BITS Pilani
annual report 2020

BITS Pilani
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ANNUAL REPORT

2020

REPORT OF THE BOARD OF GOVERNORS AS TO THE STATE AND CONDITION OF THE INSTITUTE FOR THE PERIOD 1ST JANUARY 2020 TO 31ST DECEMBER 2020

BITS Pilani

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Chancellor
Dr. Kumar Mangalam Birla

Pro-Chancellor
Smt. Shobhana Bhartia

Vice-Chancellor
Prof. Souvik Bhattacharyya

OTHER SENIOR OFFICERS OF THE INSTITUTE

DIRECTORS

Prof. Sudhirkumar Barai, Pilani Campus &
Director-in-Charge, International programmes and
Collaborations

Prof. G. Sundar, Hyderabad Campus &
Off-Campus Programmes and Industry Engagement

Prof. G. Raghurama
K K Birla Goa Campus

Prof. Ranendra N. Saha
Dubai Campus

ACTING REGISTRAR

Prof. Bijay Kumar Rout

DEANS

Prof. Arya Kumar
Alumni Relations

Prof. Sunil Bhand
Sponsored Research and Consultancy

Prof. Ajit Pratap Singh
Academic–undergraduate Studies

Prof. M B Srinivas
Academic-Graduate Studies & Research

Prof. Srinivasa Prakash Regalla
Practice School

Prof. Souri Banerjee
Faculty Affairs

Prof. S. Gurunarayanan
Work Integrated Learning Programmes

Chief Finance Officer (On Deputation)

Mr. Arun Khetan

"BITS PILANI DISTINGUISHED ALUMNUS AWARD" RECIPIENTS - 2020

Ms. Revathi Advaithi

Ms. Revathi Advaithi obtained her B.E. (Hons.) in Mechanical Engineering from BITS Pilani in the year 1990. Subsequently, she did her MBA from Thunderbird School of Global Management in 2005. Currently, she is the CEO of Flex, a global manufacturing giant with $24 billion in revenue and 160.000 employees across 30 countries. She is also an Independent Director on the Board of Uber, a member of the Business Roundtable and the Catalyst CEO Champions for Change initiative. Ms. Advaithi assumed the role of CEO, Flex in 2019 and is responsible for architecting the company's strategic direction and leading Flex through a transformation. Prior to joining Flex, she was president and Chief Operating Officer for the electrical sector business for Eaton, a power management company with over $20 billion in sales, 102,000 employees and a market capitalization of over $33 billion. She also had corporate responsibility for Europe, the Middle East, and Africa regions. She managed Eaton's largest business, consistently delivering high margins while reducing earnings volatility. She secured more than $13 billion in sales in 2018, with an array of electrical solutions built on the strengths of full-scale engineering and support services. She also led several strategic initiatives, including digital technology transformation and globally distributed innovation centers. Before joining Eaton, she worked at Honeywell for six years, with leadership roles spanning manufacturing, procurement, supply chain and sourcing, including a role as general manager of Automation and Control Solutions. For her accomplishments, Fortune featured Ms. Advaithi amongst the Top 50 most powerful women in business in the US in 2019. Fortune lauded her as the "rare female CEO in the Fortune Global 500". She has been recognized on the 2020-IndiaSpora Business Leaders list of the top 50 CEOs of Indian heritage leading the largest global companies. She is a strong advocate for STEM education for girls and women in engineering and manufacturing careers. The Distinguished Alumnus Award in the category of Corporate Leadership is awarded to Ms. Revathi Adviathi in recognition of her outstanding contributions to the society, as a Corporate Leader. Through her achievements, Ms. Revathi Advaithi has brought glory and laurels to her Alma Mater - BITS Pilani.

Prof. Aditya P. Mathur

Prof. Aditya P. Mathur obtained his B.E. (Hons) and M.E. (Hons.) in Electrical Engineering in 1970 and 1972, respectively, and Ph.D. in Computer Sciences in 1977, from BITS Pilani. He subsequently completed all requirements of a Minor in Music from Purdue University. He is currently Professor Emeritus, Department of Computer Science, Purdue University, Professor and Center Director, iTrust, Centre for Research in Cyber Security, Singapore University of Technology & Design, and Director, National Satellite of Excellence DeST-SCI. Upon completion of master's degree, Aditya joined BITS in 1972 in the newly formed Information Processing Center to pursue his passion for computing using the IBM1130. During 1972-1985, he helped launch and grow one of the earliest programs in Computer Science in India. After a brief stay at the Georgia Institute of Technology, in 1987 Aditya joined the faculty of Computer Science department at Purdue University. During his 31 year-tenure at Purdue, Aditya served as the Executive Director of the multi-university Software Engineering Research Center, Associate Dean of Graduate Programs in the College of Science, and as the department head. In 2012 Aditya was recruited to work with MIT in designing a new university in Singapore, namely SUTD, where he served as the founding pillar head of the Information Systems Technology and Design pillar. During this period, he also set up iTrust, Center for Research in Cyber Security and the Master of Science in Security by Design program. Aditya's research activities span across software testing and the design of secure critical infrastructure including water and power plants. Aditya led the design of testbeds for water treatment, distribution, and electric power that are now widely known and used by researchers across the world. Aditya has over 200 research publications with over 11480 citations and an h-index of 47. He has authored several popular textbooks. His well-known book, "Introduction to Microprocessors," was published in 1980 and was the first on the subject in India that led to the initiation and subsequent proliferation of undergraduate courses in microprocessors. In addition, Aditya has published "Foundations of Software Testing" and coauthored "An Introduction to Pascal", and "A Gentle Introduction to Programming Using Java." Prof. Mathur is regarded by his students as an outstanding teacher. His awards include Top 10 Outstanding Teacher in the School of Science (1990-91, 91-92, 93-94, and 94-95); ACM Faculty Award, Department of Computer Science (2012) - Purdue University; Outstanding Service Award - Software Engineering Research Center (2002); and Outstanding Achievement Award - Software Engineering Society (2010). The Distinguished Alumnus Award in the category of Academia and Research is awarded to Prof. Aditya P. Mathur, in recognition of his outstanding contributions to the society. Through his achievements, Prof. Aditya P. Mathur has brought glory and laurels to his Alma Mater – BITS Pilani.

Prof. Gerard George

Prof. Gerard George obtained his dual degree MSc (Hons.) Biological Sciences and Master of Management Studies from BITS Pilani in the year 1993. He subsequently completed Ph.D. in Management (1997) from Virginia Commonwealth University. He is currently Dean, Lee Kong Chian School of Business and Lee Kong Chian Chair Professor of Innovation and Entrepreneurship, Singapore Management University. Prof. George's areas of research are in innovation, entrepreneurship, sustainability and tackling grand challenges in society. Prof. George is an award-winning researcher and teacher having published over 100 research papers with over 13000 citations and h-index of 47. He received the Web of Science "Highly Cited Researcher" distinction for Cross-Field Impact in 2019. His co-authored books include Handbook of Inclusive Innovation (Edward Elgar, 2019), Managing Natural Resources (Edward Elgar, 2018), The Business Model Book (Pearson, 2018), Implausible Opportunities (Cambridge Press, 2012), and Inventing Entrepreneurs (Pearson, 2009). Prof. George joined SMU from Imperial College London, where he was Deputy Dean of the Business School, Director of the Gandhi Centre, and Academic Director of the London Stock Exchange's Elite Programme, which supports ambitious private companies through their next stage of growth. Before Imperial, he held tenured positions at London Business School and at University of Wisconsin-Madison. He was the Editor of the Academy of Management Journal, the flagship empirical journal in the field of management from 2013 to 2016. For his exemplary contributions in the field of management education, Prof. George has been honoured with several awards including the Fellowship of the City & Guilds of London Institute, Fellow of the Royal Society of Arts, Manufactures and Commerce and Honorary Doctorate in Economics from the University of St. Gallen, Switzerland. He has served on various boards including AACSB International, Global Compact Network of Singapore, Mapletree Australia, Corporate Governance Council of the Monetary Authority of Singapore, Human Capital Leadership Institute, Singapore, India Infrastructure Finance Corp (UK) and BML Munjal University (India). He was awarded the prestigious Professorial Fellow of the UK's Economic and Social Research Council. He is currently Visiting Professor at Georgetown University's McDonough School of Business and Imperial College London, and is Senior Global Fellow at The Lauder Institute, University of Pennsylvania. The Distinguished Alumnus Award in the category of Academia and Research is awarded to Prof. Gerard George in recognition of his outstanding contributions to the society. Through his achievements, Prof. Gerard George has brought glory and laurels to his Alma Mater – BITS Pilani.

Prof. Krishnan Balasubramanian

Prof. Krishnan Balasubramanian obtained his M.Sc. (Hons) in Chemistry with distinction from BITS Pilani in the year 1977. He subsequently completed M.A. and Ph.D. from Johns Hopkins University in the year 1980 and gathered post-doctoral experience from Lawrence Berkeley Lab University of California, Berkeley from 1980 to 1983. He has held a number of positions in National Labs and Universities, and he is currently an Emeritus Professor, School of Molecular Science, Arizona State University, Tempe. Prof. Balasubramanian's research areas are Theoretical Chemistry, Mathematical Chemistry and Computational Chemistry, Computational Biology, Predictive Toxicology and Drug Discovery. His other research interests focus on Computational Nanotechnology, Development of Engineered mesoporous materials for sensors, Computational bio-technology, Machine Learning, Artificial Intelligence, Graphs, Discrete Math & Applied Computer Science, Computational Actinide & Superheavy Element Chemistry with applications to energy and environment, Catalysis, Energy Conversion and Hydrogen Storage, Bioinformatics, Relativistic Electronic Structure, and Chemical Applications of Graph Theory. He has published two books and more than 600 research papers in leading international journals with over 15000 citations and an h-index of 61. He was the youngest Distinguished Professor at Arizona State University (ASU) at the age of 40 and the first Professor at ASU to receive the prestigious Camille & Henry Dreyfus Teacher-Scholar award in its history of 150 years. Prof. Balasubramanian is a two-time Fulbright Scholar, Alfred P. Sloan Fellow, and the recipient of award for Distinction in Graduate Teaching. He received a citation from the Institute of Scientific Information for one of the most cited papers (1986), as well as the Joint Prize of Minister of Education, Poland (1998). He was one of the most cited chemists worldwide (1986-1997), Phi Kappa Phi and Alpha Chi Sigma. He was a Robert S. Mulliken Lecturer, a winner of the Lawrence Livermore Distinguished Service Award, Rev. Dr. L. Yeddanapalli Memorial Award, National Science Talent Scholar, and an elected member of the International Academy of Mathematical Chemistry. He is on the Editorial Boards of a number of leading journals in the fields of Mathematical Chemistry, Science, Biomedicine, Drug Discovery, and Computing and has served on several US National Advisory Panels. The Distinguished Alumnus Award in the category of Academia and Research is awarded to Prof. Krishnan Balasubramanian, in recognition of his outstanding contributions to the society. Through his achievements, Prof. Krishnan Balasubramanian has brought glory and laurels to his Alma Mater – BITS Pilani.

Prof. Madan Pillutla

Prof. Madan Pillutla obtained his B.E. (Hons.) Mechanical Engineering from BITS Pilani in the year 1988. He subsequently completed his PGDM (1990) from XLRI, Jamshedpur, MSBA (1993) from the University of Illinois, and Urbana Champaign and Ph.D. (1995) from the University of British Columbia. He is currently a Professor of Organizational Behaviour, London Business School. He is also a Visiting Faculty at the Indian School of Business, Hyderabad. Prof. Madan Pillutla has taken on many leadership positions at the London Business School and in the broader scholarly community. He has served as Deputy Dean (Faculty), Subject Area Chair (Organizational Behavior), Governing Body Member and Ex-Officio Member of the Exec Committee at the London Business School. He continues to the area leader of Organizational Behavior group at the Indian School of Business. He has also contributed to the wider profession by taking on many editorial responsibilities. He has been an Associate Editor of the Academy of Management Annals and Organizational Behaviour and Human Decision Processes. He has also served on the Editorial Boards of almost all of the top management journals including the Academy of Management Journal, the Academy of Management Perspectives, the Academy of Management Review, Administrative Science Quarterly and the Journal of Management. Prof. Pillutla has received several awards for his exemplary contributions in the field of management education such as, Teaching Excellence Award (2010), Best Teacher on Sloan Program (2009 & 2012), & Innovation in Teaching Award (2001) – All at London Business School, Professor of the Year (2013) at the Indian School of Business an d Best Paper Award at Academy of Management (2005). He has also been honoured with the Distinguished Alumni Award 2019 by XLRI Jamshedpur. Prof. Pillutla has published more than 42 research papers in reputed peer reviewed international journals, having a citation of 2527 with h-index of 22 and authored or co-authored three books and many book chapters. His research is in the broad area of decision-making and negotiations with focus on individual level biases. He is well known for his work on the role of trust and fairness judgments in individual decisions and negotiations. Prof. Pillutla's Ph.D. students have taken up positions in top schools such as the University of California at Berkeley, University of Maryland, University College London (UCL) and National University of Singapore. The Distinguished Alumnus Award in the category of Academia and Research is awarded to Prof. Madan Pillutla, in recognition of his outstanding contributions to the society. Through his achievements, Prof. Madan Pillutla has brought glory and laurels to his Alma Mater – BITS Pilani.

Prof. Milind Tambe

Prof. Milind Tambe obtained his M.Sc. (Tech) in Computer Science from BITS Pilani in the year 1986. He subsequently completed his Ph.D. (1991) from the School of Computer Science at Carnegie Mellon University. He is currently the Gordon McKay Professor of Computer Science & Director, Center for Research in Computation and Society (CRCS), Harvard University. Concurrently, he is also Director, "AI for Social Good" at Google Research, India. Prof. Tambe's research focuses on "AI for Social Good", covering topics such as AI for public health, conservation, and public safety. In focusing on these topics, his research addresses fundamental problems in Multi-agent Systems, Agent-based modeling, Computational Game Theory, Machine Learning and Automated Planning, ensuring a virtuous cycle of research and real-world applications. He has contributed several foundational papers in above research areas, for which he has received influential paper and best paper awards at a number of premier Artificial Intelligence Conferences and workshops, such as IJCAI, AAMAS, and others. This research has led to significant practical impact, such as the use of the green security games framework to assist wildlife conservation around the world, use of social networks and machine learning to assist in improving public health outcomes such as HIV prevention or TB medication adherence, and the use of pioneering security games research for security optimization by agencies such as the US Coast Guard and the Federal Air Marshals Service. He has published more than 480 research papers with over 27000 citations and an h-index of 84. Prof. Tambe has received several awards for his exemplary contributions such as IJCAI (International Joint Conference on AI) John McCarthy Award; ACM/SIGAI Autonomous Agents Research Award from AAMAS (Autonomous Agents and Multiagent Systems Conference); AAAI (Association for Advancement of Artificial Intelligence) Robert S Engelmore Memorial Lecture award; INFORMS Wagner prize; Rist Prize of the Military Operations Research Society; Christopher Columbus Fellowship Foundation Homeland security award; and International Foundation for Agents and Multiagent Systems influential paper award.. He is a fellow of AAAI and ACM. He has also received meritorious Team Commendation from the US Coast Guard and Los Angeles Airport, and Certificate of Appreciation from US Federal Air Marshals Service for pioneering real-world deployments of security games. In terms of mentoring contributions, 31 PhD students have completed their theses under his supervision; he has also mentored 11 Postdoctoral researchers The Distinguished Alumnus Award in the category of Academia and Research is awarded to Prof. Milind Tambe, in recognition of his outstanding contributions to the society. Through his achievements, Prof. Milind Tambe has brought glory and laurels to his Alma Mater – BITS Pilani.
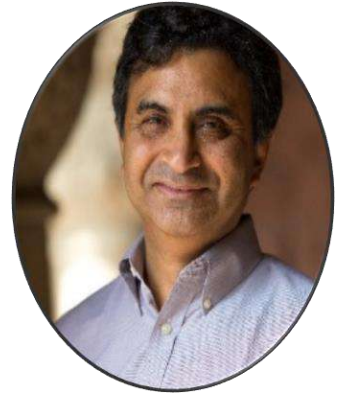
Mr. Anurag Jain

Mr. Anurag Jain obtained his B.E. (Hons.) in Electrical and Electronics Engineering from BITS Pilani in the year 1992, and received his MBA from the University of Michigan in 1995. He is currently the Managing Partner of Perot Jain, a Dallas-based venture capital firm. Mr. Jain Anurag Jain is a futurist, a consummate entrepreneur, philanthropist and venture capitalist focused on charting a better course for humanity by pioneering solutions to the world's most complex problems. Mr. Jain has invested heavily in various exponential technologies, building a portfolio of over 40 highly disruptive, industry transforming companies. The firm is particularly focused on artificial intelligence, digital health and advancements in mobility and how these emerging technologies will impact the future of work, human longevity and drive improvements in quality of life. Mr. Jain's ability to harness and leverage technology paired with his visionary global mindset has enabled him to successfully launch multiple companies. He was awarded the E&Y Entrepreneur of the Year award in 2016 for his company Access Healthcare, a healthcare services platform utilizing AI and robotics process automation (RPA) to transform the revenue cycle management industry. Under his leadership as Chairman of Access Healthcare, he has grown the business from 100 employees in 2012 to over 12,000 global employees today. Mr. Jain also co-founded Brigade Corporation, an international customer support company, and was an early pioneer in the India IT outsourcing industry as a founder of Vision Healthcare. Before Perot Jain and Access Healthcare, Mr. Jain was the Vice President of Services Delivery for Dell where he led a global team of more than 18,000 professionals delivering cutting-edge technology solutions to customers around the world. Previous to Dell, Mr. Jain led Perot Systems' Applications Business Process Solutions, Financial Services and Insurance organizations while also serving as market leader for the Asia Pacific region. Mr. Jain was credited for helping Perot Systems enhance its global services delivery model while expanding into vertical and geographic markets. Mr. Jain views philanthropy and corporate social responsibility as core tenets in both his personal life and business. He currently serves on the Board of Directors of the East West Institute, a global think-and-do tank. In addition, he serves as Chairman-Emeritus of the North Texas Food Bank, a hunger relief non-profit organization that prepares and distributes over 90 million meals a year to those in need throughout North Texas. In March 2020, Mr. Jain launched an innovative hunger relief and recovery program, Get Shift Done, to provide job opportunities to members of the hospitality workforce who were impacted negatively by COVID-19 by serving meals to families, children and the elderly across American and India. Get Shift Done has received generous contributions by corporations, individuals and philanthropic foundations to pay wages to these displaced workers performing shift assignments at local hunger relief non-profit organizations. To date, over 35 million meals have been served and 10,000 workers employed through this initiative. The Distinguished Alumnus Award in the category of Public Life/Entrepreneurship/ Philanthropy is awarded to Mr. Anurag Jain in recognition of his outstanding contributions to the society and as an entrepreneurial leader. Through his achievements, Mr. Jain has brought glory and laurels to his Alma Mater – BITS Pilani.

Mr. Jayan Ramankutty

Mr. Jayan Ramankutty obtained his B.E. (Hons.) in Electronics Engineering from BITS Pilani in the year 1980 and completed MS Computer Engineering from San Jose University in 1991. Currently, he is the Managing Partner of KRK II LLC, a private investment firm and a Board Member at Essmart. Over the last 30 years, Mr. Ramankutty co-founded over four companies in the Silicon Valley with an aggregate market value of over $750 M. He has been actively operating KRK Ventures II LLC that is focused on Angel Investment and Advisory services for Startups from 2008 onwards and has invested in over 22 startups. He holds several patents in routing, multimedia and digital rights. Having started his career in Singapore, he shifted to the US as a design engineer with Elxsi. He co-founded Nimbus Technology to design and manufacture multi-processing SPARC chipsets in 1991. Nimbus was acquired by Alliance Semiconductor in 1993 and he worked with them for four years architecting, designing and manufacturing 9 generations of PCI and AGP multi-media ASICS. In 1997, he co-founded Lara Networks, a world leader in Network Search Engines (NSE). Lara Networks was acquired by Cypress Semiconductor in June 2001 for approximately $300 million. About the same period, Mr. Ramankutty co-founded Empower Tel Networks to build carrier grade VoIP switches using a proprietary media processor, MXP, and was acquired by IPunity in 2002. In 2003, he founded and funded YuMe Networks, a leader in Digital Video Brand Advertising, which went for IPO in 2013 on the NYSE valued at approximately 300 million USD. Apart from his corporate career, Mr. Ramankutty has been deeply involved in contributing back to the Alma Mater by strengthening the BITS Alumni network in the Bay area. In 2001, he incorporated BITSAA Silicon Valley Inc. (BITSAA-SVC), as a 501 c (3) non-profit organization. He also served as Chairman of the BITSAA International from 2014-17. At BITSAA SVC, he was instrumental in conceiving and rolling out BITSAA Miles Program to assist students and faculty members to attend international conferences. For his illustrious corporate and entrepreneurial career, San Jose State University conferred the Distinguish Alumni Award to Mr. Ramankutty in 2009. The Distinguished Alumnus Award in the category of Public Life / Entrepreneurship / Philanthropy is awarded to Mr. Jayan Ramankutty, in recognition of his outstanding contributions to the society, as an Entrepreneur. Through his achievements, Mr. Jayan Ramankutty has brought glory and laurels to his Alma Mater - BITS Pilani.
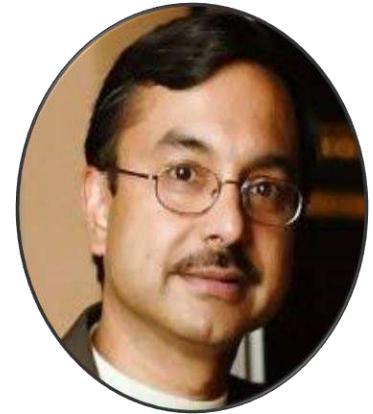
Mr. Kishore Rajvanshy

Mr. Kishore Rajvanshy obtained his B.E. (Hons.) in Mechanical Engineering from BITS Pilani in the year 1969. Currently, he is the founding Managing Director of Fleet Management Limited, world's 2nd largest professional ship-management company headquartered in Hong Kong. He joined Noble Group in 1994 to establish FLEET, which was subsequently acquired by The Caravel Group in 2011. In the last 26 years, under his able guidance and extraordinary leadership, FLEET has witnessed rapid growth — from managing 1 ship at the start in November 1994 to presently more than 600 diversified ships valued over USD 20 Billion. The company employs 20,000 seafarers and 900 shore-based staff across 26 offices in 12 countries. Prior to joining Noble Group, Mr. Rajvanshy embarked upon a 15-year career with a prominent Hong Kong-based ship management company. Starting as a Superintendent, he was soon promoted to Technical Manager, then Technical Director and finally as the Director and General Manager. Mr. Rajvanshy started his career with the Shipping Corporation of India (SCI) - the country's state-owned shipping company, where he spent the first year of training in Mumbai. He spent most of his time at sea between 1971 and 1978, the last 3 years of which he sailed as Chief Engineer. In 1978, Mr. Rajvanshy embarked on his shore career at SCI's Mumbai headquarter. Mr. Rajvanshy has won several awards for his exemplary contribution to shipping industry. These include, the Udyog Rattan Award by the Institute of Economic Studies (2014), Eminent Overseas Maritime Personality Award by the Directorate General of Shipping, Govt of India (2017), Lifetime Achievement Award by Lloyd's List Asia Pacific Awards in Singapore (2017), Lifetime Achievement Award by Tanker Shipping and Trade in London (2017), Lifetime Achievement Award by Seatrade Maritime Awards in Hong Kong (2019) and Lifetime Achievement Award by International Bulk Journal in Hamburg (2019). He has been an elected member of several classification societies such as Bureau Veritas (Paris), DNV (Norway), Class NK (Japan), the American Bureau of Shipping (Houston) and Lloyd's Register (London). He serves as the Vice-Chairman of West of England P&I Club (Luxembourg) – a leading mutual protection and indemnity association providing insurance services for ships. The Distinguished Alumnus Award in the category of Corporate Leadership is awarded to Mr. Kishore Rajvanshy, in recognition of his outstanding contributions to the society, as a Corporate Leader. Through his achievements, Mr. Kishore Rajvanshy has brought glory and laurels to his Alma Mater - BITS Pilani.

Mr. Rakesh Verma

Mr. Rakesh Verma obtained his B.E. (Hons.) in Mechanical Engineering from BITS Pilani in the year 1972, and did his MBA from Eastern Washington University in 1979. Currently, he is the Chairman and Managing Director of MapmyIndia. Mr. Verma, an innovator and visionary, quit a successful career of 12 years in the USA to return to India in the early 90s and co-founded with his wife Rashmi Verma, an alumnus of IIT Roorkee, CE Info Systems, popularly known as MapmyIndia. Armed with his foresight, he has been leading a pioneering and path-breaking effort by steering MapmyIndia over the last 25+ years to create India's most comprehensive, exhaustive, accurate, and information-rich digital map dataset. He is a first-generation entrepreneur, started this mammoth effort to create a digital map product at a time when nobody had the vision that digital maps specifically, and data and software products generally, would become a critical value proposition in the information technology space. He has been playing an active role in supporting young, talented entrepreneurs and helping them build innovative and robust enterprises via funding, mentoring or even incubation, including many BITSians have been the beneficiaries of these initiatives Under his leadership MapmyIndia pioneered and revolutionized the business model by launching India's first internet mapping portal, mapmyIndia.com, in 2004 and also the first and till date, best-in-class GPS navigation system, in 2007. The company's innovative business model – the Customer Funded Model – has been acclaimed internationally. Harvard Business Review and Prof. John Mullins of the London Business School in his book, use MapmyIndia as a case study to demonstrate the creation of a sustainable and profitable business, from scratch. The company has been able to raise Series A, B, C, D & E funding from some of the world's leading VCs. Ever the value creator, Mr. Verma even facilitated a profitable exit for the Series A & B investors, and all this in a short span of 8 years. To carry on his legacy and facilitate a smooth transition at MapmyIndia, Mr. Verma is already grooming the nextgen leader Rohan Verma, an alumnus of Stanford University and London Business School. MapmyIndia has received many awards and recognition from media, institutions, and industry - NASSCOM showcased MapmyIndia for its IT Innovation in 2004, and along with GPS Business News elected Mr. Verma as the World's GPS Business Man in 2007; in 2014 he was conferred the prestigious Geospatial Business Leadership Award by the then Minister of State for External Affairs GOI, General (retd.) V.K Singh. He was also nominated to the National GIS Core Group of the Planning Commission (now Niti Aayog) of the Government of India in 2012. He is the current chair of the FICCI Geospatial Committee, and a founding President of SAMA. The Distinguished Alumnus Award in the category of Public Life/Entrepreneurship/Philanthropy is awarded to Mr. Rakesh Verma, in recognition of his outstanding contributions to the society, as an Entrepreneur. Through his achievements, Mr. Rakesh Verma has brought glory and laurels to his Alma Mater - BITS Pilani.

Mr. Subhash (Bill) Malhotra

Mr. Subhash Malhotra obtained his B.E. (Hons.) in Civil Engineering from BITS Pilani in the year 1970. Currently, he is the CEO, President, and Founder of the Claridge Homes Group of Companies. He is also the CEO of Riverstone Retirement Communities. After 15 years as an Engineer in both private and public sectors, Mr. Malhotra launched Claridge Homes in 1986, initially as a small family run business with a dream, vision, and sense of responsibility. Since then, he has strategically grown the company, which has now built over 9300 homes, 5300 condominium and rental apartments in over 50 buildings. He has also established 9 retirement homes totaling over 1250 suites across the capital city (known as Riverstone Retirement Communities), as well as the luxury 200 room Andaz Ottawa Byward Market Hotel. Claridge Homes under his leadership and guidance continues to be Ottawa's largest developer of high-rise buildings, and its 45- storey ICON tower is nearing completion, as the Tallest Building in the nation's capital. Collectively, his firms employ over 900 personnel. For past 34 years as CEO of Claridge Homes, Mr. Malhotra has been responding to the needs of the marketplace and changing financial conditions, building a range of basic and affordable to exclusive and expensive residential units, including social housing, suburban family housing, and sophisticated urban downtown developments. With an interest in downtown urban intensification and renewal, his pioneering developments have brought, and continue to bring, many people back to the downtown Ottawa core. Many of the urban developments are mixed-use, incorporating both commercial and retail spaces. Sharing his success with the community, he has been supporting numerous charities and non-profit organizations in Ottawa including the Ottawa Hospital Foundation, and the Malhotra Family Foundation, which have donated over $3.6 million Dollars to local charitable organizations since 2011. As Ottawa's largest land developer and a leading entrepreneur, Mr. Malhotra has been honored with many awards, such as, Indo-Canadian Chamber of Commerce "Business Person of the Year" in 2002, Ottawa Chamber of Commerce "Scotiabank Business Person of the Year" in 2005, Ernst & Young Entrepreneur of the Year Finalist in 2011, Indo-Canada Ottawa Business Chamber Lifetime Achievement Award (2014). He has also been awarded the prestigious Order of Ottawa (2015), presented to remarkable residents who are honored for their services to the city for a variety of professional and civic-oriented endeavors. The Distinguished Alumnus Award in the category of Public Life / Entrepreneurship / Philanthropy is awarded to Mr. Subhash Malhotra, in recognition of his outstanding contributions to the society as an Entrepreneur and a Philanthropist. Through his achievements, Mr. Subhash Malhotra has brought glory and laurels to his Alma Mater -BITS Pilani.

Mr. Sunil Nanda

Mr. Sunil Nanda obtained his B.E. (Hons.) in Electronics Engineering from BITS Pilani in the year 1980 and completed MS Computer Engineering from the University of Iowa in 1982. He is the Founder and, currently, a board member of the Pilani Atmanirbhar Resource Centre (PARC) (www.atmanirbhar.org), a non-profit organization dedicated to the welfare of people in and around Pilani. He has had a stellar career in VLSI Design, Computer Architecture and Computer Graphics. Starting his career in the USA, he worked in several organizations such as Intel, Sun Microsystems, and Cadence. He was also a part of the founding team for a VLSI CAD start-up company developing unique simulation technology that led to its acquisition by Cadence. He was instrumental in setting a VLSI Design Centre from ground zero for S3 Inc. He founded Thinkit Technologies specializing in networking VLSI devices, which eventually was acquired by Intel Corp. He then served as the GM of the Switching Business Unit within Intel and was responsible for managing multiple teams across geographies - the USA, Israel, and Bangalore. He followed it up by setting up a new Design Centre for NVIDIA in India and growing it from zero to a stage where it could simultaneously manage multiple chip designs. One of the chips designed by this centre earned more than 100 awards worldwide as the best performing design of its kind. He holds seven international patents in the field of microprocessors and computer graphics. He was also awarded the LKM Distinguished BITS Alumnus Award in 2017 for his contributions to the field of Electronics & VLSI. His leadership and unrelenting effort, ably backed by his batch mates and BITS alumni led to setting up of Pilani Atmanirbhar Resource Centre (PARC), an ecosystem that provides skills training, job creation, health care, education, helps entrepreneurship, and secures women's rights for the community around Pilani. PARC currently houses Pratham, Nirmaan, Arogya, HelpAge, and Agastya. PARC has ameliorated more than 120,000 people's lives thus far, providing them livelihoods & employments, healthcare services, school education, and computer literacy amongst other welfare programs. PARC has secured employment for more than 1000 underprivileged boys and girls, and provided health care to more than 3000 local members of the community.

The Distinguished Alumnus Award in the category of Public Life / Entrepreneurship / Philanthropy is awarded to Mr. Sunil Nanda in recognition of his outstanding contributions to the society. Through his achievements, Mr. Sunil Nanda has brought glory and laurels to his Alma Mater - BITS Pilani.

A.1   HIGHLIGHTS OF ACHIEVEMENTS DURING THE YEAR 2020

1.   Ranking of BITS PILANI released by various International and National agencies in 2020-21.

Agency	Year	Heading	Ranking/ Rating
Time Higher Education (THE)	2021	THE World University Ranking	1001+
		THE World university Ranking for Subject LIFE SCIENCE	501-600
		THE World University Ranking for Subjects ENGINEERING AND COMPUTER SCIENCES	601-800
		THE World University Ranking for Subjects PHYSICAL SCIENCES	801-1000
		Asia University Rankings 2020	301-350
		Emerging Economies University Rankings	351-400
Quacquarelli Symonds Marketing (QS)	2021	QS World University Rankings	1001+
		QS Asia University Ranking	194
		QS India University Rankings	18
		QS World University Subject Rankings	Table below*
NIRF	2020	Overall	27
		University	15
		Engineering	30
		Pharmacy	6
Career 360	2020	Top Private Engineering Colleges	4
India Today	May 2020	India's Best Engineering College	7
		Top Private Engineering Colleges	1
	August 2020	Best Technical Universities	7
		Technical Universitites with most Patent Published, Granted, Licensed in past 3 years	5
TIMES	June 2020	Top Engineering **Institute**	2
Outlook	September 2020	Top Private Engineering College	2
The Week	August 2020	All India Engineering Colleges	7
		All India Private Engineering Colleges	1
The Week (for B- Schools)	November 2020	B-Schools All India	25
		Private B-Schools All India	12

QS World University Subject Rankings	2020	2021
Engineering & Technology	451-500	401-450
Computer Science & Information Systems	351-400	401-451
Engineering - ChemicalEngineering	351-400	351-400
Mechanical, Aeronautical & Manufactu.	351-400	351-400
Engineering - Electrical & Electronic	351-400	351-400
Chemistry	501-550	501-550
Mathematics	NR	451-500
Business & Management Studies	NR	451-500
Pharmacy & Pharmacology	NR	151-200

2. A total of 125114 candidates, including 34078 girls, from all over the country applied for BITSAT 2020 test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during September 16 to September 23, 2020.
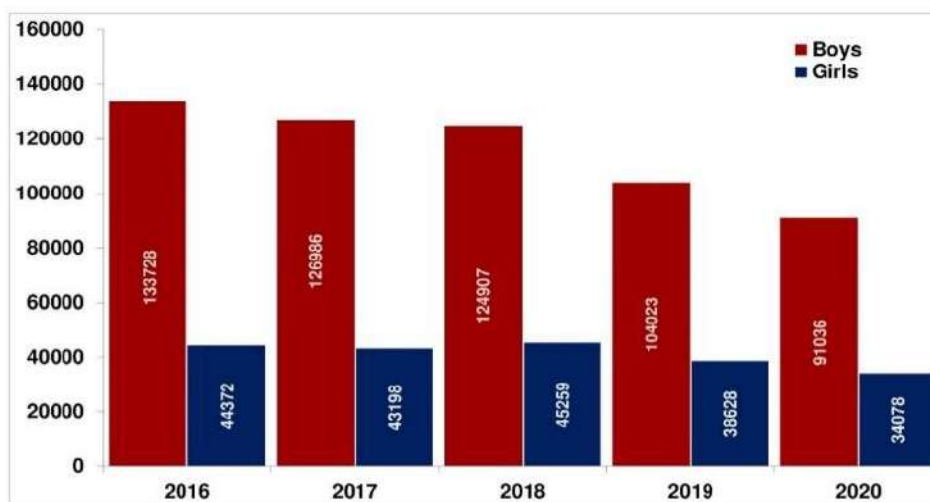
3. 15 Board toppers of Class XII of 2020 have joined three campuses of BITS Pilani this year.

4. A total of 2886 candidates, including 1000 girls, from all over the country applied for BITSHD 2020 test. Apart from 3211 candidates, including 866 girls applied through GATE admission mode.

5. 809 applications were also received for admissions in MBA Programme.

6. A total of 1895 candidates, including 856 girls applied for Ph.D. Programmes in First Semester.

Alumni Achievements

1. Mr Hari Menon (1979 Batch) has been conferred with the Start-up of the Year award-2019 by Business Standard. He is the founder of BigBasket which is India's largest online grocery company and the latest entrant in the Unicorn club. They have crossed Rs.3200 crore in sales by growing over 60% during the year. BigBasket was launched back in 2011 and in 2020, it has over 10 million registered customers. It processes more than 1 Lakh orders per day across 25 Indian cities.

2. Prof Seshadri Vasan (1991 Batch) BE-Chemical Engineering, got a major breakthrough in developing a vaccine for coronavirus (2019-nCoV). The Dangerous Pathogens team of the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Australia, headed by Prof Vasan has grown the first batch of coronavirus outside China. His team has grown the virus in sufficient quantity needed to conduct preclinical studies. This development has brought the world closer to a coronavirus vaccine. A former McKinsey consultant and Rhodes scholar, he is also an Adjunct Professor of Preventive and Social Medicine at Jawaharlal Institute of Postgraduate Medical Education & Research, Government of India.

3. Mr Aravind Yarlagadda(1996 Batch) BE- Electronics & Instrumentation, has been appointed as the Chief Digital Officer and Executive Vice President of Eaton. He has over 20 years of experience in product management, sales, marketing, business development, mergers, acquisitions, and integration. He has also served in several senior leadership roles at Itron, Schneider Electric, Invensys and Tyco.

4. Mr Reep Hazarika (1985 Batch) BE-Chemical Engineering, has been appointed as the Managing Director of Brahmaputra Cracker and Polymer Limited-a Government of India Enterprise under the Ministry of Chemicals and Fertilizers. He will be the fourth incumbent to the top post of BCPL with over 30 years of experience in the oil refining and petrochemical industry, He has worked in Indian Oil Corporation Limited, Numaligarh Refinery Limited and Bharat Oman Refineries Limited.

5. Prof S.P. Kothari, a distinguished Alumnus awardee has been honored with the Padma Shri award 2020 by the Government of India for his outstanding global contributions made to Literature and Education. Prof Kothari is the Gordon Y Billard Professor of Accounting and Finance at the MIT Sloan School of Management. He has recently been appointed as the chief economist and director of the Division of Economic and Risk Analysis (DERA) at the U.S. Securities and Exchange Commission.

Distinguished Alumnus Awards 2020

6. BITS Pilani announced the Distinguished Alumnus Award (DAA) 2020 to twelve of its eminent alumni who have made extraordinary and outstanding contributions in their domains. BITS Pilani bestows these awards annually to recognize excellence and meaningful contribution globally by its alumni in the areas of Academia & Research, Corporate Leadership, Entrepreneurship, Public Life & Philanthropy.

This year, those awarded by their alma mater are - Miss Revathi Advaithi (CEO, Flex), Mr Rakesh Verma (Founder, MapmyIndia), Mr Kishore Rajvanshy (Managing Director, Fleet Management Company), Mr Anurag Jain (Managing Partner, Perot Jain LP), Mr Jayan Ramankutty (Investor and Entrepreneur), Mr Subhash Malhotra (Founder, Claridge Homes), Mr Sunil Nanda (Founder, Pilani Atmanirbhar Centre), Prof Milind Tambe (Professor, Harvard University), Prof Gerard George (Dean, Singapore Management University), Prof Aditya P. Mathur (Emeritus Professor, Purdue University), Prof Krishnan Balasubramanian (Emeritus Professor, Arizona State University), and Prof Madan Pillutla (Professor, London Business School).

The winners were selected by a selection panel chaired by Mr Deepak S. Parekh, Chairman HDFC Ltd., with members that included Mr Harish Bhat, Brand Custodian, Tata Sons, Mr Matthew Cherian, Former CEO HelpAge India, Mr D. Bhattacharyya, Vice Chairman, Hindalco, ABG, Vice- Chancellor, Prof Souvik Bhattacharyya, and Dean Alumni Relations, Prof Arya Kumar. Vice-Chancellor Prof Souvik Bhattacharya, remarked that "It is an extremely difficult task to select a few distinguished BITSians from a long list of achievers, but we are pleased to learn that so many of our alumni are doing ground-breaking work across the globe".

Alumni Reunion

7. The 1965-70 batch of BITS Pilani celebrated 50 years of their graduation. The batch recreated their journey through an interactive light and sound 3-D laser show at the backdrop of the iconic clock tower, which narrated the story of alumni from 1965-70 at Pilani, then a quaint village away from urban cities. The reunion saw participation from more than 90 alumni accompanied by their spouses.

8. The batch proudly counts Padma Bhushan Babasaheb Kalyani, Chairman and President of Bharat Forge, as one of its members. They also pledged an amount of Rs. 2 crore to BITS Pilani for building a convention centre and a guest house.

9. The batch of 1970-74/75 celebrated their Golden Jubilee on February 8, 2019. More than 110 alumni arrived at the campus from across the world to celebrate their reunion and recall fond memories. One of the major highlights of the event was Gurudakshina. It was organized by the BITS-75 trust to felicitate 10 prominent teachers who had taught, inspired and encouraged them at Pilani. Starting from 2009, they have honoured 40 faculty members under Guru Dakshina and the number has touched 50 faculty members after Gurudakshina 2019.

10. The Gurus were honored with a citation, a shawl and Rs. 1 lakh as a token of appreciation by the BITS- 75 Trust. Vice-Chancellor Prof Souvik Bhattacharyya, welcomed the alumni and shared the developments of the institute. Prof Bhattacharyya also shared that a new and distinct impetus is given to connect with the Alumni so as to strengthen the ties for growth and development of the institute. Dean Alumni Relations, Prof Arya Kumar, applauded the effort of honouring the gurus and contributing back to their alma mater.

Pilani Campus

11. "If we wish to eliminate the atrocities against women altogether, we should start fixing the issue at the grass-root level. It is essential to sensitize the young generation so that they develop empathy towards the opposite gender since the beginning which will help us to become better as a society…" said Prof Mary E John, a Senior Fellow at the Centre for Women's Development Studies (CWDS), New Delhi, India during a talk entitled "Reflections on the Touchstone of Sexual Violence and #MeToo" organized by the Internal Complaints Committee of the institute on February 1, 2020. The talk was graced by the Director, Prof Sudhirkumar Barai, faculty, students and campus residents. Besides this, teams of school students from Birla Balika Vidyapeeth and Birla Public School also attended the talk. Prof John stressed on the various facets of sexual violence in India. She also emphasized on the importance of the role played by higher educational institutions in sensitizing students and campus population in general and instilling a safe and emotionally healthy work environment.

12. A one-day symposium on LaTeX and MATLAB was organized on February 02, 2020 by the Department of Mathematics. Prof Devendra Kumar and Dr Sangita Yadav were the resource persons for the session on LaTeX, while Dr Shivi Agarwal and Dr Trilok Mathur were the resource persons for the session on MATLAB. LaTeX is the principle standard typesetting package for producing professional quality articles, thesis, books, etc while MATLAB can be used as a computing tool for several real world applications.

13. Academic Counselling Cell organized various activities in the second semester of 2019-2020. A two-day training was provided to all ACC members on various topics focusing on a few aspects of Mental Health and Counselling during January 18-19, 2020. A small interactive session against Day Scholar Students, members of ACC, and professional counselor (Mr. Emerson Scott) was conducted to promote bonding between the day scholar students and the faculty on February 16, 2020. An event was organized in the presence of newly appointed Director Prof. SudhirKumar Barai which included a musical performance by twin brothers Mr. Sagar Verma and Mr. Srijan Verma on February 9, 2020. During the pandemic, ACC conducted a webinar on July 13, 2020 to interact and answer all the queries of Ph.D. students.

14. FitBITS, in collaboration with the Renewable Energy Club, organized the 'BITS Pilani Green Run'-a 3 km run on February 23, 2020. This was organized under the aegis of the 'Green Week', a part of APOGEE. Green

Week is aimed at increasing awareness among the BITSian populace regarding the issues of sustainability, climate change, and reforestation. The aim of this event was to ensure that BITSians come together and not only learn more about these pertinent issues but also take fitness seriously. The event enjoyed a turnout of 85 people including Prof Sangeeta Sharma, Department of Humanities and Social Sciences. The runners ran a route from the Clock Tower, circumscribed the campus and finally ended at the GymG grounds.The Renewable Energy Club decided that for every individual who completed the 3 km run, they would plant a sapling on the campus grounds.

15. Prof L.K. Maheshwari Distinguished Alumnus Award - 2019 ceremony was held on March 12, 2020. The award was conferred upon Prof Ramesh Harjani, E.F. Johnson Professor of Electronic Communications, Department of Electrical & Computer Engineering, the University of Minnesota for his outstanding contribution in Electrical & Instrumentation Engineering. As part of the award ceremonies, Prof Ramesh Harjani delivered a lecture on his current research. He explained the Analog/RF Circuits for High-Speed Communications. The award is presented every other year by the LK Maheshwari Foundation to an alumnus of BITS Pilani working in the areas of Electrical and Electronics Engineering and Instrumentation. The foundation was established in 2010 to promote education and research in engineering.Prof Harjani earned his bachelor's degree from the Pilani campus in 1982. He co-founded Bermai, Inc, a startup company developing CMOS chips for wireless LAN applications.

16. The Department of Chemistry, organized a half-day virtual conference in June 24, 2020, in association with Indian Society of Chemists and Biologists (ISCB) Lucknow on "Cross-cutting Edge Research in Organic and Medicinal Chemistry". The event was virtually inaugurated by the Vice-Chancellor, Prof Souvik Bhattacharyya and the Director Prof Sudhirkumar Barai. Dr. PMS Chauhan, General Secretary ISCB welcomed the speakers and participants. The keynote lecture was delivered by Padma Shri Prof Goverdhan Mehta, a distinguished alumnus award winner. Prof Mehta in his presentation stressed on the need of organic synthesis and medicinal chemistry synergy post COVID-19 era. The keynote address was followed by four invited lectures by Dr. D. Srinivasa Reddy (NCL Pune), Prof Suvarn S. Kulkarni (IIT Mumbai), Prof Asit K. Chakraborti (IIT Ropar) and Prof Ashok K. Prasad (University of Delhi). Around 300 participants attended the conference through WebEx and benefited from the experience of eminent speakers.

17. In a virtual function organized by Alumni Relations Division of the institute on June 02, 2020, Prof S. S. Ranganathan Memorial Teaching Excellence Award for the year 2019 was conferred upon Prof Vinod Kumar Chaubey, Head of the Department, Electrical & Electronics Engineering. The award was constituted by a group of alumni from 1978-83 batch in the memory of their beloved teacher, popularly known as SSR, and was third in the series. Faculty members from the four BITS campuses and alumni across the globe participated in the function. The award with a certificate and a cheque of Rs. 1 Lakh was handed to Prof Vinod Kumar Chaubey in recognition of his excellence and high standard of teaching.

18. A team at the institute, led by Prof Suman Kapur, has developed a phyto-constituent, molecular medicine-based formulation that can be used as a mouthwash by Covid-19 patients and their care-givers, to prevent the spread of the infection. Three lots of the natural product-based mouthwash have been prepared and tested for use in humans based on an in-vitro cytotoxicity and inhibition of viral infectivity specific assays.The team is now initiating clinical validation case control studies to measure the viral load in subjects post use of the mouthwash, and will soon embark on commercial production with strategic partner companies.

According to Prof Kapur, the mouthwash has been tested by a third-party internationally accredited lab, and found to completely inhibit the infectivity of virus particles into cultured cells. Also, the formulation was completely non-toxic to cultured cells over a period of up to 72 hours.

19. A Webinar on the theme of "International Webinar on Smart Cities: Beyond the Pandemic" was organized by the institute and was coordinated by Prof Shamsher Bahadur Singh during July 10-11, 2020. The webinar highlighted the use of technology and innovative solutions for the concept of smart cities to cope-up with the COVID-19 pandemic. The inaugural session was addressed by the Vice-Chancellor, Prof Souvik Bhattacharyya, urging participants to propose smart cities solutions that involve intelligent strategies which can be locally adapted to lead a sustainable future. The Director, Prof Sudhirkumar Barai enlightened the participants with a message of turning the hardships faced during the pandemic into an excellent opportunity to create a smarter world with novel technologies and ideas.

20. Some extremely vital changes have redefined the entire dynamics of the educational system and processes due to the COVID-19 pandemic. In this context, a booklet titled "Strategic Response to COVID 19" has been brought out, consolidating actions taken at the Pilani campus and initiatives taken by BITS Pilani alumni across the globe. The Flipbook of the booklet was released by the Vice-Chancellor, Prof Souvik Bhattacharyya, the Director Prof Sudhirkumar Barai and the Dean Alumni Relations, Prof Arya Kumar.

21. The Mathematics Olympiad was organized under the aegis of the Mathematics Association of the institute. Students of Class 11 and 12 of schools Birla Balika Vidyapeeth, Birla School and Birla Shishu Vihar participated in the Olympiad. In junior category Mr. Ishaan Patial, Class 11th (Birla School) secured the first position, while the second position was secured by Miss Sonali Das (Balika Vidyapeeth). In the senior category Miss Palak, Class 12th (Birla Balika Vidyapeeth) secured first position and Miss Anushree (Birla Shishu Vihar) secured the second position. Cash prizes and certificates were awarded to the winners. The

program was attended by Prof Bhupendra Kumar Sharma, Prof Balram Dubey, Prof Chandra Shekhar, Prof Keskar, members of the Mathematics Association, students and teachers of various schools. The aim of organizing the program was to increase the interest of the students in mathematics.

22. A service called Teaching and Research Aids Alert Service has been set up by the Library to map the digital content of the library, covering various databases / peer- Reviewed articles from reputed international journals, to the courses taught by the faculty members as well as for the research scholars in their areas of research.

23. A felicitation ceremony was organized on September 8, 2020 at the VFAST hostel for the corona warriors. It was attended by the Vice-Chancellor Prof Souvik Bhattacharyya, Director, Prof Sudhirkumar Barai, and Administrative Dean, Prof S K Verma. People from the Health Department, Police Department, Administration, BITS Pilani Security, and Corporative stores were appreciated by the BITS family. Prof Souvik Bhattacharyya appreciated the efforts of Corona warriors in their fight against the virus. Prof Sudhirkumar Barai acknowledged the struggle the world is going through and appreciated the front line warriors and applauded all departments' efforts in these challenging times. The Crisis Response Team(CRT) of BITS Pilani were also recognized for their work. The program was also attended by Prof S Routroy, CRT, Prof Gajendra Singh Chauhan, Incharge - Publications and Media Relations Unit, Prof V. S. Nirban, and Dr Pankaj Sharma, Incharge - VFAST Hostel. The program coordinator, Dr Sunil Kumar Dubey, Incharge- Public Relations Officer, proposed the vote of thanks.

24. The Department of Pharmacy celebrated the World Pharmacist Day on September 25, 2020, to imbibe confidence in the budding pharmacists. Prof Hemant Jadhav, Head, Department of Pharmacy began the proceedings with a welcome note. Dr Anjaneyulu Muragundla, Assistant Vice President, Drug Discovery, BioXcelInveniAI, US & India, delivered a lecture entitled, 'Artificial Intelligence (AI) in Drug Discovery and Development' on the occasion. He emphasized the application of AI concepts to reduce the time, cost, and efforts involved in drug discovery research by citing some case studies. The lecture was followed by an interactive discussion and informative interventions by both the speaker and the participants. The celebration witnessed an active participation of around 100 participants including undergraduate, postgraduate, Ph.D. scholars, and faculty members of the various departments and colleges.

25. The Teaching Learning Centre organized a webinar on New Education Policy on September 26, 2020. The webinar titled "Naya Kshitij: NEP 2020 for Schools- Implementation Preparedness, Challenges and Way-Forward in Schools of Rajasthan" explored New Education Policy's various aspects with a particular focus on schools in Rajasthan. The webinar was attended by more than 484 participants from various schools in Rajasthan and other parts of the country. The webinar started with a short introduction to NEP 2020 by Prof Pushp Lata, Faculty-in-Charge of TLC.

26. "Rain-Water Harvesting Plant" in the Infant Care Center was inaugurated by Chief Guest Prof Sudhirkumar Barai, Director BITS Pilani, Pilani campus on October 2, 2020.

    Prof S. K. Verma and Prof Rajeev Gupta. Prof Devika, Ms Madhu Mishra, Prof Dipendu Bhunia, Prof Shilpi Garg were also present on the occasion. Prof Rajiv Gupta informed that the plant has a tank of 25000 liters and is sufficient to serve the need of water for school children and staff for one year. It has various filters such as Self Purified Concrete Filters (Patented by BITS Pilani), making the water safe for drinking. Prof Gupta pointed out that BITS Pilani, in association with various agencies like Department of Science and Technology (India), World Bank, Rajasthan Association of North America (USA), Ambuja Cement Foundation, Bhoruka Charitable Trust (BCT), Samgra Vikas Sansthan, and Sustainable Innovations has installed various water harvesting plants in ten villages of Rajasthan under "Akash Ganga Project". Through these plants, the team of Prof Gupta and BITS Pilani are continuously working to solve the water problem of Rajasthan state.

27. Union Minister of Health and Family Welfare, Science & Technology, Earth Sciences, and Chairman of WHO Executive Board, Dr Harsh Vardhan, inaugurated the two-day webinar "Battling COVID-19: Challenges & Opportunities in Healthcare and Bio-Pharma Sector" on October 3, 2020. Deliberating on the crisis, Dr Harsh Vardhan appreciated BITS Pilani's efforts in organizing such a timely webinar on the most pressing matter. He further reinforced Honorable Prime Minister Shri Narendra Modi's call to make "Atmanirbhar Bharat" by 2022. The Vice-Chancellor Prof Souvik Bhattacharyya welcomed the Chief Guest, Dr Harsh Vardhan, and other dignitaries from the pharma industry. He apprised the gathering about BITS Pilani's legacy and stated that our entrepreneurial spirit has led to innovations to provide affordable healthcare. Director Prof Sudhirkumar Barai stated that the participating stalwarts from the pharma industry would show us the new directions, elevate the quality of life and provide affordable healthcare solutions to citizens of India.

28. The Department of Pharmacy organized various conferences to celebrate its platinum jubilee (70th Year). The first in the series was a two-day 'International virtual conference on Computer-Aided Drug Design' inaugurated on October 30, 2020. The conference program featured ten international and nationally renowned scientists and received an overwhelming response of above 900 participants.

29. A four-week Global Meet on "Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives" was organized from October 16, 2020 to November 7, 2020. Twenty-five internationally

recognized speakers from USA, Germany, France, Japan, Netherlands, Australia, UK, Singapore, Israel & Malaysia delivered lectures covering various computation research aspects.

The event broadly covered computation themes in optimization and control, multiscale and multiphysics modeling, computation analysis, environmental modeling, dependability and security, computational biology, chemistry-computational biology, computational mechanics and medicinal chemistry.

30. Department of Pharmacy organized an 'International virtual conference on Drug Discovery and Delivery' on November 6, 2020. The conference highlighted the paradigm shift witnessed by pharmaceuticals in drug discovery and product development from random screening in early eras to rational drug design. The conference program featured 12 international and national invited speakers, renowned scientists in the field and had an assemblage of 350 participants.

31. Prof Shamsher Bahadur Singh, Department of Civil Engineering, along with PhD Scholars Himanshu Chawla(2010PH43412P), and Sudhir Vummadisetti (2014PHXF0409P) has received a patent titled, "A Loading Test Apparatus and Method Thereof". The patent deals with fabrication of a test apparatus for conducting testing on a thin composite plate under in-plane shear load conditions and/or combined in-plane shear and uni-axial compression loads. Through this apparatus, researchers will be able to experimentally predict the buckling load, post-buckling strength, and post-buckling response under in-plane shear and/or combined in-plane shear and uni-axial compression loads with in-plane shear load at one edge only.

• Prof Shamsher Bahadur Singh was also selected as a Member of Sectional Committee as Reviewer of MHRD Scheme, Global Initiative on Academic Network (GIAN) on January 01, 2020.

32. Prof Kumar Neeraj Sachdev, Department of Humanities and Social Sciences, won the best paper award for the paper titled, "An Analysis of an Ethical Conflict in Seller-Buyer Relationship in the Marketplace: A Philosophical Perspective" in the International Conference on Research in Business (ICRB 2020) on "Together towards Tomorrow: Tapping the Tempo" held at India International Centre, New Delhi, India on February 16, 2020.

33. Dr Rajesh Kumar, Department of Computer Science and Information systems, presented a paper titled, "SecSafe: A model based safety-security risk analysis framework for interconnected architectures" at the 14th International Conference on Critical Infrastructures, SRI International, Arlington, Virginia, USA during March 16-17, 2020.

34. Prof Sangeeta Sharma, Department of Humanities and Social Sciences, presented a paper titled, "Creativity in Advertising: Developing a model for willingness and believability" in the International Conference on Technology and Business Management (ICTBM-20) in Los Angeles, USA, held during June 12-13, 2020 and also presented a paper on "Depiction of culture through advertising" in 13th Global Studies Conference at Concordia University, Montreal, Canada, during June 4-5, 2020.

35. Dr Rahul Arora, Department of Economics & Finance, attended a workshop on "Basics of Data Science using Python" held in a virtual mode by FsCongress International Congress on Social Science, Ankara, Turkey and Blue Forskning International Research Society, India during June 15-21, 2020.

36. Dr Sunil Kumar Dubey, Department of Pharmacy, was designated as Bentham Ambassador for the Year 2020-2021. Their research work titled, "Design, Synthesis and Neuroprotective Potency of Self-Assembling Memantine-Docosahexaenoic Acid Conjugate Nanomedicine for the Effective Treatment of Alzheimer's Disease" was selected in ISTAART Student Science Spotlight program in Alzheimer's Association of International Conference (AAIC) a virtual conference during July 27-31, 2020.

37. Prof Suresh Kumar, Department of Mathematics, has been selected as a Visiting Associate at IUCAA, Pune for a period of three years during August 1, 2020 to July 31, 2023.

38. Prof Sangeeta Sharma, Department of Humanities and Social Sciences, received the best paper award for "Marketing at the Bottom of the Pyramid: Overcoming the Challenges through MICMAC Analysis" at National Conference on Managing during Turbulent Times held at ITM Business School, Navi Mumbai on September 25, 2020. She also published her book Advertising- Planning and Implementation.

39. Dr Paul Atish Tulshiram, Department of Pharmacy received "Dr. P.D. Sethi Memorial National Award 2019" by ANCHROM PVT LTD for his research work titled "Development and validation of a new HPTLC- HRMS method for the quantification of a potent pancreatic lipase inhibitory lead Echitamine from Alstonia scholaris".

40. Prof Kuldip Singh Sangwan, Department of Mechanical Engineering, has been considered in the top 2% world scientists list by Stanford University researchers.

41. Prof P. Srinivasan, Department of Mechanical Engineering, has been awarded the prestigious Platinum Award for the Mentor category of CII MILCA AWARD 2020 (Highest award under this category). Prof Srinivasan has made an immense contribution towards arranging Practice School (PS) for 50,000 students in 1000 industries over 12 years. He has mentored 500 PS students at BHEL, Adani Power, Essar Power, Ultratech cement Units, and many other companies for ten years and has implemented 50 projects. He has conducted 30 executive training programs for 1500 working professionals from NTPC, SAIL, VSP, ABG Industries, etc.

42. Dr Rahul Singhal, Department of Electrical and Electronics Engineering, virtually attended the 2020 Asia Pacific Microwave Conference (APMC 2020) in Hong Kong held during December 8-11, 2020 and co-authored the following research papers presented during APMC 2020: (a) Hexagonal Monopole Antenna with Modified Ground Plane for Sub-6 GHz Communication Applications, and (b) Comparative Study of Translated Cross Dipole and Square Loop Frequency Selective Surfaces for Band Stop Characteristics in X-Band.

43. Manan Agarwal (2016B5A70607P) presented a Scientific Poster in the American Astronomical Society (AAS) 235th Conference in Honolulu, Hawaii, USA on January 7, 2020.

44. Shivam Soni (2017D2PS1238P) and Nishtha Pareek (2019B1PS1044P) of the startup "UrbanStack" secured 1st Runner-up in the Final Phase Competition of Be a Road Hero Hackathon on Road Safety organized by Indian Road Safety Campaign, Electrical Engineering Society IIT Delhi, Hero MotoCorp and Hindustan Times on February 15, 2020. The event was graced by Dr S Rajesh, Director, Niti Aayog; Mr. S.K Mishra, Road Safety Enforcement, Ministry of Road Transport and Highways, Government of India; Shri L Kuttiraja, Deputy Director, MoRTH, Government of India; Ms Shipra Gupta, Youth Development Professional, United Nations Volunteer (UNV) as esteemed Jury.

45. Vishnupriya Srivastava (2017ABPS0325P) has been awarded the Student Scholarship to attend the Grace Hopper Celebration of Women in Computing India(GHCI)'20 conference.

46. Abhinav Sanjay Swami (2018B5A30943P), speaker at the ISRO Webinar on "Unlocking India's potential in the Space Sector" represented BITS Pilani on August 20, 2020.

47. Anirudh Srinivasan Chakravarthy(2017A7TS1195P), Honnesh Rohmetra (2016B2A70770P), Divyam Goel(2017A7TS1196P), Harshan Baskar(2018A7PS0166P) and Prateek Garg(2018A3PS0412P) of Sally Robotics, is a student lead research group working at the Centre for Robotics and Intelligent Systems (CRIS), BITS Pilani on all facets of autonomous driving under the guidance of faculty members. This year, the team published a research paper titled "Complete Scene Parsing for Autonomous Navigation in Unstructured Environments" at the IEEE International Conference on Intelligent Autonomous Systems at NTU, Singapore examining the applicability of Computer Vision networks for unstructured Indian environments.

48. Shalvi Shukla (2017B2A40590P), Anirudh Srinivasan Chakravarthy (2017A7PS1195P) were the winners of Schneider Electric's Go Green 2020 Global Competition. They were selected as winners for the Greater India Region. Their idea SmartEye, is an AI and Computer Vision based technology platform for making buildings smarter and energy neutral. They competed with more than 1000 teams from all the top universities.

49. Arihant Jain,(2017B3A30695P), was recognized as one of India's brightest engineering minds by Economic Times in ET Campus Stars for their 2019-20 edition during September 2019 to March 2020 across India. The 6-months long and 4-phase competition provided a quantifiable way of assessing over 49,000+ applicants from over 2000+ engineering colleges across India. The final phase of the program was virtual face-to-face interaction with a Jury member. The Jury comprised leaders and CXOs of various esteemed organizations.

50. Ms. Neelakshi sharma (2016PHXF0008P) and Ms. Gurpreet Kaur (2018PHXF0010P) participated in an online presentation competition on the topic "Refractories, advanced ceramics and glasses" organized by Indian Ceramic Society, Jamshedpur. This competition was organized under the theme of "Aatmanirbhar Bharat Abhiyan: Challenges and opportunities for refractory industry" on July 18, 2020.Neelakshi stood 2nd and won a cash prize of Rs. 15000 and Gurpeet featured in top ten and won a cash prize of Rs.2500.

51. Shital Patil (2018PHXF0029P) of the Department of Mechanical Engineering has been selected for the prestigious Prime Minister Fellowship for Doctoral Research with industry partner National Engineering Industries Limited. This is a unique scholarship scheme of Science and Engineering Research Board, Department of Science and Technology, Government of India, coordinated by the Federation of Indian Chambers of Commerce and Industry (FICCI). He is the first BITSian to receive this prestigious fellowship. He is pursuing his research under the guidance of Dr Amol M Marathe and Dr Arun Kumar Jalan.

52. A.Sudarshan (F20190744) won INSPIRE Scholarships for Higher Education on August 6, 2020, by the Department of Science and Technology, Govt. of India, for securing JEE rank in the Top 10,000 and on the basis of CBSE 12th Board marks.

53. Bharat Agarwal (2019B4A70725P) won a Brainstorm Scholarship of 82 % worth INR 1,22,000 on August 17, 2020, for securing an all India Rank of 67 with a State Rank of 3 in Technothlon organised by IIT Guwahati.

54. Rehan Kunal Jagota (2019B3TS1257P) was awarded First Place in Inter-Collegiate Paper Presentation Competition 2020-21, in the event Student Webinar and Paper Presentation Competition on New Education Policy 2020 at St. Joseph's College of Commerce, Bangalore on September 14, 2020.

55. Prerna Baranwal (2016B4A80568P) attended the event Design in Space for Life on Earth Design Challenge organized by the World Design Organization® (WDO) and Center for the Advancement of Science in Space (ISS National Lab) from September 28 to October 9, 2020. She also attended the Virtual 71st International Astronautical Congress from October 12 to 14 ,2020. She is co-author of publications:

- Conceptual Design of a Mars Constellation for Global Communication Services using Small Satellites. Doi: https://dl.iafastro.directory/event/IAC-2020/paper/60635/

- Optical Communications for Small Satellites: A Review of Pointing Strategies & Requirements Optimization. Doi: https://dl.iafastro.directory/event/IAC-2020/paper/60747/

56. Saurav Harishankar Yadav (2018A2PS0113P) won the O.P. Jindal Engineering & Management Scholarship (OPJEMS) Scholar 2020 award on November 1, 2020.

57. Amarpal Singh Basra(2019B4PS0336P) was awarded INSPIRE Scholarship for Higher Education (SHE) of INR 1,20,000/- for the year 2019-2020 and 2020-2021 on November 20, 2020, by the Department of Science and Technology, Govt. of India.

58. Rohit K Bharadwaj (2017B4A70633P) has been selected for Mitacs Globalink Research Internship 2021 on December 11, 2020. Mitacs Globalink Research Internship is a 12-week research internship that is fully funded by Mitacs and is conducted in Universities in Canada.

59. Linisha Biswal, PhD student, Department of Chemical Engineering, working under the supervision of Dr Somak Chatterjee, won the gold award under the research scholar category, in the CII MILCA program, December 26-27, 2020 for her work on conductive polymeric beads for effluent treatment. She presented the work with the scope to translate the research into industrial output.

K K Birla Goa Campus

1. In view of COVID-19 pandemic, the Convocation 2020 ceremony was not held for graduating students who completed the eligibility requirements in the academic year 2019-20. However, the top three medal winners of the K K Birla Goa Campus - Gold medal – Gargi Balalsubramaniam, Silver medal – Akhil Nori, and Bronze medal – Gunjan Chhablani. were felicitated in an online ceremony held on October 20, 2020. Degrees were posted to 827/1023 First Degree, 173 Higher Degree and 23 Ph.D. Degree students from BITS Pilani, K K Birla Goa Campus.

2. BITS Pilani Alumni Association - BITSAA, along with their alma mater BITS Pilani, organized the fourth edition of the BITSAA Global Meet (BGM) of its alumni at Goa Campus from 17th to 19th January 2020. BGM was attended by over 1100 participants which included alumni from all the four campuses. BITSAA has over 84000 alumni spanning over six decades. The educator, innovator & ecowarrior, Mr. Sonam Wangchuk set the tone for the event with an inspiring vision of simplicity and sustainability. The Chancellor, Dr. Kumar Mangalam Birla, in his welcome note honoured the alumni by naming them the brand custodians of BITS. The Vice Chancellor, Prof. Souvik Bhattacharya exhorted the alumni to work together on the journey to excellence in his welcome address.

3. A state-of-the-art Central Sophisticated Instrumentation Facility (CSIF), fully funded by the BITS Pilani, was inaugurated by the Vice Chancellor, Prof. Souvik Bhattacharya, at Goa Campus on 17th January 2020. The CSIF currently houses various high-end sophisticated instruments for scientific research, including Liquid chromatography—mass spectrometry (LC-MS) unit, Raman Spectrometer, X-Ray Diffractometer, Confocal microscope, Field Emission Scanning Electron Microscope (FE-SEM), and Nuclear magnetic resonance (NMR) spectrometer to name a few. This facility aims to help the researchers of BITS as well as researchers of Goa and neighbouring regions.

4. The Second International Conference on Economics and Finance (ICEF) was organized by the Department of Economics in collaboration with University of Missouri from 23rd to 25th January 2020. The conference was coordinated by Prof. Aswini K. Mishra.

5. BITS BIRAC BioNEST organized a two-day workshop on 'Membrane Processes for Application in Food, Water and Health Sector' on 31st Jan. & 1st Feb., 2020. The workshop was conducted in collaboration with the Department of Chemical Engineering. Faculty members, researcher scholars and students from Bannari Amman Institute of Technology (Erode, Tamil Nadu); KIT's College of Engineering (Kolhapur, Maharashtra); Yeshwant Mahavidyalaya (Nanded, Maharashtra); Dhempe College of Arts & Science and Parvatibai Chowgule College of Arts & Science participated in the hands-on workshop.

6. BIG Awareness Workshop was hosted by BITS BIRAC BioNEST on 3rd February 2020. BIG is flagship programme of BIRAC, which provides the right admixture of fuel and support to young start-ups and entrepreneurial individuals. BIG is the largest early stage biotech funding programme in India. Funding grant of up to INR 5 Million (USD 70,000 approx.) is awarded to the best in class with innovative ideas to build and refine an idea to proof-of-concept.

7. The Cognitive Neuroscience Lab. at the Department of Biological Sciences along with University of Hyderabad and Max Planck Institute of Psycholinguistics, Netherlands jointly organized the Third International Workshop of the Society of the Cognitive Science of Culture (SCSC 2020) from 4th to 7th Feb., 2020. The four-day event brought together around 50 scientists and academic scholars from all across the country to discuss and present their research findings that study the effect of culture and other social conditions on cognition. The conference was coordinated by Prof. Veeky Baths.

8. Hiroshima University (Japan), Indian Institute of Management, Ahmedabad, and BITS Pilani, K. K. Birla Goa Campus, jointly organized the TAOYAKA On-site Training Program on the theme of 'Beach Tourism -- Creating Stakeholder Value and Ensuring Environmental Sustainability' at BITS Pilani, Goa Campus. A group

of 15 students from Hiroshima University (Japan), University of Texas at Austin (USA), IIM Ahmedabad and BITS Pilani, Goa Campus, participated in this one-week program held from 12th to 20th February 2020.

9. A two-day BIRAC Sensitization Workshop on "Grant-Writing, Intellectual Property & Technology Management in Life Sciences" was conducted by BIRAC in association with BITS Pilani, K. K. Birla Goa Campus, on 14th and 15th of Feb., 2020. The guest speakers were Dr. Shirshendu Mukherjee, Mission Director, GCI, BIRAC; Dr. Vinita Jindal, Chief Manager, IP & Technology Management, BIRAC; Dr. Malathi Lakhsmikumaran, Head-Patents, L&S, and Dr. Sudhakar Bangera, AILEEN Clinical Research Services.

10. Alumni Relations Cell organized the second edition of Alumni Research Talks (ART) on the 15th February 2020. A series of talks were given by these eminent alumni of BITS Pilani namely: Prof. Y.N. Mohapatra, Professor of Physics and Materials Science, IIT Kanpur; Prof. Jugal Kishore Verma, Professor of Mathematics, IIT Bombay; Dr. Shruthi Sridhar Vembar, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology, Bangalore; Prof. Subrat Kar, Professor & Head, SeNSE, IIT Delhi; Prof. Subramanian Yashonath, Professor of Solid State and Structural Chemistry Unit, IISc Bangalore and Prof. Patrick Das Gupta, Professor of Physics and Astrophysics, University of Delhi.

11. The postgraduate students of Biotechnology from Goa University along with their faculty, Dr. Meghnath Prabhu, visited the BITS BIRAC BioNEST Innovation Lab on 22nd Feb. 2020 to see the facility, equipment available and demonstration of a few of those. They also visited the STP (Sewage Treatment Plant) as well as the bio-gas plant in the campus and appreciated the Institute's contribution to sustainable environment.

12. An international conference on "Photo-irradiation and Adsorption based Novel Innovations for Water-treatment (PANIWATER)" and general assembly was held at Goa Campus, from 3rd to 6th March, 2020. PANIWATER is an international cooperation research and innovation project sponsored by Department of Science and Technology, Government of India, and European Commission (EC). The PANIWATER Project is one of the seven projects sponsored by the European Commission (EC), the Department of Science and Technology (DST) and the Department of Biotechnology (DBT), Government of India, that will be implemented between 2019 and 2023. The conference was inaugurated by Dr. Rakesh Kumar, Director of CSIR-NEERI and Prof. Raghurama G., Director of BITS Pilani, Goa Campus.   About 50 Indian scientists working in the area of water research did the deliberations on the status of water quality and treatment practices in our country. The conference was coordinated by Prof. Halan Prakash.

13. BITS BIRAC BioNEST arranged a webinar "Building Vibrancy in Entrepreneurship in Goa" with Prof. Mrutyunjay Suar, CEO, KIIT-TBI on 15th July 2020.

14. Society for Artificial Intelligence and Deep Learning (SAiDL) in association with Anuradha and Prashanth Palakurthi Centre for Artificial Intelligence Research (APPCAIR) organized a two-day Summer Symposium of AI Research on 25th – 26th July 2020. The symposium was attended by over 3000 participants from around the world.

15. Prof. Amalin Prince A, Department of Electrical and Electronics Engineering, delivered an invited talk on 'Tuning Voltage Setup and Data Processing for FMCW Reflectometer' during the National Symposium for Commemorating 30-years of ADITYA Tokamak, organised by Institute for Plasma Research (IPR) Gandhinagar, Department of Atomic Energy (DAE), Government of India at Entrepreneurship Development Institute (EDI) of India, Gandhinagar, Gujarat, on 28th January 2020.

16. Dr. Amol Deshpande, Department of Chemical Engineering, delivered an invited Talk in webinar mode, on 'Using Simulation Applications for Teaching' organized by COMSOL Multiphysics Pvt. Ltd., Bengaluru, India on 16th June 2020.

17. Prof. K A Geetha, Department of Humanities and Social Sciences delivered an invited talk on "Gendering Caste: A Study of Dalit Women" at an Online Faculty Development program on Gender Sensitization organized by BBTMC College, West Bengal, July 2020.

18. Prof. K A Geetha, Department of Humanities and Social Sciences presented a paper titled "A Study of Caste and Social Hierarchy within the Devadasi System" at the 6th World Conference organized by TIIKM and Bridge Water State University in a Webinar, July 2020.

19. Prof. Lakshmi Subramanian, Department of Humanities and Social Sciences coordinated an international seminar on 'Technologies of Trust' organized by Institute of Advanced Studies Nantes, Indo-European Advanced Research Network and Godrej archives in Mumbai from 8-10 January 2020.

20. Prof. Lakshmi Subramanian's book 'Singing Gandhi's India: Music and Sonic Nationalism' published by Roli Books was launched and a seminar on Gandhi was organized by Roli Books and Tata Literary Trust in Mumbai 4-5 February 2020.

21. Prof. Lakshmi Subramanian participated in an international seminar organized by Victoria Memorial, Kolkata on Gandhi and Sonic Nationalism.

22. Prof. Lakshmi Subramanian participated in a Conversation series, held on 27th of June-2020, organized by Ahmedabad University on the Future of Business History.

23. Prof. Lakshmi Subramanian delivered an invited talk on Creative pasts: why teach history, at IIT Goa on 10th August 2020.

24. Dr. Pramila Jakhar, Department of Electrical & Electronics Engineering, delivered an invited talk in FDP course on "Next-Generation Semiconductor Devices for high-end applications" (21st-27th June 2020) organized by NIT Patna in association with Electronics & ICT Academy and sponsored by: Minister of Electronics and Information Technology, Govt. of India.

25. Prof. Rajesh Mehrotra, Department of Biological Sciences delivered an invited talk in on 'ACGT cis regulatory elements in Plant gene expression: A comparative Genomics perspectives' at UGC SAP National Seminar, New Vistas in Botany at Goa University on 14th February 2020.

26. Prof. Snehanshu Saha, Department of CS&IS delivered a talk titled 'Ant taxi to Pie Passenger-Distributed Ride strategies' at the 12th International Conference on COMmunication Systems & NETworkS (COMSNETS) held at Bangalore on 7th January 2020.

27. Prof. Snehanshu Saha delivered an invited talk on 'Parsimony Computing: Non-tuning methods in Neural Nets' at the University of Tehran, Iran, on 12th January 2020.

28. Prof. Snehanshu Saha delivered an invited talk on 'Research and Industry Perspective on Data Science, for IEEE Computer Society, Bangalore Chapter on 8th May 2020.

29. Prof. Snehanshu Saha delivered an invited talk on 'AdaSwarm: Optimization in ML' for Nitte Institute of Technology, Bangalore on 1st June 2020.

30. Prof. Snehanshu Saha delivered an invited talk on 'From small data to Big Data: Evolution if AI Techniques: NIAS, Bangalore on 16th July 2020.

31. Dr. Vivek Rangarajan, Department of Chemical Engineering, was an "Eminent Speaker" in the e-Faculty Development Program (FDP) cum Workshop on "WASTE TO BIOENERGY" organized by Department of Life Sciences, School of Basic Sciences and Research, Sharda University, Uttar Pradesh and Department of Agricultural Engineering, Maharashtra Institute of Technology Aurangabad held from 28th June to 4th July, 2020

32. Epione Swajal Solutions (a startup by Dr. Anirban Roy, Assistant Professor, Department of Chemical Engineering) and Mr. Anupam Mukherjee (pursuing PhD under Dr. Anirban Roy's guidance) won the BRIC Idea Exposition on "Healthcare & Environment" organized by BIRAC Regional Innovation Centre in collaboration with IKP and Goa Institute of Management (GIM) held at GIM on 21 & 22 February 2020.

33. Prof. Lakshmi Subramanian, Department of Humanities and Social Sciences has been recognized for her expertise in maritime history, and has been invited by the University of Leiden to conduct a master classes tentatively scheduled in June 2021.

34. Prof. Lakshmi Subramanian, has been invited to write for Observer Research Foundation on Covid 19 from a historical perspective. She has also been approached by Palgrave to assist in the writing of a new economic history of India. Her book 'The Sovereign and the Pirate' (O.U.P., 2016) was selected by the New Books Network, New York to initiate a discussion.

35. Prof. Reena Cheruvalath, Department of Humanities and Social Sciences, along with I Manalo and H Ayabe, presented a poster, entitled as "Planning as a metacognitive strategy, diagram use, and depth of moral reasoning" at EARLI SIGs 8 and 16-Dresden 2020 in DGUV Congress, Dresden, Germany.

36. Prof. Snehanshu Saha, Department of CS&IS, was the recipient for the "Outstanding Paper Award" at the 12th International Conference on COMmunication Systems & NETworkS (COMSNETS) held at Bangalore on 7th January 2020.

37. Dr. Anirban Roy, Assistant Professor, Department of Chemical Engineering, co-authored a book on "Modeling in Membranes and Membrane-Based Processes" (Wiley publishing house).

38. Prof. Dipankar Pal presented a research paper, co-authored with BITS Goa scholars, Mr. Akhilesh G. Naik and Mr. Debarshi Deka, titled, "ASIC Implementation of High-Speed Adaptive Recursive Karatsuba Multiplier with Square-Root-Carry-Select-Adder" in the 11th LASCAS 2020- a signature conference of IEEE CAS, on 26th of February, in San Jose, Costa Rica.

39. Lakshmi Subramanian, Department of Humanities and Social Sciences participated in an International seminar organized on the Self and the other by the University of Nantes and Rome in April 2020.

40. Lakshmi Subramanian participated in The Conversation Series: Business History The Discipline and its relevance, Ahmedabad University, June 27, 2020.

41. Lakshmi Subramanian delivered a Keynote address for international seminar organized by the Jamia Millia Islamia and the University of Witwatersrand 23-25 November 2020.

42. Lakshmi Subramanian was invited to be a resource person for the refresher course at the Academic staff college, Calicut, 23 November 2020.

43. Lakshmi Subramanian delivered a Invited Lecture organized by the Godrej Archives and the CSMVS on Business at the time of Contagion, 26 November 2020.

44. Lakshmi Subramanian conducted the Methodology workshop for research scholars in History at Asoka University on 12 December 2020.

45. Lakshmi Subramanian delivered a Invited talk on Piracy in the Indian Ocean organized by the Maritime Mumbai Society, 12 December 2020.

46. Lakshmi Subramanian participated in The Art of the Painted Post Card, a conversation organized by the Victoria memorial, Delhi Art Gallery and the Jadunath Bhavan Museum and Resource Centre, 21, December 2020

47. Lakshmi Subramanian, Department of Humanities and Social Sciences authored:

   a. The book 'Singing Gandhi's India Music and Sonic Nationalism' (Roli Books, Delhi 2020)

   b. Chapter 'Cohabiting with Contagion: lessons from History', in The Viral World ORF Global Policy edited by Maya Mirchandani and Shobha Suri. (Durham University and Wiley Blackwell 2020) https://www.orfonline.org/ wp-content/uploads/2020/06/The-Viral-World.pdf

   c. 'Musical Publics in Twentieth-Century Madras: Competing Narratives of Sonic Sociability' in Tejaswini Niranjana edited Music, Modernity, and Publicness in India (O.U.P., 2020)

48. Dr. Nilak Datta, Department of Humanities and Social Sciences delivered an invited talk via webinar on "Literary and Cultural Studies: Challenges for Researchers in the 21st Century" the Professor Som P Ranchan Memorial Annual Lecture on 19th October 2020 at the English Teachers' Forum of Himachal Pradesh.

49. Dr. Rajiv Kumar Chaturvedi, Department of Humanities and Social Sciences delivered a Lead talk in International conference on Himalayan Cryosphere organised by IISc Bangalore on 23rd October 2020.

50. Dr. Rajiv Kumar Chaturvedi, co-organised (in capacity of Co-Chair Forest Systems group of IUCN) an International Workshop (online) titled 'IUCN Red List of Ecosystems (RLE) Typologies and Principles of Classification: Assessing Ecosystem Risks for Prioritizing Conservation in Mountain Ecosystems of S. Asia' on the occasion of the World Mountain Day, 14 December 2020.

51. Dr. Rajiv Kumar Chaturvedi, delivered a invited talk on the webinar on Goa State Action Plan on Climate Change as organised by Government of Goa on 29th December 2020.

52. Prof. Kundan Kumar, Department of Biological Sciences, participated in a National Virtual Conference 2020 titled 'Current Trends and Challenges in Plant Biochemistry and Biotechnology' was organized by the Department of Biological Sciences, BITS Pilani, K K Birla Goa Campus, in association with Society for Plant Biochemistry and Biotechnology on 20-21 November 2020.

53. Dr. Rajiv Kumar Chaturvedi, Department of Humanities and Social Sciences contributed to India's official (prepared by the Union ministry of Env. Forest and Climate Change) Biennial Report on Climate Change to United Nations, scheduled to be submitted to UN by Govt. of India on 31st Dec, 2020.

54. Dr. Rajiv Kumar Chaturvedi contributed to preparation of Goa's State Action Plan on Climate Change, received the honour to co-present the SAPCC to Goa Cabinet on 28th of Oct, 2020

55. Prof. Ranjan Dey, Department of Chemistry, was invited to join the Editorial Board of Chemical Physics Physical Chemistry (PCCP), as an Associate Editor.

56. Prof. Ranjan Dey was awarded Certificate of Recognition by Journal of Chemical Thermodynamics, November, 2020.

57. Prof. Ranjan Dey delivered an invited talk on "Solution Thermodynamics and its Applications", at UGC- MHRD Faculty Development Programme Refresher Course in Chemistry-Recent Trends in Chemistry Education and Research, 23rd Nov – 5th Dec, 2020, SGB Amravati University.

58. Prof. Ranjan Dey delivered an invited talk on "Use of Combined Anaerobic Bioreactor and Low Pressure Membrane Filtration System for the Treatment of Low Strength Wastewater to Recover Renewable Resources" in FDP cum Workshop on Waste to Bioenergy, organized by Sharda University and MIT from 28th June to 4th July, 2020.

59. Modified Hind Ubbelohde Approach for Predicting Viscosity of Binary and Multicomponent Liquid Mixtures, Prof. Ranjan Dey and Sanyukta Jain, THERMAM 2020, Institute of Technical Thermodynamics, University of Rostock, Rostock, Germany, 15th October 2020.

60. Density, Ultrasonic velocity, Viscosity, Refractive Index and Surface Tension of aqueous Choline Chloride with Electrolyte Solutions, Aditi Prabhune, Prof. Ranjan Dey, Institute of Technical Thermodynamics, THERMAM 2020, University of Rostock, Rostock, Germany, 15th October , 2020.

61. Prajakta Bhende, PhD scholar from the Department of Biological Sciences, working under the supervision of Dr Anasuya Ganguly and Dr Judith Braganca, had won a paid research internship to work in Cardiff University, UK with Dr Polina Prokopovich, School of Pharmacy for a few months. Due to the covid-19 ourbreak she will travel to UK at a later date. Her topic of research was to make novel scaffolds out of PHA. Prajakta Bhende also helped in testing Covid-19 patient samples at GMC, Goa.

62. Sheetal Thomas, a PhD scholar of Department of Economics along with Mridula Goel and Dipak Agrawal (2020) co-authored "A framework for analyzing financial behavior using machine learning classification of personality through handwriting analysis" Journal of Behavioral and Experimental Finance, Elsevier, Vol. 26, June 2020, 100315, DOI:10.1016/j.jbef.2020.100315 (Scopus, ABDC Grade "A" Journal, Quartile-1)

63. A research scholar, Kasi Bandla, working under the guidance of Prof. Dipankar Pal presented a paper, titled, "Design of Low Power, High Speed, Low Offset and Area Efficient Dynamic-Latch Comparator for SAR-ADC", in the IEEE 2020 International Conference on Innovative Trends in Communication and Computer Engineering (ITCE 2020) in Aswan, Egypt, on 08 February 2020. The paper was jointly authored along with Mr. A. Harikrishnan and Prof. Dipankar Pal.

64. A paper titled "Outage Analysis of OFDMA Based NOMA Aided Full-Duplex Cooperative D2D System", authored by R. Bajpai (2019PHXF0003G), A Kulkarni (2017A3PS0901G), G. Malhotra (2017A8PS0512G), N. Gupta (Faculty), has been accepted for an International Conference on Telecommunications, scheduled to be held at Indonesia on 5th to 7th October 2020.

65. During Practice School-II with UST Global, team BITSIAN_HACKERS consisting of Ravi Sadhwani (2016A8PS0302G) along with other three students of Pilani Campus viz. Teertha Raj Chatterjee, Kartik Nawal, and Abhinay Pande participated in D3 Code Pursuit Hackathon 2019. They showcased the work in D3 Global Summit in December. The team won Runners Up position amongst 440+ teams globally. Each one was awarded Samsung Note 9 as prizes for the same. They have also filed a patent in association with UST for the same algorithm designed.

66. Aditya Choudhary (2017A7PS0041G) along with 5 students from different colleges grouped randomly as a team won the Code For Good 2020 Hackathon. It was the 1st virtual and the biggest Code For Good event till date where 40 teams competed with each other. CFG is a hackathon for social good organisations. Here, students work alongside employees of JPMC to develop technical solutions for NPO's to tackle real world problems. From 23rd July, over the span of 3 days, Aditya's team developed a solution for Janaagraha Centre for Citizenship and Democracy which is working to develop a platform that enables citizens to report societal problems to the public authority. In the 48 hours, they developed a solution for citizens to register complaints about civic conditions with simple interactions through WhatsApp & SMS. Interaction through WhatsApp was processed to extract information on issue and location through ML which can be accessible to NPO through a dashboard. Each member of the team was awarded an Apple iPad worth about Rs. 1.8 Lakh.

67. In January 2020, Project Kratos a twenty five student team with Akash Chaudhary as Team Lead was selected to participate in the finals of the Indian Rover Challenge, held at Vellore Institute of Technology, Chennai. The competition was conducted from 17th to 19th January, and 4 different challenges were conducted to assess all aspects of the Mars Rover: Extreme Retrieval Task, Equipment Service Task, Astronaut Assistance Task and Life Detection Task. There were 21 teams in finals, from colleges all across the world. Project Kratos stood 10th amongst all participatory teams, and also attained first rank amongst all newly participating rovers.

68. Project Sivaar of Enactus BITS Goa led by Naman Gupta and Yash Agarwal: Out of 107 innovative projects from 20 countries, the project has been selected in the Top 24 projects worldwide and will be going to the final round of incubation & mentorship. The team of 15 students participated in Enactus 1 Race 4 Oceans. Project Sivaar aims to tackle the problem of ocean acidification, marine habitat loss and climate change through the creation of sustainable and innovative ocean farms and seaweed cultivation while creating micro-social entrepreneurs out of underprivileged communities and farmers around Goa. The Team has partnered with organisations like TERI & NIO for this endeavour and is mentored by Prof. Mridula Goel. The team will also be representative of the Ocean Student Advisory Group for Impact 4 Oceans during UN Global Goals Week.

69. Team InfinityBox has won the World Regionals of HULT Prize 2020 and is one among the Top 50 startups worldwide who will attend the accelerator at Boston and aim for the $1 Million Prize. InfinityBox is a team of IIT KGP and BITS Pilani students solving the challenge of rising usage of single-use plastics by following a circular economy model for food delivery containers. BITS Goa student Shiv Kumar along with 3 IIT Kharagpur students namely - Shashwat Gangwal, Soham Chandorkar and Keshav Godala constitute Team InfinityBox. Across three pilots in Kharagpur, Gurugram and Mumbai, they have had an outstanding adoption rate of 75% among the consumers. The latest Mumbai pilot was in partnership with Swiggy. The team is looking at replicating this success and have a bigger impact alongside Swiggy. Once operational, InfinityBox would reduce at least 200,000 Kgs of plastic within 2 years. Read more about InfinityBox at https://www.infinityboxkgp.com/

70. Suraj Gupta (2017B2A30329G), Ashutosh Vashist (2017A1PS0892G), Kushal Rathi (2018A3PS0508G) represented India as team "Changemakers" in the Hult Prize Global Regional Finals at Dhaka, Bangladesh(virtually) and secured a position in the Top 50 globally. It is organized by Hult International Business School, conducted in March 2020. The Hult Prize is an annual, year-long competition that crowd-

sources ideas from MBA and college students to solve a pressing social issue such as food security, water access, energy, and education. They developed a solution, "PiezoRun," to recover waste heat energy from road transportation to tackle the everlasting energy problems.

71. Five students of BITS Goa Campus, Suraj Gupta (2017B2A30329G), Ashutosh Vashist (2017A1PS0892G), Aditya Ketkar (2016A7PS0081G), Vishnu Nair (2017A1PS0800G) and Ishan Sharma (2019A3PS0297G), along with one student of Hyderabad Campus, Ishita Kukreti (2017A1PS1037G) participated in the Hack the Crisis – India, an Online Hackathon. This hackathon was organized by Garage48, 'Hack A Cause – India', and 'Ficci Ladies Organization Pune' and supported by the Ministry of Electronics & Information Technology, Government of India (MEITY). The hackathon is part of a global initiative, and their team, "PharmBox," was selected in the Top 30 out of more than 3000 teams (15000+ participants) from all over India in the competition held on 3-5 April 2020. They developed a medicine vending machine system to tackle the problem of medicine procurement in India.   Link to the concept video: https://www.youtube.com/watch? v=xAxU0pfQJx8&feature= youtu.be

72. Three students of Goa Campus namely Shiv Kumar (2017B3A10585G), Mayank Phadke (2017B3A80625G) and Ishita Srivastava (2016A8PS0236G), have made it to the prestigious list of Economic Times Campus Stars Class of 2019-20. The third edition of ET Campus Stars was launched in September 2019. It was a four-phase program participated by 49,000+ students from 2000+ colleges out of which 104 students nationwide were selected for this list. The full list is available here: https://economictimes.indiatimes.com/ etcampusstars

73. The Goa round of the 16th edition of the Tata Crucible Campus Quiz, a national level quiz competition held at BITS Pilani, K K Birla Goa Campus on the 16th February 2020, kicked off with a quick preliminary written round that saw two teams from BITS Pilani Goa Campus (One: Lucky Kaul and Shiv Kumar, Two: Navneet Raghunath and Ratnakant Govenkar) become a part of the top six teams for the on-stage final, out of a 114 teams. The audience was enthralled by an entertaining 45 minute final that was hosted by quizmaster Giri 'Pickbrain' Balasubramaniam, that saw a dominative performance from Lucky and Shiv, who went on to defend the title they had won in 2019. The Director of BITS Goa, Prof. Raghurama G felicitated the winners with a cash prize of INR 75000. The runners up were felicitated with a cash prize of INR 35000.

74. Sharad Chitlangia (2017A8PS0472G), a student of Department of Electrical and Electronics Engineering has won funding support of 10,000 USD (Rs. 7.64 lakhs) provided by Microsoft Research's Reinforcement Learning Open Source Festival. This year only 6 students were selected globally. The Reinforcement Learning (RL) Open Source Fest is a global online program focused on introducing students to open source reinforcement learning programs and software development while working alongside researchers, data scientists, and engineers on the Real World Reinforcement Learning team at Microsoft Research NYC. Students work on a four-month research programming project during their break from university (May-August 2020). Please find more information at this link: https://www.microsoft.com/en-us/research/academic-program/rl-open-source-fest/

75. Ayushi Dubal (2019A7PS0099G), a first year student of Department of Computer Science and Information Systems has been selected for a scholarship of Google's 2020 APAC Women Techmakers Scholars Program. Through the Women Techmakers Scholars Program, Google is furthering Dr. Anita Borg's vision of creating gender equality in the tech industry by encouraging women to excel as active participants and leaders in the field. The scholarship is awarded based on academic performance, leadership, and impact on the community of women in tech. Ms. Ayushi cleared three rounds of selection - a written essay round, the Google Online Challenge, and a telephonic interview, to be selected as one of 74 scholars from all across India and Greater China. Scholarship includes a cash scholarship of 1000 USD, and an invitation to a virtual retreat organised for the scholars, which had multiple workshops and sessions that boosted personal and professional growth.

76. Alish Dipani (2016A7TS0005G), was selected for a grant by The Ruby Association for his project titled Rubyplot: An advanced plotting library for Ruby. He was one of the five recipients with applicants from all around the world; the grant amount was JPY 500,000 for the period from November 2019 to March 2020. This was an extension of his Google Summer of Code (GSoC) 2019 project under The Ruby Science Foundation. Google Summer of Code is a global program focused on introducing students to open source software development. Since its inception in 2005, the program has brought together 15,000+ student participants and 12,000 mentors from over 118 countries worldwide. This year, Google has funded 1195 student projects for 199 open source organizations who benefit from active involvement from new developers.

77. Samesh Lakhotia's (2018AAPS0553G) proposal for Google Summer of Code 2020 has been accepted. He will be working with HydraEcosystem.org on his project, https://summerofcode.withgoogle. com/projects/# 6296902657638400

78. Devansh Aggarwal's (2018A7PS0131G) proposal for Google Summer of Code 2020 has been accepted. He will be working with The Mifos Initiative on his project, https://summerofcode.withgoogle.com /projects/#5282825042919424

79. Varun Bankar (2018B2A70295G) proposal for Google Summer of Code 2020 was selected by CERN-HSF organization. The topic of his summer project is 'Implementation of Graphical User Interface for Ganga' https://summerofcode.withgoogle.com/projects/#5614117127192576 .

80. Alish Dipani (2016A7TS0005G) and Mehul Rastogi (2016A7TS0087G) were selected as Teaching Assistants for an international online computational neuroscience summer school Neuromatch Academy held from 13th to 31st July.

81. Rachit Rastogi's (2016B3A80358G) research paper titled 'Renewable energy firm's performance analysis using machine learning approach' was accepted for the conference "SEIT 2020, The 10th International Conference on Sustainable Energy Information Technology" to be organized in Leuven, Belgium. The paper got published in Procedia Computer Science journal by the Elsevier publications. This paper was co-authored by Dr. Ritika Jaiswal (Department of Economics, BITS Goa) and Dr. Raj K Jaiswal (Department of Computer Science, BITS Goa) who mentored and guided him throughout the process.

82. Tanmay Dixit (2016B2A30593G), along with Prof. Mridula Goel Priyesh Srivastava, Hariram Ramakrishnan and Rajath Reghunath co-authored an IEEE paper entitled "Cloud-based Mobile and Web application to support managing the treatment of Tuberculosis" which was published in COMSNETS 2020 (International Conference on COMmunication Systems & NETworkS) and can be accessed here https://ieeexplore.ieee.org/abstract/document/9027426/ .

83. The nature of tuberculosis, a serious chronic disease, requires regular, continuous drug-based treatment, periodic diagnostic monitoring for serious side effects on liver function and proper supportive dietary nutrition. The app is developed to be very simple and explicit for patients to feed their data and the web interface is to optimize doctor's time in following up on the treatment of the case. Use of the app is expected to solve problems related to the administration of TB treatment, like migration, infectiveness for health and care providers etc. The research paper won the best paper award at the NetHealth Workshop on January 11, 2020 in Bangalore.

84. Snigdha Tiwari (2019A8PS0555G), designed a website for Tehsil Dadri (www.tehsildadri.com) , on a pro bono basis in July 2020 so that people and employees of the tehsil get all the information on one platform. It is regularly updated with the coronavirus pandemic information, public orders and press releases.

85. Uma Matlani (2018H1290017G), a student of M.E. Biotechnology was selected for the Khorana Program for Scholars 2019 to work under the mentorship of Dr. David R Andes, of University of Wisconsin-Madison, USA during the summer vacations (29th May to 3rd August 2019). The program is jointly supported by Department of Biotechnology, Govt. of India, Indo-U.S. Science and Technology Forum (IUSSTF) and WINStep Forward. The program includes travel expenses, stipend, stay, and health insurance of the selected student.

86. Ashutosh Vashist (2017A1PS0892G) was selected to participate in the MIT Africa Takes on COVID-19 Hackathon (https://covid19challenge.mit.edu/africa-takes-on-covid19/), a hackathon organized by MIT students from May 1-3, 2020. The objective of the Hackathon was to encourage innovations to tackle COVID19 in Africa. Ashutosh was amongst 350 participants selected from a diverse pool of more than 2500 international applicants from over 100 countries. He was chosen to be a participant in Track E. Sustaining Primary Care During COVID-19, comprising of participants from worldwide cross-functional teams. The Hackathon required the teams to build a product prototype in 48 hours, make suitable business and financial models for a potential scale-up. Ashutosh led the team, "Lifeline", communicated across different time zones to manage and offered his analytical and product development skills. The team was amongst the Top 20 in the Hackathon.

87. Ashutosh Vashist (2017A1PS0892G) was selected as a Delegate to participate in the prestigious 2020 Harvard College Project for Asian and International Relations (HPAIR) Harvard College Conference (https://hpair.org/harvard-conference-2020), in Cambridge, Massachusetts, the USA from 14th to 17th February 2020. It is the largest international student-organized conference in the world. This year's theme was Striking a balance: Vision of a Conflicted World. Ashutosh was amongst 300 delegates selected from a diverse pool of about 4000 international applicants from around 80 countries. He was chosen to be a participant of the Stride Funding Impact Challenge, comprising of delegates in global cross-functional teams. The Impact Challenge required the team to provide a comprehensive review concerning the target audience of the upcoming startup and list out relevant marketing channels for their campaign. Ashutosh led the team, collaborated with the take of the relevant stakeholders and gave the final pitch. His pitch was deemed amongst the best by the judges of the Impact Challenge.

88. Shrishailya A Agashe (2019A7PS0004G) has filed a patent for a project titled 'Contactless Sanitation System' in the Indian Patent Office. Shrishailya has invented an attachable system for contactless sanitation of the hand and feet which is specially designed and prototyped for the current COVID-19 pandemic situation, wherein contactless hand/ feet washing is an absolute need. Another unique point of the project is that the user are not needed to replace the existing hand washing basins/ stations, since an external attachment is provided for making the process of hand and feet washing contactless and completely automated.

89. Team Vikings, consisting of Anshuman Singh (2018A4PS0512G), Akash Jha (2018B5A80893G), Ashwani Kottapalli (2018B4A70646G), Abhijeet Swain (2018B4A70540G), Wahib Sabir Kapdi (2018A3PS0247G) participated and won the following hackathons:

- HAB-59: Hackathon 59 Atmanirbhar Bharat's main objective was to identify potential secure applications that not only replace but work better than those banned by the Government of India. It was powered by MIT-ADT, TERRE Policy Centre and Smart Campus Cloud Network. Team's Solution Chimera aimed to

provide a one-stop social hybrid gaming platform to promote Indian Game Developers.(project link: https://devfolio.co/submissions/chimera video link: https://youtu.be/Q1u4beOSzX8). We were placed First in the Gaming Category and received a cash prize of Rs. 1 lakh. Article Links(MIT ADT University Pune organises Hackathon 59 Atmanirbhar Bharat 2020, Winners | HAB 59, IIT Roorkee, JSPM's, VIT Vellore, BITS Pilani and MIT ADT University Students win Hackathon 59-Atmanirbhar Bharat)

- Evotech 4.0: Organized by Bharati Vidypeeth's College of Engineering, New Delhi. Team's solution LearnAR. The team was placed 2nd in the Education Theme Category and won a cash prize of Rs 3,000/-

90. Team Project RT, consisting of Devashish Gupta (2017A4PS0151G), Soham Deshpande (2018AAPS0723G) and Stuti Panda (2018B5PS0912G) under the guidance of Dr. Sudeep Baudha participated in an antenna design competition called SWANtenna20 for the Sky Watch Array Network (SWAN) organsied by IUCAA (Inter-University Centre for Astronomy and Astrophysics, Pune). The goal was to design a novel dual-polarized antenna element for astronomical observations at low radio frequencies. Over 39 teams from 32 prestigious Indian educational institutions registered, involving more than 200 students and 60 faculty mentors. The team was shortlisted to present their design to a jury consisting of renowned antenna experts in India. Team's design has been selected for final prototyping, which will be done when the COVID-19 situation improves.

91. Prakhar Yadav (2019H1030032G), Dhairya Parikh (2019H1030906G), Dilpreet Kaur (2019H1030907G), Kajal Parikh (2019H1030016G) and Prof. Hemant Rathore presented a paper on "Movie Recommendation System Addressing Changes in User Preferences with Time" in 20th International Conference on Hybrid Intelligent Systems (HIS 2020) on 14th December 2020. The paper shall be published by Springer Varlag.

92. Suraj Gupta (2017B2A30329G) and Ashutosh Vashist (2017A1PS0892G) have been selected for the prestigious Idea-to-Startup Lab, a start-up pre-accelerator by the Indian School of Business (India) and Bocconi University (Milan, Italy). Their start-up, PharmBox has been selected in the Top 25 ideas nationally out of 500+ applications to develop it further via the pre-accelerator. Idea to Startup Lab is a first of its kind training program tailored for aspiring entrepreneurs in India. This hands-on training program combines cutting-edge practices from management, entrepreneurship, design thinking, and academic research. PharmBox is a touchless 24/7 available medicine dispensing machine product integrated with an Android Application so that people have access to medicines in this crucial time of crisis when the pharmacies are not open. Our product dispenses medicines to a customer on a complete contactless model.

93. Ruturaj Atul Godse (2019A7PS0002G) participated in the ACM India Coding Contest and won second position in the finals and also won cash prize of Rs 10,000/-. The contest, held from 31st October to 21st November 2020, consisted of three rounds of coding and an interview. More than 1,100 students participated in the contest and after two rounds of filtering 11 students were selected for the final round and interviews. For more information: https://www.acm.org/articles/acm-india-bulletins/2020/online-coding-contest-2020-results.

94. Team SAE Aero Club, team Pegasus, consisting of Ashvin Ramesh (2018A4PS0559G), Pragalbh Dev Singh (2018A4PS0517G), Utkarsh Singh (2018AAPS0349G), Paul Jacob (2019B5PS0809G), and Vardhan Nihal Shah (2019A4PS0665G) participated in a Sustainability Challenge: 'Drone-a-thon: Propelling Sustainability' organized for start-ups, Industry Associations for Drones, and Academia. This hackathon was in collaboration with 3DEXPERIENCE Lab and the Drone Federation of India. The team bagged the 3rd prize among a total of 440 teams who registered for the hackathon from all over India. The hackathon was open for start-ups and industry associations for drones as well. 'Drone-a-thon: Propelling Sustainability' is a Design-Simulate-Experience 10 days challenge that inspires Young Minds to be the future innovators and future entrepreneurs in the UAV / Drone sector and it aims to use the 3DEXPERIENCE platform and boost participants' innovation capabilities, develop more creative solutions and create the conditions for remarkable talents to stand out. The Top 5 teams were additionally allowed to pitch their idea to the Shell Oil Company – one of the most diversified international oil companies.

95. Yashraj Sah (2018A4PS0065G) and Yash Bohra (2018B3AA0711G) bagged the 2nd position in EY CAFTA Case Championship 2020 organised by Ernst & Young, among all the UG students across India in 'Managing Cash & Investment' category.

96. Aniruddha Nayak (2018A4PS0850G) and Vivek Gupte (2018B1A40948G) won second prize globally in NASA Challenge: A Common Restraint and Mobility Aid System for Multiple Gravity Environments. In this challenge, participants had to design a restraint and mobility aid system for space habitat enclosures that can be compatible with multiple gravity situations and can be reconfigured based on the gravity situation that it is deployed in. The winners for this challenge were announced on September 11, 2020. https://grabcad.com/challenges/nasa-challenge-a-common-restraint-and-mobility-aid-system-for-multiple-gravity-environments

97. Devanshu Wakhale (2017A4PS0293G), Aniruddha Nayak (2018A4PS0850G), and Vivek Gupte (2018B1A40948G) won the first runners up prize at the University of Queensland Engineering Design Hackathon India. In this hackathon, participants had to design a low-cost, easy to manufacture Covid-19 Ventilator. The final design presentation was held on 21st October and the winners were announced the same day.

98. Akash Jha (2018B5A80893G) and Ashwani Kottapalli (2018B4A70646G) secured first position in All India Elixar AR Challenge organised by Elixar Systems, CSIR-CEERI. Over 350 participants participated in the competition which concluded in August 2020. Team's entry for the competition was CoARona an AR one stop shop for all Covid related needs including news, resources nearby and even medical triage.

99. Shashank Gupta (2020A4PS1816G) won the overall Global Voices MUN (Model United Nations) series organised by the DAIS, which includes a scholarship of 5000 USD. He received High Recommendation in UNOOSA organised by BITSMUN DUBAI, in World Leader's Summit organised by Bhubaneswar IMUN, in WHA organised by NTU MUN Singapore and in UNGA:DISEC organised by BITSMUN Goa. He also received Best Delegate in UNESCO organised by NIT SILCHAR MUN, in UNSC organised by Indian Diplomacy Summit, in African Union organised by VIT Pune MUN and in UNHRC organised by BITSMUN Hyderabad.

100. Navneet Raghunath (2017A3PS1902G) co-authored a conference paper with Prof. M.K Deshmukh and Prof. Sandip S. Deshmukh, titled "Field Performance Monitoring of Roof-Mounted SPV Systems: Application of Internet-Enabled Technologies" which was accepted to be published at Spriger's SIST book series. The conference was held on 21-22 August.

101. Akshay Valsaraj (2018B1A70608G), M Ithihas (2018B1AA0607G), Nikhil Garg (2016B1A30597G), and Mohit Patil (alumni), under the guidance of Prof Veeky Baths published a paper titled "Motor Imagery-Based Multimodal Biometric User Authentication System Using EEG" at the 2020 International Conference on Cyberworlds (CW), 272-279, in the biometrics category. The paper can be found here: https://ieeexplore.ieee.org/document/9240525 They are also currently working on another project titled "Identifying Psychiatric Disorders With Speech and Deep Learning" under Prof Veeky Baths.

102. Akshay Valsaraj (2018B1A70608G) received the prestigious Mitacs Globalink Research Internship for the summer of 2021 from Alberta University to work under Prof Padma Kaul to analyse echocardiography images using deep learning,

103. CEL PROGRAMMES

- Center for Entrepreneurial Leadership (CEL) is an independent society at BITS Pilani, Goa Campus, bridging the gap between Entrepreneurship and Innovation. Through mentorship, teaching, conducting highly competitive activities and funding select startups, CEL ensures that the next-gen entrepreneurs are able to maintain a highly productive environment to incubate budding talent to make it to the top with the motto: Inspire. Ideate. Innovate.

- CEL BITS Goa organised three events in association with BITS Spark as a part of the BITS Spark track at BITS Pilani K.K. Birla Goa campus at BITSAA Global Meet (BGM) 2020. BITS Spark is a BITS Pilani Angel Investment network under BITSAA International, with a purpose to produce and create amazing BITSian Startups and entrepreneurs. The event was organised in three parts, namely, BITS Spark Stars Panel, BITS Spark Cohort Pitches Investment Round 10 and Entrepreneur-Mentor Speed Dating.

Other events include:

- CEL exclusive town hall Session with BITSian Founders/Investors

- Lecture Series

- CEL Accelerators

- Workshops and Webinars

103. NIRMAAN

1) COVID RELIEF INITIATIVE

Nirmaan - Goa Chapter together with community members at BITS Pilani, KK Birla Goa Campus launched an initiative, to help migrant workers and other labourers in Zuarinagar. The initiative has been able to provide dry grocery packs to more than 500 families. They also helped many labourers by providing access to cooked food and dry rations provided by the government. Faculty members who are part of the initiative helped more than 100 migrant labourers register for travel on Shramik trains and many are also being provided a small sum to support them through the journey. They had collaborated with the Primary Health Centre at Cansaulim (which covers the Zuarinagar area) in training trainers to raise awareness and bring about behavioural changes to reduce the spread of COVID-19.

2) PROTSAHAN

Protsahan started with the aim to ensure that no one misses out to reward merit and to uplift the underprivileged and to make a move towards an equal society. The team has planned to identify and enable talented and capable students, to complete their aspirations of higher education though good institutes. The team has conducted more than 1200 scholarship tests across various Government and private schools.

3) INITIATIVE UNNATI

Amidst the Covid-19 situation where all schools were closed, Nirmaan-Goa Chapter took the opportunity to improve English Communication skills of the kids residing in Zari, Lamani and Birla. More than 40 volunteers participated in this 2-week long initiative to teach 20+ students. The volunteers taught these kids through the

means of phone call and followed a standard curriculum. The curriculum consisted of communication situations which a person faces in the outside world. The dedicated volunteers spent almost an hour daily teaching these kids. Towards the end, remarkable changes were observed and the kids' parents were really impressed with the outcome.

4) UDAAN

On 15th of February, the volunteers of Nirmaan Goa successfully organised Udaan in association with Spree - the sports festival of BITS Pilani Goa Campus. Udaan is a sports festival for differently abled children across various schools in Goa. This was the fourth edition of Udaan since its inception in 2017. The event was organised for students with physical and mental disabilities. Udaan 2020 witnessed participation of over 80 students from various different schools from Goa. It was held in collaboration with Special Olympics Association Bharat - Goa and Paralympics Association Of Goa.

5) I-RUN MARATHON

On the morning of 12th January, I-Help Foundation conducted the third edition of their annual marathon: I-Run For A Cause. The volunteers of Nirmaan Organization helped arrange this event successfully.

6) REPUBLIC DAY

A fun filled evening in which 40 children from Lamani were hosted as a part of Republic Day Celebration. The event was done in collaboration with Abhigyaan.

7) MENSTRUAL AWARENESS SESSIONS AND HEALTH CAMPS

In January, a Menstrual awareness session was held in Zari. The session was done in both Hindi and Kannada and 35 women showed up. Later in January, one more menstrual awareness session was conducted in collaboration with the Samriddhi Sharma Foundation for over 50 teenagers of Government High School, Zari. In February, the team conducted their first Dental check-up camp in Zari, where around 70 people got the check-up done.

8) STREET PLAY

Street Play relating to social issues and social awareness was done in 6 different locations of Goa in the first week of February.

Achievements:

a. Last year, 3 kids mentored by Nirmaan got selected in the prestigious Jawahar Navodaya Vidyalaya Schools, where all their education will be completely sponsored.

b. A new Self Help Group (SHG) was established in Birla to empower the ladies and over 4000 paper bags were sold.

Hyderabad Campus

1. Prof. Nishith Gupta, Professor, Department of Biological Sciences, has been given an Outstanding Potential for Excellence in Research & Academics (OPERA) Award, BITS Pilani.

2. Prof. Nishith Gupta, Professor, Department of Biological Sciences, has been sanctioned Wellcome Trust - DBT (India Alliance) Senior Fellowship.

3. Dr. Kirtimaan Syal, Asst. Professor, Department of Biological Sciences, has been selected as permanent member of AMI, India (Kirtimaan Syal).

4. Dr. Pragya Komal, Asst. Professor, Department of Biological Sciences, has been conferred with Early Career Award; International Brain Research Organization (IBRO), in the month of September 2020.

5. Dr. Shuvadeep Maity, Department of Biological Sciences has been given Outstanding Potential for Excellence in Research & Academics (OPERA) Award, BITS, Pilani.

6. Dr. Satyapaul Singh has been conferred with "Telangana Academy of Sciences (TAS) - Young Scientist Award for the year 2019 in the field of "Engineering Sciences".

7. Dr. Satyapaul Singh Recognized Reviewer for Applied Catalysis A: General (Elsevier), Applied Surface Science (Elsevier), International Journal of Hydrogen Energy (Elsevier), Bulletin of Material Science (Indian Academy of Sciences), Advanced Powder Technology (Elsevier), Journal of Nanoscience and Nanotechnology (American Scientific Publishers), Journal of Materials Science: Materials in Electronics (Springer), Solid State Sciences (Elsevier).

8. Prof. I Sreedhar, appointed as an Editorial Board Member in Fluid Dynamics and Materials Processing, a Scopus Indexed Journal, Tech Science Press, USA.

9. Dr Vikranth K Surasani appointed as an Academic Editor in the International Journal of Chemical Engineering (Scopus Indexed) Hindawi Publishing, I.F: 1.8 since May 2020.

10. Dr. Arnab Dutta has been recognized as Reviewer for International Journal of Sustainable Energy (Taylor & Francis Group), Energy Conversion and Management (Elsevier), Journal of CO_2 Utilization (Elsevier), PLOS ONE (Public Library of Science).

11. Prasanth Syamala, P. Aryan, Satchit Nagpal, Students from Department of Chemical Engineering are the Winners of the competition of "Model Making" at IIChE Inter-College competitions organized by Anurag group of Institutions, Hyderabad on 25th February, 2020.

12. Mr. Debashis Panda student from Department of Chemical Engineering conferred with "Padmasri B V Raju Best Student Award" by Indian Institute of Chemical Engineers, Hyderabad Regional Centre (IIChE-HRC).

13. As a part of Faculty Development and International Collaborative Research Dr. Vikranth Kumar Surasani collaborated with Prof. Evangelos Tsotsas (Chair of Thermal Process Engineering, Otto-von-Guerice University Magdeburg, Germany) for developing the Lattice Boltzmann Method(LBM) for Multiphase Flow in Porous media.

14. Prof. Subit K Saha Chaired a technical session under Physical Chemistry Section in online 57th Annual Convention of Chemists, 2020 & International Conference on Recent Trends in Chemical Sciences during 26th to 29th December, 2020 organized by Indian Chemical Society, Kolkata.

15. Prof. Jayanti S: Invited as Judge for "20th Annual Research awards" KVRSS 2019-2020, on 13-06-2020.

16. Prof. Jayanty S: Invited as a Panel of Judge for the "9th SPARK-Innovation awards" for school children of southern states held on 08-02-2020 at Hyderabad.

17. Prof. Amit Nag: Co-Principal Investigator of an ongoing CSIR project. Has been the Principal Investigator of a completed DST project.

18. Ms. Susmita Roy received the ACS Best Oral Presentation Award in SAIS Symposium 2020, at Indian Association for the Cultivation of Science, Kolkata.

19. Mr Thirupathi Reddu Penjarla has won best poster award in Recent Advances in Organic, Medicinal and Biological Chemistry", 8-9th July 2020, VIT- Chennai.

20. Ms. Susmita Roy received the ACS Best Oral Presentation Award in SAIS Symposium 2020, at Indian Association for the Cultivation of Science, Kolkata.

21. Dr. Anasua GuhaRay was elected as an Executive Member of Indian Geotechnical Society, Hyderabad Chapter (2019-2021).

22. Prof. K. Srinivas Raju was appointed as editor, Journal of water and climate change, IWA with effect from July 1, 2020 for a period of three years (https://iwaponline.com/jwcc/pages/Editorial_Board).

23. Dr. Arkamitra Kar was selected as a member of the RILEM TC MPA. This committee is intended to develop working standards for determining the mechanical behavior of alkali activated concrete.

24. Dr Bandhan Majumdar was awarded International Travel Grant (ITS) from DST, Govt. of India for presenting paper in 99th annual meeting of the Transportation Research Board in Washington DC, USA in January, 2020.

25. Agnivesh Pani - PhD Student received the Best Paper Award from AT015 - Freight Planning and Logistics Committee of Transportation Research Board (TRB), National Academies of Sciences, Engineering and Medicine, Washington DC, USA during the 99th Annual Meeting of TRB –January 2020 at Washington DC.

26. Dr. Venkatakrishnan Ramaswamy received the 2020 Grass Fellowship Grass Foundation, USA.

27. Dr. Dipanjan Chakraborty received the Young ICTD Fellow 2020 for United Nations University.

28. Ms. Vijitha Gunta received the Prof. V S Rao Foundation Best All Rounder Award 2020 based on the assessment of all round performance.

29. Dr. Sayan Kanungo has been awarded The Golden Reviewer for IEEE Transactions on Electron Devices Award by the Institute of Electrical and Electronics Engineers in January 2020"

30. Dr. Sayan Kanungo has been awarded the Trusted Reviewer for IOP award by Institute of Physics in September'2020"

31. Dr. Amit Ranjan Azad received "Young Scientist Award" in URSI Regional Conference on Radio Science 2020 held at IIT (BHU) Varanasi in February 2020.

32. Venkatarao Selamneni, Pranav Anand P, and Parikshit Sahatiya, WS2 QD (n) decorated on SnS (p) as Localized Heterojunctions for Highly Responsive Flexible Broadband Photodetector, ICEE, IIT Delhi (Virtual), Dec 2020 (Best Poster Award)

33. Dr. Parikshit Sahatiya has been awared the Best Project Award, Anveshan Fellowship 2020, Analog Devices.

34. Mr. Amogh has been awarded the Best B.Tech Project Award under the supervision of Dr. Parikshit Sahatiya by INAE, Govt. of India, 2020.

35. Dr. Parikshit Sahatiya has been appointed as an Associate Editor for Frontiers in Electronics (Flexible and Wearable Electronics Section)

36. Dr. Parikshit Sahatiya has been awarded the IOP Publishing Top Cited Paper Award (India) in "Materials".

37. Prof. Sanket Goel has been appointed as an Associate Editor, Applied Nanoscience (Springer-Nature), September 2020 onwards.

38.   Prof. Sanket Goel has been nominated as Associate Editor of Applied Nanoscience (Springer-Nature) and IEEE Transactions on NanoBioscience from September 2020 and February 2020 onwards respectively.

39.   Prof. Sanket Goel has been appointed as an Associate Editor, IEEE Transactions on Nano Bioscience, February 2020 onwards.

40.   Dr Amit Kumar Panda moderated the session as a Session Chair in the IEEE International Symposium on Smart Electronic Systems (ISES 2020).

41.   K Pranath Reddy (2016B5A30572H) won Swift Student Challenge Award during Apple WWDC 2020.

42.   Sankalp K G (2016B2A30683H) was part of team which was the finalist in Covid-19 Innovation challenge and received certificate of excellence for proposing herbal nanoformulation to combat against the virus. He also received Certificate of appreciation for top 300 ideas in India for developing prototype of UV embedded glove for sterilization of objects at Hack the crisis India Hackathon organized by Government of India and Garage 48.

43.   Sankalp K G (2016B2A30683H) was honoured with Indo-Asian William Gilbert Best Scholar Award in Electrical and Electronics Engineering in the International Webinar on UN Goals – Quality Education – The Future & International Academic Excellence Awards 2020 organized by IMRF, Dec 15, 2020.

44.   Aryan Singh Gill (2019A3PS0444H) won Silver Medal in Chess at ARENA 2020.

45.   Digvijay Singh (2017AAPS0317H) reached Pre-Final round of FlipKart GRiD, Robotics track. Ishika Kumar (2017A3PS0320H) Participated in BNY Mellon (Bank of New York Mellon) Code Divas Challenge and secured a internship offer through it.

46.   Rishabh Singh (2017B4A81602H), K Pranath Reddy (2016B5A30572H) and Manan Gupta (2017A3TS0488H) got selected for Google Summer of Code (GSoC) 2020

47.   Sargunpreet Kohli (2018AAPS0395H) and Sanghita Chakraborty (2018A8PS0876H) were selected for Google STEP internship.

48.   Dr. Sunny Kumar Singh has joined as an Associate Editor to the journal titled 'SN Business & Economics', a springer journal.

49.   Ms. Shreeya Jain, M.Sc. (Eco) 2016-21 batch, secured an off-campus Thesis at the University of Arizona, USA in the field of Computer Vision and Socially intelligent AI.

50.   Mr. Tarun Garg, M.Sc. (Eco) 2016-21 batch, secured a yearlong undergraduate thesis at Artificial Intelligence Institute, University of South Carolina.

51.   Ms. Aastha Dave, M.Sc. (Eco) 2017-22 batch, published her research work in 2D Nanomaterial Applications in Electronics in IEEE Consumer Electronics Magazine for which she was granted second authorship. She was also amongst 57 students across India to be selected as a Future Research Talent Scholar to pursue a summer research internship at Australian National University.

52.   Mr. Pratik Kamdar, M.Sc. (Eco) 2017-22 batch secured an internship at the Department of Economic Affairs, Ministry of Finance, Government of India

53.   Mr. Pranay Khatwani, M.Sc. (Eco) 2017-22 batch got selected as a member of Harvard Business Review Ascend Select, an invite-only and an exclusive community of aspiring leaders, handpicked by HBR Ascend.

54.   Mr. Vikas Sheoran, M.Sc. (Eco) 2018-23 batch, worked on the problem of age estimation and gender prediction and achieved state of the art results on UTKFace dataset using deep learning. These approaches were Published in the 5th IAPR International Conference on Computer Vision & Image Processing, IIIT Allahabad in collaboration with another student from BPGC.

55.   Ms. Jui Pradhan, M.Sc. (Eco) 2018- completed 3 months of contributions to open source projects in the Google Summer of Code Programme (May-August). She was also selected as a student Delegate in the ECCV 2020 (August).

56.   Ms. Vibha Narendra, Mr Sailesh Duddupudi, Ms Hitaishi Desai M.Sc. (Eco) 2019-24 batch, were awarded second place in the Goodera Global Student Challenge 2020, and were part of the only undergraduate team that reached the finals.

57.   Dr. Lavanya Suresh - Justice E S Venkataramiah Memorial Prize in Development Administration - PhD Thesis was adjudged as outstanding among the theses submitted during the 5-year period of 2014-19 and was awarded the Justice E S Venkataramiah Memorial Prize in Development Administration by the Institute for Social and Economic Change (ISEC), Bangalore on 20th Jan 2020

58.   Prof. A K Gupta ranked among the Top 2% scientists in the world as published by Stanford University Non-2020

59.   Prof. B. Mishra has been selected as a fellow of Royal Astronomical Society, London.

60.   Prof. B. Mishra has been selected as a fellow of Institute of Mathematics and Applications, United Kingdom.

61.   Prof. P.K. Sahoo has been selected as a Fellow of Institute of Mathematics & its Applications (FIMA), London.

62.   Prof. P.K. Sahoo has received Reviewer excellence award 2019 by Indian Academy of Sciences, India.

63. Dr. Manish Kumar has received Young Scientist Award in the 9th International Scientist Awards on Engineering, Science, and Medicine, which was held on September 12-13, 2020 in Trichy, India, by VDGOOD Professional Association, India.

64. Dr. S. Koley's article, "Wave interaction with a submerged semicircular porous breakwater placed on a porous seabed. Volume 80, July 2017, Pages 18-37" is one of the Most Cited Articles 2020 in "Engineering Analysis with Boundary Elements" from Elsevier.

65. Mr. Kottala Panduranga, Research Scholar, received the best poster presentation award from NCASM-2020, a conference organized by Chitkara University, Punjab during September 24-25, 2020.

66. Ms. Sukriti Chakraverti (2020B4PS2327H) got selected for "Pariksha pe Charcha, 2020' conducted by MHRD, Govt. of India, presided by the Hon'ble Prime minister.

67. Prof. Yogeeswari P has received Jury for the Global Student Entrepreneurship Award 2020, one of the biggest student startup competitions across the globe.

68. Prof. Yogeeswari P., ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

69. Prof. Sriram D., ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

70. Prof. Swati Biswas., ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

71. Prof. Yogeeswari P., Jury member for SITARE - GYTI 2021, a national award given to student innovators across the country by the honourable President of India, on Managing Work Life Balance: Story of A Woman Entrepreneur's Life.Prof. Yogeeswari was awarded Shri B. K. Birla and Shrimati Sarala Birla Chair Professorship in 2019.

72. Sri Harshini Goli - BITSAA International Travel award, Autumn Immunology Conference (AIC-2019) [presented reseach paper].

73. Jahnavi Dharwadkar - Special Mention, Human Rights Council, Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad.

74. Royal Tabitha Grace - Khorana Program for Scholars, WINstep Forward (WSF), Indo-U.S. Science Technology Forum (IUSSTF) and The Department of Biotechnology (DBT) of the Government of India.

75. Samhitha Sai Veda Koduganti - Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust.

76. Sneha Das - Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust.

77. Sneha Das - Merit Scholarship, BITS Pilani, Hyderabad Campus.

78. MSK Srujana - Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust.

79. Rohit Bisht (Postdoc Fellow), Emerging Researcher Award (Toxicology and Pharmaceutical Sciences) 2020 6th Annual Millennium Impact Award-2020, Shri Param Hans Education and Research Foundation Trust, New Delhi, India.

80. Prof. Kannan Ramaswamy has been nominated for INSA best science teacher award.

Dubai Campus

1. For its seventh year in a row, STEP Conference, the largest experiential tech festival in the Middle East held at Dubai Internet City on February 11th-12th, 2020 to gather tech startups, investors, entrepreneurs, and influential speakers. Startups across tech, finance, digital, health and a wide range of industries showcased at the Startup Basecamp. With four uniquely placed conferences - STEP Start, STEP Money, STEP X, and STEP Digital - participants experienced the industry's newest innovations, brand activations, live entertainment and benefit from exclusive one-on-one meetings with some of the region's brightest and experienced mentors and investors. Sarthak Sethi (3rd Year) from the ECE department represented BPDC with his startup "IoLetics: Smart Un-manned Retail Solutions".

2. BITS Pilani Dubai campus jointly emerged as overall champions along with the host Gulf Medical University – Ajman at the 19th annual inter-university sports festival of Gulf Medical University, Ajman held from 15th to 20th February 2020.

3. Mr Aditya Saxena, a student of CS first year, participated in a Research Challenge conducted by The UAE's Federal Competitiveness and Statistics Authority (FCSA), in collaboration with the Ministry of Education and the Ministry of Economy from January to May 2020.

The following papers were approved and received the 'Intellectual Property' rights from the 'Ministry of Economy'.

- Paper: Title – 'Lithium-Ion Battery Life Prediction Based on Initial Stage-Cycles Using Machine Learning'
- Authors – 1. Aditya Saxena (C.S. – 1st Year} 2. Dr. Vilas Haridas Gaidhane (Faculty, EEE)
- Category – Electrical & Electronics Engineering

- University – Birla Institute of Technology & Science, Dubai

- Paper: Title – 'Real-Time Drowsiness Detection Using Computer Vision and Raspberry Pi to Prevent Car & Road Accidents'

- Author – Aditya Saxena (C.S. – 1st Year}

- Category – Computer Science & Engineering

- University Representing – Birla Institute of Technology & Science, Dubai

4. Team deGerm from BPDC returned with flying colours with 4 Awards in 4 different countries at the Techstars Startup Weekend Covid Edition 2020 held between 24-26 April 2020.

- Team deGerm: Karan Sharma, Kavya Parthasarathy,Dhruva Kanwar, Divya Sehgal (2nd Year CS), Jaskaran Singh Sethi(2nd Year ECE) ,

- Team deGerm has been awarded Crowd-Fave Startup

- Techstars Startup Weekend Australia - 2nd Position

- Techstars Startup Weekend Thailand - 2nd Position

- Techstars Startup Weekend Algeria - 3rd Position

- Techstars Startup Weekend Sri Lanka

The students were a part of the Techstars Startup Weekend Covid Global Edition where the winners of the various countries competed to be a part of the Techstars Global Covid Bootcamp. The team was awarded mentorship with SIRIVentures & KT Venture Capital, investment and scale-up consultations with 42 Ventures, GC Innovation Hub, & memberships + free access to the resources and programs at the Sydney Knowledge Hub, The Generator at Bundaberg & Gympie and Fishburners. They were also invited to present their solution at the TechSauce Virtual Summit and received a number of free credits and partner resources from Google, Amazon and 42 Ventures.Organizers and partners for these events included representatives from Google for Startup, Amazon, Microsoft for startups, and a number of venture capitalists from these countries. The theme was to build sustainable solutions to tackle COVID-19 and beyond. The events hosted more than 1000 participants in each of the 4 countries, 54 hours of networking, 30+ workshops, 40+ mentors, and judges online on Zoom and Discord while the finale was live streamed on Youtube. Among the participating teams who reached the finals in each of the 4 countries, Team deGerm from BPDC bagged awards in each one of them.

5. ACM Student Chapter of BITS Pilani Dubai Campus won the Excellence Award for Outstanding Chapter Activities. The icon was proudly displayed on our web page along with a cash prize of $500. The student chapter also featuresd on the ACM Website and in ACM MemberNet. The exemplary work put in by all the members of the ACM student council, BPDC for their total involvement and innovation in conducting a plethora of activities and events. Earlier the ACM-W chapter was started last year which is first student ACM-W chapter in UAE. The ACM-W students have also immensely contributed to this award.

6. BPDC students and alumni have won at the Techstars Online Startup Weekend Dubai, COVID Edition 2020, held between 16th April & 18th April 2020. Organizers and partners for this edition included representatives from Dubai Future Accelerators, LEAD Ventures, Microsoft for Startups in the Middle East, GetBee and DTEC Ventures. The theme was to build sustainable solutions to tackle COVID-19 and beyond. The event hosted 280 participants, 54 hours of networking, 6 workshops, 17 mentors, and 6 judges online on Zoom and Slack while the finale was live streamed on Youtube. Among the 10 participating teams who reached the finals, students and alumni from BPDC bagged both the Second and Third Prizes.

Second Position: Team Vision Health: Komal Harish (2019 CS Alumni), Shivangi Kewalramani (2019 ECE Alumni) and Sabiha Shaik (4th Year CS)

Third Position: Team Moood: Parth Poply, Somil Mathur, Tushar Agrawal (4th year CS) and Kenish Shah (4th year Civil)

The teams have been awarded legal consultations worth USD 9500 each, along with 3 months of free access to DTEC's coworking space and their mentorship programs.

7. Team SolarGridX, comprising three students from BPDC, Hardik Bhatia (3rd Year, CS), Devansh Shah (3rd Year, CS) and Prashant Konda (4th year, CS) bagged the 1st place at STARTAD. The students were awarded a cash prize of $3000. StartAD organised their Startup Incubation program 2020, which was a 10-week immersive youth entrepreneurship program focusing on youth entrepreneurial capacity building and supporting the next disruptors of the UAE startup ecosystem and was held at the New York University Abu Dhabi. It came to an end on 20th April with the final pitching competition. It had 19 teams competing against each other.

8. Mr Mohammed Shoaib fourth year CS student secured 3rd place in the NYUAD 2020 Hackathon which was conducted between April 16th -19th 2020. The entire Hackathon was conducted online over Slack,Zoom and GitHub with participants and mentors joining from different countries across the globe. Five of BPDC students were selected to participate in this event which was initially planned to be conducted in NYUAD between April 6th - April 9th, 2020. This event was postponed and converted to an online event due to the COVID 19 pandemic. Three BPDC students participated in this event were Mr Mohammed Shoaib, Mr Harshit Gajjar and Mr Kelvin DeÇosta. The application developed was BFit. A brief description of the winning application is as follows: "During these rough pandemic times, we are forced to stay in quarantine at our homes. This causes minimal movement activity which isn't great for our health. It is very important to stay fit, but it is difficult to get the motivation. BFiT for Be Focused in Training is a social web app that allows users to work out and have training sessions with their family, friends, or anyone who wants to stay fit and healthy. BFiT is your very own personal trainer with planned training sessions catered towards your personal needs!"

9. BPDC Team PowerErn comprising of Jaskaran Singh Sethi (Team Lead) (2nd Year ECE), Karan Sharma (2nd Year CS) & Shaikh Firdous Banu (2nd Year ECE) won the UAE Finals as well as the Middle East & Africa finals of Schneider Electric Go Green 2020- the World's Biggest Global Student Competitions for Sustainability Startups. Out of 4,000+ startups from UAE, they won the UAE Finals of Schneider Electric Go Green in February 2020 and were awarded Incubation by Schneider Electric Gulf Region for a period of 6 months from March 2020 onwards. They were mentored by Mr. Ahmed El-Besary, the Global Director for Europe, MEA and India at Schneider Electric EcoStruxure. Team PowerErn was thus, further, selected to represent the GCC region & Schneider Electric Gulf Region at the Schneider Electric Go Green 2020 Middle East & Africa Finals, held on June 20, 2020, where they were awarded & named in the Top 5 Early-Stage Sustainability & Clean-Tech Startups in Middle East & Africa by Schneider Electric. Team members, Jaskaran Singh Sethi & Karan Sharma were also awarded acceptance into the prestigious Schneider Electric Global Virtual Student Program taking place from June-September 2020, where they will be mentored by the Schneider Electric team and will work on project-simulations. PowerErn is a Seed-Stage startup in the Fin-tech & the Energy verticals working on a micro-investing platform for financing solar projects. After their incubation, they successfully acquired their first commercial project in New Delhi, India.

10. TiE Young Entrepreneur University Pitch 2020 was scheduled on 25th June 2020. Six teams from BITS Pilani Dubai Campus participated in the Open Pitch yesterday. These teams were:

1. Team SolarGridX (Hardik Bhatia, Prasanth Konda, Devansh Shah)

2. Team IoLetics (Sarthak Sethi, Yatharth Kher, Karthikey Rai)

3. Team Debtore (Ismath Haafika, Sumera Sulaiman)

4. Team Neureno (Mohamed Aadil, Astrid Jerald, Aadithyan Rajesh, Mridul Bhandari)

5. Team Jasper (Kenish Shah, Somil Mathur, Jayant Panwar)

6. Team GreenVenn (Aishni Chatterjee, Adil Khan, Simran Sajnani, Sneha Vidyanathan)

There were a total of 16 teams from different Universities to compete with and two of BPDC teams made it to the final FOUR. However, the effort put in by all the teams was worth applause. The winner of the final round made it to the Silicon Valley.

Teams who reached the final round:

1. Team SolarGridX (Hardik Bhatia, Prasanth Konda, Devansh Shah)

2. Team IoLetics (Sarthak Sethi, Yatharth Kher, Karthikey Rai)

11. BPDC Students Mr. Karan Sharma and Ms. Kavya Parthasarathy, 2nd Year CSE won the ThoughtWorks Social Hackathon 2020, conducted by LetsEndorse, eKonnect and Social Alpha on 27th June 2020 through online, by representing Team 'deGerm' under the agenda of: "Developing an efficient prediction and response system to map, track, prevent, and treat communicable disease outbreaks in real-time". Their idea was highly acclaimed and appreciated by the judges. Besides international fame, recognition, and being given a chance to interact with many potential investors and stakeholders, team 'deGerm' has also been allocated a grant of Rs. 50,000 to upscale and manufacture their product, thereby launching it in the mainstream market soon. Team 'deGerm' consists of the following co-founders: Kavya Parthasarathy (Idea Founder; 2nd Year CSE), Karan Sharma (2nd Year CSE), Jaskaran Singh Sethi (2nd Year ECE), Divya Sehgal (2nd Year CSE) and Dhruva Kanwar (2nd Year CSE).

12. BPDC Team comprising Mr. Aditya Saxena (1st year- CSE) and Mr. Yatharth Kher (3rd year- CSE) represented BPDC secured the 1st Prize in the event and have been affiliated as 'Spotlight 2020 Star of Tech-Zest' conducted by University of Stirling, UAE on the 27th of June, 2020. The competition received 34 project registrations teams from UAE, India and the UK. Out of 34 teams, only 5 teams were selected for the final Online Presentation Pitch on 27th June,2020. The project along with their profile was published in a reputed Higher Education magazine 2020 U.A.E Edition; it is an independent Higher Education Portal

and Magazine (in their student's edition). Team built a state-of-the-art Computer Vision model for Social Distancing & Face Mask detection for the Post Covid-19 World. They demonstrated their approach to build a robust social distancing measurement algorithm using a mix of modern-day deep learning and classic projective geometry techniques. They also described their face mask detection approach which provides a high accuracy across a range of customized masks. The project was built under the guidance of Dr. Tamizharasan Periyasamy, Asst. Prof., Dept. of CSE.

13. Mr. Mujahid Salim (3rd Year CS) along with Mr. Zius Cooper (2nd Year ECE) won second place at the INSEAD UAE- Cracked the Crisis Challenge held online from July2 to 4, 2020. The INSEAD National Alumni Association UAE, in collaboration with the other Middle East NAAs and Knowledge Partner Strategy launched the Crack-The-Crisis Challenge for alumni and alumni friends. There were participants from all over the globe including countries like Spain, Austria, UK, India, UAE, and many more. They were also invited to pitch in front of other local angel investors and VCs later.

14. Aditya Saxena (2019A7PS0089U) secured Silver Honour in the Middle East (Gulf region) and ranked among Top 7% globally in the year's edition of "International Astronomy and Astrophysics Competition", IAAC 2020. Dr. Roop Kumar was his supervisor. IAAC is an annual international science competition in the fields of Astrophysics and Astronomy.

15. BPDC Team deGerm comprising Karan Sharma (3rd Year CSE), Kavya Parthasarathy (3rd Year CSE) won an Award for 3rd Place at the recently held Confederation of Global Innovators' Hack-A-Health Hackthon 2020, concerning the impact of COVID-19 and proposing solutions for the same. The team members are now permanent members of the Confederation of Global Innovators (CGI), which is the biggest chain of startups and innovators in India. Organizers and partners for these events included representatives from the Confederation of Global Innovators (CGI), Microsoft for Startups and several Venture Capitalists. The theme was to build sustainable solutions to tackle COVID-19 and beyond. The event hosted more than ~1000 participants from 4 countries, 54 hours of networking, 30+ workshops, 40+ mentors, and judges online on Zoom, Google Meet, Cisco Webex and Discord, while the finale was live streamed on Youtube. Among the participating teams who reached the finals, Team deGerm from BPDC bagged the 3rd Place.

16. BPDC Students RANIA ALI (2019A9PS0011U) and ANURAGH DASGUPTA (2019AAPS0033U) secured the 1st Place and 2nd Place respectively in the 10th International Science Conference, organized by the World Science Congress by their excellent performance in the Extempore Speech Competition in the Group E (College/University) held on 30th August 2020.

17. On 30th Aug 2020, BITS Pilani, Dubai Campus signed MoU with VEGGITECH, UAE to foster research collaborations in the areas of smart agriculture, photobioreactor, and artificial intelligence applied to agriculture. VEGGITECH, UAE works in addressing the key challenges of traditional farming – soil, temperature, and water through its design of protected Hydroponics and Grow Lights assisted Hydroponics. VEGGITECH stands for Vegetation technology redefined and has currently chosen the harsh conditions of UAE to demonstrate these technologies in farms. Chemical Engineering Department took the initiation for the MoU.

18. Adithya Praveen (IV year CSE) secured the bronze position at the Jina X Virtual Hackathon 2020 held from 18th to 20th September 2020 presented by AngelHack, among 700 participants competing worldwide along with a monetary award of $500 for the same. Jina Ai is a neural search company. This means that anyone can use their tools to build a search engine like Google, but you can search using videos, gifs, audio, and not limited to using just text. He presented "CovFeFake", a Covid fake news detector built using the Jina API. Github Project Page: Github Repository

19. BPDC Student Sarthak Sethi (2017AAPS151U) and Mujahid Salim (2017A7PS0139U) won the James Dyson Award UAE 2020. The James Dyson Award is an international design award that celebrates, encourages and inspires the next generation of design engineers. It's open to current and recent design engineering students and is run by the James Dyson Foundation, James Dyson's charitable trust, as part of its mission to get young people excited about design engineering.

Out of 100s of entries across the world, project "OBILIZER" from BITS won the runner-up award at the JDA UAE competition. Award ceremony for the UAE regional level took place at Youth Hub X, Emirates Towers, Dubai on the 21st of September. Teams were also interviewed by news channels, as well as major newspapers. Obilizer enables users to sterilize a wide range of objects of any size, rather than just a single type of object or surface. It is also very interactive and easy-to-use, compared to other sterilizers in the market which are bulky and complex. The device also connects to a smart mobile app allowing users to select objects they want to sterilize while automatically calculating the estimated sterilization time.

20. BPDC team Adithya Praveen (IV year CS) & Dhruv Duseja (IV year CS) won the "Covid-19 Challenge presented by Google Cloud" at HackNC 2020, conducted by the University of North Carolina, USA, among 81 teams competing globally. They have developed a mobile app "Q-UP" that enables people to "wait virtually" at stores in order to avoid overcrowding at consumer outlets during the current pandemic. The app essentially makes waiting time safe and productive, without being present in a physical waiting line and therefore can be used beyond the pandemic as well. By virtue of winning this category, they have also

qualified as finalists for "Google Cloud's Covid-19 Hackathon Fund". Project Page link: Q-UP Project Page on DevPost.

21. Team OFFYCE from BPDC participated in the Future Entrepreneur Awards organised by the Abu Dhabi Chamber of Commerce and Industry (ADCCI) on 21st October 2020 and emerged as winners under the Best Technical Project Category. The FE Awards (Future Entrepreneur Awards) showcased the very best in upcoming innovations across five inspirational categories and team OFFYCE were awarded the "Best Technical Project" amongst 200+ participants. OFFYCE team consisting of Sidhant Sharma (4th year Mech), Hardik Bhatia (4th year CS), Khushdeep Singh (4th Year CS) and Vyome Pathak (4th Year Mech), provided a virtual office space to ultimately replace the existence of physical offices wherever applicable. A monetary award of AED 20,000, Fazaa Card, Project Patent Registration by Abu Dhabi DED and Financial Support by Khalifa Fund were given to the Team OFFYCE members.

22. Team DigIoT won the First Prize in the Maintenance 4.0 Hackathon, which was organised by the Thales Group and Hub71 from 23rd to 25th October 2020. The Hackathon showcased the best in upcoming innovations and technologies that can streamline processes in the Maintenance Industry. Team DigIoT emerged as winners after 48 hours of prototype development. The team "DigIoT" comprised of Sarthak Sethi (4th year ECE), Hardik Bhatia (4th Year CS) and Sidhant Sharma (4th Year Mech), who worked on providing micro-sensor IoT devices which comes with a SaaS product to help the Maintenance Industry.

     A monetary award of $5000 to support building the prototype, a trip to Paris @Thales Digital Factory, a visit of Station F and Sorbonne Center for A.I. and 4 weeks tailored coaching sessions with Thales & Hub71 were awarded to the Team DigIoT members.

23. The research work done by BPDC Team comprising Mr. Prem Dakshin (Student, MBA Batch of 2020) & Dr. Shashank Khurana (Assistant Professor, Mechanical Dept.) was selected for Students Innovations for Translation & Advancement of Research Explorations (SITARE)-Gandhian Young Technological Innovation (GYTI) Award 2020.

     Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), in collaboration with Biotechnology Industry Research Assistance Council (BIRAC) - Department of Biotechnology, India, selected Fourteen proposals for SITARE-GYTI Awards, after multiple rounds of review, for Life Sciences-related applications having high translational potential, from 250 entries of 96 colleges/universities from 23 states, with eleven others receiving appreciation. The details are as follows:

     Title: - Frustum CAM in Medical Ventilators, Research Grant: - 15 Lac INR, Duration: - 2 Years

     Award Function: SITARE-GYTI award ceremony 2020 was organized on 5th November 2020, virtually, and was graced by Hon'ble Union Minister Dr. Harsh Vardhan (Ministry of Health and Family Welfare, Science and Technology; Earth Sciences of India), along with Dr R A Mashelkar (FRS, Chairperson, SRISTI BOARD), Dr Renu Swarup (Secretary, Department of Biotechnology) and Dr. Shekhar C. Mande (DG, CSIR). About the Project: Life-support Mechanical Ventilation is the most challenging and complex of all clinical treatments. The primary objective of ventilators is to aid patients in respiration when they are physically incapable of breathing or breathing insufficiently in unconscious state. The existing ventilators can perform with great accuracy with the aid of new technologies but are very expensive, making them in-accessible in remote areas. This project aimed with the development of an alternate low-cost Electronically controlled stand-alone Frustum CAM based Mechanical System to effectively control the rate and waveform of air in Life-support Ventilator Systems.

24. Student Startups, TAPP (Tap And Pay Payment Solutions) Team comprising Sandhi Reddy Tarun Teja Reddy (2018A7PS0142U), Ashish Kumar Jha (2018A7PS0173U), Abhishek Kanan (2018A7PS278) and Gourisha Sethi (2017A7PS0287) secured the First prize of AED 1000/- in the Marketing Pitch and Poster Competition organized by University of Bolton, Ras Al Khaimah,UAE on 29th November 2020 among 25 participants from various Universities across UAE.

25. Mantra awards held every year in all the BITS campuses were instituted by BITSAA International through CIIE, in 2009, to recognize and reward outstanding students who have demonstrated extraordinary leadership potential and/or entrepreneurial initiative. The following students were the Mantra Award Winners from Dubai Campus for 2019-20. ABAAN AHAMAD ALTAF (2016A3PS0181U) won Outstanding Leadership- Male, SMRITHI MALAVALLI NAGESH (2016AAPS0201U) won Outstanding Leadership-Female, TUSHAR AGARWAL (2016A7PS0080U) won Social Leadership, SARTHAK SETHI (2017AAPS0151U) won Entrepreneur of the Year and SARTHAK SETHI (2017AAPS0151U) won Innovator of the Year.

Events Conducted During the Year 2020

1.   BPDC Library conducted a series of interactive sessions on "Explore the BPDC Library e-Resources and Expand Your Research" during January 6-9, 2020. The sessions were conducted by Dr. R. Sivakumar, Librarian and Mr. K. Jayachandran, Assistant Librarian through which the faculty and research scholars were exposed to online databases, e-journals, e-library portal, digital repository. Faculty and research scholars attended the interactive sessions. In the Interactive sessions, faculty and research scholars were

given information about the use of boolean search, advanced search features in the databases, creation of an individual account in the databases, setting-up of alerts for their interested research area. The features of publication tips available in the online databases were specified to faculty and research scholars. Faculty research publications in the online databases were presented.

2. Department of Electrical and Electronics Engineering, BITS Pilani, Dubai campus Organized three-day International Conference MoSICom 2020 on Modelling, Simulation and Intelligent Computing. BITS Pilani, Dubai Campus invited delegates and academia to be a part of the three-day International Conference on Modelling, Simulation and Intelligent Computing from 29th January to 31st January 2020. Prof. R. N. Saha, Director, BITS Pilani,Dubai Campus emphasized the importance of modelling and simulation for industrial applications. Dr.VilasH Gaidhane, Head of the department introduced the guest of honor his Excellency Dr.Thanibin Ahmed Al Zeyoudi, Member of the Cabinet of the U.A.E. and Minister of Climate Change and Environment. His Excellency Dr. Al Zeyoudi delivered a talk on "Young minds and Future of Dubai" which was well received by the conference delegates. The Chief Guest, Dr. Eesa Mohammed Bastaki, President of the University of Dubai in his address focused on "Role of Business in Research". The speech was highlighting the various elements of Industry 4.0 which include IoT, Block Chain, Big Data, AI, Robotics, Nanotechnology, Biotechnology and 3D printing. Program chairs of MoSICom2020 Dr. NileshGoel, Dr. Shazia Hasan and Dr. V. Kalaichelvi faculty members of Electrical and Electronics Engineering Department, BITS Pilani, Dubai Campus have received paper submissions by academia on multiple tracks including Data Science and Engineering, Communication and Networking, Robotics, Control, Instrumentation and Automation. Accepted papers presented at the conference and published in Springer Series. Over the course of 3 days, papers presented on different tracks of the conference along with keynote sessions by Prof. Madan M. Gupta from University of Saskatchewan, Canada, Dr.Hussam Amrouch from Karlsruhe Institute of Technology, Germany, Prof. Sukumar Mishra, IIT, New Delhi, Prof. Lotfi Romdhane, American University of Sharjah, U.A.E and Dr. Navneet Gupta,Principal Engineer in Minima Processor, Finland.

3. BPDC hosted ENGINuity '2020, the inter-college competition from February 11-13, 2020. ENGINuity, the annual inter-university techno-managerial and innovation festival held in and by BITS Pilani-Dubai Campus, is one of the most prestigious platforms to showcase one's technical affinity. The Director Prof. R. N. Saha inaugurated the event by lighting the lamp. The various events include Marvel Mania, Kick-off, Back to the Future, Codeblitz, Project Sierra, El Salvador, IEEE Pitch 2.0, Neuron Rush, Capture the Flag, Electro Run, The Big Oh, Frynapse and Mathemagicians.

4. On February 20, 2020, IEEE Women in Engineering, BPDC presented a talk on "Electric Vehicles and the Power Grid" by Balqees A. Al-Daghar, Chair, WIE – UAE Section, E-Mobility Solutions Specialist, ABB Industries LLC, UAE.

5. On February 26, 2020, Department General Sciences, BPDC organized an invited talk followed by interactive session on "Carbon in Nano dimension - its technological Significance" by Dr.M.Ashraf Shah, Special Center for Nanosciences, P.G. Department of Physics, National Institute of Technology, Srinagar, Hazratbal Srinagar- 190006 (J&K), India.

6. On March 1-2, 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized a workshop by Omnibulls on "How to Create Wealth in Stock Market" by Mr. Hardeep Malik, IITian, Founder Omnibulls, NISM Certified Research Analyst. The workshop covered the topics: Introduction to the Stock Market, Technical Analysis of Stock Market, Fundamental Analysis of Stock Market and Behaviour Analysis of Stock Market.

7. On June 19, 2020, Skyline Association, Civil Engineering Department, BPDC organized a webinar session on "Effect of a Pandemic Crisis in the Construction Industry" by Mr.Nasser Al Yazji, the Chairman of Al Bawadi Road Contracting LLC.

8. On June 20, 2020, Placement Division, BPDC organized a live webinar session on "'Understand the present and gear up for the future" by Mr. Kunal Wadhwani who is currently the Group HR Head - GCC Region.

9. On June 21, 2020, On International Yoga Day, BITS Pilani, Dubai Campus Sports Club organized YOGA Online Workshop by Shikara Baddam.

10. On June 28, 2020, Placement Division, BPDC organized a live webinar session on "Identifying Opportunities - Dealing with Career Choice in an uncertain Environment" by Mr. Vinay Kapoor, An Entrepreneur, former Investment banker (Ex MD @ Citigroup).

11. On July 2, 2020, Placement Division, BPDC organized a live webinar session on "Accelerating Artificial Intelligence, Machine Learning & Deep Learning Adoption" by Mr. Raed Hijer, Senior Principal Engineer, Product Technologist, Dell, UAE.

12. On August 9, 2020, Department of Mechanical Engineering, BPDC organized a webinar session on "Advanced Composites for High-Speed Rotor Applications" by Dr. S. Nagesh, Scientist 'E', Aircraft Project Division, Combat Vehicles Research and Development Establishment, DRDO, India.

13. On August 9, 2020, Placement Division, BPDC organized a webinar session on "Transforming-Job, Employability & Career" by Dr. Dhirendra Gautam, founder of Great Human University. Dr. Gautam is a highly qualified man with global experience in the corporate world. He is a life and business doctor, and his qualifications include Ph.D., CA, ICWA and CMA.

14. On September 3, 2020, BPDC Library organized a webinar session on a book titled "Digital Nation - How the United Arab Emirates is building a future based on Tech Innovation" by the co-author of the book, Mr. Ranjit Rajan, Vice President & Head of Research, Middle East, Turkey & Africa, International Data Corporation.

15. On September 5, 2020, Alumni Relations, BPDC organized a web talk on "5G Meets Virtual Reality" by Nikhil Nair (BE Computer Science 2006, BPDC). Nikhil is currently working for HTC as Customer Business Lead for Middle East and Africa. Please find his details in the resume attached.

16. On 6th September 2020, Sports Division, BPDC organized the Virtual Annual Sports Days. Chief Guest, for the day was PULLELA GOPICHAND, Former Indian Badminton Player, Padma Shri, Padma Bhushan and Rajiv Gandhi Khel Ratna Awardee, Chief National Coach for the Indian Badminton Team.

17. On September 8, 2020, BPDC Library organized an exclusive online training on "Effective Utilization of BPDC e-Library powered by Knimbus" by the Mr. V. Venkatesh. Key Account Manager, Knimbus, India.

18. On September 15, 2020, Engineer's Day Event was celebrated to mark the birth anniversary of Bharat Ratna Sir M Visvesvaraya, (1861-1962), the legendary engineer. The event celebrations were organized by The Institute of Engineers (India), Student Chapter BPDC. Prof. R. N. Saha, Director, BPDC addressed the event. The chief Guest address was given by Mr. Suresh Redhu, Senior Vice-President, Eureka Forbes Limited. The faculty's talk was given by Dr. Murchana Changmai, Faculty, Chemical Engineering and student's experience was shared by Ms. Kavya Parthasarathy.

19. A Virtual Library Orientation "KNOW YOUR LIBRARY" on Saturday, September 26, 2020 was conducted by BPDC library staff for 2020 Batch Students.

20. On September 26, 2020, Alumni Relations, BPDC in association with BITSAA ME organized an enlightening talk on "Advances in Robotics: Where and How can you fit in?" by Mr. Anshul Singhal (BPDC 2010-2014), CEO and Founder, Sentient Labs FZ-LLC.

21. On September 26, 2020, Placement Division, BPDC in association with Global Society of HSE Professionals (GSHP) and Sanbook Quality Consultancy (SQC) organized a webinar via Facebook on "Digital Transformation and Social Media Marketing Awareness". The speakers were Dr. Sunil Manjarekar, CEO-SQC and Mr. Mohammed Abubakker, IT/SM Advisor-SQC. Th guest of honour was Dr. S V Kota Reddy, Academic President, MAHE, Dubai Campus.

22. On October 3, 2020, BPDC Library organized an exclusive online training on "Effective Utilization of BPDC e-Library powered by Knimbus" by the Mr. V. Venkatesh. Key Account Manager, Knimbus, India.

23. On 4th October 2020, the Student Welfare Division, BPDC has organized Ice Breakers (Freshers' Party) via Zoom Platform to the freshers and the senior students joined the event.

24. On October 10, 2020, BPDC Library organized an online webinar for BPDC students, research scholars and faculty on "How to Publish a Quality Technical Paper" by Prof. (Dr.) Bhim Singh, Professor, Department of Electrical Engineering, IIT Delhi, India. Prof. Singh is the top author in IEEE Xplore from India more than 1200 journal research papers and conference papers, executed more than 80 sponsored projects, filed 60 patents, guided 88 Ph.D scholars and recipient of Many Research Awards.

25. On October 28, 2020, BPDC Library organized an online training webinar session for BPDC students and faculty on "EBSCO Engineering Source" by Mr. Seoud Bemath, Training Specialist from EBSCO, MENA Region, located in London.

26. On October 28, 2020, the Social and Environment Club, BPDC organized a 'Pink day' at BPDC to spread the awareness of Breast Cancer, as October month is observed as the Breast Cancer Awareness month

27. On November 4, 2020, Academic-Graduate Studies and Research Division as part of Research Skills Development Workshop Series organized talk on "Introduction to LaTeX - A document typesetting system" Dr. Vivek B, Faculty, Department of Civil Engineering, BPDC.

28. On November 5, 2020, Placement Division, BPDC organized a webinar via Zoom platform on "How a reinvented full feel resume can enhance your career opportunity" by Ms. Rupali Saiya, the founder of fullfeel.

29. On November 11, 2020, Placement Division, BPDC organized a webinar via Microsoft Teams platform on "Experience Workday 2020" by Adecco Group. Presentation on below topics were presented:

 "LinkedIn Rock your profile" by Zita Smith, LinkedIn Ambassador,

"Preparing for the Job Market in UAE post COVID-19 and the Importance of Being Agile" by Mayank Patel, Country Manager at Adecco Middle East, "Information Technology Market Insights, how to land in an IT entry level job in UAE" by Rohit Kanwar IT Staffing Manager at Adecco Middle East,

"Resume Tips to Help you Land Your Dream Job in the Banking Sector" by Richard Garfield, Head of Banking Finance and Fintech

"Importance of digital transformation, examples of companies innovating in technology, technology influence on job market" by Mohamed Bahaa, Head of Operations, Adecco Middle East.

30. On November 18, 2020, Placement Division, BPDC organized a webinar via Zoom platform on "How Digital Entrepreneurship will affect future entrepreneurs" by Ms. Deepa Sayal, a Serial Entrepreneur, Renowned Keynote Speaker and Digital Transformation Coach.

31. On November 19, 2020, Dr. Ranendra N Saha; Director and Senior Professor, BITS Pilani, Dubai Campus acted as panelist and delivered a talk on "Transforming Education through Easy and Advanced Technological Solutions" in the webinar on Inspiring EduTalks Session. The session will be hosted by Dr. Sohan Roy, Founder Chairman and CEO of Aries Group of Companies.

32. On November 21, 2020, Skyline Association, Civil Engineering Department, BPDC as Industrial Experts' Lecture Series organized a webinar session on "Introduction to Peikko Designer- Design Software" by Mr. Nirajuthan Selvarajah, Project Manager and Senior Structural Engineer, PEIKKO Gulf LC and by Mr. Vesa Miettinen, R&D and Technical Manager, PEIKKO Gulf LC.

33. On November 23, 2020, American Society of Mechanical Engineers, BPDC as Industrial Expert Lecture Series organized a webinar session on "Steam Engineering: Industry Standards for Product Design and Development" by Mr. Monikandan, Manager, Quality Assurance, Armstrong International.

34. On November 29, 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized an informative session on "Legal Guidance on registration of Student Startup" by Rohit Ghai, Founder, 10 Leaves (Niche consultancy with a focus on regulatory authorization in the DIFC and ADGM).

35. On November 30, 2020, American Society of Mechanical Engineers, BPDC as Industrial Expert Lecture Series organized a webinar session on "Quality Control and Assurance" by Mr. Deepan Govindasamy, Manager, Quality Assurance, Armstrong International.

36. On November 30, 2020, Sports Club, BPDC, on UAE National Day Martyrs' Day, distributed sanitizers among students, faculty and staff for health and safety in association with Lifebuoy and Care Direct.

37. On December 6, 2020, Department of Electrical & Electronics Engineering, BPDC organized enlightening talk through googlemeet on "Robot Perception: Understanding what we see" by Mr. Aaditya Saraiya, BPDC Alumni (2014-2018), Computer vision and Machine Learning Engineer at Outrider, ai.

38. On December 8, 2020, Placement Division, BPDC organized a webinar session on "Exploring Career Options in Cyber Security" by Mr. Yashaan Cooper. BPDC Alumni (Batch 2016), Regional Manager, Galaxkey.

39. On December 9, 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized a live Q & A session on Sales, Marketing and Entrepreneurship with Mr. Shubhojit Mahanalobis, General Manager, Danube Homes and Danube Hospitality Solutions on the title "It's all in the Mind".

40. On December 12, 2020, Skyline Association, Civil Engineering Department, BPDC as Industrial Experts' Lecture Series organized a webinar session on "Geotechniques - Key foundation for Civil Engineers" by Mr. Raj Tilak, Principal Geotechnical Engineer, WorleyParsons, Dubai.

41. On December 13, 2020, Placement Division, BPDC organized a Virtual Job Interview Workshop on "The Research, The Interview and The Follow-up" by Mr.Dinesh Dsouza, Director of Genesis Executive Search, a Passionate Recruiter and Consultant with 20 years of Middle East Expertise .

42. On December 16, 2020, Academic-Graduate Studies and Research Division as part of Research Skills Development Workshop Series organized talk on "Cross Sectional MultiVariate Data Analysis using IBM SPSS and IBM AMOS" Dr. Nitin Vihari, Faculty, Department of Humanities, BPDC.

A.2   ADMINISTRATIVE APPOINTMENTS

A. The following have been extended as Directors as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Sudhirkumar Barai	Director, BITS Pilani, Pilani Campus	14-01-2020 to 13-01-2025

B. The following have been extended as Director as per details given below:

S.No.	Name	Administrative Function	Period
Dubai Campus			
1.	Prof. R. N. Saha	Director, BITS Pilani, Dubai Campus	18-07-2020 to 17-07-2021

C. The following have been appointed as Director-in-charge as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Sudhirkumar Barai	Director-in-charge, International Programmes and Collaborations	01-08-2020 to 31-07-2021

D. The following have been appointed as Acting Registrar as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Bijay Kumar Rout	Acting Registrar	w.e.f. 14-12-2020

E. The following has been appointed as Dean (Institute-wide) as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Prof. S. Gurunarayanan	Work Integrated Learning Programmes	08-06-2020 to 07-06-2023
(b) Hyderabad Campus			
1.	Prof. Srinivasa Prakash Regalla	Practice School	08-06-2020 to 07-06-2023
2.	Prof. M B Srinivas	Academic-Graduate Studies & Research	08-12-2020 to 07-12-2023

F. The following has been appointed as Professor-in-charge (Institute-wide) as per details given below:

S.No.	Name	Administrative Function	Period
K K Birla Goa Campus			
1.	Prof. Ashwin Srinivasan	Anuradha and Prashanth Palakurthi Centre for Artificial Intelligence Research (APPCAIR)	11-02-2020 to 10-02-2022

G. The following has been appointed as Associate Dean as per details given below:

S.No.	Name	Administrative Function	Period
(a) K K Birla Goa Campus			
1.	Prof. Rakesh Mehrotra	International Programmes and Collaborations	24-02-2020 to 15-07-2020
2.	Prof. Sachin D. Waigaonkar	Practice School	16-12-2020 to 15-12-2023
3.	Prof. Karuppiah R Anupama	Work Integrated Learning Programmes	16-12-2020 to 15-12-2023
(b) Hyderabad Campus			
1.	Prof. Sridhar Raju	Work Integrated Learning Programmes	30-09-2020 to 15-08-2021
Dubai Campus			
1.	Dr. Somasundaram Arumugam	Practice School	01-07-2020 to 11-09-2021

H. The following has been appointed as Estate Manager as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Mr. Amit Goel	Estate Manager	w.e.f. 29-05-2020

I. The following have been appointed as Heads of Departments as per details given below:

S.No.	Name	Department	Period
(a) Pilani Campus			
1	Prof. P R Deepa	Biological Sciences	01-09-2020 to 31-08-2022
2	Prof. Banasri Roy	Chemical Engineering	01-09-2020 to 31-08-2022
3	Prof. Ram Kinkar Roy	Chemistry	01-09-2020 to 31-08-2022
4	Prof. Anupam Singhal	Civil Engineering	01-09-2020 to 31-08-2022
5	Prof. Sudeept Mohan	Computer Science and Information Systems	01-09-2020 to 31-08-2022
6	Prof. H D Mathur	Electrical & Electronics Engineering and Instrumentation	01-09-2020 to 31-08-2022
7	Prof. Devika	Humanities and Social Sciences	01-09-2020 to 31-08-2022
8	Prof. Leela Rani	Management	01-09-2020 to 31-08-2022
9	Prof. Devendra Kumar	Mathematics	01-09-2020 to 31-08-2022
10	Prof. Hemant R Jadhav	Pharmacy	01-09-2020 to 31-08-2022
11	Prof. Rakesh Choubisa	Physics	01-09-2020 to 31-08-2022
(b) Hyderabad Campus			
1	Prof. Jayati Ray Dutta	Biological Sciences	01-10-2020 to 30-09-2022
2	Prof. I. Sreedhar	Chemical Engineering	01-10-2020 to 30-09-2022
3	Prof. Sounak Roy	Chemistry	01-10-2020 to 30-09-2022
4	Dr. Murari Raja Raja Varma	Civil Engineering	01-10-2020 to 30-09-2022
5	Prof. G Geethakumari	Computer Science and Information Systems	01-10-2020 to 30-09-2022
6	Prof. Alivelu Manga Parimi	Electrical & Electronics Engineering	01-10-2020 to 30-09-2022
7	Dr. Biswanath Dash	Humanities and Social Sciences	01-10-2020 to 30-09-2022
8	Prof. Pradyumn Kumar Sahoo	Mathematics	01-10-2020 to 30-09-2022
9	Prof. N Suresh Kumar Reddy	Mechanical Engineering	01-10-2020 to 30-09-2022
10	Prof. Aranya Bhuti Bhattacharjee	Physics	01-10-2020 to 30-09-2022
(c) Dubai Campus			
1.	Dr. S Ramachandran	Biotechnology	16-06-2020 to 15-06-2022
2.	Dr. Vivek B Kartha	Civil Engineering	16-06-2020 to 15-06-2022
3.	Dr. M Raja	Computer Science	16-06-2020 to 15-06-2022
4.	Dr. Jagadish Nayak	Electrical & Electronics Engineering	01-09-2020 to 15-06-2022
5.	Dr. Geetha Kannan	General Sciences	16-06-2020 to 15-06-2022
6.	Dr. Priyank Upadhyaya	Mechanical Engineering	16-06-2020 to 15-06-2022
7.	Dr. Nishant Harishbhai Pandya	Chemical Engineering	16-06-2020 to 15-06-2022
8.	Prof. Shazi Shah Jabeen	Humanities & Social Sciences	16-06-2020 to 15-06-2022

J. The following have been appointed as Faculty-in-charges as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Dr. V.S. Shekhawat	Software Development & Educational Technology	01-09-2020 to 31-08-2022
2.	Prof. Shilpi Garg	Infant Care Center and Institute Functions	01-09-2020 to 31-08-2022
3.	Dr. Sunil Kumar Dubey	Public Relations	01-09-2020 to 31-08-2022
4.	Prof. G S Chauhan	Publications and Media Relations	01-09-2020 to 31-08-2022
5.	Prof. Pushp Lata	Teaching Learning Center	01-09-2020 to 31-08-2022

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
6.	Dr. Hari Babu Kotakula	Time Table	01-09-2020 to 31-08-2022
7.	Dr. Pankaj Kumar Sharma	VFAST, Cafeteria & Transport	01-09-2020 to 31-08-2022
(b) Hyderabad Campus			
1.	Dr.Kurra Suresh	Placement	08-08-2020 to 07-08-2022
2.	Dr. Soumya J	Placement	08-08-2020 to 07-08-2022
3.	Prof. Sashideep Gutti	Time Table / Exams	03-11-2020 to 07-08-2022
4.	Prof. R Raghunathan	Strategy Planning	23-12-2020 to 22-12-2022

K. The following have been appointed as Coordinator as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Prof. R. Mahesh	Central Instruments Facility	w.e.f. 26-11-2020

The names and designations of senior officers of different campuses are given in Annexure (Pilani Campus, **'Annexure B1-13'**; K K Birla Goa Campus, '**Annexure B2-1'**; Hyderabad Campus, '**Annexure B3-1'** and Dubai Campus, '**Annexure B4-1'**).

A.3   ADMINISTRATIVE BODIES

General Body
The General Body of the Institute held its 59th Meeting on 18th September 2020 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute. Details are given in **'Annexure A-1'**.

Board of Governors
The Board of Governors of the Institute held its 73rd Meeting on 18th September 2020 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute. Details are given in **'Annexure A-2'.**

Finance Committee
The Finance Committee of the Institute held its 59th Meeting on 18th September 2020 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

Senate
The Senate of the Institute met seven times during the year. It held its 193rd, 194th, 195th, 196th, 197th, 198th and 199th meetings on 18th February 2020, 06th March 2020, 27th April 2020, 23th May 2020, 14th August 2020, 13th September 2020 and 28th December 2020 respectively.

Examination Committee
The Examination Committee met 9 times during the year for analysis and declaration of grades; approval of Ph.D. thesis reports; approval of award of degrees/medals for eligible students; deciding cases of scrutiny, unfair means and related matters.

A.4   ADMISSIONS

BITSAT 2020
A total of 125114 candidates, including 34078 girls, from all over the country applied for BITSAT 2020 test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during 16th Sep to 23rd Sep, 2020.

In addition to this 301 applications were also received for admissions under International students' scheme.

BITSAT 2020 Highlights are
- Computer-based objective type online test, conducted from 16th Sep to 23rd Sep, 2020 in 58 cities across India and in Dubai.
- 125114 candidates including 34078 girls appeared in BITSAT-2020 for 3060 seats.
- Use of secure high-end Technology.
- Choice of date, time and center for candidates, and immediate result on computer screen.
- Eligibility criteria for admission to Integrated First degree programmes: A Minimum 75% aggregate marks in Mathematics, Physics & Chemistry with a minimum of 60% in each (in 10+2 stream).

In addition to admission through BITSAT: direct admission offers were made to board toppers irrespective of their BITSAT score. 15 board toppers joined BITS in 2020.

120 students were admitted under 'International students' admissions scheme'.

The results of admissions to BITS were made available on Internet. Candidates applying for admission to BITS could find the latest information on the status of their application at http://www.bitsadmission.com/. Information on waiting list status, fee payment status etc. was made available and thousands of applicants used this instant access for information.

The number of admissions made to various programmes of the Institute in the year 2020 are given in the table below. The numbers in brackets indicate number of female students. The details such as programme-wise cut-off scores etc. are given in '**Annexure A-3'**. A comparison of the cut-off marks/scores for admissions to BITS since 1966 are given in **'Annexure A-4'.**

	II Semester 2019-2020	I Semester 2020-2021
1. BITS Pilani, Pilani Campus		
Integrated First Degree Programmes		1120 (153)
Higher Degree Programmes		409 (125)
Doctoral Programmes	60 (25)	88 (42)
Total	**60 (25)**	**1617 (320)**
2. BITS Pilani , K K Birla Goa Campus		
Integrated First Degree Programmes	-	945(104)
Higher Degree Programmes	-	177(36)
Doctoral Programmes	35 (17)	37(13)
Total	**35(17)**	**1159 (153)**
3. BITS Pilani, Hyderabad Campus		
Integrated First Degree Programmes	-	1164(210)
Higher Degree Programmes	-	308(87)
Doctoral Programmes	75(36)	65 (28)
Total	**75 (36)**	**1537 (325)**
4. BITS Pilani, Dubai Campus		
Integrated First Degree Programmes	03(00)	241(72)
Higher Degree Programmes	09(04)	23(06)
Doctoral Programmes	08(03)	10(07)
Total	**20(07)**	**274(85)**
5. Work-Integrated Learning Programmes		
Post Graduate Certificates	333(058)	321(072)
Integrated First Degree Programmes	508(070)	545(059)
Higher Degree Programmes	5098(1778)	4260(967)
Total	**5939(1906)**	**5126(1098)**
GRAND TOTAL (1+2+3+4+5)	**6129(1991)**	**9713(1981)**

A.5 FLEXIBILITIES: DUAL DEGREE ADMISSIONS

During the academic year 2020-2021, 955 students (357 at Pilani, at 289 Goa and at 309 Hyderabad) were permitted to work concurrently for two first degrees under Dual Degree scheme. Details are given in **'Annexure A-5'.**

A.6 AWARD OF DEGREES AND MEDALS

(a) Award of Degrees

During the year, a total of 10579(2728) degrees were awarded. The details on the award of degrees are given below. The numbers in brackets indicate number of female students.

Award of Degrees	Number of degrees awarded				
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	WILP
86th Award (vide Board of Governors approval on 20-3-2020)	97 (21)	74 (13)	67 (12)	44 (16)	4168 (1516)
87th Award (vide Board of Governors approval on 08-9-2020)	1426 (244)	949 (142)	999 (189)	313 (125)	2442 (450)
Total	**1523 (265)**	**1023 (155)**	**1066 (201)**	**357 (141)**	**6610 (1966)**

(b) Award of Medals for Academic Year 2019-2020

The list of students of Integrated First Degree Programmes for Award of Medals from amongst the students graduated at the end of the First Semester, Second Semester and Summer Term 2019-20 is given in the following table:

A. BITS Pilani, Pilani Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained		Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 887)							
1.	2016A7TS0098P	ANUVIND BHAT	M	10.00	FIRST	(Bracketed)	GOLD
2.	2016A3TS0317P	AKSHIT GOEL	M	10.00	FIRST		GOLD
3.	2016A8TS0424P	SAKSHAM CONSUL	M	9.99	SECOND		SILVER
4.	2016A3PS0764P	APOORVA	F	9.92	THIRD		BRONZE

B. BITS Pilani, K K Birla Goa Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 607)						
1.	2016A7PS0365G	GARGI BALASUBRAMANIAM	F	9.78	FIRST	GOLD
2.	2016A3PS0106G	AKHIL NORI	M	9.74	SECOND	SILVER
3.	2016A7TS0022G	GUNJAN CHHABLANI	M	9.65	THIRD	BRONZE

C. BITS Pilani, Hyderabad Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 652)						
1.	2016A7TS0236H	SKANDA VAIDYANATH	M	9.93	FIRST	GOLD
2.	2016A7PS0043H	ANSUMAN DIBYAYOTI MOHANTY	M	9.92	SECOND	SILVER
3.	2015B3A70647H	TANMAY GIRISH KULKARNI	M	9.86	THIRD	BRONZE

D. BITS Pilani - Dubai Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 317)						
1.	2016A7TS0006U	KELVIN PIETY DECOSTA	M	9.98	FIRST	GOLD
2.	2016A7TS0005U	LALITHA NATRAJ	F	9.95	SECOND	SILVER
3.	2016A9PS0155U	MYMUNA ASHNA	F	9.92	THIRD	BRONZE

Director's Medals for the Best All Round Achievement (Dubai Campus)

In addition to the Institute Medals, at Dubai Campus Director's medals are awarded to one male and one female student for the best all-round achievement, in every graduating batch. This medal is purely based on the year round performance of the graduating batch students. Due to the global pandemic & COVID 19 lockdown, the all round achievement could not be evaluated for the 2020 graduating batch hence the Director's medals were called off.

A.7 MoUs

The Institute has signed Memoranda of Understanding with the following reputed organizations during 2020.

1. FIGURE Network Association Poitiers, France

2. Leonardo MW Ltd., Edinburgh, U.K

3. RAK Medical & Health Sciences University, UAE

4. University of Virginia Charlottesville, USA

5. Memorial University of Newfoundland, St John's, NL, Canada

6. Ben-Gurion University of the Negev, Beer-Sheva, Israel

7. Telecom Paris, France

8. VEGGITECH, UAE

A.8 NUMBER OF STUDENTS REGISTERED

	No. of Students Registered On-campus				
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Total
Second Semester 2019-2020	5416	3989	4927	1260	**15592**
Summer Term 2019-2020	1052	896	1180	203	**3331**
First Semester 2020-2021	5770	4374	5563	1206	**16913**
				GRAND TOTAL	**35836**

The above table includes students registered in First Degree, Higher Degree and Ph.D. Programmes.

Category-wise Distribution of Ph.D. Students

During Second Semester 2019-2020, a total of 1249 Ph.D. students were on-rolls, while a total of 1353 Ph.D. students were on-rolls during First Semester 2020-2021.

S.No	Category	No. of Ph.D. Students on Rolls							
		II Semester 2019-2020				I Semester 2020-2021			
		Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
1	Research Scholars (FT+PT)	429	277	437	67	473	298	475	66
2	Lectures and Staff	05	10	05	-	05	10	04	-
3	Ph.D. Aspirants	07	02	10	-	08	05	09	-
	TOTAL	441	289	452	67	486	313	488	66
	GRAND TOTAL	1249				1353			

A.9 COURSES OFFERED

Semester/ Summer Term	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus
II Semester 2019-2020	425	309	366	223
Summer Term 2019-2020	28	10	27	07
I Semester 2020-2021	427	322	384	222

A.10 DEGREES OFFERED AT DIFFERENT CAMPUSES

Pilani Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
B.E.	**M.E.**
Chemical	Biotechnology
Civil	Chemical
Computer Science	Civil with Specialization in Structural Engineering.
Electrical & Electronics Engineering	Civil with Specialization in Transportation Engineering.
Electronics & Instrumentation	Civil with Specialization in Infrastructure Engineering &
Manufacturing Engineering	Management
Mechanical	Computer Science
B.Pharm.	Communication Engineering
M.Sc.	Design Engineering
Biological Sciences	Embedded Systems
Chemistry	Manufacturing Systems Engineering
Economics	Mechanical
Mathematics	Microelectronics
Physics	Software Systems
M.Sc.	Sanitation Science, Technology and Management
General Studies	**M.Pharm.**
	M.Pharm. (with Specialization in Pharmaceutics)
	M.Pharm. (with Specialization in Pharmaceutical Chemistry)
	M.Pharm. (with Specialization in Pharmacology)
	Master of Business Administration (M.B.A.)
C. Ph.D.	

K K Birla Goa Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
B.E.	**M.E.**
Chemical	Biotechnology
Computer Science	Chemical Engineering
Electrical & Electronics Engineering.	Computer Science
Electronics & Communication Engg.	Design Engineering
Electronics & Instrumentation Engg.	Embedded Systems
Mechanical	Mechanical
M.Sc.	Microelectronics
Biological Sciences	Sanitation Science, Technology and Management
Chemistry	**M.Phil**
Economics	Liberal Studies
Mathematics	
Physics	
C. Ph.D.	

Hyderabad Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
B.E.	**M.E.**
Chemical	Biotechnology
Civil	Chemical Engineering
Computer Science	Civil(with Specialization in Structural Engineering)
Electrical and Electronics	Civil (with Specialization in Transportation Engineering)
Electronics & Communication	Computer Science
Electronics & Instrumentation	Communication Engineering
Mechanical	Design Engineering
B. Pharm.	Embedded System
M.Sc.	Mechanical Engineering
Biological Sciences	Microelectronics
Chemistry	Mechanical (specialization in Thermal Engg)
Economics	Sanitation Science, Technology and Management
Mathematics	**M.Pharm.** (with Specialization in Pharmaceutics)
Physics	
C. Ph.D.	

Dubai Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
B.E.	**M.E.**
Biotechnology	Design Engineering
Chemical	Electrical PED
Civil	Microelectronics
Computer Science	Software Systems
Electrical and Electronics	**Master of Business Administration (M.B.A.)**
Electronics and Communication	
Mechanical	
C. Ph.D.	

A.11   PLACEMENT

	Pilani	Goa	Hyderabad	Dubai
Number of companies which conducted campus interviews	214	163	194	105
Number of offers made	902	596	707	105

A.12   FACULTY DATA

As on January 1, 2021, the number of faculty members in each campus is given below:

Designation	Pilani		Goa	Hyderabad	Dubai	Total
	On Campus	Off Campus				
Tenured						
Senior Professors	3	-	2	3	1	**9**
Professors	34	-	21	21	13	**89**
Associate Professors	71	23	47	52	12	**205**
Assistant Professors	-	-	-	75	44	**119**
Assistant Professors-Gr-I	154	29	83	86	-	**352**
Non-Tenured						
Sr. Professor Emeritus	1	-	-	-	-	**1**
Professors on Contract	-	-	-	-	-	**-**
Visiting Professors	1	-	2	3	-	**6**
Visiting Assistant Professors	-	-	4	-	2	**6**
Assistant Professors on Contract	-	-	-	-	-	**-**
Assistant Professors – Gr.-II	5	17	14	3	-	**39**
Sr. Lecturers	-	-	-	-	-	**-**
Lecturers	-	-	-	-	3	**3**
Visiting Faculty	1	-	-	2	-	**3**
Adjunct Faculty	-	-	-	-	-	**-**
Instructors	-	-	-	-	-	**-**
Professor Emeritus	-	-	-	-	-	**-**
Visiting Associate Professor	-	-	-	-	-	**-**
Total	**270**	**69**	**173**	**245**	**75**	**832**

During the year 2020, 91 new faculty members (37 in Pilani, 21 in Goa, 34 in Hyderabad and 6 in Dubai) joined. 38 faculty members (18 in Pilani, 07 in Goa, 10 in Hyderabad and 10 in Dubai) left the Institute for reasons such as planned/forced separation, resignation, expiry of term and retirement. Details are given in **'Annexure A-6'.**

A.13   PRACTICE SCHOOL STATISTICS

University-Industry Linkages

An important aspect of education at BITS is its institutionalized linkages with the world of work. The Institute attaches great importance to the University-Industry Linkages and gives mutually reinforcing thrust to it through various avenues like Practice School (PS), Work Integrated Learning Programmes (WILP), Technology Innovation Centre (TIC) and off-campus Ph.D.

Practice School Programme

All integrated first degree and higher degree programmes of the Institute provide for a Practice School option. The past statistics show that almost all the students admitted, opt for this programme. During the calendar year 2020 the Practice School programme was operated at 968 stations, with 29 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 5637 students and 172 faculty members. Categorization of PS stations is given below:

S.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	125 (91)	6 (21)
2.	Design, Development, Consultancy and Software Organization.	384 (285)	235 (101)
3.	National Research Laboratories and other Research centers	25 (19)	53 (50)
4.	Production, Manufacturing and Public Work Units	43 (32)	114 (108)
5.	Publishing Houses, News Agencies and Museums	3 (2)	7 (7)
	Total	**580 (430)**	**415 (287)**

In 2020, an integrated practice school allotment for 5637 students was carried out across Pilani, Goa and Hyderabad campuses. The statistical details of the centre-wise distribution of students and faculty at PS-I stations

are given in **Annexure A-7'** followed by the details of the Operational Statistics of PS-II and PS for higher degree in **Annexure A-8**. Growth statistics of PS-I, PS-II and PS for higher degree are given in **Annexure A-9**, while facilities available at various PS-II stations are given in **Annexure A-10**.

Following is the breakup of students who were registered in PS-I, PS-II & PS for Higher Degree:

PS-I	Summer Term 2019-2020	(2846)	2944
PS-II	II Semester 2019-2020	(870)	757
	I Semester 2020-2021	(1215)	1382
PS for Higher Degree			
	II Semester 2019-2020	(423)	554
	I Semester 2019-2020	(02)	00
Total		**(5356)**	**5637**

Note:-The figures shown in brackets relate to the year 2019.

Dubai Campus

During the calendar year 2020, the Practice School Programme was operated at 137 stations, with 08 stations hosting both Practice School –I (PS-I) and Practice School – II (PS-II), accommodating 431 students and 51 faculty members. Categorization of PS stations is given below:

S.No.	Category of Organizations	No. of Organizations	
		PS-II	**PS-I**
1.	Banks & other financial Institutions.	05 (02)	04 (02)
2.	Design, Development, Consultancy and Software Organization.	21 (33)	16 (23)
3	Trading	15 (14)	02 (05)
4	Production, Manufacturing and Maintenance	25 (19)	16 (20)
5	Other	04 (03)	09 (13)
	Total	**70 (71)**	**47 (63)**

With the present annual PS intake of 594 students, the PS programme covers almost entire eligible student population of the Institute. It is worthy to note that the Practice School operation at the Dubai Campus has been conducted successfully since 2002. The statistical details of the distribution of students and faculty at PS-I stations are given in Annexure B4-15 followed by the details of the Statistics of PS-II are given in Annexure B4-16. The Growth statistics of PS-I, PS-II are given in Annexure B4-17, while facilities available at various PS-II stations are given in Annexure B4-18. And the list of placed students from PS during 2019 are given in Annexure B4-20.

Following is the breakup of students who were registered in PS-I, PS-II. (Note: The data pertaining to the calendar year 2019 is given in parenthesis.)

PS-I	Summer Term 2020	182 (278)
PS-II	II Semester 2019-2020	169 (203)
PS-II	I Semester 2020-2021	80 (113)
Total		**431 (594)**

A.14   ALUMNI RELATIONS DIVISION

In 2017, BITS Pilani formed a new university-wide Alumni Relations Division led by Prof Arya Kumar, Dean, Alumni Relations. The Division aims to connect the BITS Pilani global alumni network and involve them in the Institute's development plans in association with BITSAA International. The Alumni Division has a strong student-alumni team led by the Dean with the cross-campus support provided by Associate Deans, Alumni Relations in each campus of BITS Pilani. The main purpose is to constantly connect with alumni and conceptualize, develop and organize various alumni-led initiatives related to campus development, student life and academic processes. The Institute Alumni Relations Division and BITSAA works in coordination for the functioning of all processes.

Distinguished Alumnus Awards 2020

BITS Distinguished Alumni Awards (DAAs) 2020 were conferred upon BITSians through inviting nominations for more than a period of two months. A committee constituted for selection and to recommend having renowned personalities from Industry and Academia was constituted. The awards are in recognition of the significant and

outstanding contributions made by recipients in the area of Academia and Research, Corporate Leadership and Entrepreneurship, Public Life and Philanthropy. The twelve DAA awardees for the year 2020 are as under:

#	Name and Affiliation	Category
1.	**Prof. Milind Tambe**, Gordon McKay Professor of Computer Science & Director, Center for Research in Computation and Society (CRCS), Harvard University	Academia and Research
2.	**Prof. Gerard George**, Dean, Lee Kong Chian School of Business and Lee Kong Chian Chair Professor of Innovation and Entrepreneurship, Singapore Management University	
3.	**Prof. Krishnan Balasubramanian**, Emeritus Professor, School of Molecular Sciences, Arizona State University	
4.	**Prof. Madan Pillutla,** Professor of Organizational Behaviour, London Business School; Area Leader, Organizational Behaviour, Indian School of Business	
5.	**Prof. Aditya. P Mathur,** Professor Emeritus, Dept. of Computer Science, Purdue University; Centre Director, iTrust, Director, National Satellite of Excellence DeST-SCI and Professor, Singapore University of Technology and Design	
6.	**Ms. Revathi Advaithi**, CEO, Flex; Member, Board of Directors, Uber	Corporate Leadership
7.	**Mr. Kishore Rajvanshy**, Founding Managing Director of Fleet Management Ltd, a Caravel Group Company	
8.	**Mr. Jayan Ramankutty**, Member, Board of Directors at Essmart; Managing Partner, KRK Ventures II LLC	Entrepreneurship/ Public Life/ Philanthropy
9.	**Mr. Anurag Jain,** Chairman, Access Healthcare & Managing Partner, Perot Jain	
10.	**Mr. Rakesh Verma**, Chairman and Managing Director, MapmyIndia	
11.	**Mr. Subhash (Bill) Malhotra**, President & CEO, Claridge Homes, Ottawa, Canada	
12.	**Mr. Sunil Nanda**, Board Member of Pilani Atmanirbhar Resource Center	

Expansion of Alumni Relations Division

- To further strengthen the activities of the Division, one content writer and office assistant- database have been hired, who are presently stationed in Pilani campus.

- Constitution of Student Alumni Relations Cell (SARC) in each of the campus comprising of core team of 10-12 students to support the activities of the Alumni Relations Division.

New Initiatives – Database, Branded Merchandise and Communication

- BITS Pilani Alumni official social media platform, BITS Pilani AlmaConnect has now been extensively used as an interactive platform for the BITSians for sharing job opportunities, seeking carrier opinions, posting alumni related news etc. Alumni Relations office using this platform very effectively to build/manage and update the database in an organized way to get regularly connected with our esteem alumni.

- The efforts to increase registration on AlmaConnect were taken through various strategies. To date, BITSian registration has crossed over 40,200 alumni data updated on AlmaConnect.

- Data base is helping in segmented approach to connect with alumni – be geographical, city based, profession and batches etc.

- In one year, more than 200 BITSian's success stories are being shared in a slide format on AlmaConnect and across all other social media platforms.

- Permanent e-mail alumni linked mail ID's are given to all passing out students and alumni from past batches that approach the institute.

- The next four issues of the newsletter of Alumni Relations Division-BITS ECHO, covering the success stories of alumni across the globe and important developments at the institute and alumni front were released. This is one initiative that aims to bring BITS campuses closer to alumni. The purpose is to share, engage, invite and thank alumni. It would value the connect with BITS Pilani that has shaped alumni to face greater challenges of life and to bring in a name and fame to alma mater.

- Various initiatives have been taken from Alumni Relations Division for popularizing/publicizing BITS branded merchandise. A good number of BITS branded Louis Philippe T-shirt has been sold to alumni during the on-campus alumni meets.

- In June 2020, Alumni Relations launched the special report booklet for BITS Pilani Covid-19 Initiative. This report offers an insight into the way the BITS Pilani administration, faculty, staff, alumni and students have responded to Covid-19 and have remained steadfast, focused and creative in their approach. Essential services were ensured during this period across all our campuses; most institute tasks were continued and in some of them business was even better than usual.

- During the lockdown period from April to July, more than 30 BITS Pilani alumni Covid-19 initiatives have been shared in a slide format on all BITS Pilani social media platform.

Alumni Donations

- A contribution of Rs 1.12 crore was received during January-March, 2020, amounting to a total donations of Rs 3.45 crores from the alumni of 1993 batch who celebrated their Silver Jubilee Reunion meet after 25 years of joining BITS in December 2018. The batch has decided to utilize the funds for supporting student travel under the program-Udaan, Counselling cell-Mpower, BACFE, tinkering Lab. etc.

- A contribution of Rs 55 lakhs was received during January-March 2020, amounting to a total donations of Rs 81.4 lakhs from the alumni of 1989 batch who celebrated their Silver Jubilee Meet in November 2018.

- A collective amount of Rs 23.29 lakhs was received from the 1965-70 batch alumni who celebrated their Golden Jubilee Reunion in February 2020 and took a pledge to contribute Rs 2 crore for the Convention Centre Project at Pilani Campus.

- A contribution of Rs 20.40 lakhs was received by the Pilani Campus from 1994-98/99 batch alumni who celebrated their Silver Jubilee Reunion in December 2019 towards contributing back to their alma mater.

- A collective amount of Rs 10.86 lakhs was received from the alumni of 1969-73 Pharmacy batch who celebrated their Golden Jubilee Reunion at Pilani Campus in December 2019 towards refurbishing animal house research laboratory in the Pharmacy department of Pilani campus.

- An amount of Rs 5.82 lakhs was received by the collective efforts of several alumni from different batches for the registration fees of a student team from K. K. Birla Goa Campus for iGEM competition.

- An amount of Rs. 8.55 lakhs and a pledge for future support was received from 1968 batch alumni, Mr. Kuldip Kaura for setting up "Kaura Family Scholarships". The scholarship will support one student from every batch for the 80% tuition Scholarship starting academic year 2019-20 and intends to support 4 students by the academic year 2022-23.

- BITS Pilani Alumni Association (BITSAA) has donated a sum of Rs. 60 Lakhs from the surplus arisen from the recent BGM 2020 held at Goa for the contribution to the University towards research/research facilities at the Goa Campus.

- Several Alumni, including 1988 batch and Pilani Atmanirbhar Resource Centre (PARC) have donated Rs 15.71 Lakhs under the 'BITS Food Effort COVID-19 Campaign' towards the distribution of ration and food to migrant labors, construction workers, daily wagers and other needy persons in and around the three Indian campuses of BITS Pilani.

- Alumni from 1991 batch has donated Rs 4.12 Lakhs towards supporting redi wallas, mess workers and other essential staff during these difficult times posed by COVID-19.

- The 1964-69 -the pioneer batch of BITS Pilani has contributed additional Rs 16.4 Lakhs and surpasses their target to achieve 1.51 Crore towards scholarship fund to the needy students under MCN category.

- An amount of Rs 2.74 Lakhs has been received from CMS computers Limited towards the two scholarships under 80% MCN in honor of Late Shri R. D. Grover, a 1968 batch alumnus from BITS Pilani, Pilani Campus.

- An amount of Rs 7.25 Lakhs was donated by Mr. Ravi Yadav, Managing Partner at Newlight Partners LP, for establishing two scholarships under 80% MCN category.

- An amount of Rs 13.51 Lakhs was received either from individual alumni or through BITSAA International towards merit-cum-need scholarships to the needy students for the Semester I, 2019-20. Some of these include: BITS86, Shantha E. Iyer, Pendaliya Vamsi Krishna, M. R. Dalmia, S. K. Agarwal, Divya -Dileepan, S. S. Seshadari Memorial, Rakesh Chandra, Ashok Agarwal and Bhushan Bhatia.

- Alumni couple, Prashanth and Anuradha Palakurthi have transferred $ 250 K as the second installment (out of at least US 1 million dollars pledge), towards promoting research in the area of Artificial Intelligence under Anuradha and Prashanth Palakurthi Centre for Artificial Intelligence Research (APPCAIR).

- Through extensive efforts of BITSAA and the support of generous alumni across the globe, an amount of Rs 37 lakhs was collected, including the donations received by BITSAA for providing financial support to the daily-wage earners across campuses and scholarships under MCN category to first -degree needy students. This was done as a part of BITSAA 'COVID-19 Daily Wagers Support Initiative.

- An amount of Rs 0.89 Lakh was donated by Mr. Agarwal towards Dr. Ashok Agarwal Scholarship. Another 0.89 lakh for the MCN scholarship was donated by BITSAA Hyderabad Chapter.

Corporate Social Responsibility Funding

- Funding of Rs 1 crore was received from Aditya Birla Finance Limited for setting up an Advanced Environmental Engineering Laboratory, including a Faecal Sludge Management Laboratory at Pilani Campus.

- Funding of Rs. 1 crore was received from Century Textiles and Industries Ltd. for establishing Shri B K Birla Centre for Incubation and Innovation (SBKBCII) at the Pilani Campus, with an additional grant of Rs. 1 crore to be given in FY 2020-21.

- Funding of Rs. 21 Lakhs was received from Mitutoyo Corp. towards supporting a PhD fellowship and associated research equipment for an Industry 4.0 project at Pilani campus under the aegis of Prof. K. S. Sangwan, Department of Mechanical Engineering.

- Funding of Rs. 25 Lakhs was received from HDFC Bank towards seed funds for the Technology Business Incubator (TBI) at Pilani campus.

- Funding of Rs. 21 Lakhs was received from Birla Carbon towards supporting PhD fellowships in K.K. Birla Goa campus.

Corporate Social Responsibility Funding highlighting the reference to Annexure on Page 16 of the report - " Details of Alumni Donations and Corporate Social Responsibility Funding is given in **Annexure 'A-13'.**

Pilani Campus

Alumni Related On-Campus and online Events

- The batch of 1965-1970 celebrated 50 years of their graduation during February 21-22, 2020 at BITS Pilani, Pilani Campus. The batch went down the memory lane through a light and sound laser show at the backdrop of the iconic clock tower The first-of-kind professional 3D laser show narrated the story of alumni from 1965-70 at Pilani, a quaint village away from urban cities. More than 90 alumni participated in the reunion along with their families.

- The batch of 1970-74 Pharma and 1970-75 celebrated their Golden Jubilee Reunions on February 08, 2020 at Pilani campus. More than 110 alumni from all over the world attended the event along with their families. One of the major highlights of the event was Gurudakshina which was organised by the BITS 75 Trust to felicitate 10 prominent teachers who had taught, inspired and encouraged them during their studies at Pilani. The batch started this event in 2009 and since then they have honoured 40 faculty members under Gurudakshina, and at Pilani by honouring 10 more Gurus this time, they have completed the magic number of 50.

- A series of Alumni Research Talks (ARTs) were organized by the Computer Science Association in collaboration with Student Alumni Relations Cell on January 17 & 19, 2020 at Pilani Campus. The day one of ART featured two alumni — Dr. Guri Sohi (Professor at the University of Wisconsin-Madison), and Dr. Deepak Poola Chandrashekhar (an Industry Expert for the Departmental Academic Committee at NIT Raipur). The talks delivered by the two alumni were highly engaging, with each talk being focused on the areas of expertise of the respective alumnus. Dr Guri Sohi's talk was largely focused on his research in the design of high-performance microprocessors and computer systems.

- On January 24, 2020, Professor L. K. Maheshwari Foundation Distinguished Alumnus Award in EEE & Instrumentation for the year 2019 was conferred upon Prof. Rajiv Gupta, in an event organized by the Department of EEE. Professor Rajiv Gupta is an alumnus of 1976-1982 batch. He works as a neuro-radiologist and ER radiologist in the Department of Radiology at Massachusetts General Hospital. He is also an Associate Professor of Radiology at the Harvard Medical School, a lecturer in Mechanical Engineering at MIT and Director of the Advanced X-ray Imaging Sciences (AXIS) Center.

- On February 22, 2020, an alumni-student interactive session with Padma Bhushan Awardee, Managing Director of Bharat Forge, Babasaheb Neelkanth Kalyani was organized by Student Alumni Relations Cell (SARC) of Pilani campus. "Believe in yourself, have a passion and be an Innovator ", this was the success

Mantra given to all BITSians by Baba Kalyani. He shared his extensive experience related to entrepreneurship and interacted with students about becoming successful in life.

- Prof. L. K. Maheshwari Distinguished Alumnus Award - 2019 ceremony was held on March 12, 2020 at Pilani Campus. The award was conferred on Prof. Ramesh Harjani, E. F. Johnson Professor of Electronic Communications, Department of Electrical & Computer Engineering, University of Minnesota for his outstanding contribution in Electrical & Instrumentation Engineering. Prof. Harjani earned his bachelor's degree from the Pilani campus in 1982.

- In a virtual function organized by Alumni Relations Division, BITS Pilani on June 02, 2020, Prof. S. S. Ranganathan Memorial Teaching Excellence Award for the year 2019 was conferred upon Prof. Vinod Kumar Chaubey, Head, Department of Electrical & Electronics Engineering, BITS Pilani, Pilani Campus. The award was constituted by a group of alumni in the memory of their beloved teacher, popularly known as SSR, and was third in the series. Faculty members from the four BITS campuses, alumni across the globe participated in the function.

- Director's E-Party for the Graduating Class of 2020 was organized on June 27, 2020. The virtual ceremony commenced with Prof. Souvik Bhattacharyya, Vice Chancellor 's address. In his encouraging speech, he wished the graduating class 2020 a great future and said, "Don't lose balance in the present testing times, and learn some new skills which may help you in future". Instilling hope and faith, he advised the students to be good citizens because it is non-negotiable and at no cost that can be compromised. Prof. Sudhirkumar Barai, Director, BITS Pilani, Pilani campus in his address said that the students' stay at BITS has taught them simplicity, which also happens to be the USP of the campus. Giving a few tips to the students he advised them to give a twist to the challenges while embarking on their journey in the real and tough world and not get deterred by them. He further assured the students that they could count on their alma mater, whenever they are in need and also urged them to stay connected.

- Student Alumni Relations Cell, Pilani Campus organized an online interactive event, #AskMeAnything with Anu Menon (Director of Shakuntala Devi) on August 07, 2020. She reminisced about her days at the campus and talked about the obstacles which came her way, and the way she gathered courage to overcome all those obstacles to win

- On the occasion of BITSian Day celebration, Student Alumni Relations Cell (SARC) of Pilani Campus organized an exclusive talk with Manu Sawhney (Pilani, '88), the CEO of ICC, and present Independent Director of Manchester United on August 09, 2020. His insightful talk on sports industry was truly a perspicacious session for BITSian's across the globe.

- An interactive session on '100 DAYS TO CAT 'was organized with Riya Midha, Pranshu Agarwal and Anushka Pathak as the panelists. They addressed questions on various topics and stressed on practicing numerous test papers, assessing one's pitfalls, and building a positive mindset while preparing for the test.

- The Student Alumni Relations Cell (SARC), Pilani Campus launched PlugIn, a weekly seminar series that was organised on every Saturday during May to July, 2020. In these series, Dr. Ramanan Laxminarayan, Director, Centre for Disease Dynamic, Economics & Policy (CDDEP) and Senior Research Scholar and Lecturer at Princeton University; Mr. Vishnu Chundi, Cofounder and CEO at AssetVault, Prof. Milind Tambe, (Professor of Computer Science at Harvard University and Director of 'AI for Social Good' at Google India) and Mr. Amit Marathe, Director of Artificial Intelligence and Machine Learning, Inseego Corp were the key speakers.

- The Student Alumni Relation Cell, Pilani campus organized, Journeys Unfiltered, a webinar series that aspire the students a first-hand account of their incredible alumni and tremendous impact that their work has had in diverse fields like AI/ML, entrepreneurship, and finance. In the series, the first speaker was Mr. Aaksh Gupta, the CTO and co-founder, GreyOrange and ex-team leader, Project AcYut.

- Student Alumni Relations Cell, Pilani campus organized an interactive session with Mr. Shailendra Jha, a Chief Evangelist and Leadership Coach at Coach-To-Transform on October 31, 2020. He has worked in the IT services industry for 36 years with global IT majors and was previously the Vice President at CapGemini. This experience of learning from and leading thousands of IT professionals gives him a strong foundation to coach people who aspire to work well, live well and fulfill their potential. He is currently the Chief Evangelist and Leadership Coach at Coach-To-Transform, a global firm focusing on Leadership and Executive Coaching.

- Student Alumni Relations Cell in association with London Business School conducted an informative session- "Post Grad Talks- LBS Edition" on November 27th, 2020, for the BITSians, to gain an exclusive insight into the admissions process of finance, management and data analytics programmes that are being offered to fresh graduates at one of the most prestigious B-Schools of the world. The session featured Mr. Yoon Kim (LBS Recruitment and Admissions Manager for South & South-East Asia and Australasia), Rishabh Goel (LBS Masters in Management 2015 and BITS Pilani Alum), and Deepak Guneja (2015A7PS0083P and an LBS Student Ambassador). The event mainly focused on providing information about the admission processes and various programs being offered at LBS. It also included a live Q&A session where students got the chance to ask questions to LBS Student Ambassadors, Alumni and Recruitment and Admissions Manager.

- ASPIRE, an alumni-led mentorship lecture series by BITSians, Dr. Arushi Prakash, Mr. Bhargav Nemmaru, Dr. Shanthan Reddy and Dr. Harini Kantamneni conducted online on November 24-27, 2020

K. K. Birla Goa Campus

Alumni Related On-Campus and online Events

- BITS Alumni Association (BITSAA) with their alma mater organized 4th edition of Global Meet at BITS Pilani, KK Birla Goa Campus. Held from January 17-19, 2020, the event was attended by 1100 participants from all the four campuses. Sonam Wangchuk set the tone for the event with an inspiring vision of simplicity and sustainability. The Chancellor, Dr. Kumar Mangalam Birla addressed the alumni through virtual recorded message and called them brand custodians to come together as an active entity to infuse new ideas and possibilities. The Vice Chancellor, Souvik Bhattacharya exhorted the alumni to work together on the journey to excellence. Revathi Advaithi, CEO of Flex, a US $25 Billion company shared insights into managing businesses, inspiring girls to break all ceilings and students to pursue their dreams. Anil Kumble enthralled the audience with his journey to follow Plan-B, cricket.

- The second edition of Alumni Research Talks (ART) were conducted on February 15, 2020 in K. K. Birla Goa Campus. The talks were given by Prof. Y.N. Mohapatra, Professor of Physics and Materials Science, IIT Kanpur, Prof. Jugal Kishore Verma, Professor of Mathematics, IIT Bombay, Dr. Shruthi Sridhar Vembar, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology, Bangalore, Prof. Subrat Kar, Professor & Head, SeNSE, IIT Delhi, Prof. Subramanian Yashonath, Professor of Solid State and Structural Chemistry Unit, IISc Bangalore and Prof. Patrick Das Gupta, Professor of Physics and Astrophysics, University of Delhi. Various colleges and universities including IIT Goa, GEC, Agnel Polytechnic and the Padre Conceicao College of Engineering were also invited to the event.

- On January 11, 2020, BITS2CivilServices was organized to provide an opportunity to the students to learn the idiosyncrasies of cracking the UPSC from their alumni. Ms. Arushi Sharma, IRS, a 2014 graduate from K. K. Birla Goa campus was invited for the event on campus. She was accompanied by her husband, Anand Raj, who also serves as an IRS officer.

- On January 16, 2020, 50 alumni of the batch of 1980 of BITS Pilani visited the K. K. Birla Goa Campus. Among these alumni were Mr. Harish Bhat, Brand Custodian, Tata Sons and Mukul Khare, VP, Thyseknkrupp India. These alumni had an interactive session with the students where the students were able to clear their doubts regarding startups, career, industry, higher studies.

- A Town Hall Session with Prof. Amit Sheth was conducted on January 18, 2020 along with BITSAA-APPCAIR. The event was held for the students who were interested in graduate studies and research studies.

- On February 13, 2020, BITS2BSchool was conducted at K. K. Birla Goa Campus to shed light on the pre-requisites of an MBA candidate. An accomplished alumnus, Ganesh S. Nagarsekar, founder and CEO GSN Invest, an IIM Calcutta alumnus and Amrit Mann, an HEC Paris Alumnus and working in JSW Ventures shared their insight on the future aspects and journey of getting through the best B Schools across the world.

- CATChamps was organized on 30th May 2020 and the speakers were Shubham Pandia and Kaushik Gaikwad, undergraduates at BITS Pilani, KK Birla Goa Campus. Shubham and Kaushik scored outstanding percentile in the exam.

- An interactive session, BITS2MS/PhD was held on June 13, 2020. The panel speakers were Abhijit Asok, Varun Nayak and Pratik Manwani and addressed various questions of the students regarding applying for MS/PhD. The event was held virtually.

- BITS2GRE was held virtually on June 20, 2020 and it laid emphasis on the most efficient methods for preparing for the test. The speakers were Pragnesh Patel, fourth year EEE student and RS Balajee, a third year ECE student.

- The director's e-party for the graduating class of 2020 was held on July 17, 2020. Though the event was held virtually, it still was an event full of emotions, heavy hearts and a sense of achievement. Prof. G. Raghurama, Director BITS Pilani, KK Birla Goa campus, Prof. Veeky Baths, Associate Dean of Alumni Relations Cell along with Ms. Sukhnandan Vohra and Mr. Hari Menon addressed the class of 2020. All the speakers appreciated the resilience of the class of 2020 and wished them good luck for being the torch bearers of BITS Pilani who will lead the future.

- BITS2CivilServices talk was held on August 09, 2020 for providing an opportunity to the students to learn the idiosyncrasies of cracking UPSC from their alumni. Saurav Pandey and Malvaika G Nair were the panelists who advised the aspirants to read good articles, editorials, practice and analyze their answers.

- Alumni Relations Cell, K. K. Birla Goa Campus started a new edition of BITS2Series, BITS2Defence on the occasion of August 15, 2020. Colonel Rakesh Sharma, Major Praveen Vimal and Air Vice-Marshal Rakesh Chopra were invited as the speakers who enthralled the audience with their words and also shared their insights about forging a career in defence sector.

- On August 07, BITSian Day was celebrated virtually. The BITSians were encouraged to upload their photo performing yoga asanas, working out and tagging us @bitsgoa_arc (Insta Handle) or

@AlumniRelationsBITSGoa (Facebook Handle) with the hashtag #bitsiansday. A contest named Nostalgic BITS was also hosted where the BITSians were asked to share a photo which took them back to the good ol' campus days. The best 3 pictures were given BITS goodies.

- An interactive session with Yashoraj Tygai, Chief Technology Officer, was held virtually on November 07 2020. Yashoraj graduated from K. K. Birla Goa campus in 2017 with a degree in Electronics and Instrumentation engineering. He discussed about the incorporation of technology in various fields by bringing together the tools to promote development.

- **Donations from Alumni to Goa Campus:**

S. No	Purpose	Donor details	Amount
1	BGM 2020 Surplus fund for Research	BGM 2020 organizing committee	Rs. 6000000/-
2	Research Scholarship	Satish Sankaralingam (2005 batch)	Rs. 15000/-
3	COVID – 19 support	BITSAA International	Rs. 579000/-
4	iGEM	1971 Batch	Rs. 606653/-
5	Bhushan Bhatia Scholarship		Rs. 142400/-
6	BITSians' Day Giving Cholarship	BITSAA International	Rs. 85750/-
7	SuRa Award		Rs. 40000/-

Hyderabad Campus

Alumni Related On-Campus and online Events

- On January 24, 2020, an interactive session about computer science was organized. The speaker was Pranav Ramarao who addressed numerous questions which are common amongst the students. He also emphasised on the importance of staying motivated, enthusiastic and healthy throughout the college life.

- Second Alumni Reunion for the batches of 2010 and 2011 was conducted on January 25, 2020. The event started with a pleasant lunch followed by cake cutting ceremony. Post lunch, the batches continued the tradition of planting trees in the grounds of the academic block. Later, a talk session with BITSAA chapter heads of Silicon Valley and Hyderabad was conducted. This was followed by high tea. The event was concluded by giving the students a tour of the campus which let the students see the progress the campus has made over the years.

- On February 10, 2020, an interactive session with Mr. K Vijay Rao, President All India Professional Congress was held. The session focused on the changing global employment trends in the 21st century and also explained the key drivers of the 21st century and its impact on the employment scenario. Nuanced topics, like were discussed the impact of technology on employment rendering jobs surplus, the changing skill-set requirements for the 21st century and assessing where Indians stand in the global employment scenario, were discussed during the session.

- A webinar on opportunities in the Research and Development Sector in India was conducted on July 26, 2020. This event was first in the series of the several alumni elated webinars by SAE. Speaker of the event was Mr., Pranav Raj, alumni of class of 2016 and he completed his dual degree in Math and Mechanical. Mr. Pranav is working as a manufacturing scientist in ISRO for heavy solid-propellant boosters like S139 and S200, which are the first stages of PSLV and GSLV-Mk3 respectively.

- Off-campus placements in collaboration with SAE was conducted on July 30, 2020. The second webinar series discussed the off campus placements and the diversifications that can be achieved after that. The speaker for the event was Mr. Saif Ali Satkhed who is currently working as a design engineer at Quolt enterprises. He started Ausam Innovations in 2018 which offers design consultancy services and helps the clients ideate their imaginations about a product. He graduated in 2017 with a degree in Manufacturing Engineering.

- A webinar on the topic "The Whens, Hows and Whats Regarding a Master's Abroad" was conducted on August 02, 2020. The speaker of the event was Mr. Vishal Ramesh, a BPHC Alumnus from the 2011-2016 batch, with a dual degree in Physics and Mechanical Engineering. He pursued his PS-1 from BARC in 2013 followed by an undergraduate thesis at the University of Wisconsin-Madison in 2016. He pursued his masters at The Oklahoma state university running from 2016-19 and currently works at ASML which is a semiconductor equipment manufacturer in the Greater San-Diego Area.

- A webinar with Subrahmanyam Pulipaka Youngest CEO of National Solar Energy Federation of India, recipient of BITSAA 30 Under 30 Award and the BRICS Young Scientific Award, 2018 was conducted on August 07, 2020. He shared how the founding of the Indo-African Youth Energy Forum and further endeavours as part of the National Solar Energy optimization have had a great impact on the nation's progress in boosting he net capacity of solar energy production and cutting down on emissions. The event was a Facebook live event which was attended by more than 1500 participants.

- To celebrate the BITSian Day and the graduation of the 2020 batch, the graduands party was conducted virtually due the coronavirus pandemic. It was a memorable event with various relatable and tear jerking speeches that summed up the college life beautifully. The event was graced by Ms Prameela, CEO BITSAA.

She shared her on campus experiences and also spoke about her involvement with BITSAA. The event was also attended by many alumni who gave talks on campus, imparting knowledge they gained post life at BITS. They shared short messages and wished the graduating students good luck for the future. Keeping up with the tradition, students and faculty members also gave speeches. The event was concluded with a note from the Prof G Sundar, Director.

- On August 09, 2020 a session with Mr. Piyush Sharma was organised where he discussed about the preparation for GATE exam. He ranked 253rd in the merit list and will be joining Exxon Mobil as a Process Safety Engineer. He graduated from BITS Pilani as a Chemical Engineer in 2020.

- Continuing the graduate education series, on August 16, 2020 this talk covered nuances of pursuing PhD abroad. The speaker of the event was Mr. Taaresh Taneja, a graduate from BITS Pilani, KK Birla Goa Campus in 2017. He majored in Mechanical Engineering and ranked 3rd in his Department. Pursued his undergraduate thesis at IIT Bombay, he got placed at Johnsons Control as a CFD Engineer. He pursued a PhD from the University of Minnesota and is currently working there in the Computational Reactive Flow and Energy Lab with focus on computational modelling of plasma assisted combustion and soot emissions from internal combustion engines.

- On August 23, 2020, a webinar on placements and higher degree, Chemical Engineering was conducted. The panelists for the webinar were Mr. Rahul Ghatameneni (MS Chemical Engineering, UC Berkeley), Mr Aman Shah (Product Manager, Reliance Petrochemicals), Ms Kanupriya Maheshwari (Investment Banker, JP Morgan), and Mr Deepak Kedia (Software Engineer, IMImobile). The goal for conducting the seminar was to clarify students' queries regarding their life after college and for the alumni to share their experiences and insights with current students.

- On October 04, 2020, a webinar on Bagging Product Management Roles Off-Campus was conducted with Adnan Azham and Jai Srivastava as the speakers. Adnan and Jai explained the different types of non-tech roles that are available and how one can decide which one would best suit them. The session concluded with a Q&A session where a plethora of queries were addressed.

- A session on MS/PhD: Chemical Engineering was conducted on October 04, 2020 with Sneha Choudhury and Shalaka Burlawar as the speakers. The speakers talked about their undergraduate, postgraduate and doctoral journey and the career opportunities thereafter.

- A webinar on Digital Well Being during COVID-19 was conducted with Rijul Arora on October 24, 2020. Rijul talked about his personal experiences with disconnecting from technology, importance of being in control and how these have had an influence in his life. He also shared some tips on maintaining a good balance between the online and the offline worlds during the pandemic.

- An interactive session was conducted on October 25, 2020 on MS/PhD: Computer Science with Anita Chaudhary and Pooja Consul. The talk covered topics like pursuing MS or PhD, getting admission into top colleges and opportunities in academia and industry thereafter.

- A webinar on MS/PhD: Masters in Management was conducted on November 07, 2020 with panelists, Neha Nandwana and Shruti Narain. In the episode 3 of the MS/PhD Series the speakers talked about the application process, difference between MiM and MBA and the career prospects to an enthusiastic audience that ranged across all years.

- An interactive session with Rishabh Shekhar, co-founder, Pepper Content was conducted on December 05, 2020. The event focused on giving the glimpse of entrepreneurship to the batch of 2020 and how the BITS environment can play a major role in making those dreams a reality. The session concluded with an interactive Q&A.

Dubai Campus

Alumni Related On-Campus and online Events

- On June 14, 2020, an informative session was conducted with panellists, Dr Saluja Shetty, Rajdeep Gosh, Sweekirti Satpathy, Ayush Chorida and Mohammed Shoaib who shed light on important aspects of Computer Science like Machine Learning and Artificial intelligence. They also talked about the importance of learning the necessary skills for becoming successful engineers.

- On June 21, 2020, a webinar series for exploring career in Mechanical Engineering was held online and the panelists were Rachit Mishra, Mohammed Atyab and Samreen Khan who are current students. They talked about the paths one could pursue after graduation. Dr. Priyanka Upadhyaya, HOD of Mechanical Engineering, BITS Dubai shared her insights on the benefits of pursuing an undergraduate degree in mechanical engineering. Tarun Krishna, Co-founder Trift also gave a brief into the corporate work culture for mechanical engineers. During the session, the students were also given insights into applying for graduate schools.

- A webinar focusing on electrical engineering was conducted on June 28, 2020 and the speakers were Shubankhan Mukherjee, Steffi Sarah, Nitin Bhalla, founder of Kregzo and Sameeksha Amin. They talked about applying for graduate studies abroad, employment opportunities for students, brief on work culture in the corporate world, and the need to innovate in the workplace. They also shared about their life at campus.

- A career series webinar was conducted on July 05, 2020 and the panelists for the event were Dr. Trupti Gokhale, Dept. of Biotech at the BITS Pilani DUABI Campus; Nahid Afshan, Sr. manager admission at the BITS Pilani Dubai Campus; Sarthak Sawarkar, Co-founder of G1 sciences; Arshi Agrawal, Director Novagen pharmaceuticals Ltd. Nigeria; Karthik Vasudev, pursuing MBA at IIM Ahmedabad and Safiya Aafreen, 2020 graduate. The speakers spoke about the right career path after bachelors in biotechnology.

- A career series webinar was conducted on July 12, 2020 with Dr. Nishant Pandya, HOD Chemical Engineering, Shanelle Govekar, Rajesh Somanath Suresh and Tanisha Varalwar as the speakers. They talked about opportunities and fields for higher education, job prospects and opportunities for startups and the ecosystem created at BITS Pilani.

- A career series webinar was held on July 19, 2020 for which Dr. Vivek, HOD Civil Engineering, Anagha Nanda and Timonthy Mathew were the speakers. They shed light on the careers after civil engineering.

- Director's 2020 annual farewell for the graduating class of 2020 was held virtually. The event commenced with the motivating speech by Dr. R. N. Saha, Director, BITS Pilani Dubai Campus. The professors also conveyed their regards and best wishes to the students. The student Music Club, Trebel, gave a captivating performance. Students also shared their thoughts and message to their fellow batch mates. Students dance club, Groove, gave a delightful performance. The event ended with the graduating batch reminiscing old times and the enthusiasm to take on the world after graduation.

- Mr. Hukumat Kalwani Chairman of Ambassador Education, Ms. Sandhya Prakash Founder of Beacon Energy and Technology, Mr. Varun Jain Account Director in Linkedin, Tarun Krishna and Mohammad Nawaz, Founders of Trift, were invited for a Panel discussion on Start-up Ecosystem: BITSian Experiments and Experiences on the occasion of BITSian Day. They shed light on today's startups and the alumni who ventured into creating and successfully running them. The speakers shared the insight on the workingnof startup ecosystem.

- Webinar "BRAND BITS" was organised on August 29, 2020 which gave valuable insight on how BITS as a brand helps the students and the alumnus to extract the maximum advantage of the brand. The panel consisted of Taizoon Khorakiwala, CEO Switz Group, Abhimanyu Gopalka, Marketing and Communcations Manager at Injazat, and Parth Kapur and Reshmi Mukherjee, Co-founders of The Bhukkad Café. The speakers talked about how BITS gives the students ample opportunities to experience the industrial world before graduating. The speakers also emphasised on the career and the internships which come in support after graduation.

- Mr. Nikhil Nair was invited as a panelist to the webinar discussion 5G meets Virtual Reality. He graduated in 2006 with a degree in Computer Science. Nikhil briefed on the Virtual Reality, its advantages and the career opportunities that come with it.

- Mr. Anshul Singhal, CEO & Founder Sentient Labs FZ-LLC (BITS Pilani Dubai Campus 2010-2014) was the panelist for a webinar conducted on 26th September. Mr. Anshul shed light on the investments being made in robotics. The event was concluded with Mr. Anshul sharing the importance of robots in today's lives and the future of robots.

- Alumni Relations Division in collaboration with BITSAA International conducted a Webinar on Campus Talk on BITS2MS/PhD was conducted on October 03, 2020. Puneet Singh, an incoming postgraduate student at TU Munich, Sowmya, an incoming graduate student in Molecular and Cellular Biology program at LMU Munich and VIkas Goel, member of technical staff Rubrik, Master's in Computer Science, University of Wisconsin were the speakers. They talked about the application process in order to get into a postgraduate program and also motivated the students to pursue their master's/PhD.

- BITS2MS was conducted on November 05, 2020 and Safia Sareen was the speaker. She stressed the importance of projects and research at the undergraduate level in her admission at John Hopkins. She also talked about the process of application and interviews.

- A project management workshop was conducted on November 6-7, 2020. The session was led by Mr. Lalit Kumar who completed his graduation from BITS PIlani, Pilani campus in 1981. He talked about the balancing the conflicting demands of timelines, dependencies, resources, costs, external factors etc. The session was conducted for 2 hours and the participants were given certificates on completion of the course.

- Nitin Bhalla, founder of Kregzo was invited as a jury member for the MVP testing evaluation of NVC course. Nitin spoke about MVP testing during the NVC course and evaluated all teams for their MPV.

- Zubair Ahmed, alumnus of Biotechnology Department recently completed his PhD from Nottingham University in Stem cell research. Zubair interacted with the students and emphasized on careers in research.

- Taizoon Khorakiwala, CEO Switz Group shared his entrepreneurial journey with the students of NVC course. With a wide experience in the bakery industry, Taizoon motivated the students to think beyond the box. The webinar was conducted on November 16, 2020.

- Varun Sharma Co-Founder at Laumière Gourmet Fruits and TEDx Speaker addressed the students on November 19, 2020. To empower the community and create a better world, Varun spoke on Negotiating with the strangers.

- Webinar on BITS2MS was conducted on November 29, 2020with Swathi Murali as the key speaker. She shared her experience in the world of Forensic Science. She is a Forensic Scientist at Wisconsin State Crime Laboratory.

- Robotics Perceotion: Understanding What We See is a webinar which was conducted in December 06, 2020 with Aaditya Saraiya as the key speaker. He completed his Master's in Robotic from Carnegie Mellon University.

- Online session on exploring career options in cyber security was conducted on December 08, 2020 with Yashaan Cooper who shared insights on careers in Cyber security. Yashaan is Regional Manager at Galaxkey, a British Data Security Company. He guided students on different career options in cyber security and helped many to decide their career.

- The process for Mantra Awards was coordinated and completed on November 12, 2020 by a six-member panel comprising of Dr. Trupti Gokhale - Faculty In-charge, CIIE, Dubai Campus, Dr. Nitin Vihari- Assistant Professor, Humanities and Social Sciences Department, Dr. R. Karthikeyan- Professor, Mechanical Department, Dr. Sunil Thomas- Assistant Professor, EEE Engineering, Dr. M. Raja, Assistant Professor, CS Engineering, Mr. Devansh Shah- Member CIIE.

A.15 FINANCE AND FUND SUPPORT

The accounts of the Institute for the financial year 2019-2020 have been audited by M/s. S.R. Batliboi and Co.LLP, Gurgaon, who are the Statutory Auditors of the Institute. M/S Aneja Management Consultants Pvt Ltd, Chartered Accountants, Mumbai are the Internal Auditors.

Finance and Funds during 2019-2020

Investments : As on 31st October, 2020, the investment in shares & Units of Mutual Funds (out of Corpus fund) stood at Rs. 1896.51 lakhs. The total fixed deposits with banks stood at Rs. 59941.84 lakhs.

Expenditure : The excess of income over expenditure as per Income & Expenditure Account was Rs.20522.37 lakhs.

Pension to Staff : As on 31st October 2020, twenty two members of the staff were receiving pension. During the financial year 2019-2020, the Institute spent Rs. 37.61 lakhs on pension**.**

Gratuity to Staff : Institute has paid Rs. 200.67 lakhs to 36 staff members who left the institute.

Medical Facilities : During the financial year 2019-2020, the Institute spent Rs. 370.72 lakhs net for providing medical facilities to the students and staff of the Institute. The expenditure included contribution to Birla Sarvajanik Hospital, Mahadev Singhi Eye Hospital, medical reimbursement and amount spent on visits of various specialists to medical centres.

Financial Assistance to Students: The Institute spent Rs. 859.34 lakhs on scholarships to staff children/spouse/self to cover the fees for education at the Institute and local schools. Further, 7240 students received financial assistance of Rs. 6590.40 lakhs from different sources, details of which are given below:

S.No.	Particulars	No. of Students	Amount in Rs.
1.	UGC PG Scholarship	197	2,41,32,772
2.	Students Aid Fund	208	52,22,000
3.	Other States Scholarship	17	18,87,343
4.	Institute Merit Scholarship	527	7,05,53,973
5.	Institute Merit-cum-Need Scholarship	3782	29,61,26,860
6.	Financial assistance to PS II Students	24	20,10,517
7.	FD/HD Fellowship	1606	10,33,88,924
8.	Scholarship to International Students	145	4,46,06,683
9.	PHD Contingency	339	26,64,969
10.	PHD Fellowship	395	10,84,45,821
	Total	**7240**	**65,90,39,862**

Grants under DST-FIST:

Pilani Campus

S.NO	Department	Period (years)	Amt. Sanctioned (50:50 Basis)	Amount Released (in Lakhs)
Grants under DST- FIST Ongoing				
1	Physics	Sept 2018 - Sept 2023	100.5	**66.00**
2	Chemistry Level II	July 2016 - July 2021	82.50	**76.58**

KK Birla Goa Campus

S.NO	Department	Period	Duration	Amt. Sanctioned (50:50 Basis)	Amount Released (in Lakhs)
Grants under DST- FIST Ongoing					
1	Mathematics	August 2015 - August 2020	5	37.5	18.75
2	Chemical Eng.	January 2015 - January 2020	5	62.00	31.00
3	Biological Sciences	January 2019 - January 2024	5	160.00	80.00
4	Physics	March 2018 - March 2023	5	290.00	145.00
Grants under DST- FIST Completed					
1	Mechanical Eng.	July 2010 - July 2015	5	80.00	40.00
2	EEE & I	October 2013 - October 2018	5	36.00	18.00
3	Chemistry	March 2013 - March 2018	5	77.00	38.50

Hyderabad Campus

S.No	Department	Period	Duration	Amt. Sanctioned (50:50 Basis)	BITS share (in Lakhs)
Grants under DST- FIST Sanctioned / Approved - NIL -					
-	-	-	-	-	-
Grants under DST- FIST Ongoing					
1.	Pharmacy	Feb 2019 to Feb 2024	5	134.4	67.2
2.	Mathematics	14.12.2015 to 13.12.2020	5	45	22.5
Grants under DST- FIST Completed					
1.	Biology	01.04.2014 to 31.03.2019	5	110	55
2.	Chemistry	31.08.2014 to 30.08.2019	5	100	50
3.	Civil Engineering	20.12.2014 to 19.12.2019	5	90	50

BITS Pilani, Dubai Campus

SCHOLARSHIPS

Financial Assistance to Students

Financial Assistance to Students- 618 students received financial assistance of AED**: 4,551,061/-** under different categories for the Academic Year 2019-20, the details of which are given below:

S.No	Particulars	Number of Students	Amount in AED
1	Institute Merit Scholarship	547	3,958,985
2	Higher Degree and Doctoral Scholarship	38	174,350
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	7	94,288
4	Others (Staff, Siblings, Sports, Special Concessions)	26	323,438
	Total	**618**	**4,551,061**

A.16	**WORK INTEGRATED LEARNING PROGRAMMES (WILP)**

Since 1979, the Institute has been participating in the human resources development activities of the industries by evolving several degree programmes that integrate the working environment of the employees with the learning environment required by the Institute. These programmes are offered in several domains like Information Technology, Engineering Technology and Management.

The Institute conducts Work Integrated Learning Programmes (WILP) as a means of continuing education for employed professionals to meet the Learning & Development needs of a diverse spectrum of industries. These programmes are a conducted through a collaborative partnership between BITS Pilani and the organization / industry, to build technical competencies and enable advancement of workplace skills. In a world of rapidly evolving technologies, these programmes represent a successful model to meet the consequent need for continuous education and up-skilling of the workforce.

Over the past three decades, these programmes have grown manifold, meeting the requirements of over 4000 organizations. At present, over 22,000 employed professionals are pursuing various degree programmes through WILP.

SALIENT FEATURES

In line with the educational philosophy of the Institute of integrating theory with practice, the student's own work environment provides an ideal ground for a meaningful combination of the two through assignments, case studies, work experience, and projects. The interplay of work or practice and education is ensured since students are admitted only to a programme that is in line with their work profiles, and with the endorsement and active support of the employer.

The programmes are industry focused, with highly contemporary and relevant curriculum, and the individual courses are taught at the same level of rigor as in programmes on the campus. Instruction is delivered at the workplace, using a judicious combination of asynchronous electronic means, and synchronous, faculty-led classes conducted either physically or through the use of technology. Extensive use is made of virtual laboratories, remote laboratories, simulations, case studies, assignments and projects drawn from the workplace for enhanced experiential learning

COURSES OFFERED

The number of courses, offered during the year 2020 is as follows:

	Number of Courses offered
Second Semester 2019-2020	692
First Semester 2020-2021	713

PROGRAMMES OFFERED

Currently Operative Work Integrated Learning Programmes

Programmes	Collaborating / Sponsoring Organization
B.Sc. Programme	
1. Design & Computing	- Designed for the HRD needs of a diverse spectrum of IT Industries, and HCL Technologies, Noida
2. Pharmaceutical Sciences	- Designed for the HRD needs of a diverse spectrum of Pharmaceutical Industries, and Dr. Reddy's Laboratories, Hyderabad
B.Tech. Programmes	
1. Engineering Design	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries and John Deere, Pune
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Bangalore
4. Manufacturing Technology	- Kirloskar Oil Engines, Kolhapur, Bharat Forge, Pune, Tata Motors, Jamshedpur; TACO, Pune; Maruti Suzuki, Gurgaon; Mahindra Motor Vehicles; Cummins, Pune; GE Locomotives
5. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy – Mumbai
6. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; Vedanta, Jharsuguda; BPCL, Mumbai

Programmes	Collaborating / Sponsoring Organization
M.Sc. Programmes	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of IT Industries
2. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries
M.B.A. Programmes	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of IT Industries and HZL
2. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of consulting firms
3. Finance	- Designed for the HRD needs of business organizations and HZL
4. FinTech	- Designed for the HRD needs of business organizations
5. Hospital and Health Systems Management	- Designed for the HRD needs of a diverse spectrum of Hospitals and Healthcare organizations
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries and Bosch
7. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries

M.Tech. Programmes	
1. Automotive Electronics	- Designed for the HRD needs of a diverse spectrum of Automotive Industries and Aptive
2. Automotive Engineering	- Designed for the HRD needs of a diverse spectrum of Automotive Industries, Tata Technologies, Tata Motors, Pune; Mercedes Benz; Cummins
3. Computing Systems & Infrastructure	- Designed for the HRD needs of a diverse spectrum of IT Industries, and Wipro, Bangalore, VMware
4. Data Science & Engineering	- Designed for the HRD requirements of a diverse spectrum of IT Industries and Intuit; Avaya; BEL; CISCO; HCL; Wipro Technologies
5. Design Engineering	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, SKF and John Deere, Pune
6. Digital Manufacturing	- Designed for the HRD needs of a diverse spectrum of Digital Industries
7. Embedded Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries, Aricent Technologies; Cisco, Bangalore; UTC Bangalore and Hyderabad.
8. Environmental Engineering	- Goa State Pollution Control Board, Goa
9. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
10. Microelectronics	- Designed for the HRD needs of a diverse spectrum of IT Industries; Synopsys, Bangalore; Samsung, Gurgaon; Aricent Technologies
11. Pharmaceutical Operations and Management	- Designed for the HRD needs of a diverse spectrum of Pharmaceutical Industries, and Sun Pharmaceutical Industries, Vadodara; Lupin, Mumbai
12. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
13. Sanitation Science, Technology and Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
14. Software Engineering	- Wipro Technologies, Dell, SAP Labs, Sabre, EMC, Oracle, Lowe's Services, Bangalore; Avaya, Tech Mahindra, Pune; Capgemini; Qualcomm, Hyderabad
15. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad; Cisco, Synopsys, Bangalore; Samsung, Gurgaon; Aricent Technologies, Mercedes-Benz, Bangalore; ATMECS
16. Systems Engineering	- Wipro Infotech, Bangalore
17. Telecommunications & Software Engineering	- Designed for the HRD needs of a diverse spectrum of Telecom Industries
18. Transportation Engineering	- PWD, Goa

Post Graduate Diploma Programmes	
1. Business Analytics	Designed for the HRD needs of a diverse spectrum of IT Industries
2. Finance	Designed for the HRD needs of a diverse spectrum of business organizations
3. FinTech	Designed for the HRD needs of business organizations
4. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing organizations

Post Graduate Certificate Programmes		
1. Artificial Intelligence and Machine Learning	-	Designed for the HRD needs of a diverse spectrum of IT industries
2. Big Data & Analytics	-	Designed for the HRD needs of a diverse spectrum of IT industries
3. Big Data Engineering	-	Designed for the HRD needs of a diverse spectrum of IT industries
4. Full Stack Engineering		Designed for the HRD needs of a diverse spectrum of IT industries
5. General Management	-	Designed for the HRD needs of a diverse spectrum of Engineering industries
6. Internet of Things	-	Designed for the HRD needs of a diverse spectrum of IT industries
7. Manufacturing Practice	-	Designed for the HRD needs of a diverse spectrum of Manufacturing organizations
Certificate Programmes		
1. Manufacturing Practice	-	Designed for the HRD needs of a diverse spectrum of Manufacturing organizations
2. General Management	-	Designed for the HRD needs of a diverse spectrum of Engineering industries

ADMISSIONS

The number of students admitted in each of the semester is given below.

	Certificate & Diploma Programmes	Integrated First Degree Programmes	Higher Degree Programmes	Total
Second Semester 2019-2020	333(058)	508(70)	5098(1778)	5939(1906)
First Semester 2020-2021	321(072)	545(59)	4260(0967)	5126(1098)

The programme-wise details are given in **Annexure 1** (Part B5).

NUMBER OF STUDENTS REGISTERED

The registration processes for both the semesters was completed on the first day of each semester.

Semester	Number of students registered
Second Semester 2019-2020	19355
First Semester 2020-2021	21078

Details of Registration of students for the First Semester 2020-2021 are given in **Annexure 2** (Part B5).

AWARD OF DEGREES

During the year, a total of 4508 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
86th Award (vide Board of Governors meeting held on 20.03.2020)	4168(1516)
87th Award (vide Board of Governors meeting held on 08.09.2020)	2442(450)
Total:	**6610(1966)**

Note: The numbers in brackets indicate number of

Statistical details of these degrees are given in **Annexure B5-6** (Part B5).

A.17   INSTITUTIONAL KNOWLEDGE ANALYSIS CELL (IKAC)

The universities across the world are increasingly promoting data driven decision for both strategic and operational purposes. This calls for systematic organization of data across offices and campuses offices that forms basis of such decisions. This function over last 4 years has been managed by an Institute-wide Faculty-in-Charge who heads the Institutional Knowledge Analysis Cell (IKAC). The overarching purpose of IKAC is to *"provide data with analysis to internal and external stakeholders for evidence based decision making and strategic planning"*. The objectives of IKAC are:

1. To seek, collate, organize & secure data for institutional processes and functions

2. To conduct analysis & provide insights into collected data, with the goal of facilitating evidence based decision making

3. To Provide relevant data for benchmarking, accreditation, rankings, awards, and other such initiatives

IKAC is tasks are somewhat similar to IR (Institutional Research) office in international universities. In the backdrop of BITS Pilani declared as Institution of Eminence by MHRD, Government of India, this cell would play a significant role in the growth and development of BITS Pilani.

Every year the IKAC works to complete above objectives for ranking questionnaire submissions to various national and international agencies including Swachh Bharat Institution Survey, All India Survey for Higher Education (AISHE), and National Institution Ranking Forum (NIRF), all MHRD, Government of India initiatives; India Today, The Week, Outlook magazines for Engineering and The Week for B- schools, all national agencies and Quacquarelli Symonds (QS) and Times Higher Education (THE) both international agencies. The ranking cycle for 2021-22 has initiated a little late due to Pandemy, and IKA Cell is working actively for the same, meeting the deadlines of all agencies. on ranking data submission to; and various other national agencies. IKAC has also taken initiatives with concerned offices to strengthen and organize data that pertains to student, faculty, research, infrastructure, etc.

The initiative taken by IKAC in 2018 to introduce a platform called "RESEARGENCE" with the help of a company CIntelligence Pvt. Ltd., Chennai; for collating the database of National and International publications that has BITS Pilani affiliation, has been of immense benefit to faculties and senior administration. This database includes details of publications in Journals, Conferences, Books, and Book Chapters as available from online databases like Scopus, Web of Science (WoS), IEEE, Pubmed and Google Scholar. This platform provides a base where individual faculty can add-up to his/ her research profile. It also provides an immediate update to the publication by any BITS faculty as it appears online and helps keep track of citations, impact factor of each publication and overall for any faculty. The platform has helped prepare key parameters namely -h-index, publication count, citations, etc. for individual faculty, department, campus, and overall institute during review. A glimpse of data analysis is presented below-

BITS Pilani affiliated publications trend last 6 years (2015-2020)
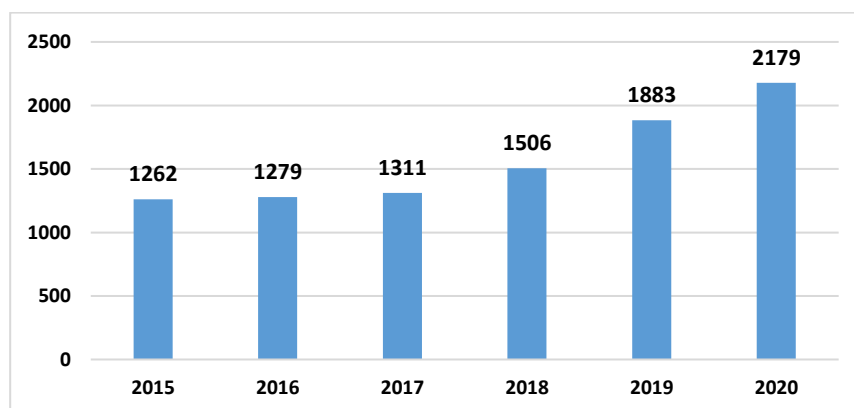
BITS Pilani, H-Index since inception is 122

Contribution to publication by campus last 6 years (2015-2020)

Parameter	Pilani	Goa	Hyderabad	Dubai
Publications	4341	1869	2750	679
Citations	22568	7432	11695	1874
H-Index	46 (107)	31 (52)	35 (57)	16 (27)

Fig in in bracket represents H-Index since inception

A.18   OBITUARIES

1. Shri Ram Singh Saini, PSRN P1053, Office Superintendent of this Institute passed away on 27th March 2020 due to a severe cardiac arrest.

2. Shri Subhash Chandra, PSRN P1058, Sweeper of this Institute passed away on 23rd July 2020 after a prolonged illness.

3. Shri Prakash, PSRN P3375, Helping Staff of this Institute passed away on 29th October 2020 after a brief illness.

4. Shri Ram Singh, PSRN P3007, Helping Staff of this Institute passed away on 5th November 2020 due to asthma attack.

5. Shri Om Prakash, PSRN P0683, Sweeper of this Institute passed away on 9th November 2020 after a brief illness.

6. Dr. Ram Chander Dagar, PSRN P2904, Acting Registrar of this Institute passed away on 10th December 2020.

7. Shri J Sampath Kumar, PSRN: H0348 (Technician), Electrical & Electronics Engineering Department, Hyderabad Campus died on December 19, 2020.

Note: The complete annual report (Part A and Part B) along with the annexures is given in soft copy.

CONTENTS

GENERAL BODY

The 59th meeting of the General Body of the Institute was held on 18th September 2020 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

The Chancellor heartily welcomed the members and thanked them for attending the meeting and apprised the members that 3352 students were admitted to the Bachelor's Programme in AY19-20. Admission to HD and PhD Programmes was at 1229. The number of applicants for BITSAT in AY19-20 was 1.43 L.

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The General Body noted the actions of the Chancellor approving the following:

(a) Extension of term of appointment of Prof. G. Sundar, Senior Professor as Director, BITS Pilani, Hyderabad Campus and Director, Off-Campus Programmes and Industry Engagement for two years with effect from 17th July 2019.

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(e) Constitution of the following Selection Committee for the Distinguished Alumnus Award (DAA) of 2019:

1. Mr. Uday Kotak, Executive Vice-Chairman & MD, Kotak Mahindra Bank: Chairman

2. Mr. D. Bhattacharya, Vice-Chairman, Hindalco Industries and Novelis, Chairman of the Business Review Council (Manufacturing) of Aditya Birla Group

3. Prof Suhas Joshi, Dean - Alumni & Corporate Relations & Rahul Bajaj Chair Professor, Department of Mechanical Engg, IIT Bombay

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6. Prof. Souvik Bhattacharyya, Vice-Chancellor, BITS Pilani (Member)

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(h)   Re-nomination of the following Alumni Term members of the General Body of the Institute for a period of 3 years with effect from 28th July 2019

1.   Prof. D. Balasubramanian

2.   Shri Raju Reddy

The General Body also noted the following:

(a)   Considered and noted the proposal for establishment of Off-Campus of the Institute in the State of Maharashtra (in or around Mumbai). The proposed B-School will be distinct and comparable to the best business schools in the world – aiming to garner a distinct space akin to BITS Pilani's engineering campuses. BITS shall seek requisite approvals and consent from competent regulatory authorities for establishing this off campus centre.

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The General Body received and recorded the reports on Research Activities of the Institute and collaboration with various Institutions/organisations both within India and abroad.

The General Body adopted the Report of the Board of Governors as to the state and condition of the Institute for the period from 1st January 2019 to 31st December 2019. While adopting the report the members expressed their happiness and satisfaction over the functioning of the Institute. The General Body also adopted the Balance Sheet and Income & Expenditure Account for the year ended on 31st March 2019 and approved the Budget Estimates of the Institute for the financial year 2020-2021 as recommended by the Finance Committee and the Board of Governors.

BOARD OF GOVERNORS

The Board of Governors of the Institute held its 73rd Meeting on 18th September 2020 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

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DETAILS OF ADMISSIONS MADE DURING THE YEAR 2020

(A) On-Campus Programmes:

    Second Semester 2019-2020

    BITS Pilani, Dubai Campus

PROGRAMMES	No. of students joined
1. *Integrated First Degree Programmes:*	
B.E.	
Biotechnology	00(00)
Chemical Engineering	00(00)
Civil Engineering	00(00)
Electrical and Electronics Engineering	00(00)
Mechanical Engineering	00(00)
Computer Science	03(00)
Electronics and Communication Engineering	00(00)
Total	**03(00)**
2. *Higher Degree Programmes:*	
M.E.	
Microelectronics	00(00)
Design Engineering	00(00)
Software Systems	03(02)
Electrical PED	00(00)
MBA	06(02)
Total	**09(04)**
Grand Total	**12(04)**

3. **Doctoral Programmes (Ph.D.):**

BITS Pilani, Pilani Campus	**60(25)**
BITS Pilani, K.K. Birla Goa Campus	**35(17)**
BITS Pilani, Hyderabad Campus	**75(36)**
BITS Pilani, Dubai Campus	**08(03)**
Total	**178(81)**

First Semester 2020-2021

PROGRAMMES	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
1. Integrated First Degree Programmes			
(a) Pilani Campus			
<u>Group A</u>			
B.E.			
Chemical	80(12)	368	270
Civil	79(11)	331	254
Computer Science	162(12)	422	372
EEE	118(10)	382	333
Electronics & Instrumentation	70(07)	368	323
Mechanical	104(03)	364	298
Manufacturing	43(06)	293	253
B.Pharm.(Hons.)	48(25)	363	203
Total	**704(86)**		
<u>Group B</u>			
M.Sc.			
Biological Sciences	79(15)	314	261
Chemistry	81(12)	300	258
Economics	85(14)	346	304
Mathematics	83(13)	364	286
Physics	79(07)	386	283
Total	**407(61)**		
<u>Group C</u>			
M.Sc.			
Gen. Studies	09(06)		
Total	**09(06)**		
Grand Total :	**1120(153)**		
(b) K.K. Birla Goa Campus:			
<u>Group A</u>			
B.E.			
Chemical	73(16)	300	248
Computer Science	176(09)	387	347
EEE	89(10)	330	306
Electronics & Communication	91(14)	347	320
Electronics & Instrumentation	87(09)	330	293
Mechanical	117(05)	312	269
Total	**633(63)**		
<u>Group B</u>			
M.Sc.(Hons.)			
Bio. Sciences	53(08)	296	247
Chemistry	56(07)	289	249
Economics	70(07)	335	290
Mathematics	76(15)	304	265
Physics	57(04)	338	271
Total :	**312(41)**		
Grand Total	**945(104)**		

(c) Hyderabad Campus:

Group A

B.E.(Hons.)

Chemical	54(17)	293	240
Civil	51(7)	285	240
Computer Science	189(16)	396	336
EEE	107(11)	338	300
Electronics & Communication	123(19)	357	314
Electronics & Instrumentation	63(6)	314	290
Mechanical	153(19)	315	260
B.Pharm.(Hons.)	55(32)	276	161
Total	**795(127)**		

Group B

M.Sc.

Biological Sciences	52(18)	323	240
Chemistry	57(14)	275	240
Economics	84(18)	326	281
Mathematics	88(26)	311	257
Physics	88(07)	314	256
Total	**369(83)**		
Grand Total	**1164(210)**		

Note:

i.   The above list consists of 120(40) students who are admitted under 'International students admissions' at Pilani 38(10), Hyderabad 46(21) and Goa 36(09).

ii. The above list consists of 15 students who are First rank holders from 15 different central/ state boards admitted under 'direct admission of board toppers' scheme.

iii. The above numbers also include 39 admissions of staff children(33) and of BET school students (06), made under special dispensation consisting of 4 in Biological Sciences, 5 in Chemistry, 8 in Economics, 8 in Mathematics, 5 in Physics and 9 in General Studies.

(d) Dubai Campus:

Admission to Integrated First Degree Programmes

B.E.

Biotechnology	18(13)
Chemical Engineering	08(03)
Civil Engineering	07(02)
Electrical and Electronics Engineering	13(03)
Mechanical Engineering	22(01)
Computer Science	164(48)
Electronics and Communication Engineering	09(02)
Total	**241(72)**

2. *Higher Degree Programmes :*

(a) Pilani Campus

M.E.

Biotechnology	21(15)
Chemical	18(08)
M.E. Sanitation Science	03(00)
Civil (Structural Engineering)	22(06)
Civil (Transportation Engineering)	17(05)
Civil (Infrastructure Engineering)	12(05)
Computer Science	28(02)
Communication Engineering	15(04)
Design Engineering	25(01)
Embedded Systems	17(05)
Manufacturing Systems Engineering	16(01)
Mechanical Engineering	25(04)
Microelectronics	29(02)
Software Systems	44(08)
M.Pharm.	12(06)
M.Pharm.(Pharmaceutics)	19(15)
M.Pharm.(Pharmaceutical Chemistry)	12(08)
M.Pharm.(Pharmacology)	12(09)
MBA	62(21)
Total	**409(125)**

(b) Goa Campus

M.E.

Biotechnology	18(10)
Mechanical	21(01)
M.E. Sanitation Science	01(01)
Chemical Engineering	12(04)
Design Engineering	20(01)
Microelectronics	31(04)
Embedded Systems	29(04)
Computer Science	41(08)
M.Phil.	
Liberal Studies	04(03)
Total	**177(36)**

(c) Hyderabad Campus

M.E.

Biotechnology	15(14)
Computer Science	59(16)
Civil (Structural)	29(06)
Civil (Transportation Engineering)	12(02)
Mechanical (Thermal)	17(03)
Design	29(01)
Embedded Systems	33(08)
Communication Engineering	20(8)
Chemical	07(02)
Mechanical Engineering	27(02)
Microelectronis	34(09)
Sanitation Science, Technology and Management	03(01)
M.Pharm (Pharmaceutics)	23(15)
Total	**308(87)**

(d) Dubai Campus
M. E.

Microelectronics	00(00)
Design Engineering	05(00)
Electrical PED	03(01)
Software Systems	06(02)
M.B.A	09(03)
Total	**23(06)**

3. Doctoral Programmes (Ph.D.):	
(a) **Pilani Campus**	**88(42)**
(b) **K.K. Birla Goa Campus**	**37(13)**
(c) **Hyderabad Campus**	**65(28)**
(d) **Dubai Campus**	**10(07)**
Total	**200(90)**

Work-Integrated Learning Programme

(A) Second Semester 2019-2020

PROGRAMMES	No. of students joined
1. Certificate & Diploma Programmes	
Certificate	
Manufacturing Practice	46(001)
Post Graduate Certificate	
Artificial Intelligence & Machine Learning	184 (041)
Big Data Engineering	93 (015)
Post Graduate Diploma	
Finance	10 (001)
Sub Total	**333(058)**
2. Integrated First Degree Programmes:	
B.Tech.	
Engineering Technology	260(015)
Process Engineering	49 (003)
Manufacturing Technology	28 (000)
B.Sc.	
Design & Computing	47(018)
M.Sc.	
Business Analytics	73 (017)
Information Systems	51 (017)
Sub Total	**508(070)**
3. Higher Degree Programmes:	
M.Tech.	
Automotive Electronics	117 (024)
Automotive Engineering	43 (003)
Computing Systems & Infrastructure	1642 (834)
Data Science & Engineering	1074 (198)
Design Engineering	134 (012)
Digital Manufacturing	54 (002)
Embedded Systems	107 (028)
Manufacturing Management	77 (003)
Microelectronics	100 (024)

Pharmaceutical Operations & Management	26 (007)
Quality Management	54 (010)
Sanitation Science, Technology and Management	20 (003)
Software Systems	1379 (562)
MBA	
Consultancy Management	48 (010)
Finance	42 (007)
Hospital & Health Systems Management	83 (036)
Manufacturing Management	63 (003)
Quality Management	35 (012)
Sub total	**5098(1778)**
Total	**5939(1906)**

(B) First Semester 2020-2021

PROGRAMMES	No. of students joined
1. Certificate & Diploma Programmes	
Post Graduate Certificate	
Artificial Intelligence & Machine Learning	83 (021)
Full Stack Engineering	21 (006)
Internet of Things	33 (004)
Post Graduate Diploma	
Business Analytics	154 (035)
Finance	6 (001)
FinTech	24 (005)
Sub Total	**321(072)**
2. Integrated First Degree Programmes:	
B.Tech.	
Engineering Technology	305 (016)
Manufacturing Technology	74 (007)
Process Engineering	28 (000)
B.Sc.	
Design & Computing	98 (024)
M.Sc.	
Business Analytics	40 (012)
Sub total	**545(059)**
3. Higher Degree Programmes:	
M.Tech.	
Automotive Electronics	162 (020)
Automotive Engineering	57 (002)
Computing Systems & Infrastructure	129 (020)
Data Science & Engineering	1114 (238)
Design Engineering	142 (015)
Digital Manufacturing	69 (003)
Embedded Systems	127 (027)
Environmental Engineering	66 (009)
Manufacturing Management	75 (005)
Microelectronics	125 (035)
Pharmaceutical Operations & Management	35 (007)
Quality Management	74 (007)
Sanitation Science, Technology and Management	11 (002)
Software Engineering	426 (128)
Software Systems	506 (111)
Systems Engineering	209 (076)

MBA

Business Analytics	415 (111)
Consultancy Management	69 (017)
Finance	85 (018)
FinTech	72 (021)
Hospital & Health Systems Management	166 (072)
Manufacturing Management	86 (014)
Quality Management	40 (009)
Sub total	**4260(967)**
Total	**5126(1098)**

SUMMARY

		II Semester 2019-2020	I Semester 2020-2021
1.	**BITS, Pilani – Pilani Campus**		
	Integrated First Degree Programmes		1120(153)
	Higher Degree Programmes		409(125)
	Doctoral Programmes	60(25)	88(42)
	Total	**60(25)**	**1617(320)**
2.	**BITS, Pilani – K.K. Birla Goa Campus**		
	Integrated First Degree Programmes		945(104)
	Higher Degree Programmes		177(36)
	Doctoral Programmes	35(17)	37(13)
	Total	**35(17)**	**1159(153)**
3.	**BITS, Pilani – Hyderabad Campus**		
	Integrated First Degree Programmes		1164(210)
	Higher Degree Programmes		308 (87)
	Doctoral Programmes	75(36)	65(28)
	Total	**75(36)**	**1537(325)**
4.	**BITS, Pilani – Dubai Campus**		
	Integrated First Degree Programmes	03(00)	241(72)
	Higher Degree Programmes	09(04)	23(06)
	Doctoral Programmes	08(03)	10(07)
	Total	**20(07)**	**274(85)**

5. **Work-Integrated Learning Programmes**

	II Semester 2019-20	I Semester 2020-21	Total
Post Graduate Certificates	333(058)	321(072)	654(130)
Integrated First Degree Programmes	508(070)	545(059)	1053(129)
Higher Degree Programmes	5098(1778)	4260(967)	9358(2745)
Total	**5939(1906)**	**5126(1098)**	**11065(3004)**

ADMISSIONS: QUALITY OF STUDENTS' INPUT

Year of Admission	Percentage of marks in Qualifying Subjects (General PCM)	
	Max.	Min.
1966-67	93.7	38.2
1967-68	91.2	52.0
1968-69	95.0	47.3
1969-70	92.7	51.6
1970-71	96.7	45.0
1971-72	92.3	56.2

Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1972-73	I Sem.	94.30	65.22
	II Sem.	88.16	65.22
1973-74	I Sem.	100.00	70.97
	II Sem.	94.41	70.97
1974-75	I Sem.	97.83	73.00
	II Sem.	97.83	80.11
1975-76	I Sem	97.00	78.61
	II Sem.	96.14	79.76
1976-77	I Sem.	99.73	78.50
	II Sem.	92.30	69.63
1977-78	I Sem.	100.00	79.11
	II Sem.	97.19	82.84
1978-79	I Sem.	100.00	60.00
	II Sem.	98.05	79.67
1979-80	I Sem.	100.00	69.46
	II Sem.	99.87	84.24
1980-81	I Sem.	100.00	78.72
	II Sem	(No admisions made)	
1981-82	I Sem.	100.00	81.10
	II Sem.	97.15	86.30
1982-83	I Sem.	100.00	84.13
	II Sem.	100.00	86.64
1983-84	I Sem.	100.00	84.68
	II Sem.	99.22	85.35
1984-85	I Sem.	99.89	85.60
	II Sem.	96.67	85.60
1985-86	I Sem.	100.00	85.05
	II Sem.	99.04	85.56

Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1986-87	I Sem.	100.00	88.63
	II Sem.	97.61	88.63
1987-88	I Sem.	100.00	88.11
	II Sem.	97.81	88.37
1988-89	I Sem.	100.00	88.86
	II Sem	100.00	92.63
1989-90	I Sem	100.00	89.03
	II Sem	98.96	89.03
1990-91	I Sem	100.00	90.90
	II Sem.	100.00	93.87
1991-92	I Sem.	100.00	90.96
	II Sem.	100.00	96.11
1992-93	I Sem	100.00	93.81
	II Sem.	100.00	94.71
1993-94	I Sem.	100.00	93.91
	II Sem.	100.00	95.02
1994-95	I Sem.	100.00	94.53
	II Sem.	99.52	94.99
1995-96	I Sem.	100.00	94.70
	II Sem	98.66	96.07
1996-97	I Sem.	100.00	95.27
	II Sem.	97.87	95.30
1997-98	I Sem.	100.00	95.31
	II Sem.	99.52	95.32
1998-99	I Sem.	100.00	95.10
	II Sem.	100.00	95.31
1999-2000	I Sem.	100.00	96.09
	II Sem.	98.89	96.70
2000-01	I Sem.	100.00	96.11
	II Sem.	99.79	96.11
2001-02	I Sem.	100.00	97.15
	II Sem.	100.00	97.44
2002-03	I Sem.	100.00	98.069
	II Sem.	100.00	98.069
2003-04	I Sem.	100.00	98.374
	II Sem.	100.00	98.374
2004-05	I Sem.	100.00	97.323
	II Sem.	99.673	97.323

Year of Admission	Semester	BITSAT Test Score	
		Highest	Lowest
2005-06	I Sem.	434	245
	II Sem.	366	267
2006-07	I Sem.	430	283
	II Sem.	300	283
2007-08	I Sem.	411	260
	II Sem.	386	251
2008-09	I Sem.	419	230
2009-10	I Sem.	422	255
	II Sem.	304	251
2010-11	I Sem.	398	258
2011-12	I Sem.	414	211
2012-13	I Sem.	414	258
2013-14	I Sem.	418	266
2014-15	I Sem.	430	160
2015-16	I Sem.	419	201
2016-17	I Sem.	423	224
2017-18	I Sem.	442	200
2018-19	I Sem.	378	177
2019-20	I Sem.	439	176
2020-21	I Sem.	422	161

STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2020-2021 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES

(i)   Pilani Campus:

FIRST PRIORITY

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AB	Total
B1	14	05	12	14	--	07	13	04	69
B2	18	03	12	13	--	11	07	04	68
B3	04	02	18	10	--	34	07	04	79
B4	05	08	16	09	--	23	0ff6	02	69
B5	05	03	14	15	--	12	13	09	71
Total	46	21	72	61	--	87	46	23	356

OTHER PRIORITIES

Programmes* From ↓ To →	B5	Total
A7	01	01
Total	01	**01**

Transfer within same tier

Programmes* From ↓ To →	A3	A4	A7	Total
A1			01	01
A2	02			02
A3			02	02
A4	01			01
AB	01			01
B2			01	01
B4			02	02
B5		01		01
Total	04	01	06	**11**

A-17

Transfer within B to B

Programmes* From ↓ To →	B3	Total
B1	01	01
B5	01	01
Total	02	**02**

Vertical Transfers: ME First Semester 2020-21

From	To	No. of Students
M.Sc. Physics & B.E.Electrical & Electronics	M.E. Embedded Systems	01
B.E. Electrical & Electronics		01
B.E. Electrical & Electronics	M.E. Microelectronics	02
B.E. Electrical & Electronics	M.E. Software Systems	01
B.Pharm.	MBA	01
	Total	**06**

Vertical Transfers: (Ph.D) First Semester 2020-21

From	To	No. of Students
M.E. SS	Ph.D. Computer Science	2
M.E. CS		
M.E. Mechanical Engg	Ph.D Mechanical Engineering	1
M.E. Civil with Spl. in Transportation Engineering	Ph.D Civil Engineering	2
	Total	**05**

Minor Programs: During the Academic year 2020-2021, 199 students were admitted in Minor Program, out of them 127 are in Finance and 58 are in Data Science and 06 are in Physics and 02 are in PEP and 06 are in Entrepreneurship.

(ii)   K.K. Birla Goa Campus:

FIRST PRIORITY

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A7	A8	AA	Total
B1	5	0	9	7	6	13	7	**47**
B2	10	0	11	14	4	10	4	**53**
B3	2	0	5	6	36	6	12	**67**
B4	1	0	6	10	23	11	12	**63**
B5	2	0	11	12	17	6	10	**58**
Total	**20**	**0**	**42**	**49**	**86**	**46**	**45**	**288**

OTHER PRIORITIES

Programmes* From ↓ To →	B3	Total
A3	01	**01**
Total	**01**	**01**

Transfer within same tier

Programmes* From↓To→	B3	Total
B4	01	**01**
B5	02	**02**
Total	**03**	**03**

Programmes* From↓To→	A7	AA	Total
A3	00	05	**05**
A8	00	01	**01**
AA	01		**01**
Total	**01**	**06**	**07**

Vertical Transfers First Semester 2020-21

From	To	No. of Students
M.E. COMPUTER SCIENCE	Ph.D. COMPUTER SCIENCE & INFORMATION SYSTEMS	01
	Total	**01**

(iii)   Hyderabad Campus:

FIRST PRIORITY
(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AA	Total
B1	3	2	11	11	0	6	4	3	40
B2	7	4	8	13	0	5	9	4	50
B3	0	6	16	12	0	33	5	13	85
B4	2	7	8	14	0	14	6	15	66
B5	2	4	4	11	0	22	6	17	66
Total	14	23	47	61	0	80	30	52	307

OTHER PRIORITIES

	B3	Total
A5	2	2
Total	2	2

Transfer within same tier:

Programmes* From ↓ To →	AA	A8	A7	Total
A3	04	00	00	04
A4	00	01	00	01
A8	01	00	00	01
AA	00	00	04	04
B4	00	00	01	01
Total	05	01	05	11

Transfer within B to B

Programmes* From ↓ To →	B3	Total
B1	02	02
B5	01	01
Total	03	03

Vertical Transfers

From	To	No. of Students
B.E. EEE	M.E. Embedded Systems	01
M.E. Biotechnology	Ph.D	01
M.E. Pharm	Ph.D	**03**
Total		**05**

(iv) Dubai Campus: ZERO

LIST OF CANDIDATES WHO HAVE BEEN PERMITTED TO TRANSFER WITHIN THE FIRST DEGREE IN II SEMESTER 2019-2020

S.NO.	ID NO	NAME	PERMITTED TO TRANSFER	
			FROM	TO
1	2019A7PS0198U	YASSER MUSTAFA ANSARI	CS	BIOT
2	2019A3PS0264U	SHEIKH SHAH SABEEL	EEE	CS
3	2019A4PS0128U	RAUNAK MALHOTRA	MECH	BIOT
4	2019A4PS0065U	PREMSAI PEDDI	MECH	ECE
5	2019A4PS0191U	MOHD ARHAM KHAN	MECH	CIVIL
6	2019AAPS0051U	GAURAV DHANUKA	ECE	CS
7	2019A4PS0220U	FAWZAN VAKKEPARAMBIL SHAJAHAN	MECH	CS
8	2019AAPS0260U	DHRUV JAIN	ECE	CS
9	2019A7PS0035U	DEVANG MEHTA	CS	MECH
10	2019A7PS0238U	ADDALA KASYAPI	CS	CIVIL

*Legend :

A1   B.E. Chemical
A2   B.E. Civil
A3   B.E. Electrical & Electronics
A4   B.E. Mechanical
A5   B.Pharm.
A7   B.E. Computer Science
A8   B.E. Electronics and Instrumentation
A9   B.E. Biotechnology
AA   B.E. Electronics & Communication
AB   B.E. Manufacturing Engineering
B1   M.Sc. Biological Sciences
B2   M.Sc. Chemistry
B3   M.Sc. Economics
B4   M.Sc. Mathematics
B5   M.Sc. Physics
C2   M.Sc. General Studies
C5   M.Sc. Engineering Technology
C6   M.Sc. Information Systems
C7   M.Sc. Finance

FACULTY DATA

Pilani Campus

List of Faculty members who joined between 01-01-2020 to 31-12-2020.

S.No.	Name of the faculty member	Designation	Department	Date of Joining
1.	Veena R	Assistant Professor, Gr-I	HUSS	02-Jan-20
2.	Abhishek	Assistant Professor, Gr-II	CSIS	06-Jan-20
3.	Sudhirkumar Barai	Senior Professor & Director	CE	14-Jan-20
4.	Achint Nigam	Assistant Professor, Gr-I	MGT	18-Jan-20
5.	Jatin Bedi	Assistant Professor, Gr-II	CSIS	23-Jan-20
6.	Ramakrishna Dantu	Associate Professor (OC)	WILPD-CSIS	04-Feb-20
7.	Byomakesh Debata	Assistant Professor, Gr-I	ECFIN	05-Feb-20
8.	Rajendra Prasad Gupta	Visiting Faculty	ECFIN	24-Feb-20
9.	Vinti Agarwal	Assistant Professor, Gr-I	CSIS	14-Mar-20
10.	Ashish Patel*	Assistant Professor, Gr-I	EEE	04-Jun-20
11.	Saikishor Jangiti	Assistant Professor (OC)-Gr-I	WILPD-CSIS	10-Jun-20
12.	Kranthi Kumar Palavalasa	Assistant Professor (OC)-Gr-I	WILPD-EEE	03-Jul-20
13.	Jyotsana Grover	Assistant Professor (OC)-Gr-I	WILPD-CSIS	07-Jul-20
14.	Rallapalli Srinivas	Assistant Professor, Gr-I	CE	13-Jul-20
15.	Shree Prasad M	Assistant Professor (OC)-Gr-I	WILPD-EEE	13-Jul-20
16.	Radha Raman Mishra	Assistant Professor, Gr-I	ME	21-Jul-20
17.	L Rajya Lakshmi	Assistant Professor, Gr-I	CSIS	07-Aug-20
18.	Vijay Bajirao Kakade	Assistant Professor, Gr-I	CE	10-Aug-20
19.	Sandeep Joshi	Assistant Professor, Gr-I	EEE	17-Aug-20
20.	Amitesh Singh Rajput*	Assistant Professor, Gr-I	CSIS	28-Aug-20
21.	Arkaprovo Ghosal	Assistant Professor, Gr-I	CHE	18-Sep-20
22.	Krishnendu Mondal	Associate Professor (OC)	WILPD-EEE	05-Oct-20
23.	Tanmaya Mahapatra	Assistant Professor, Gr-I	CSIS	19-Oct-20
24.	Rahul Kumar	Assistant Professor, Gr-I	EEE	02-Nov-20
25.	Revendranath Tirumalsety	Assistant Professor, Gr-I	MGT	07-Nov-20
26.	Paul Mathew	Assistant Professor, Gr-I	HUSS	09-Nov-20
27.	Samatha Benedict	Assistant Professor, Gr-I	EEE	11-Nov-20
28.	Sourav Kumar Sasmal	Assistant Professor, Gr-I	MATH	28-Nov-20
29.	Deepak Kumar Saxena	Assistant Professor, Gr-I	MGT	01-Dec-20
30.	Nishit Narang	Associate Professor (OC)	WILPD-CSIS	01-Dec-20
31.	Sharda Tripathi	Assistant Professor, Gr-I	EEE	14-Dec-20
32.	Mukul Joshi	Assistant Professor, Gr-I	BIO	17-Dec-20
33.	Satyendra Kumar Mourya*	Assistant Professor, Gr-I	EEE	18-Dec-20
34.	Shashank B S	Assistant Professor, Gr-I	CE	21-Dec-20
35.	Tribeni Roy	Assistant Professor, Gr-I	ME	21-Dec-20
36.	Divyansh Patel	Assistant Professor, Gr-I	ME	29-Dec-20
37.	Shaili Singh	Assistant Professor, Gr-I	MGT	30-Dec-20

* indicates Re-designation

List of Faculty members who left the Institute between 01-01-2020 to 31-12-2020.

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Lavika Goel	Assistant Professor, Gr-I	10-Jan-20	Resignation
2.	Monika Gupta	Assistant Professor, Gr-I	13-Jan-20	Resignation
3.	Jagat Sesh challa	Assistant Professor, Gr-II	25-Jan-20	Resignation
4.	Shelaka Gupta	Assistant Professor, Gr-I	15-Feb-20	Resignation
5.	Rupam Goswami	Assistant Professor, Gr-I	21-Feb-20	Resignation
6.	Prithviraj Mukhopadhyay	Assistant Professor (OC)-Gr-I	16-May-20	Resignation
7.	Gourab Sil	Visiting Faculty	09-Jun-20	Resignation
8.	Vaibhav Soni	Assistant Professor, Gr-I	10-Jun-20	Resignation
9.	Priyansh Singh	Assistant Professor, Gr-I	15-Jun-20	Resignation
10.	Rahul Banerjee	Professor	20-Jun-20	Resignation
11.	Arghya Banerjee	Assistant Professor, Gr-I	09-Jul-20	Resignation
12.	Jatin Bedi	Assistant Professor, Gr-II	20-Jul-20	Resignation
13.	Deepak Sharma	Assistant Professor, Gr-I	31-Aug-20	Resignation
14.	Rajendra Prasad Gupta	Visiting Faculty	08-Sep-20	Resignation
15.	Abhishek	Assistant Professor, Gr-II	17-Oct-20	Resignation
16.	Suresh Kumar	Associate Professor	01-Dec-20	Resignation
17.	Belde Vinay	Assistant Professor (OC), Gr-II	22-Nov-20	Resignation
18.	Sunil Kumar Dubey	Assistant Professor, Gr-I	31-Dec-20	Resignation

K.K. Birla Goa Campus

List of Faculty Members Joined for the period from 01-Jan-2020 to 31-Dec-2020

S.No	Name	Designation	Department	Date of Joining
1	Prof. Snehanshu Saha	Associate Professor	CS & IS	01-Jan-2020
2	Mr. Pritam Bhattacharya	Assistant Professor, Gr-II	CS & IS	01-Jan-2020
3	Prof. Samit Chattopadhyay	Sr. Professor	Biological Sciences	06-Jan-2020
4	Dr. Mizanur Rahaman	Assistant Professor, Gr-I	Mathematics	08-Jan-2020
5	Dr. Anupama Sharma	Assistant Professor, Gr-I	Mathematics	02-Mar-2020
6	Dr. Abhishek Kr Singh	Assistant Professor, Gr-II	CS & IS	01-Jul-2020
7	Dr. Ravi Kadlimatti	Assistant Professor, Gr-I	EEE	03-Jul-2020
8	Dr. Jobish John	Assistant Professor, Gr-I	EEE	03-Jul-2020
9	Dr. Biswajit Das	Assistant Professor, Gr-I	Mechanical Engineering	06-Jul-2020
10	Dr. Nilesh Dadasaheb Pawar	Assistant Professor, Gr-I	Mechanical Engineering	08-Jul-2020
11	Dr. Iniyan Thiruselvam N.	Visiting Faculty	Mechanical Engineering	03-Aug-2020
12	Dr. Kizheppatt Vipin	Assistant Professor, Gr-I	EEE	03-Aug-2020
13	Dr. Vaibhav Joshi	Assistant Professor, Gr-I	Mechanical Engineering	10-Aug-2020
14	Dr. Indrani Chakraborty	Assistant Professor, Gr-I	Physics	03-Sep-2020
15	Dr. Sravan Danda	Assistant Professor, Gr-I	CS & IS	07-Sep-2020
16	Dr. Ganesh Madhav Bapat	Assistant Professor, Gr-I	Mechanical Engineering	01-Oct-2020
17	Dr. Saranya G. Nair	Assistant Professor, Gr-I	Mathematics	03-Oct-2020
18	Dr. Suman Gupta	Assistant Professor, Gr-I	Economics	10-Oct-2020
19	Dr. Hareesh A.G.*	Assistant Professor, Gr-I	Humanities & Social Sciences	14-Oct-2020
20	Dr. Sundari R.	Assistant Professor, Gr-I	Chemical Engineering	20-Nov-2020
21	Dr. Tanmay Tulsidas Verlekar	Assistant Professor, Gr-I	CS & IS	01-Dec-2020
22	Dr. Ashwin K.P.	Assistant Professor, Gr-I	Mechanical Engineering	14-Dec-2020
23	Dr. Soumyabrata Barik*	Assistant Professor, Gr-I	EEE	21-Dec-2020

* indicates Re-designation

List of Faculty Members left between 01-Jan-2020 to 31-Dec-2020

S.No	Name	Designation	Department	Date of Exit
1	Dr. Partha Saha	Visiting Assistant Professor	Economics	06-Jan-2020
2	Dr. Chaudhry Indra Kumar	Assistant Professor, Gr-II	EEE	11-Jan-2020
3	Dr. Gauranga Charan Samanta	Assistant Professor, Gr-I	Mathematics	08-Jun-2020
4	Dr. Mithun Muthiah Sakthivel	Assistant Professor, Gr-I	EEE	30-Jun-2020
5	Dr. Jobish John	Assistant Professor, Gr-I	EEE	01-Aug-2020
6	Dr. Sandeep Singh	Assistant Professor, Gr-I	Mechanical Engineering	14-Dec-2020
7	Dr. Sukumar Vellakkal	Assistant Professor, Gr-I	Economics	22-Dec-2020
8	Dr. Hareesh A.G.*	Visiting Assistant Professor	Humanities & Social Sciences	13-Oct-2020
9	Dr. Soumyabrata Barik*	Assistant Professor, Gr-II	EEE	20-Dec-2020

* indicates Re-designation

Hyderabad Campus

List of Faculty members who joined between 01-01-2020 to 31-12-2020.

S.No.	Name	Designation	Department	Date of Joining
1	Mrityunjay Singh	Assistant Professor, Gr-II	CS & IS	01-Jan-20
2	D Ramaiah	Senior Professor	Chemistry	06-Jan-20
3	Amit Kumar Panda	Assistant Professor, Gr-I	EEE	10-Jan-20
4	Vidyapu Sandeep	Assistant Professor, Gr-II	CS & IS	27-Jan-20
5	Sanjay Vidhyadharan	Visiting Assistant Professor	EEE	01-Feb-20
6	Davuluri Subrahmanya Bhima Sankar	Assistant Professor, Gr-I	Physics	03-Feb-20
7	Pratyush Chakraborty	Assistant Professor, Gr-I	EEE	25-Jun-20
8	Nijjwal Karak	Assistant Professor, Gr-I	Mathematics	26-Jun-20
9	Apurba Das	Assistant Professor, Gr-I	CS & IS	29-Jun-20
10	Shuvadeep Maity	Assistant Professor, Gr-I	Biological Sciences	29-Jun-20
11	Kirtimaan Syal	Assistant Professor, Gr-I	Biological Sciences	29-Jun-20
12	Gopal Krishna Kamath M	Assistant Professor, Gr-I	EEE	01-Jul-20
13	Prabakaran Saravanan	Assistant Professor, Gr-I	Mechanical Engineering	04-Jul-20
14	Rohit Gupta	Assistant Professor, Gr-I	Mathematics	10-Jul-20
15	Addepalli Ramu	Visiting Professor	Mathematics	20-Jul-20
16	Nikumani Choudhury	Assistant Professor, Gr-II	CS & IS	25-Jul-20
17	Arnab Dutta	Assistant Professor, Gr-I	Chemical Engineering	27-Jul-20
18	Shivang Shekhar	Assistant Professor, Gr-I	Civil Engineering	03-Aug-20
19	Mrinal Ketan Jagirdar	Assistant Professor, Gr-I	Mechanical Engineering	01-Sep-20
20	Subhradeep Pal	Assistant Professor, Gr-I	EEE	10-Sep-20
21	Dheeraj Agarwal	Assistant Professor, Gr-I	Mechanical Engineering	30-Sep-20
22	Farida Parvez Barbhuiya	Assistant Professor, Gr-I	Mathematics	02-Nov-20
23	Sajith P	Assistant Professor, Gr-I	Mathematics	02-Nov-20
24	Nabin Kumar Meher	Assistant Professor, Gr-I	Mathematics	10-Nov-20
25	Afkham Mir	Assistant Professor, Gr-I	Chemical Engineering	12-Nov-20
26	Raghunath Reddy Madireddy	Assistant Professor, Gr-I	CS & IS	16-Nov-20
27	Debirupa Mitra	Assistant Professor, Gr-I	Chemical Engineering	16-Nov-20
28	Nishith Gupta	Professor	Biological Sciences	20-Nov-20
29	Spandan Bhattacharya	Assistant Professor, Gr-I	HSS	01-Dec-20
30	Iyman Abrar	Assistant Professor, Gr-I	Chemical Engineering	01-Dec-20
31	Abhishek Sarkar	Assistant Professor, Gr-I	Mechanical Engineering	14-Dec-20
32	P Raghu	Assistant Professor, Gr-I	Civil Engineering	28-Dec-20
33	Ayan Das	Assistant Professor, Gr-I	CS & IS	28-Dec-20
34	Chanchal Chakraborty	Assistant Professor, Gr-I	Chemistry	30-Dec-20

List of Faculty members who Left the Institute between 01-01-2020 to 31-12-2020.

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1	Sudeepta Mishra	Assistant Professor, Gr-I	31-Jan-20	Resignation
2	Odelu Vanga	Assistant Professor, Gr-I	22-Feb-20	Resignation
3	Nemiraja Jadiyappa	Assistant Professor, Gr-I	29-Feb-20	Resignation
4	Rakesh Pandey	Assistant Professor, Gr-II	07-Mar-20	Resignation
5	Angan Sengupta	Assistant Professor, Gr-I	20-May-20	Resignation
6	Addepalli Ramu	Professor	17-Jul-20	Normal Retirement
7	Surender Samant	Visiting Faculty	17-Jul-20	Term Ended
8	Souvik Kundu	Assistant Professor, Gr-I	28-Nov-20	Resignation
9	Vajjha Venkata Hara Gopal	Visiting Professor	31-Dec-20	Term Ended
10	Md Zakaria Siddiqui	Assistant Professor, Gr-I	31-Dec-20	Resignation

Dubai Campus

List of Faculty members who joined between 01-01-2020 to 31-12-2020

S.No.	Name of Faculty	Designation	Discipline	Date of Joining
1	Santhosh Kumar Vasudevan	Visiting Faculty	CS	08-Mar-20
2	Murchana Changmai	Assistant Professor	CHEM ENGG.	30-Aug-20
3	Pranav Mothabhau Pawar	Assistant Professor	CS	13-Oct-20
4	Rahul Pramanik	Assistant Professor	CS	08-Nov-20
5	Sayantan Chakraborty	Assistant Professor	HSS	15-Dec-20
6	Pramod Gaur	Assistant Professor	CS	16-Dec-20

List of Faculty members who Left the Institute between 01-01-2020 to 31-12-2020

S.No.	Name of Faculty	Designation	Date of Leaving	Reason
1.	Tewfik Mahdi	Professor	1-JAN-2020	Resignation
2.	Adhir Baran Chattopadhyay	Professor	05-JAN-2020	Resignation
3.	Venkata Nagasankaram Mullapudi	Associate Professor	05-JAN-2020	Resignation
4.	Ramachandran Anand Kumar	Professor	05-JAN-2020	Resignation
5.	Mary Lourde Regeena	Associate Professor	20-FEB-2020	Resignation
6.	Bharat Bhushan Gulyani	Associate Professor	27-FEB-2020	Demise
7.	Santhosh Kumar Vasudevan	Assistant Professor	5-MAR-2020	Resignation
8.	Santhosh Kumar Vasudevan	Visiting Faculty	14-JUN-2020	Term End
9.	Periasamy Chinnapalaniandi	Professor	30-JUN-2020	Resignation
10.	Rajan Ramaswamy	Assistant Professor	13-AUG-2020	Other Separation

DETAILS OF DISTRIBUTION OF PS-I STUDENTS AND FACULTY OVER PRACTICE SCHOOL - I STATIONS DURING THE SUMMER 2020

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
1	Ahmedabad	Adani Power +	10	1
		ISRO Space Applications Centre	4	1
		Silvertouch Technologies - Facial demographics	4	1
		Silvertouch Technologies - Tender Classification	5	1*
		Silvertouch Technologies -product recommendation system	3	1*
2	Ballabgarh	NCCBM	20	1
3	Bangalore	Akira Consultancy Pvt. Ltd - IT	4	1
		Akira Consultancy Pvt. Ltd - Secondary Research	3	1**
		Akira Consultancy Pvt. Ltd - Sectoral Study	4	1**
		Amazon Jobs	15	1
		Anvesha Community Development - IT	8	1**
		AURUM SMART TECH - Image processing	2	1**
		AURUM SMART TECH -Embedded systems	4	1
		Bharat Electronics Limited	10	1
		Couture AI - ML based +	5	1
		CueMath Education Pvt. Ltd- Creating training content	15	1
		CueMath Education Pvt. Ltd- IT	10	1
		Dhio Research - 3D CFD Simulation	18	1
		Dhio Research - Casting project	6	1*
		Dhio Research - Combustion Coating Simulations	5	1
		Dhio Research - FEM based	16	1
		Dhio Research - Forming	4	1*
		Dhio Research - Material Modeling and Simulation-	9	1*
		Dhio Research - Mesh FREE CFD Simulations	10	1*
		Dhio Research - Piping Stress and Process Flow Simulations	3	1*
		Dhio Research - Process Flow and Heat Transfer Modeling	13	1
		Electrono Solutions - Electrical Power Systems	14	1*
		Electrono Solutions - Industrial Control & Automation	6	1
		Electrono Solutions - Industry 4.0 standard	11	1
		Electrono Solutions - IoT	7	1*
		Electrono Solutions - VLSI Design	3	1
		Electrono Solutions -APP/API Development	6	1*
		Goavega Software India Pvt Ltd. - Mobile web applications	3	1
		Goavega Software India Pvt Ltd. - Automation projects AI/ML Cyber security	4	1*
		Happiest Minds - CoE Analytics	8	1*
		Happiest Minds - DBS	4	1*
		Happiest Minds - IMSS	4	1*
		Heraizen Technologies Pvt. Ltd. - UI development for college management software	20	1
		i-exceed technology solutions Pvt. Ltd. +	2	1*
		Indian Red Cross Society - Social Sector	14	1
		LOGIQ LABS Pvt Ltd (eShipz.com) - Predictive analytics and Blockchain based +	10	1
		Nihon Communication Solutions Pvt. Ltd. - IoT	4	1
		Nihon Communications - Embedded Systems	12	1*

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		NIVEA India Pvt.Ltd.-Operations Management	2	1**
		Parentlane	6	1**
		Plastic Water Labs - Actuators and Sensors in IoT	5	1*
		Plastic Water Labs - App development for VR/AR	5	1
		Plastic Water Labs - Industrial Augmented reality	5	1*
		Plastic Water Labs - Skill force training using Virtual Reality	4	1*
		Plastic Water Labs -Machine Learning for defect analysis	5	1
		Platifi Solutions	10	1
		Power Grid Corporation of India Limited	5	1**
		Proxima Corporate Services Private Limited - Manufacturing Management	4	1**
		Race2Cloud Technologies Pvt. Ltd. - Apps on Zoho Creator	9	1**
		Starmark Software Pvt.Ltd. - Analyze log to detect issues	4	1*
		Starmark Software Pvt.Ltd. - Build an interoperability platform	3	1*
		Starmark Software Pvt.Ltd. - support ticket classification	3	1*
		Starmark Software Pvt.Ltd. - Usability improvement	3	1*
		Starmkark Software Pvt. Ltd. - Build an automated testing framework	3	1*
		Texas Instruments	7	1*
		TIBIL Computer Solutions Pvt.Ltd.	6	1*
		Walmart - IT	5	1**
		Walmart - Operations Management	5	1**
		Walmart - Sectoral study	5	1**
		William O Neil - Data Analytics	5	1
		William O Neil - Gen Management	1	1**
		William O Neil - General Management	1	1*
		William O Neil - Information Technology	5	1**
		William O Neil - IT	5	1*
		William O Neil - Sales & Marketing	5	1*
		William O Neil - Sectoral study	17	1*
		Wipro - Attendance capturing system using GPS location	10	1**
		Wipro - Chatbot development	10	1**
		Wipro - Data analytics for decision making	10	1**
		Wipro - Independent assessment engine	10	1**
		Wipro - Online written examination system using AI and ML	10	1**
		CoffeeBeans Consulting LLP	7	1**
		Sattva Media and Consulting-Social Sector	7	1**
4	Bapatla (Near Amravati)	Andhra Pradesh Human Resource Development institute (APHRDI)	9	1*
5	Bhopal	NIVEA India Pvt.Ltd.-Operations Management	1	1**
6	Bilaspur	Prakriti Organics - Content writing	2	1*
		Prakriti Organics - Data Analysis	3	1*
		Prakriti Organics - Feedback and communication with customers	2	1**
		Prakriti Organics - Social Outreach Work	1	1
		Prakriti Organics - Website Design	2	1**
7	Chandigarh	Gates India Pvt Ltd-Operations management	4	1
8	Chandrapur	Awarpur Cement Works - Electrical Power Systems	18	1
		Awarpur Cement Works - Energy Management	9	1**
		Awarpur Cement Works - Environment Management	5	1
		Awarpur Cement Works - Industrial Control and Automation	8	1*
		Awarpur Cement Works - Process & Unit Operations	8	1

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
9	Chennai	Hertztech Solutions Pvt Ltd. - AI/ML	4	1
		Hertztech Solutions Pvt Ltd. - Noise vibration and harshness (NVH)	12	1
		Hertztech Solutions Pvt Ltd. - Strength and durability	9	1*
		Hertztech Solutions Pvt Ltd. - Digital Signal Processing & Communication/DL/ML	8	1
		L&T Technology Services (Market Research)- IT	4	1**
		PayPal - Secondary Research +	5	1**
		PayPal - Sectoral study	5	1**
		Qruise Technologies - Financial Analysis	6	1**
		Qruise Technologies - Secondary Research	3	1**
		ScoVelo Consulting Chennai - IT	12	1**
		Sirius Motor Sports - Engine Efficiency & Emission Control	11	1
		Sirius Motor Sports - Engine Efficiency & Emission Control -2	20	1
		Sirius Motor Sports - Engine Efficiency & Emission Control -3	24	1
		TamilNadu Health System Reforms - Data analysis	10	1**
		TamilNadu Health System Reforms - IT	5	1*
		TamilNadu Health System Reforms -Economic Analysis/General Maangement	13	1
		TNSTC - Digital Content - Astronomy	5	1
		TNSTC - Digital Content - Bio Technology	5	1
		TNSTC - Digital Content - Electronics and Communication	5	1*
		TNSTC - Digital Content - Geology	5	1*
		TNSTC - Digital Content - Nuclear Power	4	1
		TNSTC - Digital Content - Space Research	6	1*
		TNSTC - Digital Content - Tools for Innovation Hub	2	1*
		TNSTC - Digital Content - Transport Technology Development	5	1*
		TNSTC - Digital Content - Virology â€" Covid 19 facts	5	1
		TNSTC - Quantum computing software	5	1*
		TNSTC - Remote Mouse Operation	1	1*
		TNSTC - virtual interactive video software	4	1**
		TNSTC -Creating virtual contents	3	1*
		TVS Motors Ltd -R or Python	19	1**
10	Dadri	NTPC	8	1
11	Dalla	Dalla Cement Works - Electrical Power Systems	5	1*
		Dalla Cement Works - Energy Management	3	1**
		Dalla Cement Works - IT	3	1**
		Dalla Cement Works - Mechanical	3	1
12	Dehradun	Indian Institute of Petroleum - candidate engine oil	1	1*
		Indian Institute of Petroleum - Crude to chemical	1	1*
		Indian Institute of Petroleum - Diesel Oxidation Catalyst Development	1	1*
		Indian Institute of Petroleum - Effects of Fuel Composition	1	1*
		Indian Institute of Petroleum - Gas phase and gas-liquid reactions	1	1*
		Indian Institute of Petroleum - Life Cycle Assessment	1	1*
		Indian Institute of Petroleum - Study of On-Board Exhaust Emission Measurement	2	1*
		Indian Institute of Petroleum -Regulated and ultrafine particle (UFP) emission measurement	1	1*
		Indian Institute Of Remote Sensing	19	1**
13	Delhi	GMR Varalakshmi Foundation - Social sector	15	1

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		Lakshyam NGO	3	1**
		Solar Energy Corporation of India	7	1**
		Takshila Learning- Sales and Marketing	9	1*
14	Faridabad	Gates India Pvt. Ltd.-Operations management	4	1*
15	Gandhinagar	Bhaskaracharya Institute For Space Applications And Geoinformatic	27	1*
16	Gauhati	Guwahati Refinery IOCL	9	1
17	Goa	Department of Agriculture	9	1**
		Helix Techin Info Systems Pvt.Ltd	5	1*
		National Centre For Polar And Ocean Research	12	1
		National Institute of Oceanography	1	1*
		Parinati Solutions Private Limited	5	1
18	Greater noida	Bharat Petroleum Corporation Ltd.	4	1*
19	Gurgaon	Alankaar India Trust	6	1*
		Convergent Technologies	10	1*
		Futures First Academy - Secondary Research	9	1*
		Futures First Academy - Sectoral study	2	1*
		IndusInd Bank	5	1**
		Power Grid Corporation of India	5	1**
		Pramerica - Secondary Research	4	1**
		Reckitt Benckiser - IT	10	1*
		Reckitt Benckiser - Sectoral Study	5	1*
20	Halol	Aditya Birla Chemicals - (SCM) - Industry Benchmarking	3	1**
		Aditya Birla Chemicals - (SCM) - Modelling and Analytics	3	1**
		Aditya Birla Chemicals - (SCM) - Supplier Risk Management	2	1**
		Aditya Birla Insulators - Electrical Power Systems	3	1*
		Aditya Birla Insulators - Inspection report standardization	3	1**
		Aditya Birla Insulators - Metal part Quality improvement	3	1**
		Aditya Birla Insulators - PoP mould and cutting tools	3	1*
		Aditya Birla Insulators - Thermal & Mass balance frame work development	2	1*
		CEAT Tyres - Operations Management	15	1**
21	Harihar	Birla Polyfibers	19	1
22	Hosur	Sundaram Auto Components Ltd (SACL) - Secondary research	15	1*
23	Hyderabad	Access Livelihoods Consulting India Ltd. - Social Sector	5	1
		Aliens Developers - Civil	6	1
		BHEL - Sectoral study	10	1*
		Data M Intelligence 4 Market Research LLP	6	1**
		Donatekart - Social Sector	17	1*
		GMR Varalakshmi Foundation - Social sector	13	1
		Incozen Therapeutics Pvt. Ltd.	4	1*
		India Buys - IT	10	1*
		India Buys - Sales & Marketing	5	1*
		India Buys - Secondary Research	5	1**
		Industry ARC - Sectoral Study	27	1
		Industry Arc - Sectoral Study - 2	27	1
		Infor Global Soln India (Pvt) Ltd	7	1**
		ITC (Sales and distribution project) - Sales and Marketing	8	1*
		Jochebed Tech Solutions - Alexa working model with ESP32	1	1*
		Jochebed Tech Solutions - Dashboard project	2	1*
		Jochebed Tech Solutions - ESP WiFi MESH	3	1*

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		Jochebed Tech Solutions - Routers	2	1*
		Jochebed Tech Solutions -API's for Remote monitoring and control of IoT devices	1	1*
		Market Data Forecast - Secondary Research	15	1**
		Mylan Laboratories Ltd	15	1**
		MySmartPrice Web Technology - Machine Learning	2	1*
		MySmartPrice Web Technology - monitoring metrics	7	1*
		MySmartPrice Web Technology - Multi page responsive websites	2	1*
		MySmartPrice Web Technology -Product Research	7	1*
		MySmartPrice Web Technology -Whatsapp Automation	2	1*
		National Institute of Rural Development & Panchayati Raj - IT	16	1*
		Pass Consulting - Creation of Azure dashboard for Analytics	4	1**
		Pass Consulting - Election Results Analysis	8	1**
		Preto Tooling Systems	4	1*
		Telangana e-governance	5	1
		Yashoda Hospitals	22	1**
24	Jaipur	KEC International Ltd.	5	1**
25	Jammu	Power Grid Corporation of India	5	1**
26	Jodhpur	Birla White Cements - Civil	5	1*
		Birla White Cements - Electrical Power Systems	6	1*
		Birla White Cements - Energy Management	6	1**
		Birla White cements - Environment Management	6	1*
		Regional Remote Sensing Centre	9	1**
27	Kalpakkam	Atomic Energy Regulatory Board (AERB)	3	1*
		Indira Gandhi Centre For Atomic Research (igcar) - Core Engg	24	1
		Indira Gandhi Centre for Atomic Research (IGCAR) - Electrical	25	1
28	Kolkata	Algo One AI Pvt Ltd	6	1*
		Irrigation and Waste Water Department - Comparative Study and Analysis of Irrigation System	5	1*
		Irrigation and Waste Water Department - Flood Control Management in Flood Prone States of India	5	1*
		NIVEA India Pvt.Ltd.-Operations Management	2	1**
		Power Grid Corporation of India Limited	5	1**
		Self Help Group Self Employment Department Government Of West Bengal Kolkata- Social Sector	30	1*
		Texmaco Ltd - Steel Making with electric arc furnace	1	1*
		Texmaco Ltd. - Chemical and mechanical testing of steel.	3	1*
		Texmaco Ltd. -steel casting moulding and mould design	3	1*
29	Kotputli	Ultratech Cement Ltd.	15	1
30	Kovaya	Gujarat Cement - Electrical Power Systems	12	1
		Gujarat Cement - IT	2	1**
		Gujarat Cement - Mechanical	1	1*
		Gujarat Cement -Civil	3	1*
		Gujarat Cement - Process and unit operations	4	1
31	Lucknow	Power Grid Corporation of India	5	1**
32	Ludhiana	ALW Lighting India Pvt. Ltd. - Optical systems	1	1*
		ALW Lighting India Pvt. Ltd. -Mechanical/Bio/IT	3	1**
33	Malkhed	Rajshree Cement Works - Civil	6	1*
		Rajshree Cement Works - Electrical Power Systems	4	1
		Rajshree Cement Works - Environment Management	1	1*

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		Rajshree Cement Works - Industrial Control and Automation	2	1*
34	Mumbai	AECOM Infrastructure	5	1*
		Atomic Energy Regulatory Board	11	1*
		Axis Bank	3	1**
		Bharat Petroleum Corporation Ltd.	8	1*
		BMG Inida - Sectoral study	10	1*
		Homi Bhabha Centre For Science Education	15	1*
		IIFL	14	1*
		Indian Red Cross Society - Social Sector	5	1*
		Kwick Living (I) Pvt. Ltd - IT	3	1*
		Kwick Living (I) Pvt. Ltd - Sales and Marketing	3	1*
		L & T Infotech	12	1**
		Larsen & Toubro Electrical & Automation - Embedded Systems	3	1*
		Larsen & Toubro Electrical & Automation - IoT	2	1*
		Lenest	15	1*
		MagTapp Technologies - Backend Development	11	1*
		MagTapp Technologies - Content Writing	9	1*
		MagTapp Technologies - Digital Marketing	7	1**
		Maharashtra State Innovation Society - Secondary Research	2	1*
		Nerolac Paints - Operations management	15	1
		Nerolac Paints - Operations Management -2	15	1**
		Nerolac Paints - Operations Management -3	20	1
		NIVEA India Pvt.Ltd.-Operations Management	2	1**
35	Mysore	RMJ Automation & Training - Industrial Control & Automation	30	1**
		RMJ Automation Solution and Training - Embedded Systems	8	1*
36	Nagda	Grasim Industries - Energy Conservation	14	1*
		Grasim Industries - Process calculations	13	1*
		Grasim Industries - Quality	5	1*
37	Nagpur	Kizora Software Pvt. Ltd.	5	1**
		MALHAR INDUSTRIES	10	1**
		Power Grid Corporation	5	1**
38	Nandyal	Nandi Group of companies - Aftershave formulation and production	4	1*
		Nandi Group of companies - Bio fertiliser from distillery spent wash	4	1*
		Nandi Group of companies - Design of Drip and sprinkler installation	1	1*
		Nandi Group of companies - Design of mould for bottle dispenser	2	1*
		Nandi Group of companies - Hydropincs	1	1*
		Nandi Group of companies - Ideas for Alcohol based products.	5	1*
		Nandi Group of companies - Vehicle loading and scheduling of PVC pipes.	5	1*
39	Neemuch	Vikram Cement Works - Environment Management	4	1*
		Vikram Cement Works - IT	10	1*
		Vikram Cement Works -Electrical Power System	3	1*
		Vikram Cement Works -Industrial Control and Automation	1	1*
40	New Delhi	Alma connect - customer relationship management	8	1**
		CCS STRATEGY SOLUTION - FLEXSIM	12	1**
		Centre for Railway Information Systems	10	1*
		Clensta International - Manufacturing	5	1*

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		Clensta International -IT	1	1*
		CSIR-Institute of Genomics & Integrative Biology	7	1
		DMI Finance - secondary research	4	1*
		ECom Express Pvt. Ltd. - Sectoral study	1	1**
		ECom Express Pvt. Ltd. - Data Analytics	4	1**
		Elixar Systems - APP Development	7	1**
		Elixar Systems - AR Development	5	1**
		Elixar Systems - Business Development	5	1**
		Elixar Systems - Product Development	4	1**
		Elixar Systems - Web Development	5	1*
		Give India - Social Sector	5	1*
		Good 2 give - Social Sector	10	1*
		Indian Electrical & Electronics Manufacturers' Association -	9	1*
		Indian Institute of Public Administration - Secondary Research	14	1**
		Indian Red Cross Society Blood Bank - Social Sector	7	1*
		Institute for Human Development - Secondary Research	4	1*
		IOCL (Sectoral Study)	5	1**
		ITC	3	1**
		Jaguar Overseas Ltd - EPC Planning for Building a cement factory	1	1*
		Jaguar Overseas Ltd. - Electrical Power Systems	1	1*
		Jaguar Overseas Ltd. - EPC Planning for building a hand sanitizer	1	1**
		Lighthouse Partners - Sectoral Study	2	1**
		National Informatics Centre (NIC)	20	1*
		NCAER - Secondary Research	16	1*
		NCAER - Sectoral study	7	1*
		NECTORR LABS - IT	10	1*
		NIVEA India Pvt.Ltd.-Operations Management	2	1**
		Pramartha Investment Partners - Data analytics	3	1**
		Takshila Learning - IT	4	1*
41	Noida	BIG AIM INFOCOM	10	1*
		HCL Technologies	2	1*
		IMARC Services Pvt. Ltd. - IT	4	1*
		IMARC Services Pvt. Ltd. - Sectoral Study	8	1**
		Loadshare Networks	3	1*
		Million Sparks Foundation - Social Sector	5	1*
		Noida Metro Rail Corporation (NMRC)	8	1*
		Samsung	10	1*
42	Patna	Power Grid Corporation of India	5	1**
43	Pilani	Birla Science Centre - Embedded Systems	6	1*
		Birla Science Centre - IoT	10	1*
		CEERI - App/AR development	16	1
		CEERI - Deep learning/Machine Learning	27	1*
		CEERI - Digital Signal Processing & Communication/ML/DL	21	1*
		CEERI - Industrial Control & Automation	17	1*
		CEERI - IoT	15	1*
		CEERI - VLSI Design	30	1
		Pilani AtmaNirbhar Resource Center (PARC)	7	1*
44	Pune	AFOUR Technologies - ERP Platform (Build & Enhance)	8	1**

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		APS Lifetech - Biotechnology	5	1
		APS Lifetech - Industrial Control and Automation	1	1*
		APS Lifetech - IVF	4	1*
		AURUM SMART TECH - DSP	1	1**
		Centre for Development of Advanced computing (C-DAC)	5	1*
		Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	3	1**
		Gunadhya Software solutions - Incident Management System	3	1*
		Gunadhya Software solutions - Reward Point System	3	1*
		Indian Meteorological Department - Image processing	13	1**
		Indian meteorological department - Mechanical based	7	1*
		Maritime Research Centre - Underwater Acoustic Research	29	1*
		National Chemical Lab - Mathematical Modelling	2	1*
		National Chemical Lab - Optimization Techniques	2	1*
		National Chemical Lab - Simulation	1	1*
		Pepper Content Pvt. Ltd. Mumbai- Sales & Marketing	10	1*
		ProIndia Healthcare - Operations Management	4	1**
		ProIndia Healthcare - Sales & Marketing	5	1*
		Shalaka Connected Devices - API/App development	7	1*
		Shalaka Connected Devices - Control systems (EV)	7	1*
		Shalaka Connected Devices - IoT	14	1*
		Smarti Electronics - App/API development	1	1*
		Smarti Electronics - Digital Signal Processing & Communication /ML/DL	3	1**
		Smartii electronics - IoT	2	1*
		Suzlon Foundation Pune - Social Sector	4	1*
		Tech Mahindra - Secondary research	5	1**
		Tech Mahindra - Sectoral study	5	1**
		Viram Technologies - Civil design	4	1*
		Viram Technologies - Cognate Mechanism	1	1*
		Viram Technologies - Design of Pressure vessels / Heat Exchangers	2	1*
		Viram Technologies - Heat Treatment Process	2	1*
		Viram Technologies - Material Handling equipment-Conveyor	1	1*
		Viram Technologies - Nozzle Analysis	1	1*
		Viram Technologies - Robot design & automation	6	1*
		Vodafone Intelligent Solutions (VOIS) - Secondary Research	15	1*
		Vodafone Intelligent Solutions (VOIS) - Sectoral study	5	1*
45	Raipur	Rawan Cement Works - Control systems	6	1*
		Rawan Cement Works - Data analytics	3	1*
		Rawan Cement Works - Electrical Power Systems	16	1*
		Rawan Cement Works - Industrial Control and Automation	3	1*
		Rawan Cement Works - Maintenance/QoS practices	6	1*
46	Renukoot	Grasim Chemicals	14	1*
		Hindalco Industries Limited	10	1*
47	Renusagar	Hindalco Industries Limited	10	1
48	Secunderabad	Power Grid Corporation of India	5	1**
49	Shambupura	Aditya Cement Works	9	1*
50	Shillong	Power Grid Corporation of India	5	1**
51	Simga	Hirmi Cement Works	7	1*
52	Solan (H.P.)	Baga Cement Works - Environment Management	6	1*
		Baga Cement Works - Industrial Control and Automation	3	1*

S.No	Center_Name	Station_Name	No. of Student	No. of Faculty
		Baga Cement Works - Electrical Power Systems	5	1*
		Baga Cement Works - Mechanical	3	1*
		Baga Cement Works - Process and unit operations	6	1*
53	Srikalahasti (Near Tirupati)	Andhra Pradesh Human Resource Development institute (APHRDI)	10	1*
54	Surat	Praveen Laboratories Pvt. Ltd.	6	1*
55	Thane	Eclipse Instrumentation Pvt. Ltd.	12	1*
56	Thiruvallur	Hyundai Mobis - Operations management	15	1*
57	Tirora	Adani Power	12	1*
58	Trivandrum	Centre for Development & Imaging Technology - Web services	8	1*
		Centre For Development Of Imaging Technology - IT	7	1*
		Kerala Infrastructure and Technogy for Education	10	1*
		UST Global - Application of IPFS	2	1*
		UST Global - Blockchain	3	1*
		UST Global - Computer Vision & Speech Processing	5	1*
		UST Global - Distributed Computing	4	1*
		UST Global - Hybrid Quantum Classical Computation	3	1*
		UST Global - NLP	3	1*
		UST Global - Quantum Computing	3	1*
		UST Global - Quantum Distribution Network	4	1**
59	Udaipur	E-Connect Solutions Pvt. Ltd - Smart city Governance projects	8	1**
		Pyrotech Electronics Pvt. Ltd. - App/API based	2	1*
		Pyrotech Electronics Pvt. Ltd. - CAD	4	1*
		Pyrotech Electronics Pvt. Ltd. - Industrial Control & Automation	6	1*
		Pyrotech Electronics Pvt. Ltd. - VLSI Design	2	1*
60	Umiam	North Eastern Space Applications Centre - AI applications on Satellite & UAV images	6	1*
		North Eastern Space Applications Centre - Cloud and time-series algorithms	4	1*
		North Eastern Space Applications Centre - cloud computing with Google Cloud	5	1*
61	Vadodara	L & T Chiyoda Ltd - Industrial Control & Automation	6	1*
		L & T Chiyoda Ltd- Electrical Power Systems	5	1*
		L&T-Chiyoda Limited - Mechanical Design	10	1*
		Power Grid Corporation of India	5	1**
		Sud-Chemie India Pvt.Ltd	5	1*
62	Vijayawada	Indian Red Cross Society - Social Sector	5	1*
63	Vijaynagar	Jsw Energy	8	1**
		Jsw Steel	30	1*
64	Visakhapatnam	Andhra Pradesh Human Resource Development institute (APHRDI)	10	1*
		BHEL - CIVIL	1	1*
		BHEL - Engineering Materials Analysis & Design	10	1*
		BHEL - IT	38	1*
		BHEL - Performance Measurement	4	1*
		BHEL - Secondary Research	15	1*
		415	**2944**	

*   Faculty looking after more than one PS-I station

**   PS-II Faculty looking after PS-I

\+   PS-I organizations hosting PS-II also

SOME PRACTICE SCHOOL - II STATISTICS

Statistical Details of the Distribution of Students & Faculty over Practice School-II and Practice School (for Higher Degree) Stations during the year 2020

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
Ahmedabad						
1.	Adani Power +	4	1*			4
2.	AltMat			1	1*	1
3.	Burncal Healthcare Pvt. Ltd.			2	1*	2
4.	La Renon Healthcare Pvt. Ltd.	3	1*			3
5.	Sopan			2	1*	2
Ballabgarh						
6.	National Council for Cement and Building Materials	5	1	10	1	15
Bangalore						
7.	ABB Global Industries and Services Private Limited	2	1*			2
8.	Aditya Birla Group -Data and Analytics	2	1*	3	1	5
9.	Adobe Systems	4	1*			4
10.	Airmeet			7	1*	7
11.	Altair Engineering India Pvt. Ltd. - Software Division	2	1			2
12.	Amazon - Machine Learning	14	1*			14
13.	Amazon - Operations Manager	17	1*			17
14.	Amazon Area Manager	6	1*			6
15.	Amazon Development Center	37	1*	9	1*	46
16.	American Express - Big Data Labs (BDL)	4	1*			4
17.	American Express - Credit & Fraud Risk (Capabilities)	2	1*			2
18.	Analog Devices India Pvt. Ltd.	3	1*			3
19.	ARM Embedded Technologies Private Limited	8	1			8
20.	Asteria Aerospace Pvt. Ltd.			2	1*	2
21.	Atkins	2	1*			2
22.	Atyati Technologies			8	1*	8
23.	Aurigo Software Technologies	9	1*			9
24.	Avaamo	4	1*	1	1*	5
25.	Blue Jeans Network India Pvt. Ltd.	2	1	7	1	9
26.	Blue Yonder (JDA)			10	1*	10
27.	Bogmalo Foods LLP			1	1*	1
28.	Bosch Research and Technology center			9	1*	9
29.	Bridge Your Network Inc			2	1	2
30.	Bundl Technologies Private Limited (Swiggy) - Nontech	14	1*			14
31.	Bundl Technologies Private Limited (Swiggy) - Tech	3	1*			3
32.	Capillary Technologies - Testing Automation	2	1*			2
33.	CDM Smith Global Resource Center	2	1*			2
34.	Cisco Systems (India) Pvt. Ltd - Software Engineering	34	1*	11	1*	45
35.	Cisco Systems (India) Pvt. Ltd. - Hardware	2	1*	3	1*	5
36.	ClearTax			10	1*	10
37.	Clumio India Technologies India LLP	4	1*			4
38.	CoffeeBeans Consulting LLP			2	1*	2
39.	COGOS Technologies Pvt Ltd.	1	1*			1
40.	Cohesity Storage Solutions India Pvt. Ltd.	1	1*			1
41.	Confluent India Pvt Ltd.	3	1*			3
42.	Couture AI +			7	1*	7

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
43.	CueMath Learn Pvt. Ltd			15	1*	15
44.	Cypress Semiconductor India Pvt Ltd.	1	1*			1
45.	Dell R&D	8	1*			8
46.	Dreamplug Technologies	2	1	2	1	4
47.	Dreamplug Technology - Operations	1	1*			1
48.	Dunzo Digital Pvt. Ltd.			7	1*	7
49.	E2open Inc.			2	1*	2
50.	eGovernments Foundation	6	1*	5	1*	11
51.	Emptycup Innovation Pvt. Ltd. - Non tech			2	1*	2
52.	Emptycup Innovation Pvt. Ltd. - Tech (Nedo Software)	1	1	2	1	3
53.	Enact Systems India Pvt. Ltd.			2	1*	2
54.	Enphase Energy	2	1*			2
55.	EntHire Inc			1	1*	1
56.	Ernst & Young Global Delivery Services	2	1*			2
57.	Everwell Health Solution			3	1*	3
58.	FamPay Pvt. Ltd. - Business Development & Content Writing			2	1*	2
59.	Flipkart	5	1*	3	1*	8
60.	GE Digital	2	1*			2
61.	GE India Technology Centre	5	1*			5
62.	Genpact	2	1*			2
63.	GET MY Parking	1	1*			1
64.	Give Foundation			5	1	5
65.	Goldman Sachs - Investment Banking	4	1*			4
66.	Goldman Sachs India Pvt. Ltd. - Operations	11	1			11
67.	Goodera			5	1*	5
68.	Goscale Technologies Pvt. Ltd. - IT			3	1*	3
69.	Groww - Business Analyst	3	1*			3
70.	Groww - Software Development	5	1	4	1	9
71.	HAPPAY (VA Tech Ventures Pvt Ltd.)	3	1*			3
72.	Harness	3	1*			3
73.	HealthCubed - Onsite			1	1	1
74.	HelloThinkster			5	1*	5
75.	Heraizen Technologies Pvt Ltd			10	1*	10
76.	Hevo Technologies India Pvt. Ltd.			5	1*	5
77.	Holy Cow Productions			1	1*	1
78.	HSBC (WMR/GAC/DATA SCIENTIST)	10	1*			10
79.	HSBC Portfolio Management Analytics (PMA)	3	1*			3
80.	HSBC Strategic Transaction Group (STG)	5	1*			5
81.	i-exceed Technology Solutions +			1	1*	1
82.	Infinera	1	1*			1
83.	Ingersoll Rand India Ltd	2	1			2
84.	InMobi - Software Development	1	1*			1
85.	InMobi- Business Analyst	10	1*			10
86.	Innoviti Payment Solutions Pvt Ltd			6	1*	6
87.	Intel India Technology	34	1	35	1	69
88.	Invento Markerspaces Pvt. Ltd.			4	1*	4
89.	IQVIA	7	1*			7
90.	John F Welch Technology Center (GE)	6	1			6
91.	JP Morgan Chase - Technology	2	1*			2
92.	JPMS - GR&C AM Investment Market & Principle Risk			1	1*	1
93.	JPMS - GR&C Commercial Banking Risk	2	1*			2

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
94.	JPMS (Finance) GR&C Model Risk Governance and Review - Challenger	1	1*			1
95.	JPMS GR&C Auto Risk Strategy Analytics			1	1*	1
96.	JPMS GR&C Cards Risk Strategy Analytics			2	1*	2
97.	JPMS GR&C CCB Business Banking Reporting Strategy			1	1*	1
98.	JPMS GR&C CCB Chase 360 Strategy			1	1*	1
99.	JPMS GR&C Corporate Risk - Risk Project Solutions			2	1*	2
100.	JPMS GR&C Corporate Risk â€" Firm wide Risk Reporting			1	1*	1
101.	JPMS GR&C Credit Forecasting Strategy			2	1*	2
102.	Knolskape Solutions Pvt. Ltd.			6	1*	6
103.	Kofluence			2	1*	2
104.	KPMG	4	1			4
105.	Kristal.AI	1	1	1	1	2
106.	Kubric			2	1*	2
107.	Lemnisk Pvt. Ltd.			2	1*	2
108.	LOGIQ LABS Pvt Ltd (eShipz.com) +			2	1*	2
109.	Lowe Services India Pvt.Ltd	4	1*			4
110.	MapMyIndia			2	1*	2
111.	Matdev Investment Advisers Pvt. Ltd.			5	1*	5
112.	MathWorks India Private Limited	3	1*			3
113.	Mavuno Technologies -			1	1*	1
114.	Maxim Integrated	2	1*			2
115.	MBB Labs Pvt. Ltd.			2	1*	2
116.	MediaTek Bangalore Pvt. Ltd.	2	1*			2
117.	Megh Computing			2	1*	2
118.	Melio			2	1	2
119.	Mercedes Benz	23	1*			23
120.	MiQ Digital India Pvt. Ltd.	2	1*			2
121.	Mobileum			2	1*	2
122.	Mocxa Health Pvt. Ltd			6	1*	6
123.	Molecular Connections Pvt. Ltd.	1	1*			1
124.	Myntra.com	1	1*			1
125.	National Centre for Biological Sciences	4	1*			4
126.	National Instruments Systems (India) Pvt. Ltd.	3	1*			3
127.	NetApp	8	1	2	1	10
128.	Niyo Solutions			2	1*	2
129.	Niyo Solutions Non Tech			1	1*	1
130.	Nobroker	3	1*			3
131.	nurture.farm (A Subisidiary of UPL Ltd.)			1	1*	1
132.	Nutanix Technologies India Pvt. Ltd.	18	1*	18	1*	36
133.	Nvidia Graphics - Hardware	26	1	12	1	38
134.	Nvidia Graphics -Software	9	1*	2	1*	11
135.	NXP India Pvt Ltd.	2	1*			2
136.	Oracle India Pvt Ltd.			6	1*	6
137.	Oyo Rooms (Tech)	11	1*			11
138.	PAYPAL	11	1*			11
139.	Perfios Software Solutions Pvt. Ltd.			2	1*	2
140.	Petasense - Services & App Development			4	1*	4
141.	PharmEasy			10	1*	10
142.	Pixcy			2	1*	2
143.	Pixcy - Computer Vision			1	1*	1
144.	Pixcy - Marketing Designing			1	1*	1
145.	Pixxel (Syzygy Space Technologies Pvt. Ltd.)			5	1*	5

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
146.	Praktice.ai			3	1	3
147.	Praktice.ai - Marketing & Sales			1	1	1
148.	PricewaterhouseCoopers (PWC)	1	1*			1
149.	Psi Phi Global Solutions Pvt. Ltd. (OkCredit)			4	1*	4
150.	Publicis Sapient	1	1*			1
151.	Qualcomm India Pvt Ltd- Bangalore	15	1*			15
152.	Qubole	4	1	7	1	11
153.	Rupeek Fintech			3	1*	3
154.	Rupifi Non Tech			4	1*	4
155.	Rupifi Tech			5	1*	5
156.	Samsung R & D Institute	35	1			35
157.	Samsung Semiconductor India R&D Center-Hardware	18	1	11	1	29
158.	Samsung Semiconductor India Research -Software	8	1*	12	1*	20
159.	Samyojya			1	1*	1
160.	SAP Labs	10	1	4	1	14
161.	Sattva Media & Consulting Pvt Ltd			2	1*	2
162.	Saveo Healthtech Pvt. Ltd - Non Tech			1	1*	1
163.	SENSEI TECHNOLOGIES PVT LTD			2	1*	2
164.	Shell Technology Center	3	1*			3
165.	Siemens technology and Services Pvt ltd	2	1*			2
166.	Signalchip Innovations Pvt. Ltd.	1	1*			1
167.	Strand Life Sciences Pvt Ltd	2	1*			2
168.	Sun Mobility	2	1	2	1	4
169.	Synopsys (India) EDA Software Pvt Ltd.	1	1*			1
170.	Tata Digital Health	2	1	5	1	7
171.	Tejas Networks	6	1*			6
172.	Texas Instruments (I) Pvt. Ltd - Systems	2	1*	1	1*	3
173.	Texas Instruments (I) Pvt. Ltd. -Analog	2	1	3	1	5
174.	Texas Instruments (I) Pvt. Ltd. -Digital	3	1*			3
175.	Thorogood			2	1*	2
176.	Toshiba Software (India) Pvt Ltd	1	1	1	1	2
177.	Trell Experiences Pvt Ltd			9	1*	9
178.	Trell Experiences Pvt Ltd (Non tech-Operations)			31	1*	31
179.	Trell Experiences Pvt Ltd (Non tech-Product Analyst			2	1*	2
180.	Trifacta Inc			3	1*	3
181.	Tvami Technologies Pvt. Ltd.			5	1*	5
182.	Udaan	20	1	5	1*	25
183.	Udhyam Learning Foundatation			1	1*	1
184.	Valorem Stack Pvt. Ltd. (FloBiz)	1	1*			1
185.	Viacom 18 Media Pvt. Ltd. - Digital Ventures			6	1*	6
186.	VMware Software India Pvt. Ltd.	8	1	6	1	14
187.	Vymo			3	1*	3
188.	Walmart Global Technology Services	4	1			4
189.	Wealthy			4	1*	4
190.	Weir Minerals India Pvt Ltd			1	1*	1
191.	Western Digital (SANDISK)	16	1*			16
192.	WickedRide Adventure Ltd.(Bounce)	5	1*			5
193.	William O Neil India Pvt Ltd	1	1	4	1*	5
194.	Wisemonk Services Pvt. Ltd.			3	1*	3
195.	Zendrive India Pvt Ltd	6	1*			6
196.	Zeotap India Pvt. Ltd.	5	1	2	1	7
197.	Zinnov Management Consulting Pvt. Ltd (IT Project)			3	1*	3

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
198.	Zinnov Management Consulting Pvt. Ltd.			15	1*	15
199.	ZS Associates			2	1*	2
200.	Zwende Design Tech Pvt Ltd			3	1	3
201.	Zwende Design Tech Pvt Ltd - Nontech			2	1	2
	California					
202.	Ascendo. AI			2	1*	2
203.	BellyMelly			2	1*	2
204.	Glocol Networks			2	1*	2
205.	NewCo Inc.			1	1*	1
206.	Oyla Inc			1	1*	1
	Chennai					
207.	Amazon Development Center			10	1*	10
208.	Arm Soft Technologies			2	1*	2
209.	ARVAUTO ECOM PRIVATE LIMITED			2	1*	2
210.	ASCO Numatics India Pvt. Ltd. (Emerson Automation Solutions)			3	1	3
211.	BNY Mellon Technology			1	1*	1
212.	Central Leather Research Institute (CLRI)	4	1	2	1	6
213.	Congruent Solutions Business Analyst			2	1*	2
214.	Congruent Solutions Mobile App.			2	1*	2
215.	Congruent Solutions Web Development			1	1*	1
216.	Do it Yourself			1	1*	1
217.	Door Sabha Nigam Ltd.			2	1*	2
218.	Enterpreneurship Development and Innovation Institute			3	1*	3
219.	Histogenetics	2	1			2
220.	Indium Software			8	1*	8
221.	Kovax Abrasives South Asia Pvt Ltd			1	-	1
222.	Linarc India Pvt. Ltd.			2	1*	2
223.	Lucas TVS Ltd.	1	1*			1
224.	MEL Systems and Services Ltd			1	1*	1
225.	Paypal			1	1*	1
226.	PAYPAL +	7	1*			7
227.	Pfizer Ltd.	4	1*			4
228.	Rane Madras Ltd	2	1*			2
229.	ReferralYogi Technologies Pvt. Ltd.			2	1*	2
230.	Scovelo Consulting +			1	1*	1
231.	TNSTC +			6	1*	6
232.	UST Global- Chennai +	2	1*			2
233.	Wabco India Pvt. Ltd	2	1			2
	Coimbatore					
234.	Velan	1	1*			1
	Dehradun					
235.	Indian Institute of Petroleum +			12	1*	12
236.	Indian Institute Of Remote Sensing +			2	1*	2
	Delhi					
237.	AECOM Infrastructure	1	1*			1
238.	Amazon - Area Manager	1	1*			1
239.	Amazon - Operations Manager	2	1*			2
240.	Amazon Development Center	18	1			18
241.	Amazon Professional Services			2	1*	2
242.	Central Road Research Institute			3	1*	3
243.	CL Educate Ltd.	2	1			2
244.	DMI Finance Private Limited	1	1*	2	1*	3

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
245.	Ecom Express - Business Analysis	3	1*	2	1*	5
246.	Ecom Express Pvt. Ltd. - Business Analysis - Onsite			1	1*	1
247.	Ecom Express Pvt. Ltd. - Data Science	2	1*			2
248.	Flying Homingos Private Limited			1	1*	1
249.	Grey Orange Robotics Pvt. Ltd.			5	1*	5
250.	Hindustan Times -			8	1*	8
251.	Indian Electrical & Electronics Manufacturers' Association			1	1*	1
252.	Insights Alpha			7	1*	7
253.	Intercontinental Consultants and Technocrats Pvt. Ltd	3	1*			3
254.	Laneyes LLC			2	1	2
255.	MapMyIndia			19	1*	19
256.	myHQ & (JustWork Technologies Pvt. Ltd.) Tech			3	1*	3
257.	MyHQ (Justwork Technologies Pvt Ltd.) â€" Nontech - Onsite			9	1*	9
258.	Nable IT Consultancy Services Pvt. Ltd.			1	1*	1
259.	National Council of Applied Economic Research	1	1	1	1	2
260.	National Institute of Science and Tech. Dev. Studies (NISTADS)	1	1	6	1	7
261.	Netcore Solutions	1	1*			1
262.	Seygnux Solutions Pvt. Ltd.			1	1*	1
263.	Singh Plasticisers & Resins (I) Pvt. Ltd	4	1*			4
264.	Solar Energy Corporation of India +	1	1*			1
265.	Takshila Learning Pvt. Ltd. +			2	1*	2
266.	Takshila Learning Pvt. Ltd. (Non tech)			3	1*	3
267.	The Center for Disease Dynamics Economics and Policy India Pvt. Ltd.			3	1*	3
268.	Udaan	1	1*			1
269.	ZEE5 India			1	1*	1
Faridabad						
270.	Rite Infotech Pvt Ltd			6	1*	6
271.	Stowe Research India Pvt Ltd			3	1*	3
Ghaziabad						
272.	Mtandt Rentals Ltd.	2	1*			2
273.	NutriPal Healthcare Pvt Ltd			1	1*	1
274.	NutriPal Healthcare Pvt Ltd - Non Tech			1	1*	1
Goa						
275.	CommScope	2	1*			2
276.	IFB Industries	7	1			7
Gurgaon						
277.	AlmaConnect	6	1*	14	1*	20
278.	American Express - Credit & Fraud Risk (Capabilities)	5	1*			5
279.	American Express Big Data Labs	1	1*			1
280.	ANS Commerce - Non tech			5	1*	5
281.	ANS Commerce - Tech			2	1	2
282.	Apollo Tyres			3	1*	3
283.	Atkins	2	1*			2
284.	Class 21A Pvt. Ltd.			1	1*	1
285.	Collegedunia Web Pvt. Ltd.	6	1*			6
286.	Decimal Technologies			1	1*	1
287.	Decision Resources Group	2	1*			2
288.	Express Stores - Tech			1	1*	1
289.	Express stores â€" Nontech â€" Onsite			3	1*	3

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
290.	Indic-ai Foundation for Social Good			1	1*	1
291.	IQVIA	2	1*			2
292.	KPMG	1	1*			1
293.	MM Aqua Technologies Ltd.	1	1			1
294.	OfBusiness	1	1*	1	1	2
295.	OLX Group	4	1*			4
296.	OYO Tech	6	1*			6
297.	Phone Post			1	1*	1
298.	PricewaterhouseCoopers (PWC)	1	1*			1
299.	Process 9 - Document Translation System			1	1*	1
300.	Process 9 - Neural Machine Translation			1	1*	1
301.	Process 9 - Website Translation System			2	1*	2
302.	Process 9 - Website Translation System ver 2.0			2	1*	2
303.	Ramboll India Pvt. Ltd.	8	1*			8
304.	Rivigo Tech	2	1	4	1	6
305.	SequelOne Solutions Pvt Ltd			7	1*	7
306.	shipsy	1	1*			1
307.	ShortHills Tech Pvt Ltd(Nontech)			3	1*	3
308.	ShortHills Tech Pvt. Ltd			5	1*	5
309.	SMEC India Private Limited.	3	1*			3
310.	Snap Deal			2	1*	2
311.	SRF Ltd.	1	1*			1
312.	VenueMonk			2	1	2
313.	VSD Eduventures Pvt. Ltd.			1	1*	1
314.	Wake-up Technology Pvt Ltd - Onsite			10	1*	10
315.	Wake-Up Technology Pvt. Ltd.			2	1*	2
316.	Zinnov Management Consulting Pvt. Ltd.	1	1*	6	1	7
Halol						
317.	Aditya Birla Insulators +			5	1*	5
Hosur						
318.	TVS Motors			14	1	14
Hyderabad						
319.	Aizant Drug Research Solutions Pvt. Ltd.	3	1*			3
320.	Alien Developers			2	1*	2
321.	Amazon - Machine Learning	1	1	3	1*	4
322.	Amazon - Operations Manager	2	1*			2
323.	Amazon Development Center	30	1*	4	1*	34
324.	Amazon Operations (Area Manager)	2	1*			2
325.	Apollo Tele Health Services (ATHS)			2	1*	2
326.	Apple India Pvt Limited	3	1	6	1	9
327.	Arup India Pvt. Ltd.	6	1*			6
328.	Audree Infotech P Ltd.			2	1*	2
329.	Balaxi	5	1*			5
330.	Blue Yonder (JDA)	2	1	1	1	3
331.	BSCPL Infrastructure Ltd.			1	1*	1
332.	CASHe			2	1*	2
333.	CriticalRiver Technologies Pvt Ltd			2	1*	2
334.	CtrlS Data Centre Pvt Ltd	1	1*			1
335.	Dhruva Space Pvt. Ltd.			1	1*	1
336.	Dr. Reddys Laboratories			2	1*	2
337.	eKincare (Aayuv Technologies Pvt. Ltd.	3	1*			3
338.	Experian			2	1*	2

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
339.	Flyboat			2	1*	2
340.	GE Digital	2	1*			2
341.	GenY medium	4	1	3	1*	7
342.	Intel India Technology	4	1*			4
343.	Mahati Infra Services Pvt. Ltd	3	1			3
344.	MathWorks India Pvt. Ltd.	2	1*			2
345.	Micron Technology India Operations	10	1*			10
346.	Microsemi India Pvt Ltd	3	1*			3
347.	Molde Analytics India Pvt. Ltd.			1	1*	1
348.	Mordor Intelligence			2	1*	2
349.	My Smart Price - Non Tech			5	1*	5
350.	My smart price - Tech +			5	1*	5
351.	Nagarjuna Construction Company	3	1*			3
352.	National Institute of Rural Development and Panchayati Raj			8	1*	8
353.	NCPE infrastructure India Pvt.Ltd	4	1*			4
354.	Nippon Koei	2	1*			2
355.	Novartis Healthcare Pvt. Ltd.	7	1*			7
356.	Nvidia Graphics - Hardware	3	1*	1	1*	4
357.	Oracle India Pvt Ltd.			6	1	6
358.	OYO Rooms	8	1*			8
359.	Petasense Technologies Pvt. Ltd			3	1*	3
360.	Qualcomm India Pvt Ltd- Bangalore	20	1			20
361.	Quintessential Design			1	1	1
362.	Reild Residential Properties Pvt.Ltd			6	1*	6
363.	Saffrongrid Ltd. - Artificial Intelligence Department			1	1*	1
364.	Saras Analytics - Nontech			10	1*	10
365.	Saras Analytics - Tech			1	1*	1
366.	Servicenow Software Development India	10	1*			10
367.	Synchrony			12	1*	12
368.	Thomson Reuters			2	1*	2
369.	UBS - Group Finance			3	1*	3
370.	UBS Business Solutions (India) Private Limited - Group Operations			5	1*	5
371.	UBS Group Finance - Hyd/Pune			4	1*	4
372.	Udaan	1	1*			1
373.	VCTIP Pvt. Ltd. (Market Data Forecast) Content Writing	1	1	5	1	6
374.	VCTIP Pvt. Ltd. (Market Data Forecast) Research Associate			3	1*	3
375.	Voziq India Pvt. Ltd.			3	1*	3
376.	Wavelabs Technologies			9	1*	9
377.	Xilinx India Technology Services Pvt. Ltd.	4	1	10	1	14
378.	Zaggle Prepaid Ocean Services Pvt. Ltd			14	1*	14
379.	Zaggle Prepaid Ocean Services Pvt. Ltd - Onsite			6	1*	6
Indore						
380.	Techture Structures	2	1*			2
381.	Vinilok SoluNons Pvt. Ltd.			4	1*	4
Jagdishpur						
382.	Indogulf Fertilizers Ltd.			6	1	6
Jaipur						
383.	CEG Limited	4	1*			4
384.	NBC Bearings	2	1	2	1	4
Jamshedpur						
385.	Tata Steel	4	1*			4

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
Kalpakkam						
386.	Indira Gandhi Centre for Atomic Research +			6	1*	6
Kheda						
387.	Crest Speciality Resins Pvt. Ltd. - onsite			1	1	1
Kolkata						
388.	Asanify Technologies Pvt. Ltd.			2	1*	2
389.	Axxela Advisory Services	2	1*			2
390.	ITC Limited	2	1			2
391.	Keysight Technologies India Pvt. Ltd.			2	1*	2
392.	Tega Industries	3	1*			3
393.	Texmaco Rail & Engineering Ltd.	2	1	2	1	4
Kota						
394.	MedCords			2	1*	2
Ludhiana						
395.	ALW Lighting India Pvt Ltd +			2	1*	2
396.	ALW Lighting India Pvt Ltd- Nontech			1	1*	1
Mehsana						
397.	Oswal Industries	3	1*			3
Mumbai						
398.	ActiveBuildings			1	1	1
399.	Aditya Birla Science & Technology Company Ltd.	2	1*	2	1*	4
400.	AECOM +	6	1*			6
401.	Agami Realty			1	1	1
402.	Amazon - Operations Manager	9	1*			9
403.	BuroHappoldÂ Engineering	1	1*			1
404.	CACTUS Communications - Product Analysis	2	1			2
405.	CACTUS Communications - Product Management & Software Dev.	1	1*			1
406.	Christensen Investor Relations (I) Pvt. Ltd.			1	1*	1
407.	Cityflo (Komorebi Tech Solutions Pvt. Ltd.)	1	1	1	1*	2
408.	Cogoport - Non Tech	1	1*			1
409.	Credit Suisse - Credit Analytics	4	1*			4
410.	Credit Suisse - Equity Research	2	1*			2
411.	Credit Suisse - GBIS	2	1*			2
412.	Credit Suisse - Global Market Risk Management	10	1*			10
413.	Credit Suisse - GM Trading Risk	1	1*			1
414.	Credit Suisse - International Wealth Management	1	1*			1
415.	Credit Suisse - Non-Financial Risk Management	7	1*			7
416.	Credit Suisse - Prime Services	3	1*			3
417.	Credit Suisse - Risk & Finance Data Analytics Reporting	5	1*			5
418.	Credit Suisse- Investment Banking and Capital Markets	2	1*			2
419.	DBOI - Business Finance			7	1*	7
420.	DBOI - Counterparty Credit Ratings			6	1*	6
421.	DBOI - Finance	2	1*			2
422.	DBOI - GVG	1	1*			1
423.	DBOI - Market Risk	8	1*			8
424.	DBOI - Market Risk Analysis & Control			10	1*	10
425.	DBOI - Valuation Control	2	1*			2
426.	DBOI-Rating Analysis	1	1*			1
427.	Development Consultants Pvt. Ltd. (DCPL)	3	1*			3
428.	Dolat Capital			1	-	1
429.	Dorsch Consult (India) Pvt. Ltd.	2	1*			2
430.	FlipSpaces Technology Labs Pvt. Ltd.			1	1	1

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
431.	Grasim Industries Pulp and Fibre Division			2	1*	2
432.	HCL Technologies Ltd (Formerly Geometric Ltd)	3	1*			3
433.	Here Maps - Distributed Data	3	1			4
434.	Hourglass Research	1	1	2	1	3
435.	IDFC First Bank			5	1	5
436.	IDfy (formerly Baldor Technologies Pvt Ltd)	5	1*			5
437.	Indian Energy Exchange Ltd			4	1	4
438.	ION Energy	3	1			3
439.	Jio Platforms Limited			5	1*	5
440.	JP Morgan Services GKN Global Research(GRC)-Fintech	1	1*			1
441.	JP Morgan Services-GKN Data Science-Fintech	2	1*			2
442.	JP Morgan Services-GKN GlobalResearch(GRC)Finance	9	1*			9
443.	JP Morgan Services-GKN Quantitative Research-Fintech	3	1*			3
444.	JPMS (Finance) CIB R&A Markets - Sales and Structuring	1	1*			1
445.	JPMS (Finance) GR&C Market Risk	3	1*			3
446.	JPMS (Fintech) CIB R&A Banking (CRG)	7	1	3	1	10
447.	JPMS (Technology - IT) CIB R&A Data Science - Fintech	2	1*			2
448.	JPMS (Technology - IT) GR&C Quantitative Research - Fintech	5	1*			5
449.	JPMS (Technology - IT) GR&C Wholesale Credit Solutions - Data Science - Fintech	2	1*	2	1*	4
450.	JPMS (Technology-IT) GR&C Model Risk Governance and Review - Ongoing Performance Management	2	1*			2
451.	JPMS (Technology-IT) GR&C Model Risk Governance and Review - Risk Strategy & Execution	1	1*			1
452.	JPMS CIB R&A - Markets (Derivatives Analyst Group			1	1*	1
453.	JPMS CIB R&A Data Science			1	1*	1
454.	JPMS CIB R&A Global Research			14	1*	14
455.	JPMS CIB R&A Marketsâ€" Equity Derivatives Trading & Structuring			3	1*	3
456.	JPMS GR&C Corporate Risk - Risk Project Solutions			1	1*	1
457.	JPMS GR&C Credit Risk â€" Counterparty Credit Infrastructure & Capital			3	1*	3
458.	JPMS GR&C Quantitative Research â€" Fintech			6	1*	6
459.	JPMS GR&C WCS - Credit Portfolio Analytics			2	1*	2
460.	JPMS GR&C Wealth Management â€" Data Science â€" Credit Risk			1	1*	1
461.	JPMS-GR&C Credit Risk-Counterparty Credit Infrastructure&Capital	3	1*			3
462.	Jupiter			3	1*	3
463.	Morgan Stanley Advantage Services	2	1*	3	1	5
464.	Morning Star - Index Management and Analytics			1	1*	1
465.	Morning Star - Index New Product Development	1	1*			1
466.	Morningstar - Index data calculation			1	1*	1
467.	Morningstar - Index Technology	2	1*			2
468.	Morningstar - Indexes - Data and Content			1	1*	1
469.	Morningstar - Indexes Product and Sales Operations (IPSO)			1	1*	1
470.	Morningstar - Quantitative Research	2	1*			2
471.	MSCI (NPD â€" Index Research)	1	1*			1
472.	MSCI Index and Research			1	1*	1
473.	Netcore Solutions	1	1*			1
474.	Nomura - Change Management Team			5	1*	5
475.	Nomura - Finance - Corporate/ Business Advisory	1	1*			1

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
476.	Nomura - Finance - Product Control PnL	3	1*			3
477.	Nomura - Finance - Structured Deal Review	1	1*			1
478.	Nomura - FinTech	2	1*	2	1*	4
479.	Nomura - RMO - Risk Middle Office	3	1*			3
480.	Nomura - Wholesale Strategy	1	1*	1	1*	2
481.	Nomura Global Markets	8	1*	5	1	13
482.	Nomura Global Risk	5	1*	5	1*	10
483.	Pepper Content Pvt. Ltd.	1	1*	7	1	8
484.	Piramal Group	8	1*			8
485.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) - Tech			1	1*	1
486.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) Non Tech			1	1*	1
487.	Pushstart Media Network Pvt. Ltd.			1	1*	1
488.	Receivables Exchange of India Limited			2	1*	2
489.	Thornton Tomasetti	3	1*			3
490.	UBS - Group Compliance	3	1*			3
491.	UBS - Group RISK	4	1*	4	1*	8
492.	UBS Business Solutions (India) Private Limited - Finance Group	5	1*	1	1*	6
493.	UBS Business Solutions(India)PrivateLimited-Group Operations	1	1*	7	1*	8
494.	UPGRAD	7	1	38	1	45
495.	Viacom18 Media Pvt. Ltd - Corporate Strategy	1	1*	2	1*	3
496.	Viacom18 Media Pvt. Ltd - Digital Ventures	4	1*			4
497.	VMS (Vakil Mehta Seth) Consultants Private Limited	3	1*			3
498.	Worley Parsons India			2	1*	2
499.	Ascent Health and Wellness Solutions Private Limited	1	1*			1
Nagda						
500.	Grasim Industries Ltd. +	4	1*	4	1*	8
Nagpur						
501.	Techture Structures Pvt Ltd.			4	1*	4
Nashik						
502.	Questo Wellbeing Pvt Ltd			3	1*	3
Noida						
503.	Adobe Systems	4	1*			4
504.	B and S Consultants	1	1*			1
505.	Bisquare Systems Pvt. Ltd. - Onsite			1	1*	1
506.	Bunch Microtechnologies Pvt Ltd			1	1*	1
507.	Classplus			3	1*	3
508.	Clearpack Automation Pvt. Ltd.			1	1*	1
509.	DIXON TECHNOLOGIES INDIA LTD			3	1*	3
510.	HISP India			5	1*	5
511.	IMarc Services			3	1*	3
512.	Jubilant FoodWorks Ltd.	3	1*			3
513.	Nucleus Software Export Ltd			15	1*	15
514.	NXP Semiconductors	6	1*			6
515.	Samsung R&D Institute India-Delhi (SRI-D)	3	1*			3
516.	SmartHelio Sarl.			1	1*	1
517.	ST Microelectronics(I) Pvt.Ltd.	3	1			3
518.	Time Tooth	1	1*			1
Pilani						
519.	Central Electronics Engineering Research Institute	1	1	4	1	5
520.	Pilani AtmaNirbhar Resource Center (PARC) +			2	1*	2

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
Portland						
521.	Versa Cloud ERP Inc - Non Tech			3	1*	3
522.	Versa Cloud ERP Inc - Tech			4	1*	4
Pune						
523.	AFour Technologies +	4	1*			4
524.	AFour Technologies Pvt. Ltd.			4	1*	4
525.	AgroStar	2	1*			2
526.	B.G.Shirke Construction Technology Pvt. Ltd.	2	1*			2
527.	Bharat Forge Ltd	4	1	3	1	7
528.	BNY Mellon Technology	2	1*	22	1*	24
529.	Centre for Development of Advanced Computing +			6	1*	6
530.	Credit Suisse - Global Markets BC & E Efficiency)	1	1*			1
531.	Credit Suisse- Finance Change	2	1*			2
532.	Credit Suisse - Risk & Finance Data Analytics Reporting	6	1*			6
533.	DBOI - AC	1	1*	1	1*	2
534.	DBOI - Automation			1	1*	1
535.	DBOI - Financial Analytics			1	1*	1
536.	DBOI - IF	1	1*			1
537.	DBOI - Risk Metrics Analytics	1	1*	2	1	3
538.	DemandMatrix			3	1*	3
539.	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari +	1	1	5	1	6
540.	Energy Exemplar	4	1*			4
541.	HealthRx by Bajaj Finserv Health Ltd.			7	1*	7
542.	Integrated Active Monitoring Pvt. Ltd.			2	1*	2
543.	Integrated Active Monitoring Pvt. Ltd.-Product & Business Dev.			1	1*	1
544.	Johnson Controls	2	1*			2
545.	Maritime Research Centre +	1	1	2	1	3
546.	Markets & Markets	4	1*			4
547.	Millet & More Foods			2	1	2
548.	namaste.fit			1	1*	1
549.	National Chemical Laboratory +	1	1	5	1	6
550.	News Cape Consulting			1	1	1
551.	Nvidia - Software	3	1*			3
552.	PharmaACE	2	1*			2
553.	Praj Industries Ltd.	1	1*			1
554.	Quick Heal Technologies Ltd	1	1*			1
555.	Reflexis Systems India Pvt Ltd.	7	1	9	1	16
556.	Siemens PLM Software	5	1			5
557.	Sleepiz (India) Pvt. Ltd.			1	1*	1
558.	Tata Motors Ltd.	2	1*			2
559.	Toshiba Software (India) Pvt Ltd	2	1*			2
560.	UBS - Group Compliance			3	1*	3
561.	UBS Business Solutions (India) Private Limited-Finance Group	2	1*	4	1*	6
562.	UBS Business Solutions (India) Private Limited - Group Operations	9	1*	5	1*	14
563.	UBS Business Solutions (India) Private Limited-RAS FINANCE	2	1	13	1	15
564.	Visteon Corporation	4	1*			4
565.	Vuclip India Pvt. Ltd.	3	1*			3
566.	Whirlpool	6	1*			6
Renukoot						
567.	Birla Carbon SKI Carbon Black (India) Pvt. Ltd.			2	1*	2
Secunderabad						
568.	Dvara E Registry Pvt. Ltd.			1	1*	1

S.No	Stations	Second Semester 19-20 (06.01.2020-18.06.2020)		First Semester 20-21 (24.07.2020-21.12.2020)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
Singapore						
569.	Zluri			3	1*	3
Sirohi						
570.	JK Lakshmi Cement Ltd.			8	1*	8
Sonipat (Delhi)						
571.	Amazon Operations (Area Manager)	1	1*			1
Texas (USA)						
572.	Resolvity Inc.			3	1*	3
Trivandrum						
573.	UST Global Infinity Labs-Robotics	6	1			6
574.	Centre For Development Of Imaging Technology +			2	1*	2
575.	Eyenetlabs			2	1	2
576.	Kerala Infrastructure and Technogy for Education +			3	1*	3
Udaipur						
577.	E-Connect Solutions Pvt. Ltd. +			10	1*	10
578.	Udaipur Cement Works			7	1	7
579.	Wonder Cement	4	1*			4
Vadodara						
580.	Cosmos Impex	2	1*			2
	Total	1311	66	1382	71	2693

+Stations hosting PS-I also

*Faculty looking after more than one PS-II Station

PRACTICE SCHOOL GROWTH STATISTICS

PRACTICE SCHOOL-I

Session	No. of students who attended PS-I	No. of faculty who supervised PS-I	No. of PS-I stations
Summer 1973	15	04	01
Summer 1974	89	17	09
Summer 1975	244	26	14
Summer 1976	355	33	28
Summer 1977	349	32	38
Summer 1978	335	35	38
Summer 1979	474	45	53
Summer 1980	397	34	42
Summer 1981	372	33	36
Summer 1982	462	39	44
Summer 1983	476	43	49
Summer 1984	491	40	52
Summer 1985	514	42	52
Summer 1986	507	38	49
Summer 1987	497	35	49
Summer 1988	552	42	59
Summer 1989	574	42	58
Summer 1990	572	46	63
Summer 1991	530	43	62
Summer 1992	625	53	78
Summer 1993	648	56	87
Summer 1994	612	55	81
Summer 1995	607	54	80
Summer 1996	648	54	89
Summer 1997	628	53	86
Summer 1998	638	53	87
Summer 1999	568	42	73
Summer 2000	656	52	85
Summer 2001	770	52	100
Summer 2002	807	52	98
Summer 2003	861	60	115
Summer 2004	861	57	95
Summer 2005	840	54	83
Summer 2006	1376	68	129
Summer 2007	1340	79	138
Summer 2008	1399	72	133
Summer 2009	1355	68	121
Summer 2010	1926	95	204
Summer 2011	2065	107	203
Summer 2012	2036	105	183
Summer 2013	2081	74	178
Summer 2014	2038	93	170
Summer 2015	2096	107	182
Summer 2016	2184	100	182
Summer 2017	2192	111	197
Summer 2018	2119	103	205
Summer 2019	2846	116	287
Summer 2020	2944	101	415

PRACTICE SCHOOL-II FOR INTEGRATED FIRST DEGREE

Semesters	No. of students who attended PS-II	No. of faculty who supervised PS-II	No. of PS-II stations
Second Sem. 72-73	10	04	01
First Sem. 73-74	12	04	01
Second Sem. 73-74	12	08	01
First Sem.74-75	36	05	06
Second Sem. 74-75	56	15	09
First Sem.75-76	31	06	05
Second Sem. 75-76	75	12	15
First Sem.76-77	121	18	15
Second Sem. 76-77	110	21	18
First Sem.77-78	151	16	16
Second Sem. 77-78	159	19	20
First Sem.78-79	166	23	20
Second Sem. 78-79	171	23	26
First Sem. 79-80	159	25	23
Second Sem. 79-80	153	25	22
First Sem.80-81	183	27	25
Second Sem. 80-81	195	26	28
First Sem.81-82	181	28	30
Second Sem. 81-82	184	27	31
First Sem.82-83	208	26	32
Second Sem. 82-83	212	23	34
First Sem.83-84	213	30	31
Second Sem. 83-84	200	23	35
First Sem.84-85	217	30	34
Second Sem. 84-85	213	37	41
First Sem. 85-86	239	33	41
Second Sem. 85-86	231	34	46
First Sem.86-87	248	36	47
Second Sem. 86-87	249	40	45
First Sem.87-88	231	40	48
Second Sem. 87-88	232	36	46
First Sem.88-89	274	39	51
Second Sem. 88-89	269	30	51
First Sem.89-90	275	31	49
Second Sem. 89-90	272	32	49
First Sem.90-91	272	30	49
Second Sem. 90-91	274	29	57
First Sem. 91-92	306	32	62
Second Sem. 91-92	297	36	66
First Sem.92-93	297	38	68
Second Sem. 92-93	281	34	69
First Sem.93-94	311	36	69
Second Sem. 93-94	314	38	79
First Sem.94-95	335	36	80
Second Sem. 94-95	344	35	79
First Sem.95-96	330	43	84
Second Sem. 95-96	323	40	91
First Sem.96-97	321	42	92
Second Sem. 96-97	323	43	89
First Sem.97-98	320	42	86
Second Sem. 97-98	330	42	87
First Sem.98-99	317	36	82
Second Sem. 98-99	327	37	89
First Sem. 1999-2000	324	42	84
Second Sem. 1999-2000	335	42	91
First Sem. 2000-2001	347	43	85
Second Sem. 2000-2001	336	44	93
First Sem. 2001-2002	330	43	88
Second Sem. 2001-2002	349	36	84
First Sem. 2002-2003	400	40	99
Second Sem. 2002-2003	406	43	93

Semesters	No. of students who attended PS-II	No. of faculty who supervised PS-II	No. of PS-II stations
First Sem. 2003-2004	427	42	88
Second Sem. 2003-2004	426	43	88
First Sem. 2004-2005	456	44	94
Second Sem. 2004-2005	459	46	101
First Sem. 2005-2006	499	53	110
Second Sem. 2005-2006	470	48	113
First Sem. 2006-2007	458	46	103
Second Sem. 2006-2007	570	53	128
First Sem. 2007-2008	708	53	153
Second Sem. 2007-2008	763	54	165
First Sem. 2008-2009	864	54	174
Second Sem. 2008-2009	730	61	193
First Sem. 2009-2010	862	62	194
Second Sem. 2009-2010	871	66	229
First Sem. 2010-2011	897	62	219
Second Sem. 2010-2011	874	69	261
First Sem. 2011-2012	1085	72	259
Second Sem. 2011-2012	1087	63	273
First Sem. 2012-2013	1190	64	256
Second Sem 2012-2013	1147	63	263
First Sem 2013-2014	1127	60	246
Second Sem 2013-2014	1128	49	244
First Sem 2014-2015	1138	48	221
Second Sem 2014-2015	1107	45	208
First Sem 2015-2016	1078	46	179
Second Sem 2015-2016	760	51	172
First Sem 2016-2017	1070	57	162
Second Sem 2016-2017	812	57	168
First Sem 2017-2018	1174	57	226
Second Sem 2017-2018	787	54	218
First Sem. 2018-2019	1204	56	259
Second Sem 2018-2019	870	61	320
First Sem. 2019-2020	1215	63	276
Second Sem 2019-2020	757	55	199
First Sem. 2020-2021	1382	71	352

PRACTICE SCHOOL FOR HIGHER DEGREE

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
Second Sem. 91-92	18	09	12
First Sem.92-93	39	19	20
Second Sem. 92-93	41	19	21
First Sem.93-94	35	16	17
Second Sem. 93-94	41	11	15
First Sem.94-95	43	18	22
Second Sem. 94-95	45	17	17
First Sem.95-96	53	29	36
Second Sem. 95-96	52	27	35
First Sem.96-97	60	25	36
Second Sem. 96-97	55	25	33
First Sem.97-98	45	21	28
Second Sem. 97-98	56	22	29
First Sem.98-99	38	20	28
Second Sem. 98-99	46	19	24
First Sem. 1999-2000	62	26	34
Second Sem. 1999-2000	63	26	33
First Sem. 2000-2001	39	23	27
Second Sem. 2000-2001	50	26	36
First Sem. 2001-2002	85	23	27
Second Sem. 2001-2002	100	27	39
First Sem. 2002-2003	69	25	35

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
Second Sem. 2002-2003	46	20	22
First Sem. 2003-2004	02	02	02
Second Sem. 2003-2004	59	22	27
First Sem. 2004-2005	43	11	16
Second Sem. 2004-2005	88	20	32
First Sem. 2005-2006	46	16	19
Second Sem. 2005-2006	95	22	31
First Sem. 2006-2007	50	18	24
Second Sem. 2006-2007	111	30	47
First Sem. 2007-2008	55	23	31
Second Sem. 2007-2008	129	41	67
First Sem. 2008-2009	63	35	53
Second Sem. 2008-2009	174	48	84
First Sem. 2009-2010	38	18	21
Second Sem. 2009-2010	146	40	78
First Sem. 2010-2011	63	29	41
Second Sem. 2010-2011	181	42	96
First Sem. 2011-2012	78	29	44
Second Sem. 2011-2012	230	40	105
First Sem. 2012-2013	72	22	34
Second Sem 2012-2013	217	16	75
First Sem 2013-2014	2	4	2
Second Sem 2013-2014	217	35	88
First Sem 2014-2015	0	0	0
Second Sem 2014-2015	32	12	14
First Sem 2015-2016	2	1	1
Second Sem 2015-2016	239	43	85
First Sem 2016-2017	0	0	0
Second Sem 2016-2017	284	45	88
First Sem 2017-2018	0	0	0
Second Sem 2017-2018	261	41	104
First Sem. 2018-2019	0	0	0
Second Sem 2018-2019	423	52	133
First Sem. 2019-2020	2	2	2
Second Sem 2019-2020	554	58	155
First Sem. 2020-2021	0	0	0

+ It may be noted that the faculty members and PS stations indicated in this table are common to that of integrated First Degree PS-II Programme and thus numbers shown under the columns 3 and 4 are subsets of the respective columns of table "PRACTICE SCHOOL - II FOR INTEGRATED FIRST DEGREE" given above.

FACILITIES AVAILABLE AT PS-II STATIONS DURING THE YEAR 2020

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
Ahmedabad				
1.	Adani Power	3000	No	No
2.	AltMat	10000	No	No
3.	Burncal Healthcare Pvt. Ltd.	15000	No	No
4.	La Renon Healthcare Pvt. Ltd.	35000	No	No
5.	Sopan	12000	No	No
Ballabgarh				
6.	National Council for Cement and Building Materials	10000	Accommodation provided by the organization (only for boys)	No
Bangalore				
7.	ABB Global Industries and Services Private Limited	25000	No	Subsidised Canteen Facilities
8.	Aditya Birla Group -Data and Analytics	30000	No	No
9.	Adobe Systems	100000	No	No
10.	Airmeet	30000	No	No
11.	Altair Engineering India Pvt. Ltd. - Software Division	20000	No	No
12.	Amazon - Machine Learning	60000	No	No
13.	Amazon - Operations Manager	60000	No	No
14.	Amazon Area Manager	60000	No	No
15.	Amazon Development Center	60000	No	Air Fare Free Company Bus
16.	American Express - Big Data Labs (BDL)	100000	No	No
17.	American Express - Credit & Fraud Risk (Capabilities)	70000	No	No
18.	Analog Devices India Pvt. Ltd.	25000	No	No
19.	ARM Embedded Technologies Private Limited	28000	No	No
20.	Asteria Aerospace Pvt. Ltd.	18000	No	No
21.	Atkins	20000	No	No
22.	Atyati Technologies	20000	No	No
23.	Aurigo Software Technologies	35000	No	No
24.	Avaamo	75000	No	No
25.	Blue Jeans Network India Pvt. Ltd.	50000	No	Free Breakfast & Lunch
26.	Blue Yonder (JDA)	25000	No	No
27.	Bogmalo Foods LLP	7000	No	No
28.	Bosch Research and Technology center	30000	No	No
29.	Bridge Your Network Inc	700	No	No
30.	Bundl Technologies Private Limited (Swiggy) - Nontech	40000	No	No
31.	Bundl Technologies Private Limited (Swiggy) - Tech	40000	No	No
32.	Capillary Technologies - Testing Automation	35000	No	No
33.	CDM Smith Global Resource Center	15000	No	No
34.	Cisco Systems (India) Pvt. Ltd - Software Engineering	70000	No	No
35.	Cisco Systems (India) Pvt. Ltd. - Hardware	70000	No	No
36.	ClearTax	45000	No	No
37.	Clumio India Technologies India LLP	100000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
38.	CoffeeBeans Consulting LLP	15000	No	No
39.	COGOS Technologies Pvt Ltd.	20000	No	III AC Train Fare on one side
40.	Cohesity Storage Solutions India Pvt. Ltd.	90000	No	No
41.	Confluent India Pvt Ltd.	100000	No	No
42.	Couture AI	50000	No	No
43.	CueMath Learn Pvt. Ltd	18000	No	No
44.	Cypress Semiconductor India Pvt Ltd.	35000	No	No
45.	Dell R&D	30000	No	No
46.	Dreamplug Technologies	12000	No	No
47.	Dreamplug Technology - Operations	30000	No	No
48.	Dunzo Digital Pvt. Ltd.	30000	No	No
49.	E2open Inc.	40000	No	No
50.	eGovernments Foundation	30000	No	No
51.	Emptycup Innovation Pvt. Ltd. - Non tech	20000	No	No
52.	Emptycup Innovation Pvt. Ltd. - Tech (Nedo Software)	35000	No	No
53.	Enact Systems India Pvt. Ltd.	35000	No	No
54.	Enphase Energy	50000	No	No
55.	EntHire Inc	10000	No	No
56.	Ernst & Young Global Delivery Services	40000	No	No
57.	Everwell Health Solution	40000	No	Free Breakfast,Lunch & Dinner
58.	FamPay Pvt. Ltd. - Business Development & Content Writing	8000	No	No
59.	Flipkart	50000	No	No
60.	GE Digital	30000	No	No
61.	GE India Technology Centre	30000	No	No
62.	Genpact	18000	No	No
63.	GET MY Parking	50000	No	No
64.	Give Foundation	12000	No	No
65.	Goldman Sachs - Investment Banking	120000	No	No
66.	Goldman Sachs India Pvt. Ltd. - Operations	35000	No	No
67.	Goodera	25000	No	No
68.	Goscale Technologies Pvt. Ltd. - IT	25000	No	No
69.	Groww - Business Analyst	26000	No	No
70.	Groww - Software Development	51000	No	No
71.	HAPPAY (VA Tech Ventures Pvt Ltd.)	40000	No	No
72.	Harness	80000	No	No
73.	HealthCubed - Onsite	25000	No	No
74.	HelloThinkster	30000	No	No
75.	Heraizen Technologies Pvt Ltd	10000	No	No
76.	Hevo Technologies India Pvt. Ltd.	65000	No	No
77.	Holy Cow Productions	15000	No	No
78.	HSBC (WMR/GAC/DATA SCIENTIST)	50000	No	No
79.	HSBC Portfolio Management Analytics (PMA)	50000	No	No
80.	HSBC Strategic Transaction Group (STG)	50000	No	No
81.	i-exceed Technology Solutions	24000	No	No
82.	Infinera	35000	No	No
83.	Ingersoll Rand India Ltd	15000	No	No
84.	InMobi - Software Development	40000	No	No
85.	InMobi- Business Analyst	35000	No	No
86.	Innoviti Payment Solutions Pvt Ltd	25000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
87.	Intel India Technology	30000	No	Fully Sunsidised Lunch & Snacks III AC Train Fare To & Fro Company Bus at Costs
88.	Invento Markerspaces Pvt. Ltd.	20000	No	No
89.	IQVIA	20000	No	No
90.	John F Welch Technology Center (GE)	30000	No	No
91.	JP Morgan Chase - Technology	35500	No	No
92.	JPMS - GR&C AM Investment Market & Principle Risk	75000	No	No
93.	JPMS - GR&C Commercial Banking Risk	50000	No	No
94.	JPMS (Finance) GR&C Model Risk Governance and Review - Challenger	50000	No	No
95.	JPMS GR&C Auto Risk Strategy Analytics	75000	No	No
96.	JPMS GR&C Cards Risk Strategy Analytics	75000	No	No
97.	JPMS GR&C CCB Business Banking Reporting Strategy	75000	No	No
98.	JPMS GR&C CCB Chase 360 Strategy	75000	No	No
99.	JPMS GR&C Corporate Risk - Risk Project Solutions	50000	No	No
100.	JPMS GR&C Corporate Risk â€" Firm wide Risk Reporting	50000	No	No
101.	JPMS GR&C Credit Forecasting Strategy	75000	No	No
102.	Knolskape Solutions Pvt. Ltd.	25000	No	No
103.	Kofluence	10000	No	No
104.	KPMG	15000	No	No
105.	Kristal.AI	50000	No	No
106.	Kubric	30000	No	No
107.	Lemnisk Pvt. Ltd.	50000	No	No
108.	LOGIQ LABS Pvt Ltd (eShipz.com)	20000	No	No
109.	Lowe Services India Pvt.Ltd	37000	No	No
110.	MapMyIndia	10000	No	No
111.	Matdev Investment Advisers Pvt. Ltd.	15000	No	No
112.	MathWorks India Private Limited	35000	No	No
113.	Mavuno Technologies -	10000	No	No
114.	Maxim Integrated	25000	No	No
115.	MBB Labs Pvt. Ltd.	35000	No	No
116.	MediaTek Bangalore Pvt. Ltd.	33000	No	No
117.	Megh Computing	25000	No	No
118.	Melio	10000	No	No
119.	Mercedes Benz	25000	No	No
120.	MiQ Digital India Pvt. Ltd.	35000	No	No
121.	Mobileum	30000	No	No
122.	Mocxa Health Pvt. Ltd	10000	No	No
123.	Molecular Connections Pvt. Ltd.	15000	No	III AC Train Fare on one side
124.	Myntra.com	30000	No	No
125.	National Centre for Biological Sciences	0	No	No
126.	National Instruments Systems (India) Pvt. Ltd.	30000	No	No
127.	NetApp	35000	No	No
128.	Niyo Solutions	30000	No	No
129.	Niyo Solutions Non Tech	25000	No	No
130.	Nobroker	40000	No	No
131.	nurture.farm (A Subisidiary of UPL Ltd.)	50000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
132.	Nutanix Technologies India Pvt. Ltd.	90000	Accommodation provided by the organization (for boys and girls)	Subsidised Breakfast,Lunch & Dinner, Air Fare
133.	Nvidia Graphics - Hardware	35000	No	Free Lunch Air Fare Free Company BusCompany bus
134.	Nvidia Graphics -Software	35000	No	Free Lunch Air Fare Free Company BusCompany bus
135.	NXP India Pvt Ltd.	28000	No	No
136.	Oracle India Pvt Ltd.	50000	No	No
137.	Oyo Rooms (Tech)	45000	No	No
138.	PAYPAL	50000	No	No
139.	Perfios Software Solutions Pvt. Ltd.	15000	No	No
140.	Petasense - Services & App Development	42000	No	No
141.	PharmEasy	25000	No	No
142.	Pixcy	12000	No	No
143.	Pixcy - Computer Vision	12000	No	No
144.	Pixcy - Marketing Designing	12000	No	No
145.	Pixxel (Syzygy Space Technologies Pvt. Ltd.)	30000	No	No
146.	Praktice.ai	10000	No	No
147.	Praktice.ai - Marketing & Sales	10000	No	No
148.	PricewaterhouseCoopers (PWC)	40000	No	No
149.	Psi Phi Global Solutions Pvt. Ltd. (OkCredit)	50000	No	No
150.	Publicis Sapient	35000	Accommodation provided by the organization (for boys and girls)	No
151.	Qualcomm India Pvt Ltd- Bangalore	30000	No	No
152.	Qubole	90000	No	No
153.	Rupeek Fintech	25000	No	No
154.	Rupifi Non Tech	15000	No	No
155.	Rupifi Tech	30000	No	No
156.	Samsung R & D Institute	50000	No	No
157.	Samsung Semiconductor India R&D Center-Hardware	50000	No	No
158.	Samsung Semiconductor India Research - Software	50000	No	No
159.	Samyojya	20000	No	No
160.	SAP Labs	50000	No	Free Breakfast,Lunch & Dinner
161.	Sattva Media & Consulting Pvt Ltd	14000	No	No
162.	Saveo Healthtech Pvt. Ltd - Non Tech	20000	No	No
163.	SENSEI TECHNOLOGIES PVT LTD	25000	No	No
164.	Shell Technology Center	20000	No	No
165.	Siemens technology and Services Pvt ltd	40000	No	No
166.	Signalchip Innovations Pvt. Ltd.	8000	No	No
167.	Strand Life Sciences Pvt Ltd	20000	No	No
168.	Sun Mobility	20000	No	No
169.	Synopsys (India) EDA Software Pvt Ltd.	35000	No	No
170.	Tata Digital Health	45000	No	Free Air Fare
171.	Tejas Networks	30000	No	No
172.	Texas Instruments (I) Pvt. Ltd - Systems	45000	No	Food coupons worth Rs.735/-p.m. Air

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				Fare sFree Company Buss
173.	Texas Instruments (I) Pvt. Ltd. -Analog	45000	No	Food coupons worth Rs.735/-p.m. Air Fare Free Company BusCompany bus
174.	Texas Instruments (I) Pvt. Ltd. -Digital	45000	No	No
175.	Thorogood	32000	No	No
176.	Toshiba Software (India) Pvt Ltd	25000	No	No
177.	Trell Experiences Pvt Ltd	50000	No	No
178.	Trell Experiences Pvt Ltd (Non tech-Operations)	20000	No	No
179.	Trell Experiences Pvt Ltd (Non tech-Product Analyst	25000	No	No
180.	Trifacta Inc	60000	No	No
181.	Tvami Technologies Pvt. Ltd.	20000	No	No
182.	Udaan	35000	No	No
183.	Udhyam Learning Foundatation	20000	No	No
184.	Valorem Stack Pvt. Ltd. (FloBiz)	35000	No	No
185.	Viacom 18 Media Pvt. Ltd. - Digital Ventures	25000	No	No
186.	VMware Software India Pvt. Ltd.	50000	No	Subsidised Breakfast,Lunch & Dinner Air Fare
187.	Vymo	25000	No	No
188.	Walmart Global Technology Services	50000	No	Free Lunch, Free Transport
189.	Wealthy	20000	No	No
190.	Weir Minerals India Pvt Ltd	20000	No	No
191.	Western Digital (SANDISK)	35000	No	No
192.	WickedRide Adventure Ltd.(Bounce)	60000	No	To & Fro Air Fare
193.	William O Neil India Pvt Ltd	20000	No	No
194.	Wisemonk Services Pvt. Ltd.	10000	No	No
195.	Zendrive India Pvt Ltd	60000	No	No
196.	Zeotap India Pvt. Ltd.	65000	No	Free Breakfast
197.	Zinnov Management Consulting Pvt Ltd (IT Project)	30000	No	No
198.	Zinnov Management Consulting Pvt. Ltd.	18000	No	No
199.	ZS Associates	45000	No	No
200.	Zwende Design Tech Pvt Ltd	15000	No	No
201.	Zwende Design Tech Pvt Ltd - Nontech	8000	No	No
California				
202.	Ascendo. AI	20000	No	No
203.	BellyMelly	20000	No	No
204.	Glocol Networks	10000	No	No
205.	NewCo Inc.	15000	No	No
206.	Oyla Inc	30000	No	No
Chennai				
207.	Amazon Development Center	60000	No	No
208.	Arm Soft Technologies	15000	No	No
209.	ARVAUTO ECOM PRIVATE LIMITED	15000	No	No
210.	ASCO Numatics India Pvt. Ltd. (Emerson Automation Solutions)	15000	No	No
211.	BNY Mellon Technology	60000	No	No
212.	Central Leather Research Institute (CLRI)	0	No	No
213.	Congruent Solutions Business Analyst	15000	No	No
214.	Congruent Solutions Mobile App.	15000	No	No
215.	Congruent Solutions Web Development	15000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
216.	Do it Yourself	8000	No	No
217.	Door Sabha Nigam Ltd.	25000	No	No
218.	Enterpreneurship Development and Innovation Institute	20000	No	No
219.	Histogenetics	15000	No	No
220.	Indium Software	10000	No	No
221.	Kovax Abrasives South Asia Pvt Ltd	12000	No	No
222.	Linarc India Pvt. Ltd.	20000	No	No
223.	Lucas TVS Ltd.	10000	No	No
224.	MEL Systems and Services Ltd	10000	No	No
225.	Paypal	50000	No	No
226.	PAYPAL	50000	No	No
227.	Pfizer Ltd.	12000	No	No
228.	Rane Madras Ltd	8000	No	No
229.	ReferralYogi Technologies Pvt. Ltd.	25000	No	No
230.	Scovelo Consulting	8000	No	No
231.	TNSTC	0	No	No
232.	UST Global- Chennai	25000	No	Subsidised Canteen Facilities
233.	Wabco India Pvt. Ltd	18000	No	No
Coimbatore				
234.	Velan	15000	No	No
Dehradun				
235.	Indian Institute of Petroleum	0	No	No
236.	Indian Institute Of Remote Sensing	0	No	No
Delhi				
237.	AECOM Infrastructure	7500	No	No
238.	Amazon - Area Manager	60000	No	No
239.	Amazon - Operations Manager	60000	No	No
240.	Amazon Development Center	60000	No	No
241.	Amazon Professional Services	60000	No	No
242.	Central Road Research Institute	0	No	No
243.	CL Educate Ltd.	15000	No	No
244.	DMI Finance Private Limited	35000	No	No
245.	Ecom Express - Business Analysis	30000	No	No
246.	Ecom Express Pvt. Ltd. - Business Analysis - Onsite	30000	No	No
247.	Ecom Express Pvt. Ltd. - Data Science	30000	No	No
248.	Flying Homingos Private Limited	10000	No	No
249.	Grey Orange Robotics Pvt. Ltd.	20000	No	No
250.	Hindustan Times -	25000	No	No
251.	Indian Electrical & Electronics Manufacturersâ€™ Association	8000	No	No
252.	Insights Alpha	8000	No	No
253.	Intercontinental Consultants and Technocrats Pvt. Ltd	10000	No	No
254.	Laneyes LLC	7000	No	No
255.	MapMyIndia	10000	No	No
256.	myHQ & (JustWork Technologies Pvt. Ltd.) Tech	35000	No	No
257.	MyHQ (Justwork Technologies Pvt Ltd.) â€“ Nontech - Onsite	20000	No	No
258.	Nable IT Consultancy Services Pvt. Ltd.	25000	No	No
259.	National Council of Applied Economic Research	15000	No	No
260.	National Institute of Science and Tech. Dev. Studies (NISTADS)	0	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
261.	Netcore Solutions	40000	No	No
262.	Seygnux Solutions Pvt. Ltd.	7500	No	No
263.	Singh Plasticisers & Resins (I) Pvt. Ltd	18000	No	No
264.	Solar Energy Corporation of India	5000	No	No
265.	Takshila Learning Pvt. Ltd.	20000	No	No
266.	Takshila Learning Pvt. Ltd. (Non tech)	12000	No	No
267.	The Center for Disease Dynamics Economics and Policy India Pvt. Ltd.	35000	No	No
268.	Udaan	35000	No	No
269.	ZEE5 India	25000	No	No
Faridabad				
270.	Rite Infotech Pvt Ltd	12000	No	No
271.	Stowe Research India Pvt Ltd	20000	No	No
Ghaziabad				
272.	Mtandt Rentals Ltd.	15000	No	No
273.	NutriPal Healthcare Pvt Ltd	20000	No	No
274.	NutriPal Healthcare Pvt Ltd - Non Tech	12000	No	No
Goa				
275.	CommScope	20000	No	Subsidised Lunch
276.	IFB Industries	15000	No	No
Gurgaon				
277.	AlmaConnect	20000	No	No
278.	American Express - Credit & Fraud Risk (Capabilities)	70000	No	No
279.	American Express Big Data Labs	100000	No	No
280.	ANS Commerce - Non tech	8000	No	No
281.	ANS Commerce - Tech	10000	No	No
282.	Apollo Tyres	18000	No	No
283.	Atkins	20000	No	No
284.	Class 21A Pvt. Ltd.	25000	No	No
285.	Collegedunia Web Pvt. Ltd.	50000	No	No
286.	Decimal Technologies	15000	No	No
287.	Decision Resources Group	25000	No	No
288.	Express Stores - Tech	30000	No	No
289.	Express stores â€" Nontech â€" Onsite	20000	No	No
290.	Indic-ai Foundation for Social Good	30000	No	No
291.	IQVIA	20000	No	No
292.	KPMG	15000	No	No
293.	MM Aqua Technologies Ltd.	15000	No	No
294.	OfBusiness	30000	No	No
295.	OLX Group	60000	No	No
296.	OYO Tech	45000	No	No
297.	Phone Post	15000	No	No
298.	PricewaterhouseCoopers (PWC)	40000	No	No
299.	Process 9 - Document Translation System	10000	No	No
300.	Process 9 - Neural Machine Translation	10000	No	No
301.	Process 9 - Website Translation System	10000	No	No
302.	Process 9 - Website Translation System ver 2.0	10000	No	No
303.	Ramboll India Pvt. Ltd.	10000	No	No
304.	Rivigo Tech	30000	No	No
305.	SequelOne Solutions Pvt Ltd	25000	No	No
306.	shipsy	30000	No	No
307.	ShortHills Tech Pvt Ltd(Nontech)	20000	No	No
308.	ShortHills Tech Pvt. Ltd	30000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
309.	SMEC India Private Limited.	10000	No	No
310.	Snap Deal	20000	No	No
311.	SRF Ltd.	18000	No	No
312.	VenueMonk	10000	No	No
313.	VSD Eduventures Pvt. Ltd.	32000	No	No
314.	Wake-up Technology Pvt Ltd - Onsite	20000	No	No
315.	Wake-Up Technology Pvt. Ltd.	20000	No	No
316.	Zinnov Management Consulting Pvt. Ltd.	18000	No	No
Halol				
317.	Aditya Birla Insulators	10000	No	No
Hosur				
318.	TVS Motors	20000	No	No
Hyderabad				
319.	Aizant Drug Research Solutions Pvt. Ltd.	15000	No	No
320.	Alien Developers	10000	No	No
321.	Amazon - Machine Learning	60000	No	No
322.	Amazon - Operations Manager	60000	No	No
323.	Amazon Development Center	60000	No	Free Company Bus
324.	Amazon Operations (Area Manager)	60000	No	No
325.	Apollo Tele Health Services (ATHS)	15000	No	No
326.	Apple India Pvt Limited	45000	No	No
327.	Arup India Pvt. Ltd.	20000	No	No
328.	Audree Infotech P Ltd.	20000	No	No
329.	Balaxi	14500	No	No
330.	Blue Yonder (JDA)	25000	No	No
331.	BSCPL Infrastructure Ltd.	10000	No	No
332.	CASHe	15000	No	No
333.	CriticalRiver Technologies Pvt Ltd	20000	No	No
334.	CtrlS Data Centre Pvt Ltd	25000	No	No
335.	Dhruva Space Pvt. Ltd.	8000	No	No
336.	Dr. Reddys Laboratories	15000	No	No
337.	eKincare (Aayuv Technologies Pvt. Ltd.	35000	No	No
338.	Experian	30000	No	No
339.	Flyboat	10000	No	No
340.	GE Digital	30000	No	No
341.	GenY medium	12000	No	No
342.	Intel India Technology	30000	No	No
343.	Mahati Infra Services Pvt. Ltd	15000	No	No
344.	MathWorks India Pvt. Ltd.	35000	No	No
345.	Micron Technology India Operations	50000	Accommodation provided by the organization (only for boys)	No
346.	Microsemi India Pvt Ltd	27000	No	No
347.	Molde Analytics India Pvt. Ltd.	35000	No	No
348.	Mordor Intelligence	15000	No	No
349.	My Smart Price - Non Tech	22000	No	No
350.	My smart price - Tech	22000	No	No
351.	Nagarjuna Construction Company	10000	No	No
352.	National Institute of Rural Development and Panchayati Raj	30000	No	No
353.	NCPE infrastructure India Pvt.Ltd	10000	No	BNo
354.	Nippon Koei	20000	No	No
355.	Novartis Healthcare Pvt. Ltd.	30000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
356.	Nvidia Graphics - Hardware	35000	No	Reimbersement of Cheapest Mode
357.	Oracle India Pvt Ltd.	50000	No	No
358.	OYO Rooms	45000	No	No
359.	Petasense Technologies Pvt. Ltd	42000	No	Free Lunch
360.	Qualcomm India Pvt Ltd- Bangalore	30000	No	No
361.	Quintessential Design	8000	No	No
362.	Reild Residential Properties Pvt.Ltd	10000	No	No
363.	Saffrongrid Ltd. - Artificial Intelligence Department	21000	No	No
364.	Saras Analytics - Nontech	20000	No	No
365.	Saras Analytics - Tech	35000	No	No
366.	Servicenow Software Development India	35000	No	No
367.	Synchrony	35000	No	No
368.	Thomson Reuters	45000	No	No
369.	UBS - Group Finance	40000	No	No
370.	UBS Business Solutions (India) Private Limited - Group Operations	40000	No	No
371.	UBS Group Finance - Hyd/Pune	40000	No	No
372.	Udaan	35000	No	No
373.	VCTIP Pvt. Ltd. (Market Data Forecast) Content Writing	18000	No	No
374.	VCTIP Pvt. Ltd. (Market Data Forecast) Research Associate	15000	No	No
375.	Voziq India Pvt. Ltd.	10000	No	No
376.	Wavelabs Technologies	20000	No	No
377.	Xilinx India Technology Services Pvt. Ltd.	25000	No	No
378.	Zaggle Prepaid Ocean Services Pvt Ltd	30000	No	No
379.	Zaggle Prepaid Ocean Services Pvt Ltd - Onsite	30000	No	No
Indore				
380.	Techture Structures	15000	No	No
381.	Vinilok SoluNons Pvt. Ltd.	25000	No	No
Jagdishpur				
382.	Indogulf Fertilizers Ltd.	10000	No	No
Jaipur				
383.	CEG Limited	12500	No	No
384.	NBC Bearings	4000	No	No
Jamshedpur				
385.	Tata Steel	18000	No	No
Kalpakkam				
386.	Indira Gandhi Centre for Atomic Research	0	No	No
Kheda				
387.	Crest Speciality Resins Pvt. Ltd. - onsite	15000	No	No
Kolkata				
388.	Asanify Technologies Pvt. Ltd.	25000	No	No
389.	Axxela Advisory Services	20000	No	No
390.	ITC Limited	60000	No	No
391.	Keysight Technologies India Pvt. Ltd.	20000	No	No
392.	Tega Industries	15000	No	No
393.	Texmaco Rail & Engineering Ltd.	2000	Accommodation provided by the organization (only for boys)	Treatment by Company Doctor, Free Breakfast,Lunch & Dinner
Kota				
394.	MedCords	20000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
Ludhiana				
395.	ALW Lighting India Pvt Ltd	24000	No	No
396.	ALW Lighting India Pvt Ltd- Nontech	26000	No	No
Mehsana				
397.	Oswal Industries	15000	No	No
Mumbai				
398.	ActiveBuildings	10000	No	No
399.	Aditya Birla Science & Technology Company Ltd.	10000	No	No
400.	AECOM	7500	No	No
401.	Agami Realty	5000	No	No
402.	Amazon - Operations Manager	60000	No	No
403.	BuroHappold Engineering	15000	No	No
404.	CACTUS Communications - Product Analysis	40000	No	No
405.	CACTUS Communications - Product Management & Software Dev.	50000	No	No
406.	Christensen Investor Relations (I) Pvt. Ltd.	10000	No	No
407.	Cityflo (Komorebi Tech Solutions Pvt. Ltd.)	50000	No	No
408.	Cogoport - Non Tech	30000	No	No
409.	Credit Suisse - Credit Analytics	75000	No	No
410.	Credit Suisse - Equity Research	75000	No	No
411.	Credit Suisse - GBIS	75000	No	No
412.	Credit Suisse - Global Market Risk Management	75000	No	No
413.	Credit Suisse - GM Trading Risk	75000	No	No
414.	Credit Suisse - International Wealth Management	75000	No	No
415.	Credit Suisse - Non-Financial Risk Management	75000	No	No
416.	Credit Suisse - Prime Services	75000	No	No
417.	Credit Suisse - Risk & Finance Data Analytics Reporting	75000	No	No
418.	Credit Suisse- Investment Banking and Capital Markets	75000	No	No
419.	DBOI - Business Finance	30000	No	No
420.	DBOI - Counterparty Credit Ratings	30000	No	No
421.	DBOI - Finance	30000	No	No
422.	DBOI - GVG	30000	No	No
423.	DBOI - Market Risk	30000	No	No
424.	DBOI - Market Risk Analysis & Control	30000	No	No
425.	DBOI - Valuation Control	30000	No	No
426.	DBOI-Rating Analysis	30000	No	No
427.	Development Consultants Pvt. Ltd. (DCPL)	8500	Accommodation provided by the organization (only for boys)	No
428.	Dolat Capital	25000	No	No
429.	Dorsch Consult (India) Pvt. Ltd.	12000	No	No
430.	FlipSpaces Technology Labs Pvt. Ltd.	7000	No	No
431.	Grasim Industries Pulp and Fibre Division	17000	No	No
432.	HCL Technologies Ltd (Formerly Geometric Ltd)	30000	No	No
433.	Here Maps - Distributed Data	30000	No	No
434.	Hourglass Research	20000	No	No
435.	IDFC First Bank	20000	No	No
436.	IDfy (formerly Baldor Technologies Pvt Ltd)	50000	No	No
437.	Indian Energy Exchange Ltd	18000	No	No
438.	ION Energy	30000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
439.	Jio Platforms Limited	35000	No	No
440.	JP Morgan Services GKN Global Research(GRC)-Fintech	50000	No	No
441.	JP Morgan Services-GKN Data Science-Fintech	50000	No	No
442.	JP Morgan Services-GKN GlobalResearch(GRC)Finance	50000	No	No
443.	JP Morgan Services-GKN Quantitative Research-Fintech	50000	No	No
444.	JPMS (Finance) CIB R&A Markets - Sales and Structuring	75000	No	No
445.	JPMS (Finance) GR&C Market Risk	75000	No	No
446.	JPMS (Fintech) CIB R&A Banking (CRG)	50000	No	No
447.	JPMS (Technology - IT) CIB R&A Data Science - Fintech	100000	No	No
448.	JPMS (Technology - IT) GR&C Quantitative Research - Fintech	100000	No	No
449.	JPMS (Technology - IT) GR&C Wholesale Credit Solutions - Data Science - Fintech	100000	No	No
450.	JPMS (Technology-IT) GR&C Model Risk Governance and Review - Ongoing Performance Management	100000	No	No
451.	JPMS (Technology-IT) GR&C Model Risk Governance and Review-Risk Strategy & Execution	75000	No	No
452.	JPMS CIB R&A-Markets(Derivatives Analyst Group	75000	No	No
453.	JPMS CIB R&A Data Science	100000	No	No
454.	JPMS CIB R&A Global Research	75000	No	No
455.	JPMS CIB R&A Markets–Equity Derivatives Trading & Structuring	75000	No	No
456.	JPMS GR&C Corporate Risk-Risk Project Solutions	50000	No	No
457.	JPMS GR&C Credit Risk – Counterparty Credit Infrastructure & Capital	75000	No	No
458.	JPMS GR&C Quantitative Research – Fintech	100000	No	No
459.	JPMS GR&C WCS - Credit Portfolio Analytics	75000	No	No
460.	JPMS GR&C Wealth Management – Data Science – Credit Risk	100000	No	No
461.	JPMS-GR&C Credit Risk-Counterparty Credit Infrastructure&Capital	75000	No	No
462.	Jupiter	50000	No	No
463.	Morgan Stanley Advantage Services	80000	No	No
464.	Morning Star - Index Management and Analytics	40000	No	No
465.	Morning Star - Index New Product Development	40000	No	No
466.	Morningstar - Index data calculation	40000	No	No
467.	Morningstar - Index Technology	40000	No	No
468.	Morningstar - Indexes - Data and Content	40000	No	No
469.	Morningstar - Indexes Product and Sales Operations (IPSO)	40000	No	No
470.	Morningstar - Quantitative Research	40000	No	No
471.	MSCI (NPD – Index Research)	60000	No	No
472.	MSCI Index and Research	60000	No	No
473.	Netcore Solutions	40000	No	No
474.	Nomura - Change Management Team	75000	No	No
475.	Nomura - Finance-Corporate/ Business Advisory	75000	No	No
476.	Nomura - Finance - Product Control PnL	75000	No	No
477.	Nomura - Finance - Structured Deal Review	75000	No	No
478.	Nomura - FinTech	75000	No	No
479.	Nomura - RMO - Risk Middle Office	75000	No	No
480.	Nomura - Wholesale Strategy	75000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
481.	Nomura Global Markets	75000	No	No
482.	Nomura Global Risk	75000	No	No
483.	Pepper Content Pvt. Ltd.	30000	No	No
484.	Piramal Group	70000	No	Air Fare
485.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) - Tech	12500	No	No
486.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) Non Tech	7500	No	No
487.	Pushstart Media Network Pvt. Ltd.	10000	No	No
488.	Receivables Exchange of India Limited	10000	No	No
489.	Thornton Tomasetti	15000	No	No
490.	UBS - Group Compliance	25000	No	No
491.	UBS - Group RISK	40000	No	No
492.	UBS Business Solutions (India) Private Limited - Finance Group	40000	No	No
493.	UBS Business Solutions(India)PrivateLimited-Group Operations	40000	No	No
494.	UPGRAD	25000	No	No
495.	Viacom18 Media Pvt. Ltd - Corporate Strategy	30000	No	No
496.	Viacom18 Media Pvt. Ltd - Digital Ventures	30000	No	No
497.	VMS (Vakil Mehta Seth) Consultants Private Limited	15000	No	No
498.	Worley Parsons India	19000	No	No
499.	Ascent Health and Wellness Solutions Private Limited	35000	No	No
Nagda				
500.	Grasim Industries Ltd.	10000	Accommodation provided by the organization (for boys and girls)	Subsidised Breakfast,Lunch & Dinner
Nagpur				
501.	Techture Structures Pvt Ltd.	25000	No	No
Nashik				
502.	Questo Wellbeing Pvt Ltd	10000	No	No
Noida				
503.	Adobe Systems	100000	No	No
504.	B and S Consultants	13000	No	No
505.	Bisquare Systems Pvt. Ltd. - Onsite	30000	No	No
506.	Bunch Microtechnologies Pvt Ltd	20000	No	No
507.	Classplus	30000	No	No
508.	Clearpack Automation Pvt. Ltd.	25000	No	No
509.	DIXON TECHNOLOGIES INDIA LTD	25000	No	No
510.	HISP India	10000	No	No
511.	IMarc Services	12000	No	No
512.	Jubilant FoodWorks Ltd.	25000	No	No
513.	Nucleus Software Export Ltd	15000	No	No
514.	NXP Semiconductors	25000	No	No
515.	Samsung R&D Institute India-Delhi (SRI-D)	35000	No	No
516.	SmartHelio Sarl.	20000	No	No
517.	ST Microelectronics(I) Pvt.Ltd.	26000	No	Subsidised Lunch & Breakfast
518.	Time Tooth	10000	No	No
Pilani				
519.	Central Electronics Engineering Research Institute	0	No	No
520.	Pilani AtmaNirbhar Resource Center (PARC)	15000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
Portland				
521.	Versa Cloud ERP Inc - Non Tech	15000	No	No
522.	Versa Cloud ERP Inc - Tech	15000	No	No
Pune				
523.	AFour Technologies	60000	No	No
524.	AFour Technologies Pvt. Ltd.	30000	No	No
525.	AgroStar	40000	No	No
526.	B.G.Shirke Construction Technology Pvt. Ltd.	10000	No	No
527.	Bharat Forge Ltd	7500	No	No
528.	BNY Mellon Technology	60000	No	No
529.	Centre for Development of Advanced Computing	0	No	No
530.	Credit Suisse - Global Markets BC & E Efficiency)	75000	No	No
531.	Credit Suisse- Finance Change	75000	No	No
532.	Credit Suisse - Risk & Finance Data Analytics Reporting	75000	No	No
533.	DBOI - AC	30000	No	No
534.	DBOI - Automation	30000	No	No
535.	DBOI - Financial Analytics	30000	No	No
536.	DBOI - IF	30000	No	No
537.	DBOI - Risk Metrics Analytics	30000	No	No
538.	DemandMatrix	35000	No	No
539.	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	12500	No	No
540.	Energy Exemplar	40000	No	No
541.	HealthRx by Bajaj Finserv Health Ltd.	50000	No	No
542.	Integrated Active Monitoring Pvt. Ltd.	8000	No	No
543.	Integrated Active Monitoring Pvt. Ltd. - Product & Business Dev.	6000	No	No
544.	Johnson Controls	15000	No	No
545.	Maritime Research Centre	15000	No	No
546.	Markets & Markets	25000	No	No
547.	Millet & More Foods	10000	No	No
548.	namaste.fit	15000	No	No
549.	National Chemical Laboratory	0	No	No
550.	News Cape Consulting	25000	No	No
551.	Nvidia - Software	35000	No	Free Canteen Facility
552.	PharmaACE	30000	No	No
553.	Praj Industries Ltd.	18000	No	No
554.	Quick Heal Technologies Ltd	40000	No	No
555.	Reflexis Systems India Pvt Ltd.	30000	No	No
556.	Siemens PLM Software	30000	No	No
557.	Sleepiz (India) Pvt. Ltd.	40000	No	No
558.	Tata Motors Ltd.	18000	No	No
559.	Toshiba Software (India) Pvt Ltd	25000	No	No
560.	UBS - Group Compliance	40000	No	No
561.	UBS Business Solutions (India) Private Limited - Finance Group	40000	No	No
562.	UBS Business Solutions (India) Private Limited - Group Operations	40000	No	No
563.	UBS Business Solutions (India) Private Limited - RAS FINANCE	40000	No	No
564.	Visteon Corporation	15000	No	No
565.	Vuclip India Pvt. Ltd.	60000	No	No
566.	Whirlpool	25000	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
Renukoot				
567.	Birla Carbon SKI Carbon Black (India) Pvt. Ltd.	10000	No	No
Secunderabad				
568.	Dvara E Registry Pvt. Ltd.	25000	No	No
Singapore				
569.	Zluri	15000	No	No
Sirohi				
570.	JK Lakshmi Cement Ltd.	8000	No	No
Sonipat (Delhi)				
571.	Amazon Operations (Area Manager)	60000	No	No
Texas (USA)				
572.	Resolvity Inc.	25000	No	No
Trivandrum				
573.	UST Global Infinity Labs-Robotics	25000	No	No
574.	Centre For Development Of Imaging Technology	0	No	No
575.	Eyenetlabs	10000	No	No
576.	Kerala Infrastructure and Technogy for Education	25000	No	No
Udaipur				
577.	E-Connect Solutions Pvt. Ltd.	17000	No	No
578.	Udaipur Cement Works	8000	No	No
579.	Wonder Cement	35000	No	No
Vadodara				
580.	Cosmos Impex	17000	No	No

LIST OF PROJECT ASSIGNMENTS FOR SECOND SEMESTER 2019-2020

1	**ABB Global Industries and Services Private Limited , Bangalore**	
	1.	SIMPLE NETWORK TIME PROTOCOL (SNTP) & WOLFSSL
	2.	U-Boot
2	**Adani Power , Ahmedabad**	
	3.	Study on Boiler Tube Failures
	4.	Modeling & Analysis of composite pressure vessel
	5.	Waste Heat and water recovery from Flue gases to improve Boiler efficiency
3	**Aditya Birla Group -Data and Analytics , Bangalore**	
	6.	Migration of existing price forecasting code from R to Python to enable forecasting as a platform and to participate in the M5 forecasting - Accuracy competition on Kaggle.
4	**Adobe Systems , Bangalore**	
	7.	Data Migration using Apache Flink
	8.	A Real-Time Stateless Collaboration Service POC
	9.	Monitoring Microservices
	10.	Investigating the performance and development of web application
5	**Adobe Systems , Noida**	
	11.	Enforcing Consistency in Latent Space of Generative Adversarial Networks (GANs)
	12.	Improving Image based VIrtual try on
	13.	Ensemble Reinforcement Learning
	14.	XDM Automapping
6	**AECOM , Mumbai**	
	15.	Design of Viaduct for Mumbai Metro Line 4
	16.	Mumbai Coastal Road Project
	17.	Mumbai Trans Harbour Link - General Consultant
	18.	Analysis and Design of Substructure elements for mumbai metro line-4
7	**AECOM Infrastructure , Delhi**	
	19.	DEVELOPMENT OF CONTAINER TERMINAL AIPT-2 AT YANGON
8	**AFour Technologies , Pune**	
	20.	Google Sheet Jira Sync utility, Robot Jira Automation utility and QAccelerator
	21.	STATISTICAL MODELLING OF RETAIL SALES, HANDLING BIG DATA & BACK-END DEVELOPMENT
	22.	Building ML Model Service for ML Models of Marchex Services
	23.	Cloud Migration Portal
9	**AgroStar , Pune**	
	24.	Data Analysis on service to Gold Service customers
	25.	Analysis of Marketing Strategies
10	**Aizant Drug Research Solutions Pvt. Ltd. , Hyderabad**	
	26.	To Design and Develop a QBD- Based Generalized Methodology for Analytical Method Development.
	27.	BENCHMARKING AND OPTIMIZATION OF POWDER FLOWABILITY AND HOT MELT EXTRUSION: TO ENHANCE BIOAVAILABILITY OF DRUGS
	28.	Development of In-vitro In-vivo Correlations Using Programming Languages to Interpret In-house Data and Extending the Scopes to Modify the Formulation & Manufacturing Parameters
11	**AlmaConnect , Gurgaon**	
	29.	Process Management
12	**Altair Engineering India Pvt. Ltd. - Software Division , Bangalore**	
	30.	Finite element analysis of front axle of a tractor
	31.	Co-simulation of a robot arm using motion solve and activate
13	**Amazon - Machine Learning , Bangalore**	
	32.	1. Text Classification for Customer Attribution; 2. Language model for on-the-fly Text Generation
	33.	Machine Learning for modelling sequential data
	34.	Image Title Mismatch Defect Detection in e-commerce site
	35.	Product Curation for Deals and Events
	36.	Box Suite Optimization
	37.	Product SummarizationVideo

	38.	Attention Guided Anomaly Detection and Localization
	39.	volume forecasting for wireless devices
	40.	Text Classification and Extraction for PPU Computation
	41.	BERT Experiments On Named Entity Recognition
	42.	Leveraging pre-trained models for automatic speech recognition
	43.	High Dimensional Time-series Forecasting
	44.	* MaxPrice filter project
	45.	Classification of products with egregious MRP
	46.	Gender Based Differences in Employee Review
14	**Amazon - Operations Manager , Bangalore**	
	47.	Reduction of FCPP and VCPP in sort center by 5%
	48.	1- Improving the Auto-sorter's productivity and 2 - Reducing FL NC CPT misses
	49.	Defect Reduction & Process improvement for Airhaul
	50.	To Improve Pick Productivity
	51.	1. Arriving at a right slotting mix to improve the capacity of sites 2. Help in designing new site for Amazon
	52.	Ambient Bag Design and Related Cost Analysis (Project 1) and Audit Mechanisms and Report Automation (Project 2)
	53.	1. Enabling palletization movement for all the outbound lanes.2. Improving Line Haul truck utilization and sweeper run reduction. 3. Implementing ZBS and Dynamic Staging Area roll out across PAN India.
	54.	1. Cost Modeling of suburban Network in Mumbai. 2. Model of inter-city railways network
	55.	Central Flow Management
	56.	Site Modeling for Risk Prediction
	57.	Alternate fllfillment method for Cost Reduction
	58.	Transhhipment Efficiency
	59.	1. FC and Hub Sizing Models 2. Rate Model
	60.	Reconciliation of C-Returns and Reusable Assets used in GSF Delivery
	61.	Slot availability improvement
	62.	Project 1:- Improvising ZBS (Zonal Based Sortation) in the staging area Project 2:- Analyze Forward Leg Node Controllable impact due to fluid and bag miss-staging. Sub Area - Improving the performance of the site by reducing the shipment misses through making some changes in operational procedures.
15	**Amazon - Operations Manager , Delhi**	
	63.	Reduction of NNC
	64.	Reduce In-facility losses
16	**Amazon - Operations Manager , Hyderabad**	
	65.	Reduction of In Facility Ageing and RL NC CPT Misses.
	66.	Productivity at HYDF
17	**Amazon - Operations Manager , Mumbai**	
	67.	Cost Optimization in BOM1
	68.	Produce Quality Improvement
	69.	Design and implementation of a VBA based tool to assist in a process of fulfillment
	70.	Inventory placement plan to improve throughput and reduce NVAs
	71.	Pick Productivity improvement by reduction in Unknown idle time
	72.	Improving Pack Productive Time by BY REDUCTION OF PACK CYCLE TIME AND REDUCTION OF UNKNOWN IDLE TIME AND REDUCING SLAM PACK KO FPY
	73.	Reduction in multi-floor batch formation of high-velocity ASINs to improve pick productivity, reduction of First Pass Yield (FPY) metrics and Problem Solve, develop a mechanism to eliminate generation of time off task defect and improve login hygiene
	74.	Homogeneity improvement in Downstream FCs, Conveyor redesign to eliminate bottlenecks, replacement of single use corrugated boxes with reusable totes
	75.	Improving Salability Yield for Customer Returns, Segregation of High Velocity ASINs at Dock & Dock Door Planning for Diwali Peak.
18	**Amazon Area Manager , Bangalore**	
	76.	To reduce Pre Slam DEA Miss
	77.	Improvisation of frX Compliance Score and Minimization of DEA Misses
	78.	Reducing OB FPY Defects Per Million Opportunities

	79.	Delivery Estimated accuracy Miss
	80.	Warehouse Damage and Amnesty Reduction
	81.	Inventory Management and Stow Quality Control
19	**Amazon Development Center , Bangalore**	
	82.	1. Enabling RFS for Singapore marketplace for Retail and FBA; 2. Design and Implementation of config and config evaluator to assist in onboarding Brazil configs to BCM tool
	83.	Development of AWS Ordering Platform
	84.	Live data migration
	85.	IN Payments â€" New Category Launch
	86.	Backup Payment Method â€" One Click Launch
	87.	PayStationExternalization
	88.	Test Bulk Data Import Utility and Implement Feedback collection service for the utility
	89.	Search Capability and Rewards Console
	90.	In Advertising Tech Team tasks
	91.	â€˜Login with QR Code for Amazon Payâ€™
	92.	Rule Engine Enhancement : Copying a rule
	93.	Zeus - File Based Ingestion
	94.	Exception Handling Framework For Dependent Services and Interpretation Service Upgrade
	95.	Error diagnostic tool for Amazon Prime Membership Orders
	96.	Transaction History Features Onboarding
	97.	Development of Spring and Android applications for AFT-X team
	98.	Competitor Monitoring Workflow
	99.	End to end development of an upcoming feature of the Cart page on Amazon website globally
	100.	Development of Receive Tool
	101.	Customer Experience Enhancement
	102.	Notification and TIcketing Service
	103.	Fund Manager
	104.	Broker Central - Search Datastore and Querying
	105.	Reducing Network Loss in Mobile Phones
	106.	Work done in Amazon as a part of Associates Payment Team
	107.	Gurupa Migration in Shopping Aids
	108.	Latex - Language Agnostic Text Extraction
	109.	CounterApp development for iOS/Android and Web
	110.	Performance advertising development tasks
	111.	Proof of concept on Apache HBase as a scalable solution to team use case.
	112.	Amazon Pay Notification 2.0
	113.	Prime Gaming UI Launch For India
	114.	Enhancement of Recall Inventory Tool & Expiry Awareness Tool for Amazonâ€™s Physical Stores
	115.	Building serverless website
	116.	Serverless Application for Data Ingestion On-boarding
	117.	INPayments Affordability EMI Tasks
20	**Amazon Development Center , Hyderabad**	
	118.	RuleVisualizerEnhancements
	119.	Introduce Delete Account feature in User Console and Create Admin Console.
	120.	Developing a feature to download tax-compliant invoices
	121.	G2S2 MIGRATION FROM JAVA CLIENT 1.X TO SLAPSHOT
	122.	Labels Tab in Label Self Serve Platform
	123.	Identity Deletion Service
	124.	System Health Monitor
	125.	RENDERING PROCESSING DATA OF VARIOUS TYPES OF PROCESSING ACTIVITIES AND IS IT DOWN IMPLEMENTATION
	126.	Measurement & Improvement of labelling quality of Alexa's training data
	127.	DATA EXTRACTION - FORM 16
	128.	Creating self serve form for updating backend configurationns.
	129.	Building Amazon Specific tool to ease the process of testing of a new feature
	130.	Store approval dashboard

	131.	Proactive Feedback for Amazon Business customers
	132.	IMPLEMENTING SELF SERVICE FOR PARTITIONING OF LOAD BALANCING UNIT
	133.	Implementation of tags based categorization and Implementation of Coral Invoker Plugin
	134.	Automating Metric Collection and Report Generation
	135.	Real Time Determination of TISIL Invoicing Decision
	136.	Launch an amazon category similar to gift recharge on amazon pay
	137.	Client Notification System For Unified Banking Module, Migration of VIPS to Native AWS
	138.	1. Partner Account Creation Automation 2. Argon Session Deletion(IDS) 3. Bulk Search Payee identity(TOM) 4. Bulk Create Payee Profile(TOM)
	139.	Process Error Report
	140.	DocVault
	141.	Traces Rule management Service
	142.	Developing migration tracker Tool and adding features to client onboarding portal
	143.	Calling an API and Data Modification
	144.	Blacklist and Expire Exemptions of Customers on Amazon.com
	145.	1) Throttling in invoice Generation Process 2) Populate index in Database to add search feature
	146.	1. Enhancements in ManageSFP , 2. Peeknow enablement for SSR , ManageSFP pages 3. Retries handling mechanism for failed events.
21		**Amazon Development Center , New delhi**
	147.	REQUEST TRACING, DATA MIGRATION, AND REFACTORING
	148.	Job Scheduler and Configuration Manager for Lockers
	149.	Document Visualizer
	150.	Full CD of TRDocValidatorService
	151.	Revamping the Reaper Service
	152.	1. TerminalStateDetermination 2. ServiceAPI to Resolve interna Tickets
	153.	Syncing Document Register dynamo with Elasticsearch to search and retrieve documents.
	154.	Asset Library for Advertisers
	155.	Asset Library
	156.	Migration of Web Pages to a New Service Stack and Setting up New Services
	157.	Request Tracing and Data Privacy in Frontend UI
	158.	Enhancements in Exception Handling and Automating Testing for saving Development Time. Replaying requests picking from a particular stack onto another stack without manual intervention.
	159.	Building components of Teams Internal Service
	160.	WIRE India Launch
	161.	AccessPointInformationService, AccessPointAuditingLambda and AccessPointAuditingService
	162.	Launch of WIRE in IN / TIMSOpsManager Library
	163.	SCOREService deprecation
	164.	Micro front end based widgets
22		**Amazon Operations (Area Manager) , Hyderabad**
	165.	Improvement of frX and OOSLA metrics and analysis of DEA misses
	166.	Increasing pick productivity
23		**Amazon Operations (Area Manager) , Sonipat (Delhi)**
	167.	To develop an Dashboard for the IB development and ensure personnel dont have to search for various portals to get the required metrics
24		**American Express - Big Data Labs (BDL) , Bangalore**
	168.	Marketing Creative Review Automation
	169.	Classification of Notebook on the Amex Platform and creation of an end to end pipeline and Analytics Dashboard for two other platforms
	170.	Active Learning Toolkit for Unstructured Text
	171.	Multiclass and MRC support for PMML based scoring
25		**American Express - Credit & Fraud Risk (Capabilities) , Bangalore**
	172.	Auto Model Refresh
	173.	Generating Model For Risk Prediction
26		**American Express - Credit & Fraud Risk (Capabilities) , Gurgaon**
	174.	Reject Inference Capabilities on Distributed Systems
	175.	Merging of consumer and commercial regulatory capabilities
	176.	RCM Validation and NLQ Input Capability for DS Master Sheet Automation Tool

	177.	Master Sheet Automation Capability
	178.	Modelling Workbench
27	**American Express Big Data Labs , Gurgaon**	
	179.	Regression Science for Prediction Intervals
28	**Analog Devices India Pvt. Ltd. , Bangalore**	
	180.	WORKING WITH ROBOT OPERATING SYSTEM (ROS2)
	181.	Verification Driven Metrics for MIPI Camera Serial Interface -2
29	**Apple India Pvt Limited , Hyderabad**	
	182.	Sonar
	183.	Automated Incident Research
30	**ARM Embedded Technologies Private Limited , Bangalore**	
	184.	Implementing Non-coherent Interconnect component with R-class CPUs
	185.	System Compliance for ARM Based Servers
	186.	Automation of Test Case Generator and Coverage Collector for Arm Architecture using Python
	187.	A Class Prrocessor Verification
	188.	Incorporating Machine Learning into Memory IP Characterization to reduce the time of simulation and Design of Memory Compilers.
	189.	top level verification of M class processors
	190.	GENERATION OF RANDOM TEST CASES USING RIS(RANDOM INSTRUCTION SEQUENCE GENERATOR) TOOL FOR VERIFICATION OF CPU
	191.	1. Incorporating Machine Learning into Memory IP Characterization to reduce the time of simulation and Design of Memory Compilers.
31	**Arup India Pvt. Ltd. , Hyderabad**	
	192.	Software Development of PRIMER and T/HIS
	193.	Structural Engineering Software Development and Support
	194.	FEASIBILITY STUDY OF AUTOMATED TESTING TOOLS & SUPPORT SYSTEM
	195.	Software Development of PRIMER
	196.	Introduction to Oasys Software Suite and Software Development for PRIMER
32	**Ascent Health and Wellness Solutions Private Limited, Mumbai , Mumbai**	
	197.	RIO Online Payments Onboarding
33	**Atkins , Bangalore**	
	198.	PAVEMENT RENEWAL SCHEMES ON AREA 4 COUNTY, UNITED KINGDOM
	199.	A REPORT ON PAVEMENT RENEWAL SCHEMES ON AREA 4 COUNTY, UNITED KINGDOM
	200.	Design of bolted connections for Rectangular Hollow Sections, Special Inspection of Post-Tensioned bridges and MTHL - temporary formwork
34	**Aurigo Software Technologies , Bangalore**	
	201.	Bug Fixing
	202.	Nevada Department of Transportation(NDOT- Aurigo Masterworks)
35	**Avaamo , Bangalore**	
	203.	Natural Language Processing
	204.	Conversationalist AI and Natural Language Processing for Large Scale Applications
	205.	Creating a Skill Store
	206.	Creating the Skill Store
36	**Axxela Advisory Services , Kolkata**	
	207.	Devising a Trading Strategy: A Multivariate Approach at Pair Trading
	208.	Trading Eurodollar futures
37	**Balaxi , Hyderabad**	
	209.	Regulatory requirements for lyophilized parenteral products and combination products in USA and Latin American countries
	210.	Regulatory Aspects of Contract Manufacturing.
	211.	Management of nonconforamce reports issued by Ministry of Health
	212.	Regulatory Landscape of biosimilars in Latin America
	213.	Drug Lag and Regulatory Impediments in Both Emerging and ROW Markets
38	**Bharat Forge Ltd , Pune**	
	214.	Forging of connecting rod: An insight into industry practices
	215.	Computer Vision Based Magnetic Particle Inspection
	216.	TITANIUM WELDING TECHNIQUES

	217.	Computer Vision Based Magnetic Particle Inspection.
39	**Blue Jeans Network India Pvt. Ltd. , Bangalore**	
	218.	Frontend Web development
	219.	Media Platform Sequin
40	**BNY Mellon Technology , Pune**	
	220.	Anomaly Detection As a Service
	221.	Upgrade of Navigator UI for enhanced user experience
41	**Bundl Technologies Private Limited (Swiggy) - Nontech , Bangalore**	
	222.	MDI and Agent Workbench
	223.	S+LD and RBS
	224.	GeoHash Level Visualization Tool
	225.	Bill difference reduction
	226.	B2C Merchant Identification
	227.	Implementation and scaling up of LS Retail in satellite & central kitchens for private brands
	228.	Improvement of Growth on Swiggy SUPER
	229.	Monetisation Growth Strategies
	230.	Item Out of Stock Analysis and Complaint Tracker
	231.	DISCOUNT CAMPAIGN PLANNING
	232.	Planning and Performance at Swiggy Genie
	233.	Business review, planning and Strategy development at Swiggy
	234.	MENU DEVELOPMENT & ANALYSIS
	235.	Premium Account Management
42	**Bundl Technologies Private Limited (Swiggy) - Tech , Bangalore**	
	236.	Intelligence Engineering
	237.	Banner Service Design
	238.	Restaurant Anomaly Detection and Central Abuse Fraud Engine User Interface
43	**BuroHappoldÂ Engineering , Mumbai**	
	239.	Analysis & Structural RCC Design of a Multi Storied Residential Building as per Indian National Standards
44	**CACTUS Communications - Product Management & Software Dev. , Mumbai**	
	240.	Development of browser compatibility checker for TypeScript, Angular schematics and Angular libraries (smart URL routing, analytics and logging and dynamic forms)
45	**CDM Smith Global Resource Center , Bangalore**	
	241.	Understanding AASHTO Based Design Concept and Preparing Design Excel Sheets
	242.	Preparation of design templates for various mechanical equipment associated with wastewater plant
46	**CEG Limited , Jaipur**	
	243.	Design review of the Chakeri and Allahabad project
	244.	Geometric design of highways and expressways
47	**Central Electronics Engineering Research Institute , Pilani**	
	245.	STUDY OF COLD ATMOSPHERIC PRESSURE PLASMA BRUSH
48	**Central Leather Research Institute (CLRI) , Chennai**	
	246.	PREPARATION OF MESOPOROUS PARTICLES FOR BIOMEDICAL APPLICATIONS
	247.	To characterize/identify protein(in this case keratin) or peptide(after hydrolysis of keratin) from the hydrolysis of goat hair which is a waste product from tannery in leather industry and its applications such as wound healing
49	**Cisco Systems (India) Pvt. Ltd - Software Engineering , Bangalore**	
	248.	STARDOM DASHBOARDS
	249.	Survey Tool and OSV
	250.	DESIGNING SDK WITH WEB INTERFACE AND EXTENSION MICROSERVICE FOR CKC
	251.	Developing a testing automation framework
	252.	1. Asset Tracking using Geofencing, 2. Jellyfish Code Impact Analysis
	253.	Design & Development of Meetings SRE Dashboard
	254.	â€˜Adapter Layer for Voice Media Manager in WebEx CC 1.0â€™
	255.	Tool for OSPF Visualize
	256.	Thrift to REST API conversion: Smart Licensing, Install and Expand Modules
	257.	Policy and Configuration Recommendation for ESA (Email Threat Reporting and Analytics)

	258.	Multiple Destination Support for Conditional Debugs On Firepower Threat Defense
	259.	CI / CD Pipelining and Quality Assurance by Automation
	260.	Automatic Transcription of Product Documentation
	261.	Test Impact Analysis
	262.	Streaming media using gRPC and WebSocket
	263.	Chatbot - to make everyday life simple and Full Stack Web Development
	264.	Log Analyser
	265.	Nfs based upgrade for Server
	266.	Context aware recommendation engine for audio conversations
	267.	AppQoE Monitoring
	268.	Secure Vault for Third Party Apps
	269.	CX Collector Serviceability
	270.	Customer Portal : Risk Mitigation Check
	271.	Partner Portal
	272.	Anomaly detection and prediction in Syslog
	273.	Spam Prevention and Detection
	274.	To demonstrate a Proof of Concept of OTN switching on a NCS1004 router and resolving memory crashes on a Line Card Application using Valgrind
	275.	Performance Improvement of FTD (Firepower Threat Defense)
	276.	REALM
	277.	PROJECT1: POOL MANAGEMENT IN INTERSIGHT UI, PROJECT2: HANDLING SERVER ACTIONS IN INTERSIGHT UI, PROJECT 3: STYLE-GUIDE FOR UCS-FLOW COMPONENT USED IN INTERSIGHT UI
	278.	1)Datasheet Digitization , 2)eGenie
	279.	Resource Entitlements and Access Lifecycle Management (REALM)
	280.	(1)Webex QoS Analytics (2)AI Marketplace (3)Hierarchy Management Platform
	281.	AI Chatbot System using MindMeld Engine
50	**Cisco Systems (India) Pvt. Ltd. - Hardware , Bangalore**	
	282.	Enhancement of Hardware Emulation Flow for Verifying RTL Design
	283.	ASIC Physical Design
	Cityflo (Komorebi Tech Solutions Pvt. Ltd.) , Mumbai	
	284.	Development of Cityflo Android App And Automating Deployment Workflow
51	**CL Educate Ltd. , New delhi**	
	285.	Digital Marketing and Webinar Marketing for CL Educate Ltd.
	286.	2 Platform Development for CL-Educate
52	**Clumio India Technologies India LLP , Bangalore**	
	287.	Serverless Web App, Dburger Enhancements, React UI components
	288.	Restore Module For Microsoft365 Outlook
	289.	Serverless Web Framework, DBurger dashboards, VM List UI & RDS dashboards
	290.	Clumio Product Support Environment
53	**Cogoport - Non Tech , Mumbai**	
	291.	Customer Advocacy: Giving them a great onboarding experience and maintaining their experience from brand
54	**COGOS Technologies Pvt Ltd. , Bangalore**	
	292.	To design and develop an android mobile application in flutter.
55	**Cohesity Storage Solutions India Pvt. Ltd. , Bangalore**	
	293.	Nexus Development Tasks
56	**Collegedunia Web Pvt. Ltd. , Gurgaon**	
	294.	Development of a digital marketing platform
	295.	A REPORT ON FREELANCE MANAGEMENT PORTAL
	296.	CROSS PLATFORM APP DEVELOPMENT USING REACT NATIVE AND REACT NATIVE WEB
	297.	Machine Learning project at Collegdunia, Gurgaon
	298.	Improvisation in the functioning of websites handled by CarHP Team, Collegedunia
	299.	Ad Network and Data Science
57	**Confluent India Pvt Ltd. , Bangalore**	
	300.	Creating FTPS Source and Sink Connectors
	301.	AMPS Source Connector for Apache Kafka

	302.	Protobuf Telemetry Pipeline
58	**Cosmos Impex , Vadodara**	
	303.	MAXIMIZE SPINDLE RUN TIME & IMPROVE EFFECTIVE UTILIZATION BASED ON DATA FROM DIGIFAC AND IMPLEMENTATION OF MACHINE LEARNING IN THE SAME
	304.	Horizontal deployment of SPC in Heating Cylinder
59	**Credit Suisse - Global Market Risk Management , Mumbai**	
	305.	A Framework for Identifying Drivers of Flight to Liquidity in Market Risks
	306.	Implementation of Non-Financial Risk Framework
60	**Credit Suisse - Prime Services , Mumbai**	
	307.	Study f Methodology of addition or removal of a company from an Index
61	**Credit Suisse - Risk & Finance Data Analytics, Reporting , Pune**	
	308.	ECL calculation
	Cypress Semiconductor India Pvt Ltd. , Bangalore	
	309.	Capacitive Touch Sensing
62	**DBOI - Market Risk , Mumbai**	
	310.	Counterparty Weekly Risk
63	**DBOI - Risk Metrics Analytics , Pune**	
	311.	Risk Data QA analysis of Business Areas
64	**DBOI-Rating Analysis , Mumbai**	
	312.	Ratings Analysis at DBOI (Mumbai)
65	**Decision Resources Group , Gurgaon**	
	313.	TO GET INSIGHT ABOUT CHINA PHARMACEUTICALS MARKET
66	**Dell R&D , Bangalore**	
	314.	CSI-Unity, Cis-Isilon and Dell EMC Operator
	315.	Chatbot for Dell's User Guides
	316.	DELL SERVER PERFORMANCE OPTIMIZATION USING CLUSTERING OF SERVERS
	317.	Data Collection Through Switches, Docker Security and Log Analysis
	318.	USB Detection and Mounting using SCSI
	319.	AN AI ASSISTANT FOR DELLâ€™S POWEREDGE SERVERS
	320.	Automated Build Verification Testing For iDRAC(Integrated Dell Remote Access Controller) GUI
	321.	LOCAL DEV ENVIRONMENT FOR DEVELOPMENT, A TESTING FRAMEWORK & GENERATING NEW API ENDPOINTS
67	**Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari , Pune**	
	322.	THINGS TO LEARN ON SHOP FLOOR, ANALYSIS OF TROLLEY & SUN â€“PINION GEAR IN ANSYS AND 4:1 TRANSFER CASE ANALYSIS IN MASTA SOFTWARE.
68	**Dorsch Consult (India) Pvt. Ltd., , Mumbai**	
	323.	EXPANSION OF DOMESTIC PASSENGER TERMINAL BUILDING AT DEHRADUN AIRPORT
	324.	Expansion of Passenger Terminal Building at Dehradun Airport
	Dreamplug Technologies , Bangalore	
	325.	Geo-service and Credprofiler service improvements
69	**Dreamplug Technology - Operations , Bangalore**	
	326.	Improving payouts efficiency
70	**Ecom Express - Business Analysis , Delhi**	
	327.	ML algorithm for attrition prediction
	328.	Locality mapping
71	**Ecom Express Pvt. Ltd. - Data Science , New delhi**	
	329.	Data Science and Engineering in the Logistics Industry
	330.	Consolidation of Visualization Codebase, Deployment of Graph Based Database On EC2 And Building Interactive Dashboards using Power BI
72	**eGovernments Foundation , Bangalore**	
	331.	Full Stack Application
	332.	Strategy Research for eGovernments Foundation
73	**eKincare (Aayuv Technologies Pvt. Ltd. , Hyderabad**	
	333.	Ekincare Backend Application Development
74	**Emptycup Innovation Pvt. Ltd. - Tech (Nedo Software) , Bangalore**	
	334.	Planklist and Parts-List Generation.

75	**Energy Exemplar , Pune**	
	335.	Energy Market Analytics
	336.	SOFTWARE DEVELOPMENT INTERNSHIP ON PLEXOS CLOUD PRODUCT
	337.	AMELIORATE THE PLEXOS USER EXPERIENCE BY PROVIDING SOLUTION
	338.	Exploration and research plexos cloud version
76	**Ernst & Young Global Delivery Services , Bangalore**	
	339.	Hull White 1 Factor model and HJM model
	340.	Valuation of Constant Maturity Spread using Hull White Model
77	**Flipkart (Business Development) , Bangalore**	
	341.	Cyber Security Analysis and Miscellaneous Activities
	342.	Lifestyle -BSKU(Brand Stock Keeping Unit) Demand Planning
	343.	Designing a Workflow Manager for Forecasting
	344.	Rate Limiter as a Web Service
	345.	Information and Application security analysis
78	**GE Digital , Bangalore**	
	346.	Creating a reusable web component using Front end technology stack
	347.	Asset Performance Management - Rounds
79	**GE Digital , Hyderabad**	
	348.	Asset Performance Management
	349.	Multiple POCs (Service Discovery, Distributed Log Tracing, Ansible based Installer)
80	**GE India Technology Centre , Bangalore**	
	350.	Performance Enhancement of Axial Flow Compressors- Airfoil
	351.	Industrial Gear Box Design For Turbomachinery
	352.	Damping Analysis and Creep Analysis of Gas Turbine Blade
	353.	Parametric design analysis of Aircraft component in Ansys WB
	354.	Study on Gas-based generation competitiveness and Grid Firming
81	**GenY medium , Hyderabad**	
	355.	The digital marketing sector: How the whole process goes about inside a Digital marketing firm
	356.	Reports, Audits and strategizing spends and budgets for 4 clients
	357.	Analysis of various channels of Digital Marketing and its implementations at GenY Medium
82	**Goldman Sachs India Pvt. Ltd. - Operations , Bangalore**	
	358.	SFTR Testing
	359.	Use of macro in Microsoft excel for following Automation process: A. Email automation through excel B. Importing data from Outlook mails to excel sheet
	360.	Consolidation of Reports on Sharepoint
83	**Grasim Industries Ltd. , Nagda**	
	361.	STUDY OF STEAM CONSUMPTION RATE IN DRYER(VISCOSE FIBRE)
	362.	Improving Cooling tower efficiency for enhanced reliability and power saving.
	363.	To calculate effectiveness of exhaust ventilation system
	364.	effectiveness measurement of exhaust ventilation system
84	**Groww - Business Analyst , Bangalore**	
	365.	Analysing User Behaviour to Improve Help and Support
85	**Groww - Software Development , Bangalore**	
	366.	App Development Using Kotlin
	367.	OPS DASHBOARD USING REACT AND APP DEVELOPMENT USING KOTLIN
86	**Harness , Bangalore**	
	368.	Microsoft Teams Integration & Trial Account Expiration
	369.	Backend Development using Java Spring/Guice Framework
87	**HCL Technologies Ltd (Formerly Geometric Ltd) , Mumbai**	
	370.	Prototype Tool Feed and Speed Calculator
	371.	Optimizing Work Flow in HCL Technologies using Atlassian JIRA and Editing of Batch Scripts
	372.	Optimization of Algorithm to Identify All The Components In The Vicinity of a Particular Feature
88	**Here Maps - Distributed Data , Mumbai**	
	373.	Here Maps Projects
	374.	STUDY ON OBJECT DETECTION APIs AND ACTIVE LEARNING
	375.	Pipeline Deployment and Automation

89	**Histogenetics , Chennai**	
	376.	ABO gene polymorphisms in different populations
	377.	TO FIND THE VARIOUS POLYMORPHISMS IN CCR5 GENE IN DIFFERENT POPULATIONS AROUND THE WORLD
90	**Hourglass Research , Mumbai**	
	378.	Infringement Analysis and Market Research.
91	**HSBC (WMR/GAC/DATA SCIENTIST) , Bangalore**	
	379.	Customer segmentation and sentimental analysis of social media feeds such as twitter related to covid-19
	380.	TER Application
	381.	1. Automation of the Quarterly Portfolio Monitoring for CE & UK portfolios, 2. Study to analyse the economic inconsistencies due to COVID-19 in Retail Risk Analytics
	382.	Data Quality Dashboard automation
	383.	Automation of Reconciliation Tool
92	**HSBC Portfolio Management Analytics (PMA) , Bangalore**	
	384.	BAU & Covid-19 Impact on Civil Aviation
93	**IDfy (formerly Baldor Technologies Pvt Ltd) , Mumbai**	
	385.	Authorization and Authentication service using Keycloak as IDP along with SAML
	386.	AUTOMATION, UNIT TESTING AND UAT OF THE PRODUCTS
	387.	Eyeballing and Admin Events Publisher Application
	388.	A Package Validation App
	389.	API Spec Changes to Aadhaar Masking
94	**IFB Industries , Goa**	
	390.	Liquid Dispensing in top loader
95	**Infinera , Bangalore**	
	391.	Puthon based PIF FPGA Validation
96	**InMobi - Software Development , Bangalore**	
	392.	Fraud Detection
97	**InMobi- Business Analyst , Bangalore**	
	393.	Owned and operated apps, Inmobi
	394.	IAP,Social â€" Wadogo, InMobi
	395.	Client Services
	396.	Sales Excellence in Microsoft Search Ads
	397.	Optimization of Auto-Bidder in InMobiâ€™s Demand Side Platform
	398.	Delivery, Sales and Optimization in Mobile Ad Industry
	399.	Optimisations and Scaling of Advertisement Campaigns in the ISO Region
	400.	Affiliate Partner Strategy and Operations - ONO
	401.	MANAGING PROGRAMMATIC DELIVERY ACROSS ASIA-PACIFIC REGION
	402.	BUILDING BRAND AWARENESS AND GROWTH IN ASIA-PACIFIC REGION FOR INMOBI
98	**Intel India Technology , Bangalore**	
	403.	Emulation Based Validation of Next Generation Server SoC
	404.	FORMAL CONNECTIVITY VERIFICATION
	405.	Study and Analysis of IR Drop and Reliability Methodologies in VLSI Design
	406.	Performing an Acceleration and validation of data search using FPGA
	407.	ATPG, PATTERN SIMULATION AND FAULT ANALYSIS FOR NETWORK SERVERS
	408.	Static Timing Analysis
	409.	Power Verification and Coverage Analysis of Intel Server SOC
	410.	UVM Based Testbench Development
	411.	Physical Design of a module
	412.	On Chip System Fabric for Efficient Communication between Processor Units and IPs
	413.	REGISTER VALIDATION
	414.	Physical Design of Module
	415.	UVM for Verification Environment and Error Automation
	416.	Secure Channels for Disaggregated Storage Management System (a) / Persistent Memory Firmware Features (b)
	417.	Soc Hardware Security and Standard Cell Library Design
	418.	1)Enabling visa_validate at subsystem and SoC Model 2)RTL Methodologies for Partition Merging

	419.	Physical design and Clocking implementation for a server SoC partition
	420.	1. Integration of Display Sub-sytem into an SoC
	421.	DDRIO
	422.	CDC and LINT Analysis
	423.	Double Data Rate Input Output IP (DDRIO IP)
	424.	Integration of OpenNESS with free5GC
	425.	Emulation based validation of Next Generation Server SoC And Design for Debug Methodology.
	426.	CDC and BMOD Analysis in High Bandwidth Memory IP
	427.	Physical Design of a Server SoC partition
	428.	PCIe based Long Range (LoRa) Module
	429.	NetAdapt: Platform-Aware Neural Network Adaptation for Intel Hardware
	430.	Validation of SoC through Emulation
	431.	GDR subip
	432.	ENHANCEMENT OF SOFTWARE TOOL FOR GRAPHICS PIPELINE VALIDATION
	433.	GUNDERSON ROCK - DESIGN OF 10nn ETHERNET IP
	434.	RTL Design quality checks at IP & SoC level
99		**Intel India Technology , Hyderabad**
	435.	INTERFACE PROTOCOLS AND UART TESTING & STUDY OF ASSERTION FLOW AND TEST CASE DESIGN
	436.	Hierarchical Timing Analysis
	437.	Verification of AXI Bus Protocol
	438.	Formal Equivalence Verification at RTI to Compile ,Compile to Syn and Syn to Apr and Timing Analysis and Physical Design Rules Check
100		**Intercontinental Consultants and Technocrats Pvt. Ltd , New Delhi**
	439.	Environmental Impact Assessment of NH-88 (Shimla-Mataur section), Detailed Design of Highway using MX Road
	440.	ENVIRONMENTAL IMPACT & MITIGATION PLAN &OVERVIEW OF PROJECT DOCUMENTS AND HIGHWAY DESIGN (2 LANE) USING MX ROAD .
	441.	ANALYSIS OF VARIOUS DESIGN OPERATIONS INVOLVED IN ROAD PROJECTS
101		**ION Energy , Mumbai**
	442.	BATTERY PACK DESIGN
	443.	USING CAN AND CAN-TP FOR FIRMWARE APPLICATIONS INSIDE A BMS
	444.	Diagnostic messages using CAN broadcast TP and function testing of errors and warnings
102		**IQVIA , Bangalore**
	445.	Understanding the Process Overview of Market Research in Pharma Sector, and its Types; Custom and Syndicated Research
	446.	Product Profiling Through Integrated Desk Research
	447.	Market Research and Competitive Intelligence
	448.	SECONDARY DESK RESEARCH ACROSS VARIOUS PROJECTS
	449.	Secondary Desk Research for Development of Pharma Market in CESE Region
	450.	MARKET RESEARCH AND PROFILING OF KEY OPINION LEADERS (KOL) IN PHARMACEUTICAL INDUSTRY
	451.	Secondary Desk Research for Competitive Intelligence
103		**IQVIA , Gurgaon**
	452.	Custom Market Research: Process Overview
	453.	Assessing commercial opportunity for new products in atopic dermatitis
104		**John F Welch Technology Center (GE) , Bangalore**
	454.	STUDY OF BOLTED JOINT BEHAVIOR
	455.	1. Simulation of cold spay of copper using different turbulence models. 2. Feasibility studies on direct current potential drop method for crack growth measurements.
	456.	Mesh Adaptation
	457.	Fatigue Life Assessment and Methodology for Aero-Engine Structures
	458.	Computational Fluid Dynamics Data Post-Processing and Automation using PYTHON
	459.	Non-destructive analysis of Thermal Barrier Coating systems for gas-turbine application
105		**Johnson Controls , Pune**
	460.	Mathematical and thermal modelling of fin and tube heat exchanger
	461.	Thermal Modeling of Heat And Mass Transfer for METHANE GAS

106	**JP Morgan Chase - Technology , Bangalore**	
	462.	Creation of new UI pages and Test cases
	463.	Corporate and Investment Banking
107	**JP Morgan Services GKN Global Research(GRC)-Fintech , Mumbai**	
	464.	Equity Strategy in Asia
108	**JP Morgan Services-GKN Data Science-Fintech , Mumbai**	
	465.	Risk Classification and Detection
	466.	Root Cause Analysis
109	**JP Morgan Services-GKN GlobalResearch(GRC)Finance , Mumbai**	
	467.	Fixed Income and Credit Research
	468.	Global Equity Research
	469.	Equity Research
	470.	Equity Research (Healthcare Technology and Distribution)
	471.	Equity Research and Analysis of European Technology Sector
	472.	Equity Research - US Utilities and Power
	473.	European Equity Research
	474.	Small Mid Cap Equity Strategy
110	**JP Morgan Services-GKN Quantitative Research-Fintech , Mumbai**	
	475.	Risk Forecasting Framework Migration
	476.	Hedging Equity Derivative Products and Developing Tools to Analyze the Results
	477.	Minimum Capital Requirements using Internal Model Approach - Fundamental Review of Trading Book
111	**JPMS - GR&C Commercial Banking Risk , Bangalore**	
	478.	Equipment Finance
	479.	1. Review and Validation of Equipment Valuation Grids. 2. Annual Review: Aircraft. 3. Annual Review of Leases for comparison with Residual Values 4. Creating Access Database for Historical data
112	**JPMS (Finance) CIB R&A Markets - Sales and Structuring , Mumbai**	
	480.	PRICING AND STRUCTURING OF DERIVATIVES
113	**JPMS (Finance) GR&C Market Risk , Mumbai**	
	481.	SPG Process Enhancement and Company Financial Parameter Dashboard
	482.	Daily VaR Reporting and Automation of FSI
	483.	Determination of Regulatory Capital requirements governed by Fundamental Review of the Trading Book (FRTB)
114	**JPMS (Fintech) CIB R&A Banking (CRG) , Mumbai**	
	484.	Financial analysis of DIT sector involving logistics industry
	485.	Centralized research group - Technology, Media & Telecom sector
	486.	Report on the Centralized Research Group (CRG), Regional Investment Banking (RIB) sector
	487.	JPMS Centralized Research Group-Financial Institutions Group
	488.	Centralized Research Group, Energy North America Region (NAMR)
	489.	Assessment, Monitoring and Management of Liquidity Risk across JP Morgan€™s Legal Entities in North America(NA) and Latin American(LatAm).
	490.	Centralized Research Group Real Estate
115	**JPMS (Technology - IT) CIB R&A Data Science - Fintech , Mumbai**	
	491.	Outlier Detection in Sparse and Noisy Time Series Data and Time Series Clustering
	492.	1. Root Cause Analysis 2. Use Case of RCA 3. Cash Equities Optimization 4. Email Moderation Control
116	**JPMS (Technology - IT) GR&C Quantitative Research - Fintech , Mumbai**	
	493.	Volatility Remarking
	494.	Source Data Consolidation of Financial Market Algorithms
	495.	Migration of existing tools to Voila environment
	496.	Index Characteristics Analysis
	497.	Forecasting Revenue, Loss, and Risk Weighted Assets for Credit Portfolio under CCAR Framework.
117	**JPMS (Technology - IT) GR&C Wholesale Credit Solutions - Data Science - Fintech , Mumbai**	
	498.	ACH facility limit determination based on historical usage (using time series forecasting)
118	**JPMS (Technology-IT) GR&C Model Risk Governance and Review - Ongoing Performance Management , Mumbai**	
	499.	Enhancing and improving existing web applications using React, Typescript and Python and JavaScript

	500.	Enhancing and improving existing web applications using React,Typescript, Python and JavaScript
119	**JPMS (Technology-IT) GR&C Model Risk Governance and Review - Risk Strategy & Execution , Mumbai**	
	501.	Development of Web Applications & APIs using Angular framework, JavaScript and Python
120	**JPMS-GR&C Credit Risk-Counterparty Credit Infrastructure&Capital , Mumbai**	
	502.	Counterparty Credit Risk
	503.	Analysis of Expected Exposure and Rising EE Profile
121	**KPMG , Bangalore**	
	504.	Tax Research and Benchmarking
	505.	Full Time Internship - Global Collaboration and Knowledge team
122	**KPMG , Gurgaon**	
	506.	A REPORT ON DEAL ADVISORY RESEARCH WITH FOCUS ON MERGERS & ACQUISITIONS (M&A) TRANSACTIONS
123	**Kristal.AI , Bangalore**	
	507.	Indian Advisory Algorithm And Equity Linked Option Notes
124	**La Renon Healthcare Pvt. Ltd. , Ahmedabad**	
	508.	TO STUDY THE ROLE OF UREMIC TOXINS IN PROGRESSION OF CKD AND MARKET POTENTIAL OF PRODUCT FIDOTOX USED FOR ELIMINATION UREMIC TOXINS IN INDIA.
	509.	A. THE MARKET POTENTIAL OF NEUROPATHIC PAIN DRUGS IN INDIA ALONG WITH UNMET NEED IN THE TREATMENT OF NEUROPATHIC PAIN and B. Analysis of prescription behavior for neuropathic pain drugs and potential of Palmiges in neuropathic pain.
125	**Lowe Services India Pvt.Ltd , Bangalore**	
	510.	Promo Forecasting Tool
	511.	PCE & PPI data automation, Retail Sales Dashboard, MSA Data Automation, TraQline Data Automation, Classifying Point of Sale not in stock survey comments, Role of Category Fact Packs, Data Repository
126	**Lucas TVS Ltd. , Pondicherry**	
	512.	DESIGN OF FRAME OF E-BIKE
127	**Mahati Infra Services Pvt. Ltd , Hyderabad**	
	513.	Design of Pressure Vessel, Piping as per ASME at Mahathi Infrastructure
128	**Maritime Research Centre , Pune**	
	514.	Noise and Vibration analysis
129	**MathWorks India Private Limited , Bangalore**	
	515.	Testing Strategies for Block Graphics And Technical Support in Engineering Development Group
	516.	TI C2000 Support Package Automated Test
	517.	Simulink Check Debugger
130	**MathWorks India Pvt. Ltd. , Hyderabad**	
	518.	Classification of ECG data using Convolution Neural Network (CNN) and its deployment on Raspberry Pi
	519.	Generating 3D Assets using Deep Learning
131	**Maxim Integrated , Bangalore**	
	520.	Comprehensive Analysis of Low Drop-out Regulator, Band-gap Reference and Programmable Oscillator.
132	**MediaTek Bangalore Pvt. Ltd. , Bangalore**	
	521.	Throughput Analysis of HSDPA and HSUPA channel
	522.	LTE U-PLANE LOG ANALYSIS TOOL ENHANCEMENTS AND AUTOMATION OF DATA COLLECTION
133	**Mercedes Benz , Bangalore**	
	523.	Analogous Thermal - Structural Simulation to Perform Topology Optimization of the Rotor Design of the Permanent Magnet Synchronous Motor
	524.	Image Space Modal Analysis & Web Based Management Tool
	525.	Development of tools for Automation and Data Visualization using Python and VBA
	526.	CFD methodology to predict Water Separation Efficiency of an Air Intake Duct for Commercial Vehicles.
	527.	Machine Learning Aprroach to Automated Intelligent Meshing
	528.	Child occupant safety analysis in small overlap crash load case
	529.	Controls Integration

	530.	1. Development of an AI application for automating post-processing tasks in crash simulations & 2. Life Cycle Assessment for car components
	531.	Parametric Studies of Transfer Mobility Correlation
	532.	Car cabin pressure variation due to closure motion
	533.	Torque optimization of AGS
	534.	Development of End to End CFD Simulation Workflow using Open-Source Software
	535.	'Rollover simulation load case setup automation' and 'Investigation of glass modeling to predict the failure behaviour'
	536.	CAE Using Artificial Intelligence And Machine Learning
	537.	FSI behavior study under impact analysis using SPH method
	538.	Modeling and pull out analysis of ball joint
	539.	Rear Door trim Method Development (Primary) and MPP Decomposition (Secondary)
	540.	ANALYSING RUNNING BOARD AND PROVIDING VIABLE MODEL THROUGH DESIGN OF EXPERIMENTS
	541.	Signal Extraction from Vehicle Model and FE model of Elasto Kinematic Fivelink Axle type
	542.	Project 01: NVH Diagnosis Tool, Project 02: NVH Data Driven Prediction Tool
	543.	3 POINT BENDING TEST ON FEMUR WITH FAILURE
	544.	Vehicle Noise Classification using Neural Networks and Audio Fingerprinting
	545.	Advanced FE model of Small Animal Impactor
134		**Micron Technology India Operations , Hyderabad**
	546.	Design verification of NAND flash memory
	547.	Solution development for code compatibility issues
	548.	Overview of NAND Flash and Firmware development
	549.	Schematic and Extracted Simulations of discrete transistor based scribe line modules
	550.	ASIC verification
135		**Microsemi India Pvt Ltd , Hyderabad**
	551.	Verification of AXI4 Bridge Device Under Test
	552.	GPIO & LSRAM Testing on PolarFire FPGA
	553.	APB4 VIP Enhancement and PERL Script Development
136		**MM Aqua Technologies Ltd. , Gurgaon**
	554.	IMPLEMENTING LEAN MANUFACTURING PRACTICES IN THE INDUSTRY
		Molecular Connections Pvt. Ltd. , Bangalore
	555.	Patent landscape report on treatment options for ÃŸ coronavirus
137		**Mtandt Rentals Ltd. , Ghaziabad**
	556.	Geocell and Geogid reinforced flexible pavement design for container stacking yard pavement.
138		**Myntra.com , Bangalore**
	557.	Data ETL, RCA and Predictive Modelling
139		**Nagarjuna Construction Company , Hyderabad**
	558.	EXECUTION OF WORKS AT NAGPUR MUMBAI SUPER COMMUNICATION EXPRESSWAY (PACKAGE III)
140		**National Centre for Biological Sciences , Bangalore**
	559.	Comparative Analysis Of Tumor Vs Non-Tumor Tissues In Pancreatic Cancer
	560.	Medio-lateral regeneration in Planaria
	561.	Production of recombinant Acetylcholinesterase enzyme in E. coli
	562.	A study on subtype specific functional differences in HIV-1 with focus on Nef, an HIV-1 regulatory protein
141		**National Council for Cement and Building Materials , Ballabgarh**
	563.	Suitability of Recycled Concrete Aggregates
	564.	INSTALLATION OF BIOGAS PLANT
	565.	Ultra High Performance Concrete and Application of Carbon Nanotubes in Higrformance Concrete
142		**National Institute of Science and Tech. Dev. Studies (NISTADS) , New delhi**
	566.	Developing A Framework For Technology Readiness Level Scale
143		**National Instruments Systems (India) Pvt. Ltd. , Bangalore**
	567.	Design to Fetch Raw IQ / Spectrum Data
	568.	1. Generation and Analysis of an OFDM Signal. 2. Backward Compatibility Architecture for Noise Figure Measurement
	569.	Grouping Automated Tests and Predicting Test-suite Result

144		NCPE infrastructure India Pvt.Ltd , Hyderabad
	570.	ANALYSIS AND DESIGN OF STRUCTURES AS PER INDIAN STANDARDS
	571.	Analysis and Design of Residential & commercial buildings as per Indian Standards
	572.	Analysis and Design of Commercial & Residential Buildings
	573.	Design of Underground Drainage and Storm Water Drainage
145		NetApp , Bangalore
	574.	Cold To Hot Data Migration
	575.	NetAppâ€™s SnapCenter Server and itâ€™s Plugins
	576.	Photon IoT
	577.	CVE analysis and Integration of tools for Component test gap improvement
	578.	Logging and Analysis in SnapCenter
	579.	ANALYSIS AND PREDICTION OF CRITICAL SECTION OF A PROJECT
	580.	NDMP support for Single File Restore in Flexgroups
	581.	Scalability Improvement of Active IQ Unified Manager
146		Netcore Solutions , Mumbai
	582.	ANALYSING THE ONLINE MARKETING STRATEGY OF PEPIPOST (A NETCORE PRODUCT)
147		Netcore Solutions , New delhi
	583.	CUSTOMER SUCCESS MANAGEMENT FOR NETCORE SOLUTION
148		Nippon Koei , Hyderabad
	584.	CHENNAI PERIPHERAL RING ROAD PROJECT
	585.	Chennai Peripheral Ring Road
149		Nomura - Finance - Product Control PnL , Mumbai
	586.	FID Credit- PCPNL
150		Novartis Healthcare Pvt. Ltd. , Hyderabad
	587.	Automation in Pharma
	588.	Development of automated workflows for periodic reporting of sales data
	589.	Dissolution Method Development and Other Analyses in Drug Development
	590.	Measuring the size of pills in an image using OpenCv & Getting useful data insights from large amounts of data using Machine Learning
	591.	ROLE OF FEASIBILITY ANALYSIS OF A DRUG USING REAL WORLD DATA IN DRUG DEVELOPMENT
151		Nutanix Technologies India Pvt. Ltd. , Bangalore
	592.	Network Segmentation Stabilization and Automation for Satadom Breakfix
	593.	Scalability of Recovery Plan
	594.	Development tasks on Sizer Team
	595.	Scale out Lazan
	596.	Enhancing Scalability and Operations Framework in Era
	597.	Anomaly Detection In Cloud Resource Access
	598.	Improvement and Development tasks for Micro services platform team
	599.	Development Tasks on Nutanix Portals
	600.	Re-Design of Ingestion Architecture with Druid
	601.	DEVELOPMENT TASKS ON FRONTLINE APPLICATION
	602.	Automation of backup of databases and Creation of UI for a service
	603.	Development tasks on insights data fabric.
	604.	Improvements in Logbay
	605.	Prism Subscription Service
	606.	Development work on Policies in Nutanix Calm
	607.	DEVELOPMENT PROJECTS ON NUTANIX ERA
	608.	Search Performance and Analysis
	609.	IMPROVEMENTS IN NCC LICENSE CHECKS AND PRISM GATEWAY
152		Nvidia - Software , Pune
	610.	Automation for Nvidia
	611.	Automation Testing and Deepstream Profiler tool
	612.	ADDING FEATURES TO NVIDIA INTERNAL TOOL
153		Nvidia Graphics - Hardware , Bangalore
	613.	NVIDIA GPU Context Switching unit & its Functional Safety Standards for Automotive Applications

	614.	Verification of Security Aspects in Memory Fabric
	615.	Test Optimization across various IO interfaces.
	616.	Verification of Memory Consistency and Coherency
	617.	RTL Testbench Modification & Performance Verification of Memory Subsystem of NVIDIA GPUs
	618.	PCIE Block Level Design Verification
	619.	Low Power Features validation
	620.	Specs Flow for Power Estimation
	621.	Power Management Unit Verification
	622.	Design for Debug
	623.	System Verilog Code Generation and RAL Model Integration for GPU Arbitrar Unit Testbench
	624.	Network On Chip Design Verification
	625.	INT Build Flow Optimisation and Restructuring
	626.	L3 Cache Coherency Verification
	627.	Fullchip GPU Verification Debugging and Scripting
	628.	Memory Controller for FPGA
	629.	Formal Verification of LDPC Modules and Plugin Development for Protocol Conversion
	630.	Developing Infrastructure Tools - Tegra Memory Subsystem Architecture
	631.	Migration & Verification of changes related to NVIDIAâ€™s NVLink Interconnect
	632.	Crossbar Translator
	633.	L2-L3 Cache Coherency Verification
	634.	PCIe Verification
	635.	CORE and FRONT END Unit Verification
	636.	System Performance Verification
	637.	Automated CONFIGURATION PARAMETERS Generation and PERFORMANCE CATALOGUE Population
	638.	Sizing the FIFO as per the configuration using the valid-credit interface protocol
154	**Nvidia Graphics - Hardware , Hyderabad**	
	639.	UVM TB for PWM and TACH
	640.	Create script to generate TSN register values/parameters for MGBE in similar lines as 1G.
	641.	CREATING A UNIFIED SUPER CLUSTER FOR NEXT GENERATION TEGRA SOC
155	**Nvidia Graphics -Software , Bangalore**	
	642.	Framework for auto-generation of software design documents using doxygen and understand tools
	643.	BUILD AND RELEASE MANAGEMENT OF NVIDIA DRIVEOS
	644.	NVrule, NVSM (Nvidia System Management) Rule Engine
	645.	Development of File system for the use in testing infrastructure
	646.	CTL API METRICS COLLECTION
	647.	MIGRATION TO GR 2.0 AND ORIN IMPORT WORK
	648.	Tool for generating report comparing code violations
	649.	Unit testing framework for pmu p-state initialization
	650.	NVGrok- a code search toool for NVIDIA
156	**NXP India Pvt Ltd. , Bangalore**	
	651.	POWER CORRELATION BETWEEN RTL AND GATE LEVEL
	652.	Power Estimation using EDA Tools And Benchmarking
157	**NXP Semiconductors , Noida**	
	653.	System On-Chip (SoC) Integration Through Physical Design Flow (Tools Flows Methodology)
	654.	SoC Physical Design Flow
	655.	RTL2GDSII Flow of 16FFC technology
	656.	SoC Verification with Regression Techniques
158	**OfBusiness , Gurgaon**	
	657.	Cross-platform mobile app development using react native
	658.	Enhancements in AutoSuggest Algorithm
	659.	Video Upload API
	660.	Incident Management Automation
	661.	Progressive Web App implementation for OLX Buyers team
159	**Oswal Industries , Mehsana**	

	662.	Design Package for Valve manufacturing at Oswal Industries Limited
160	**Oyo Rooms (Tech) , Bangalore**	
	663.	Software development-API Integration, Website Development, Internal Tools development
	664.	WEB DEVELOPMENT
	665.	Full stack development on belvilla website
	666.	Backend Development on the traum platform
	667.	Optimising and Improving Belvilla website
	668.	Front End Development
	669.	Full Stack Development
	670.	Map Service and Invoicing Service
	671.	Leisure Accommodation Rental Services - Back-End
	672.	Price data migration and bug solving
	673.	Backend Development for Traum-Ferienwohnungen
161	**OYO Rooms , Hyderabad**	
	674.	SUPPLY CHAIN MANAGEMENT AND OPERATIONS
	675.	SEO microservice and Monitoring
	676.	SSO integration and optimized front end feature developments for multipage OYO LIFE applications
	677.	Task Scheduler & Clockwork Integration and Other Assigned Projects
	678.	BUILDING MICROSERVICE FOR OYOâ€™S HMSFOM TEAM
	679.	Supply Chain Operations at OYO Rooms
162	**OYO Tech , Gurgaon**	
	680.	Overview of Android App development projects in Consumer App Android Booking/Post Booking Team at OYO
	681.	Service Development for Customer Service Tech Team at OYO
	682.	NO CONSOLE MONTH-END RECONCILIATION
	683.	Evolution of software architecture from Monolithic to Microservice architecture
	684.	BACK END DEVELOPMENT USING MVC TOOLS
	685.	Working in OYO's Operations Technology
163	**PAYPAL , Bangalore**	
	686.	Billing Admin Tool
	687.	Configuration Compliance Dashboard
164	**PAYPAL , Chennai**	
	688.	Asynchronous Crypto Client
	689.	Analysis of Risk Actions, Covid-19 and New Ventures of Paypal
	690.	Disclosure Insights
	691.	Loss saving initiatives - Resolutions and Protections
	692.	INVESTIGATION ASSISTANT
	693.	Loss Forecasting
	694.	Apache airflow scheduler engineering - API development and testing
165	**Pepper Content Pvt. Ltd. , Mumbai**	
	695.	Understanding and achieving operational efficiency using enabler tools, extensions and applications and Strategize and develop growth plan to enter possible business verticals
166	**Pfizer Ltd. , Chennai**	
	696.	Transition of Medical Device Directive (MDD) to Medical Device Regulations (MDR): Key changes and Impact on various delivery systems
	697.	Off-Label Drug Indications: Stance of Regulatory Agencies, Healthcare Professionals and Pharmaceutical Industry in Current Scenario
	698.	BIOSIMILARS
	699.	Regulatory requirement for complex injectable.
167	**PharmaACE , Pune**	
	700.	Introduction to Oncology Forecasting and Forecasting Analysis for Myelofibrosis
	701.	INTRODUCTION TO CHART AUDIT AND PATIENT CHART AUDIT OF DIFFUSED LARGE B CELL LYMPHOMA AND OTHER CANCER PATIENTS

168	**Piramal Group , Mumbai**	
	702.	Multiple Automation & Risk Analysis Projects
	703.	SALES DATA ANALYTICS AND PREDICTION MODEL
	704.	Financial Documents Analysis
	705.	End Semester Report
	706.	Role at Consumer Product Division, Piramal Enterprises Limited, Mumbai
	707.	Robotic Testing and Robotic Process Automation
	708.	ROLE AT CONSUMER PRODUCT DIVISION, PIRAMAL ENTERPRISES LIMITED, INDIA
	709.	Data Extraction From Scanned And Normal PDFs
169	**Praj Industries Ltd., , Pune**	
	710.	Failure analysis of pretreatment system of lignocellulosic biomass for bioethanol production
170	**PricewaterhouseCoopers (PWC) , Gurgaon**	
	711.	Force Majeure and PPP concession agreements
171	**Publicis Sapient , Bangalore**	
	712.	Hiring Automation
172	**Qualcomm India Pvt Ltd- Bangalore , Bangalore**	
	713.	Estimation and Characterization of cell delays
	714.	Improvisation Of the ddr memory controller design in terms of power
	715.	Divergence Point Detection
	716.	Disabling Tool inserted timing critical CGCs from design netlist.
	717.	Analysis of timing paths after various stages of Physical Design
	718.	Device Firmware Upgrade in TWS devices
	719.	Automation of testbench environment
	720.	Memory Controller and Power Aware Verification
	721.	Accurate Graphics performance projection using an Established model at pre-silicon stage
	722.	Survey of Intra and Inter SoC Interconnects and Bus Protocols
	723.	Technology Benchmarking using Primetime based Ring Oscillator
	724.	Differences in Clock Constraints Before and After Placement and Routing
	725.	Security Controller block coverage using Z01X tool & Flow automation using Perl and Splunk
	726.	LPDDR4 Memory controller verification
	727.	Physical Design and Automation
173	**Qualcomm India Pvt Ltd- Bangalore , Hyderabad**	
	728.	Floorplan and Placement &Route of a Block
	729.	Synthesis and STA of a block in CPU
	730.	To understand and debug problems with the ARM MMU intialization
	731.	CPU VALIDATION
	732.	Design Verification of DDR
	733.	Boot time profiling and memory optimization
	734.	Bluetooth Snoop Analysis
	735.	MODEM_DUMP_ANALYSIS_TOOL_AND_PLUGIN
	736.	Automation of the Log Extraction Process
	737.	Performance evaluation and optimization of FastRPC driver on Windows
	738.	WLAN Power Save Mode Testing on Simulator
	739.	Video Processing: Power and Performance Management
	740.	Verification of Bus Architecture
	741.	STUDY ON THE CONCEPTS OF SOC DESIGN
	742.	Study of concepts inn SoC design
	743.	Memory Testing and Fault diagnosis using MBIST & Static Timing Analysis
	744.	ACCESS CONTROL CONFIGURATION TO REDUCE BOOT TIME KPI
	745.	Debugging Mobile Station Modem SoC
	746.	Debugging of Audio Hardware Abstraction Layer
174	**Qubole , Bangalore**	
	747.	Dev Productivity at Qubole
175	**Quick Heal Technologies Ltd , Pune**	
	748.	Dynamic Malware Detection

176	Ramboll India Pvt. Ltd. , Gurgaon	
	749.	ANALYSIS AND DESIGN OF STRUCTURAL STEEL BUILDING AND CONNECTIONS AS PER NORWEGIAN NATIONAL STANDARDS
	750.	Analysis and Design of Bridges (Substructure and Superstructure)
	751.	ANALYSIS AND DESIGN OF PILE CAPS USING STRUT AND TIE AND BEAM METHOD
	752.	Analysis and Design of Airfield Pavement
	753.	Airside stormwater drainage design of an airport
177	Rane Madras Ltd , Chennai	
	754.	BRAKE LINING MANUFACTURING AUTOMATION
	755.	Process parameter optimization and failure rate reduction of various assembly line with the help of FEM analysis
178	Reflexis Systems India Pvt Ltd. , Pune	
	756.	Software Developer in EPP
	757.	XML To CSV Conversion, CSV Validation App
	758.	Automation tool for updating database
	759.	Debugging Issues
	760.	Machine Learning Techniques And Implementation
	761.	Development and testing of Reflexis Workforce Scheduler
	762.	Automation of remote execution of testcases
179	Rivigo Tech , Gurgaon	
	763.	Backend Development using Spring Boot
	764.	FRONTEND AND BACKEND DEVELOPMENT FOR WEB APPLICATION USING SPRING BOOT
180	Samsung R & D Institute , Bangalore	
	765.	Action recognition from videos for peak event detection from long videos
	766.	Resource Prediction during in-app transitions
	767.	Customer Churn Prediction In Mobile Phone Industry
	768.	Image Beautification
	769.	Android App Bundles Study and Implementation
	770.	Exploration of TOF based Depth
	771.	Smart Watch- Internet Of Things
	772.	UPI ID GENERATION AND QR CODE REPRESENTATION
	773.	VISUALIZING SMARTWATCH USING AUGMENTED REALITY (IoT) & PREDICTING ARGLASS CONTROLLER POSITION FROM ITS ORIENTATION (ATL)
	774.	Large Scale Data Organizing, Processing and Error Reporting
	775.	Human Eye Gaze Estimation
	776.	1. REST API Testing Framework 2. Pattern Miner Android App Extension
	777.	Development of webview features for tizen port
	778.	Development of server for Programmatic Direct Advertising
	779.	3D reconstruction: Facial Mesh & Material Genereation
	780.	CONTEXT BASED INTELLIGENT FRAME RATE SELECTION FOR SUPER SLOW MOTION
	781.	Image Classification using OpenCV and Frontend Development in Angular
	782.	Bixby Data Gibberish Classification
	783.	Feasibility study & implementation of multi-camera recording and playback
	784.	Credt Risk Analysis - Prediction of Default
	785.	Video Super Resolution
	786.	Rich Communication System-Simulation And Validation framework
	787.	PPT Integration in Video call
	788.	Applications of Artificial Intelligence & Machine Learning in 5G Wireless Networks
	789.	TEXT CLASSIFICATION USING NEURAL NETWORK FOR KNOX MESSENGER & ILA (INTERNAL LOG ANALYZER) TOOL DEVELOPMENT
	790.	A Video Based Fire Detection using Deep Learning Model
	791.	MODEM SYSTEM CRASH DEBUG ENHANCEMENT AND AUTOMATION
	792.	Question Answering Expert Sysem
	793.	Text Classification using Artificial Neural Network & MIMO detector using Path Preserving Trellis Search Algorithm
	794.	Implementation of Sparse and Binary Convolution
	795.	Video Stabilization Methods in Smartphones

	796.	UNDERSTANDING AND EXTRACTING VARIOUS USER EQUIPMENT (UE) CAPABILITIES
	797.	Exploration of AI Image Super Resolution in Bayer domain for enhanced quality
181	**Samsung R&D Institute India-Delhi (SRI-D) , Noida**	
	798.	Sound Separation using Deep Learning & Face Detection
	799.	Anti-Spoofing Speaker Verification
	800.	Cross-platform Recommendation System
182	**Samsung Semiconductor India R&D Center-Hardware , Bangalore**	
	801.	Verification of Rhino SSD and GPIO Sideband Agent Design
	802.	Camera Image Sensor
	803.	Automation in verification process
	804.	Design and verification of 4nm SRAM memory using ESPCV and UVM
	805.	Verification of LPDDR4
	806.	Verification of RTL design through c model
	807.	SATA FRAMEWORK DEVELOPMENT FOR MULTI-OS STORAGE VERIFICATION PLATFORM SOFTWARE
	808.	Design of LPDDR PHY
	809.	To Develop DFT dashboard
	810.	IP Performance Tracker
	811.	Automation of Differential Blocks of Imaging Subsystem of a Virtual Prototype
	812.	PhysicalDesign â€" CMOS Image sensor
	813.	Failure Triage and Debug Tool
	814.	Memory Design Verification
	815.	I/O signature and workload identification in a userspace framework
	816.	DESIGN OF IMAGE PROCESSING SENSOR MODULE
	817.	AUTOMATION AND GUI INTERFACE USING PYTHON
	818.	Formal Verification of Debug Structures
183	**Samsung Semiconductor India Research -Software , Bangalore**	
	819.	HYBRID PLATFORM ENABLING CO-SIMULATION
	820.	SIMULATION OF DUAL-SIM-DUAL-STANDBY ON NS3 SIMULATION ENVIRONMENT
	821.	Aggrgator Emulator Tool & File Management Tool
	822.	Throughput degradation due to increased overhead in LTE as compared to 5G NR.
	823.	TETRA CELL BAD PIXEL CORRECTION
	824.	Dual SIM Dual Standby (DSDS) in ns-3
	825.	Bad Pixel Detection Using Neural Networks
	826.	AI/ML ACCELERATION ON AXI AND PCI-E INTERFACE USING FPGA AND GPU
184	**SAP Labs , Bangalore**	
	827.	Backend Development in Microservice and Monolith Architecture
	828.	Development Dashboard and ASPM
	829.	Release Assessment and Scope Dependency Tool
	830.	Deployment and Debugging of the Micro-service Codebase
	831.	Cloud Integration Tests for Hyperscaler Managed Redis and PostgreSQL
	832.	SAP S/4 Hana Cloud Release Assessment and Scope Dependency Tool (RASD)
	833.	Integration Tests for Hyperscaler managed Redis and PostgreSQL
	834.	ODATA V4 API USING RESTFUL ABAP PROGRAMMING AND CONCUR WEBSITE USING MENDIX
	835.	Continuous Integration and Continuous Delivery
	836.	Development dashboard and S4Federator
185	**Servicenow Software Development India , Hyderabad**	
	837.	Performance Testing
	838.	Spoke Development
	839.	Seismic component for raising incident
	840.	Visual Task Boards
	841.	ReviewNow
	842.	Similar Knowledge articles to HR cases
	843.	ServiceNow SURF
	844.	Dynamic SLA

186	shipsy , Gurgaon	
	845.	Automating INTTRA and Daily Summary Report
187	Siemens PLM Software , Pune	
	846.	Design and implementation of an intelligent tolerancing system in SIEMENS NX
	847.	Improving efficiency in CI/CD with neural networks and reinforcement learning.
	848.	DESIGN OF DATA STRUCTURE FOR INTELLIGENT TOLERANCING
	849.	Teamcenter Data Model - UML Designer
188	Siemens technology and Services Pvt ltd , Bangalore	
	850.	Decision Support System for Engineering Software
	851.	Automation of Computer Aided Manufacturing
189	Signalchip Innovations Pvt. Ltd. , Bangalore	
	852.	JESD204B - Serial Interface for Data Converters
190	Singh Plasticisers & Resins (I) Pvt. Ltd , Delhi	
	853.	STUDYING AND ANALYZING OF PHENOL RECOVERY UNIT FOR ITS CONTINUOUS AND EFFICIENT WORKING.
	854.	Continous analysis, design and improvement of powder resin plant and capability anaysis of finished goods
	855.	Automation and Digitalization
	856.	STUDYING, ANALYSING AND DESIGNING THE POWDER PLANT FOR EFFICIENT AND CONTINUOUS MANUFACTURING OF THE PRODUCT
191	SMEC India Private Limited. , Gurgaon	
	857.	Uttar Pradesh Major District Road Infrastructure Project
192	Solar Energy Corporation of India , Delhi	
	858.	Design of Module Mounting Structures
193	Strand Life Sciences Pvt Ltd , Bangalore	
	859.	RELEVANCE OF BIOMARKERS IN CANCER THERAPIES
	860.	Clinical Interpretation of breast and ovarian cancer and other germline cancers using Next Generation Sequencing techniques.
194	Synopsys (India) EDA Software Pvt Ltd. , Bangalore	
	861.	Design and Verification of Verilog RTL code using VLSI Front-end techniques
195	Tata Digital Health , Bangalore	
	862.	Working at Tata Digital Health
	863.	API DEVELOPMENT AT TATA DIGITAL HEALTH
196	Tata Motors Ltd. , Pune	
	864.	GEN3 NPI(New Product Introduction)Improving efficiency in Product Development,Task : Develop a 36 month timeline for a new top hat program
	865.	GEN3NPI- Improving Efficiency in Product Development
197	Tata Steel , Jamshedpur	
	866.	Root cause analysis of failure of Double taper roller bearing & Vibration analysis of its cage
	867.	Design of a maitenance platform for Stacker Reclaimer
	868.	TO FIND AN APPROACH TO CHANGE EXIT ROLLER TABLE UNDER MEASURING HOUSE
	869.	Root cause analysis and life enhancement of skirt lifting tie rod which is failing by pre-mature elongation
198	Tega Industries , Kolkata	
	870.	Design and Implementation of industry 4.0 in Tega Industries
	871.	Design and implementation of industry 4.0 in Tega industries Dahej
	872.	DESIGN AND IMPLEMENTATION OF INDUSTRY 4.0 AT TEGA INDUSTRIES Ltd.
199	Tejas Networks , Bangalore	
	873.	Wi-Fi Access Point Development
	874.	MQTT Protocol & Mosquitto Broker
	875.	24 PORT ETHERNET SWITCH
	876.	Date Dependent Password Generation
	877.	FIFO Based UART Console Logging
	878.	Design of High Speed Networking Card
200	Texas Instruments (I) Pvt. Ltd - Systems , Bangalore	
	879.	Design of Marchand Balun
	880.	Building of a Data Analysis Toolkit for Medical Imaging Applications

201	**Texas Instruments (I) Pvt. Ltd. -Analog , Bangalore**	
	881.	Emulation and Protocol Compliance Suite for USB 2.0 Repeater configuration
	882.	MEASUREMENT OF NOISE AND POWER SUPPLY REJECTION RATIO OF A LOW DROPOUT VOLTAGE REGULATOR ON AUTOMATIC TEST EQUIPMENT
202	**Texas Instruments (I) Pvt. Ltd. -Digital , Bangalore**	
	883.	Creation of HTML based STA (static timing analysis) DASHBOARD
	884.	designing of low power phase locked loop
	885.	Area Optimization of SRAM BIST Controller
203	**Texmaco Rail & Engineering Ltd. , Kolkata**	
	886.	Understanding the effect of surface turbulence in straight shroud casting
	887.	Optimisation of normalising procedure for low alloy steel used for railway bogie castings
204	**Thornton Tomasetti , Mumbai**	
	888.	REVIEW OF SHOP DRAWINGS
205	**Time Tooth , Noida**	
	889.	CFD Analysis Setup of a Pneumatic Shock Absorber and Design of a Flow Sensor
206	**Toshiba Software (India) Pvt Ltd , Bangalore**	
	890.	Tiny Firmware for a client SSD.
	891.	SSD Management tool
	892.	NVMe Express and NVMe Linux Driver
207	**Udaan , Bangalore**	
	893.	Data Analysis in Clothing Department
208	**Udaan , Delhi**	
	894.	RTO Reduction and cost analysis; Launch of Private label product
209	**Udaan , Hyderabad**	
	895.	CLassfication of customer base into different categories and finding out the requirements of certain category stores.
210	**UPGRAD , Mumbai**	
	896.	Blockchain Technology
	897.	Content Development for Data Science modules
	898.	Redevelopment of Product Management Program
	899.	Solar System
	900.	Dev-ops and CI/CD
	901.	Content and Academic Course Development: Full Stack Development
	902.	Content Design for a Machine Learning and Cloud Program
211	**UST Global- Chennai , Chennai**	
	903.	Automating syringe manufacturing line using the concept of Internet of Things(IOT)
	904.	Atchayam (Serverless Computing based Mobile Application)
212	**UST Global Infinity Labs-Robotics , Thiruvananthapuram**	
	905.	Solution to Bottom of the basket loss
	906.	Humanoid
	907.	&Double; Filled Free Space for Storage Area&Double;
	908.	Analysis of POS Data
	909.	computer vision in retail POC
	910.	Application of Computer Vision and Machine Learning Based Methods to Establish Proof of Concept
213	**Valorem Stack Pvt. Ltd. (FloBiz) , Bangalore**	
	911.	Building Mobile and Web Accounting Solutions for MSMEs
214	**Visteon Corporation , Pune**	
	912.	DEFINITION OF CLUSTER MOUNTING ANGLE BY THEORETICAL AND PRACTICAL WAY TO AVOID SUNLIGHT REFLECTION ON LCD.
	913.	Respiration and Condensation in two wheeler cluster
	914.	Design of instrument cluster of vehicles under static and fatigue loading
215	**VMS (Vakil Mehta Seth) Consultants Private Limited , Mumbai**	
	915.	Analysis and Design of Multistorey Residential building
	916.	DESIGN AND ANALYSIS OF 62 STOREY CONCRETE STRUCTURE
	917.	ANALYSIS AND DESIGN OF HIGH - RISE RESIDENTIAL AND COMMERCIAL BUILDINGS
216	**VMware Software India Pvt. Ltd. , Bangalore**	

	918.	Development of microservices-like solutions on VMware's Workspace ONE Cloud Platform
	919.	Polaris
	920.	VMware Identity Manager
	921.	Container Migration and Mobility Migrations in VROPS
	922.	Mitosis-Migration and replication of page tables
	923.	Software Based Distributed PMem
	924.	HCX link visualization
	925.	Instrumenting with Wavefront
217	**Vuclip India Pvt. Ltd. , Pune**	
	926.	Frontend Web Development and maintenance for viu website
	927.	Advanced Analytics
	928.	Improvements in CMS and Moments Tool for User experience Enhancements
218	**Wabco India Pvt. Ltd , Chennai**	
	929.	Valve modeling of Modular Braking System Platform 2.0
	930.	Automatic Tire Inflation System for Commercial Vehicles
219	**Walmart Global Technology Services , Bangalore**	
	931.	Development of Automated Quality Assurance for Groceries
	932.	Markdown Elasticity Model Governance
	933.	RADD (Rapid Application Deployment And Development)
	934.	Social Listening
220	**Western Digital (SANDISK) , Bangalore**	
	935.	Analysis, Design and Simulation of Analog Circuits used in Charge Pump Systems
	936.	STUDY OF POWER DISTRIBUTION NETWORK(PDN) RELIABILITY ANALYSIS AND DEVELOPING METHODOLOGY FOR DYNAMIC VOLTAGE DROP(DVD) IMPACT ANALYSIS ON LOGIC CELLS TIMING CHARACTERISTIC
	937.	COMPREHENSIVE ASSESSMENT AND COMPARISON OF THE RELIABILITY OF NAND MEMORY FROM TWO FABS AND DISCURSIVE ESTIMATION OF TRUE ERASE DETECTION
	938.	Enabling NAND Tester Platform to Calculate Errors for Different Programming Sequences
	939.	AST Checkout and Deployment Framework
	940.	ASIC Design Flow, AXI Protocol, Verification Methodologies And Test Interface Verification
	941.	Manufacturing Self Test
	942.	Timing Closure of a Block
221	**Whirlpool , Pune**	
	943.	HMI Encoder Control
	944.	Volume optimization of Belt and Pulley System , Lifter Profile Optimization for Wash performance enhancement and reduction of Power consumption
	945.	Wear prediction using Finite Element Analysis
	946.	Carton Material characterisation
	947.	1. Guideway Mechanism for Refrigerator and 2. Airflow optimisation to the ice maker to improve ice rate
	948.	Design, Creation and Implementation of a HIL Hardware Channel Diagnostic Tool
222	**WickedRide Adventure Ltd.(Bounce) , Bangalore**	
	949.	Churn Period Definition and Marketing Campaign Impact Analysis
	950.	Deep Learning based OCR
	951.	Reliability model for Electric Vehicles and Bad Parking Analysis
	952.	Asset Safety of Bounce Bikes
	953.	Driving efficiency of Bounce Heroes: Smart Task assignment to reduce operation costs
223	**Xilinx India Technology Services Pvt. Ltd. , Hyderabad**	
	954.	Installation of LAVA software and Testlink Management
	955.	ACCELERATING AI MODELS ON FPGA USING VITIS-AI
224	**Zendrive India Pvt Ltd , Bangalore**	
	956.	Event Consistency in Parallel Trips, Temporal Feature-Based Driver v/s Passenger Identification
	957.	SCALABLE ALTERNATIVE TO POSTGIS IN A DISTRIBUTED ENVIRONMENT
	958.	Production Pipeline to generate datasets
	959.	Role Based Access Control on Elasticsearch Cluster
	960.	Build an API for fetching SDK logs from elasticsearch and also build a website to display those
	961.	Design and Implementation of SDK(Software Development Kit) and Internal App Release Pipeline

225	Zeotap India Pvt. Ltd. , Bangalore	
	962.	Identity Graph Quality Pipeline
	963.	Half Life (ID Deletion Pipeline)
	964.	Lookalike Migration, Revenue Estimator Migration, Airflow POC, Half-Life, 360 Affinity
	965.	ID deletion pipeline and Dynamic cookie ingestion automation
	966.	Connect v2.0 Back end engineering
226	Zinnov Management Consulting Pvt. Ltd., , Gurgaon	
	967.	Research and Analysis of Digital Workplace Market and Container Market

LIST OF PROJECT ASSIGNMENTS FOR FIRST SEMESTER 2020-2021

1	ACSZ Tech PVt. Ltd , Chennai	
	1.	CLUSTERING AND CLASSIFICATION OF BANK SERVICE SMS & TRANSACTION TABLE DATA EXTRACTION FROM CREDIT CARD STATEMENTS
2	Aditya Birla Group -Data and Analytics , Bangalore	
	2.	TIME SERIES FORECASTING
	3.	WEBSITE DEVELOPMENT FOR IGFL
	4.	APPLICATIONS OF NLP IN A DATA ANALYTICS FIRM
3	Aditya Birla Insulators , Halol	
	5.	Railway Insulator Project
	6.	REWORK REDUCTION IN POST KILN AREA
	7.	Oracle Upgrade Project
	8.	MIGRATION TO JAVA
4	Aditya Birla Science & Technology Company Ltd. , Mumbai	
	9.	APPLICABILITY OF MEMBRANE TECHNOLOGY AND MULTI-STAGE FLASH EVAPORATOR IN VISCOSE STAPLE FIBRE PROCESS
	10.	DEVELOPMENT AND COMPARISION OF PREDICTIVE MODELLING TECHNIQUES FOR CARBON BLACK BEADS USING MACHINE LEARNING
5	AFour Technologies Pvt. Ltd. , Pune	
	11.	Development of Enterprise Resource Portal Features
	12.	Enhancement of User Interface for ERP Portal
	13.	SOCIAL MEDIA APP FOR SOCIETIES USING REACT NATIVE
	14.	Android Application for Local Grocery Delivery Service
6	Agami Realty , Mumbai	
	15.	Civil Engineering Works, Business Promotion and Market Research Projects
7	Airmeet , Bangalore	
	16.	Targeting potential clients for Airmeet through E-mail
	17.	Growth Strategies and Business Development for Airmeet in North America
	18.	Creating an end to end growth strategy for tapping into the Education Sector
	19.	International Expansion of Airmeet through experimenting & executing business strategies, and Lead Funnel Analysis
	20.	"Growth Strategies and Expansion of Airmeet in the North America Region"
	21.	Growth strategies adopted by the Indian Team to increase communities and onboarding process of new communities
	22.	"Growth Strategies and Expansion of Airmeet in Europe Continent"
	23.	Business development work as a 'growth associate' for the APAC region at Airmeet)
	24.	Strategies and Experiments used by the Growth India team to ensure exponential growth of Airmeet Platform)
8	Alien Developers , Hyderabad	
	25.	Automation, Sales and Land Audit, Business Models
	26.	QA/QC of Construction materials from incoming raw materials to handover of the flats
9	AlmaConnect , Gurgaon	
	27.	Job Consultation Program
	28.	COMPREHENSIVE REPORT
	29.	Product Marketing For AlmaConnect
	30.	Ad Campaign Management, SEO and Data Collection & Analysis.
	31.	JOB MODULE (AlmaConnect)
	32.	Web Scraping

	33.	Ruby on Rails Web Development
	34.	PRODUCT DESIGN
	35.	ACCOUNT MANAGEMENT
	36.	Alumni in News, Business Development (AlmaConnect)
10	**AltMat , Ahmedabad**	
	37.	NaturalFibreComposites&Delignification
11	**ALW Lighting India Pvt Ltd , Ludhiana**	
	38.	ILLUMINATION AND OPTICS DESIGN AND CHARACTERIZATION FOR ARCHITECTURAL LED LUMINAIRES
	39.	Sustainability practices, CFL to LED repurposing, LED testing, Lighting Control Methods and LDT Repository Tools
12	**ALW Lighting India Pvt Ltd- Nontech , Ludhiana**	
	40.	LIGHTFORMS DIGITAL
13	**Amazon - Machine Learning , Hyderabad**	
	41.	ROBL (Routes Over Block Length) PREDICTION
	42.	TRANSIT TIME ESTIMATION
	43.	CONTEXT AWARE 3D INSTANCE SEGMENTATION OF MONOCULAR VIDEO
14	**Amazon Development Center , Chennai**	
	44.	INTEGRATING ULTRON WITH AN A/B TESTING SERVICE
	45.	Enhancing Customer Experience in Alexa Voice Assistant
	46.	IMPLEMENTING NEW FEATURES IN FIRE OS
	47.	PROJECT KRYPTON, TEAM EPSILON
	48.	Migration from Mason Platform to Spring MVC Platform
	49.	APEX CONSOLE : A DASHBOARD FOR APEX SERVICES
	50.	'Design and Implementation of Transaction History'
	51.	CONTENT WIZARD INCOMPATIBILITY ISSUE
	52.	Krypton Migration
	53.	ONBOARDING DIGITAL PAYMENTS TEAM TO ELK STACK
15	**Amazon Development Center , Hyderabad**	
	54.	Intelligent Lineage
	55.	Run-time Optimization of Integration Tests
	56.	Decoupling of Marketing Stack
	57.	ENHANCEMENTS IN NODE LAUNCH WEB SERVICE
16	**Amazon Professional Services , Delhi**	
	58.	Automated Online Proctoring
	59.	Personalized Testing
17	**ANS Commerce - Non tech , Gurgaon**	
	60.	BUSINESS STARTERGY ROLE AT ANS COMMERCE
	61.	DIGITAL MARKETING IN THE ECOMMERCE INDUSTRY
	62.	CONVERSION RATE OPTIMIZATION OF ECOMMERCE PLATFORMS
	63.	E-COMMERCE ANALYTICS
18	**ANS Commerce - Tech , Gurgaon**	
	64.	Recofy- A tool for performing reconciliation
	65.	Web Development
19	**Apollo Tele Health Services (ATHS) , Hyderabad**	
	66.	MICROSERVICE WEB APPLICATION WITH OFFLINE FEATURE
	67.	OFFLINE FEATURE AND WEB APPLICATION DEVELOPMENT
20	**Apollo Tyres , Gurgaon**	
	68.	BRB DIGITIZATION
21	**Apple India Pvt Limited , Hyderabad**	
	69.	Voice Intent Recognition
	70.	Component Development for internal Trace and Log analysis Tool
	71.	PERSONALIZED RECOMMENDATIONS FOR RETAIL STORE
	72.	Machine learning based model to predict system crashes
	73.	FIRE OS
	74.	MODEL AND KNOWLEDGE GRAPH FOR CLUSTERING OF THREADS

22		**Arm Soft Technologies , Chennai**
	75.	ESTIMATING SEMANTIC TEXTUAL SIMILARITY BETWEEN TWO TEXTS
23		**ARVAUTO ECOM PRIVATE LIMITED , Chennai**
	76.	A REPORT ON THE INDIAN AUTOMOTIVE AFTERMARKET ANALYSIS, PROCESS MAPPING & OPERATING MODEL
	77.	INDIAN AUTOMOTIVE AFTERMARKET ANALYSIS, BUSINESS
24		**Asanify Technologies Pvt. Ltd. , Kolkata**
	78.	BACKEND WEB APPLICATION DEVELOPMENT
	79.	DEVELOPING WEB APPLICATION
25		**Ascendo. AI , California**
	80.	NOTIFICATION SERVICE
	81.	INTEGRATION HUB
26		**ASCO Numatics India Pvt. Ltd. (Emerson Automation Solutions) , Chennai**
	82.	Design of 3/2 way solenoid valve for sea water application (direct acting & dry construction)
	83.	DESIGN OF A PUSH PULL VALVE TO MEET LOW TEMPERATURE REQUIREMENTS(-60°C)
	84.	AUTOMATION OF SHOT COUNTING IN MOULDING MACHINES
27		**Asteria Aerospace Pvt. Ltd. , Bangalore**
	85.	PRECISION LANDING USING JEVOIS SMART CAMERA AND ARUCO TAGS
	86.	AUTONOMOUS INDOOR NAVIGATION USING VISUAL INERTIAL ODOMETRY AND SLAM ALGORITHMS WITH INTEL REALSENSE T265 TRACKING CAMERA
28		**Atyati Technologies , Bangalore**
	87.	DEVELOPMENT FOR AEPS BASED FINANCIAL INCLUSION PROJECTS
	88.	Web APP development
	89.	AUTOMATION TESTING
	90.	Android Development using JAVA in Android Studio
	91.	BANK STATEMENT ANALYSER
	92.	TVAM ANDROID APP DEVELOPMENT
	93.	Full stack development of .NET core MVC application with microservices
29		**Audree Infotech P Ltd. , Hyderabad**
	94.	Web development in LIMS and MTS using .NET and Angular
30		**Avaamo , Bangalore**
	95.	ServiceNow Assistant Development
31		**BellyMelly , California**
	96.	DEVELOPING AN ECOMMERCE WEBSITE FOR SERVICES
32		**Birla Carbon, SKI Carbon Black (India) Pvt. Ltd. , Renukoot**
	97.	Shear Rate Estimation for Stirred Tank Operations
	98.	COMPUTER VISION APPLICATION
33		**Bisquare Systems Pvt. Ltd. - Onsite , Noida**
	99.	Cloud Based Smart Mesh Home Automation
34		**Blue Jeans Network India Pvt. Ltd. , Bangalore**
	100.	Implement A Way To Query Accounts Belonging To A Channel and Show Scim Related Configs On Spector
	101.	Web Meeting Client (Front-end Web Development)
	102.	Dockerization and migration of Support-Scripts to AWS and deployment on Kubernetes' AND 'User Data obfuscation using AWS for GDPR Compliance
	103.	BlueJeans Rooms Inventory Management and Zero-Touch Rooms
	104.	A report on my internship at Bluejeans
	105.	AGGREGATION AND REDIRECTION OF CALL METRICS TO METRICMGR
	106.	IMPROVING MICROSERVICES FOR EVENTS
35		**Blue Yonder (JDA) , Bangalore**
	107.	GUI Development for Node Optimization & Dashboard Development for log analysis
	108.	AUTOMATION- APP REFRESH FOR WMS DIVISION,
	109.	Automation and Self-heal
	110.	WFMR RUNBOOK AUTOMATION
	111.	AUTOMATION STRATEGY IN OPERATIONS PLANNING
	112.	WAREHOUSE MANAGEMENT SOLUTIONS
	113.	ESO AUTOMATIONS AT BLUE YONDER

	114.	(AUTOMATION FOR WAREHOUSE MANAGEMENT SYSTEM)
	115.	Customer Cumulative Patch(CCP) generation, MOCA Hot Deployment
	116.	Blue Yonder Warehouse Management System (WMS)
	117.	SUPPLY CHAIN MANAGEMENT
36	**BNY Mellon Technology , Chennai**	
	118.	Streamlining the Metrics & Creating a Dashboard of Key Performance/Risk
37	**BNY Mellon Technology , Pune**	
	119.	DATA DESIGN AT BNY MELLON
	120.	AUTOMATION TESTING USING SELENIUM AND JAVA
	121.	ISSUE ANALYTICS
	122.	OPERATIONS 360
	123.	OPERATIONS 360 USE CASE
	124.	METRICS ANALYSIS
	125.	CLIENT ONBOARDING AT BNY MELLON
	126.	Automation using Visual Basic for Applications and Microsoft SharePoint
	127.	METRIC COE AND ISSUE ANALYSIS
	128.	A REPORT ON DATA ANALYTICS
	129.	Business Process Automation
	130.	Software Development and Quality Assurance for Automation: Technology Innovation in Data Analytics and Visualization
38	**Bogmalo Foods LLP , Bangalore**	
	131.	Franchise Expansion
39	**Bosch Research and Technology center , Bangalore**	
	132.	DOMAIN ADAPTATION & BAG OF VISUAL WORDS FOR COMPUTER VISION
	133.	CONTENT-BASED IMAGE RETRIEVAL: ROADS AND LANE MARKINGS
	134.	SEMANTIC SEGMENTATION USING ACTIVE LEARNING
	135.	Multi-Object Identification: An autonomous Car
	136.	ESMini for Autonomous Driving Simulations
	137.	LANGUAGE MODELS WITH SPACY AND HUGGING FACE/FLAIR/GENSIM
	138.	INFUSING WORD2VEC ALGORITHM WITH ANCHORS FOR SEMANTIC CLEANSING
	139.	ROAD TRAFFIC SIGNAL RETRIEVAL
	140.	VIOLENCE DETECTION IN VIDEO DATA
40	**Bridge Your Network Inc , Bangalore**	
	141.	PRODUCT DEVELOPMENT AND FEATURE IMPLEMENTATION
41	**BSCPL Infrastructure Ltd. , Hyderabad**	
	142.	Comprehensive Road Maintenance Programme (CRMP)
42	**Bunch Microtechnologies Pvt Ltd , Noida**	
	143.	MARKETING AND MARKET STUDY
43	**Burncal Healthcare Pvt. Ltd. , Ahmedabad**	
	144.	FULL STACK WEB DEVELOPMENT
	145.	AI-POWERED HOME WORKOUTS
44	**CASHe , Hyderabad**	
	146.	AUTOMATIC VERIFICATION OF FINANCIAL DOCUMENTS USING OCR
	147.	CHURN PREDICTION AND CUSTOMER RETENTION
45	**Central Electronics Engineering Research Institute , Pilani**	
	148.	Air Quality Prediction using Spatial and Temporal Analysis of Air Quality and other metrological factors
	149.	A Structural Health Monitoring system viewable in Augmented Reality
	150.	STRUCTURAL HEALTH MONITORING USING DEEP LEARNING
	151.	Real time Steel surface defect detection using DCNN
46	**Central Leather Research Institute (CLRI) , Chennai**	
	152.	DEFECT SEGMENTATION AND CLASSIFICATION
	153.	Automatic Leather Defect Classification using Deep Learning
47	**Central Road Research Institute , New delhi**	
	154.	Geospatial Analysis for Integrated Road and Transport Planning
	155.	(DETERMINING SPEED LIMIT OF ROAD DEPENDING ON VARIOUS FACTORS

	156.	NETWORK ARCH BRIDGES
48	**Centre for Development of Advanced Computing , Pune**	
	157.	AUTOMATED WEBFORM GENERATION USING AI
	158.	CONVERGENCE OF HPC AND BIG DATA
	159.	AUTOMATED WEB FORM GENERATION
	160.	Implementing AI at scale: Automatic Number Plate Recognition
49	**Centre For Development Of Imaging Technology , Trivandrum**	
	161.	MULTIPART AUTHENTICATION & DIGILOCKER MANAGEMENT SYSTEM
	162.	SOCIAL MEDIA NEWS DISCERNING PORTAL
50	**Christensen Investor Relations (I) Pvt. Ltd. , Mumbai**	
	163.	PREPARING VALUATION MODELS AND EQUITY RESEARCH REPORTS AND PERFORMING INVESTOR TARGETING
51	**Cisco Systems (India) Pvt Ltd - Software Engineering , Bangalore**	
	164.	CI/CD for Webex Contact Center
	165.	CPA AUTOMATION FOR NEW PID
	166.	BIG DATA PROCESSING USING SPARK
	167.	INTERNET PEERING OPTIMIZATION
	168.	Automation and Testing of SD-WAN through vTest.
	169.	OPTICAL AUTOMATION SOFTWARE
	170.	Migration From On Premise Contact Center to Cloud Contact Center w.r.t Routing Scripts
	171.	VTEST Framework and HTTP Caching
52	**Cisco Systems (India) Pvt. Ltd. - Hardware , Bangalore**	
	172.	PHYSICAL DESIGN
	173.	REAL-TIME TRAFFIC GENERATOR AND VERIFICATION TESTBENCH FOR A HARDWARE ACCELERATOR
53	**Cityflo (Komorebi Tech Solutions Pvt. Ltd.) , Mumbai**	
	174.	Backend Development of Cityflo App
54	**Class 21A Pvt. Ltd. , Gurgaon**	
	175.	application (direct acting & dry construction)
55	**Classplus , Noida**	
	176.	STATELESS TOKEN STRATEGY AND BACKEND FRONT- END INTEGRATION USING REACT TABLE
	177.	Login flow using stateless token strategy and integration of frontend and backend using React and creating components for component library
	178.	BUILDING APIs AND DATABASE USING MONGODB AND NODE.JS AND MANAGING PRODUCT OPERATIONS USING LATEST SOFTWARES
56	**Clearpack Automation Pvt. Ltd. , Noida**	
	179.	Full Stack Web Application Development
57	**ClearTax , Bangalore**	
	180.	Internship at ClearTax.
	181.	MIGRATION OF CLEARTDS FROM DOTNET TO DOTNET CORE AND KUBERNETES
	182.	CLEARTAX- GST
	183.	Internship Projects In PS II
	184.	DEVELOPMENT OF CLEAR APP
	185.	SOFTWARE DEVELOPMENT
	186.	E-INVOICING CORE TEAM OPERATIONS
	187.	'ClearTax GST & ClearGST Desktop'
	188.	DEVELOPING CLEAR: UDHAR KHATA, BILLING, COLLECTION & PAYMENTS APP
	189.	BACKEND WEB DEVELOPMENT IN CLEARTAX
58	**Code Argo , Hyderabad**	
	190.	LAUNCHING AMAZON WEB INSTANCES USING PYTHON SDK
59	**CoffeeBeans Consulting LLP , Bangalore**	
	191.	"Data Analytics, Data Science and Development at CoffeeBeans Consulting"
	192.	SOFTWARE DEVELOPMENT
60	**Congruent Solutions, Business Analyst , Chennai**	
	193.	Analyzing Business Needs of US Retirement Industry using Agile Methodology
61	**Congruent Solutions, Mobile App. , Chennai**	

	194.	MOBILE APPLICATION DEVELOPMENT BY WIREFRAMING THE SCREENS IN FIGMA
62	**Congruent Solutions, Web Development , Chennai**	
	195.	MOBILE APPLICATION DEVELOPMENT BY WIREFRAMING THE SCREENS IN FIGMA
63	**Couture AI , Bangalore**	
	196.	Default Database Synchronization between two FAB applications and Front-end and Back-end development using React js and Spring Boot.
	197.	Ecommerce Search Engine
	198.	Developing real time in browser deep learning solutions for background blurring and swapping in live video calls/still images AND Development of Recommender Systems for large scale data
	199.	E-Commerce Search Engine Query Handling
	200.	Generalisation of Deep Learning Pipelines AND Performance Tuning of Video Embedding Pipeline
	201.	Application Programming Interface Development
	202.	UI/UX design, Use-case suggestions, Web-development to prepare web-pages to showcase demo for various use cases.
64	**CriticalRiver Technologies Pvt Ltd , Hyderabad**	
	203.	GREENCAP – Digital Health Platform
65	**CueMath Learn Pvt. Ltd , Bangalore**	
	204.	Marketing and Growth at Topics Project, Cuemath
	205.	Cuemath Blog Project
	206.	One App: Optimizing on apps ASO components and undertaking marketing initiatives to improve Product and drive more installs.)
	207.	CONTENT CREATION AND ASSESSMENT
	208.	THE BLOG PROJECT
	209.	Cuemath Website Blog Project
	210.	SIMULATIONS FOR CUEMATH ONLINE WEBPAGES
	211.	Analysis on Customer Insights
	212.	BLOG PROJECT
	213.	Interactive Applet Development and Management
	214.	Various sectors to increase potential customers
66	**DBOI - Automation , Pune**	
	215.	AUTOMATION IN MACHINE LEARNING MODELS FOR DATA ANALYTICS
67	**DBOI - Automation Control , Pune**	
	216.	RISK REPORTING AND REGULATORY FILING
68	**DBOI - Business Finance , Mumbai**	
	217.	DAILY P&L AND RISK ATTRIBUTION AND CASH ADJUSTMENT AND CONSOLIDATION
	218.	RISK AND PnL
	219.	AUTOMATION OF PRODUCT CONTROL TOOLS
	220.	VALIDATION OF PNL AND MANAGING CASH BREAKS
	221.	AUTOMATION OF EXCEL PROCESSES - RATES FFT TEAM
	222.	DAILY RISK, PROFIT &LOSS AND BALANCE SHEET
	223.	Updating Key Operating Procedure Documents
69	**DBOI - Counterparty Credit Ratings , Mumbai**	
	224.	Counterparty Credit Ratings Team
	225.	Global Credit Ratings Leveraged and Structured Finance
	226.	Counterparty Credit Rating
	227.	Corporates & Financial Institutions' Credit Rating
	228.	Real Money Funds
	229.	WRITING RISK REPORTS
70	**DBOI - Financial Analytics , Pune**	
	230.	MI File for Infrastructure Finance team and Lease Delta Audit Reports
71	**DBOI - Market Risk Analysis & Control , Mumbai**	
	231.	VaR Backtesting and Daily Sensitivities Check
	232.	Market Risk Management in the APAC Region
	233.	DATA QUALITY PROJECT
	234.	Automation For Risk Analysis
	235.	STRESS PERIOD SELECTION TESTING
	236.	Daily Operations in Market Risk Analysis & Control

	237.	ANALYSIS AND PROCESS AUTOMATION OF MONTE-CARLO AND HISTORICAL SIMULATION BASED REPORTING FOR RISK MITIGATION
	238.	Daily IPV for Global Foreign Exchange business And FX Delta & FX Rho parameters
	239.	DoD DATA ANALYSIS AND RISK VALIDATION
	240.	MARKET RISK ANALYSIS & CONTROL
72	**DBOI - Risk Metrics Analytics , Pune**	
	241.	RISK WEIGHTED ASSET & ANALYSIS
	242.	Independent Price Verification
73	**Decimal Technologies , Gurgaon**	
	243.	prepare web-pages to showcase demo for various use cases.
74	**DemandMatrix , Pune**	
	244.	Data Warehousing and ETL Pipeline Optimization+Migration
	245.	PRODUCT DATA COLLECTION USING WEB-SCRAPING
	246.	Data Retrieval and Formatting and PySpark Integration
75	**Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari , Pune**	
	247.	SAP module for Divgi TTS Supplier Relationship Management
	248.	DESIGN ANALYSIS OF DUAL OFFSET HEAVY-DUTY TRANSFER CASE
	249.	DESIGN AN END OF LINE TEST RIG FOR SYNCHRONIZER ASSEMBLY
	250.	CASE
	251.	PRICE ESTIMATION OF PRODUCTS USING REGRESSION TECHNIQUES
76	**DIXON TECHNOLOGIES INDIA LTD , NOIDA**	
	252.	Android App Development for Smart TV
	253.	Fundamental Analysis of global consumer electronics outsourcing companies
	254.	Supply Chain Logistics of Consumer Electronics
77	**DMI Finance Private Limited , New delhi**	
	255.	A-SCORE MODEL MONITORING
	256.	Modelling Credit Risk using Data Science
78	**Do it Yourself , Chennai**	
	257.	BUILDING A CHATBOT)
79	**Dolat Capital , Mumbai**	
	258.	MERGERS AND ACQUISITIONS IN INFORMATION TECHNOLOGY
80	**Door Sabha Nigam Ltd. , Chennai**	
	259.	ACTIVITIES AND KEY LEARNINGS AT PRACTICE SCHOOL
	260.	RCA of Losing Customers, Analyzing Disconnections in Conference and Process Automation)
81	**Dr. Reddys Laboratories , Hyderabad**	
	261.	GLOBAL SUPPLY CHAIN INTELLIGENCE PROJECT
	262.	An Overview of Global Supply Chain Intelligence Project
82	**Dreamplug Technologies , Bangalore**	
	263.	product CRED available exclusively to high trust individuals
	264.	BUILDING A NEW PAYMENTS PRODUCT - CRED Pay
83	**Dunzo Digital Pvt. Ltd. , Bangalore**	
	265.	Supply Management at Dunzo Essentials (Pune)
	266.	Use of Multi-Channel Advertising to increase ROI and Improve lead conversion
	267.	Strategy Planning and Brand Tracking
	268.	Indicators for the various sub-functions in Cash Operations Department
	269.	Working Capital and Purchase Management for Dunzo Essentials Business
	270.	PROGRAM MANAGEMENT OF D4B BUSINESS OF DUNZO
	271.	Analysis of the Operational Metrics of a Dark Store Model Warehouse
84	**Dvara E Registry Pvt. Ltd. , Secunderabad**	
	272.	CHANELLING FINANCIAL PRODUCTS TO RURAL INDIA
85	**E2open Inc. , Bangalore**	
	273.	JBPM UPGRADE AND MIGRATION ANALYSIS AND MULTITHREADING BASED COPYING
	274.	IMPROVING HARMONY SCORECARD
86	**Ecom Express - Business Analysis , Delhi**	
	275.	SUPPLY CHAIN PLANNING
	276.	First Mile Planning AND Return Centre Analysis

87	Ecom Express Pvt. Ltd. -(Business Analysis) , Delhi	
	277.	Lowering the RTS/RTO And Locality Mapping to reduce misroutes
88	E-Connect Solutions Pvt. Ltd. , Udaipur	
	278.	CREATING UI FRAMEWORK USING REACT JS
89	eGovernments Foundation , Bangalore	
	279.	Designing RESTful APIs, Vehicle Tracker Android Application and Contributing to eGov's codebase.
	280.	Software Deployment using Golang and Devops
	281.	Developing an NLP based WhatsApp chatbot, Integrating the bot with WhatsApp using Python Flask API.
	282.	React-Express based web application to handle MDMS file data
	283.	Runtime Loading,Chatbot Design/Development
90	Emptycup Innovation Pvt. Ltd. - Non tech , Bangalore	
	284.	Preparation of business level dashboards to drive insightful decisions; Customer analytics of the mobile application; and Project Management of Digital media Marketing and Website development
	285.	Product Development and Product Outreach
91	Emptycup Innovation Pvt. Ltd. - Tech (Nedo Software) , Bangalore	
	286.	DECISION TREE IMPLEMENTATION
	287.	Digitisation of Textures and Management in Engineering
92	Enact Systems India Pvt. Ltd. , Bangalore	
	288.	UX IMPROVEMENTS IN A WEB APP
	289.	CREATION OF NEW DATA ACCESS LAYER
93	Enterpreneurship Development and Innovation Institute , Chennai	
	290.	Industry Analysis and Tamil Nadu Startup and Innovation Mission
	291.	Study of different Incubator Schemes in India and Startup Ecosystem in Tamil Nadu)
	292.	Startup Ecosystem of BITS Pilani, Sectoral Analysis & Trends
94	EntHire Inc , Bangalore	
	293.	DEVELOPMENT OF FEATURES FOR THE ENTHIRE WEBSITE
95	Everwell Health Solution , Bangalore	
	294.	Integration of Teleconsultation feature into Platform
	295.	PDF Generation
	296.	SPRINT MONITORING SYSTEM & REPORT GENERATION
96	Experian , Hyderabad	
	297.	KAFKA CONSUMER AND CASSANDRA
	298.	GENERATION OF DAILY VALIDATION REPORT USING DEEQU
97	Express Stores - Tech , Gurgaon	
	299.	Development of a Middleware to Unify Company Backend Resources
98	Express stores - Nontech - Onsite , Gurgaon	
	300.	INTERNSHIP/PS-2 AT EXPRESS STORES INFORETAIL PVT LTD.
	301.	Data analysis and Management
	302.	BUSINESS OPERATIONS, MARKETING and GROWTH
99	Eyenetlabs , Trivandrum	
	303.	Indoor Autonomous Robot Navigation
	304.	Web Interface for Robot(Autonomous Indoor Navigation)
100	FamPay Pvt. Ltd. - Business Development & Content Writing , Bangalore	
	305.	product Management Intern
101	Flipkart (Business Development) , Bangalore	
	306.	BRAND PERFORMANCE AND METRICS
	307.	TASKS IN MAKEUP & FRAGRANCES TEAM AT FLIPKART
	308.	Devising a Launch Strategy for OTC Medicines through Marketplace on Flipkart and Scaling Up the Category
102	FlipSpaces Technology Labs Pvt. Ltd. , Mumbai	
	309.	SALES AND MARKETING OF WORK-FROM-HOME FURNITURE AND OFFICE RENOVATION SERVICES IN POST-COVID ERA
103	Flyboat , Hyderabad	
	310.	FINANCIAL MODELLING & PITCH DECK DESIGNING
	311.	Startup Management Consulting and Automation Tool Development
104	GenY medium , Hyderabad	

	312.	Digital Marketing and Insights into Advanced Techniques
	313.	Optimization of Marketing Activities for Welspun Flooring:Use of Multi-Channel Advertising to increase ROI and Improve lead conversion
	314.	Comparison of the digital marketing plan and outcomes between an existing brand going digital and an e-commerce-based start-up
105	**Give Foundation , Bangalore**	
	315.	BUILDING ADMIN DASHBOARD
	316.	NGO CREATION AND MODIFICATION TOOL GIVE INDIA, BANGALORE
	317.	ADMIN-DASHBOARD
106	**Goodera , Bangalore**	
	318.	GCPL Sustainable Procurement Policy & Dell Giving CSR performance
	319.	Sustainability Platform. for Tata Chemical Limited. and Volunteering Team(Non Profit Outreach and workflow))
	320.	DATA ANALYSIS AND VISUALISATION
	321.	PRODUCT MANAGEMENT AND ANANLYTICS
	322.	Corporate Social Responsibilty (CSR) management of Gap Inc.
	323.	Work done as a Product and Business Analyst
	324.	CSR AND SUSTAINABILITY REPORTING
	325.	PRODUCT DEPLOYMENT OF CSR LIFECYCLE
	326.	Internship Project
107	**Goscale Technologies Pvt. Ltd. - IT , Bangalore**	
	327.	Web Scraper And Crewscale Applications(Pulse)
	328.	DEVELOPMENT OF WEB PAGES FOR Pulse (crewscale agent)
	329.	GOSCALE TECHNOLOGIES PVT. LTD. - COMPANY PRODUCTS
108	**Grasim Industries Ltd. , Nagda**	
	330.	IMPROVING EVAPORATION EFFICIENCY OF MSFE BY ANALYSING PROCESS AND OPERATING PARAMETERS
	331.	DATA ANALYTICS OF VISCOSE PROCESS PARAMETERS
	332.	Pigment Quality and its impact on Fibre Quality
	333.	SPARE PARTS INVENTORY MANAGEMENT OF SPINNING DEPARTMENT
109	**Grasim Industries, Pulp and Fibre Division , Mumbai**	
	334.	(Advanced Process Control for Pulp and Fibre Process)
	335.	CONTROL LOOP PERFORMANCE MONITORING
110	**Grey Orange Robotics Pvt. Ltd. , New delhi**	
	336.	REAL OUTPUT WITH PUT SIMULATION
	337.	MAXIMUM QUANTITY PUT CALCULATOR AND ERLANG
	338.	MAPPING CUSTOMER PERSONAS TO REPORTS
	339.	Grey Matter Command Center Watch Tower
	340.	IMPROVING THE GREYORANGE SIMULATOR
111	**Groww - Software Development , Bangalore**	
	341.	SPRING BASED BACKEND SOFTWARE DEVELOPMENT
	342.	REACT NATIVE MOBILE APPLICATION DEVELOPMENT
	343.	Frontend Website Development Groww
	344.	US STOCKS DATA
112	**HealthRx by Bajaj Finserv Health Ltd. , Pune**	
	345.	Automation, Data Insights and Machine Learning
	346.	Intelligent Search and Language Understanding Intelligent Service
	347.	DoctorRx
	348.	BACKEND DEVELOPMENT
	349.	Data Engineering, Insights and Automation
	350.	Software Development for ManagedCare Platform
	351.	API Automation using Rest Assured and JAVA
113	**HelloThinkster , Bangalore**	
	352.	IMPLEMENTING TEXT TO SPEECH ON WEB APP, DEVELOPING A MESSAGING AND CALLING WEB APPLICATION USING TWILIO
	353.	AI-DRIVEN CUSTOMER FACING CHATBOT, PROPOSAL OF TUTOR FACING CHATBOT AND TUTOR FACING WEBSITE DEVELOPMENT

	354.	AI BASED LEARNING PATH FOR STUDENTS
114	**Heraizen Technologies Pvt Ltd , Bangalore**	
	355.	Full Stack Development
	356.	End to End Development of Website for streamlined accreditation of Educational Institutes
	357.	ANALYTICS IN DHI
	358.	'ANALYTICS IN DHI'
115	**Hevo Technologies India Pvt. Ltd. , Bangalore**	
	359.	WORK IN DATA INTEGRATION PLATFORM
	360.	IMPLEMENTING PREFERRED SOURCES DASHBOARD AND BUILDING ADMIN PANEL APPLICATION
	361.	Building SAAS based connector.
	362.	Google Analytics and Virtual Scrolling.
	363.	Working as a Software Developer on various diverse tasks.
116	**Hindustan Times - , Delhi**	
	364.	Smart Cookie-Nutritional Calculator, Adhawk'
	365.	Scraper Bot, Paraphraser and Image Quality Analysis'
	366.	Deployment
	367.	TRENDS API USING SPRING BOOT FOR NEWS ANALYSIS
	368.	DASHBOARD FOR DAILY PERFORMANCE REPORTS OF THE HEALTHSHOTS WEBSITE
	369.	Healthshots App
	370.	Data Science
117	**HISP India , Noida**	
	371.	UP-HEALTH MANAGEMENT SYSTEM
	372.	Surveillance system for Antimicrobial Resistance with "One Health" approach in collaboration with ICMR and UiO
	373.	Surveillance system for Antimicrobial Resistance
	374.	A CUSTOMIZED EMR SYSTEM BASED ON OPENMRS
118	**Holy Cow Productions , Bangalore**	
	375.	UNITY ENGINE FOR MOBILE GAMES
119	**Hourglass Research , Mumbai**	
	376.	PATENT ANALYTICS
120	**IDFC First Bank , Mumbai**	
	377.	BANK STATEMENT ANALYZER SOFTWARE
	378.	Merchant Trading Portal
	379.	Report Automation
	380.	Visualization & Dashboard Building
121	**iDrive Capital , Bangalore**	
	381.	Fund Raising Process in the Startup Ecosystem
122	**i-exceed Technology Solutions , Bangalore**	
	382.	DIGITAL BANKING APPLICATION FOR CITI BANK
123	**IMarc Services , Noida**	
	383.	CONTENT & MARKET RESEARCH AT IMARC SERVICES
	384.	CONTENT DEVELOPMENT & MARKET RESEARCH
124	**Indian Electrical & Electronics Manufacturersâ€™ Association , New Delhi**	
	385.	SOFTWARE DEVELOPMENT ATDOUBTNUT
125	**Indian Energy Exchange Ltd , Mumbai**	
	386.	Automation Using RPA and Windows Application
	387.	Software Automation Testing
	388.	Windows Applications By .NET
	389.	MICROSERVICES DEVELOPMENT
126	**Indian Institute of Petroleum , Dehradun**	
	390.	"CATALYTIC STEAM NAPHTHA CRACKING FOR OLEFIN PRODUCTION"
	391.	"DEVELOPMENT OF A CORRELATION TO PREDICT GAS HOLDUP IN STIRRED AND SPARGED TANK CONTACTORS:
	392.	"TECHNO-ECONOMIC EVALUATION OF IIP's ONE STEP DME PRODUCTION PROCESS OVER EXISTING PROCESSES USING A PROCESS SIMULATION"
	393.	PREPARATION OF LIGNIN MODIFIED BITUMEN

	394.	PROPERTY CALCULATION AND PACKED BED REACTOR DESIGN CALCULATION FOR BIO JET FUEL FROM NON-EDIBLE OIL
	395.	WASTE PLASTICS TO CHEMICALS
	396.	PRODUCTION OF AROMATICS FROM THE CRUDE DERIVED MIXED HYDROCARBON FEED
	397.	DEVELOPMENT OF CATALYST FOR CONVERSION OF BIO-DERIVED GLYCEROL INTO BENZENE FREE HIGH-OCTANE AROMATICS
	398.	Production of BTX (Benzene, Toluene, Xylene),from Light Coker Gas Oil
	399.	PRODUCTION OF BIODIESEL FROM USED COOKING OIL
	400.	ENERGY DEMAND AND SUPPLY EVALUATION OF SUGAR AND PAPER MILLS
127	**Indian Institute Of Remote Sensing , Dehradun**	
	401.	PYTHON IMPLEMENTATION OF MIMICS I MODEL
128	**Indira Gandhi Centre for Atomic Research , Kalpakkam**	
	402.	LIQUID-LIQUID EXTRACTION IN NUCLEAR FUEL REPROCESSING
	403.	AUTOMATIC OFT LEVEL DISCORDANCE SETPOINT TRACKER
	404.	Developing a Soft Sensor using Kalman Filtering to measure temperature of the liquid phase of the nuclear fuel in the nuclear dissolver
	405.	THERMAL ANALYSIS OF CONTINUOUS CASTING PROCESS.
	406.	DEVELOPMENT OF DIGITAL INSTRUMENTATION SYSTEM USING FPGA FOR BEAM PROFILE MONITORING
	407.	Implementation of different modes of Total Focusing Method on phased array ultrasonic signals.
129	**Indium Software , Chennai**	
	408.	Development of Angular Crud-App and Django Blog
	409.	DATA & TABLE EXTRACTION
	410.	SERVICE ORIENTED ARCHITECTURE
	411.	BUILDING RESPONSIVE USER-FACING WEB APPLICATIONS & TRIM SAIL PROJECT
	412.	BUILDING A MARINE VOYAGE JOURNEY OPTIMIZATION MODEL (Trim Sail Digital Solutions Pvt. Ltd)
	413.	SQL COMPILER WEBSITE, DATA ANALYTICS AND ELASTICSEARCH
130	**Indogulf Fertilizers Ltd., , Jagdishpur**	
	414.	Operations
	415.	AMMONIA ENERGY: MAPPING OF SECTION WISE ENERGY CONSUMPTION AND FINDING OUT OPPORTUNITIES FOR IMPROVEMENT WITH GAS MANAGEMENT
	416.	Customize Fertilizers Plant Reduction of specific raw material consumption over by minimization of input losses and minimization of recycle loss
	417.	Heat recovery from heat exchangers (using pinch analysis) and flue gas from Ammonia Plant
131	**Inmobi , Bangalore**	
	418.	Performance and Brand Level Analysis of the Mobile AdTech Industry in Japan and South Korea)
132	**Innoviti Payment Solutions Pvt Ltd , Bangalore**	
	419.	Payment Gateway Integration
	420.	THIRD PARTY API INTEGRATION, DATABASE MANAGEMENT AND IDENTIFICATION OF SUCCESSFUL MERCHANT TRAITS USING DATA ANALYTICS
	421.	COMPARATIVE ANALYSIS BETWEEN TABLEAU AND POWER BI
	422.	Payment Gateway Integration and Onboarding Details
	423.	Statistical Analysis of Customer Data and Secure File Transfer
133	**Insights Alpha , Delhi**	
	424.	Business Development
	425.	PROJECTS AT INSIGHT ALPHA
	426.	Business Development,
134	**Integrated Active Monitoring Pvt. Ltd. - Product & Business Dev. , Pune**	
	427.	COMPUTER VISION ANALYTICS IN THE RETAIL SPACE
135	**Integrated Active Monitoring Pvt. Ltd. , Pune**	
	428.	Implementation of a Micro-services based Architecture for a Data Lake for Unstructured Data
	429.	DESIGN & DEVELOPMENT OF IMAGE STORE, RETRIEVAL & CLASSIFICATION ARCHITECTURE

136		Intel India Technology , Bangalore
	430.	Optimizing and Profiling TensorFlow Implementations for Large Natural Language Processing Tasks on Intel Architectures
	431.	EXPLORING DEEP LEARNING TECHNIQUES FOR COMPUTER GRAPHICS AND STYLE TRANSFER
	432.	Post Silicon Validation on Intel Vision Product
	433.	INTEGRATION OF CPU CORE & CODE COVERAGE OF DUT
	434.	Communication Protocols and their Post Silicon Validation
	435.	Anomaly Detection Using Machine Learning
	436.	Neural Architecture Search
	437.	Functional & Code Coverage of Server Based Interconnects
	438.	ACTIVITIES AND KEY LEARNINGS AT PRACTICE SCHOOL
	439.	FORMAL PROPERTY VERIFICATION OF IPs
	440.	Development of framework to expedite RAS Feature validation
	441.	FULL CHIP TIMING ANALYSIS AND CALIBER RULES
	442.	DFT Flow Automation using Python
	443.	AUTOMATE REGRESSION TESTING FOR BUSINESS PLANS
	444.	SOFTWARE DEVELOPMENT FOR A DAAS (DATA-AS-ASERVICE) PLATFORM
	445.	EVENT-BASED FEATURE EXTRACTION
	446.	Profiling and Characterisation of Graph Neural Networks
	447.	REMOTE HOST MANAGEMENT AND UPDATION
	448.	AUTOMATED TESTING
	449.	SOFTWARE VERIFICATION OF NoC CONFIGURATIONS
	450.	Hardware Diagnostics Software For Discrete GPUs
	451.	I2C IP DESIGN AND TEST
	452.	OPTICAL FLOW RESEARCH
	453.	RTL CHECKS ON COHERENT POINT TO POINT INTERCONNECT IP
	454.	Automating the Performance Execution Flow for AMFS
	455.	Theoretical Study on Timing Closure in Graphic cores Implementation
	456.	NETLIST ABSTRACTION FOR A COMPLEX GRAPHICS FLOORPLAN
	457.	Firmware Validation of Intel Ultra Path Interconnect (UPI)
	458.	DEVELOPMENT OF VALIDATION TOOLS FOR POST SILICON VALIDATION OF VISION PRODUCTS
	459.	Analysis of Deadlocks in Graphics Hardware Design
	460.	Automation of Functional Coverage
	461.	ACTIVITIES AND KEY LEARNINGS AT PRACTICE SCHOOL (END SEMESTER)
137		Invento Markerspaces Pvt. Ltd. , Bangalore
	462.	MARKETING AND MARKET STUDY
	463.	ENGAGING CUSTOMERS AND FLEET MANAGEMENT
	464.	Application for Robot Fleet management and health tech
	465.	The Design and Development of a 5-DoF Robotic Manipulator
138		Jio Platforms Limited , Navi mumbai
	466.	Development and Deployment of Content Curation Service
	467.	Digital Signature using PKI SIM
139		JPMS (Fintech) CIB R&A Banking (CRG) , Mumbai
	468.	Developing Excel Add-Ins and Improving Efficiency of Technical Modules in the Organization
	469.	STRIP PROFILES AUTOMATION
	470.	Developing Automation Modules and Improving Efficiency of Technical Modules in the Organization
140		JPMS (Technology - IT) GR&C Wholesale Credit Solutions - Data Science - Fintech , Mumbai
	471.	Developing a data-driven alerting framework for ABL and Liquidity.
	472.	News Analytics and Intra Day Line Sizing using Time Series Analysis.
141		JPMS CIB R&A - Markets (Derivatives Analyst Group , Mumbai
	473.	FX Derivatives Structuring: Pricing Concepts and Term Sheet Automation
142		JPMS CIB R&A Data Science , Mumbai
	474.	Exception Detection, Analysis, and Resolution in Regulator Reporting

143	JPMS CIB R&A Global Research , Mumbai	
	475.	Equity Research of US Automotive Industry: Franchised Dealers and E-Commerce Used Vehicle Retailers
	476.	US High Yield Bonds and Leveraged Loans
	477.	European Equity Research
	478.	US Equity Research
	479.	Equity Research of Malaysian Stocks
	480.	Green Hydrogen and ESG Note
	481.	ASEAN Equity Research Strategy
	482.	Equity Research (India – Technology, Internet and Telecoms / India – Pharmaceuticals and Healthcare
	483.	Study of the BSE500 Index Member Companies for the Granular Industry Wise Analysis of the Indian Economy
	484.	Equity Markets Analysis in the European Technology, Multi-Industry Team
	485.	Financial Modelling for Listed Australian REITs, Infrastructure and Transport Stocks
	486.	Performance Analysis of Small and Mid Cap Equity Industry
	487.	Global Equity Research: European Banks
144	JPMS CIB R&A Markets- Equity Derivatives Trading & Structuring , Mumbai	
	488.	Flow as new Equity Risk factor to improve Traditional Factor models
	489.	Client presentations automation, scripts migration, and Reports making
	490.	Reporting- Sending Automated Mails to Clients and Seniors
145	JPMS GR&C Corporate Risk - Risk Project Solutions , Mumbai	
	491.	Enhancements to the Risk Report Repository
146	JPMS GR&C Credit Risk - Counterparty Credit Infrastructure & Capital , Mumbai	
	492.	Counterparty Credit Exposure Analysis for OTC Derivatives
	493.	An Introduction to Counterparty Risk Management
	494.	Exposure Analysis and Controls
147	JPMS GR&C Quantitative Research - Fintech , Mumbai	
	495.	Rates Curve Building Conventions and Associated Tools
	496.	Credit Risk Modelling (Wholesale Credit)
	497.	Index Studio and Breaks Reconciliation Project
	498.	Software Development tasks on the Falcon Tools Suite & Production Execution tasks
	499.	SIGNAL ANALYSIS OF TRADES
	500.	Optimizing explains calculations, and sensitivity calculations in corporate bond modelling
148	JPMS GR&C WCS - Credit Portfolio Analytics , Mumbai	
	501.	Financial Outliers signaling Analytics
	502.	Financial Outliers signaling Analytics: Trend Analysis and Predictive model generation for detecting financial misstatements by companies
149	JPMS GR&C Wealth Management - Data Science - Credit Risk , Mumbai	
	503.	Optical Character Recognition for Data Extraction. Peer comparison based on credit profiles
150	Jupiter , Mumbai	
	504.	Tools and Software Solutions in Fintech to reimagine customer's banking experience
	505.	APPLICATIONS OF AI AND CLOUD SERVICES BY FINTECH FIRM TO IMPROVE CUSTOMER EXPERIENCE
151	Kerala Infrastructure and Technogy for Education , Trivandrum	
	506.	Web Development: Quiz module and Picture Comprehension module.
	507.	Language Lab Project
	508.	FULL-STACK WEB DEVELOPMENT
152	Keysight Technologies India Pvt. Ltd. , Kolkata	
	509.	Development for log analysis
	510.	GENERATING PSEUDO-REAL NETWORK PACKETS USING GENERATIVE ADVERSARIAL NETWORKS & ANOMALY DECTECTION IN TIME SERIES DATA
153	Knolskape Solutions Pvt. Ltd. , Bangalore	
	511.	BUSINESS SIMULATIONS
	512.	Business Simulation Development
	513.	GRAND PRIX
	514.	WEB DEVELOPMENT PROJECT

	515.	Web development,
	516.	AGILE
154	**Kofluence , Bangalore**	
	517.	A Report on Data analyst
	518.	ANALYTICS IN DIGITAL MARKETING
155	**Kovax Abrasives South Asia Pvt Ltd , Chennai**	
	519.	Strategizing entry into paint retail and hardware channel for kovax
156	**Kristal.AI , Bangalore**	
	520.	FEATURES TESTING OF WEALTH MANAGEMENT PLATFORM
157	**Kubric , Bangalore**	
	521.	TRANSFORMX- UPLOAD & TRANSFORM IMAGES
	522.	ROSETTA
158	**Laneyes LLC , Delhi**	
	523.	3D VOLUMETRIC ANALYSIS USING DEEP LEARNING
	524.	BUILDING AN OCR ALGORITHM FOR DOCUMENT ANALYSIS AND PROCESSING OF TEXT RECOGNISED IN DOCUMENTS
159	**Lemnisk Pvt. Ltd. , Bangalore**	
	525.	Recommendation and Personalisation
	526.	Development of Customer Data Platform UI
160	**Linarc India Pvt. Ltd. , Chennai**	
	527.	DEVELOPMENT OF UI AND BACK-END FOR COMPANY SETUP
	528.	SUBCONTRACTOR SETUP AND DATABASE MIGRATION
161	**LOGIQ LABS Pvt Ltd (eShipz.com) , Bangalore**	
	529.	Designing a Cross-Platform Application
	530.	DEVELOPING A DUTY CALCULATOR API)
162	**Mailmodo (Whyist Solutions Pvt. Ltd.) , Bangalore**	
	531.	Marketing for Mailmodo platform
163	**MapMyIndia - Software , New delhi**	
	532.	PRAYER , A NEW MAPMYINDIA PRODUCT ON WEB, ANDROID AND iOS
	533.	DRIVING NEW CORPORATE PARTNERSHIPS AND STRATEGIC ALLIANCES AT VISIT HEALTH
	534.	Business Development and Marketing Analytics for MapMyIndia
	535.	API and NaviMaps Product Development
	536.	BUSINESS DEVELOPMENT (SALES) INTERNSHIP
	537.	WEB DEVELOPMENT AND MARKETING
	538.	DEVELOPMENT OF AN APP TO CONNECT AND INTERACT WITH NEIGHBOURS - COMPLETE PRODUCT CYCLE
	539.	JUNCTION POSTPROCESSING
	540.	DEVELOPMENT AND OUTREACH USING STRATEGIC BUSINESS PARTNERSHIPS AND AFFILIATE MARKETING PROGRAM
164	**MapMyIndia , Bangalore**	
	541.	PRAYER , A NEW MAPMYINDIA PRODUCT ON WEB, ANDROID AND iOS
	542.	DEVELOPING A CONTENT BASED IMAGE RETRIEVAL MODEL
165	**Maritime Research Centre , Pune**	
	543.	Underwater Radiated Noise (URN) Management
	544.	NOISE & VIBRATION MANAGEMENT ON-BOARD MARINE VESSELS
166	**Matdev Investment Advisers Pvt. Ltd. , Bangalore**	
	545.	Full Stack Development of Symbl Landing Page
	546.	STUDY OF MUTUAL FUNDS ECOSYSTEM IN INDIA
	547.	MUTUAL FUND HOUSE AND SHARE TRANSFER AGENT
	548.	Understanding the Passive Investment Market and its digital Scope.
	549.	FUND ACCOUNTING ANALYSIS AND PRODUCT FEATURE DEVELOPMENT
167	**MBB Labs Pvt. Ltd. , Bangalore**	
	550.	Operational Risk Weighted Assets Services
	551.	AN EC SIMULATION AND VISUALISATION APP
168	**MedCords , Kota**	
	552.	Unit testing in python and demo system of OMS(Order Management System)

	553.	Aayu web application
169	**Megh Computing , Bangalore**	
	554.	MULTIPLE CAMERA OBJECT DETECTION AND TRACKING
	555.	RE-IDENTIFICATION AND TRACKING ON MULTIPLE TARGET WITH A MULTI CAMERA AND MULTISTAGE PIPELINE
170	**MEL Systems and Services Ltd , Chennai**	
	556.	VIBRATIONS DATA FORECASTING USING MACHINE LEARNING ALGORITHM
	557.	INDOOR REAL TIME LOCATION TRACKING USING UWB
171	**Melio , Bangalore**	
	558.	MANAGING THE CATEGORY COMPETITONS
	559.	Automations and Cohort Analysis
172	**Millet & More Foods , Pune**	
	560.	ESTABLISHMENT OF SOCIAL MEDIA PRESENCE FOR AAHA OHO
173	**Mobileum , Bangalore**	
	561.	AUDIO FEATURE EXTRACTION AND CLASSIFICATION
	562.	Time Series Forecasting
174	**Mocxa Health Pvt. Ltd - Tech , Bangalore**	
	563.	De-identification of video data of patients suffering from epileptic seizures
	564.	Face Reconstruction using Deep Learning
	565.	De-identification of patients
	566.	Different approaches to achieve De-identification of the patient in Video monitoring using EEG and Rendering 3d faces
	567.	GAIT ANALYSIS
	568.	VIDEO EEG – MARKET DYNAMICS AND STRATEGY PLANNING.'
175	**Molde Analytics India Pvt. Ltd. , Hyderabad**	
	569.	CUSTOMIZATION OF LOTTIE ANIMATIONS
176	**Mordor Intelligence , Hyderabad**	
	570.	E-MAIL MARKETING LEAD GENERATION AND SEARCH ENGINE OPTIMIZATION
	571.	LEAD GENERATION AND SEARCH ENGINE OPTIMIZATION
177	**Morgan Stanley Advantage Services , Mumbai**	
	572.	MODEL MONITORING AND INDICATOR TRACKER TO AID SCENARIO FORECASTING TO ASSESS CAPITAL REQUIREMENT
	573.	Counterparty methodologies and Backtesting
	574.	VaR Model Calibration Automation Validation
178	**Morning Star - Index Management and Analytics , Mumbai**	
	575.	FUNDAMENTAL DATA CALCULATION
179	**Morningstar - Index data calculation , Mumbai**	
	576.	Environmental Social and Governance Index
180	**Morningstar - Indexes - Data and Content , Navi mumbai**	
	577.	COVERAGE DASHBOARD
181	**Morningstar - Indexes Product and Sales Operations (IPSO) , Mumbai**	
	578.	Indexes – Product Sales and Operations
182	**MSCI Index and Research , Mumbai**	
	579.	THEMATIC INDEX RESEARCH – NEW PRODUCT DEVELOPMENT
183	**My Smart Price - Non Tech , Hyderabad**	
	580.	Development of Growth and Strategy Making at BrightCHAMPS
	581.	Product Growth and Management Challenges of the Ed Tech Industry: Special Emphasis on Brightchamps and the International Market Dynamic
	582.	Digital Marketing in BrightChamps
	583.	Enabling High Growth of an 1:1 Ed Tech Startup Into Multiple Countries and Maximizing Successfully Completed Demo Classes
	584.	Optimizing Business Operations and Maximizing Leads at BrightChamps
184	**My smart price - Tech , Hyderabad**	
	585.	Block based Educational Web Application
	586.	BRIGHTCHAMPS (FRONT-END DEVELOPMENT,BACKEND DEVELOPMENT & ZOHO CRM MANAGEMENT)
	587.	BACK-END DEVELOPMENT, AUTOMATION AND SQL ANALYTICS

	588.	Authentication Using Amazon Web Services (AWS COGNITO) and Google API's.
185	**myHQ & (JustWork Technologies Pvt. Ltd.) Tech , New Delhi**	
	589.	Front-End Development - Corporate Dashboard
	590.	BACKEND WEB-DEVELOPMENT OF MYHQ WEB PORTAL
	591.	Front-End Development of MyHQ Website
186	**MyHQ (Justwork Technologies Pvt Ltd.) - Nontech - Onsite , New Delhi**	
	592.	DRIVING THE SALES PROCESS OF FLEXI-PASS AND VIRTUAL OFFICE PRODUCTS
	593.	Marketing
	594.	ONBOARDING OF NEW SUPPLY IN VARIOUS REGIONS OF OPERATION
	595.	Accounting Practices and SEO
	596.	MARKETING AND OPERATIONS MANAGEMENT
187	**Nable IT Consultancy Services Pvt. Ltd. , New Delhi**	
	597.	Video Embedding Pipeline
188	**namaste.fit , Pune**	
	598.	Saas platform development
189	**National Chemical Laboratory , Pune**	
	599.	MODEL PREDICTIVE CONTROL USING A WIENER FILTER AND ITS COMPARISON WITH NEURAL NETWORK PREDICTIVE CONTROL
	600.	ADSORPTION OF HEAVY METALS IONS FROM WATER USING LOW COST ADSORBENTS IN COMSOL
	601.	IN STIRRED AND SPARGED TANK CONTACTORS:
	602.	FORCED PERIODIC OPERATIONS
	603.	DYNAMIC SIMULATION AND ADVANCED CONTROL OF CONTINUOUS DISTILLATION
190	**National Council for Cement and Building Materials , Ballabgarh**	
	604.	REINFORCMENT PROPORTIONING IN HIGH STRENGTH CONCRETE REINFORCED CONCRETE (HSC-RC) MEMEBERS
	605.	INVENTORY MANAGEMENT SYSTEM
	606.	FACTORS)
	607.	Novel Cement
	608.	'Design of a cost effective dosing feeder for alternative fuels to support Atma Nirbhar and Swachh Bharat mission of India
	609.	PROCESS MODELING FOR ALTERNATIVE FUEL UTILIZATION IN CEMENT INDUSTRY
	610.	SUPPLY CHAIN AND ANALYSIS OF FLUE-GAS DESULPHURISATION GYPSUM
191	**National Council of Applied Economic Research , New delhi**	
	611.	Market Data Forecast(MDF) (first 2 weeks) & National Council of Applied Economic Research (NCAER
	612.	Study of resources of Gram Panchayats
192	**National Institute of Science and Tech. Dev. Studies (NISTADS) , New delhi**	
	613.	Startup Ecosystem in India
	614.	The Socioeconomic Effects of the Virgin Coconut Oil
	615.	Assessment of medical technologies including medicines on TRL Scale.
	616.	Faecal Oral Transmission of Covid-19
	617.	MAINSTREAMING GENDER IN STEM THROUGH GENDER BUDGETING OF CSIR AND OTHER SCIENTIFIC INSTITUTES
	618.	BENCHMARKING OF PUBLIC RESEARCH INSTITUTES
193	**NBC Bearings , Jaipur**	
	619.	STUDY & OPTIMIZATION OF BEARING AXIAL SLOT FOR HIGH SPEED APPLICATION
	620.	Preparation of Calculator/ Tool for estimation of Cylindrical Roller Bearing component weight for Costing purpose
194	**NetApp , Bangalore**	
	621.	Enabling encryption for SMB & NFSv4.1 Protocols for NetApp GCP Cloud Volume Services & Automation Via Microservices
	622.	Optimizing Cost of Kubernetes Cluster
195	**NewCo Inc. , California**	
	623.	Automation Testing using Selenium,JS
196	**News Cape Consulting , Pune**	
	624.	Proof of Concept(PoC) for Data Lake Solutions

197	Niyo Solutions , Bangalore	
	625.	Development of GOLANG CUSTOM PLUGINS FOR KONG 2.0
	626.	Product and Portfolio Analysis using Data analytics and Machine Learning Algorithms
198	Niyo Solutions Non Tech , Bangalore	
	627.	User Penetration, Engagement and Retention on the Bharat App
199	Nomura - Change Management Team , Mumbai	
	628.	Project Management and Implementation, Change Management Team
	629.	Feasibility Analysis & Transformation Governance
	630.	Business Analysis For Structured Issuance Programme
	631.	Change Management Team
	632.	Project Management, Financial Planning, Data Analytics and Automation using various Digital Tools
200	Nomura - FinTech , Mumbai	
	633.	Wealth Management start-ups across APAC And Application of BlockChain and Cryptography in Banks
201	Nomura - Wholesale Strategy , Mumbai	
	634.	Private Market Analysis
202	Nomura Global Markets , Mumbai	
	635.	Macros structuring
	636.	AlgoQuants Mumbai Team
	637.	Equity Structuring and Asset Backed Securities Monitoring
	638.	Global Risk and Investment Portfolio Assessment
	639.	CVA Trading and BRM
203	Nomura Global Risk , Mumbai	
	640.	RISK METHODOLOGY
	641.	NOMURA GLOBAL RISK
	642.	Risk Methodology Development
	643.	HISTORICAL MARKET DATA ANALYSIS
	644.	Credit Risk Analysis
204	Nucleus Software Export Ltd , Noida	
	645.	AUTOMATIC CODE DOCUMENTATION
	646.	UCO A VOICE ENABLED LOAN BOT
	647.	Screenshot Capture and Masking Utility and Data Migration Utility
	648.	ESTABLISHING A TESTING FRAMEWORK FOR THE EXISTING FINNONE NEO CODE THAT INCLUDES UNIT AND INTEGRATION TESTS.
	649.	WEB APPLICATION TO FACILITATE THE PROCESS OF RFP
	650.	ENHANCEMENT TO INTELLIGENT TEXT EXTRACTOR
	651.	TESTING AUTOMATION
	652.	STATICALLY ANALYSING COMPATIBILITY OF CODE WITH MULTIPLE DATABASES.
	653.	LOGS AND EXCEPTION ANALYSIS
	654.	ENCRYPTED DATABASE COMMUNICATION WITH A SPRING BOOT APPLICATION IN FINNONE NEO and IN-MEMORY DATABASE WITH ACID SUPPORT
	655.	GITLAB AND ITS BASICS AND DETECTING LOGGING OF PERSONAL IDENTIFIABLE INFORMATION
	656.	PREDICTIVE ANALYSIS ON FILE PROCESSING
	657.	DECISION MAKING ENGINE
205	nurture.farm (A Subisidiary of UPL Ltd.) , Bangalore	
	658.	Nurture Farm
206	Nutanix Technologies India Pvt. Ltd. , Bangalore	
	659.	Enhancements in the features of Nutanix Era
	660.	ENHANCEMENTS IN NUTANIX'S DISASTER RECOVERY & BACKUP SOLUTION
	661.	WEB DEVELOPMENT AT SIZER, SAAS ENGINEERING
	662.	Development Test Tool User Report Generation and Integration.
	663.	STATSD – COLLECTOR DEVELOPMENT
	664.	NUTEST MIGRATION AND QUALIFICATION
	665.	DEVELOPMENT OF APPLICATION DISASTER RECOVERY FEATURE
	666.	ALERT VERIFICATION SYSTEM& AUTOMATION FOR EXPAND CLUSTER 2.0
	667.	BEAM COST GOVERNANCE AND SECURITY COMPLIANCE

	668.	PRISM CENTRAL DEPLOYMENT
	669.	NETWORK PERFORMANCE DASHBOARD
	670.	AUTOMATION, BENCHMARKING & TESTING NUTANIX DATABASE ARCHITECTURE
	671.	ENGINEERING ISSUES RELATED TO MSP (BACKUP & RESTORE)
	672.	Full Stack Development (Billing Team)
	673.	BUILDING OF THE GLOBAL CONFIG PUSH SERVICE
	674.	BENCHMARKING AND GO ERGON HYBRID
	675.	DATA MIGRATION AND DEGRADED NODE DETECTION
	676.	WEB APP MANAGEMENT
207	**NutriPal Healthcare Pvt Ltd - Non Tech , Ghaziabad**	
	677.	Data Analytics and Customer Experience Operations
208	**NutriPal Healthcare Pvt Ltd , Ghaziabad**	
	678.	Coach Dashboard for Nutripal Health Coaches(Frontend Development)
209	**Nvidia Graphics - Hardware , Bangalore**	
	679.	Design verification and Board Bring-up
	680.	BOOT ARCHITECTURE MODEL
	681.	Writing test stimulus for functional verification of DUT
	682.	Automated Benchmarking Tool & Data Collection
	683.	Development of an Automation Tool with Specific Capabilities
	684.	Implementation of network bridges and components in CPU NOC
	685.	FLOORSWEEP VERIFICATION OF GPU FULLCHIP
	686.	UVM TESTBENCH FOR USB VERIFICATION
	687.	CDC/RDC ANALYSIS FOR NVIDIA CPU
	688.	DEVELOPING CUDA LEVEL BENCHMARKS OF THE GPU
	689.	NLP Based Verification for Power Gating
	690.	GPU MEMORY SUBSYSTEM MODULE VERIFICATION
	691.	Automated quality checks for Functional Safety Work Products & EDP Sensing Controller Verification
210	**Nvidia Graphics -Software , Bangalore**	
	692.	PERFORMANCE ENHANCEMENT OF DATA MINING TOOL
	693.	ASSEMBLING SHADER FROM HIGH-LEVEL LANGUAGE IN TRACE ASSEMBLER
211	**OfBusiness , Gurgaon**	
	694.	BIDASSIST SPIDER
212	**Oracle India Pvt Ltd. , Bangalore**	
	695.	Filter Type Ahead
	696.	Send Time Optimization & Wloqua APIs
	697.	Cloud Application Development
	698.	FULL STACK DEVELOPMENT
	699.	Test Automation & Next Best Offer
	700.	STARTER REFERENCE CHURNOUT APPLICATION AND CONTACT WASHING MACHINE APP
213	**Oracle India Pvt Ltd. , Hyderabad**	
	701.	BIP and ESSBASE Integration with Docker Deployment of Fusion Application
	702.	FinTech Jira Tools
	703.	DETECTING OUTLIERS & BICC VIEW OBJECTS
	704.	Designing and Implementing a Feature Adoption UI
	705.	SOFTWARE DEVELOPMENT AND APP INTEGRATIONS WITH ORACLE ELOQUA
214	**Oyla Inc , California**	
	706.	ROS AND WEBVIZ
215	**Paypal , Chennai**	
	707.	Enhanced Buyer Protection
216	**Pepper Content Pvt. Ltd. , Mumbai**	
	708.	ACHIEVING OPERATIONAL EFFICIENCY USING CRM TOOLS & STRATEGIZE AND THE GROWTH PLAN TO ENTER POSSIBLE BUSINESS VERTICALS AND DEVELOP A MODEL FOR CLIENT PROFILING
	709.	BACKEND WEB APPLICATION DEVELOPMENT AND UNIT TESTING
	710.	Designing a Content Mediation Platform for Clients and Creators

	711.	TODO LIST APPLICATION CREATING NEW COMPONENTS FOR PEPPER UI AND REFACTORING
217	**Perfios Software Solutions Pvt. Ltd. , Bangalore**	
	712.	FRAMEWORKS FOR INTELLIGENT DOCUMENT PROCESSING
218	**Petasense - Services & App Development , Bangalore**	
	713.	Frontend testing and Virtual device emulation
	714.	Generating Activity Feed using Audit Trails
	715.	Petasense Next-Generation Over-The-Air(OTA) Firmware Update Framework
	716.	Embedded System Design
219	**Petasense Technologies Pvt. Ltd , Hyderabad**	
	717.	Demod Improvements
	718.	UNIFIED SENSORS HEALTH DASHBOARD FOR WEBAPP
	719.	OSI Pi Integration V2 (Using Blob Storage)
220	**PharmEasy , Bangalore**	
	720.	MESSAGE QUEUING IN KAFKA AND MARKETING PANEL DEVELOPMENT
	721.	Dashboard of Network Routes for Logistics Team
	722.	Alloy Service
	723.	Full Stack Web Application Development
	724.	ADDING A DISTRIBUTED CACHING LAYER
	725.	DATA PROFILING TO ENSURE THE FLOW OF DATA FROM SOURCE DATA POOL TO TARGET DATA POOL
	726.	Front-End Web Development Using React for Various Applications and Features
	727.	Building MicroServices for DocOn's WebEMR using Full Stack Web Development
	728.	RETAILIO WEB UI DEVELOPMENT
221	**Pilani AtmaNirbhar Resource Center (PARC) , Pilani**	
	729.	IT Platform for Stakeholder Management
222	**Pixcy - Computer Vision , Bangalore**	
	730.	PIXCY
223	**Pixcy - Marketing Designing , Bangalore**	
	731.	'Content Marketing and Customer Support in Stock Photography'
224	**Pixcy , Bangalore**	
	732.	MOBILE APP DEVELOPMENT WITH REACT NATIVE
	733.	APP. DEVELOPMENT USING REACT-NATIVE
225	**Pixxel (Syzygy Space Technologies Pvt. Ltd.) , Bangalore**	
	734.	Satellite Electrical Power Subsystem Design
	735.	Thermal Verification and Validation of Battery Pack and Design of Active Temperature Control
	736.	BIG DATA SCALING OF A GEOSPATIAL DATA PRODUCT
	737.	Studies and Implementation of Different Memory Test Methods & Development of Thermal Control System
	738.	Implementation of the CCSDS 123.0-B-2 Compression algorithm for Hyperspectral and Multispectral Data
226	**Plastic Water Labs , Hyderabad**	
	739.	Augmented Reality mobile application development for BSc. Design & Manufacturing
227	**Platifi , Hyderabad**	
	740.	JOB PORTAL WEBSITE
228	**PM School (ABSORB TECHNOLOGIES PVT. LTD.) - Tech , Mumbai**	
	741.	Design & Web Development of Community platforms
229	**PM School (ABSORB TECHNOLOGIES PVT. LTD.) Non Tech , Mumbai**	
	742.	CUSTOMER ACQUISITION & RETENTION Marketing & sales
230	**Process 9 - Document Translation System , Gurgaon**	
	743.	Process 9 Website Translation System
231	**Process 9 - Neural Machine Translation , Gurgaon**	
	744.	MOX-VEDA 2.0 PORTAL DEVELOPMENT
232	**Process 9 - Website Translation System , Gurgaon**	
	745.	UI/UX
	746.	Process 9 Website Translation System

233	**Process 9 - Website Translation System ver 2.0 , Gurgaon**	
	747.	WORKING ON MOXVEDA SOFT LAUNCH
	748.	On Product Marketing at Process9
234	**Psi Phi Global Solutions Pvt. Ltd., (OkCredit) , Bangalore**	
	749.	Empowering small-scale Merchants by offering an Online Business Platform
	750.	WEB DEVELOPMENT TO FACILITATE MONEY TRANSFER
	751.	PRODUCT MANAGEMENT & MARKET RESEARCH
	752.	USER RESEARCH FOR DIGITAL SERVICES VERTICAL
235	**Pushstart Media Network Pvt. Ltd. , Mumbai**	
	753.	Managing a community of 20k+ Entrepreneurs and Startup Founders
236	**Qubole , Bangalore**	
	754.	STABILITY OF FEATURES
	755.	WEB DEVELOPMENT USING RUBY ON RAILS
	756.	Frost 2.0
	757.	Robust query rendering in Presto
	758.	FEATURE ROLLOUT TASKS AND STRESS FRAMEWORK
	759.	SPARK MAINTENANCE AND OPTIMIZATION
	760.	ADVANCED CLUSTER MANAGEMENT
237	**Questo Wellbeing Pvt Ltd , Nashik**	
	761.	Using the fundamentals of Market Research and Growth Marketing,
	762.	MARKETING TECHNOLOGY
	763.	Using the fundamentals of Market Research and Growth Marketing
238	**Quintessential Design , Hyderabad**	
	764.	DESIGNING SMART HELMETS FOR ALL-TERRAIN VEHICLES
239	**Receivables Exchange of India Limited , Mumbai**	
	765.	INTERNAL PORTAL PROJECT
240	**ReferralYogi Technologies Pvt. Ltd. , Chennai**	
	766.	BUILDING CHATBOTS AND WEB DEVELOPMENT
241	**Reflexis Systems India Pvt Ltd. , Pune**	
	767.	Machine Learning and Natural Language Processing techniques in Corporate Data Analysis
	768.	SPEECH AND FACE RECOGNITION FEATURES FOR APP DEVELOPMENT
	769.	BUILDING A FRONT-END APPLICATION USING REACT LIBRARY
	770.	CUSTOMER LIFETIME VALUE ANALYSIS FOR A VEHICLE INSURANCE COMPANY AND UI FOR BUTTONS
	771.	QUALITY ASSUARANCE THROUGH MANUAL AND AUTOMATION TESTING
	772.	AUTOMATING FEATURE SELECTION IN A MACHINE LEARNING MODEL WITH BAYESIAN OPTIMIZATION
	773.	WEB APPLICATION DEVELOPMENT FOR REFLEXIS
	774.	Quality Assurance of Reflexis Workforce Management System
	775.	CREATING A JAVA LIBRARY FOR REPRESENTING EXCEL DATA IN VARIOUS FORMATS
242	**Reild Residential Properties Pvt.Ltd , Hyderabad**	
	776.	Web Development – Front End
	777.	Tokenization of Real Estate and making Smart Contracts for Block Chain
	778.	Defining Complete Project
	779.	WEB-APP DEVELOPMENT – ADMIN & RETAIL SAAS PORTAL
	780.	MOBILE-APP DEVELOPMENT – INVESTOR PORTAL
	781.	ENTERPRISE RESOURCE SOFTWARE FOR ASSET PROCUREMENT
243	**Resolvity Inc. , Texas**	
	782.	SPEECH RECOGNITION
	783.	Developing IVR Applications on AWS Lambda;
	784.	QA TESTING AND ANDROID APPLICATIONS
244	**Rite Infotech Pvt Ltd , Faridabad**	
	785.	IMAGE LABELLER WEB APPLICATION
	786.	DEEP LEARNING FOR AUTOMATION
	787.	'REPOSITORY DASHBOARD'
	788.	Backend And Networking on 2wys Remote Technology

	789.	WEB DEVELOPMENT ON 2WYS REMOTE TECHNOLOGY
245	**Rivigo Tech , Gurgaon**	
	790.	Payments Systems Integration
	791.	ON PAYMENTS SYSTEMS, DATA PORTAL AND PRIME PANEL
	792.	VYOM - WAREHOUSE CLEANUP, PILOT PAYOUT REPORT and PSWT AND UNS TICKET GENERATION
	793.	Pickup Adherence
246	**Rupeek Fintech , Bangalore**	
	794.	Google Pay Spot for Rupeek and other projects
	795.	Maximizing traffic through bid automation and SEO
	796.	Practice School–II: Projects and Learnings
	797.	Designing and Launching the Rupifi website
	798.	MANAGEMENT OF CREDIT DISBURSALS
	799.	MANAGEMENT OF DAILY BUSINESS OPERATIONS
	800.	MANAGEMENT OF FLIPKART BUSINESS OPERATIONS
247	**Rupifi Tech , Bangalore**	
	801.	SOFTWARE DEVELOPMENT AT RUPIFI
	802.	SOFTWARE DEVELOPMENT AT RUPIFI TECH RUPIFI FINTECH
	803.	DEVELOPMENT OF WEB APPLICATION FOR
	804.	BACKEND DEVELOPMENT IN JAVA SPRING BOOT
248	**Saffrongrid Ltd. - Artificial Intelligence Department , Hyderabad**	
	805.	'TRAFFIC MONITORING SYSTEM
249	**Samsung Semiconductor India R&D Center-Hardware , Bangalore**	
	806.	BCH CODE
	807.	DESIGN OF SYSTEMVERILOG TESTBENCH MODULES FOR THE VERIFICATION OF DESIGN WITH THE AID OF PYTHON SCRIPTS TO ACHIEVE A DESIRED DEGREE OF SCALABILITY AND AUTOMATION
	808.	Memory Solution(Hardware Verification)
	809.	Physical Design Flow of NVMe Chips
	810.	Universal Verification Methodology for the Verification of eFlash Memory and Scripting using Perl
	811.	Study of Image and Tensor Transformation Operations
	812.	INTEGRATION AND VERIFICATION OF A SUBSYSTEM IN A SOC
	813.	DETECTION ,MODELLING AND REDUCTION OF NOISE IN A CAMERA IMAGE SENSOR CHIP
	814.	Coding Guideline Checker
	815.	Memory Design Verification
	816.	RTL and Circuit Design for Image Sensors
250	**Samsung Semiconductor India Research -Software , Bangalore**	
	817.	Distributed Systems and Distributed Storage
	818.	Storage Protocols in Modern Devices
	819.	ADDITION OF FEATURES TO AN IN-HOUSE TOOL FOR CODE COVERAGE
	820.	Development of Common framework for NVMe
	821.	CMOS Image Sensor Image Processing
	822.	FOUNDRY SOFTWARE SOLUTION
	823.	Zoned Storage and Asynchronous I/O Framework
	824.	Neural Processing Unit - Compilers
	825.	Development of Automation Software for WiFi Division
	826.	Implementing a Recommendation System, Accelerating Inference using Intel OpenVino toolkit.
	827.	VIRTUALISATION AND STORAGE PROTOCOLS
	828.	GRAPHIC RENDERING PIPELINE IN ANDROID OPERATING SYSTEM
251	**Samyojya , Bangalore**	
	829.	AI-DRIVEN ENGINE FOR DRIVER ALERTNESS DETECTION
252	**SAP Labs , Bangalore**	
	830.	SERVICE FABRIK BROKER: Enhancing SAP Cloud Platform Backing Services Open Source Broker through internal module restructuring and dependency upgradation.
	831.	automation of the syncing of FOSS across the product repositories.
	832.	Hibernation of DevOps Tools and Resources
	833.	Object Store as a Service

253	**Saras Analytics - Nontech , Hyderabad**	
	834.	CREATING BRAND AWARENESS & CUSTOMER BASE FOR HALO 2.0'
	835.	Data Analysis DSP, LA & L'Azurde
	836.	DATA ANALYTICS
	837.	Saras Analytics,Hyderabad
	838.	Dashboard and Business Intelligence Tasks
	839.	Optimizing conversion for the e-commerce Fashion brand
	840.	Optimizing ecommerce conversion rate of a luxury luggage brand and a bath and body works brand
	841.	Business Analytics Internship
	842.	App Analytics and Conversion Rate Optimization
	843.	Developing Watchdog & Anomaly Tracker for Daily Reporting Requirements"
254	**Saras Analytics - Tech , Hyderabad**	
	844.	DEVELOPMENT OF HALO WEB-APP USING ANGULAR
255	**Sattva Media & Consulting Pvt Ltd , Bangalore**	
	845.	Impact of Covid-19 On Anti-Human trafficking funding)
	846.	Program Management and Operations for Action COVID-19 Team Grants
256	**Saveo Healthtech Pvt. Ltd - Non Tech , Bangalore**	
	847.	Product Management And Data Driven Purchases
257	**Scovelo Consulting , Chennai**	
	848.	DIGITAL AND SOCIAL MEDIA MARKETING PRACTICES
258	**SENSEI TECHNOLOGIES PVT LTD , Bangalore**	
	849.	GUIDED LEARNING SYSTEM
259	**SequelOne Solutions Pvt Ltd , Gurgaon**	
	850.	Dashboard Development and Software Engineering at Hono.ai
	851.	WEB DEVELOPMENT ON PULSE AND APOLLO
	852.	Web Development to build Learning Management System
	853.	Website Development for Efficient and Automated Recruitement Processes
	854.	WEB DEVELOPMENT WITH PHP, MYSQL, CODEIGNITER, REST API
260	**Seygnux Solutions Pvt. Ltd. , Delhi**	
	855.	GROWTH HACKING TECHNIQUES
261	**ShortHills Tech Pvt Ltd(Nontech) , Gurgaon**	
	856.	Deploying and Customizing Dynamics 365, and Organization Security with Azure AD
	857.	BUSINESS DEVELOPMENT
	858.	Business Development Internship
262	**ShortHills Tech Pvt. Ltd , Gurgaon**	
	859.	BestViewsReviews (Full Stack Development)
	860.	BestViewsReviews Web Development
263	**Sirius MotorSports , Chennai**	
	861.	Systems Engineering of a skateboard architecture and Stewart's Platform development for vehicle stability visualization
	862.	Systems Engineering of Skateboard architecture, Basic control system development in Automobiles & Development of Stewart's Platform
264	**Sleepiz (India) Pvt. Ltd. , Pune**	
	863.	ARTIFACT DETECTION OF CW DOPPLER DATA
265	**SmartHelio Sarl. , NOIDA**	
	864.	DEVELOPMENT OF THE CLOUD ARCHITECTURE
266	**Snap Deal , Gurgaon**	
	865.	ANALYSING AND IMPROVING PRODUCTS USING DATA ANALYTICS
	866.	GROWTH OF SELLTM
	867.	SUPPLY CHAIN AND POST-ORDER ANALYTICS
267	**Sopan , Ahmedabad**	
	868.	Developing Iot Based Solution For Remote Monitoring, Preventive & Predictive Maintenance.
	869.	Enhancement of after sales services by migration to an app based solution
268	**Stowe Research India Pvt Ltd , Faridabad**	
	870.	Rule Based FAQ Chatbot
	871.	Progressive Web App (PWA) on Insurance Claim

	872.	AND PROCESSING OF TEXT RECOGNISED IN DOCUMENTS
269	**Sun Mobility , Bangalore**	
	873.	FIELD OPERATIONS AT A BATTERY CHARGING AND SWAPPING STATION
	874.	RCCB ALERT SYSTEM
270	**Synchrony , Hyderabad**	
	875.	Robotic Process Automation using Automation Anywhere
	876.	RPA FOR ENVIRONMENT CLEAN UP AND HEALTH CHECK
	877.	Triaging and Automation of DLP Webmail Incidents
	878.	Data Loss Prevention and Automation through API integation
	879.	Development of Random Password Generator and Automation of Internal Synchrony Applications using Robotic Process Automation
	880.	PRISM (GENASYS)
	881.	DATA LOSS PREVENTION AND AUTOMATION THROUGH API INTEGRATION
	882.	AUTONOMOUS HEALTH-CHECK BOT CREATION FOR CLEANUP OF PROCESSES USING AUTOMATION ANYWHERE
	883.	Control Insider Threats in DLP and integration of Symantec DLP with demisto(cortex XSOAR)
	884.	WEB APPLICATION FOR TALEAU CONTENT MIGRATION
271	**Takshila Learning Pvt. Ltd. (Non tech) , Delhi**	
	885.	(Business Development of Takshila Learning
	886.	(Sales Analytics and Process Optimization)
	887.	(Content Development, Digital Marketing and UX Development for Takshila
272	**Takshila Learning Pvt. Ltd. , Delhi**	
	888.	Video Conferencing Platform for Live Classes
	889.	Mobile Application for Takshila Learning Classes
273	**Tata Digital Health , Bangalore**	
	890.	Backend Development Using Spring Boot
	891.	BACKEND DEVELOPMENT
	892.	"BACKEND DEVELOPMENT AT TATA HEALTH"
	893.	BACK END SOFTWARE DEVELOPMENT EXPERIENCE USING SPRING BOOT
	894.	ELECTRONIC MEDICAL RECORDS APPLICATION
274	**Techture Structures Pvt Ltd. , Nagpur**	
	895.	BACKEND SOFTWARE DEVELOPMENT
	896.	WORKING ON BIM FRAMEWORK OF BIRLA CENTURY MILLS
	897.	Front-End Software Development
275	**Texas Instruments (I) Pvt Ltd - Systems , Bangalore**	
	898.	Developing the firmware for a hardware block in DLP Projector to enable Edge Blending
276	**Texas Instruments (I) Pvt. Ltd. -Analog , Bangalore**	
	899.	Design of Analog front-end circuits for Ultrasonic applications
	900.	DESIGN OF VOLTAGE TRANSLATOR PRODUCT
	901.	A Spatial Numerical Algorithm Porting to C++ For Real-Time Wafer Probe Testing
277	**Texmaco Rail & Engineering Ltd. , Kolkata**	
	902.	SIMULATION OF WAGON COMPONENTS USING Z-CAST PRO SOFTWARE
278	**Thomson Reuters , Hyderabad**	
	903.	Use of AI, ML and Robotic Automation Process to automate business processes
	904.	DEVELOPING SOFTWARE, PREDICTIVE & AUTOMATION TECHNOLOGIES FOR FINANCIAL BUSINESS PROCESSES
279	**Thorogood , Bangalore**	
	905.	Data ETL Case Study
	906.	BI & DATA ANALYTICS
280	**TNSTC , Chennai**	
	907.	Web Application Development
	908.	OFFLINE WEB BASED APP FOR AIRCRAFT'S FACTS AND FUCTIONS
	909.	Developing cross platform mobile applications(for both iOS and android) using Flutter SDK
	910.	Dummy Website for TNSTC
281	**Toshiba Software (India) Pvt Ltd , Bangalore**	
	911.	Study about Semantic Segmentation using Deep Learning

282	**Trell Experiences Pvt Ltd , Bangalore**	
	912.	Automating Content Featuring & QC pipeline of Trell Platform using Machine Learning
	913.	'Backend Software Engineering'
	914.	Content Tagging & Quality Control Dashboards
	915.	FRONTEND WEB DEVELOPMENT
	916.	Backend Software Engineering and User Personalisation
	917.	"Case Reviews and GCP Deck Automation"
	918.	Data Engineering Projects
283	**Trifacta Inc , Bangalore**	
	919.	Databricks Execution Optimization and Capturing KPI Metrics
	920.	Wrangle To Python Conversion -- DataPrep for Data-Science
	921.	EXCEL INGESTION USING APACHE POI
284	**Tvami Technologies Pvt. Ltd. , Bangalore**	
	922.	INTERNSHIP AT TVAMI
	923.	Product and Marketing Strategies at Tvami Technologies
	924.	Website Development
	925.	TO WORK WITH THE CONTENT CREATION TEAM OF TVAMI AND TO MAINTAIN THE WEBSITE AND SOCIAL MEDIA PLATFORMS OF THE FIRM
285	**TVS Motors , Hosur**	
	926.	Speech Processing in Android Platform for Two-wheeler environment
	927.	MODELING AND SIMULATION OF MONOWHEEL VEHICLE DYNAMICS
	928.	TECHNOLOGY DEMONSTRATION OF ELECTRONICALLY OPERATED MOTORCYCLE SUSPENSION (SEMI ACTIVE SUSPENSION WITH RIDE MODES
	929.	MODEL DEVELOPMENT FOR REGENERATIVE BRAKING
	930.	ESTIMATION OF ROLL, PITCH AND YAW ANGLES OF A TWO-WHEELER USING AN INERTIAL MEASUREMENT UNIT
	931.	Search Campaign Optimization & Data extraction, authentication of TVSM dealerships invoice
	932.	A REPORT ON DEEP LEARNING EDGE DEPLOYMENT ATTENDANCE PLATFORM
	933.	Scraping Prices of Products of Competitor Vehicle Companies & Data extraction, authentication of TVSM dealerships invoice
	934.	BUILDING A DASHBOARD FOR VEHICLE DATA ANALYTICS
	935.	PREDICTING POTENTIAL LINE STOPPERS
	936.	Optimization of Partial Loads by Clubbing Multiple Loads
	937.	Electronic analysis of the design and simulation of BLDC motor controllers
	938.	COMMON PLATFORM CREATION FOR COMMUNICATING DIFFERENT PLCs
286	**UBS - Group Compliance , Pune**	
	939.	MITIGATION OF OPERATIONAL RISK THROUGH EFFECTIVENESS TESTING OF INTERNAL CONTROLS
	940.	Operational Risk Management by Internal Auditing
	941.	Operating effectiveness of Key procedural Controls [KPC])
287	**UBS - Group Finance , Hyderabad**	
	942.	Moving towards automation in GDBS team
	943.	DAY TO DAY PNL ASSESSMENT AND REVIEW OF TRADES
	944.	BUSINESS MANAGEMENT
288	**UBS - Group RISK , Mumbai**	
	945.	CROSS CURRENCY BASIS SPREAD (CCBS) MODEL BACKTESTING & CONFIRMATION USING R
	946.	OPTIMIZATION OF BUSA CCAR MORTGAGES, PAST DUES AND RWA OECD MODELS
	947.	DEVELOPING MONTHLY CONTROL OVER RISKY COLLATERALS & AUTOMATING RISK FACTOR GENERATION
	948.	OPTIMISING MODEL RISK CONFIRMATION PROCESS FOR RETAIL AND NON-RETAIL CREDIT RISK MODEL USING R
289	**UBS Business Solutions (India) Private Limited - Finance Group , Mumbai**	
	949.	Onboarding and Implementation of Hard Transfers and Improving Process efficiency at various levels
290	**UBS Business Solutions (India) Private Limited - Finance Group , Pune**	
	950.	Valuations and Automation Processes
	951.	OTHER MONTHLY ACCOUNTING TASK

	952.	PRODUCT CONTROL AND AUTOMATION
	953.	Wealth Management Americas compliance requirement with US regulators as a broker dealer
291	**UBS Business Solutions (India) Private Limited - Group Operations , Hyderabad**	
	954.	KYC REVIEWS AND CLIENT OUTREACH
	955.	CENTRALIZATION OF TICKET FLOW STATUS AND EMAIL VOLUME REDUCTION VIA INCIDENT MANAGEMENT MODULE
	956.	IMPLEMENTATION OF AOM IN OPERATIONS MANAGEMENT
292	957.	**UBS Business Solutions (India) Private Limited - Group Operations , Pune**
	958.	MAKING AND IMPLEMENTATION OF CONTROL FRAMEWORK AND SHAREPOINT SITE
	959.	Process modelling and VBA
	960.	4EYE OPTIMIZATION, DOCUMENTATION & END-TO-END REPORT AUTOMATION USING VBA-HTML MACROS
	961.	Analysis of Operational Risk and Controls using FMEA framework
	962.	CONVERSION OF STANDARD OPERATING PROCEDURES INTO ARIS PROCESS FLOW MAPS
293	**UBS Business Solutions (India) Private Limited - RAS FINANCE , Pune**	
	963.	GROUP REPORTING (Internal and External)
	964.	Reporting and Analytical Services
	965.	Investment Bank Reporting at UBS
	966.	Project Management
	967.	REPORTING ACTIVITIES FOR NCL BUSINESSES AND GROUP TREASURY COST
	968.	REPORTING DASHBOARD DEVELOPMENT AND UPDATION USING MICROSTRATEGY TOOL
	969.	INFORMATION MANAGEMENT AND RISK MITIGATION
	970.	INFORMATION MANAGEMENT OF TREASURY
	971.	FINANCIAL INFORMATION MANAGEMENT & RISK MITIGATION
	972.	Preparing Frontpages and Factsheets for the various Business Divisions of UBS
	973.	PREPARATION OF QUARTERLY AND ANNUAL REPORTS USING KYVOS OLAP SERVER
	974.	Liquidity and Funding(Group Treasury)
294	**UBS Business Solutions(India)PrivateLimited-Group Operations , Mumbai**	
	975.	Optimization of Client Service Efficiency
	976.	CENTRAL SUPERVISORY CONTROLS FOR INVESTMENT BANKING AND AUTOMATION OF SUCH CONTROLS FOR UBS
	977.	Optimization of Client database
	978.	Streamlining the Client On Boarding Process
	979.	AUTOMATION OF FINANCIAL DATA HANDLING USING ROBOTIC PROCESS AUTOMATION
	980.	BUSINESS ANALYSIS AND AUTOMATION
	981.	Preparation of daily and monthly P&L accounts and automation of P&L process using VBA
295	**UBS Group Finance - Hyd/Pune , Hyderabad**	
	982.	P&L Control- Validation & Production
	983.	Product Control – Validation & Production
	984.	Management of Daily Dashboard, Profit and Loss and Month End Deliverables in GB Apac
	985.	DAILY REPORTING ON FX EXECUTION DESK AND AUTOMATION OF MONTHLY REPORTING SYSTEM
296	**Udaan , Bangalore**	
	986.	CTR PREDICTION AND RANKING FOR ADVERTISEMENT PERFORMANCE EVALUATION
	987.	COMPETITIVE BENCHMARKING PROJECT & DASHBOARD CREATION
	988.	AUTOMATED SUPPLY CHAIN DASHBOARD
	989.	"Setting Up and Automating Telesales Project".
	990.	Smartphone Allocations- Design, Execution, and Automation AND Reporting Revamp.
297	**Udhyam Learning Foundatation , Bangalore**	
	991.	AUTOMATION OF DATA COLLECTION, PROCESSING AND ANALYSIS AT UDHYAM SHIKSHA
298	**Upgrad - Non - Tech , Mumbai**	
	992.	Designing Content for management programs
	993.	THE LIFECYCLE OF A DEGREE PROGRAM AT UPGRAD
	994.	"Content Creation of BA & MA History Course"
	995.	CONTENT DEVELOPMENT FOR MBA MODULES
	996.	CONTENT DEVELOPMENT FOR ONLINE COURSES
	997.	Digital Marketing Program Redevelopment

	998.	'INTERNATIONAL MBA PROGRAM
299	**UPGRAD , Mumbai**	
	999.	Content strategy on upGrad's flagship course - PGDDS Data Science
	1000.	Content Strategist (PGDML/AI & PGDDS)
	1001.	Tasks and Learnings in Software Development Course
	1002.	Designing ML/AI/Cloud Specialization Courses for College team & MLC Program
	1003.	EndSem Work
	1004.	Designing ML/AI Courses in collaboration with IIIT Bangalore
	1005.	'Designing ML/AI Specialization Courses for Joint Degree Programs'
	1006.	Designing Data Science Courses
	1007.	Capstone Project - Real Time Health Alert System
	1008.	Building Automated Data Pipelines using Apache Airflow
	1009.	Content Strategist Work Role.
	1010.	"Designing Post-Graduate Diploma Data Science – Data Engineering Course"
	1011.	Course Preparation: C programming
	1012.	END-SEM WORK
	1013.	CONTENT DESIGNING FOR TECH PROGRAMS
	1014.	CONTENT STRATEGIST AT UPGRAD
	1015.	THE LIFECYCLE OF A DEGREE PROGRAM AT UPGRAD
	1016.	Content Creation for MBA and BBA Courses- Quantitative Methods, Business Mathematics and Quantitative Techniques"
	1017.	CONTENT DEVELOPMENT FOR MBA MODULES
	1018.	" Content Strategy of MBA Course - Organizational Behaviour and Management (OBM)"
	1019.	"CONTENT CREATION OF MBA AND BBA COURSESMARKETING AND FINANCE"
	1020.	'INTERNATIONAL MBA PROGRAM
	1021.	DESIGN AND DEVELOPMENT OF DEGREE PROGRAMS AT UPGRAD
	1022.	Foundation of LPU B. Com Degree and MBA Analytics with NMIMS
	1023.	CONTENT CREATION OF DEGREE PROGRAMS AT UPGRAD
300	**VCTIP Pvt. Ltd. (Market Data Forecast) Content Writing , Hyderabad**	
	1024.	Market research and analysis on different markets across various horizontals and verticals and preparing a research report on the markets)
	1025.	MARKET RESEARCH AND ANALYSIS ON VARIOUS INDUSTRIES OF DIFFERENT SECTORS
301	**VCTIP Pvt. Ltd. (Market Data Forecast) Research Associate , Hyderabad**	
	1026.	Author report descriptions, summaries, articles, blog posts about various industry trends in electronics domain
	1027.	Market Research on Chemical industries across the world
	1028.	Market Analysis of Trending Industries: Size, Growth, Trends, Forecast, CAGR, COVID-19 Analysis, Drivers, Restraints, Segmentation, Regional Analysis, Key Players
302	**VenueMonk , Gurgaon**	
	1029.	Design and Development of Venue Booking and Management Software as a SaaS using MERN stack
303	**Versa Cloud ERP Inc - Non Tech , Portland**	
	1030.	Drip marketing and Inventory forecasting
	1031.	MARKETING, SALES FORECASTING AND AD HOC REPORTING AT VERSA CLOUD
	1032.	DRIP MARKETING AND DASHBOARD MGMT.
304	**Versa Cloud ERP Inc - Tech , Portland**	
	1033.	Inventory Forecasting and BI Integration
	1034.	DRIP MARKETING , REPORTS AND DASHBOARD ENHANCEMENT AND CHATBOT
	1035.	INTEGRATION OF POWER BI AND DASHBOARD/REPORTING ENHANCEMENT
	1036.	Integrating Microsoft Power BI on Versa Cloud ERP, Inventory Optimization through Machine Learning, and UX Design for Business Overview interactive reports.
305	**Viacom 18 Media Pvt. Ltd. - Digital Ventures , Bangalore**	
	1037.	Content Metadata Enrichment and Building Recommender System
	1038.	Viacom 18, Digital Ventures
	1039.	Subscription Revenue, Viacom18, Digital Ventures
	1040.	PRODUCT REQUIREMENTS OF VOOT KIDS (APP + TV) WITH GAMIFICATION PLANS
	1041.	In-house inventory management through organic marketing campaigns

	1042.	REVENUE MANAGEMENT AT VOOT
306	**Viacom18 Media Pvt. Ltd - Corporate Strategy , Mumbai**	
	1043.	Viewership Retention and Advertisement Prediction Projects
	1044.	IMPLEMENTATION OF MACHINE LEARNING MODEL FOR AD BREAK SCHEDULING
307	**Vinilok SoluNons Pvt. Ltd. , Indore**	
	1045.	Customer Invoice Classification Model using ML
	1046.	PRESCRIPTION DASHBOARD
308	**VMware Software India Pvt. Ltd. , Bangalore**	
	1047.	Mitosis: Page Table Replication on ESXi
	1048.	Automating Chaos Engineering Experiments for Seamless Resiliency Testing
	1049.	CONTENT SDK FOR APPLICATION MONITORING
	1050.	VMWARE CLOUD - NIMBUS CONSOLE
	1051.	VIRTUAL CLUSTER MEMORY (vCM)
309	**Voziq India Pvt. Ltd. , Hyderabad**	
	1052.	Improvement of ML Models for Customer Retention
	1053.	Customer Churn Prediction and Analytics using Machine Learning
	1054.	Data Science Internship
310	**VSD Eduventures Pvt. Ltd. , Gurgaon**	
	1055.	Project Development, Digital Marketing,Content creation for the new website
311	**Vymo , Bangalore**	
	1056.	Backend Development Using Node.JS and Java
	1057.	"Cron Jobs and Task Automation"
312	**Wake-up Technology Pvt Ltd - Onsite , Gurgaon**	
	1058.	REAL TIME OBJECT DETECTION
	1059.	REAL-TIME FACE RECOGNITION
	1060.	WEB APPLICATION DEVELOPMENT
	1061.	Content based Image Recognition
	1062.	BACKGROUND REMOVAL
313	**Wavelabs Technologies , Hyderabad**	
	1063.	ENHANCING TIMESHEETS APPLICATION USING REACT AND MICRO-FRONTENDS
	1064.	Building and Deploying Google Cloud Architecture: Cloud Application – Storage and Analysis of Spectroscopic Data)
	1065.	Application of Reinforcement Learning for Intelligent Enterprise - Marketing
	1066.	OBJECT DETECTION MODEL
	1067.	Software Development at Wavelabs
	1068.	Networking domain :Interaction between systems.
	1069.	GUI BASED TESTING OF 5G USER PLANE FUNCTION
	1070.	MMRs SOFTWARE DEVELOPMENT
314	**Wealthy , Bangalore**	
	1071.	BACKEND DEVELOPMENT AT WEALTHY
	1072.	API TO COMMUNICATE THROUGH WHATSAPP
	1073.	BACK-END DEVELOPMENT
315	**Wheebox , Gurgaon**	
	1074.	Developing A Web Application To Show The Information About The Questions And The Users In An Exam
	1075.	Development of Microservice for Complete Project Assessments
316	**William O Neil India Pvt Ltd , Bangalore**	
	1076.	Quantitative Finance
	1077.	Practice School 2 at Wisemonk Services
	1078.	Product Practices and Journey
	1079.	'Talent Acquisition/ Recruitment Associate I Operations Executive IInnovation & Growth '
317	**Worley Parsons India , Mumbai**	
	1080.	3D RECONSTRUCTION USING VISUAL SLAM
318	**Xilinx India Technology Services Pvt. Ltd. , Hyderabad**	
	1081.	Ethernet Performance Numbers extraction and report trend
	1082.	Final Report,2020

	1083.	DEVELOP RTL FOR AN AXI PERFORMANCE SLAVE.
	1084.	SYSTEM VALIDATION AND REGRESSION TESTING AUTOMATION
	1085.	U-boot
	1086.	Regression Automation for PnR flows
	1087.	System Validation
	1088.	Performance evaluation of NoC Architecture
	1089.	Embedded system,
	1090.	Embedded Design
319	**Zaggle Prepaid Ocean Services Pvt. Ltd - Onsite , Hyderabad**	
	1091.	Backend Development on Ruby On Rails
	1092.	Founders Card iOS Application
	1093.	WEB DEVELOPMENT USING RUBY IN RAILS
	1094.	WEB DEVELOPMENT USING RUBY ON RAILS
	1095.	Backend Testing on Ruby On Rails
320	**Zaggle Prepaid Ocean Services Pvt. Ltd , Hyderabad**	
	1096.	Founder's Card App
	1097.	Backend Development on Ruby on Rails
	1098.	FOUNDERS CARD iOS APPLICATION
	1099.	BACKEND DEVELOPMENT USING RUBY ON RAILS
	1100.	building a product feature (chatbot), learning about NLPs and working with APIs
	1101.	WEB DEVELOPMENT WITH RUBY ON RAILS
	1102.	front end and back end part of an application
	1103.	FRONTEND WEB DEVELOPMENT USING REACTJS AND TESTING USING JEST
	1104.	Rspec Testing in Ruby on Rails
	1105.	OPEN BANKING APP: MACHINE LEARNING FEATURES
321	**ZEE5 India , New Delhi**	
	1106.	BUSINESS INTELLIGENCE AND COMPETITIVE ANALYSIS
322	**Zeotap India Pvt. Ltd. , Bangalore**	
	1107.	LOOKALIKE 3.0
	1108.	Central Authentication Service, Pixel Service & Data Partner Microservices
323	**Zinnov Management Consulting Pvt. Ltd (IT Project) , Bangalore**	
	1109.	Django REST Backend Development of Python Applications
	1110.	Backend Database Assistance
	1111.	BUILDING ETL PIPELINES FOR HARVESTED DATA WITH PYSPARK AND SCHEDULING JOBS ON AWS EMR USING AIRFLOW
324	**Zinnov Management Consulting Pvt. Ltd., Bangalore**	
	1112.	Talent Pool Assessment, Location Analysis and Reskilling
	1113.	(Reorganization strategy and Location assessment)
	1114.	Professional Learnings and Experiences in a Consulting Firm
	1115.	Talent Research
	1116.	INDIAN TECH START-UP ECOSYSTEM IN 2020
	1117.	Finance & Accounting and Talent analysis for Client Companies
	1118.	Projects at Draup
	1119.	Talent Landscape Analysis for HDE-Compiler Engineering roles
	1120.	DRAUP PROJECTS
	1121.	FUTURE SKILLS, A NASSCOM INITIATIVE
	1122.	Training & Certification by leading Public Cloud Service Provider Market Report
	1123.	Projects within Braindesk, Draup
	1124.	Future skills Project
325	**Zinnov Management Consulting Pvt. Ltd., , Gurgaon**	
	1125.	Hyper Intelligent Automation
	1126.	Google - Market Segmentation & Account Prioritization
	1127.	Digital Technology Adoption by Indian SMBs
	1128.	Various different projects (?)
	1129.	Various Project Works as an Intern
	1130.	CHINA MARKET ACCOUNT INTELLIGENCE

326	Zluri , Singapore	
	1131.	USING NODE.JS EXPRESS FRAMEWORK AND MONGO-DB TO BUILD REST APIs FOR A WEB APPLICATION
	1132.	Design & Development of the Zluri Dashboard
327	ZS Associates , Bangalore	
	1133.	Pipeline and Launch Strategy Using Competitive Intelligence And Entity Linking Using UMLS
	1134.	ITEM RECOMMENDER SYSTEM
328	Zwende Design Tech Pvt Ltd - Nontech , Bangalore	
	1135.	Pinterest Analytics & Etsy Project
329	Zwende Design Tech Pvt Ltd , Bangalore	
	1136.	GROWTH MARKETING
	1137.	WEBSITE MANAGEMENT OF ZWENDE
	1138.	Website Management at Zwende Design Tech Pvt Ltd

BITS PRACTICE SCHOOL STATIONS

LEGEND

● -- PS 1 CENTERS   EXAMPLE -- PRIVATE ORGANIZATIONS

▲ -- PS 2 CENTERS   **EXAMPLE** -- GOVERNMENT ORGANIZATIONS

Details of the Contributions Received from Alumni and CSR Funding
(January 01, 2020-December 31, 2020)

S.No	Name	Batch	Towards	Amount	INR/ USD
1	Phani Gudipaty	-	Covid - 19 Donation	1,000	INR
2	Aakash Aggrawal	-	Daily Wagers Support Initiative	1,000	INR
3	Aarthi Jayaraman	1999	Covid - 19 Donation	5,000	INR
4	Abdul kader Nazimudeen	1993	1993 Batch Fund	500	USD
5	Abhijit Mohod	-	Daily Wagers Support Initiative	2,000	INR
6	Abhinav Pandey	-	Daily Wagers Support Initiative	1,000	INR
7	Abhishek Lalwani	-	Daily Wagers Support Initiative	500	INR
8	Abirami Mahadevan	1993	1993 Batch Fund	500	USD
9	Access Healthcare Services Pvt. Ltd.	-	Covid 19 Donation - BITS 88	2,00,000	INR
10	Aditya Birla Capital Foundation	CSR Fund	CSR Fund	1,00,00,000	INR
11	Aditya Birla Finance Ltd.	CSR Fund	Faecal Sludge Management Lab.	1,00,00,000	INR
12	Aditya Mukherjee	-	Daily Wagers Support Initiative	5,000	INR
13	Aishwarya	-	Daily Wagers Support Initiative	1,000	INR
14	Aishwarya Shukla	-	Daily Wagers Support Initiative	5,000	INR
15	Ajay Kumar	-	Daily Wagers Support Initiative	10,000	INR
16	Ajay Kumar K	-	Daily Wagers Support Initiative	500	INR
17	Ajay Rungta	2002	Covid - 19 Donation	1,100	INR
18	Akashya	-	Daily Wagers Support Initiative	100	INR
19	Akshanth Polepally	-	Daily Wagers Support Initiative	5,000	INR
20	Alluri Reddy Ramesh	1993	1993 Batch Fund	100	USD
21	Aman Arora	-	Daily Wagers Support Initiative	500	INR
22	Aman Shaikh	1993	1993 Batch Fund	200	USD
23	Aman Thakkar	1988	Covid - 19 Donation	1,500	INR
24	Amit Bajaj	-	Daily Wagers Support Initiative	1,000	INR
25	Amit Garg	-	Daily Wagers Support Initiative	5,000	INR
26	Amit Khetan	1994	1994 Batch Fund	1,00,000	INR
27	Amit Mohan	1989	1989 Batch Fund	250	USD
28	Amit R Mishra	-	Daily Wagers Support Initiative	5,000	INR
29	Amit Singh	1991	Daily Wagers Support Initiative	2,500	INR
30	Amitava Sengupta	1969	1969 Batch Alumni Scholarship Fund	20,000	INR
31	Amol Kulkarni	1989	1989 Batch Fund	250	USD
32	Anand Aga	-	Daily Wagers Support Initiative	5,000	INR
33	Anand Gopal	1989	1989 Batch Fund	500	USD
34	Anand Parameswaran	-	Daily Wagers Support Initiative/ 91 Batch support for Campus Rediwallahs	30,000	INR
35	Anand Prasannamoorthy	1993	1993 Batch Fund	140	USD
36	Anika Bairathi	-	Daily Wagers Support Initiative	2,000	INR
37	Anish Seth	-	Daily Wagers Support Initiative	10,000	INR
38	Anju Juneja	1969	1969 Batch Alumni Scholarship Fund	1,500	USD
39	Ankit Bansal	-	Daily Wagers Support Initiative	7,500	INR
40	Ankit Dua	-	Daily Wagers Support Initiative	20,000	INR
41	Ankit Sood	-	Daily Wagers Support Initiative	5,000	INR
42	Ankita Arora	1988	Covid 19 Donation - BITS 88	1,000	INR
43	Ankur Gupta	1994	1994 Batch Fund	49,982	INR
44	Ankush Kumar Tandon	-	Daily Wagers Support Initiative	10,000	INR
45	Anonymous donations	-	iGEM registration charge Goa campus	1,400	INR
46	Anoop Singh	-	Daily Wagers Support Initiative	5,000	INR
47	Anshuman Kapoor	1993	1993 Batch Fund	100	USD
48	Anupam Gupta	1989	1989 Batch Fund	100	USD
49	Anupam Sachdev	1969	1969 Batch Alumni Scholarship Fund	500	USD
50	Anupama Srikantaiya	1999	Covid 19 Donation - BITS 88	20,000	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
51	Anuradha and Prashant Palakurthi	-	Anuradha and Prashant Palakurthi	1,79,88,695	INR
52	Anurag Gupta	1989	1989 Batch Fund	1,000	USD
53	Apoorva Shah	-	Daily Wagers Support Initiative	5,000	INR
54	Apoorva Srivastava	2003	Covid - 19 Donation	2,000	INR
55	Arjun Shankar Krishnan	1988	Covid 19 Donation - BITS 88	9,500	INR
56	Arnab Kumar Panda	-	Daily Wagers Support Initiative	1,000	INR
57	Arpit Bhutani	-	Daily Wagers Support Initiative	1,000	INR
58	Arun Birla	-	iGEM registration charge Goa campus	75,000	INR
59	Arun Hariharan	1989	1989 Batch Fund	300	USD
60	Arun Prasad Raman	-	Daily Wagers Support Initiative	1,000	INR
61	Arun S. Bhat	-	Covid - 19 Donation	7,000	INR
62	Arvind Lakshmikumar	1994	1994 Batch Fund	3,50,000	INR
63	Arvind Balaraman	1989	1989 Batch Fund	200	USD
64	Arvind Construction Company Pvt. Ltd.	1965-70	Alumni Guest House	20,00,000	INR
65	Ashish Agnihotri	-	Daily Wagers Support Initiative	501	INR
66	Ashish Gupta	1989	1989 Batch Fund	500	USD
67	Ashok Chandak	-	iGEM registration charge Goa campus	25,000	INR
68	Ashok Deshmukh	1969	1969 Batch Alumni Scholarship Fund	6,000	USD
69	Ashok Kumar Mathur	1969	1969 Batch Alumni Scholarship Fund	11,000	INR
70	Ashok Kumar Surekha	1969	1964-69 batch Scholarship fund	65,000	INR
71	Ashok Mittal	-	Daily Wagers Support Initiative	25,000	INR
72	Ashok Suri	-	Daily Wagers Support Initiative	2,500	INR
73	AST Telecom Solar Private Limited	-	Daily Wagers Support Initiative	1,00,000	INR
74	Atreya Chaganty	1989	1989 Batch Fund	250	USD
75	Atul Kumar	-	Daily Wagers Support Initiative	500	INR
76	Atul M Mulkar	-	Daily Wagers Support Initiative	10,000	INR
77	Atul Mishra	-	Daily Wagers Support Initiative	10,000	INR
78	Avinash Kamani	-	iGEM registration charge Goa campus	50,000	INR
79	Avinsh Kumar Mehta	-	Daily Wagers Support Initiative	500	INR
80	Bajarang Lal Agarwal	1969	1969 Batch Alumni Scholarship Fund	2,500	USD
81	Bala Natarajan	1993	1993 Batch Fund	200	USD
82	Balachander Gopalan	1989	1989 Batch Fund	350	USD
83	Balaji Bashyam	1989	1989 Batch Fund	500	USD
84	Balaji Dhamotharan	1993	1993 Batch Fund	1,500	USD
85	Barath Shankar Subramanian	-	Daily Wagers Support Initiative	50,000	INR
86	Bharath Kandasamy	1997	Covid - 19 Donation	10,000	INR
87	Bharath Kumar Peramur Sampath	1993	1993 Batch Fund	100	USD
88	Bhaskar Viswanathan	1993	1993 Batch Fund	707	USD
89	Bikram Gupta Sarma	-	iGEM registration charge Goa campus	10,000	INR
90	Birla Carbon India Pvt. Ltd.	CSR Fund	CSR Fund	21,00,000	INR
91	BITS Pilani Alumni Association	-	BITSAA Global Meet	60,00,000	INR
92	BITSAA International	-	iGEM registration charge Goa campus	56,564	INR
93	BITSAA Alumni Trust	-	Covid 19 Donation - BITS 88	2,00,000	INR
94	BITSAA International	-	Bhushan Bhatia Scholarship	89,200	INR
95	BITSAA International	-	Bhushan Bhatia & RP Vaid scholarship	58,600	INR
96	BITSAA International	-	Travel grant/Scholarship Goa campus	45,605	INR
97	BITSAA International	-	Covid - 19 Donation	3,76,009	INR
98	BITSAA International	-	Covid - 19 Donation	3,48,889	INR
99	BITSAA International	-	BITSAA Scholarship (BITS'86 Batch Scholarship, Pendyala Vamsi Krishna, M. R. Dalmia Memorial, Divya Dalipan, S S Seshadari, S K Agarwal Scholarship)	9,72,600	INR
100	Boobalan Veerabadran	1989	1989 Batch Fund	500	USD
101	Brahmkeshwar	-	Daily Wagers Support Initiative	500	INR
102	C Pranay Reddy	-	Daily Wagers Support Initiative	199	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
103	Century Textiles & Industries Ltd.	CSR Fund	Shri BK Birla Incubation and Innovation Centre	2,00,00,000	INR
104	Chandra Siva	1989	1989 Batch Fund	500	USD
105	Chandra Viswanathan	1991	91 Batch support for Campus Rediwallahs	40,000	INR
106	Chandresh Kumar Jain	1969	1964-69 batch Scholarship fund	50,000	INR
107	Chetan Talanki	-	Covid - 19 Donation	1,200	INR
108	Chinmay Deshpande	-	Daily Wagers Support Initiative	1,000	INR
109	Chintan Zalani	-	Daily Wagers Support Initiative	2,000	INR
110	Chirag Ranawat	1988	Covid - 19 Donation	5,000	INR
111	CMS Computers Ltd.	-	Ramesh D Grover Memorial Computers Scholarships	2,74,400	INR
112	Crux Investments Pvt. Ltd.	1969	1964-69 batch Scholarship fund	71,000	INR
113	D.K. Shringi	1969-73	The Animal House Research Lab	51,000	INR
114	Davanum Srinivas	1989	1989 Batch Fund	500	USD
115	Davy S Kalonia	1969-73	The Animal House Research Lab	1,00,000	INR
116	Deep Basu	-	Daily Wagers Support Initiative	20,000	INR
117	Deepak Bhatia	1989	1989 Batch Fund	200	USD
118	Deepak Chinnam	-	Daily Wagers Support Initiative	10,000	INR
119	Deepak Gupta	-	iGEM registration charge Goa campus	75,000	INR
120	Deepak Tyagi	1993	1993 Batch Fund	2,000	USD
121	Deepanjan Mitra	1993	1993 Batch Fund	50	USD
122	Deepti Bhatnagar	1989	1989 Batch Fund	500	USD
123	Deven Raut	1989	1989 Batch Fund	8,392	USD
124	Dexter Cutinha	-	Daily Wagers Support Initiative	20,000	INR
125	Dexter Cutinha	1993	1993 Batch Fund	100	USD
126	Dhairya Mittal	1968	CB Das Award	15,000	INR
127	Dharmarajan Ramachandran	1989	1989 Batch Fund	150	USD
128	Dhiraj K Shah	-	Daily Wagers Support Initiative	1,500	INR
129	Dhiraj Taneja	-	Daily Wagers Support Initiative	25,000	INR
130	Dhirendra Dhir	1969	1969 Batch Alumni Scholarship Fund	5,001	USD
131	Dhruv Kumar	-	Daily Wagers Support Initiative	750	INR
132	Dileep Srigiri	-	Daily Wagers Support Initiative	1,000	INR
133	Dinesh Babulal Gupta	1969	1969 Batch Alumni Scholarship Fund	25,000	INR
134	Dinesh Srivastava	-	Daily Wagers Support Initiative	5,000	INR
135	Divya Gopalan	1993	1993 Batch Fund	500	USD
136	Diwakar Narasimhan	1989	1989 Batch Fund	400	USD
137	Diwakar Pingle	1988	Covid 19 Donation - BITS 88	7,500	INR
138	Dolly Sapra	-	Daily Wagers Support Initiative	4,000	INR
139	G R Mehta	1969	1969 Batch Alumni Scholarship Fund	11,000	INR
140	Gangaikondan Padmanabhan	1969-73	The Animal House Research Lab	2,00,000	INR
141	Garvesh K Pal	-	Daily Wagers Support Initiative	1,30,488	INR
142	Gaurav Shah	-	Daily Wagers Support Initiative	8,000	INR
143	Gaurav Vaid	1989	1989 Batch Fund	200	USD
144	Gautam Jain	-	Daily Wagers Support Initiative	11,000	INR
145	Gayathri Ganesh	1993	1993 Batch Fund	3,000	USD
146	Gerard Francis	1989	1989 Batch Fund	1,000	USD
147	Gerard George	1989	1989 Batch Fund	1,500	USD
148	Girish Chandra Mangal	1969-73	The Animal House Research Lab	25,000	INR
149	Gomathy Sundaresan	1993	1993 Batch Fund	2,500	USD
150	Gosagan	-	Daily Wagers Support Initiative	2,000	INR
151	Gosagan Padmanabhan	1993	1993 Batch Fund	930	USD
152	Goutham Kurra	1993	1993 Batch Fund	10,000	USD
153	Govind Dharwada	1993	1993 Batch Fund	4,700	USD
154	Grandhi Sai Anirudh	-	Daily Wagers Support Initiative	2,500	INR
155	Gujarat Colourlam Pvt. Ltd	-	1964-69 batch Scholarship fund	50,000	INR
156	Guljit Singh Kochhar	1969	1964-69 batch Scholarship fund	50,000	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
157	Gunjan Pandya	1989	1989 Batch Fund	251	USD
158	Gurjeet Singh	-	Daily Wagers Support Initiative	1,000	INR
159	Harbhajan Singh	1969-73	The Animal House Research Lab	10,000	INR
160	Harikrishna Dammalapati	1991	91 Batch support for Campus Rediwallahs	4,000	INR
161	Harinath Babu Soorea	1994-95	Covid - 19 Donation	2,000	INR
162	Haripriya Kankanala	1993	1993 Batch Fund	300	USD
163	Harish Lakshman	1991	91 Batch support for Campus Rediwallahs	20,000	INR
164	Harish Srivatsa Venkatesan	1993	1993 Batch Fund	1,000	USD
165	Harsh Agarwal	-	Daily Wagers Support Initiative	800	INR
166	Harsh Bhargava	1968-73	Daily Wagers Support Initiative	20,000	INR
167	Harsh Patel	-	Daily Wagers Support Initiative	1,500	INR
168	Harshikha Gupta	-	BITSian Day	1,200	INR
169	Hemant Priyadarshy	-	Daily Wagers Support Initiative	10,000	INR
170	Hemanth Yamijala	1994	1994 Batch Fund	3,00,000	INR
171	Hemanth Yamijala	-	Daily Wagers Support Initiative	20,000	INR
172	Himani Gupta	1994	1994 Batch Fund	49,982	INR
173	Impact Foundation (India)	-	Ravi Yadav Scholarship (Dasra)	7,25,000	INR
174	Inder Bir Singh	1969	1969 Batch Alumni Scholarship Fund	11,000	INR
175	Itihaas	-	iGEM registration charge Goa campus	1,000	INR
176	Jagdish Kumar Saraogi	-	Daily Wagers Support Initiative	10,800	INR
177	Jaisimha Thaloor	1991	91 Batch support for Campus Rediwallahs	21,000	INR
178	Jasbir Saini	1969	1969 Batch Alumni Scholarship Fund	1,001	USD
179	Jayaram Rangan	1969	1969 Batch Alumni Scholarship Fund	1,00,000	INR
180	Jiten Naralasetty	1989	1989 Batch Fund	1,000	USD
181	K Girish	-	Daily Wagers Support Initiative	20,000	INR
182	K Sashidharan	-	Daily Wagers Support Initiative	5,000	INR
183	K Sridhar Rao	1969	1969 Batch Alumni Scholarship Fund	10,000	INR
184	K Srinivasan	1988	Covid 19 Donation - BITS 88	5,000	INR
185	K.E. Ayyar	-	K.E. Ayyar Scholarship	1,00,000	INR
186	Kailash Gupta	-	Daily Wagers Support Initiative	5,000	INR
187	Kakkattil Rajan	-	Daily Wagers Support Initiative	10,000	INR
188	Kamal Uppal	1969	1969 Batch Alumni Scholarship Fund	5,000	USD
189	Kanagasabapathy Surendran	1993	1993 Batch Fund	1,000	USD
190	Kanagasabapathy Surendran	1993	1993 Batch Fund	3,00,000	INR
191	Karanpal Singh	-	Daily Wagers Support Initiative	5,000	INR
192	Karthick Prasad	1989	1989 Batch Fund	570	USD
193	Karthik Sivaprakasam	1993	1993 Batch Fund	1,001	USD
194	Kashinath Mitra	-	Daily Wagers Support Initiative	4,000	INR
195	Kathesh V Shah	-	Daily Wagers Support Initiative	2,000	INR
196	Kaushik Mour	-	Daily Wagers Support Initiative	1,000	INR
197	Keshav Vashishta	-	Daily Wagers Support Initiative	10,000	INR
198	Ketan Bhalla	1989	1989 Batch Fund	750	USD
199	Kishan Lal Goel	1969	1969 Batch Alumni Scholarship Fund	10,000	USD
200	Kishore Patil	1989	1989 Batch Fund	500	USD
201	Kittur Subbarao Shankar	1969	1964-69 batch Scholarship fund	50,000	INR
202	Koppalu Subbanna Nagabhushan	1969	1969 Batch Alumni Scholarship Fund	1,00,000	INR
203	Kripa Venkatachalam	1993	1993 Batch Fund	1,500	USD
204	Krishna Ganti	1993	1993 Batch Fund	2,532	USD
205	Krishna Kumar	1993	1993 Batch Fund	930	USD
206	Krishnamurari Parandur	1989	1989 Batch Fund	342	USD
207	Krishnamurthy Srikanth	1988	Covid 19 Donation - BITS 88	10,000	INR
208	Krishnan Rajagopalan	1989	1989 Batch Fund	500	USD
209	Krithika Shankar	1989	1989 Batch Fund	100	USD
210	Kuldip Kaura	1968	Kaura Family Scholarship	8,55,100	INR
211	Kumaraguru Jagannathan	-	1964-69 batch Scholarship fund	1,00,000	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
212	Lakshman Santanam	-	Daily Wagers Support Initiative	5,000	INR
213	Lalit Chauhan	-	Daily Wagers Support Initiative	24,458	INR
214	Lucky Kaul	-	iGEM registration charge Goa campus	2,500	INR
215	Lux Chakrapani	1989	1989 Batch Fund	1,000	USD
216	M B L Bhargava	-	Daily Wagers Support Initiative	50,000	INR
217	Madhav Gudipati	1989	1989 Batch Fund	100	USD
218	MadhusudhanMunagala	1993	1993 Batch Fund	5,000	USD
219	Mahendra Salgia	-	Daily Wagers Support Initiative	5,000	INR
220	Mahesh A Kulkarni	1993	1993 Batch Fund	100	USD
221	Mahesh Santhanam	1989	1989 Batch Fund	375	USD
222	Malay Bansal	-	Bloomberg Finance Lab	3,562	INR
223	Mani Sundaram	1993	1993 Batch Fund	5,000	USD
224	Manish Agarwal	1989	1989 Batch Fund	100	USD
225	Manjunath MN	-	Daily Wagers Support Initiative	5,000	INR
226	Manoj Kumar Batchu	-	Daily Wagers Support Initiative	2,000	INR
227	Manoj Kumar Reddy Pandikunta	1993	1993 Batch Fund	1,971	USD
228	Manu Gupta	-	BITSian Day	16,587	INR
229	Manuj Rathor	1989	1989 Batch Fund	500	USD
230	Mathangi Parthasarathi	1991	91 Batch support for Campus Rediwallahs	15,000	INR
231	Mayur Deshpande	1993	1993 Batch Fund	5,910	USD
232	Meena Ramakrishnan	1993	1993 Batch Fund	5,000	USD
233	Metal Dyne Industries Ltd.	-	Daily Wagers Support Initiative	20,000	INR
234	Milind Goel	-	Daily Wagers Support Initiative	2,500	INR
235	Mohan Borkar	-	iGEM registration charge Goa campus	7,000	INR
236	Mohan Chittella	-	Daily Wagers Support Initiative	10,000	INR
237	Mohan Nangia	-	Daily Wagers Support Initiative	10,000	INR
238	Pushpa Devi Bhartiya	1969	1964-69 batch Scholarship fund	30,000	INR
239	Rekha Dev Kumar	1969	1964-69 batch Scholarship fund	51,000	INR
240	Mukul Chawla	1993	1993 Batch Fund	20,000	USD
241	Mukul Khare	-	iGEM registration charge Goa campus	2,500	INR
242	Mukund Dhondge	-	Daily Wagers Support Initiative	10,000	INR
243	Mukund Ramachandran	1993	1993 Batch Fund	250	USD
244	Muthukumaran T A	1991	91 Batch support for Campus Rediwallahs	10,000	INR
245	N R Ramanathan	-	Daily Wagers Support Initiative	10,000	INR
246	N. Bhimsaria	-	Daily Wagers Support Initiative	2,000	INR
247	Nalin Kaul	-	iGEM registration charge Goa campus	30,000	INR
248	Naman Gupta	-	Daily Wagers Support Initiative	200	INR
249	Narayan Venkataraman	1989	1989 Batch Fund	400	USD
250	Narendra Kumar Kabra	1969	1969 Batch Alumni Scholarship Fund	10,000	INR
251	Narendra Singh Rawat	-	iGEM registration charge Goa campus	75,000	INR
252	Naveen Goel	1983-87	Alumni Guest House	3,00,000	INR
253	Naveen B	-	Daily Wagers Support Initiative	1,000	INR
254	Naveen Bala	1989	1989 Batch Fund	7,500	USD
255	Naveen Kamatam	-	Covid - 19 Donation	5,000	INR
256	Naveen Kapur	1969	1969 Batch Alumni Scholarship Fund	10,725	USD
257	Navkaran Singh	-	Daily Wagers Support Initiative	1,000	INR
258	Neel Broker	1993	1993 Batch Fund	1,000	USD
259	Neeraj Pugalia	1994	1994 Batch Fund	1,49,982	INR
260	Neeti Pokharna	-	Daily Wagers Support Initiative	2,500	INR
261	Nigamanth Sridhar	1993	1993 Batch Fund	5,000	USD
262	Nikhil Mathur	-	Daily Wagers Support Initiative	10,000	INR
263	Nikhil Patni	-	Daily Wagers Support Initiative	1,000	INR
264	Nikhil Rajesh Virmani	-	Daily Wagers Support Initiative	1,000	INR
265	Nimesh	-	Daily Wagers Support Initiative	500	INR
266	Nipun Nair	1993	1993 Batch Fund	1,500	USD

S.No	Name	Batch	Towards	Amount	INR/ USD
267	Nithya Ramamurthy	-	Daily Wagers Support Initiative	10,000	INR
268	Nitin Singla	-	Daily Wagers Support Initiative	2,000	INR
269	Nitish Kundala	-	Daily Wagers Support Initiative	1,000	INR
270	Nityanand Roy	-	Daily Wagers Support Initiative	10,000	INR
271	Nivya Sharma	-	Daily Wagers Support Initiative	100	INR
272	Nukala Jayadeep	-	Daily Wagers Support Initiative	300	INR
273	O.P. Singhi	1965-70	Alumni Guest House	10,000	INR
274	P Harsha	-	Daily Wagers Support Initiative	500	INR
275	P M Krishna Prasad	-	Daily Wagers Support Initiative	10,000	INR
276	P.K. Raghuram	-	Daily Wagers Support Initiative	25,000	INR
277	Padamrani Venkatachalam	1991	91 Batch support for Campus Rediwallahs	10,000	INR
278	Padmanabhan Seshaiyer	1989	1989 Batch Fund	700	USD
279	Padmapriya S	1991	91 Batch support for Campus Rediwallahs	6,000	INR
280	Pale Blue Dot	1989	1989 Batch Fund	1,000	USD
281	Pankaj Chaudhry	1969	1964-69 batch Scholarship fund	1,00,000	INR
282	Pankaj Vaish	-	Daily Wagers Support Initiative	1,50,000	INR
283	Pankaj Vij	1993	1993 Batch Fund	500	USD
284	Parth Patel	-	iGEM registration charge Goa campus	300	INR
285	Percy Batlivala	1969	1969 Batch Alumni Scholarship Fund	1,000	USD
286	Prabodh Agarwal	-	Daily Wagers Support Initiative	500	INR
287	Pradeep Chetal	-	Daily Wagers Support Initiative	7,000	INR
288	Pradeep Sethi	-	Daily Wagers Support Initiative	5,000	INR
289	Praerit Garg	1989	1989 Batch Fund	5,000	USD
290	Prakash Edavan	1989	1989 Batch Fund	500	USD
291	Prakash Iyengar	1988	Covid 19 Donation - BITS 88	10,000	INR
292	Prakash Raman	1988	Covid 19 Donation - BITS 88	5,000	INR
293	Prakash Sadagopan	1989	1989 Batch Fund	500	USD
294	Prakhar Srivastava	-	Daily Wagers Support Initiative	500	INR
295	Praneeth	-	Daily Wagers Support Initiative	1,000	INR
296	Prashanth Rao	1993	1993 Batch Fund	1,000	USD
297	Pratap Arangil	1993	1993 Batch Fund	3,434	USD
298	Prateek Sharma	-	Daily Wagers Support Initiative	5,000	INR
299	Pratim	-	Daily Wagers Support Initiative	5,000	INR
300	Prayas Mittal	-	Daily Wagers Support Initiative	5,000	INR
301	Priya Narasimhan	1994	1994 Batch Fund	3,50,000	INR
302	Priya Paul	-	Graduating class compaign 2019	1,500	INR
303	Priya Gopalan	-	Covid - 19 Donation	10,000	INR
304	Priya Karthik	1991	91 Batch support for Campus Rediwallahs	2,000	INR
305	Priya Ramachandran	1993	1993 Batch Fund	250	USD
306	Priya Vattyam	1993	1993 Batch Fund	2,890	USD
307	Priyali Sen	1989	1989 Batch Fund	1,000	USD
308	Priyamvatha Natarajan	1991	91 Batch support for Campus Rediwallahs	10,000	INR
309	Professonal Education Service	-	-	15,000	INR
310	Pudhvi Raju	-	Daily Wagers Support Initiative	1,000	INR
311	Pushparaj Motam	-	Daily Wagers Support Initiative	100	INR
312	R Raghunathan	-	Daily Wagers Support Initiative	10,000	INR
313	Rachit Joshi	-	Daily Wagers Support Initiative	2,500	INR
314	Radha Aravamudhan	-	91 Batch support for Campus Rediwallahs	300	USD
315	Radha Thothadri	1993	1993 Batch Fund	1,001	USD
316	Radhe Sharma	1969	1969 Batch Alumni Scholarship Fund	1,000	USD
317	Raghav Nair	-	Daily Wagers Support Initiative	2,000	INR
318	Raghavan Srinivasan	1989	1989 Batch Fund	100	USD
319	Raghu Salguti	-	Daily Wagers Support Initiative	10,000	INR
320	Raghuraman S	1991	91 Batch support for Campus Rediwallahs	30,300	INR
321	Rahul Borkar	-	Daily Wagers Support Initiative	1,000	INR

S.No	Name	Batch	Towards	Amount	INR/USD
322	Rahul Jain	1989	1989 Batch Fund	1,950	USD
323	Raj Nagarajan	1989	1989 Batch Fund	501	USD
324	Raj Singh	-	Daily Wagers Support Initiative	50,000	INR
325	Rajasekaran Nagarajan	1989	1989 Batch Fund	501	USD
326	Rajat Gupta	-	iGEM registration charge Goa campus	4,000	INR
327	Rajeev Bhaskaran	-	Daily Wagers Support Initiative	5,000	INR
328	Rajeev Kannan	1989	1989 Batch Fund	1,000	USD
329	Rajeev Rai	1989	1989 Batch Fund	500	USD
330	Rajeev Sharma	-	Daily Wagers Support Initiative	10,000	INR
331	Rajesh Aerat	1988	Covid 19 Donation - BITS 88	10,000	INR
332	Rajesh Boddu	-	Daily Wagers Support Initiative	5,000	INR
333	Rajesh Sengamedu	-	Daily Wagers Support Initiative	25,000	INR
334	Rajeshwaran Selvanesan	1989	1989 Batch Fund	200	USD
335	Rajiv Gupta	1993	1993 Batch Fund	500	USD
336	Rajiv Ranka	-	iGEM registration charge Goa campus	75,000	INR
337	Rajiv Tandon	1969-73	The Animal House Research Lab	1,00,000	INR
338	Rakesh Bhatia	1989	1989 Batch Fund	200	USD
339	Rakesh Chandra	-	Rakesh Chandra Scholarship	85,750	INR
340	Rakesh Chandra Goyal	1969-73	The Animal House Research Lab	2,00,000	INR
341	Rakhee Kothari	1969	1964-69 batch Scholarship fund	1,50,000	INR
342	Ram Balasubramanian	1989	1989 Batch Fund	850	USD
343	Ram Narayanan G	-	Daily Wagers Support Initiative	10,000	INR
344	Ram Venkataraman	1989	1989 Batch Fund	500	USD
345	Raman Hariharan	1989	1989 Batch Fund	250	USD
346	Ramana Gupta Narayanam	1989	1989 Batch Fund	1,000	USD
347	Ramana Narayanam	1989	1989 Batch Fund	1,000	USD
348	Ramanathan Venkatraman	-	Daily Wagers Support Initiative	5,000	INR
349	Ramasubramanian Sundararajan	1993	1993 Batch Fund	150	USD
350	Ramesh Kumar Gupta	-	Daily Wagers Support Initiative	5,000	INR
351	Ramesh Vasudevan	1989	1989 Batch Fund	785	USD
352	Ramnarayan Viswanathan	1993	1993 Batch Fund	500	USD
353	Ramu Kandula Mckinney	1993	1993 Batch Fund	3,000	USD
354	Ranga Rajagopal	1982	Covid - 19 Donation	1,000	INR
355	Rangarajan Sreenivasan	1993	1993 Batch Fund	13,486	USD
356	Ranjit Pedapati	1993	1993 Batch Fund	1,971	USD
357	Ranjith Melarkode	1993	1993 Batch Fund	3,300	USD
358	Ravi Subramanian	1993	1993 Batch Fund	1,000	USD
359	Ravi Varanasi	1989	1989 Batch Fund	1,000	USD
360	Ravina R V	-	Daily Wagers Support Initiative	2,000	INR
361	Ravindra Sunkad	1989	1989 Batch Fund	100	USD
362	Ravishankar	-	iGEM registration charge Goa campus	10,000	INR
363	Ravishankar K	1989	1989 Batch Fund	1,000	USD
364	Ravishankar Kuppuswamy	1989	1989 Batch Fund	950	USD
365	Ravishankar Srinivasan	-	Daily Wagers Support Initiative	3,000	INR
366	Rita Pad Printing	-	iGEM registration charge Goa campus	50,000	INR
367	Robert Raja	1989	1989 Batch Fund	350	USD
368	Rohan Pillai	-	Daily Wagers Support Initiative	5,000	INR
369	Rohit Agarwal	-	Daily Wagers Support Initiative	2,000	INR
370	Ruchi Tandon	1989	1989 Batch Fund	150	USD
371	S G Narayanamurthy	-	Daily Wagers Support Initiative	30,000	INR
372	S Ramchander	1991	91 Batch support for Campus Rediwallahs	20,000	INR
373	S Sundar	1993	1993 Batch Fund	10,000	INR
374	S. Kothai	-	Daily Wagers Support Initiative	5,000	INR
375	S.V. Chinoy	-	Daily Wagers Support Initiative	25,000	INR
376	Sahil Malhotra	-	Daily Wagers Support Initiative	2,500	INR

S.No	Name	Batch	Towards	Amount	INR/USD
377	Sai Priyaa N P (N Pattabhiraman)	-	iGEM registration charge Goa campus	25,000	INR
378	Sajjan Mal Lalwani	1969	1969 Batch Alumni Scholarship Fund	10,000	INR
379	Samarth Shah	-	Daily Wagers Support Initiative	3,000	INR
380	Sameer Chawla	1989	1989 Batch Fund	50	USD
381	Sameer Saral	-	Daily Wagers Support Initiative	10,000	INR
382	Sampat Rampuria	1969	1969 Batch Alumni Scholarship Fund	1,000	USD
383	Sandeep Gawai	1993	1993 Batch Fund	2,000	USD
384	Sandeep Waghchoure	1993	1993 Batch Fund	250	USD
385	Sandeepan Chaudhuri	-	Daily Wagers Support Initiative	10,000	INR
386	Sandhya Srikanth	-	iGEM registration charge Goa campus	1,000	INR
387	Sanjay Khendry	-	Daily Wagers Support Initiative	7,600	INR
388	Sanjay Rajvanshi	-	Daily Wagers Support Initiative	50,000	INR
389	Sanjay Thirumalai	1991	91 Batch support for Campus Rediwallahs	25,000	INR
390	Sanjeev Das Mohapatra	-	Daily Wagers Support Initiative	5,000	INR
391	Sanjeev Kumar	-	Daily Wagers Support Initiative	500	INR
392	Sarat Chandra Prasad Kongara	1993	1993 Batch Fund	250	USD
393	Sarat Industries Ltd.	1969	1964-69 batch Scholarship fund	3,00,000	INR
394	Satheesh Gannamraju	1989	1989 Batch Fund	500	USD
395	Sathya Ganesan	1989	1989 Batch Fund	100	USD
396	Satya Narayan Zindal	1965-70	Alumni Guest House	7,500	INR
397	Satyanarayana	-	Daily Wagers Support Initiative	5,000	INR
398	Saurabh Suman	-	Daily Wagers Support Initiative	14	INR
399	Savith Kandala	1989	1989 Batch Fund	100	USD
400	Sayee Anakk	1993	1993 Batch Fund	1,000	USD
401	Sayonee Ghosh Roy	-	Daily Wagers Support Initiative	10,000	INR
402	Seema Nayak	1989	1989 Batch Fund	300	USD
403	Seema Sushil Kumar	1993	1993 Batch Fund	500	USD
404	Senthil Venkatachalam	1989	1989 Batch Fund	750	USD
405	Senthilkumar S	-	Daily Wagers Support Initiative	2,000	INR
406	Shabda Singh	-	Daily Wagers Support Initiative	5,000	INR
407	Shalika Pargal	1993	1993 Batch Fund	1,000	USD
408	Shantikam Hazarika	1969	1969 Batch Alumni Scholarship Fund	10,000	INR
409	Sharad Agarwal	1969	1964-69 batch Scholarship fund	2,00,000	INR
410	Sharmila Ravula	1993	1993 Batch Fund	1,000	USD
411	Sharmishtha Balwan	-	Daily Wagers Support Initiative	5,000	INR
412	Shashi Mohan Mathur	1969	1969 Batch Alumni Scholarship Fund	11,000	INR
413	Shery Varghese	1989	1989 Batch Fund	1,000	USD
414	Shitanshu Chandra	-	Daily Wagers Support Initiative	5,000	INR
415	Shiv Shankar Gupta	1965-70	Alumni Guest House	11,845	INR
416	Shivakumar Ganesan	-	Daily Wagers Support Initiative	5,000	INR
417	Shivalik Industries	-	Daily Wagers Support Initiative	1,00,000	INR
418	Shreepad S	-	Daily Wagers Support Initiative	10,000	INR
419	Shreyash Anand	-	Daily Wagers Support Initiative	5,000	INR
420	Shri Ahimsa Mines and Minerals Ltd.	-	Daily Wagers Support Initiative	25,000	INR
421	Shuban Kaul	1969	1964-69 batch Scholarship fund	5	INR
422	Shuban Kaul	1969	1964-69 batch Scholarship fund	50,000	INR
423	Shyam Lakshman	1989	1989 Batch Fund	100	USD
424	Shyam Nagaraj	1989	1989 Batch Fund	250	USD
425	Shyam Sunder Agarwal	-	1964-69 batch Scholarship fund	50,000	INR
426	Shyamsundar Sagarmal Somani	-	Daily Wagers Support Initiative	2,000	INR
427	Siddhant Pundir	-	Daily Wagers Support Initiative	1,000	INR
428	Siddharth Swarup	1991	91 Batch support for Campus Rediwallahs	25,000	INR
429	Siva Natarajan	1993	1993 Batch Fund	333	USD
430	Siva Ramamurthy	1989	1989 Batch Fund	7,500	USD
431	Skyblue Aero Pvt. Ltd.	1990	1990 Batch Fund	75,000	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
432	Smarajit Dey	-	Daily Wagers Support Initiative	10,000	INR
433	Snehashish Sinha	-	Daily Wagers Support Initiative	1,000	INR
434	Spur Microwave INC	1969	1964-69 batch Scholarship fund	30,000	INR
435	Sreedevi Kothandaraman	1994	1994 Batch Fund	1,48,053	INR
436	Sreenivasa Reddy Komma	1989	1989 Batch Fund	100	USD
437	Sri Raghunathan	1989	1989 Batch Fund	500	USD
438	Sridhar Kodali	1993	1993 Batch Fund	333	USD
439	Sridhar Ramanathan	-	Daily Wagers Support Initiative	10,000	INR
440	Srikanth Govindaswamy	1993	1993 Batch Fund	1,000	USD
441	Srinivas K	-	Daily Wagers Support Initiative	5,000	INR
442	Srinivas Nukala	1993	1993 Batch Fund	1,000	USD
443	Srinivasa Nithin	-	Daily Wagers Support Initiative	2,500	INR
444	Srinivasa Raju Jampana	1993	1993 Batch Fund	5,000	USD
445	Srinivasan Nagarajan	-	Daily Wagers Support Initiative	5,000	INR
446	Srinivasan Ramasubramanian	1993	1993 Batch Fund	5,000	USD
447	Srivatsa Desikamani	1993	1993 Batch Fund	2,500	USD
448	Srivatsan K	-	iGEM registration charge Goa campus	5,000	INR
449	Srivatsan Parthasarathy	1993	1993 Batch Fund	125	USD
450	Srividya Ramkumar	1993	1993 Batch Fund	2,750	USD
451	Srujan Reddy Yara	-	Daily Wagers Support Initiative	1,500	INR
452	Steel & Allied Products	1969	1969 Batch Alumni Scholarship Fund	25,000	INR
453	Subha Chandrasekaran	1994	1994 Batch Fund	1,97,404	INR
454	Subha Das	1989	1989 Batch Fund	200	USD
455	Subhash BGK	1991	91 Batch support for Campus Rediwallahs	10,000	INR
456	Subhash Chugh	-	iGEM registration charge Goa campus	50,000	INR
457	Subhash Pochareddy	1993	1993 Batch Fund	1,930	USD
458	Subhash Tahilramani	1969	1969 Batch Alumni Scholarship Fund	2,000	USD
459	Subhashini Chandrasekharan	1989	1989 Batch Fund	200	USD
460	Subhashini Krishnamoorthy	1994	1994 Batch Fund	71,400	INR
461	Subramnian Sethuraman	1993	1993 Batch Fund	500	USD
462	Sudha Addepalli	1989	1989 Batch Fund	350	USD
463	Sudhir Achuthan	1989	1989 Batch Fund	279	USD
464	Sugavanam Rajaram	-	iGEM registration charge Goa campus	10,000	INR
465	Sumit Gupta	1991	Daily Wagers Support Initiative	25,000	INR
466	Sumit Mohanty	1993	1993 Batch Fund	2,000	USD
467	Sundaram S	-	Daily Wagers Support Initiative	1,000	INR
468	Sundararaman	-	Daily Wagers Support Initiative	5,000	INR
469	Sundraraman RA	1991	91 Batch support for Campus Rediwallahs	40,000	INR
470	Sunil Bakhru	1993	1993 Batch Fund	100	USD
471	Sunil Gera	1969	1969 Batch Alumni Scholarship Fund	2,000	USD
472	Sunil Kumar	-	Daily Wagers Support Initiative	5,000	INR
473	Suraj Gopal	-	iGEM registration charge Goa campus	3,250	INR
474	Surbhi Vatsa	-	Daily Wagers Support Initiative	10,000	INR
475	Surendra Bhargava	-	Daily Wagers Support Initiative	20,000	INR
476	Suresh Bagaria	1969-73	The Animal House Research Lab	3,00,000	INR
477	Suresh Gurunathan	1989	1989 Batch Fund	380	USD
478	Suresh Khosla	1991	91 Batch support for Campus Rediwallahs	30,000	INR
479	Suresh Rangarajan	1989	1989 Batch Fund	1,000	USD
480	Suriyanarayanan	1991	91 Batch support for Campus Rediwallahs	21,000	INR
481	Surya Manepalli	1989	1989 Batch Fund	1,075	USD
482	Swaran Lata Jain	1969	1969 Batch Alumni Scholarship Fund	1,00,000	INR
483	Swati Bhatia	1993	1993 Batch Fund	5,000	USD
484	Teja Theegela	-	Daily Wagers Support Initiative	1,500	INR
485	Tejpal Jain	-	-	5,000	INR
486	Tridel Builders and Traders Pvt. Ltd.	1969	1964-69 batch Scholarship fund	71,000	INR

S.No	Name	Batch	Towards	Amount	INR/ USD
487	Tushar Mehtani	-	Daily Wagers Support Initiative	1,000	INR
488	Tushar Nigoskar	-	Daily Wagers Support Initiative	5,000	INR
489	Uday Industries (Processing Division)	1969	1964-69 batch Scholarship fund	2,00,000	INR
490	Ujwala Deshmukh Malwade	1989	1989 Batch Fund	150	USD
491	Uneek Mehra	1989	1989 Batch Fund	300	USD
492	Upendra Sharma	-	Daily Wagers Support Initiative	10,000	INR
493	Usha Gopalan	1990	1990 Batch Fund	14,982	INR
494	Utpal Bhatt	1989	1989 Batch Fund	500	USD
495	V Priyamvadan	-	iGEM registration charge Goa campus	1,000	INR
496	V.S. Spandana	2016	Daily Wagers Support Initiative	500	INR
497	Vaibhav Kathuria	-	Daily Wagers Support Initiative	600	INR
498	Vaibhav Surange	-	Daily Wagers Support Initiative	2,500	INR
499	Vaishno P. Rajesh	1987	Covid - 19 Donation	50,000	INR
500	Vamsikrishna Atluri	-	Daily Wagers Support Initiative	2,000	INR
501	Veena Deshpande	-	Daily Wagers Support Initiative	10,000	INR
502	Veena Mendiratta Living Trust	1969	1969 Batch Alumni Scholarship Fund	1,500	USD
503	Veenu Jain	-	iGEM registration charge Goa campus	75,000	INR
504	Venkat Sundaresan	1989	1989 Batch Fund	200	USD
505	Venkatesan Sounderarajan	1989	1989 Batch Fund	100	USD
506	Venkatesh Pattamadai Subramanian	1994	1994 Batch Fund	1,05,611	INR
507	Venkateswaran K	-	Daily Wagers Support Initiative	10,000	INR
508	Venktaraman Ram	1991	91 Batch support for Campus Rediwallahs	10,000	INR
509	VG Rajagopalan	-	iGEM registration charge Goa campus	10,000	INR
510	Vidyasagar Bedida	-	Daily Wagers Support Initiative	5,000	INR
511	Vijay Gulechha	1968	Daily Wagers Support Initiative	15,000	INR
512	Vijay Raghavan C	2005	Covid - 19 Donation/ Daily Wagers Support Initiative	7,001	INR
513	Vijay Rentala	1993	1993 Batch Fund	5,000	USD
514	Vijay Sampath	1993	1993 Batch Fund	5,000	USD
515	Vijay Sankar V	1991	91 Batch support for Campus Rediwallahs	30,000	INR
516	Vijayakumar R Tawker	-	Daily Wagers Support Initiative	1,200	INR
517	Vijaykumar Natarajan	1989	1989 Batch Fund	500	USD
518	Viji Ramachandran	1993	1993 Batch Fund	500	USD
519	Vikas Kothari	1969	1969 Batch Alumni Scholarship Fund	28,400	INR
520	Vikrant Kobla	1989	1989 Batch Fund	400	USD
521	Vimal Shukla	-	Daily Wagers Support Initiative	21,000	INR
522	Vinod Jain	1978-83	Centre for Artificial Intelligence Research	65,689	INR
523	Vinod Kumar Agarwal	-	Covid - 19 Donation	1,00,000	INR
524	Vinod Kumar Dhanuka	-	Daily Wagers Support Initiative	2,000	INR
525	Vinod Kumar Goyal	1969	1969 Batch Alumni Scholarship Fund	14,300	USD
526	Vinod Narayanan	1993	1993 Batch Fund	250	USD
527	Vipen Seth	1969-73	The Animal House Research Lab	1,00,000	INR
528	Vishal Kapur	1989	1989 Batch Fund	100	USD
529	Vishal Lulla	1989	1989 Batch Fund	2,000	USD
530	Viswadharini Kumar	1993	1993 Batch Fund	5,000	USD
531	Viswanathan	-	Covid 19 Donation - BITS 88	2,500	INR
532	Viswanathan Thiagarajan	1991	91 Batch support for Campus Rediwallahs/ Daily Wagers Support Initiative	50,000	INR
533	Viswanathan Vallinayagam	1991	91 Batch support for Campus Rediwallahs	1,000	INR
534	Viswanathan Vallinayagam	1991	91 Batch support for Campus Rediwallahs/ Daily Wagers Support Initiative	2,000	INR
535	Vivek Anand	-	Daily Wagers Support Initiative	5,000	INR
536	Vivek Kumar Kaul	-	Daily Wagers Support Initiative	1,500	INR
537	Yamini Pathak	1989	1989 Batch Fund	500	USD
538	ZL Software Systems	1969	1964-69 batch Scholarship fund	50,000	INR

S.No	Name	Company	Funding	Campus	
539.	Prabhakar Reddy	FalconX	$50 million	Dubai	
540.	Ankit Gupta & Deepak Joy	Quizizz Inc	$12.5 million	Pilani	
541.	Deepak Mital	Roviero, INC	$6.6M	Pilani	
542.	Abhinav, Abhijit	Postman	$2 Billion	Hyd, Goa	
543.	Kartik Gupta	Express Stores	Rs 8 crore	Pilani	
544.	Suraj Supekar	Connected Analytics	7 figure pre-Series	WILP	
545.	Subham Malhotra	MPL	$95 million	Pilani	
546.	Varun Mahana, Varun Puri	Dangal games	$1 million	Dubai	
547.	Mukesh Bansal	Phable	$12 million	Pilani	
548.	Kaushik Mukherjee	SUGAR Cosmetics	$21 million	Pilani	
549.	Dhrub Borthakur	Rockset	$40 million	Pilani	
550.	Darshan Bathija	YourPhysio	$350K million	Pilani	
551.	Shivakumar Ganesan	Exotel	$5.43 million	Pilani	
552.	Krishnan Menon	BukuKas	$10 million	Pilani	
553.	Darshan Bathija	Vauld	$2 million	Pilani	
554.	Vinayak Aggarwal	BiteSpeed	$275,000	Pilani	
555.	Arjun Narang	Gatik	$25 million	Pilani	
556.	Azan and Gowtham	Lancify	$300k	Dubai	
557.	Prem Jain	Pensando Systems	$145 millon	Pilani	
558.	Siddhartha Jain	DeFiDollar	$1.2 million	Hyd	
559.	Harikrishna & Vrushali Prasade	PyxisPM	$7 million	Goa	
560.	Ramesh Panuganty	MachEye	$4.6 million	Pilani	
561.	Shoaib Mohammed	CustomFit.ai	Undisclosed	Goa	
562.	Govinda Upadhyay	Smarthelio	CHF250,000	Goa	
563.	Rishabh, Anirudh Singla	Pepper	$4 million	Pilani	
564.	Ishan Bansal	Groww	$30 Million	Pilani	
565.	Chaitanya Kalipatnapu	Eruditus	$100 Million	Pilani	
566.	Kshitij $ Awais	Pixxel	$ 5 Million	Pilani	
567.	Mustaque Ahamad	FraudScope	$7 million	Pilani	
568.	Abishek Agrawal	Kinexcs	$50,000	Goa	
569.	Nukul, Mahesh	Bijak	$12 million	Pilani	
Aquasition					
570.	J. C. Chaudhry	Aakash Edu. Services Ltd.	$1 billion	Pilani	Byjus
571.	Manil Gupta	Scholr	US$2.1 million	Pilani	Byju's
572.	Binay, Shashanj, Arjun	Tapchief	Undisclosed	Pilani	Unacademy
573.	Kuldeep Deshpande	Ellicium	Undisclosed	Wilp	Future tech
574.	Kiran Bhat & Mahesh R	Loom.ai	Undisclosed	Pilani	Roblox
575.	Arvind & Narinder J Singh	Utopia Global, Inc	Undisclosed	Pilani	Genstar-backed
576.	Kamal Anand, Anil Batra	Asparia	Undisclosed	Pilani	Intrado
577.	Prashantha Palakurthi	Reflexis Systems	$575 Million	Pilani	Zebra technologies
578.	Alagu Periyanan	Bluejeans	$ 500 Million	Pilani	Verizon

*Some of the Alumni Contributions (in dollar) were received by BITSAA International and the net amount after taking care of their administrative expenses was received by BITS Pilani .

RESEARCH PROJECT GRANTS

Pilani Campus

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
1	Synthesis of heterocycle fused cpomenones and quinolinone through transitional metal catalyzed cascade reactions	Chemistry	Dr Anil kumar		CSIR	24.14
2	Synthesis and tubulin inhibition activity studies of novel indolyl heterocycles	Chemistry	Dr. Dalip Kumar		CSIR	22.36
3	Heteroaromatic-Annulated Porphyrins: Design, Synthesis and Study of optoelectronic properties towards the development of photosensitizers	Chemistry	Dr. Dalip Kumar		SERB	24.82
4	Screening Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and their application in Photo electrochemical Water Splitting	Chemistry	Dr. Mrinmoyee Basu		DST-INSPIRE	35
5	Photo degradation of toxic organic dyes using dye-sensitized semiconductor photocatalyst	Chemistry	Dr. Shamik Chakraborty		CSIR	8.07
6	Design and development of synthetic industrial methods to access chiral drugs	Chemistry	Dr. Indresh Kumar		Praveen Laborataries Ltd, Surat	20.8
7	Studying Catalytic carbonylation of polyols-Sustainable Route to Carboxylic Acids from Renewable Platforms	Chemistry	Dr. Bibhas Ranjan Sarkar		SERB	32.3
8	Transition-metal-catalysed synthesis of fused heterocycles via C-C/C-N bond forming stratgegies	Chemistry	Dr. Rajeev Sakhuja		SERB	33.29
9	Synthetic Probes for Staudinger Ligation: Synthesis and Application of Phosphane Based templates	Chemistry	Dr. Kiran Bajaj		DST-WOS	29.7
10	Synthesis of metal complexes using D-glucose derived ligands and application of produced molecules in catalysis	Chemistry	Dr. Ajay Kumar Sah		CSIR	11.32
11	Assessment of sulfur centered halogen bonding (C-X…S,X=CI, Br., I) interaction using matrix isolation infrared spectroscopy	Chemistry	Dr. Amrita Chakraborty		DST-WOS	29.4
12	Sensitive explosive detection in vapor phase with cyclometalated iridim (III), Platinum (II) and Conjugated Hyperbranched polymer based aggregation induced emission active nanoprobes	Chemistry	Dr. Inamur Rahaman Laskar		DRDO	32.72
13	Investigating the correlation between thermodynamic and kinetic parameters through density functional reactivity theory (DFRT) based approach	Chemistry	Dr. R K Roy		SERB-CRG	41.29
14	Use of Social Media as a Driver for Innovation in Higher Education in India	Management	Dr. Nirankush Dutta	Dr. Anil Kumar Bhat	ICSSR	10.5

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
15	Designing a Futuristic Learning Framework for Post Millennial Generation Students of Higher Education Institutions in India	Management	Dr. Jayashree Mahesh	Dr. Anil Kumar Bhat	ICSSR	3
16	Developing active social learning interventions and assessing their impact on envrironmentally sustainable consumption behavior of primary children	Management	Dr. Leela Rani		NCERT	5.14
17	To study the role of hyperglycemia on the progression of acute kidney injury	Pharmacy	Dr Anil Bhanudas		SERB	47.18
18	Klotho regulation as a novel therapeutic strategy against acute kidney injury-induced comorbidity: Impact of epigenetic driven and epigenetic independent reactivation of endogenous Klotho expression	Pharmacy	Dr Anil Bhanudas		SERB-EEQ	50.33
19	Umblical cord mesenchymal stem cells derived exosomes as biogenic nanocarriers of miRNA and chemotherapeutic drug for reversal of chemoresistance in breast cancer	Pharmacy	Dr. Anupama Mittal		DST-Nanomission	40.57
20	Gel-based composite formulation containing asiaticoside and neurotensin for rapid healing of diabetic wounds	Pharmacy	Dr. Anupama Mittal	Dr. Deepak Chitkara	ICMR	23.8
21	Nanotechnology based pharmaceutical, nutraceuticals and cosmetics-development of platform technology	Pharmacy	Dr. Deepak Chitkara		Incisive Elements	21.38
22	Activity targeted nano-formulations for co-delivery of a taxane and antioxidant molecule, alpha acid, for treating breast cancer	Pharmacy	Dr. Deepak Chitkara		DST Rajasthan	11.14
23	Peptide-decorated pH-sensitive nano-conjugate hybrid micelles for co-delivery of temozolamide and an autophagy inducer, rapamycin, for treatment of glioblastoma multiforme	Pharmacy	Dr. Deepak Chitkara	Dr. Gaikwad Anil Bhanudas	DBT	41.94
24	cRGD decorated lipo-polymeric nanoplexes of CRISPR/Cas9 ribonucleoprotein (RNP) for the management of retinal dystrophic conditions	Pharmacy	Dr. Deepak Chitkara	Dr. Debojyoti Chakraborty, IGIB-CSIR (PI), Dr. Vivek Singh(PI), LV Prasad Institute, Hyderabad, Dr. Indumati Mariappan (CO-I), LV Prasad Institute, HYD, Dr. Vivek Pravin Dave (Co-I), LV Prasad Institute	DBT_Nano Intervention	50
25	Self assembling pH-sensitive temozolomide-lipoic acid conjugate nanomedicine for treatment of glioblastoma multiforme	Pharmacy	Dr. Deepak Chitkara		ICMR	8.44
26	Rod-shaped polymeric nanoparticles for targeted delivery of artemisinin-derivatives to plasmodium-infected erythrocytes for improved	Pharmacy	Dr Anil Jindal		SERB (ECR)	44.30

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
	intravenous therapy of cerebral malaria					
27	Development and evaluation of lipid based nanoparticles of Quinapyramine and Isometamidium salt for treatment of trypanosomiasis in camels	Pharmacy	Dr Anil Jindal	National Research Center on Camel, Bikaner (Dr. Sanjay Kumar Project Coordinator and PI) , Dr. Paul Atish Tulshiram	DBT	29.04
28	Role of Endocrine Disrupting chemicals (ECDs) in Maternal and Child Health	Pharmacy	Dr. Sunil K Dubey	Dr. Rajiv Taliyan	ICMR-Adhoc	18.31
29	The impact of formulation variables and processing methods for solubility enhancement of poorly soluble model drug using Affinisol HPMCAS	Pharmacy	Dr. R. N. Saha & Dr. Sunil Kumar Dubey		Colorcon Asia Pvt. Ltd	15.00
30	Develop of novel anti-leishmanial analogues loaded with novel nano-formulations	Pharmacy	Dr. S Murugesan		DBT-IndoSpain	60.00
31	QUALITY BY DESIGN (QbD) BASED SUSPENSION PRODUCT DEVELOPMENT AND PROCESS OPTIMIZATION	Pharmacy	Dr. Sunil kumar Dubey and Dr. Gautam Singhvi		Slyback Pharma	5.50
32	Development and preclinical evaluation of nanostructured lipid particles of bleomycin sulphate for targeting Brain cancer	Pharmacy	Dr. Sunil kumar Dubey and Dr. Gautam Singhvi		Oniosome Healthcare Private Ltd.	12.50
33	Enhancement of oral bioavailability of selected drugs	Pharmacy	Dr. Aniruddha Roy & Dr. Gautam Singhvi		INTAS Pharmaceutic als LTd., Ahmedabad	45.00
34	Design and evaluation of ophthalmic suspension of prednisolone acetate and study the factors reponsible for dose uniformity	Pharmacy	Dr. R N Saha and Dr. Gautam Singhvi		Slyback Pharma	14.00
35	Design, Synthesis, Biological Evaluation and Molecular modelling studies of Indolyl Oxoacetamide-Quinazoline based hybrid analogs as potential pancreatic lipase inhibitors for Obesity treatment	Pharmacy	Dr. Paul Atish Tulshiram		SERB (CRG)	35.05
36	Computational design, synthesis and screening of non-hydroxamate lipophilic DXR inhibitors as potential antibacterial/antimalarial/anti-TB agents	Pharmacy	Dr. Sandeep Sundriyal		SERB (CRG)	30.46
37	Design & Synthesis of Mycobacterium UDG Inhibitors	Pharmacy	Dr. Sandeep Sundriyal		The office of principal scientific advisor, Govt. of India	10.00
38	Development of a Triggered Release Nano-Formulation for Combined Chemo-Immunotherapy of Cancer	Pharmacy	Dr. Aniruddha Roy		Shastri Institutional Collaborative Research Grant (SICRG)	10.00
39	Study of Postbuckling response, failure and strength of functionally graded composite plates with and without cutouts	civil	Dr. S. B. Singh		CSIR	21.6

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
40	Structured Dialogues for sustaibable urban water management (SDSUWM)	civil	Dr. Rajiv Gupta	BITS Pilani Hyderabad campus, Aligarh Muslim University, Amrita School of Engineering, Coimbotore	DST-TMD	329.3
41	Costs and remediatin of Groundwater contamination in India	Civil	Dr. Rajiv Gupta		University of Virginia	100
42	Mobile app for assisting Indian farmers in improving yield by automatic identification of plant diseases (Rice and tomato)	CSIS	Dr. Sundaresan Raman		DST	17.73
43	Development of real-time multi objective route recommender system using AI	CSIS	Dr. Kamlesh Tiwari	Dr. Ashutosh Tiwari	MapmyIndia	7.42
44	Design and Implementation of content based Recommender System for answering web based user queries	CSIS	Dr. Yash Sharma		DST-ICPS	35.57
45	Waste Management of Generated Sludge from Indian Steel and Steel related plants: A sustainable Business Model	Mechanical	Dr. Srikanta Routroy	Dr. Anupam Singhal and Dr. Dipendu Bhunia	Ministry of Steel	30.49
46	Development of e-waste management strategies for selected e-products in Rajasthan	Mechanical	Dr. M S Dasgupta	Dr. Srikanta Routroy	DST Rajasthan	7.54
47	Re-value: Innovative technologies for improving resource utilization in the Indo-European fish value chains	Mechanical	Dr. Souvik Bhattacharya (BITS Pilani, Pilani Campus) Dr. Nutan Kaushik (Amity University, NOIDA) Dr. Maitri Thakur (SINTEF Fisheries , NORWAY), Dr. Evangelina Campos Ceprian , Spain)	Dr. Srikanta Routroy, Dr. M S Dasgupta	DBT-INNOINDIGO	62
48	Development of Fault dignosis scheme for Aero-bearing with multiple localized defects using non-linear mathematical modeling and experimental analysis	Mechanical	Dr. Arun Kumar Jalan	Dr. Sachin Belgamwar	DRDO	9.93
49	Empirical Investigation and Analysis of Factors for Sustainable Growth of Electric Vehicles Manufacturing in India	Mechanical	Dr. Abhijeet Digalwar		ICSSR(IMPRESS)	14.7
50	Development of a reliable, low-cost, portable, IOT-enabled optical device for measuring PM2.5 concentration in air	Mechanical	Dr. Aakash Chand Rai	CSIR-CEERI Pilani	DST-SYST	35.96
51	Assessment of Indoor plants for improving air quality in buildings	Mechanical	Dr. Aakash Chand Rai		SERB (CRG)	39.71
52	Effective anti-icing strategies for power transmission cables and pipelines using macro structured superhydrophobicity	Mechanical	Dr. A R Harikrishnan		SERB-SRG	30.17
53	A Benchmarking analysis public transport sector of Rajasthan	Mathematics	Dr. Shivi Agarwal	Dr. Trilok Mathur	DST Rajasthan	5.29

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
54	A Study of Graphs on Semigroups	Mathematics	Dr. Jitendra Kumar		SERB(MATRICS)	6.6
55	A study of nonlinear polyharmonic boundary value problems with dependence on gradient	Mathematics	Dr. Gaurav Dwivedi		SERB(MATRICS)	6.6
56	A Parameter-uniform approximation for singularly perturbed parabolic reaction-diffusion boundary value problems	Mathematics	Dr. Devendra Kumar		SERB(MATRICS)	6.6
57	Development of Uniformly Convergent methods for two-parameter singularly perturbed boundary value problems	Mathematics	Dr. Devendra Kumar		SERB-CRG	16.87
58	Numerical methods and Error Analysis for Solving coagulation and non-linear fragmentation equations	Mathematics	Dr. Rajesh Kumar		SERB-SRG	9.62
59	Design and Analysis of Metamaterial Based Antenna for Wearable Application	EEE	Dr. Navneet Gupta	Prof. Plamen Dankov, Associate Professor, Sofia University " St. Kliment Ohridski", Faculty of Physics, Bulgaria	DST-Indo Bulgaria Joint Project	11.82
60	Development of a Dielectric Resonator based displacement sensor	EEE	Dr. Praveen Kumar AV		DST-SERB	20.75
61	IoT based energy management system of a Microgrid with V2G (Vehicle to Grid) feature	EEE	Dr. H D Mathur		DST-ICPS	47.53
62	Management of Distributed energy resources in smart cities: Challenges and Advanced control strategies	EEE	Dr. H D Mathur (BITS Pilani) Prof. Houria Siegueriddjane (Centralesupelec)	Dr. Bijoy Mukherjee, Dr. Alivelu Parimi Prof. Guillaume Sandou (Centralesupelec), Prof. Romeo Ortega (Centralesupelec) Dr. Bijoy Mukherjee, Dr. Alivelu Parimi	MHRD (SPARC)	42.56
63	Development of Improved Design and Control Techniques for Unified Power Quality Conditioner with Distributed Generation (UPQC-DG)	EEE	Dr. H D Mathur		CPRI	21.1
64	Resource dimensioning and management of smart and sustainable 5G small cells for rural broadband	EEE	Dr. Vinay Chamola		DST-ECR	28.34
65	Carbon nanomaterials for chemical sensing applications	EEE	Dr. Arnab Hazra (BITS Pilani, Pilani Campus) Prof. Yossi Rosenwaks (TEL AVIV UNIVERSITY)	Dr. Navneet Gupta & Dr. Rupam Goswami Prof. Yosi Y. Shacham-Diamand (TEL AVIV UNIVERSITY)	MHRD (SPARC)	46.12
66	Development of 1-D Nanomaterials based Selective Sensor System for Non-Invasive Detection of Diabetes Mellitus and Asthma by Breath Analysis Technique	EEE	Dr. Arnab Hazra	Dr. Syamantak Majumder	DBT	46.57

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
67	Modelling of Drivers and Barriers of electric vehicle penetration in emerging economy : A study of Indian Market	EEE	Dr. Hari Om Bansal	Dr. Praveen Goyal	ICSSR	5.25
68	Machine learning techniques for resource allocation in cell-free massive MIMO communications	EEE	Dr. Syed Zafaruddin		SERB-SRG	18.48
69	GaN Gratings-on-Diaphragm based Otical Pressure Sensing in Harsh Environments	EEE	Dr. Rahul Singhal		CARS-DRDO	9.66
70	Process development for bio-mitigation of flue gases (CO2, SOx, and NOx) using chemolithotrophs and production of value-added products	Chemical	Dr. Smita Raghuvanshi		SERB (CRG)	31.61
71	Prevention of Hazardous Field-Firing of Bagasse and Its Sustainable Utilization as a Raw Material in An Innovative Industrial Process	Chemical	Dr. Srinivas Appari (BITS Pilani Pilani Campus) Prof. Shinji Kudo (KYUSHU UNIVERSITY)	Dr. Bahrudeen A (BITS Pilani Hyderabad Campus) Dr. Koji Nakabayashi (KYUSHU UNIVERSITY)	MHRD (SPARC)	28.79
72	Development of microporous PVC films for synthetic leather applications	Chemical	Dr. Etica Krishna Chaitnya		M/s Mayur Uniquoters Pvt. Ltd	7.67
73	Assessment of mixed-matrix membrane system for CO2 separation for upgradation of Biogas to Bio-compressed Natural Gas (Bio-CNG)	Chemical	Dr. Bhanuvardhan Reddy Kuncharam		SERB-SRG	24.47
74	Analysis of mitochondrial dynamicity post drug exposure in human glioblastoma cells and understanding its correlation with drug resistance	Biological Sciences	Dr. Sudeshna Mukherjee		SERB	27.89
75	Understanding hyperglycemia induced alterations in non-coding RNA expression pattern and post-translation histone protein modifications contributing to drug resistance and progression of pancreatic cancer	Biological Sciences	Dr. Rajdeep Chowdhury	Dr. Gaikwad Anil Bhanudas	SERB	40.33
76	High altitude-hypoxia mediates thrombosis in soldiers; modulation of autophagy as a strategy to co mbat high altitude-hypoxia induced thrombosis	Biological Sciences	Dr. Rajdeep Chowdhury	Dr. Syamantak Majumder, Dr. Shibasish Chowdhury	DRDO	42.24
77	Development of bioinoculant based formulation for enhanced phytoremediation of poly chorinated biphenyl (PCB) contaminated soil	Biological Sciences	Dr. Monika Sandhu		DST	20.80
78	Analyzing the crosstalk between autophagy, cytosketal and mitochondrial dynamicity regulating epithelial to mesenchymal transition (EMT) in human glioblastoma cells	Biological Sciences	Dr. Sudeshna Mukherjee		CSIR	18.40
79	To investigate the mechanism of CRISPR-Cas regulated biofilm formation in salmonella enterica serovar Typhimurium	Biological Sciences	Dr. Sandhya Amol Marathe		DST-SERB	43.71
80	Development of sensors for blast and blight diseases and stomatal activity measurement in rice	Biological Sciences	Dr. P N Jha		ICAR(NASF)	23.95

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
81	repurposing of CNS accumulating drugs as autophagy modulators for potential treatment against glioblastoma: as in-silico, in-vitro and in-vivo study	Biological Sciences	Dr. Shibashis Chowdhury	Dr. Syamantak Majumder, Prof. Rajdeep Chowdhury, Dr. Aniruddha Roy	ICMR	21.00
82	Studying the efficacy of ADAM Inhibitors in treating diabetic nephropathy	Biological Sciences	Dr. Syamantak Majumder	Prof. Rajdeep Chowdhury	ICMR	14.25
83	Understanding the genetic interactions of parkin and α-synuclein affecting pathogenesis of Parkinson's disease	Biological Sciences	Dr. Meghana Tare		SERB	22.55
84	Anti-sense, Sense and Epigenetics in Severe Malaria	Biological Sciences	Dr. Ashish Kumar Das	Dr. Dinesh Gupta, International Centre for Genetic Engineering, New Delhi and Dr. Sanjay Kumar Kochar, SPMC, Bikaner	ICMR	143.00
85	Exploring Known and novel HSPs and HSFs in a thermotolerant plant Prosopis cineria by genome-wide studies and application of genome editing for enhanced heat stress tolerance in rice	Biological Sciences	Dr. Mukul Joshi		DBT-Ramalinga F/s	42.50
86	Epigenetics of Endothelial Dysfunction during cardiovascular disease	Biological Sciences	Dr. Syamantak Majumder		SERB(ECR)	44.98
87	EXAFS Investigations on ion conducting polymer nanocompisites for conductivity strucure corelation	Physics	Dr. Anshuman Dalvi		UGC-DAE	4.4
88	Li+ NASICON-Polymer hybrid composites for solid state supercapcitor applications	Physics	Dr. Anshuman Dalvi		SERB-CRG	43.79
89	Substrate supported transition metal dopped alkaline earth clusters as hydrogen storage materials and their applications in hydrogen fuel cell	Physics	Dr. Debashish Bandyopadhyay		DST-SERB	20.57
90	Statistical Mechanics of biopolymers in confined geometry	Physics	Dr. Navin Singh		SERB	28.42
91	UV-Guided study of Blue straggler stars in open clusters and galactic fields	Physics	Dr. Kaushar Vaidya		ISRO	17.72
92	Investigation of Elastic and Inelastic Dephasing in Carbon Nanotube FET	Physics	Dr. Niladri Sarkar	Dr. Navneet Gupta	SERB (CRG)	18.25
93	Investigation on Langmuir-Blodgett films of pristine and functionalized single walled carbon nanotubes and application	Physics	Dr. R. K. Gupta		SERB-CRG	45.70
94	An Empirical Study on Accountability and Learning Outcomes in Public School Systems in Rajasthan	Humanities & Social Science	Dr. Tanu Shukla	Dr. V. S. Nirban	ICSSR(IMPRESS)	**10.5**
95	Influence of English Teacher's Efficacy, competance and Motivation on their Instructional Strategy: A Study of Secondary	Humanities & Social Science	Dr. Devika	Dr. Rajni Singh	**NCERT**	**6.8**

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
	Schools Teachers in Jhunjhunu, Rajasthan					
96	Linking Energy Poverty with Human Development: A Case Study of Two Districts of Rajasthan	Economics & Finance	Dr. A K Giri		ICSSR	7.87
97	Measuring the Vulnerability of Agricultural Households to Climate Change in Arid and Semi-Arid Regions of Rajasthan - A Capacity to Adapt Perspective	Economics & Finance	Dr. Geetilaxmi Mohapatra		ICSSR	8.4
98	Insights into genetic interactions manifesting to onset and progression of parkinson's disease	Biological Sciences	Dr. Meghna Tare		BITS- ACRG	6.1
99	Analysis of mitochondrial regulation (fission and fusion) in parental and drug resistant human cancer cells and understanding its functional implications	Biological Sciences	Dr. Sudeshna Mukherjee		BITS- ACRG	4
100	Hybrid polymer nanocomposite materials for electromagnetic interference (EMI) shielding applications	Chemical Engg	Dr. Krishna Chaitanya Etika		BITS- ACRG	7.5
101	Failure analysis of MWCNTs-Reinforced laminated composite plate subjected to different types of mechanical loads	Mathematics	Dr. Rajesh Kumar		BITS- ACRG	8.8
102	Disaster monitoring from aerial imagery using deep learning	csis	Dr. Pratik Narang		BITS- ACRG	7.9
103	Brain computer interface controlled humanoid	EEE&I	Dr. Vinay Chamola		BITS- ACRG	9
104	Design and development of MEMS based resonant glucose sensor	EEE&I	Dr. Sujan Yenuganti		BITS- ACRG	2.25
105	Study of Interfacial, Evaporation and ignition characteristic of micro-emulsion for printing, combustion, oil recovery and machining industrial applications	Mechanical Engg	Dr. A R Harikrishnan		BITS- ACRG	7.9
106	To decipher the role of Oxidative stress-induced inhibition of PKM2 in regulating autophagic induction of Nrf2: Understanding the mechanism of ROS adaptation in Breast Cancer Cells	Pharmacy	Dr. Richa Shrivastava		BITS- ACRG	1.5
107	Design and synthesis of conformationally constrained cationic peptidomimetics (CPMs) as antimicrobial agents	Pharmacy	Dr. Sandeep Sundriyal		BITS- ACRG	9.5
Sanctioned Projects:						
1	Development of Conductive FDM based rapid tooling for EDM electrode fabricatino: Application in Medical implant Manufacturing	mechanical engg	Dr. Pratik Kala		SERB-CRG	2169101
2	Deisgn and Development of Soft robotic system for selective harvesting of coffee cherries	EEE	Dr. Meetha V. Shenoy	Dr. Nitin Chaturvedi	DST-SYST	3977600
3	Skill Development Project	mechanical engg	Dr. K S Sangwan		Mitutoyo South Asia Pvt. Ltd - Under CSR Initiative	3300000

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
4	Implementation of Analysis of the low carbon life style options and participatory household research in India	mechanical engg	Dr. K S Sangwan		Institute of Global Environmental Studies	451000
5	Joint Indo-German academy towards sustainability (German Academic Exchange Service)	mechanical engg	Dr. K S Sangwan		DAAD	108505 EURO
6	Peptide-tethered multifunctional cationic nanocomplexes for delivery of IL-1 receptor antagonist for treatment of type 2 diabetes mellitus	Pharmacy	Dr. Anupama Mittal	Dr. Deepak Chitkara	SERB-CRG	4046950
7	Design and Development of inline sensor for lead Ion Detection	Chemical Engg	Dr. Somak Chaterjee	Dr. Etika Krishna Chaitainya	MKS Vision USA	2617000
8	Enhancer of Zeste Homolog-2 role in Glomerular endothelial Dysfunction during Diabetic nephropathy	Biological Sciences	Dr. Syamantak Majumder	Dr. Shibasish Chowdhury	DBT	3347120
9	Targeting the RNA-dependent RNA polymerase (RdRp) of SARS-COV2 for the development of inhibitors	Chemistry	Dr. Benu Batra Das, Indian Association for the cultivation of Science , Kolkata	Dr. Anil Kumar	SERB	577500
10	28S Ribosomal RNA capture assay for the sensitive detection of plasmodium vivax	Biological Sciences	Dr. A K Das		ICMR	8002556
11	Design and Development of MEMS gyroscope for naval applications	Mechanical Engg	Dr. Vankatesh Kadbur Prabhakar Rao	Dr. Sujan yenuganti	DRDO (NRB)	4669000
12	Analysis, Design and Development of low cost cold storage for selected agricultural products based fully on solar and geothermal energy	Mechanical Engg	Dr. M S Dasgupta	Dr. Sanjeev Jakhar, Modi University	DST	4760000
13	Educational Program for Sustainable Heating and Cooling Solutions for India	Mechanical Engg	Dr. Souvik Bhattacharyya	Dr. M. S. Dasgupta	Research Council of NORWAY	1147000
14	Development of Deep Learning-Based Intrusion Detection System for Defending Android-Based HTML5 Web Applications against Cross-Site Scripting (XSS) Attack	CSIS	Dr. Shashank Gupta	Dr .Amit Dua	Data Security Council of India	552500
15	Direct Catalytic approach towards the Synthesis of C3-Substituted Pyrroles in Non-asymmetric/asymmetric Fashion	Chemistry	Dr.Indresh Kumar		SERB	3491400
16	Investigation of the nature and origin of intermolecular Se-H….X(X=0,N,S,Se) hydrogen bonding interaction using matrix isolation infrared spectroscopy and theoretical calculations	Chemistry	Dr. Shamik Chakraborty		SERB	2952400
17	Synthesis and C-H Bond Functionalization of N-heterocycles Employing Novel Pincer-type complexes of late Transition metal	Chemistry	Dr.Anil Kumar		SERB	3656400
18	Arfificial Intelligence Enabled security provisioning and vehicular vision innovations for autonomous vehicles	EEE	Dr. Vinay Chamola	Dr. Pratik Narang	Shastri Institutional Coollaborative Research Grant (SICRG)	1000000
19	Exploring the Mechanisms(s) of gut microbiota link to parkinson disease pathology and its	Pharmacy	Dr. Rajeev Taliyan		ICMR	2025813

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
Ongoing Project						
	reversal based on fibroblast growth factor 21 gene delivery through lentivirus system					
20	Crystallographic Orientation (lattice plane) dependent selective gas sensing: A new approach in metal-oxides (MOx) based gas sensor	Physics	Dr. Subhashsi Gangopadhyay		SERB	2237400
21	Study of driven quantum systems: Floquet Engineering of Novel Materials	Physics	Dr. J N Bandyopadhyay	Dr. Tapomoy Guha Sarkar	SERB	2391400
22	Higher-harmonic generation in gases and solids and their implications in attosecond science	Physics	Dr. Amol Holkundkar		SERB	2347400
23	A Study of Existence Questions to elliptic partial differential equations with gradient nonlinearities	Mathematics	Dr. Gaurav Dwivedi		SERB-CRG	1862982
24	Cytometic Fingerprinting and Machine learning (CFML) for revamping biogas technology and sustainable rural development	Chemical Engg	Dr. Abhishek Dhoble		ACRG	5.3
25	Preparation of hybrid hollow fiber membranes and its application in desalination applications	Chemical Engg	Dr. Somak Chaterjee		ACRG	7.75
26	Development of Novel catalysts for pyrolysis derived Bio-oil upgradation	Chemical Engg	Dr. Arghya Banerjee		ACRG	5.25
27	Role of oxophilic promoters in the ring-opening of biomass derived 2- pyrone molecules	Chemical Engg	Dr. Shelaka Gupta		ACRG	5.25
28	Evaluation of coarse, fine and SMA asphalt mix incorporating copper mine tailing	Civil Engg	Dr. Priyansh Singh		ACRG	8.2
29	Characterization of soil-rock mixtures and development of numerical models for landslide hazard assessment	Civil Engg	Dr. Nishant Roy		ACRG	8
30	A feasibility study on development of fire resistant geopolymer composites	Civil Engg	Dr. Mukund Lahoti		ACRG	8.25
31	Image stitching based decision making for virtualization of visual sensor nodes in cloudlet and node deployment for real time situational awareness	EEE&I	Dr. Meetha V Shenoy		ACRG	8
32	Development of a label-free plasmonic nanostructure-based optical sensor for refractive index and thickness detection of sub-wavelength thick analytes	EEE&I	Dr. Pankaj Arora		ACRG	8.25
33	Design, fabrication and testing of lab-scale printed circuit heat exchanger (LPCHE) for moderate pressure and temperature applications	Mechanical Engg	Dr. Aneesh A M		ACRG	8.25
34	Efffect of electric current surges in the failure of pre-cracked and mechanically stressed thin metallic structures	Mechanical Engg	Dr. Deepak Sharma		ACRG	7
35	A new perspective on internal forced and mixed convection heat transfer in inclined circular and non-circular tube	Mechanical Engg	Dr. Suvanjan Bhattacharyya		ACRG	7.5

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
36	Redoxware: Exploiting enzyme redox property differences fro drug discovery and technological applications	pharmacy	Dr. Vaibhav Anil Dixit		ACRG	7.5
Projects completed						
1	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C–H functionalization reactions	Chemistry	Dr Anil kumar		DST	32.46
2	Screening Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and their application in Photo electrochemical Water Splitting	Chemistry	Dr. Mrinmoyee Basu		DST-INSPIRE	35
3	"Probing the Nature of Intermolecular X–H...Se (X = O and N) Hydrogen Bonding Interactions using Matrix Isolation Infrared Spectroscopy"	Chemistry	Dr. Shamik Chakraborty		SERB	73.55
4	Asymmetric synthesis of [2.2.2] azabicyclo-isoquinuclidine derivatives: Towards the synthesis of related alkaloids	Chemistry	Dr. Indresh Kumar		SERB	43.3
5	Synthesis of D-glucose derived glycoconjugates and their application in molecular recognition and catalysis	Chemistry	Dr. Ajay Kumar Sah		SERB	30.1
6	Cyclic RGD modified lipopolymeric micelles for targeted delivery of tamoxifen in ER+Breast cancer	Pharmacy	Dr. Anupama Mittal		DST Rajasthan	12.54
7	Development of nutraceutical nanoemulsion based health drink of food bioactives	Pharmacy	Dr Anil Jindal		Ananta Medicare Limited	5.10
8	Exploring the synergism of PPAR-Y agonist and HDAC inhibitor for reversal of Alzheimers type of dementia and developing their brain targeted nano-carrier system for effective treatment	Pharmacy	Dr. Rajeev Taliyan		DST-Nanomission	32.14
9	Design of Health care supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan	Mechanical Engg	Dr. Srikanta Routroy	Dr. Sunil Kumar Dubey	DST Rajasthan	5.88
10	Design and development of a power assistive hybrid e-trike (PAH e-Trike) for differently abled person in rural and urban regions of India	Mechanical Engg	Dr. Sachin Belgamwar	Dr. Jitendra Rathore	DST-SEED	30.63
11	Mathematics aided Architectural Design layouts	Mathematics	Dr. Krishnendra Shekhawat		SERB	15.45
12	Soft Computing framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting fluoride as major parameter	EEE	Dr. K.K.Gupta	Dr. R.K.Gupta	DST	38.7
13	Study on Electronic Transport Behaviour of Carbon nanotube based field effect transistors (CNTFETs)	EEE	Dr. Navneet Gupta	Dr. Niladri Sarkar	DRDO	21.82
14	Crime Analysis and study for safe cities with emphasis on women safety using technology and societal participation	EEE	Dr. Anu Gutpa	Dr. Rajiv Gupta, Dr. Meetha V Shenoy	ICSSR(IMRESS)	5.25

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
15	Removal of Heavy metals from industrial wastewater using metallic nanoparticales as absorbents	Chemical Engg	Dr. Bansri Roy		SERB	19
16	Investigating the Role of Aryl Hydrocarbon Receptors in medicating the Anti-Cancer Properties associated to camel milk	Biological Sciences	Dr Uma Dubey		DST-Rajasthan	7.43
17	Production and use of indigenous local strains of microbial pesticides through trainings, demonstrations and installation of cost effective production units for the farmers of Rajasthan	Biological Sciences	Dr. Jola Dubey		DST	26.33
18	Studies on Quarkonium suppression in Asymmetric Nuclear Collision at LHC	Physics	Dr. Madhukar Mishra		SERB	15.85
19	"Investigating Dynamical and Topological Properties of Fioquet Systems: A Comparative study of perturbative Schemes	Physics	Dr. Jayendra Bandyopadhyay	Dr. Tapomoy Guha Sarkar	SERB	16.22
20	"Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications"	Physics	Dr. Amol Holkundkar	Dr. Jayendra Bandyopadhyay	SERB	16.54
21	Electro-optical response of Nematic Liquid Crystals doped with nanorods	Physics	Dr. ManjulaDevi V		SERB	39.20
22	"Theoretical Study of Electron impact double ionization of atoms and molecules"	Physics	Dr. Rakesh Choubisa		SERB	20.44
23	Efficacy & Effectiveness of Information, Education and Communication (IEC) Activities for Health Awareness and Promotion among Women in Rajasthan: Towards a HOPE Approach	Humaities & Social Sciences	Dr. Gajendra Chauhan	Dr. Rajnessh Choubisa, Dr. Tanu Shukla , Dr. Sailaja Nandigama, Dr. R.P.Pareek	ICMR-ICSSR	**25.11**
24	Development & Validation of a Prototype of a Web/Mobile App Based Positive Psychological Intervention for Adolescents	Humaities & Social Sciences	Dr. Rajneesh Choubisa	Dr. Gajendra Singh Chouhan, Dr. Tanu Shukla	ICMR-ICSSR	**17**
25	Epistemology Revisited: Postmodern Discourse alternative forms of cognition and interdisclipnary of knowledge	Humaities & Social Sciences	Dr. Anupam Yadav		ICPR	**2**
26	Financial Inclusion	Economics & Finance	Dr. Arun Kumar Vaish		HCL	15
27	Design and Characterization of Nanoparticle based drug delivery systems of Anticancer drug	Pharmacy	Dr. M M Pandey	Dr. Gautam Singhvi	Crenza Pharmaceutical	8.00
28	Preliminary investigation, characterization and stability analysis of micelles formulation	Pharmacy	Dr. Sunil kumar Dubey and Dr. Gautam Singhvi		Enaltec Labs Pvt. Ltd	1.46
29	Joint Indo-German Experience Lab	Mechanical Engg	Dr. K S Sangwan		DAAD	341.00
30	Experimental studies on meachanics of micromechnanical structures and cells	Mechanical Engg	Dr. Venkatesh Kadbur Rao		BITS - ACRG	8.20
31	Exploiting background information for efficient coordination of Multi-Robot systems dispatched for service delivery in an indoor environment	CS/IS	Dr. Avinash Gautam		BITS - ACRG	8.00
32	Understanding the role of long non coding RNA in glomerular endothelial cell dysfunction during diabetic nephropathy	Biological Sciences	Dr. Syamantak Majumder		BITS - ACRG	8.50
33	Investigate role of CRISPR-Cas system in pathogenesis of	Biological Sciences	Dr. Sandhya Amol Marathe		BITS - ACRG	7.50

S.No	Project Title	Dept	Principal Investigator	Co-Principal Investigator	Funding Agency	Sanctioned Amount Rs. In Lakhs
	Salmonella enterica serovar Typhiumurium					
34	Design exploration and performance analysis (through simulation) of RF-MEMS, SPST and SPDT Switches	EEE	Dr. Mahesh Angira		BITS - ACRG	8.70

KK Birla Goa Campus:

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Numerical approximation of Optimal Problems using Virtual Element Method	Mathematics	Dr. Anil Kumar	-	SERB-CRG	Prof. Sarvesh Kumar, IIST, Valiamala Thiruvananthapuram	1907400
2	Studies on CO fuelled self-sustaining Unmixed Combustion (UMC) reactor for integrated CO2 capture and power/steam generation	Chemical Engineering	Dr. Srinivas Krishnaswamy	Dr. Amol Deshpande	Mission Innovation call- by DST	-	7861832
3	Studies on hybrid Pressure Retarded Osmosis (PRO) – Reverse Osmosis (RO) system for energy generation utilizing hypersaline RO reject stream	Chemical Engineering	Dr. Anirban Roy	-	SERB-CRG	-	3630264
4	Targeting the amyloid matrix of staphylococcal biofilms for effective management of its recalcitrant infections	Biological Sciences	Dr. Nikita Admane (Young Scientist-DHR) (Mentor- Dr. Sumit Biswas)	-	ICMR-DHR	-	4735500
5	Empowered Septic tank as a decentralized wastewater treatment system- Phase-2	Biological Sciences	Dr. Srikanth Mutnuri	-	DBT- BIRAC	Prof. Korneel Rabaey, Ghent University	15192700
6	To submit projetto study impact of negative factors which effect the ecology of wetland and importance of monitoring natural wetland ecosystem	Biological Sciences	Dr. Srikanth Mutnuri	Dr. Rajiv Kumar Chaturvedi, Dr. Mohan Kumar Bera	Forest & State Culturist Jharkhand Ranchi	-	1700000
7	A Low Power Deep Spiking neural network for forest surveillance	CS&IS	Dr. Basabdatta Bhattacharya	Sujith Thomas	SERB-CRG	-	3147973
8	Quantum information Technologies with Ion-trap and Optical -lattice devices	Physics	Dr. Radhika Vathsan	-	DST -QUest (Quantum Technologies)	-	4840000
9	Implications of Ujjawala scheme for forest conservation efforts in the state of Jharkhand	Humanities and Social Sciences	Dr. Rajiv Kumar Chaturvedi	Dr. Mohan Kumar Bera	Forest & State Culturist Jharkhand Ranchi	-	967500
10	MPSoC Based Automated Digital Signal Processing System for Tokamak Reflectometry	EEE	Dr. A. Amalin Prince	-	BRNS	-	2529350

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
11	Co-digestion of STP Secondary Sludge with organic wastes in urban /peri-urban areas, process optimization, scale up and field demonstration	Biological Sciences	Dr. Srikanth Mutnuri	-	DST	Dr. B Krishnakumar, CSIR-NIIST Thiruvananthapuram, Dr. P Ramna, Dr. P Venkateswara Rao, NITW Telangana, Mr. P Ganesh Kumar, L&T construction Chennai	500000
12	Study of efficacy of Quinacrine (QC) on inhibition of migration, proliferation, angiogenesis and Vesicle trafficking network of human non-small cell lung cancer cells.	Biological Sciences	Dr. Angshuman Sarkar	-	Goa Cancer Society	-	1000000
13	Undertaking study for mapping forest arears vulnerable to climate change in India based on high resolution computer model based projections	Humanities & Social sciences	Dr. Rajiv Chaturvedi	-	Forest Survey of India, Ministry of Env. Forest, Govt. of India	-	913000
14	Biocompatible nano-vehicle mediated delivery of siRNA into stem cells for targeting Pulripotency markers as a Potential therapeutic approach in regenerative medicine	Biological Sciences	Dr. Meenal Kowshik	Dr. Indrani Talukdar, Dr. Sutapa Roy Ramanan	CSIR	-	3316000
15	Modelling and Forecasting the Effects of Long Tern Interventions on COVID-19 using Network-based Approach	Mathematics	Dr. Anupama Sharma	-	SERB-Matrics Special Call	-	550000
16	J. C. Bose Fellowship Award	Biological Sciences	Dr. Samit Chattopadhyay	-	SERB	-	6645968
17	Demonstration of a practical solution for removal and monitoring heavy metal ions from drinking water using modified biopolymer	Chemistry	Dr. Amrita Chatterjee	-	DSTE-Goa	-	215000-(1st Installment)
18	Dual-functional and band-gap tunable visible-active semiconductors as hosts for single atom catalysts: Co-production of solar fuels and value-added chemicals with high selectivity	Chemistry	Dr .Kiran Vankayala	-	SERB- SRG	-	2919000
19	Water Filtration, advanced oxidation and capacitive-deionisation treatments for removal of emerging contaminants in water Acronym: (Water FACTs)	Chemistry	Dr. Halan Prakash	-	DST-WTI call	-	10523036
20	Assessing the Impact of Climate change on mountain communities in Spiti Basin	Humanities & Social sciences	Dr. Rajiv Kumar Chaturvedi	-	ISRO-Under Cryosphere Science and Applications Programme (CAP) of Space Applications Centro, ISRO , Ahmedabad,	-	2484000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
21	Predicting grease lubrication behavior: (a) novel methods to determine grease rheology at extremely large shear rates and (b) the role of nanoscale and mesoscale structure of grease in film formation inside tribocontact".	Chemical Engineering	Dr. Asima Shaukat	-	SERB- CRG	-	4065100
22	Experimental and theoretical investigations of ultra-thin two dimensional semiconductor heterostructures and their application to make nano-scale Devices	Physics	Dr. E S Kannan	Dr. Swastibrata Bhattacharyya	SERB-CRG		4614309
23	Field Theories with Carrollian Symmetry	Physics	Dr. Kinjal Banerjee	Dr. Rudranil Basu	SERB-CRG	Dr. Arjun Bagchi IIT Kanpur	1803576
24	Development of Therapeutic Phages to Combat Drug Resistant Staphylococci Infection	Biological Sciences	Dr. Malabika Biswas	Dr. Samit Chattopadhyay	SERB-CRG	Dr. Susmita Ghosh	4041000
25	Surface water purification for hand6.wash and other application for rural India	Chemical Engineering	Dr. Aniriban Roy		DST, NIDHI-PRAYAS		675000
26	Entanglement , non-local games and quantum error correction-an operator algebraic viewpoint	Mathematics	Dr. Mizanur Rahaman		SERB		1246357
27	Holography from null-infinity: Curious interactions and (how) do they probe black –holes?	Physics	Dr. Rudranil Basu		SERB-SRG		1365936
28	Brownian Dynamics Studies on Depinning, Melting and Dynamics Phases of Driven Partially Pinned Vortex Lattice".	Physics	Dr. Toby Joseph		SERB-CRG		2252160
29	Designing new 2D heterostructured materials: A definitive path towards next-generation energy storage devices	Physics	Dr. Swastibrata Bhattacharyya		SERB		1972872

B. INDUSTRY SANCTIONED PROJECTS

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Recovery of resources from worn out tires for enabling Circular economy	Chemistry	Dr. Sunil Bhand	Dr. Utpal Roy	Birla Carbon (ABG)	-	4200000
2	Recovery of water from Gaseous emissions	Chemical Engineering	Dr. Srinivas Krishnaswamy	Dr. Amol Deshpande, Dr. Anirban Roy	Birla Carbon (ABG)	-	6300000
3	Enzymatic pretreatment for enhancing anaerobic co-digestion of sewage sludge/septage/Food waste/MSW for energy production	Biological Sciences	Dr. Srikanth Mutnuri	-	Larsen and Toubro Limited, Chennai	-	1239000

C. INTERNATIONAL SANCTIONED PROJECTS

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Integrated Track in Brain and Cognitive Science (iBRAIN)	Biological Sciences	Dr. Veeky Baths	-	Erasmus Programme	-	12000000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
2	Food Insecurity, Intrahousehold Dynamics, and Lifecourse Outcomes in Low and Middle-Income Countries	Economics	Dr. Sukumar Vellakkal	-	UKRI-MRC-Lancaster	-	£ 54,876.09 (BITS share) approximately 5200000
3	Generation 2 Reinvented Toilet (G2RT)	Biological Sciences	Dr. Srikanth Mutnuri	-	Bill and Milenda Gates Foundation (Georgia Institute of Technology, GIT)	Dr. Shannnon Yee (PI-GIT)	7325040

D. INSTITUTE SANCTIONED PROJECTS

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Design of a dynamic recommender system to make the resource access control protocols in hard real-time system energy efficient	CS&IS	Dr. Shubhangi K. Gawali	-	RIG	-	100000
2	Modeling the Multi-Scale Dynamics of Recurrent Infectious Diseases	Mathematics	Dr. Anupama Sharma	-	RIG	-	200000
3	Completely Positive Maps in Quantum Information Theory	Mathematics	Dr. Mizanur Rahaman	-	RIG	-	200000
4	EnsembleGAN: Approximate Bayesian Computation in Generative Adversarial Networks	CS&IS	Prof. Snehanshu Saha	Dr. Soma. S. Dhavala	RIG	-	200000
5	An automated framework for mapping bioinformatics applications to cloud compute instances under time and cost constraints	EEE	Dr.Vipin Kizheppatt	-	RIG	-	200000
6	Numerical investigation of nucleation of droplets on a solid surface during dropwise condensation	Mechanical Engineering	Dr. Nilesh Dadashaheb Pawar	-	RIG	-	200000
7	Two-Phase Fluid-Structure Interaction of Flexible Structures	Mechanical Engineering	Dr. Vaibhav Joshi	-	RIG	-	200000
8	Adapting Regression Trees to Edge-Weighted Graphs using Watersheds	CS&IS	Dr. Sravan Danda	-	RIG	-	200000
9	Self-assembly of active and passive colloidal particles for applications in drug-delivery and micro-robotics	Physics	Dr. Indrani Chakraborty	-	RIG	-	200000
10	Vision based biomedical analysis of GAIT	CS&IS	Dr. Tanmay Tulsidas Verlekar	Paulo Lobato Correia(Ph.D)	RIG	-	200000

ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Room temperature Hydrogen Storage and sensing using Reduced Graphene Oxide-MoS2 Nanocomposites	Physics	Dr. E S Kannan	-	SERB	-	3061520
2	Enabling startups in Healthcare and environmental engineering	BIRAC Bionest	- Development Grant	-	BIRAC Bionest	-	29664000
3	Small Scale and sustainable household wastewater recycling	Biological Sciences	Dr. M. Srikanth (coprincipal investigator) Project partner with Indian Inst. of Science	-	DST/MHRD under IMPRINT scheme	Dr. Hoysall N Chanakya, Chief research scientist And associate faculty Centre for Contemporary Studies (CCS) and Centre for Infrastructure, Sustainable Transport and Urban Planning (CISTUP), Prof. Ghangrekar, IIT, Kharagpur, Arun Kumar, NITK, Surathkal	3192000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
4	Ecofriendly flexible CZTS solar cells	Physics	Dr. Teny Theresa John	-	SERB	Dr. M. K. Jayaraj, CUSAT, Kochi	2925560
5	Knowledge- Rich Deep Models fro Optimisation	CS&IS	Dr. Ashwin Srinivasan	-	SERB	-	2250290
6	Design and synthesis of smart supramolecular dyes based on TPE modified PDI- cucurbituril conjugates: their binding and photophysical studies and application in the detection of biogenic polyamines	Chemistry	Dr. Mainak Banerjee	Dr. Amrita Chatterjee	BRNS	-	2792500
7	A study of homotopy invariats of a model category	Mathe-matics	Dr. Shilpa Gondhali	-	SERB (MATRICS) scheme	-	660000
8	Development of suitable material for visible light induced photocatalytic hydrogen production from industrial wastewater	Chemical Engineering	Dr. Saroj Sundar Baral		SERB	Dr. Saibal Ganguly, Dr. Priyabrat Mohapatra	3583000
9	Process Improvements in Urrakh and Feni Production in Goa" (Pilot Scale Process and thermal Efficiency improvement measures)	Chemical Engineering	Dr. S. D. Manjare		DSTE, Goa and Navika Nursery, Padnem Goa	Dr.Pramod V. Pathak, Chairman , Envirnmental Impact Assessment Agency, Goa	1000000
10	Studies on the effect of Russells Viper Venom on regulation of cell morphology, apoptosis and further characterization of the active compound(s).	Biological Sciences	Dr. Dibakar Chakrabarty	Dr. Angshuman Sarkar	ICMR		2477000
11	Exploring the effects of polyamine and associated metabolic regulation of hypothalamic GnRH-GnIH synthesis and release during ageing in BALB/cJ mice	Biological Sciences	Dr. Arnab Banerjee		SERB	Dr. Rajiv Taliyan, Pilani	3435200
12	Evaluation of Antifungal activity of lipopeptides from a wild type Bacillus sp.RLID 12.1in mouse models of invasive candidiasis, crypotococcosis, and Aspergillosis	Biological Sciences	Dr. Utpal Roy		SERB	Prof. Arunalokechakrabarti, (PGIMER), Chandigarh	2459000
13	Synthesis of mononuclear as well as homo and hetero dinuclear complexes of Cu(II) and Zn(II) with hard-soft donor ligands and evaluation of their anticancer activities	Chemical Engineering	Dr. Manjuri Kumar	Dr. Sumit Biswas	SERB		2305578
14	Formulation of bio-functionalized cosmetic emulsions using biosurfactant and essential oil as green ingredients	Chemical Engineering	Dr. Vivek R.		SERB-ECR		3027670
15	Mechanistic approach to design composite metal- carbon nanofiber oxygen electrodes for high-performance metal-air batteries	Chemical Engineering	Dr. Richa Singhal		SERB – ECR		4559920
16	Mesoporous nanocomposites for controlling microbially induced corrosion caused by sulfate reducing bacteria	Chemical Engineering	Dr. Sutapa Roy Ramanan	Dr. Meenal Kowshik	SERB-CORE		3260400
17	Development of mesoporous silica (for alumina)-SiC- metal nanoparticles based nanocomposites for rader absorption application at high temperature	Chemistry	Dr. N. N. Ghosh	Dr. Amrita Chatterjee	DRDO		1513000
18	Cyclic Peptide-based nanotubes for Efficient proton conducting material	Chemistry	Dr. Subhasish Roy		DST-Inspire		3500000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
19	Noninvasive investigation of stem cell differentation using an in house	Physics	Dr. Geetha Varier	Dr. P. Nandakumar (Mentor)	WOS-A		3201000
20	A Theoretical and Numerical Study of the Control Problems Involving Differential Equations with Memory Terms,	Mathe-matics	Dr. Anil Kumar		SERB MATRICS		660000
21	Impact of "Make in India" and new IPR policy on Innovation of MNCs and Indian MSMEs in Medical Device Sector	Economics	Dr. Rajorshi Sen Gupta	Dr. Aswini Kumar Mishra	ICSSR		600000
22	A study on energy barrier to buckling in cylindricals shells	Mechanical Engineering	Dr. Sandeep Jose		SERB-ECRA		3287900
23	Multiscale modelling of noncarbon nanomaterials and their reinforced polymer composite materials and structures	Mechanical Engineering	Dr. Sandeep Singh		SERB-ECRA		1952460
24	Magic and Antimagic Labelings of Graphs	Mathe-matics	Dr. Tarkeshwar Singh		SERB	Dr. A. Somoasundaram, Dubai	1954832
25	Partial Migration Phenomenon : A Game Theoretic Approach to Causes and Environmental Effects	Mathe-matics	Dr. Anushaya Mohapatra		SERB-SRG		1205292
26	Numerical approximation of Optimal Problems using Virtual Element Method	Mathe-matics	Dr. Anil Kumar	-	SERB-CRG	Prof. Sarvesh Kumar, IIST, Valiamala Thiruvananthapuram	1907400
27	A Computational investigation on the reaction paths and spectroscopic properties of crown ethers	Chemistry	Dr. Anjan Chattopadhyay	-	BRNS	-	2480750
28	A Polydiacetylene-based fluorescent sensor for the detection of arsenic species and uranyl ion in water by conventional and nuclear analytical methods	Chemistry	Dr. Amrita Chatterjee	-	BRNS	-	3208355
29	Evaluation of Mechanical Performance of the 3-D Printed Peek polymer used in space applications	Mechanical Engineering	Dr. D. M. Kulkarni	Dr. Vikas Chaudhari, Dr. Iniyan Thiruselvam N.	ISRO	-	3629000
30	Drag Reduction by suppressing the Bi-Stability character of the wake	Mechanical Engineering	Dr. Shibu Clement	Dr. Pritanshu Ranjan	ARDB/DRDO(aeronautics)	-	2080500
31	Microfluidics sperm cell sorting device: addressing male infertility factor	Mechanical Engineering	Dr. Siddhartha Tripathi	-	SERB-SRG	-	2741440
32	Design and Development of Innovative Structural health Monitoring (SHM) system using embedded piezo based active sensing approach for Delamination Detection in Multi-layer composite Structures	Mechanical Engineering	Dr. Devandra Gokul Patil	-	SERB-SRG	-	2884060
33	Continuous flow oil-water seperation system using smart separators capable of low-voltage wettability switching	Chemical Engineering	Dr. Pradeep Kumar Sow	-	SERB-ECRA	-	4651900
34	TNF alpha mediated alternative splicing in type 2 diabetes: A genome wide approach	Biological Sciences	Jiss Maria Louis	Mentor: Dr. Indrani Talukdar	WOS-A DST	-	2068000
35	Development of Novel Biofilm Resistant Coat for Implant Devices from Moringa oleifera Leaf Extracts	Biological Sciences	Dr. Sumit Biswas	Dr. N N Ghosh	ICMR	-	3613000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
36	Bioremediation and Digital Documentation towards the conservation of Cultural Heritage	Biological Sciences	Dr. Srikanth Mutnuri	Dr. Geetha B., Dr. Ramprasd Joshi	DST-SHRI	-	3280288
37	Fine Mapping of the Chromatin structure of key genes involved in reproductive maturation and egg production in dengue vector mosquito, Aedes aegypti	Biological Sciences	Dr. Tushar Tirtha Saha	-	SERB-SRG	-	3159412
38	Mobile App for improving survival in fires through efficient egress: The role of impromptu indoor WiFi localization and georeferenced building maps	CS&IS	Dr. Vinayak Naik	Dr. Ashwin Srinivasan	DST and IC-IMPACT canadian Project	Dr. Raja Sengupta, Canada, Liliana perez, Canada	3831512
39	Coping with Displacement due to River Erosion in the Indian Sundarban and Lower Assam	Humanities and Social Sciences	Dr. Mohan Kumar Bera	-	ICSSR	-	450000
40	Flying Ad Hoc Network for disaster rescue operations	EEE	Dr. Sarang C Dhongdi	-	SERB-SRG	-	2156000
41	Doxorubicin loaded pegylated gold nano particles synthesis and to test chemoradiation potentials as drug delivery system and radiosensitizer for old squamous cancer cell line	Biological Sciences	Dr. Shameer Ahmed (Ph.D Student) Dr. Vijayashree Nayak(Mentor)	-	Goa Cancer Society	-	600000
42	Feacal Sludge Lab at Goa (1966 Batch)	Biological Sciences	Dr. Srikanth Mutnuri	-	1966 - 1971 BITS Alumni Batch	-	5077000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Potocatalyst embedded Graphene based membranes for Treatment of Dye containing waste water under Sunlight.	Chemistry	Dr. N. N. Ghosh	-	ABSTCPL	Dr. Rajib Ghosh, Dubai	2610000
2	Process Design and Development cost effective method for carbon-silica based hybrid fillers for application in rubber products	Chemical Engineering	Dr. S. D. Manjare	-	Apollo Tyres, Chennai	Dr. T Sushil Kumar Rajan, Mexichem Industries Mumbai	6000000
3	Bioleaching of limestone and clay to remove iron and other transition elements (Titanium, chromium, manganese, nickel and zinc)	Biological Sciences	Dr. Srikanth Mutnuri	-	ABSTCPL	-	1000000
4	Proposal for Appointment as Consultant for Implementation of Artificial Intelligence use-cases in Yard Operations and Onboard Ship Operations.	CS&IS	Dr. Ramprasad Joshi	Dr. Ashwin Srinivasan	GSL	-	2600000
5	Nokia Localization and Nokia health	CS&IS	Dr. Vinayak Naik	-	Nokia	-	1001000
6	Use of cell phones for detecting and controlling infectious disesase	CS&IS	Dr. Vinayak Naik	-	National Geographic Society	-	623000

C. Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Sanitation, water and solid waste for development	Biological Sciences	Dr. Srikanth Mutnuri	-	Agreement between EAWAG, Switzerland and BITS, Goa	-	726000
2	Literacy and Cognition project (MPI)	Biological Sciences	Dr. Veeky Baths	-	Max Planck Institute	Dr. Falk Huettig	444493.14

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Novel micro and nano sensors for antibiotic resistance measurement.	Chemistry	Dr. Sunil Bhand	Dr. Utpal Roy	SPARC	Dr. Nelida Leiva Eriksson, Lund University Sweden	5105296
4	Photo-irradiation and Adsorption based Novel Innovations for Water-treatment" (PANI).	Chemistry	Dr. Halan Prakash		Horizon H2020 (EU) - DST	Consortium partners comprise of 5 European countries, Ireland, UK, Spain, Italy, Cyprus and 5 Indian partners, NEERI, Nagpur; Kwality Photonic, Hyderabad; Affordable water solutions, Hyderabad; Society for Alternative Developments, New Delhi; and Society for Technology & Action for Rural Advancement, New Delhi.	20931000

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Isolation of white blood cells using a passive hydrodynamic microfluidic device	Mechanical Engg	Dr. Siddhartha Tripathi	-	ACRG	-	900000
2	A multi-layer neural network for dynamic visual scene learning, cognition, and decision implemented on GPU and SpiNNaker.	CS&IS	Dr. Basabdatta Bhattacharya	-	ACRG	-	1000000
3	RESCUER – RESidential Cooling Usage for Energy 4Reduction	CS&IS	Dr. Vinayak Naik	-	ACRG	-	556900
4	Versatile catalytic behavior of short peptide-based supramolecular assemblies	Chemistry	Dr. Subhasish Roy	-	ACRG	-	1000000
5	Single atom catalysts on two dimensional nanosheets for the generation of renewable fuels	Chemistry	Dr. Kiran Vankayala	-	ACRG	-	995000
6	Feasibility Study of Innovative Piezo-based System for Inhibition of Subsea Algal Growth and SHM of Marine Structures	Mechanical Engg	Dr. Devendra Patil	-	ACRG	-	927500
7	Investigating the role of juvenile hormone signaling pathway components in chromatin remodeling of target genes using reverse genetic approach	Biological Sciences	Dr. Tusar T. Saha	-	ACRG	-	1000000
8	First principles study of new two dimensional electrode materials for metal ion batteries	Physics	Dr. Swastibrata Bhattacharyya	-	ACRG	-	3000000
9	Computational understanding of structural evolution and reaction kinetics during the lithiation and delithiation process of silicon anode in lithium ion battery	Chemical Engg	Dr. Paramita Haldar	-	ACRG	-	
10	Numerical Investigation of fluid flow and heat transfer around a rotating circular cylinder	Mechanical Engg	Dr. Pritanshu Ranjan	-	ACRG	-	
11	High power compact UWB TEM antenna and mode converter design	EEE	Dr. Ashish Chittora	-	ACRG	-	950000
12	Design, Development and field trials of a prototype for point of source	Chemical Engineering	Dr. Anirban Roy	-	ACRG	-	800000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	treatment of domestic waste water (DWW)						
13	Revival of Long-term forest monitoring in the Western Ghats, for assessing changes in ecosystem services under changing climate	HSS	Dr. Rajiv Kumar Chaturvedi	-	ACRG	-	462500
14	Design and Simulation of Micro devices for Development of Reliable Biosensor	EEE	Dr. Gautam G. Bacher	-	ACRG	-	1000000
15	Development of transition metal oxide based nanostructured surfaces for low- voltage tuning of wettability	Chemical Engineering	Dr. Pradeep Kumar Sow	-	ACRG	-	917000
16	Aqueous rechargeable metal- air batteries for lrge scale energy storage	Chemical Engineering	Dr. Richa Singhal	-	ACRG	-	877000
17	Biopolymers from thermophilic bacteria for fly- ash disposal and soil erosion prevention applications.	Chemical Engineering	Dr. Vivek R	-	ACRG	-	670000
18	Experimental investiation of unmixed combustion process with copper and nickel based material at high temperature.	Chemical Engineering	Dr. Amol Deshpande	-	ACRG	-	1000000
19	Experimental and Numerical Study on Crashworthiness of Aluminium-Composite Collapsible Energy Absorber under Quasi-static Loading	Mechanical Engineering	Dr. Kiran Dinkar Mali	-	ACRG	-	525000
20	MOF's and its composites for direct solar light driven photocatalytic degradation of dye effluents	Chemical Engineering	Dr. Sharad Sontakke	-	ACRG	-	1000000
21	Design and Development of Underwater Acoustic Modem	EEE	Dr. Sarang Dhongdi		ACRG		888750
22	A study on energy barrier to buckling in cylindrical shells	Mechanical Engineering	Dr. Sandeep Jose	-	ACRG	-	1000000
23	Thermal Characterization of Loop Heat Pipe with nanofluids using Infrared Thermography	Mechanical Enginering	Dr. Vadiraj Hemadri	-	ACRG	-	900000
24	Atomistic continuum coupled methods for the large deformation simulation of two dimensional nanomaterials	Mechanical Engineering	Dr. Sandeep Singh	-	ACRG	-	690000
25	Assessment of Attitudes & Approaches of Individuals towards Segregation & Recycling of Everyday generated Household and Other Solid Wastes: A Study of Residents of BITS Pilani, K.K. Birla Goa Campus	HSS	Dr. Sayantani Sarkar	-	RIG	-	200000
26	AES: Automated Evaluation Systems for Computer Programming Course in Any University	CS&IS	Dr. Soumyadip Bandypadhyay	-	RIG	-	200000
27	Flat Holography: Integrable Field Theories as Dual to Asymptotically Flat Quantum Gravity	Physics	Dr. Rudranil Basu	-	RIG	-	200000
28	The Role of Juvenile Hormone in Chromatin Remodeling of Target Genes in mosquito Aedes Aegypti	Bio. Sci.	Dr. Tusar Tirtha Saha	-	RIG	-	200000
29	Coping with Crisis of Livelihood and Disasters: A Study of Migration in Sundarban Islands	HSS	Dr. Mohan Kumar Bera	-	RIG	-	200000
30	Investigation of Electronic and Structural Properties of Low Dimensional Hybrid Materials using First Principles Calculations	Physics	Dr. Swastibrata Bhattacharyya	-	RIG	-	200000
31	Materials for Nitrogen Fixation and Water Splitting	Chemistry	Dr. Vankayala Kiran	-	RIG	-	200000
32	The Effects of Environmental Fluctuations on the Evolution of Partial Migration Phenomenon	Mathematics	Dr. Anushaya Mohapatra	-	RIG	-	200000
33	Mobile App for Improving Survival in Fires through Efficient Egress: The Role of Impromptu Indoor Vifi	CS&IS	Prof. Vinayak Naik	-	RIG	-	200000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	Localization and Georeferenced Building Maps						
34	Emergent Catalytic Behavior of Low Molecular Weight Peptide-based Supramolecular Fibrils	Chemistry	Dr. Subhasish Roy	-	RIG	-	200000
35	Modeling of Switches for beyond-CMOS Applications	EEE	Prof. Abhijit Jayant Pethe	-	RIG	-	200000
36	Link and Content based Analysis of Online Recruitment in Terrorist Communities	CS&IS	Dr. Swati Agarwal	-	RIG	-	200000

E. Grants Under DST-FIST Ongoing

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	DST-FIST	Mathematics	-	-	DST	-	3750000
2	DST-FIST	Chemical Eng.	-	-	DST	-	6200000
3	DST-FIST	Biological Sciences	-	-	DST	-	16000000
4	DST-FIST	Physics	-	-	DST	-	29000000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Screening, isolation and identification of novel antimicrobial compounds from potential mangroves of Goa	Biological Sciences	Dr. Kundan Kumar	Dr. Utpal Roy	CSIR	-	2000000
2	Steric and conformational influences on the performance of nonplanar and highly functionalized phenyl- and heteroaryl- porphyrins in the sensing of anions and heavy metal ions	Chemistry	Dr. Bhavana P	-	SERB	-	2822820
3	A Comprehensive study on mechanochemical sp2 C-H bond activation in five-membered heteroaromatics in a Ball- Mill: Can 1st row transition elements be a potential replacement of late transitional elements a question to investigate.	Chemistry	Dr. Mainak Banerjee	-	SERB	-	3057560
4	Development of PCDA-liposome based detection kit for Alzheimer's disease biomarker	Chemistry	Dr. Amrita Chatterjee	Dr. Malabika Biswas	SERB	-	2663200
5	Unmixed reforming(UMR)" of Methane for Hydrogen Production	Chemical Engineering	Dr. Srinivas Krishnaswamy	-	SERB	Prof. Aniruddha B. Pandit, Institute of Chemical Technology, Mumbai	5611100
6	Nano-based detection of organophosphate pesticides using metal organic framework conjugates	Chemistry	Dr. Sunil Bhand	-	NASF, ICAR	Dr Irani Mukherjee, IARI, New Delhi	4308110 (BITS share)
7	Computational Study of the Catalytic Mechanism Some Diaryldiselenide-based Glutathione peroxidase Mimetics	Chemistry	Dr. Raghu Nath Behera	-	SERB	-	1642280
8	Exploration of Antifungal lead molecules from the wild type Bacillus subtilis RLID 12.1 purification and molecular characterization along with optimizing production	Biological Sciences	Dr. Utpal Roy	-	DBT	Prof. Arunalokec hakrabarti	3804600] (BITS share out of 4869600)
9	Design and synthesis of grapheme oxide based AIE-sensor for selective detection of Hg(II) and	Chemistry	Dr. Amrita Chatterjee	Dr. Narendra	UGC- DAE Consortium for	-	1119399

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	Organic mercury in aqueous medium			Nath Ghosh	Scientific Research Proposal		
10	Study on the role of Tonoplast Intrinsic Protein Family members in arsenite accumulation and their transport in rice	Biological Sciences	Dr. Kundan Kumar	-	BRNS	Dr. Sudhakar Srivastava, Banaras Hindu University	2939900
11	Studies on biomolecular transport through nuclear pore complexes using a dual fluorescence channel confocal microscope	Physics	Dr. Nandakumar Patincharath	Dr. Meenal Kowshik	SERB	-	4404104
12	Spin seebeck Effect in novel heterostructures	Physics	Dr. Ram Shanker Patel	-	SERB	Dr. Kartik Senapati, Dr. Pratap Kumar Sahoo	5083821
13	An Acoustic Study characterization and standardization of the Sarasvati Veena	Mechanical Engineering	Dr. Pravin M Singru	Dr.Radhika Vathsan	SERB	-	3695560
14	Signature of Space-time noncommutativity in high energy colliders	Physics	Dr. Prasanta Kumar Das	-	SERB	-	1885515
15	Predictive Mathematical Modeling and Analysis for Effective Diagnosis and Control of Diabetes Mellitus with associated Co-infections and Dieseases among Indians.	Mathematics	Dr. P Danumjaya	-	SERB	-	1568490
16	A study on the inequalities involving complex polynomials	Mathematics	Dr. Prasanna Kumar	-	Dept. of Atomic Energy	-	1304100
17	Developing Bioactive compound - Enriched Functional Food ingredients from Dillenia Indicia and Valorization of its Pomace	Biological Sciences	Dr. Srikanth Mutnuri	Dr. Anasuya Ganguly	Biotech Consortium India Limited (DBT Twinning)	-	4215000
18	Throretical and numerical study of Elliptic and Parabolic partial differential equations with interferes	Mathematics	Dr. P Danumjaya	-	Dept. of Atomic Energy	-	1348100
19	A Study on the Bernstein- type inequalities for the polar Derivative of a Complex Polynomial	Mathematics	Dr. Prasanna Kumar	-	CSIR	-	1646000
20	Study on dark energy, dark matter and cosmic acceleration of the Universe in modified gravity	Mathematics	Dr. Gauranga Charan Samanta	Dr. Prasanta Kumar Das	CSIR	-	1696000
21	Catalytic HI decomposition studies in membrane reactor for hydrogen production (transferred project)	Chemical Engineering	Dr. Sharad Sontakke	-	BRNS	-	1933568
22	Response of Copepods to crude oil polution and warming	Biological Sciences	Dr. Lalita V. Baragi	Dr. Srikanth Mutnuri (Mentor)	SERB-National Post Doctoral Fellowship	-	2250000
23	Towards a healthy consumption pattern for preventing chronic diseases in India: pattern and determinants in the consumption of substance, healthy and unhealthy diets over 1983-2012	Economics	Dr. Sukumar Vellakkal	-	PHRI-DST	-	1850750
24	Risk & Uncertainty Assessment for Railway Infrastructure due to Impacts of Climate Change	Humanities & Social Sciences	Dr. Rajiv Kumar Chaturvedi	-	Indian Institute of Management, Ahmedabad	-	224000
25	Conservation initiative by restoration of windowpane oysters (placuna placenta) population in chicalim Bay area, Goa	Biological Sciences	Dr. Sumit Biswas	-	Wildlife Trust of India	-	170000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
26	Innovation in Science pursuit for Inspired Research (INSPIRE)	Physics	Dr. Rudranil Basu	-	DST-Inspire	-	1400000
27	Introducing cyanobacterial bicarbonate transporters into C 3 plants for enhanced photosynthetic performance	Biological Sciences	Dr. Sandhya Mehrota	Dr. Rajesh Mehrotra	EMR-Core	-	3773000
28	Experimental and Computational study of Boron Doped TiO2 and ZnO Nanocrystals	Chemistry	Dr. Jayadevan K.P.	Dr. Raghu Nath Behera	SERB	-	2332515

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Study of lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes	Mechanical Engineering	Dr. Varinder Singh		Tube Investments of India Ltd, Chennai (Inhouse industrial research project)	Dr. Amit Kumar Gupta, Dr. Srinivas P Regalla, Dr. Tufan Chandra Bera	2743500
2	Hybrid Electrochemical-MFC waste processing: Functional blocks for low energy disinfection and denitrification of human waste streams	Biological Sciences	Dr. Srikanth Mutnuri		Gates Foundation through RTI International		1400000
3	Electrochemical Process for Hydroiodic acid (HI) decomposition in Iodine-Sulfur Cycle:A feasibility study (Industry Sponsored Projects).	Chemical Engineering	Dr. Pradeep Kumar Sow		ONGC Energy Centre		1169550

C. Completed International Projects- NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
							-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Design of Compact High Power Antenna with Mode Conversion Capability for High Power Microwave Applications	EEE	Dr. Ashish Chittora	-	RIG	-	200000
2	Experimental Investigation on the Role of Oxygen Storage and Release Materials (OSRMs) in Unmixed Combustion (UMC) for Heat Transfer Applications	Chemical Engg.	Dr. Amol Deshpande	-	RIG	-	200000
3	Development of IoT System for Monitoring Gases	EEE	Dr. Sarang Dhongdi	-	RIG	-	200000
4	Arithmetic circuit implementation on Nanocrossbar and its performance evaluation	EEE	Dr. Pravin Sakharam Mane	-	RIG	-	200000
5	Microfluidic Sperm Cell Sorting Device: Addressing Male Infertility Factor	Mechanical Engg.	Dr. Siddhartha Tripathi	-	RIG	-	200000
6	Thermal Peformance Characterizationn of Loop Heat Pipes with Nanofluids by Infrared Thermography	Mechanical Engg.	Dr. Vadiraj Hemadri	-	RIG	-	200000
7	Large Eddy Simulation of Fluid Flow and Heat Transfer from Rectangular Cylinder kept in Turbulent Stream	Mechanical Engg.	Dr. Pritanshu Ranjan	-	RIG	-	200000
8	Computationally Efficient 3D Ray Tracing Program for Analysis of Radome Enclosed Antennas	EEE	Dr. Hrishikesh Sonalikar	-	RIG	-	200000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
9	Molecular and Ab-inito Modeling of Novel materials for energy applications	Chemical Engg.	Dr. Paramita Haldar	-	RIG	-	200000
10	A Visuo-Motor Tool on Neuromorphic Hardware to perform Pattern Recognition, Decision Making and Action Selection in Real Time	Computer Science and Information Systems	Dr. Basabdatta Bhattacharya	-	RIG	-	200000
11	Development of a Mental Health Profile and Identifying Mental Health Issues among Student Community in BITS Pilani K K Birla Goa Campus: An Explanatory Sequential Mixed Method Study	Hum. & Soc. Sci.	Dr. Bidisha Banerjee	-	RIG	-	200000

Other Projects:

A : New Approved Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Polyamines and their involvement in GnRH I regulations and their role in polycystic Ovarian Snydrome (PCOS)	Biological Sciences	Dr. Arnab Banerjee	Dr. Raviprasad Aduri	DBT	-	6300000
2	Design of "smart" scaffolds incorporating nano-bioactive molecules for treatment of type 2 diabetes mellitus associated chronic wounds	Biological Sciences	Dr. Meenal Kowshik	Dr. Jyutika Rajwade	ICMR	-	2750000
3	Vetting of designs for Biofilter bassed odour control system for sewage treatment plant (11 pumpimg stations)	Biological Sciences	Dr. Srikanth Mutnuri	-	Larsen and Toubro Ltd (L&T)	-	428340
4	Mitigation of salt stress in Oryza sativa by overexpression of ABA dependent with No-Lysine kinase 9"	Biological Sciences	Dr. Kundan Kumar		SERB-CRG		4271340
5	Technical support for operating anaerobic digestor at sada for Mormugao Municipal Council	Biological Sciences	Dr. Srikanth Mutnuri		Mormugao Municipal Council		600000
6	Atomically - thin photonic devices as hosts of single-photons and entangled-photon pairs emitters and single - spins for quantum sciences and technologies	Physics	Dr. E S Kannan (Co-PI)		DST-Nano Mission	Dr. Santosh Kumar (PI) (IIT Goa) Dr. Saidi Reddy (Co-Investigator NIT Goa) Dr. Atikur Rehman - IISER Pune (Co-Investigator)	2300000 (Bits share) Total cost of project is 330 lakhs
7	Evaluation' as a Teaching method: A New pedagogical model to improve knowledge and critical thinking among students	Humanities and Social Sciences	Dr. Reena Cheruvalath	-	NCERT	-	370000
8	RRSFP- Builder Capital- Level -III	BITS Pilani Goa	-	-	DBT	-	100000000

CONSULTANCY PROJECTS

A. Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Life cycle Assessment (LCA) for synthetic organic chemicals factory for manufacture of Dyes, Dye-/Intermediates & reactive Dyes	Chemical Engineering	Dr. S D Manjare	-	Shree Pushkar Chemicals & Fertilizers Ltd	-	129800
2	Technical Vetting for 15KLD	Biological Sciences	Dr. Srikanth Mutnuri	-	Tide Technocrats Private Limited	-	177000
3	Fatigue Life Assessment Study	Mechanical Engineering	Dr. Vikas Chaudhari	Dr.Sachin Waigaonkar	John Deere India Pvt. Ltd	-	590000
4	Climate Change Impact Assessment in Thiruvananthapuram Division Kerala	Humanities & Social sciences	Dr. Rajiv Kumar Chaturvedi	-	IORA Ecologicals, under The Forest-PLUS 2.0 program	-	408000
5	Ionic liquid -based fowarded osmosis desalination : A Bench Scale Study	Chemical Engineering	Dr. S D Manjare	-	Procter and Gamble Health Limited	-	330000
6	Environmental Impact Assessment of MAT 2	Chemical Engineering	Dr. S D Manjare	-	Deccan fine Chemicals (India) Pvt Ltd	-	424800
7	Colab Agreement	Computer Sci & Information Sys	Dr. Ashwin Srinivisan	-	Reflexis Systems, INC, USA	-	2200000
8	TCS- Research advisory	Computer Sci & Information Sys	Dr. Ashwin Srinivisan	-	TCS	-	720000
9	MTU Field Study	Biological Sciences	Dr. Srikanth Mutnuri	-	WASH Institute	-	1000640

B. Consultancy Projects Ongoing

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Vitamin D increase in Mushrooms by exposing by UV light	Biological Sciences	Dr. Srikanth Mutnuri	-	Tropical Mushrooms & Zuari foods. (Kurade)	-	306800
2	Tata Consultancy Services	CS&IS	Dr. Ashwin Srinivasan	-	Tata Consultancy Services	-	720000
3	English Translation of Two Literary works in Malayalam, Haritha Niroopanam Malayalathil (Green - Criticism in Malayalam) and Aa Aa Aanakkathakal (those Elephant stories)	Humanities & Social Sciences	Dr. Rayson K Alex	-	Association for the study of Literature and Environment(USA)	-	70000
4	Performance assessment of MTB & Oxa production process	Chemical Engineering	Dr. S. D. Manjare	-	Deccan Fine Chemicals (India) Pvt Ltd	-	401200
5	Performance Assessment of 2,4,6-trichloroaniline (TCAN) production process	Chemical Engineering	Dr. S. D. Manjare	-	Deccan Fine Chemicals	-	401200
6	Recovery and Purification of enzymes from spent Mushroom Substrate	Biological Sciences	Dr. Srikanth Mutnuri	-	Zuari foods & Farms pvt.Ltd/ Tropical Mushrooms Goa	-	715000
7	Datalab Setup	CS&IS	Dr. Ashwin Srinivasan	-	TCS	-	2460000
8	From NDCs to pathways and Policies: Tranformative climate Action After Paris	Humanities and Social Sciences	Dr. Rajiv Kumar Chaturvedi	-	IDDRI	-	1200000

9	Image processing and machine learning techniques for leather species identification	EEE	Ms. Anjli Varghese (Ph.D Student) (Mentor-Dr.A. Amaline Prince)	-	TCS-RSP	-	<u>2534000</u>
10	1981 Batch Chair Professorship	CS&IS	Dr. Ashwin Srinivasan		1981 Batch Chair Professorship		180000

C. Consultancy Projects Completed

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Environmental Audit (EA) for Ammonia, Urea, & Phosphate Fertilizers Units and Storage Sections.	Chemical Engineering	Dr. S. D. Manjare	-	M/s.Zuari Agro Chemicals Ltd	-	851960
2	Water Audit (WA) for Ammonia, Urea, & Phosphate Fertilizers Units and Storage Sections.	Chemical Engineering	Dr. S. D. Manjare	-	M/s.Zuari Agro Chemicals Ltd	-	851960
3	Assessment of MNQ Production Process	Chemical Engineering	Dr. S. D. Manjare	-	Deccan Fine Chemicals	-	354000
4	Assessment of BFBTF Production Process	Chemical Engineering	Dr. S. D. Manjare	-	Deccan Fine Chemicals	-	354000
5	Life cycle Assessment of Lote plot	Chemical Engineering	Dr. S D Manjare	-	Laxmi Organic Industries Ltd	-	672600
6	preparation of Goa state Action plan on climate change, concept note and DPR	Humanities and Social Sciences	Dr. Rajiv Kumar Chaturvedi	-	NABARD Consultancy Services Pvt Ltd	-	365800
7	Cloning of spot blotch disease resistance gene in wheat.	Biological Sciences	Dr. Rajesh Mehrotra	-	CIMMYT	-	1500000
8	To carry out study on issue of volatile organic emission	Chemical Engineering	Dr. Sharad M Sontakke	-	AEGIS Logistics ltd.	-	216000
9	Assing Rotomoldability of materials for Roots Multicleean Ltd. Tamil Nadu	Mechanical Engineering	Dr. Sachin Waigaonkar	-	Roots Multicleean Ltd. Tamil Nadu	-	125840

Hyderabad Campus

SPONSORED RESEARCH AND CONSULTANCY

1. PROJECTS SANCTIONED

Government Sanctioned							
S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Development of a Standard method for identification of dope dyed and exhaust dyed polyester fibers/fabrics	Biology	Dr. Ruchi Jain Dey	Dr. Trinath Jamma	DRDO-LSRB	-	39,82,000
2	Efficient prediction strategy of covid 19based onpandemic data and immunoinformatics, integrated on artificial intelligence (AI) platform	Biology	Dr Debashree Bandopadhyay		DST -Matrix	-	5,50,000
3	Efficient prediction strategy of covid 19based onpandemic data and immunoinformatics,	Biology	Dr Debashree Bandopadhyay		CSIR	-	8,50000

Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	integrated on artificial intelligence (AI) platform						
4	Molecular genetic analysis of schizophrenia patients	Biology	Dr. Naga Mohan K		DST	-	60,42,360
5	Role of m6AReversible RNA Methylation in Oral Cancer	Biology	Dr. Piyush Khandelia	Dr. Vivek Sharma	CSIR	-	22,50,000
Department of Chemical Engineering							
6	Developmental studies on Enviromental conditioning of QCE composite materials	Chem. Engg	Dr. Ramesh Babu A	Dr. Mithun Modal	DRDO	-	24,89,999
Department of Civil Engineering							
7	Mitigation strategy to counter top-down cracking due to non-uniform contact stresses in Flexible Pavements-	Civil Engineering	Dr. Sridhar Raju	Dr. Chandu Parimi	NHAI	-	26,52,000
Department of Computer Science and Information Systems							
8	MUT-DROCO:MUltipathnetworking Test-bed for DROneCOmmunications·	CSIS	Dr. Paresh Saxena	-	DST	-	1660600
Department of Electrical and Electronics Engineering							
9	28S Ribosomal RNA capture Assay for the Sensitive Detection of Plasmosium vivax	EEE	Dr Sanket Goel	-	ICMR	-	1141280
10	Design of miniaturized 5GHZ high pass filter (HPF) and study of interference due to multi chip packing in TR module/plank	EEE	Dr. Runa Kumari	Dr. Harish Dixit	DRDO	-	997395
11	Design of phase locked loop dielectric resonator oscillators for frequency sysnthesziers	EEE	Dr. Sourav Nandi	Dr. Harish Dixit	DRDO	-	993324
12	Swechha	EEE	Dr Sanket Goel		Swechha	-	64494
13	Automated IoT based microfluidic electrochemiluminescence ECL biosensing platform for various biomarker detection	EEE	Dr. Prasant Kumar Pattnaik	Dr Sanket Goel	DST	-	5142307
14	MRI based onon-invasive quantitative biomaker for early diagnosis and prognosis of brain tumor	EEE	Dr. Venkateshwaran Rajagopalan	Dr. Prabhakar rao & Prof. Yogeeswari	DBT	-	1748360
15	Magnetoplasmonic studies on cobalt nickel based nanostructures	EEE	Ms Priya latha	Dr. Runa Kumari	WOS-DST	-	2534000
Department of Economics and Finance							
16	"Socio-Economic Impacts of Cyclones and the Coping Strategies of the Local Communities in Odisha, India with a Special Focus on Women"	Economics and Finanace	Dr. Archana Srivastava		Shastri Institutional Collaborative Research Grant	-	1000000
Department of Mechanical Engineering							
17	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Mechanical Engineering	Dr. Sandip Deshmukh S	Dr. Chandu Parimi	DRDO	-	1550600
18	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Mechanical Engineering	Dr. Kurra Suesh	Dr. Sujith R	DRDO	-	3907830

Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
19	Interated smart phone and IOT enabled Microfluidic sensor for real time qualification of soil macronutrients conductivity and pH	Mechan	Dr. Satish Kumar Dubey	Dr. Sanket Goel & Dr. Ponnalagu	DST	-	1871408
Department of Mathematics							
20	Development and application of a meshfree adjoint approach for aerodynamics shape optimization	Mathematics	Dr. Anil N	Dr. Kishore Kumar	DRDO-ARDB	-	1781934
21	True relative of suslin normality theorem for elementary groups and transvection groups	Mathematics	Dr. Pratyusha Chattopadhyay	-	DST-Inspire	-	660000
22	Adaptive and efficient method of fundamental solutions for the numerical reconstruction of boundary data in two-phase inverse stefan problems	Mathematics	Dr. Gujji MohanMurali Reddy	-	DST	-	1045000

Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Science							
1	A formulation to prevent transmission of SARS-CoV-2 virus	Biological Sciences	Dr. Suman Kapur	-	CSR-1	-	3000000
2	Testing for Covid-19 using an available Platform	Biological Sciences	Dr. Suman Kapur	-	CSR-2	-	3150000
Department of Chemical Engineering							
3	Development of cost effective bio-sorbents to remove heavy metals form the effluent generated at HBL	Chemical Engineering	Dr. I. Sreedhar	-	HBL	-	5,04,000
Department of Chemistry							
4	Developmental studies on Enviromental conditioning of QCE composite materials	Chemistry	Dr. Tanmay Chatterjee	-	Chancuex Labs	-	10,07,000
Department of EEE							
5	2D Nanomaterials based Flexible Resistive Memory (Memristor)	EEE	Dr. Parikshit Sahatiya	-	Redpine Signals, India Pvt Ltd	-	814400
Department of CSIS							
6	Testing artificial intelligence system	CSIS	Dr. Lov Kumar	Dr. BhamuMurthy	TestAIng Solutions Pvt. Ltd.	-	240000
Department of Pharmacy							
7	Topical nanomicelles eyedrop for delivering antifungal drug to treat corneal infection	Pharmacy	Dr Nirmal J	-	Parenteral Drug Association (PDA)	-	2000000
8	Development and optimization of stable anti-leukemic drug loaded long circulating lipsomes	Pharmacy	Dr. Akash Chaurasiya	-	Parenteral Drug Association (PDA)	-	3000000
9	In-vivo experiments pertaining to pharmacokinetic studies on new conjugates)	Pharmacy	Dr. Sajeli Begum	-	WIPRO	-	50000
10	Evaluation of Novel Transdermal Device for Controlled delivery of drug	Pharmacy	Dr. Punna Rao Ravi	-	Medicen Devise Technologies Pvt Ltd	-	1870890

| 11 | Design and Evaluation of Novel Transdermal Drug Delivery Systems | Pharmacy | Dr. Punna Rao Ravi | - | Transform SciTech Pvt. Ltd., | - | 1297853 |
| 12 | Pre-Clinical efficacy evaluation of three synthetic peptides For the treatement of inflammatory bowel diseases & sepsis | Pharmacy | Dr. D Sriram | Dr. Arti Dhar | ISSAR | - | 2980000 |

Consultancy Sanctioned Projects							
Department of Civil Engineering							
1	Damages to Highway Property at GMR Pochanpalli	Civil Engineering	Dr. Sridhar Raju	-	Team Insurance	-	3,10,000
Department of Economics and Finance							
2	Socio-economic determinants of household investment portfolio in India	Economics and Finance	Dr. Priya Rampal	Dr Shreya Biswas	Dvara Research	-	270000
3	Urban Low-Income Households' Savings: Understanding Issues and Challenges in Indian Context	Economics and Finance	Dr.. Rishi Kumar	Dr. Archana Srivastava	Dvara Research	-	1405000
4	Novel Formulation for oral biovailability enhancement of anticancer drug	Pharamcy	Dr. Akash C		Slayback Pharma		2068540

International Sanctioned Projects							
Department of Humanities and Social Sciences							
1	Role of Environmental Entro Dysfunction in explaining intestate variation calorie intake	HSS	Dr Zakaria Siddiqui	-	University of South Australia	-	2,40,000

Institute Sanctioned Projects							
S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1.	Gpp mediated inter-cell communication and biofilm formation	Biological Sciences	Dr. Kirtimaan Syal	-	BITS-RIG	-	200000
2.	Opera	Biological Sciences	Dr. Nishit Gupta	-	Opera	-	420000
3	Opera	Biological Sciences	Dr. Shuvadeep Maity	-	Opera	-	420000
Department of Chemical Engineering							
4	Techno economic feasibility analyses of sustainable energy systems using simulation based optimization paradigm	Chemical Engineering	Dr. Arnab Dutta	-	BITS-RIG	-	2,00,000
Department of Civil Engineering							
5	Next Generation Seismic Vulnerability and Loss Assessment Models for Highway Bridges	Civil Engineering	Dr. Shivang Shekhar	-	BITS-RIG	-	2,00,000
Department of Computer Science and Information Systems							
1	Data enabled lot system for Noise monitoring, analysis and mitigation (DIN)	CSIS	Dr. Manik Gupta	-	BITS-RIG	-	2,00,000
	Data enabled Systems for Tracking and Evaluating Student Stress (DeSTRESS)	CSIS	Dr. Manik Gupta	-	BITS-ACRG	-	700000
2	Conversational Information Systems for low text-illiteracy contexts	CSIS	Dr. Dipanjan Chakraborty	-	BITS-RIG	-	2,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
	Institute Sanctioned Projects						
3	Real – time performance analysis of network coding implementation	CSIS	Dr. Paresh Saxena	-	BITS-RIG	-	198520
4	Marr on the Microprocessor: A prelude towards understanding Marr's bottom 2-levels in Brains and Machines	CSIS	Dr. Venkatakrishnan Ramaswamy	-	BITS-RIG	-	2,00,000
	Towards understanding Computational Principles in Deep Networks & Brains	CSIS	Dr. Venkatakrishnan Ramaswamy	-	BITS-ACRG	-	1000000
	Department of Mathematics						
1	Permutation polynomials over finite fields	Mathematics	Dr. Rohit Gupta	-	BITS-RIG	-	2,00,000
	Department of Humanities and Social Sciences						
1	Banla, Telugu and Oriya: Examining the feasibility of automatic identification of Indian accents in English	HSS	Dr. Pranesh Bhargava	-	BITS-RIG	-	2,00,000
2	Minority Investor Protection and Business group ownership structure in India	HSS	Dr Nivedita Sinha	-	BITS-ACRG	-	8,50,000
	Department of Mechanical Engineering						
1	Effect of filler on the mechanical performance of adhesively bonded joints	Mechanical Engineering	Dr. Amol Vuppuluri	-	BITS-RIG	-	2,00,000
2	Polymer composites for water-lubricated hydropower bearing applications	Mechanical Engineering	Dr. Prabakaran Saravanan	-	BITS-RIG	-	2,00,000
3	Simulation study of desiccant-wheels coated with desiccant-material having a non-conventional sorption-isotherm	Mechanical Engineering	Dr. Mrinal Ketan Jagirdar	-	BITS-RIG	-	2,00,000
4	Aerodynamic Shape Optimization using Feature-Based CAD systems and Adjoint Methods	Mechanical Engineering	Dr. Dheeraj Agarwal	-	BITS-RIG	-	2,00,000
7	Development of a robust and efficient crack detection technique for wind turbine rotor blades using nonlinear vibration response characteristics	Mechanical Engineering	Dr Brajesh Kumar Panigrahi	-	BITS-ACRG	-	1000000
	Chatter Identification & Control for Thinwalled Workpiece Machining	Mechanical Engineering	Dr Kundan Kumar Singh	-	BITS-ACRG	-	1000000
	Department of EEE						
1	Design of Commercially Viable Compact and Efficient Planar Multi-Port Antennas for WLAN amd 5G Applications	EEE	Dr Sourav Nandi		BITS-ACRG	-	1000000

2. ONGOING PROJECTS

Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Probing the functional and regulatory role of m6A reversible RNA methylation in skeletal myogenesis and muscle wasting	Biological Sciences	Dr. Piyush Khandelia	-	DST	-	55,58,360
2	Deciphering the role of host-microbiota derived bile acids in programing immune cell function during intestinal inflammation	Biological Sciences	Dr. Trinath Jamma	-	CSIR	-	24,94,000
3	Sequence based designs and characterization of peptide-amyloidnano materials exploring functionality	Biological Sciences	Dr. Ramakrishna Vadrevu	Dr. R. Krishnan	DAE-BRNS	-	29,68,650
4	Ramanujam Fellowship	Biological Sciences	Dr. Gireesha Thipperudrappa	-	Ramanujam Fellowship	-	38,00,000
5	Harnessing mucosal immunity towards improved resistance against tuberculosis	Biological Sciences	Dr. Ruchi Jain Dey	-	DBT Ramalingaswamy	-	32,50,000
6	Identification and characterization of long non-coding RNA's involved in Genome stability	Biological Sciences	Dr. Vivek Sharma	-	DBT Ramalingaswamy	-	32,50,000
7	Conditional pathogenesis: understanding why potentially beneficial rhizobacteria turn pathogenic under certain environmental conditions	Biological Sciences	Dr. Sridev Mohapatra	Prof. Naga Mohan K	DBT	-	45,16,800
8	Novel approach to develop computational pipeline to predict functions of cysteines in Proteins of Unknown Function (PUFs) and Domains of Unknown Function (DUFs), based on protein microenvironments	Biological Sciences	Dr. Debashree Bandyopadhyay	-	DST	-	19,42,800
9	Understanding the role of long non coding RNA's (Inc RNA's) I transforming growth factor - beta (TGF-B) pathway in Glioblastoma.	Biological Sciences	Dr. Vivek Sharma	-	DST	-	47,26,480
10	Identification of the regulatory mechanisms executed by bile acids during inflammation induced colon cancer	Biological Sciences	Dr. Trinath Jammma	-	DST	-	43,82,650
11	Elucidating the role of long non coding RNAs (incRNAs) in neuronal cell death during japanese encephalitis (JE)	Biological Sciences	Dr. Vivek Sharma	Prof. Naga Mohan K	DBT	-	68,76,800
Department of Chemical Engineering							
12	Reactive Transport Modeling and Simulation of Carbon Dioxide Sequestration in Deccan Volcanic Province	Chemical Engineering	Dr. Vikranth Kumar Surasani	Dr.Balajikrishna Murthy	DST	-	21,73,600
13	Cracking of hydrocarbon fuel for a possible heat sink applications	Chemical Engineering	Dr. Srikanta Dinda	-	DRDO	-	40,65,000

Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
14	Development of superomniphobic surface for self-celaning and anti-microbial applications	Chemical Engineering	Dr. Nandini Bhandaru	-	DST INSPIRE	-	28,00,000
15	Designing of potential adsorbents via molecular modelling and simulations for the high temperature carbon dioxide capture	Chemical Engineering	Dr. Angan Sengupta	-	DST	-	21,95,220
16	Modelling the capacity loss in lithium ion batteries during cycling	Chemical Engineering	Dr. Balaji Krishna Murthy	Dr. Vikranth Kumar S	CSIR	-	18,00,000
17	Waste Minimization and Carbon Capture with Coal Flyash Doped Sorbents- A Two-Edged Sword	Chemical Engineering	Dr. I Sreedhar	-	CSIR	-	18,85,000
Department of Chemistry							
18	Design And Synthesis Of Diverse Pyrrole-Pyridine Basd Molecules As Selective Sensors for Zn2+AND F-	Chemistry	Dr. Anupam Bhattacharya	-	CSIR	-	16,52,940
19	High potency of complex dietary β-glucan fibers as Cholesterol and Low-Density Lipoprotein lowering agents: A comprehensive mechanistic investigation through advanced dynamical simulations.	Chemistry	Dr. Durba Roy	-	DST	-	36,66,520
20	Investigations on napthalene and anthracene based phosphosates/phosphates: important sources for alkene based new alegers and polyarylalkanes	Chemistry	Dr. Manab Chakravarty	Dr. Amit Nag	CSIR	-	16,20,000
21	Photocatalytic reduction of CO2 to biofuels	Chemistry	Dr. Sounak Roy	-	CSIR	-	4,00,000
22	DST INSPIRE Fellowship	Chemistry	Dr. Chanchal Chakraborty	-	DST INSPIRE Fellowship	-	35,00,000
23	Women Scientist (Dr. Atasi Mukherjee Under Prof. Manab Chakravarty	Chemistry	Dr. Atasi Mukherjee Under Prof. Manab Chakravarty	-	WOS-DST	-	31,55,000
24	Synthesis of highly stable Zr-based mixed -linker metal organic frameworks (MOFs) for humidity control and gas separation	Chemistry	Dr. Himanshu Aggarwal	-	DST	-	21,98,183
Department of Civil Engineering							
25	Costal wetlands characterization using L and S bands of polarimetric SAR data	Civil Engineering	Dr. Rajitha	-	ISRO	-	13,58,000
26	Economic construction practice using bacterial inclusions in concrete in improve its durability	Civil Engineering	Dr. Arkamitra Kar	Dr. Jayati Ray Dutta & Dr. Mohna Bandyopadhyay	CSIR	-	17,00,000
27	Development of a comprehensive methodology to improve traffic safety in Indian urban roadways based on advanced statistical techniques	Civil engineering	Dr. Bandhan Bandhu M	-	DST	-	11,39,880

Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
28	Experimental and computational studies of surface water quality parameters from morphometry and spectral characteristics	Civil engineering	Dr. Jagdeesh Anmala	Dr. Murari R R Varma & Dr. Rajitha K	CSIR	-	41,9,8080
29	Rainfall-Runoff modelling for lower godavari basin ina changing climate	Civil engineering	Dr. K S Raju	Dr. Nagesh Kumar	CSIR	-	16,00,000
30	Quality Control in road works	Civil engineering	Dr. Sridhar Raju	Dr. Prasanta Kumar Sahu	Govt of Telangana	-	9,90,000
31	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Civil Engineering	Dr. S C Mohan	-	DST	-	43,14,540

Department of Computer Science and Information Systems

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
32	Interpretation of Tuberculin Reaction Using Medical Photography and Computer Aided Diagnosis.	CSIS	Dr. Jabez Christoper	-	DST-SERB	-	9,94,400

Department of Electrical and Electronics Engineering

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
33	Investigations of the effects of photon up-conversion materials on the electrical performance of ferroelectric/semiconductor heterojunction photovoltaic devices	EEE	Souvik Kundu	Kannan Ramaswamy and B. Venkat. Hariharan	SERB (EMR), DST		35,63,000
34	Digital 3D Printed Electronic Technology for Space Electronic Packaging Applications	EEE	Sanket Goel	-	ISRO		26,36,000
35	Cardiac-Organ -On-Chip: Integrated microfluidic cardiac C18:K18platform for drug screening and toxicity detection	EEE	Prof. Sanket Goel	-	DST		43,75,800
36	Micro-plasma transistor for high temperature applications	EEE	Dr. Karumbaiah C		DST		2563070
37	Microfluidic Enzymatic Biofuel Cell for Energy Harvesting and Blood Parameters monitoring	EEE	Sanket Goel	-	DSIR		15,00,000
38	National Post-Doctoral Fellowship	EEE	Prof. Sanket Goel /Ms. Khairunnisa	-	National Post-Doctoral Fellowship		19,20,000

Department of Economics and Finance

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
39	Impact of modern organized multi brand retail trade on street vendors case study of two capital cities	Economics and Finance	Dr. Archana Srivastava	-	ICSSR		4,50,000
40	Does Financial Awareness lead to Better Financial Inclusion Outcomes? An Investigation	Economics and Finance	Dr. Durgesh Ch Pathak (PI)	Dr. Rishi Kumar	IMPRESS-ICSSR		4,50,000
41	Financial Inclusion through Urban Cooperative Banks: An Exploratory Study of Telangana State	Economics and Finance	Dr. Mini Thomas	-	IMPRESS-ICSSR		5,60,000
42	Impact of the ex-gratia for farmers' suicide on the surviving family member of the deceased farmers in Telangana	Economics and Finance	Dr. Thota Nagaraju	-	IMPRESS-ICSSR		4,20,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Ongoing Government Projects							
Department of Humanities and Social Sciences							
43	Structured dialogues for sustainable urban water management	Humnities and Social Sciences	Dr. Suchismita Satpathy	-	DST		57,26,400
Department of Mechanical Engineering							
44	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Mechanical	Dr. Nitin Kotkunde	-	DST	-	31,43,000
45	Studies on wind resistant design for proposed Ligo India Observatory	Mechanical	Dr. Sabareesh GR	Dr. KRC Murthy & Dr. Rahul Nigam	IUCAA-LIGO	-	45,02,000
46	Development of image processing based portable device to measure surface strains in sheet metal forming	Mechanical	Dr Kurra Suresh	-	DST	-	17,24 ,000
47	3D printing of graphene nanocomposites for energy storage applications	Mechanical Engineering	Dr. Pavan Kumar Penumakala,	-	DST		24,30,040
48	Machinability assessment and material characterization of tungsten heavy alloys used in defense applications as KE penetrators	Mechanical Engineering	Dr. Amrita Priyadarshini	-	DRDO ARB		14,78,900
49	Harvesting energy from underwater ocean currents through coupled vortex-induced vibration, flapping dynamics, electromagnetic inductin and piezoelectric effects	Mechanical Engineering	Dr. Pardhasaradhi G	-	DST		27,35,370
50	Modelling and Simulation of quartz Accelerometer for navigation system	Mechanical Engineering	Dr. Satish Kumar Dubey	Dr. Arshad Javed, Sanket Goel, AK Gupta	DRDO-cars		5,38,000
51	Experimental Investigation on an Energy Efficient Regenerative Thermal Management Technique for Hybrid Electric Vehicles".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST		27,93,700
52	A solar assisted combined cooling, heating and energy source: An alternative energy source for rural India".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST		38,40,496
53	Fully Integrated Smartphone and IoT enabled Microfluidic Sensor for Real-time Quantification of Soil Macronutrients, Conductivity and pH	EEE	Satish Dubey	Sanket Goel and Ponnalagu R N	DST		27,98,000
Department of Mathematics							
54	Comparison of phase velocities of Rayleigh waves, Love waves and Torsional waves in various anisotropic geo-media	Mathematics	Sumit Kumar Vishwakarma	-	SERB - DST	-	13,66,800
55	Characterizing the sets of periodic points of automorphisms on a solenoid	Mathematics	Sharan Gopal	-	SERB - DST	-	19,98,480
56	Modeling the hydrodynamics of various wave energy converter devices in real sea conditions	Mathematics	Santanu Koley	-	DST-INSPIRE	-	35,00,000

Department of Pharmacy

57	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Pharmacy	Prof. D.Sriram	-	DBT TATA INNOVATION FELLOWSHIP	-	45,00,000
58	Development of smart capsule to target colorectal cancer	Pharmacy	VVK.Venuganti	Dr. Onkar P. Kulkarni	DST-SERB	-	55,00,000
59	Near-Infrared Light Degradable Nanomicellar ChemoPhotodynamic	Pharmacy	Swati Biswas	-	DST-SERB-CRG	-	30,72,000
60	Understanding the role of animicrobial peptide S100A12 (Cangranulin C) mediated host defense in Pseudomonas keratitis and developing nano-tools for efficient delivery of S100A12	Pharmacy	Sanhita Roy	Swati Biswas	DST-SERB-CRG	-	16,37,800
61	Bifunctional Gene-Expression Modulating Chemotherapeutic Agents as Improved Treatment Strategy for Cancer	Pharmacy	Balaram Ghosh	Prof. Swati Biswas	CSIR	-	29,00,000
62	Determination of wound healing (Pro-angiogenic) properties of peptide conjugate	Pharmacy	Onkar Kulkarni		DRDO-INMAS	-	8,00,000
63	Role of HDAC6 in pathogenesis of oral sqamous cell carcinoma: regulation of IL-1beta, EMT and autophagy	Pharmacy	Onkar Kulkarni	Balaram Ghosh	ICMR	-	35,00,000
64	Agro-homeopathy: Potential of homeopathy as a tool to manage phytopathogen / nematode complex for a sustainable agriculture	Pharmacy	Dr. Vidya sagar	Dr. A.Sajeli Begum	CCRH-AYUSH	-	30,32,000

Department of Physics

65	Fundamental Physics in strong gravitational field of neutron stars	Physics	Prof. Sarmistha Banik	Dr. Asrarul Haque	DAE-BRNS	-	24,39,650
66	Quantum Gravity in Rindler space	Physics	Dr. Prasant Samantray	-	CSIR	-	15,46,000
67	Exceptional polynomials and their applications to Wigner Function"	Physics	Dr. K V S Shiva Chaitanya	-	DST-SERB	-	6,60,000

Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
Department of Chemistry							
1	Zinc Air Battery	Chemistry	Sounak Roy	Chanchal Chakraborty	HBL	-	13,50,000
Department of Civil Engineering							
2	Evaluation of the efficiency of bacterial inclusions in concrete	Civil Engineering	Dr. A. Kar	Prof. Sridhar Raju, Dr. Chandu Parimi, Dr. jayati Ray Dutta	ALIENS Developers Ltd.	-	11,40,000
3	Development of Pedestrian Facility Assessment Tool for Improving Pedestrian's safety condition in Hyderabad	Civil Engineering	Dr. Bandhan Bandhu	-	AIA	-	1,00,000
4	Seismic Certification for our range of racks based on certificate of 3septs 2tier rack	Civil Engineering	Dr. Mohan SC	-	HBL	-	1,18,000

| 5 | using a Geo-composite drainage layer (GDL | Civil Engineering | Dr. Sridhar Raju | | R& D Project | - | 4,00,000 |

Department of Mechanical Engineering

| 6 | Study of lubrication method for enhanced surface finish and reduced draw load on cold draw steel tubes | Mechanical | Dr Varinder Singh | Prof. A. K. Gupta & Prof. S. P. Regalla | Tubes Investment India Ltd. | - | 27,50,000 |
| 7 | Financial sanction of research project on Li Ion Battery | Mechanical Engineering | Dr. Sujith R | - | HBL | | 11,90,000 |

Department of Pharmacy

8	Pharmacokinetic and pharmacodynamic evaluation of new chemical entities for ocular diseases	Pharmacy	Nirmal J		Incilia Therapeutics Pvt Ltd		8,14,000
9	Development & characterization of emulsion based drug product for the management of emetogenic cancer chemotherapy	Pharmacy	Dr. Akash Chaurasiya		Slayback Pharma		7,02,100
10	Identification of UGT-isoform specific substrates and inhibitors and their contribution in drug metabolism and systemic levels of bile secretions	Pharmacy	Dr. Punna Rao	-	Acubiosys Private Limited	-	11,75,000
11	Pharmacokinetic Evaluation of Ocular In-Situ Gelling Systems Loaded with treatment of posterior uveitis	Pharmacy	Dr. Punna Rao	-	BMS		3,40,000
12	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Pharmacy	Dr. Balaram Ghosh	Dr. Swati biswas	Reddy's Lab		9,00,000

Department of Humanities and Social Sciences

| 13 | Understanding the commercialization of brease milk from sociological perspective | Humanities and Social Sciences | Dr. Suchismita Satpathy | | AIA | | 187000 |

Ongoing Consulantcy Projects

Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Humanities						
AP HRDI - Entrustment of Studies - Cyclone Titli	Humanities and Social Sciences	Dr. Biswanath Dash	-	Cyclone Titli	-	120000
Department of Mechanical Engineering						
Automation of sample preparation process for pharmaceutical Applications	Mechanical Engineering	Dr. Y V D Rao	Dr. Arshad Javed	Aizant Drug Research Solutions Pvt.Ltd	-	1548000

Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Chemistry							
1	Develop of novel anti-leishmanial analogues loaded with novel nano-formulations	Chemistry	-	K V G Chandra Sekhar	DBT	-	13,00,000

Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Civil Engineering							
2.	Implementation of plants and treated natural fibers to enhance the strength properties of soft soil and to decrease the rate of surface erosion (Nat-Treat)	Civil Engineering	Dr. Anasua GuhaRay & Dr. Wei Wu (University of Vienna, Austria)	Dr. A. Kar, and Dr. M. Acharya (University of Vienna, Austria)	Indo-Austria Scientific and Technological Cooperation between WTZ (Austria) and DST (India)	BOKU, University of Vienna, Austria	6,40,000
3	Sweden-Volvo Educational Research Foundation	Civil Engineering	Dr. Prasanta Kumar Sahu		Sweden-Volvo Educational Research Foundation		223881
4	Congestion Pricing: Planning for optimal strategies & commuters behavioral implications under different pricing schemes	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Majumdar and Prof. Asoke Kumar Sarkar (Pilani Campus)	SPARC - MHRD, Govt. of India		42,00,000
5	Transport policy interventions to curb particulate matter emissions in Chandigarh	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Bandhu Majumda	Global Challenges Research Fund, UK		2562000
6	Prevention of Hazardous field -firing of bagasse amd its sustainable utilization as a raw material in an innovation industrial process	Civil Engineering	Dr. Srinivas Appari	Dr. Bahurudeen & Dr. Prassanta Kumar Sahoo	Sparc		28,79,650
Department of Electrical and Electronics Engineering							
7	Development of Methodologies for Self-Aware Network-on-Chip Design (India-Austria)	EEE	Soumya J	Axel Jantch	DST-Austria	Austria	8,89,000
8	Indo-Norwegian collaboration in Autonomous Cyber-Physical Systems	EEE	Soumya J & Lingareddi C	-	Norwegian Research Council"	Norway	42,43,000
9	Management of distributed energy resource in smart cities: challenges and advanced control strategies	EEE	Dr. Hitesh Datt Mathur	Dr. Alivelu Manga Parimi	Sparc		42,55,900
Department of CSIS							
10	Network Coding for Multipath Transport	CSIS	Dr. Paresh Saxena		AnsuR Technologies AS , Oslo Norway		547200
Department of Pharmacy							
11	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	Pharmacy	PI - Dr. Prashant Garg (LVPEI),	Dr. V Vamsi Krishna Venuganti	DBT-MRC		35,00,000
Department of Mechanical Engineering							
12	Sustainable technology solutions for energy efficiency in the jageery industry	Mechanica Engineering	Dr. M. Srinivas	1. Dr. K Srinivas Reddy & 2. Dr. V Srinivas	Royal Academy		48,00,000
13	Benchmark studies of tornado induced wind loads between tornado simulators wordwide	Mechanical Engineering	Dr. Sabareesh G R		Research center of wind Engineering		1400000

Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Differential expression and ruglation of	Biological Science	Dr. Pragya Komal		BITS-ACRG		700000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Ongoing International Projects							
	GluN2A/GluN2B subnit containing NMDA receptor by Src kinase in MAM -induced cell based model of schizophrenia						
2	Deciphering the role of gut microbiota-derived secondary bile acids in metabolic rewiring of macrophages: implications in colon cancer	Biological Sciences	Trinath Jamma		BITS-ACRG		985000
3	To elucidate novel mechanisms of Sn RK1-AMPK family kinases in plant antiviral defense and human metabolism regulations	Biological Sciences	Gireesha T M		BITS-ACRG		995000
Department of Chemistry							
4	Design of highly stable fluorescent metal-organic frameworks for iodine capture.	Chemistry	Dr. Himanshu Agarwal	-	BITS-ACRG	-	10,00,000
5	Synthesis of highly stable Zr based mixed-linker metal organic frameworks (MOFs) with fcu and hex topology for gas separation and sensing	Chemistry	Dr Himanshu Aggarwal	–	BITS-RIG	-	2,00,000
6	Synthesis of Highly Functionalized and Medicinally Potential Bioactive Heterocycles through Trifluoromethylative Cyclization Strategy	Chemistry	Dr .Tanmay Chatterjee	–	BITS-ACRG G	-	800000
Department of Civil Engineering							
7	Urban road safety management through evaluation of operating speed and geometric consistency	Civil Engineering	Dr Bandhan Bandu Majumdar	-	BITS-ACRG	0	800000
8	Bicycle and Pedestrian Modelling in Hyderabad	Civil Engineering	Dr. Bandhan Majumdar	-	BITS-RIG	-	2,00,000
Department of *Chemical Engineering*							
9	Opera	Chemical Engineering	Dr. Nandini B	-	Opera	-	420000
10	Underwater Superoleophobic Surfaces for Oil/Water Separation	Chemical Engineering	Dr. Nandini B	-	BITS-ACRG	-	950000
11	Nanocomposites synthesis and stability enhancement for methane combustion	Chemical Engineering	Dr. Satyapaul Singh Amarthaluri	-	BITS-RIG	-	200000
12	Synthesis of core-shell nanoparticles (CSNs) for photocatalytic reforming	Chemical Engineering	Dr. Satyapaul Singh Amarthaluri	-	ACRG	-	1000000
Department of Computer Science and Information Systems							
13	Blockchain Enabled Solutions for Integration of MHR with Access Control and Personally Identifiable Information	CSIS	Dr. Subhrakanta Panda	-	ACRG	-	8,00,000
14	ReSeThIoT: Building Research Framework for Investigating Security	CSIS	Dr. Rajib Ranjan Maiti	-	BITS-RIG	-	2,00,000

Ongoing International Projects						
S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	Threats for Internet of Things over WiFi.						
15	Performance Evaluation and Behavioral Study of Trajectory and Discontinuous Methods based Metaheuristics.	CSIS	Dr Jabez Christopher	-	BITS-RIG	-	2,00,000
Department of Electrical and Electronics Engineering						
16	OPERA	EEE	Sayan Kanungo	-	BITS OPERA	-	4,20,000 per year
17	Cleanroom free solution processed fabrication of flexible nanoelectronic devices for sensing applications	EEE	Dr.Parikshit Sahatiya	-	BITS RIG	-	2,00,000
18	Detection of sleep related disorders from various physiological signals using multiscale analysis and deep neural network	EEE	Dr.Rajesh Kumar Tripathy	-	BITS RIG	-	2,00,000
19	Design and Synthesis methodologies for CNFET-based Multi-Valued Logic Circuits.	EEE	Dr.Chetan Kumar V	-	BITS RIG	-	2,00,000
20	Design and development of an instrumentation system to measure dynamic signals	EEE	Dr.R. N. Ponnalagu	-	BITS RIG	-	2,00,000
21	Development of a New Vegetable-Oil-Based Dielectric Fluid for Liquid-Filled Transformers	EEE	Dr.Mithun Mondal	-	BITS CRG	-	8,00,000
22	Direct growth of 2D materials by Chemical Vapor Deposition (CVD) on flexible substrates and its application in wearable electronics	EEE	Dr.Parikshit Sahatiya	-	BITS-CRG	-	10,00,000
23	RISC-V based Approximate Processor and its FPGA Prototype for Image processing Applications	EEE	Dr.Chetan Kumar V	-	BITS-CRG	-	4,70,000
24	Design and development of an AI-based Remote Fault Signature Analyzer (ReFSA) for condition monitoring of rotor bar failures in an Industrial electrical machine	EEE	Dr.Sudha Radhika	-	BITS-CRG	-	9,80,000
25	Black TiO2 nanotubes for detection and degradation of pollutants in drinking water	EEE	Dr.Karumbaiah C N	-	BITS-CRG	-	10,00,000
26	Synthesis of nano-porous metal oxide composite material for water splitting application	EEE	Dr.Karumbaiah C N	-	BITS-RIG	-	2,00,000
27	Design and Development of an optimized Electrical Interface for Smart Hybrid Microgrid and Energy Storage for Peak Load Saving	EEE	Dr.Ankur Bhattacharjee	-	BITS-RIG	-	2,00,000
28	Miniaturization and Enhancement of port isolation of MIMO antennas	EEE	Dr.Sourav Nandi	-	BITS-RIG	-	2,00,000

Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
29	Energy Efficient Mechanisms and Algorithms for 4G and 5G Broadband Wireless Networks	EEE	Dr Prashant K.Wali	BITS-RIG	BITS-RIG	-	2,00,000
30	Design and development of an optimized electrical interface for Smart Hybrid Microgrid and energy storage for peak load shaving, demand side management and energy security	EEE	Dr K Bhargav Kumar	–	BITS-RIG	-	2,00,000
31	Opera	EEE	Dr. Rajesh Kumar Tripathy	-	Opera	-	420000
32	Opera	EEE	Sanyan Kanungo	-	Opera	-	420000
Department of Humanities and Social Sciences							
33	Political Ecology	HSS	Dr. Lavanya Suresh	-	OPERA	-	3,60,000 (per year)
34	The Notion of Time in the Philosophy of Nagarjuna	Humanities and Social Sciences	Dr. A K Jayesh	–	BITS-RIG	-	2,00,000
35	Wilde and Manto: A Comparative Study of Writers on Trial	Humanities and Social Sciences	Dr Anhiti Patnaik	–	BITS-RIG	-	2,00,000
36	A study of contemporary epistemological and ethicopolitical challenges confronting genomics research in India	HSS	Dr Aswathy Raveendran	-	BITS-RIG	-	2,00,000
Department of Economics and Finance							
37	Impact of Remittances, Financial Development and Institutional Structure on Poverty: An Empirical Evidence from Developing countries.	Economics and Finance	Dr Sunny Kumar Singh	–	BITS-RIG	-	1,67,000
38	Regional Variation in Women's Employment in Rural India: Evidence from Bihar and Andhra Pradesh.	Economics and Finance	Dr Bheemeshwar Reddy. A	–	BITS-RIG	-	2,00,000
39	Social Conflicts: Role of Development in the Presence of Electoral Concerns	Economics and Finance	Dr Dushyant Kumar	–	BITS-RIG	-	1,58,000
40	Women on Board and Corporate Policies in India.	Economics and Finance	Dr Shreya Biswas	–	BITS-RIG	-	2,00,000
41	Mobilizing Clean Energy Finance	Economics and Finance	Dr Nivedita Sinha	–	BITS-RIG	-	2,00,000
Department of Mathematis							
42	Adaptive Discretization of Parabolic Integro-differential Equations by Finite Element Methods.	Mathematics	Dr Gujji Murali Mohan Reddy	–	BITS-RIG	-	2,00,000
43	DPG method for parabolic problems	Mathematics	Dr Jhuma Sen Gupta	–	BITS-RIG	-	2,00,000
44	Holomorphic Characterizations of the Approximation Property and Its Variants	Mathematics	Dr Deepika	–	BITS-RIG	-	2,00,000
45	On generating some new families of congruent and non-congruent numbers	Mathematics	Dr Debopam Chakraborty	–	BITS-RIG	-	1,50,000
46	Hypersingular Integral Equation Techniques for Wave-structure Interaction Problem	Mathematics	Dr Santanu Koley	–	BITS-RIG	-	2,00,000

Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
47	Conditional von Neumann entropy and its implications in quantum information processing tasks	Mathematics	Dr Nirman Ganguly	–	BITS-RIG	-	1,96,000
48	Cryptanalysis of some Symmetric Key Ciphers	Mathematics	Dr Sabyasasachi Dey	–	BITS-RIG	-	2,00,000
49	Efficient reconstruction of boundary data using the method of fundamental solutions for the two phase inverse Stefan problem	Mathematics	Dr Gujji Murali Mohan Reddy	-	BITS-ACRG	-	700000
50	Modeling the hydrodynamics of porous breakwaters in ports and harbors under irregular and multidirectional incident waves.	Mathematic	Dr Santanu Koley	-	BITS-ACRG	-	700000
Department of Mechanical Engineering							
51	An Indigenous Energy Efficient Thermal Management Strategy of Buildings for all Climatic Conditions across India	Mechanical	Dr.Santanu Datta P	-	BITS-ACRG	-	10,00,000
52	Design and Indigenous Development of a Biaxial Tensile Test Setup on Uniaxial Machine for Sheet Metal Forming	Mechanical	Dr.Nitin Kotkunde	-	BITS-ACRG	-	10,00,000
53	OPERA Project	Mechanical	Dr PardhaSaradhi G V	-	OPERA-BITS	-	20,70,000
54	Design and Development of 3D Printer for Carbon Fiber Reinforced Composites	Mechanical	Dr Kurra Suresh	-	BITS-ACRG	-	10,00,000
55	Investigation of the weldability of the mild steel during A-TIG welding.	Mechanical Engineering	Dr Ravi Shanker Vidyarthy	–	BITS-RIG	-	2,00,000
56	Flow induced vibration/flapping dynamics of multi-layered flexible foil in a uniform flow	Mechanical Engineering	Dr Pardha Saradhi Gurubelli Venkata	–	BITS-RIG	-	2,00,000
57	Friction and Wear Investigation of Ceramic Coated Commercial Rotor	Mechanical Engineering	Dr Piyush Chandra Verma	–	BITS-RIG	-	2,00,000
58	Effect of inherent nonlinearities on operational failure of damaged structural elements	Mechanical Engineering	Dr Brajesh Kumar Panigrahi	–	BITS-RIG	-	2,00,000
59	Sustainable High Speed Micromachining Process Development for Thin Beam Manufacturing	Mechanical Engineering	Dr Kundan Kumar Singh	–	BITS-RIG	-	2,00,000
60	Liquid Jet in Crossflow-Effect of Injector Geometry	Mechanical Engineering	Dr Anubhav Sinha		BITS-RIG	-	2,00,000
61	Investigation of the mechanical properties of ATIG welded mild steel and Ti6Al4V alloy	Mechanical Engineering	Dr Ravi Sankar Vidyarthy	-	BITS-ACRG	-	950000
Department of Pharmacy							
62	Fate of Drug Encapsulated Ultradeformable Lipid	Pharmacy	Nirmal J	-	BITS-ACRG	-	10,00,000

Ongoing International Projects							
S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
	Vesicles after Subconjunctival Delivery						
63	Surface Modified Nanoparticulate Carrier System for the Effective Delivery of Antileukemic Drug	Pharmacy	Dr. Akash Chaurasiya	-	BITS-ACRG	-	10,00,000
Department of Physics							
64	Opera	Physics	Dr. Prashant Kumar Samantry	-	Opera	-	420000

3. COMPLETED PROJECTS

Completed Government Projects							
S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Protein structure and stability modulation due to In-Cell and In-Vitro Crowding: Molecular insights on the origin of the effects of crowding	Biological Sciences	Dr. Ramakrishna Vadrevu	-	DST	-	54,36,000
2	Polymorphism studies and moleuclar characterization of plasmodial Rhoptry neck protein 2 (RON-2) from Indian fields isolates	Biological Sciences	Prof. Vidya Rajesh	-	DST	-	34,92,000
3	Mechanistic basis of abnormal neurogenesis due to HSSN1E-assicuated DNA Methyltransferase 1 (Dnmt1)mutation and pharmacological intervention for phenotypic correction	Biological Sciences	Dr. K Naga Mohan	Prof. Yogeeswari	DBT-2	-	68,45,800
Department of Chemistry							
4	Synthesis, study of optical properties and Anticancer ativity of unique di-substituted tetracyanoquinodimethanes	Chemistry	Dr. Jayanti Subbalakshmi	-	DST	-	25,74,605
5	Efficacy of Appropriately Tailored Biopolymer and Carbonaceous Adsorbents for the separation and Recovery of Europium	Chemistry	Dr. N. Rajesh	Prof. Vidya Rajesh	DST	-	29,59,370
Department of Civil Engineering							
6	Performance evaluation of backfill soils partially replaced with building derived materials	Civil Engineering	Dr. Anasuya Guhary	Dr. Naveen James Dr. Arkamitra Kar	DST	-	24,43,710
7	Multiobjective evolutionary approach for solving water distribution network design optimization	Civil Engineering	Dr. A Vasan	Dr. Murari Varma	CSIR	-	22,35,400
Department of EEE							
8	STRATEGIES FOR FAULT-TOLERANT NETWORK-ON-CHIP DESIGN "	EEE	Dr. Soumya J	-	DST	-	25,93,140
9	Metal-Oxide and nano composite based low-power non-volatile switching device : a novel approach	EEE	Dr. Souvik Kundu	Prof. Souri Banerjee	DAE-BRNS	-	34,90,650

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Completed Government Projects							
10	Underwater Characterization of solar cells and their optimization	EEE	Prof. Sanket Goel	Dr. Sudha Radhika	DRDO-cars	-	9,85,000
Department of Mechanical Engineering							
11	Design and Development of an Automated Flow Calibration Unit for Fuel and Oxidizer Injectors in a Pneumatic Control System	Mechanical Engineering	Dr. Sandip Deshmukh S	Dr. Supardeepan K & Dr. Rajesh Kumar Tripathy	DRDO	-	100000
12	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Mechanical Engineering	Dr. Amit Kumar Gupta	-	DRDO	-	45,60,000
13	Hydrogen storage in mesoporous polymer drived ceremics for automotive applications	Mechanical Engineering	Dr. Sujith R	1.Dr. R. Rarameshwaran 2. Prof. N. V. Ravi Kumar (IIT Madras)	DST-SERB	-	42,38,240
14	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Mechanical Engineering	Dr. R. Parameshwaran	-	DST	-	27,76,340
15	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Mechanical Engineering	Dr. Arshad Javed	-	DST	-	29,43,600
Department of Humanities and Social Sciences							
16	Resistance to the Western Ghats Conservation and Undercurrents: A study of the people's protest and the role of the local bodies in Iduuki, Kerela	H umnities and Social Sciences	Dr. Lavanya Suresh	M Suchitra	CDS	-	3,15,000
Department of Pharmacy							
17	Investigations on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS -36 for the treatement of renal injury	Pharmacy	Prof. Sajeli Begum	Dr. Onkar Prakash Kulkarni	DST	-	24,37,000
18	Development of a Non-invasive giodegradable polymeric mciroprojection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Pharmacy	Dr. V Vamsi Krishna Venuganti	-	ICMR	-	42,25,150
19	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Pharmacy	Dr. Balaram Ghosh	Dr. Swati Biswas	DST	-	29,87,800
Department of Mathematics							
20	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Mathematics	Dr. Anil N	-	DST	-	1590600

Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Study to be conducted in collaboration with Telangana State Pollution Control Board	Biological Sciences	Dr. Suman Kapur	-	CPCB	-	9,50,000

Completed Consultany Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of Humanities							
1	AP HRDI - Entrustment of Studies - Cyclone Titli	Humanities and Social Sciences	Dr.Biswanath Dash	-	Cyclone TItle	-	1,00,000
Department of Economics and Finance							
2	Sustainability of Cashless Banking in Unorganized Retail Sector: Issues and Challenges ahead	Economics and Finance	Dr. Archana Srivastav	-	IIBF (Indian Institute of Banking and Finance)	-	250000

Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
Department of CSIS							
1	Parallax Lighttweight code self-verification for IoT Devices	CSIS	Dr. C. Hota	Prof.Herbert Bos , VU University Amsterdam, Nethrlands	Nwo-Deit(Indo-Dutch)	-	38,30,000
Department of Pharmacy							
2	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Pharmacy	Dr. D Sriram	Dr. P Yogeeswari	Indo-Sweden-3	-	67,00,068

Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
Department of Biological Sciences							
1	Differential expression and function of nicotinic acetylcholine receptors(nAChRS) in excitatory versus inhibitory neurons due to impairment of Src family-tyrosine kinase pathway in schizophrenia	Biological Scieces	Dr. Pragya Komal		BITS-RIG		200000
Department of Chemistry							
2	Development of new synthetic methodologies for fluoroalkylation reactions by visible - light-photoctalysis : Access tp mew classes of potent molecules	Chemistry	Dr. Tanmay Chatterjee		BITS-RIG		200000
3	Development of new synthetic methodologies for fluoroalkylation reactions by visible - light-photoctalysis : Access tp mew classes of potent molecules	Chemistry	Dr. Tanmay Chatterjee		BITS-RIG		200000

Completed Institute Projects						
S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
Department of Chemical Engineering							
4	Soft lithographic fabrication of super hydrophobic surfaces and durability studies	Chemical Engineering	Dr. Nandini Bhandaru		BITS-RIG		200000
Department of Civil Engineering							
5	An investigation on Factors influencing Bicycling and Walking in Indian Urban Context: A Case Study of Hyderabad, India	Civil Engineering	Dr. Bandhan Bandhu M		BITS-RIG		200000
6	Shrinkage Properties of Concrete with Alkali - Activated Binder. (OPERA)	Civil Engineering	Dr. A. Kar,	-	OPERA	-	18,20,000
7	Performance assessment of agrowaste as supplementary cementitious materials (OPERA)	Civil Engineering	Dr. Bahurudeen	-	OPERA	-	18,20,000
Department of EEE							
8	Wavelet based pattern recognition and motor current signature analysis of stator winding faults due to insulation failure in industrial machines	EEE	Dr. Sudha Radhika	-	BITS-RIG		200000
9	Nano-scale power management interface circuits for IoT Node	EEE	Dr. Saroj Mondal	-	BITS-RIG		200000
10	Design and implementation of Hardware Architectures for Media Processing Applications	EEE	Dr.Syed Ershad Ahmed	-	BITS-RIG		200000
11	Studies on the design of high power, low loss power divider and combiner	EEE	Dr. Harish V Dixit	-	BITS-RIG		200000
12	Simulation, Design and Modelling of vertical Heterostructure transition metal dichalcogenides for lab free electrochemical gas sensing applications	EEE	Dr. Sayan Kanungo	-	BITS-RIG		200000
Department of CSIS							
13	Investigation and improving the performance of next generation cellular networks	CSIS	Dr. Sudeepta Mishra		BITS-RIG		200000
14	How should I detect and fix code smell? Investigation source code, text analytic and social network based approaches to find structural design	CSIS	Dr. Lov Kumar		BITS-RIG		200000

Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
	problems in software systems						
Department of Economics and Finance							
15	Impact of the ex-gratia for farmers suicide on the surviving family member of the deceased farmers in Telangana	Economics and Finance	Dr. Thota Nagaraju		BITS-RIG		200000
16	An investigation in to child nutrition in India	Economics and Finance	Dr. Rishi Kumar		BITS-RIG		200000
Department fo Humnaities							
17	Alternative ways of understanding ecological conservation practices to enable justice for all	Humanities and Social Sciences	Dr. Lavanya Suresh		BITS-RIG		200000
Department of Mechanical Engineering							
18	Developmnet of a visco-hyper elastic constitutive model for polyuria using experiments	Mechanical Engineering	Dr. A V S Siva Prasad		BITS-RIG		200000
19	Analysis and design modifications to the exsisting form of laparascopic forceps	Mechanical Engineering	Dr. Ramachandra Murthy K		BITS-RIG		200000
Department of Physics							
20	Quantum theory of black holes and quasinormal nodes	Physics	Dr. Swastik Bhattacharya	1	BITS-RIG		148000
Department of Pharmacy							
21	Development optimization and characterization of nanostructured carrier systems for effective delivery of anticancer therapeutics	Pharmacy	Dr. Akash Chaurasiya		BITS-RIG		200000
22	Optimization and characterization of deformable vesicle Nano carriers for ocular therapeutics	Pharnacy	Dr. Nirmal		BITS-RIG		200000

Hyderabad Campus

S.No	Department	Period	Duration	Amt. Sanctioned (50:50 Basis)	BITS share (in Lakhs)
Grants under DST- FIST Sanctioned / Approved					
1.	Pharmacy		5	138.00	60.00
Grants under DST- FIST Ongoing					
1.	Civil Engineering	December 2014 to December.2019	5	90.00	50.00
2.	Mathematics	December 2015 to December 2020	5	45.00	22.5
Grants under DST- FIST Completed					
1.	Pharmacy	December 2012 to December 2017	5	67.00	30.00
2.	Biology	April 2014 to March 2019	5	110.00	55.00
3.	Chemistry	August 2014 to August 2019	5	100.00	50.00

MEMBERS OF VARIOUS BODIES AND COMMITTEES OF THE INSTITUTE

(A) GENERAL BODY

Chancellor:

Dr. Kumar Mangalam Birla

Pro-Chancellor:

Smt. Shobhana Bhartia

Founding Members:

Vacant

Vice-Chancellor, BITS:

Prof. Souvik Bhattacharyya

Members admitted by General Body:

Shri Sidharth Birla
Smt. Manjushree Khaitan
Shri Hemant Kumar
Shri P. Radhakrishnan
Prof. L.K. Maheshwari
Prof. Asis Datta

Alumni Term Members:

Prof. D. Balasubramanian
Shri Raju Reddy

Representative of MoE, Govt. of India:

Additional Secretary, Technical Education

Representative of UGC:

Vacant

Representative of CSIR:

Vacant

Representative of AICTE:

Vacant

Representative of FICCI:

Shri Anand Sudarshan

Non-Member Secretary:

Prof. Bijay Kumar Rout, Acting Registrar

(B) BOARD OF GOVERNORS

Chancellor:

Dr. Kumar Mangalam Birla

Pro-Chancellor:

Smt. Shobhana Bhartia

Honorary Treasurer:

Vacant

Vice-Chancellor of BITS:

Prof. Souvik Bhattacharyya

Director of Campuses by rotation:

Prof. G. Raghurama

Nominee of AICTE:

Vacant

Nominees of the Government of India:

Secretary, Higher Education

Nominees of the BET:

1. Shri Sidharth Birla

2. Shri Hemant Kumar

Members selected by the General Body:

Vacant

Members coopted by the Board of Governors:

1. Smt. Manjushree Khaitan

2. Shri D. Bhattacharya

Nominee of the Zuari Industries Limited:

Shri Akshay Poddar

Non-Member Secretary:

Prof. Bijay Kumar Rout, Acting Registrar

(C) FINANCE COMMITTEE

Chancellor:

Dr. Kumar Mangalam Birla

Honorary Treasurer:

Vacant

One Person nominated by the Board:

Vacant

One Person nominated by the BET:

Shri Hemant Kumar

Vice-Chancellor:

Prof. Souvik Bhattacharyya

Registrar:

Prof. Bijay Kumar Rout, Acting Registrar
Member-Secretary

(D) BUILDING AND WORKS COMMITTEE

Chairman (Vice-Chancellor):

Prof. Souvik Bhattacharyya

Members:

Director, Pilani Campus:

Prof. Sudhirkumar Barai

Director, Hyderabad Campus:

Prof. G. Sundar

Director, K.K. Birla Goa Campus:

Prof. G. Raghurama

Nominated members (2):

Vacant

Member-Secretary:

Prof. Bijay Kumar Rout, Acting Registrar

Mr. Anand K Patil, K.K. Birla Goa Campus will be special invitee to the committee

(E) PURCHASE COMMITTEE

Convenor:

Unit Chief, CPU:

Prof. N.V. Muralidhar Rao

Members:

Director:

Prof. Sudhirkumar Barai

Dean, Administration:

Prof. Sanjay Kumar Verma

Head, Accounts & Finance:

Shri Satyen Sharma

(F) FACULTY SELECTION COMMITTEES

1. **Institute Level Selection Committee:**
   - Vice-Chancellor (or his nominee) – Chairman
   - At least two external experts in the concerned discipline
   - Directors of the BITS campuses
   - One of the Chairmen of the Department Level Shortlisting committees from one of the campuses in the concerned Department/Discipline
   - Dean of Faculty Affairs – Convenor
   - Associate Dean(s) of Faculty Affairs - Invitees
2. **Institute Level Shortlisting Review Committee**:
   - Vice-Chancellor (or his nominee) - Chairman
   - Directors of the BITS campuses
   - Dean of Faculty Affairs - Convenor
3. **Campus Level Shortlisting Review Committee (one for each of the campuses)**
   - Director of the campus - Chairman
   - 2 or more Senior Professors or Professors – to be identified by the campus Director
   - Associate Dean of Faculty Affairs of the campus – Convenor
4. **Department Level Application Shortlisting Committee (at least 3 members) (one for each campus and for each discipline**
   - Chairperson – to be nominated by the campus Director from amongst:
     - (a) The HODs, if he/she is a Senior Professor or Professor, ELSE
     - (b) Any Senior Professor or Professor from the Department, ELSE
     - (c) Any Senior Professor or Professor from a related discipline, ELSE
     - (d) Any Senior Professor or Professor from the campus
   - All other Senior Professors, Professors and Associate Professors from the Department,
   - Additionally up to two Senior Professors or Professors from the campus if the members above are fewer than 3- to be nominated by the campus Director.

Note: The shortlisting committee will seek the views of all faculty members in the department in its effort to shortlist or not shortlist a candidate by having them express their opinion at any time, but particularly during the audio-visual interaction with the candidate.

MEMBERS OF THE SENATE

Chairman (Vice-Chancellor):
Prof. Souvik Bhattacharyya (Sr. PROF)

Vice-Chairman (Director, Pilani Campus):
Prof. Sudhirkumar Barai

Secretary:
Prof. Bijay Kumar Rout

Directors:
Prof. Ranendra N. Saha (Sr. PROF), Dubai Campus
Prof. G. Raghurama (Sr. PROF), K.K. Birla Goa Campus
Prof. G. Sundar (Sr. PROF.), Hyderabad Campus & Off-Campus Programmes & Industry Engagement

Deans:

Institute Wide Deans:

Prof. Arya Kumar, Pilani Campus	Prof. M. B. Srinivas, Hyderabad Campus
Prof. A.P. Singh, Pilani Campus	Prof. Srinivasa Prakash Regalla, Hyderabad Campus
Prof. S. Gurunarayanan, Pilani Campus	Prof. Souri Banerjee, Hyderabad Campus
Prof. Sunil Bhand, K.K. Birla Goa Campus	

Campus Specific Deans:

Pilani Campus   **Hyderabad Campus**

Prof. Sanjay Kumar Verma   Prof. Niranjan Swain

K.K. Birla Goa Campus

Prof. Dhananjay M. Kulkarni

Associate Deans:

Pilani Campus

1. Prof. Suresh Gupta, Academic- Undergraduate Studies
2. Prof. Jitendra Panwar, Academic-Graduate Studies & Research
3. Prof. Anshuman Dalvi, Faculty Affairs
4. Prof. Navneet Gupta, Sponsored Research and Consultancy Division
5. Prof. Dalip Kumar, International Programmes and Collaboration
6. Prof. P. Srinivasan, Work Integrated Learning Programmes
7. Prof. Anil B. Gaikwad, Practice School
8. Prof. Srikanta Routroy, Student Welfare
9. Prof. Rajeev Sakhuja, Alumni Relations

Off-Campus Centre

1. Prof. Annapoorna Gopal, Practice School, Bangalore
2. Prof. Gopalakrishnan Venkiteswaran, Work Integrated Learning Programmes, Chennai
3. Prof. P.B. Venkataraman, Work Integrated Learning Programmes, Hyderabad

K.K. Birla Goa Campus

1. Prof. Karuppiah R. Anupama (PROF), Work Integrated Learning Programmes
2. Prof. Neena Goveas (PROF), Academic-Undergraduate Studies
3. Prof. Bharat M. Deshpande (PROF), Academic-Graduate Studies & Research
4. Prof. C.K. Ramesha (ASOP), Student Welfare
5. Prof. Sutapa Roy Ramanan (PROF), Faculty Affairs
6. Prof. Sachin D Waigaonkar (ASOP), Practice School
7. Prof. Rajesh Mehrotra (ASOP), International Programmes and Collaborations
8. Prof. Veeky Baths (ASOP), Alumni Relations
9. Prof. Meenal Kowshik (PROF), Sponsored Research and Consultancy Division

Hyderabad Campus

1. Prof. Bivudutta Mishra (ASOP), International Programmes andCollaboration
2. Prof. Sandip Shridharrao Deshmukh (ASOP), Student Welfare
3. Prof. P. Sankar Ganesh (ASOP), Practice Sschool
4. Prof. Meenakshi Viswanathan (ASOP), Alumni Relations
5. Prof. Venkata Vamsi Krishna Venuganti (ASOP), Academic-Graduate Studies & Research
6. Prof. Vidya Rajesh (PROF), Faculty Affairs
7. Prof. Punna Rao Ravi (ASOP), Work Integrated Learning Programmes
8. Prof. Sridhar Raju (ASOP), Work Integrated Learning Programmes
9. Prof. A. Vasan (PROF), Academic-Undergraduate Studies
10. Prof. Anupam Bhattacharya (ASOP), Sponsored Research and Consultancy Division

Dubai Campus

1. Prof. Kumar Karuppusamy (PROF), Academic-Undergraduate Studies
2. Prof. Priti Bajpai (PROF), Student Welfare
3. Dr. A. Somasundaram (ASOP), Practice School
4. Prof. Ramanujam Karthikeyan (ASOP), Academic-Graduate Studies & Research

Professors (PROF):

Pilani Campus

1. Prof. Anil Kumar
2. Prof. Anil Kumar Bhat
3. Prof. Anu Gupta
4. Prof. Ashis Kumar Das
5. Prof. Balram Dubey
6. Prof. Bandi Venkata Prasad
7. Prof. Chandra Shekhar (Sr. PROF)
8. Prof. Debashish Bandyopadhyay
9. Prof. Debi Datt Pant
10. Prof. Janardan Prasad Misra
11. Prof. Kuldip Singh Sangwan
12. Prof. N.V. Muralidhar Rao
13. Prof. Navneet Goyal
14. Prof. R. Mahesh
15. Prof. Rajiv Gupta (Sr. PROF)
16. Prof. Rajiv Kumar
17. Prof. Rashmi Ranjan Mishra
18. Prof. S C Sivasubramanian
19. Prof. Shamsher Bahadur Singh
20. Prof. Sindhu S
21. Prof. Surekha Bhanot
22. Prof. V K Chaubey

K.K. Birla Goa Campus

1. Prof. Aditya Prasad Koley
2. Prof. Arun Venkatesh Kulkarni
3. Prof. Ashwin Srinivasan
4. Prof. Bhavana P.
5. Prof. Dibakar Chakrabarty
6. Prof. Dipankar Pal
7. Prof. Mukund Keshavrao Deshmukh
8. Prof. Narendra Nath Ghosh
9. Prof. Patincharath Nandakumar
10. Prof. Pravin Madanrao Singru
11. Prof. Samit Chattopadhay
12. Prof. Srinivas Krishnaswamy
13. Prof. Utpal Roy
14. Prof. Vijayashree Nayak

Hyderabad Campus

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2. Prof. Chittaranjan Hota
3. Prof. D. Sriram
4. Prof. Jaideep Chatterjee
5. Prof. Komaragiri Srinivasa Raju
6. Prof. N. Rajesh
7. Prof. Nishith Gupta
8. Prof. P K Thiruvikraman
9. Prof. P. Yogeeswari
10. Prof. P.N.K. Rao
11. Prof. Ramaiah D
12. Prof. Ramakrishna Vadrevu
13. Prof. Subit Kumar Saha
14. Prof. Sumithra Kanakamma

Dubai Campus

1. Prof. Dawood Jalaluddin Shariff
2. Prof. Karthiyayini Sridharan
3. Prof. Krishna Kumar Singh
4. Prof. Neeru Sood
5. Prof. Ramadoss Roop Kumar
6. Prof. Sangili Vadivel
7. Prof. Thoppil George Thomas
8. Prof. Udayakumar Rajamanickam
9. Prof. Vijayakumar Balakrishnan

Associate Professors (ASOP):

Pilani Campus

1. Prof. A R Asati
2. Prof. Abhijeet Keshaorao Digalwar
3. Prof. Ajay Kumar Sah
4. Prof. Ambatipudi Vamsidhar
5. Prof. Anita Ramachandran
6. Prof. Anshuman
7. Prof. Arun Maity
8. Prof. Arvind Kumar Sharma
9. Prof. B K Sharma
10. Prof. Benu Madhab Gedam
11. Prof. Bharti Khungar
12. Prof. Brajabandhu Mishra
13. Prof. Chandra Shekhar
14. Prof. Chetana Anoop Gavankar
15. Prof. Dheerendra Singh
16. Prof. Dipendu Bhunia
17. Prof. G S Chauhan
18. Prof. Gopala Krishna Koneru
19. Prof. H. Viswanathan
20. Prof. Hare Krishna Mohanta
21. Prof. Hari Om Bansal
22. Prof. Holkundkar Amol Ramdas Shilpa
23. Prof. I.R. Laskar
24. Prof. Indresh Kumar
25. Prof. J N Bandyopadhyay
26. Prof. Jyoti
27. Prof. K Venkatasubramanian
28. Prof. Karunesh Kumar Gupta
29. Prof. Krishnamurthy Bindumadhavan
30. Prof. Krishnendu Mondal
31. Prof. Kumar Neeraj Sachdev
32. Prof. Lucy J. Gudino

33. Prof. Madhukar Mishra
34. Prof. Madhushree Sarkar
35. Prof. Manoj Kumar
36. Prof. Manoj Kumar Soni
37. Prof. Mukesh Kumar Rohil
38. Prof. Niladri Sarkar
39. Prof. Nishit Narang
40. Prof. P K H Keskar
41. Prof. Paul Atish Tulshiram
42. Prof. Poonam Goyal
43. Prof. Prabhat nath Jha
44. Prof. Pushp Lata
45. Prof. Raj Kumar Gupta
46. Prof. Rajdeep Chowdhury
47. Prof. Rajeev Taliyan
48. Prof. Rajesh Prasad Mishra
49. Prof. Rakhee
50. Prof. Ravi Kant Mittal
51. Prof. S Gangopadhyay
52. Prof. S K Choudhary
53. Prof. S Murugesan
54. Prof. Sandeep Kayastha
55. Prof. Sangeeta Sharma

56. Prof. Satya Sudhakar Yedlapalli
57. Prof. Saumi Ray
58. Prof. Shamik Chakraborty
59. Prof. Shashank Mohan Tiwari
60. Prof. Shekhar Rajagopalan
61. Prof. Sheth Pratik N
62. Prof. Shibasish Chowdhury
63. Prof. Shilpi Garg
64. Prof. Sidharth Misra
65. Prof. Smita Raghuvanshi
66. Prof. Sugata Ghosal
67. Prof. Surojit Pande
68. Prof. Sushila Shekhawat
69. Prof. T Venkateswara Rao
70. Prof. Tapomoy Guha Sarkar
71. Prof. Udayan Chanda
72. Prof. Uma S Dubey
73. Prof. V Manjuladevi
74. Prof. Virendra S Nirban
75. Prof. Vishal Saxena
76. Prof. Y V K Ravi Kumar
77. Prof. Yashvardhan Sharma

K.K. Birla Goa Campus

1. Prof. Alamelu Geetha Krishnamurthy
2. Prof. Amalin Prince A.
3. Prof. Amrita Chatterjee
4. Prof. Anasuya Ganguly
5. Prof. Anita Bhagirathji Agrawal
6. Prof. Anjan Chattopadhyay
7. Prof. Basabdatta Bhattacharya
8. Prof. Basavadatta Mitra
9. Prof. Biju K. Raveendran Nair
10. Prof. Chandradew Sharma
11. Prof. Debasis Patnaik
12. Prof. Dhanumjaya Palla
13. Prof. Gaurav Dar
14. Prof. Geetha Bakilapadavu
15. Prof. Judith Maria Braganca
16. Prof. Kundan Kumar
17. Prof. Mainak Banerjee
18. Prof. Mridula Goel
19. Prof. Prasanna Kumar Nekkare

20. Prof. Prasanta Kumar Das
21. Prof. Rabi Narayan Panda
22. Prof. Raghu Nath Behera
23. Prof. Raghunath Anand Ratabole
24. Prof. Ram Shanker Patel
25. Prof. Ranjan Dey
26. Prof. Rudra Prasad Pradhan
27. Prof. Sampatrao Dagu Manjare
28. Prof. Sandhya Mehrotra
29. Prof. Sanjay Kumar Sahay
30. Prof. Senthamarai Kannan Ethirajulu
31. Prof. Shalini Upadhyay
32. Prof. Shibu Clement
33. Prof. Snehanshu Saha
34. Prof. Sumit Biswas
35. Prof. Tarkeshwar Singh
36. Prof. Teny Theresa John
37. Prof. Vijay Madhukar Patankar

Hyderabad Campus

1. Prof. A. Michael Alphonse
2. Prof. A. Ramesh Babu
3. Prof. Amit Nag
4. Prof. Aravinda N. Raghavan
5. Prof. Arti Dhar
6. Prof. Aruna Malapati
7. Prof. B. Harihara Venkataraman
8. Prof. Balaji Krishnamurthy
9. Prof. BVVSN Prabhakar Rao
10. Prof. Dipak Kumar Satpathi
11. Prof. Jagadeesh Anmala
12. Prof. Jayanty Subbalakshmi
13. Prof. Jeevan Jaidi
14. Prof. K.V.G. Chandrasekhar
15. Prof. Kannan Ramaswamy

16. Prof. Karthik Venkateshan
17. Prof. Kumar Pranav Narayan
18. Prof. M.G. Prasuna
19. Prof. Manab Chakravarty
20. Prof. Morapakala Srinivas
21. Prof. N L Bhanu Murthy
22. Prof. Naga Mohan Kommu
23. Prof. Onkar P. Kulkarni
24. Prof. R. Gururaj
25. Prof. R. Krishnan
26. Prof. Raghunathan Rajasekaran
27. Prof. Ramakrishnan Ganesan
28. Prof. S K Sahoo
29. Prof. Sanket Goel
30. Prof. Sarmistha Banik

31. Prof. Shilpaa Anand
32. Prof. Srikanta Dinda
33. Prof. Subhash Narayan Karbelkar
34. Prof. Swati Biswas

35. Prof. Tathagata Ray
36. Prof. V Vinayaka Ram
37. Prof. Y.V. Daseswara Rao

Dubai Campus

1. Prof. Kalaichelvi Venkatesan
2. Prof. Kavita Sunil Jerath
3. Prof. Maneesha
4. Prof. Prakash Kumar Beri

5. Prof. Suhel Ahmad Khan
6. Prof. Tapan Kumar Datta
7. Prof. Trupti Swarup Gokhale
8. Prof. Vijaya Ilango

Heads of Departments:

Pilani Campus

1. Prof. P R Deepa (PROF), Biological Sciences
2. Prof. Banasri roy (ASOP), Chemical Engineering
3. Prof. Ram Kinkar Roy (PROF), Chemistry
4. Prof. Anupam Singhal (ASOP), Civil Engineering
5. Prof. Sudeept Mohan (PROF), Computer Science & Information Systems
6. Prof. Arun Kumar Giri (ASOP), Eco. & Finance
7. Prof. Hitesh Dutt Mathur (ASOP), Electrical & Electronics Engineering

8. Prof. Devika (ASOP), Humanities & Social Sciences
9. Prof. Leela Rani, (ASOP), Management
10. Prof. Devendra Kumar (ASOP), Mathematics
11. Prof. Mani Sankar Dasgupta (PROF), Mechanical Engineering
12. Dr. Hemant R Jadhav (PROF), Pharmacy
13. Prof. Rakesh Choubisa (ASOP), Physics

K.K. Birla Goa Campus

1. Prof. Saroj S. Baral (ASOP), Chemical Engineering
2. Prof. Halan Prakash (ASOP), Chemistry
3. Prof. Aswini Kumar Mishra (ASOP), Economics
4. Dr. Jajati Keshari Sahoo (ASTP), Mathematics
5. Prof. Srikanth Mutnuri (PROF), Biological Sciences
6. Prof. Vinayak Shashikant Naik (PROF), Computer Science & Information Systems

7. Prof. Reena Cheruvalath (ASOP), Humanities & Social Sciences
8. Dr. Ranjit Shankarrao Patil (ASTP), Mechanical Engineering
9. Prof. Radhika Vathsan (ASOP), Physics
10. Prof. Abhijit Jayant Pethe (ASOP), Electrical & Electronics Engineering

Hyderabad Campus

1. Prof. Jayati Ray Dutta (ASOP), Biological Sciences
2. Prof. I. Sreedhar (ASOP), Chemical Engineering
3. Prof. Sounak Roy (ASOP), Chemistry
4. Dr. Murari Raja Raja Varma (ASTP), Civil Engineering
5. Prof. G. Geethakumari (ASOP), Computer Science & Information Systems
6. Dr. Dushyant Kumar (ASTP), Eco. & Finance
7. Prof. Alivelu Manga Parimi (ASOP), Electrical & Electronics Engineering

8. Dr. Biswanath Das (ASTP), Humanities & Social Sciences
9. Prof. Pradyumn Kumar Sahoo (ASOP), Mathematics
10. Prof. N. Suresh Kumar Reddy (PROF), Mechanical Engineering
11. Prof. A. Sajeli Begum (ASOP), Pharmacy
12. Prof. Aranya Bhuti Bhattacharjee (PROF), Physics

Dubai Campus

1. Prof. Geetha Kannan (ASOP), General Sciences
2. Dr. Vivek B Kartha (ASTP), Civil Engineering
3. Prof. Shazi Shah Jabeen (PROF), Humanities & Social Sciences
4. Dr. Nishant Harishbhai Pandya (ASTP), Chemical Engineering

5. Prof. Jagadish Nayak (ASOP), Electrical & Electronics Engineering
6. Prof. Ramachandran Subramanian (ASOP), Biotechnology
7. Dr. M Raja (ASTP), Computer Science
8. Dr. Priyanka Upadhyaya (ASTP), Mechanical Engineering

Co-opted Members:

Dr. Pawan Kumar Ajmera (ASTP), Pilani Campus

Dr. Jitendra Singh Rathore (ASTP), Pilani Campus

Dr. Vivek Rangarajan (ASTP), K.K. Birla Goa Campus

Dr. Manoj Kumar Pandey (ASTP), K.K. Birla Goa Campus

Dr. Rahul Nigam (ASTP), Hyderabad Campus

Dr. Anasua Guharay (ASTP), Hyderabad Campus

Dr. Eldhose Iype (ASTP), Dubai Campus

Dr. Mainak Dutta (ASTP), Dubai Campus

Librarian:	
Shri Giridhar M. Kunkur, Pilani Campus	Dr. Sivakumar Raja Rathinam, Dubai Campus

Workshop Superintendent:	
Shri Rajiv Annarao Shinde, K. K. Birla Goa Campus	

Chief Warden:	
Prof. Navin Singh (ASOP), Pilani Campus	Dr. Phaneendra Kiran C (ASTP), Hyderabad Campus
Prof. Angshuman Sarkar (ASOP), K.K. Birla Goa Campus	Dr. Naveen Kumar Shrivastava (ASTP), Dubai Campus

Student Members:	
Mr. Siddhant Jain 2016A7PS0113P	Mr. Pranay Khatwani 2017B3AA1024H
Mr. Arshdeep Singh 2017A7PS0060G	Mr. Rahul Ashok Sharma 2017A4PS0182U

MEMBERS OF THE SENATE APPOINTED BODIES

(A) RESEARCH BOARD

Chairman (Vice-Chancellor):
Prof. Souvik Bhattacharyya

Vice Chairman (Dean, AGSR):
Prof. M. B. Srinivas

Secretary (Registrar):
Prof. Bijay Kumar Rout, Acting Registrar

Directors of all BITS Campuses:
Prof. Sudhirkumar Barai
Prof. Ranendra N. Saha
Prof. G. Raghurama
Prof. Prof. G. Sundar

Deputy Directors:
Vacant

Dean, Sponsored Research & Consultancy:
Prof. Sunil Bhand

Faculty Members (8):
1. Prof. S.B. Singh, Pilani Campus
2. Prof. P.R. Deepa, Pilani Campus
3. Prof. P. M. Singru, K.K. Birla Goa Campus
4. Prof. Raghu Nath Behera, K.K. Birla Goa Campus
5. Prof. Sharmistha Banik, Hyderabad Campus
6. Dr. Eldhose Iype, Dubai Campus
7. Dr. M. Raja, Dubai Campus

(B) ACADEMIC COUNSELLING BOARD

I. Pilani Campus:

Chairman : Associate Dean , AUGS
Prof. Suresh Gupta

Associate Dean , AGSR:
Prof. Jitendra Panwar

Associate Dean, SWD:
Prof. Srikanta Routroy

Faculty Members (2):
1. Dr. Amit Jain
2. Dr. Madhushree Sarkar

Student Members (2):
1. Ms. Simran Sodhi, ID No. 2018B1A70896P
2. Mr. Gaurav Bellal Natesh, ID No. 2018A1PS0027P

II. K.K. Birla Goa Campus:

Chairman : Associate Dean , AUGS
Prof. Neena Goveas

Associate Dean , AGSR:
Prof. Bharat M. Deshpande

Associate Dean, SWD:
Prof. C.K. Ramesha

Faculty Members (2):
1. Dr. Malabika Biswas
2. Dr. Varinder Singh

Student Members (2):
1. Mr. Mihir Mahajan, ID No. 2018B3A70285G
2. Ms. Kopal Srivastava, ID No. 2018B1AA0594G

III. Hyderabad Campus:

Chairman : Associate Dean , AUGS
Prof. A. Vasan

Associate Dean , AGSR:
Prof. Venkat Vamsi Krishna Venuganti

Associate Dean, SWD:
Prof. Sandip Shridharrao Deshmukh

Faculty Members (2):
1. Prof. Shilpa Anand
2. Dr. Sumit Kumar Vishwakarma

Student Members (2):
1. Mr. Varshith Reddy, ID No. 2018B3A70022H
2. Ms. Eva Tiwari, ID No. 2018B5A70816H

IV. Dubai Campus:

Chairman : Associate Dean , AUGS
Prof. K. Kumar

Associate Dean , AGSR:
Prof. Ramanujam Karthikeyan

Associate Dean, SWD:
Prof. Priti Bajpai

Faculty Members (2):
1. Dr Sunil Thomas
2. Dr Mahima Raina

Student Members (2):
1. Mr. Rahul Ashok Sharma, ID No. 2017A4PS0182U
2. Ms. Anushka Patil, ID No. 2017A7PS0233U

(C) ACADEMIC MONITORING BOARD

Chairman : Dean, WILPD: *Dean, AUGSD:*

   Prof. S Gurunarayanan   Prof. Ajit Pratap Singh

Associate Deans, WILPD: *Dean, PSD:*

1. Prof. Karuppiah R Anupama   Prof. S. P. Regalla

2. Prof. Punna Rao Ravi   *Dean, AGSRD*

3. Prof. Sridhar Raju   Prof. M. B. Srinivas

4. Prof. Gopalakrishnan Venkiteswaran   *Associate Dean, AUGS:*

5. Prof. P Srinivasan   Prof. Suresh Gupta (Pilani Campus)

6. Prof. P B Venkataraman

(D) ACADEMIC GOVERNING COMMITTEE

Dean, AUGSD   *Dean, Work Integrated Learning Programmes Division*

   Prof. Ajit Pratap Singh   Prof. S Gurunarayanan

Associate Dean, AUGSD from each campus   *Professor-in-charge, BITS Entrance Examination*

1. Prof. Suresh Gupta, Pilani Campus   Prof. Chittaranjan Hota

2. Prof. Neena Goveas, K.K. Birla Goa Campus   *Associate Dean, AGSRD from each campus*

3. Prof. A. Vasan, Hyderabad Campus   1. Prof. Jitendra Panwar, Pilani Campus

4. Prof. K. Kumar, Dubai Campus   2. Prof. Bharat M. Deshpande, K.K. Birla Goa Campus

Dean, Practice School Divison   3. Prof. Venkat Vamsi Krishna Venuganti, Hyderabad Campus

   Prof. S. P. Regalla   4. Prof. Ramanujam Karthikeyan,Dubai Campus

Dean, AGSRD

   Prof. M. B. Srinivas

Convenorship rotates amongst these members depending on the item to be discussed.

(E) DOCTORAL COUNSELLING COMMITTEE

Convenor   *One Faculty Member from each Campus*

   Prof. M. B. Srinivas   1. Prof. Abhijit R Asati, Pilani Campus

Dean, Sponsored Research & Consultancy Division 2. Prof. Halan Prakash, K.K. Birla Goa Campus

   Prof. Sunil Bhand   3. Prof. N. Suresh Kumar Reddy, Hyderabad Campus

Dean, AUGSD   4. Prof. Vilas H. Gaidhane, Dubai Campus

   Prof. Ajit Pratap Singh

Associate Dean, AGSRD of each Campus

1. Prof. Jitendra Panwar, Pilani Campus   3. Prof. Venkat Vamsi Krishna Venuganti, Hyderabad Campus

2. Prof. Bharat M. Deshpande, K.K. Birla Goa Campus   4. Prof. Ramanujam Karthikeyan, Dubai Campus

(F) STANDING COMMITTEE FOR STUDENTS' DISCIPLINE

I. Pilani Campus:

Chairman : Associate Dean , SWD
   Prof. Srikanta Routray
Chief Warden:
   Prof. Navin Singh

Faculty Members(2):
1. Prof. Bharti Khungar
2. Dr. Praveen Goyal
Student Member (2):
1. Mr. Saurav Virmani, ID No. 2017A7PS0090P
2. Ms. Riya Ramabadhran, ID No. 2017B2A40990P

II. K.K. Birla Goa Campus:

Chairman : Associate Dean, SWD
   Dr. C.K. Ramesha
Chief Warden:
   Prof. Angshuman Sarkar

Faculty Members (2):
1. Dr. Paramita Haldar
2. Dr. Anil Kumar
Student Member (2):
1. Ms. Anwesha Panda, ID No. 2018A8PS0515G
2. Mr. Sampreet Arthi, ID No. 2018B3A70703G

III. Hyderabad Campus:

Chairman : Associate Dean, SWD:
   Prof. Sandip Shridharrao Deshmukh
Chief Warden:
   Prof. Phaneendra Kiran C

Two Faculty Members (2):
1. Prof. Swati Biswas
2. Dr. Kota Venkata Ratnam
Student Member (2):
1. Mr. Sarthak Sheoran, ID No. 2018A7PS0206H
2. Ms. Ananya Mohapatra, ID No. 2018B3AA0037H

IV. Dubai Campus:

Chairman : Associate Dean , SWD
   Prof. Priti Bajpai
Chief Warden:
   Dr. Santosh Kumar Vasudevan

Two Faculty Members (2):
1. Dr. Gulshan Kumar
2. Dr. Devika Sharma
Student Member (2):
1. Mr. Prajit Samir Rawte, ID No. 2017A4PS0079U
2. Ms. Aparna Dwivedi, ID No. 2018A7PS0294U

(G) NOMINATIONS COMMITTEE

Chairman (Vice-Chairman of the Senate):
   Prof. Sudhirkumar Barai
Deputy Directors:
   Vacant
Members of Senate (4):
1. Prof. Hitesh Dutt Mathur, Pilani Campus

2. Prof. Bharat M Deshpande, K.K. Birla Goa Campus
3. Prof. Vidya Rajesh, Hyderabad Campus
4. Prof. Krishna Kumar Singh, Dubai Campus
Secretary:
   Prof. Bijay Kumar Rout, Acting Registrar

(H) LIBRARY COMMITTEE

I   Pilani Campus:

S.N.	Department	Name of the member
1.	Biological Sciences	Dr. B. Vani
2.	Civil Engineering	Dr. S. N. Patel
3.	Chemical Engineering	Dr. Somak Chatterjee
4.	Chemistry	Prof. Anil Kumar
5.	Computer Science & Information Systems	Dr. Jennifer Ranjani
6.	Economics & Finance	Dr. Rahul Arora
7.	Electrical & Electronics Engineering	Dr. Sandeep Joshi
8.	Humanities and Social Sciences	Dr. Muhammed Afzal Puthusseri
9.	Mathematics	Dr. Anirudh Rana
10.	Mechanical Engineering	Dr. Subhanjan Bhattacharya
11.	Management	Dr. Mohammad Faraz Naim
12.	Pharmacy	Dr. Anupama Mittal
13.	Physics	Prof. Subhashis Gangopadhyay

Shri Giridhar M. Kunkur (Librarian) - Chairman of the Library Committee

II. K.K. Birla Goa Campus:

S.N.	Department	Name of the member
1.	Biological Sciences	Dr. Tushar Tirtha Saha
2.	Chemical Engineering	Dr. Pradeep Kumar Sow
3.	Chemistry	Dr. Subhasish Roy
4.	Computer Science & Information Systems	Prof. Basbdatta Sen Bhattacharya
5.	Economics	Dr. Richa Shukla
6.	Electrical & Electronics Engineering	Dr. Naveen Gupta
7.	Humanities and Social Sciences	Dr. Harish A. G.
8.	Mathematics	Prof. Vijay Madhukar Patankar
9.	Mechanical Engineering	Dr. Biswajit Das
10.	Physics	Prof. Prasanta Kumar Das

Dr. Anuradha V (Deputy Librarian) - Chairman of the Library Committee

III. Hyderabad Campus:

S.N.	Department	Name of the member
1.	Biological Sciences	Dr. Vivek Sharma
2.	Civil Engineering	Dr. Shivang Sekhar
3.	Chemical Engineering	Dr. Arnab Dutta
4.	Chemistry	Dr. Himanshu Aggarwal
5.	Computer Science & Information Systems	Dr. Venkata Krishnan Ramaswamy
6.	Economics and Finance	Dr. Shreya Biswas
7.	Electrical & Electronics Engineering	Dr. Sumit Kumar Chatterjee
8.	Humanities and Social Sciences	Dr. Aswathy Raveendran
9.	Mathematics	Dr. P T V Praveen Kumar
10.	Mechanical Engineering	Dr. Dheeraj Agarwal
11.	Pharmacy	Dr. Onkar Kulkarni
12.	Physics	Dr. Asrarul Haque

Shri M.S. Uday Kumar (Deputy Librarian) - Chairman of the Library Committee

IV. Dubai Campus:

S.N.	Department	Name of the member
1.	Biotechnology	Dr. Neeru Sood
2.	Chemical Engineering	Dr. B. G. Prakash Kumar
3.	Civil Engineering	Dr. Brij Kishor Pandey
4.	Computer Science	Dr. Siddhaling Urolagin
5.	Electrical & Electronics Engineering, Electronics and Communication Engineering and Electronics and Instrumentation Engineering	Dr. Gomathi Bhavani
6.	General Sciences	Dr. Roopkumar. R.
7.	Humanities and Social Sciences	Dr. Devika Sharma
8.	Mechanical Engineering	Dr. Gulshan Kumar

Dr. R. Sivakumar (Librarian) - Chairman of the Library Committee

(I) ADMISSION COMMITTEE

Vice-Chancellor (Chairman):
   Prof. Souvik Bhattacharyya

Members:
Director, Pilani Campus:
   Prof. Sudhirkumar Barai
Director, K.K. Birla Goa Campus:
   Prof. G. Raghurama

Director, Hyderabad Campus:
   Prof. G. Sundar
Director, Dubai Campus:
   Prof. Ranendra N. Saha
Director (Off-campus Programmes and Industry Engagement):
   Prof. G. Sundar
Professor-in-charge - BITS Entrance Examination (Convenor):
   Prof. Chittaranjan Hota

MEMBERSHIP

The Institute continued to be a member of the following distinguished bodies:

1.   Association of Commonwealth Universities, London.

2.   Association of Indian Universities, New Delhi.

3.   Current Science Association, Bangalore.

4.   Federation of Indian Chambers of Commerce and Industry – Higher Education Network, New Delhi.

5.   India International Centre, New Delhi.

6.   Indian Association of Social Science Institutions, New Delhi.

7.   Indian Distance Education Association, Hyderabad.

8.   Indian Institute of Foreign Trade, New Delhi.

9.   Indian Society for Technical Education, New Delhi.

10.   Institution of Communication Engineers and Information Technologists, New Delhi.

11.   International Association of Universities, Paris.

12.   International Council for Open and Distance Education, Oslo, Norway.

13.   National Council of Applied Economic Research, New Delhi.

14.   Petrotech Society, New Delhi.

15.   Pharmacy Council of India, New Delhi.

16.   The Institution of Engineers (India), Kolkata.

17.   World Association for Cooperative Education, Boston

18.   Council for Advancement and Support of Education, Washington

19.   Association for Institutional Research, Florida

STATISTICS OF Ph.D. QUALIFYING EXAMINATION

BITS, PILANI – PILANI CAMPUS

I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	33	33	31	2
I Sem. 2020-21	68	68	60	8
Total	**101**	**101**	**91**	**10**

II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	-	-	-	-
I Sem. 2020-21	-	-	-	-
Total				

III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total	(ii)	Aspirants/Part time of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	--		**8**		**93**

Discipline wise Break-up	
Biosciences	13
Chemistry	10
Chemical	3
EEE	3
Mathematics	12
Mechanical	11
CSIS	10
HSS	6
Econ. & Fin.	4
Pharmacy	15
Physics	4
Civil	6
Management	4
Total	**101**

STATISTICS OF Ph.D. QUALIFYING EXAMINATION

BITS, PILANI - KK BIRLA GOA CAMPUS

I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	26	26	25	01
I Sem. 2020-21	36	36	34	02
Total	**62**	**62**	**59**	**03**

II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	0	0	0	0
I Sem. 2020-21	0	0	0	0
Total	**0**	**0**	**0**	**0**

III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total	(ii)	Aspirants of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	00		**06**		**56**

Discipline wise Break-up	
Biosciences	10
Chemistry	12
Chemical	05
EEE	01
Mathematics	08
Mechanical	06
CSIS	05
Lang. & Hum.	03
Management & Econ. & Fin.	06
Pharmacy	00
Physics	06
Civil	00
Total	**62**

STATISTICS OF Ph.D. QUALIFYING EXAMINATION

BITS, PILANI - HYDERABAD CAMPUS

I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	54	54	46	8
I Sem. 2020-21	73	73	66	7
Total	128	128	112	16

II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	-	-	-	-
I Sem. 2020-21	-	-	-	-

III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total	(ii)	Aspirants/Part time of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	-		27		101

Discipline wise Break-up	
Biosciences	14
Chemical	8
Chemistry	12
Civil	4
CSIS	16
Econ. & Fin.	6
EEE	14
H&SS	9
Mathematics	10
Mechanical	15
Pharmacy	12
Physics	8
Total	128

STATISTICS OF Ph.D. QUALIFYING EXAMINATION

BITS, PILANI - DUBAI CAMPUS

I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	3	3	3	0
I Sem. 2020-21	9	9	9	0
Total	**12**	**12**	**12**	**0**

II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2019-20	1	1	1	0
I Sem. 2020-21	0	0	0	0
Total	0	0	0	0

III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total	(ii)	Aspirants of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	1		**0**		**11**

Discipline wise Break-up		Discipline wise Break-up	
		Biosciences	2
		Chemistry	0
		Chemical	0
		EEE	1
		Mathematics	0
		Mechanical	1
		CSIS	5
		HSS - Lang. & Hum.	2
		Management	0
		Pharmacy	0
		GS- Physics	0
		Econ. & Fin.	0
		Civil	1
		Total	12

BITS Pilani

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Part B1: Pilani Campus

CONTENTS

BITS PILANI

B1.1 SENIOR OFFICERS OF THE INSTITUTE

VICE CHANCELLOR
Prof. Souvik Bhattacharyya

DIRECTOR
Prof. Sudhirkumar Barai

ACTING REGISTRAR
Prof. Bijay Kumar Rout

New Administrative appointments

The following administrative appointments were made during the year:

A. The following have been appointed as Director as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Sudhirkumar Barai	Director, BITS Pilani, Pilani Campus	14-01-2020 to 13-01-2025

B. The following have been extended as Director as per details given below:

S.No.	Name	Administrative Function	Period
Dubai Campus			
1.	Prof. R. N. Saha	Director, BITS Pilani, Dubai Campus	18-07-2020 to 17-07-2021

C. The following have been appointed as Director-in-charge as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Sudhirkumar Barai	Director-in-charge, International Programmes and Collaborations	01-08-2020 to 31-07-2021

D. The following have been appointed as Acting Registrar as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Prof. Bijay Kumar Rout	Acting Registrar	w.e.f. 14-12-2020

E. The following has been appointed as Dean (Institute-wide) as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Prof. S. Gurunarayanan	Work Integrated Learning Programmes	08-06-2020 to 07-06-2023
(b) Hyderabad Campus			
1.	Prof. Srinivasa Prakash Regalla	Practice School	08-06-2020 to 07-06-2023
2.	Prof. M B Srinivas	Academic-Graduate Studies & Research	08-12-2020 to 07-12-2023

F. The following has been appointed as Professor-in-charge (Institute-wide) as per details given below:

S.No.	Name	Administrative Function	Period
K K Birla Goa Campus			
1.	Prof. Ashwin Srinivasan	Anuradha and Prashanth Palakurthi Centre for Artificial Intelligence Research (APPCAIR)	11-02-2020 to 10-02-2022

G. The following has been appointed as Associate Dean as per details given below:

S.No.	Name	Administrative Function	Period
(a) K K Birla Goa Campus			
1.	Prof. Rakesh Mehrotra	International Programmes and Collaborations	24-02-2020 to 15-07-2020
2.	Prof. Sachin D. Waigaonkar	Practice School	16-12-2020 to 15-12-2023
3.	Prof. Karuppiah R Anupama	Work Integrated Learning Programmes	16-12-2020 to 15-12-2023
(b) Hyderabad Campus			
1.	Prof. Sridhar Raju	Work Integrated Learning Programmes	30-09-2020 to 15-08-2021
Dubai Campus			
1.	Dr. Somasundaram Arumugam	Practice School	01-07-2020 to 11-09-2021

H. The following has been appointed as Estate Manager as per details given below:

S.No.	Name	Administrative Function	Period
Pilani Campus			
1.	Mr. Amit Goel	Estate Manager	w.e.f. 29-05-2020

I. The following have been appointed as Heads of Departments as per details given below:

S.No.	Name	Department	Period
(a) Pilani Campus			
1	Prof. P R Deepa	Biological Sciences	01-09-2020 to 31-08-2022
2	Prof. Banasri Roy	Chemical Engineering	01-09-2020 to 31-08-2022
3	Prof. Ram Kinkar Roy	Chemistry	01-09-2020 to 31-08-2022
4	Prof. Anupam Singhal	Civil Engineering	01-09-2020 to 31-08-2022
5	Prof. Sudeept Mohan	Computer Science and Information Systems	01-09-2020 to 31-08-2022
6	Prof. H D Mathur	Electrical & Electronics Engineering and Instrumentation	01-09-2020 to 31-08-2022
7	Prof. Devika	Humanities and Social Sciences	01-09-2020 to 31-08-2022
8	Prof. Leela Rani	Management	01-09-2020 to 31-08-2022
9	Prof. Devendra Kumar	Mathematics	01-09-2020 to 31-08-2022
10	Prof. Hemant R Jadhav	Pharmacy	01-09-2020 to 31-08-2022
11	Prof. Rakesh Choubisa	Physics	01-09-2020 to 31-08-2022
(b) Hyderabad Campus			
1	Prof. Jayati Ray Dutta	Biological Sciences	01-10-2020 to 30-09-2022
2	Prof. I. Sreedhar	Chemical Engineering	01-10-2020 to 30-09-2022
3	Prof. Sounak Roy	Chemistry	01-10-2020 to 30-09-2022
4	Dr. Murari Raja Raja Varma	Civil Engineering	01-10-2020 to 30-09-2022
5	Prof. G Geethakumari	Computer Science and Information Systems	01-10-2020 to 30-09-2022
6	Prof. Alivelu Manga Parimi	Electrical & Electronics Engineering	01-10-2020 to 30-09-2022
7	Dr. Biswanath Dash	Humanities and Social Sciences	01-10-2020 to 30-09-2022
8	Prof. Pradyumn Kumar Sahoo	Mathematics	01-10-2020 to 30-09-2022
9	Prof. N Suresh Kumar Reddy	Mechanical Engineering	01-10-2020 to 30-09-2022
10	Prof. Aranya Bhuti Bhattacharjee	Physics	01-10-2020 to 30-09-2022
(c) Dubai Campus			
1.	Dr. S Ramachandran	Biotechnology	16-06-2020 to 15-06-2022
2.	Dr. Vivek B Kartha	Civil Engineering	16-06-2020 to 15-06-2022
3.	Dr. M Raja	Computer Science	16-06-2020 to 15-06-2022
4.	Dr. Jagadish Nayak	Electrical & Electronics Engineering	01-09-2020 to 15-06-2022
5.	Dr. Geetha Kannan	General Sciences	16-06-2020 to 15-06-2022
6.	Dr. Priyank Upadhyaya	Mechanical Engineering	16-06-2020 to 15-06-2022
7.	Prof. Shazi Shah Jabeen	Humanities & Social Sciences	16-06-2020 to 15-06-2022
8.	Dr. Nishant Harishbhai Pandya	Chemical Engineering	16-06-2020 to 15-06-2022

J. The following have been appointed as Faculty-in-charges as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Dr. Virendra Singh Shekhawat	Software Development & Educational Technology	01-09-2020 to 31-08-2022
2.	Prof. Shilpi Garg	Infant Care Center and Institute Functions	01-09-2020 to 31-08-2022
3.	Dr. Sunil Kumar Dubey	Public Relations	01-09-2020 to 31-08-2022
4.	Prof. G S Chauhan	Publications and Media Relations, Annual Report	01-09-2020 to 31-08-2022
5.	Prof. Pushp Lata	Teaching Learning Center	01-09-2020 to 31-08-2022
6.	Dr. Hari Babu Kotakula	Time Table	01-09-2020 to 31-08-2022
7.	Dr. Pankaj Kumar Sharma	VFAST, Cafeteria & Transport	01-09-2020 to 31-08-2022
(b) Hyderabad Campus			
1.	Dr.Kurra Suresh	Placement	08-08-2020 to 07-08-2022
2.	Dr. Soumya J	Placement	08-08-2020 to 07-08-2022
3.	Prof. Sashideep Gutti	Time Table / Exams	03-11-2020 to 07-08-2022
4.	Prof. R Raghunathan	Strategy Planning	23-12-2020 to 22-12-2022

K. The following have been appointed as Coordinator as per details given below:

S.No.	Name	Administrative Function	Period
(a) Pilani Campus			
1.	Prof. R. Mahesh	Central Instruments Facility	w.e.f. 26-11-2020

The names and designations of senior officers of different campuses are given in Annexure (Pilani Campus, **'Annexure B1-13'**; K.K. Birla Goa Campus, '**Annexure B2-1'**; Hyderabad Campus, '**Annexure B3-1'** and Dubai Campus, '**Annexure B4-1'**).

B1.2   ADMISSIONS

The number of students admitted in each of the semester is given below.

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (PhD)	Total
Second Semester 2019-2020			60(25)	**60(25)**
First Semester 2020-2021	1120(153)	409(125)	88(42)	**1617(320)**

The programme-wise details are given in **'Annexure B1-1'**.

B1.3   DUAL DEGREES AND TRANSFERS

(a) Dual Degree

During the Academic year 2020-2021, 357 students were permitted to work concurrently for two first degrees under Dual Degree scheme. See **'Annexure B1-2'** for details.

(b) Transfers within same tier

During the Year 2020-21, a total no of 13 students were permitted to transfer from the initial allotment of First Degree programme to the other programmes of First Degree.

(c) Vertical Transfers

During the year 2020-21, 6 students were permitted to transfer from First Degree to Higher degree and 5 students were permitted to transfer from Higher Degree to Ph.D. Programme at Pilani Campus.

B1.4 ACADEMIC CALENDAR

The Academic year of the Institute is divided into two semesters and a summer term.

	Starting Date	Ending Date	Number of instruction days(excluding the examination days)
Second Semester 2019-2020	07-1-2020	15-5-2020	97
First Semester 2020-2021	17-8-2020	28-11-2020	86
Summer Term 2019-2020	18-5-2020	27-6-2020	36

B1.5 COURSE OFFERED

The number of courses offered during the year 2019 is as follows:

	Number of Courses offered
II Semester 2019-2020	425
I Semester 2020-2021	427
Summer Term 2019-2020	28

The list of new courses introduced during 2019 are given in **'Annexure B1-7'**.

Project-oriented Courses.

During this year a large number of students worked on time-bound projects of various types. The information about the projects done and the names of the students who worked on the projects and the names of the instructors are given in **Annexure 'B1-6'.**

B1.6 REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
Second Semester 2019-2020	5416
First Semester 2020-2021	5770
Summer Term 2019-2020	1052

Details of Registration of students for the First Semester 2020-2021 are given in **'Annexure B1-3'.**

B1.7 ACADEMIC COUNSELLING BOARD (ACB)

During the year, the Academic Counseling Board estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

		II Semester 2019-2020	I Semester 2020-2021
1.	Total number of students under the purview of ACB at the beginning of the semester	301	123
2.	No. of students declared out of its purview at the end of the semester	203	78
3.	No. of students who left the Institute during the semester	0	0
4.	No. of new students who came under the purview of ACB at the end of the semester	25	106
5.	Total No. of students under the purview of ACB during the next semester	123	151

B1.8 AWARD OF DEGREES AND MEDALS

a. Award of Degrees

On Campus Programmes

During the year 97 degrees were awarded in the Board of Governors meeting held on 20-3-2020 (86th Award) and 1426 degrees were awarded on 08-09-2020 (87th Award), through a Circulatory Resolution. Statistical details of these degrees are given in '**Annexure B1-4'.**

b. Award of Medals

For Academic Year 2019-2020

The list of students who were awarded various medals, for the students graduated at the end of First Semester, Second Semester and Summer Term of the academic year 2019-2020 in the following table:

S.N.	ID.No.	NAME	SEX	CGPA OBTAINED	POSITION OBTAINED	TYPE OF MEDAL AWARDED
	Integrated First Degree Programmes (No. of students: 887)					
1.	2016A7TS0098P	ANUVIND BHAT	M	10.00	FIRST	GOLD
2.	2016A3TS0317P	AKSHIT GOEL	M	10.00	FIRST	GOLD
3.	2016A8TS0424P	SAKSHAM CONSUL	M	9.99	SECOND	SILVER
4.	2016A3PS0764P	APOORVA	F	9.92	THIRD	BRONZE

B1.9   CAMPUS INTERVIEWS AND PLACEMENT

Number of companies which conducted campus interviews	214
Number of offers made	902

The statistics (discipline-wise) and the list of organizations which conducted campus interviews during the year are given in **Annexure 'B1-5'.**

Employment of Graduates during the Year 2020

Programme	Number graduated	Employed	Unemployed	Not Registered for Placements / Deregistered from Placements
On-Campus Programmes				
B.E. / B.E.(Hons.)				
Chemical	105	85	3	17
Civil	98	67	11	20
Computer Science	181	167	1	13
EEE	150	120	0	30
Electronics & Instrumentation	95	75	3	17
Mechanical	125	99	9	17
Manufacturing	47	32	5	10
B.Pharm	41	25	6	10
M.Sc. / M.Sc.(Hons.)				
Bio. Sciences	43	30	2	11
Chemistry	51	38	1	12
Economics	73	59	7	7
Mathematics	60	52	3	5
Physics	54	43	2	9
M.Sc.(Tech.)				
General Studies	14	5	5	4

Programme	Number graduated	Employed	Unemployed	Not Registered for Placements / Deregistered from Placements
M.E.				
Biotechnology	20	4	9	7
Chemical	9	3	4	2
Civil (Spl. in Structural Engg.)	21	10	10	1
Civil (Spl. in Transportation Engg.)	18	6	12	0
Civil (Spl. in Infrastructure Engg. and Management	9	2	6	1
Communication Engg.	23	15	7	1
Computer Science	17	17	0	0
Design Engg.	18	13	6	0
Embedded System	17	17	0	0
Manufacturing Systems Engg.	15	7	7	1
Mechanical	20	10	9	1
Microelectronics	27	23	2	2
Software Systems	33	26	1	6
M.Pharm	12	8	0	4
M.Pharm. (Spl. In Pharmaceutics)	12	8	2	2
M.Pharm. (Spl. Pharmaceutical Chemistry)	6	2	0	4
MBA	57	40	15	2
Total	**1471**	**1108**	**148**	**210**

B1.10.   DEPARTMENT-WISE REPORT

In the following pages, a brief summary of the main activities and achievements of different departments of the campus are highlighted.

B1.10.1 Department: Biological Sciences

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	04
Associate Professors	06
Assistant Professors	08
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department: Prof. P.R. Deepa

Contact details: deepa@pilani.bits-pilani.ac.in; hod.biology@pilani.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   **:** 46

Part Time   **:** 00

Aspirant Scheme   **:** 00

Ph.D. Thesis Submitted during the year (2020): 03

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Leena Fageria	2014PHXP425P	An analysis of the uptake mechanism of nanoparticles, its temporal effect on autophagy and organelle dynamics in breast cancer cells	Prof. Rajdeep Chowdhury	Dr. Surojit Pandey
2	Vikram Pareek	2015PHXP001P	Elucidating the Antibacterial Mechanism of Silver Species Against Gram-Negative Bacteria	Prof. Jitendra Panwar	-
3	Vidushi Asati	2013PHXP014P	Phytochemical and Metabolic Characterization of Pods and Seeds of Prosopis Cineraria and Cyamopsis Tetragonoloba With Respect to Isoflavonoids and Flavonoids for Potential Medicinal Applications	Dr. Pankaj Sharma	-

1. Projects Sanctioned

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	28S Ribosomal RNA Capture Assay for the sensitive detection of P. falciparum & P. vivax	Biological Sciences	Prof. AK Das	Prof. Sunil Bhand (Goa Campus) Prof. Sanket Goel (Hyderabad campus)	Malaria Elimination Research Alliance India (MERA)	Dr. Arunansu Talukdar (Medical College Kolkata)	125 Lakhs
2	Enhancer of Zeste Homolog-2 role in Glomerular Endothelial Dysfunction during Diabetic Nephropathy	Biological Sciences	Dr. Syamantak Majumder		DBT		33.5 Lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Targeting chromatin modifiers- Jumonji Histone Demethylases in tumor cells surviving acute drug stress: an in vitro and in vivo study.	Biological Sciences	Dr Rajdeep Chowdhury	Prof. Shibasish Chowdhury, Dr. Syamantak Majumder, Dr.Sandeep Sundriyal (Dept of Pharmacy)	ICMR		Technically Approved; approx. 23 Lakhs proposed budget; sanction awaited
4	To study and gain mechanistic insights into the regulation of Salmonella pathogenesis by endogenous CRISPR-Cas system.	Biological Sciences	Dr Sandhya Marathe	Dr Meghana Tare	DBT	Dr Vidya Devi Negi (NIT Rourkela)	Technically approved; 51.26 lakhs proposed budget; sanction awaited

B. Industry Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR) Lakhs
1	Activity targeted nano-formulations for co-delivery of a taxane and anti-oxidant molecule, alpha lipoic acid for treating breast cancer.	Biological Sciences	Dr. Deepak Chitkara (Dept. of Pharmacy)	Dr. Rajdeep Chowdhury	DST Rajasthan	-	11.136
2	To investigate the mechanism of CRISPR-Cas regulated biofilm formation in Salmonella enterica serovar Typhimurium	Biological Sciences	Dr. Sandhya Marathe		DST	-	43.71
3	Analysis of mitochondrial dynamicity (fusion/fission and mitophagy) post drug exposure in human glioblastoma cells and understanding its correlation with drug resistance	Biological Sciences	Dr. Sudeshna Mukhejee	Prof. Rajdeep Chowdhury	SERB	-	27.00
4	Understanding hyperglycemia induced alterations in non-coding RNA expression pattern and post–translational histone protein modifications contributing to drug resistance and progression of pancreatic cancer"	Biological Sciences	Prof. Rajdeep Chowdhury	Prof. Anil Gaikwad (Dept of Pharmacy)	SERB	-	40.00

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR) Lakhs
5	Epigenetics of Endothelial Dysfunction during Cardiovascular Disease".	Biological Sciences	Dr. Syamantak Majumder		SERB-ECRA	-	45.00
6	Development of 1-D nanomaterials based selective sensor system for non-invasive detection of complications of diabetes mellitus and asthama by breath analysis technique	Biological Sciences	Dr. Arnab Hazra Dept of Electrical & Electronics Engg.	Dr. Syamantak Majumder	DBT	-	46.5
7	Development of sensors for blast and blight diseases and stomatal activity measurement in rice (O. Sativa L.)	Biological Sciences	Prof. Prabhat Nath Jha	-	ICAR-NASF	Dr SP Singh, SNU, Noida; Dr BK Sarma, BHU; Dr D Sircar, IIT-Roorkee; Dr Kavitha, Anna University	26.07
8	Analyzing the cross-talk between Autophagy, Cytoskeletal and Mitochondrial Dynamicity regulating Epithelial to mesenchymal Transition (EMT) in Human Glioblastoma Cells."(CSIR-Extra Mural)	Biological Sciences	Dr. Sudeshna Mukherjee	-	CSIR	-	18.40
9	Repurposing of CNS accumulating drugs as autophagy modulators for potential treatment against glioblastoma: an in-silico, in-vitro and in-vivo study	Biological Sciences	Prof. Shibasish Chowdhury	Prof. Rajdeep Chowdhury, Dr. Aniruddha Roy (Dept. of Pharmacy)	ICMR	-	33.00
10	Studying the Efficacy of ADAM Inhibitors in Treating Diabetic Nephropathy	Biological Sciences	Dr. Syamantak Majumder	Prof. Rajdeep Chowdhury	ICMR	-	33.00
11	High altitude-hypoxia mediates thrombosis in soldiers; modulation of autophagy as a strategy to combat high altitude-hypoxia induced thrombosis	Biological Sciences	Dr. Rajdeep Chowdhury	Prof. Shibasish Chowdhury, Dr. Syamantak Majumder	DRDO	-	42.5
12	Understanding the genetic interactions of parkin and α-Synuclein affecting pathogenesis of Parkinson's disease.,	Biological Sciences	Dr. Meghana Tare	-	DST, Start Up Research Grant	-	24.00
13	Antisense, sense and epigenetics in severe malaria	Biological Sciences	Prof. Ashis K. Das (Multicentric collaboration with ICGEB , New Delhi & SP Medical College Bikaner)	Dr. Syamantak Majumder	ICMR	-	Approx. 143.00
14	Exploring known and novel HSPs and HSFs in a thermotolerant plant Prosopis cineraria by genome-wide studies, and application of genome editing for enhanced heat stress tolerance in rice	Biological Sciences	Dr. Mukul Joshi	-	DBT	-	42.5

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)Lakhs
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR) Lakhs
1	Insights into genetic interactions manifesting to onset and progression of the Parkinson's Disease. ACRG, BITS Pilani	Biological Sciences	Dr. Meghana Tare	-	CRG - BITS Pilani	-	6.1
2	Analyses of mitochondrial regulation in parental and drug resistant human brain cancer cells and understanding its functional implications	Biological Sciences	Dr. Sudeshna Mukherjee	-	ACRG-BITS	-	4.00

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)Lakhs
1	Production and use of indigenous local strains of microbial pesticides through trainings, demonstrations and installation of cost-effective production units for the farmers of Rajasthan.	Biological Sciences	Jola Dubey	-	DST-Wos B	-	26.33
2	"Evaluation of anti-tumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells"	Biological Sciences	(PI- Anirudh, Dept of Pharmacy), DST	Dr. Rajdeep Chowdhury	DST	-	33.86
3	Mutant-p53 gain-of-function: its role in regulating long non-coding RNA (lncRNA) expression and associated chemo-resistance in human cancer cells"	Biological Sciences	Prof.. Rajdeep Chowdhury	-	DBT, New Delhi	-	25.00
4	Modeling immune response to Salmonella during typhoid	Biological Sciences	-	Dr. Sandhya Marathe	DST-New Delhi	-	37.73
5	Investigating the role of Aryl hydrocarbon receptors in mediating the anticancer properties associated to camel milk	Biological Sciences	Prof. Uma S. Dubey	-	DST-Rajasthan	-	7.432

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	"Integrated Approach for the Efficient Removal and Recovery of Zinc from the Viscose Fiber Process	Biological Sciences	Dr S K Verma	Dr Jitendra Panwar Suresh Gupta Prof A P Singh	Aditya Birla Group	Nil	49.42

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Understanding the role of long non coding RNA in glomerular endothelial cell dysfunction during diabetic nephropathy.	Biological Sciences	Dr. Syamantak Majumder		CRG, BITS		8.5
2	Investigate role of CRISPR-Cas system in pathogenesis of Salmonella enterica serovar Typhiumurium.	Biological Sciences	Dr. Sandhya Marathe		CRG - BITS Pilani	CRG - BITS Pilani	7.5

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. G. Lakshmi, Shilpi Garg, Neera Kapoor, "BOOK REVIEW: PIERCING POWER IS MORE THAN THE HUMAN POWER ", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.8, Issue 4, pp.2406-2407, April 2020

2. G. Lakshmi, Shilpi Garg, World Malaria Day – a Good Time to Remember COVID-19 Isn't the Only Crisis; The Wire, Science, Health, 25 April 2020

3. Niveditha D, Jasoria M, Narayan J, Majumder S, Mukherjee S, Chowdhury R & Chowdhury S. Common and Unique microRNAs in Multiple Carcinomas Regulate Similar Network of Pathways to Mediate Cancer Progression. (2020) 10:2331.

4. Chaudhary J, Mittal V, Mishra S, Daiya A, Chowdhury R, Laskar IR, and Roy RK, A New AIE Active Halochromic White Light Emissive Molecule: Combined Experimental and Theoretical Study. DOI: 10.1021/acs.jpcc.0c01067 • Publication Date (Web): 27 May 2020

5. Sandhu M, Jha P. Paul AT, Singh RP. Jha PN (2020): Evaluation of biphenyl- and polychlorinated-biphenyl (PCB) degrading Rhodococcus sp. MAPN-1 on growth of Morusalba by pot study, International Journal of Phytoremediation, DOI: 10.1080/15226514.2020.1784

6. Agarwal, DS, Singh RP, Jha PN, Sakhuja R. (2020). Fabrication of deoxycholic acid tethered α-cyanostilbenes as smart low molecular weight gelators and AIEE probes for bio-imaging. Steroids 160: 108659. doi.org/10.1016/j.steroids.2020.108659

7. Khan S, Paravastu P, Jha PN, Marathe SM (2020). Elucidating the pathogenic potential of Enterobacter cloacae SBP-8 using Caenorhabditis elegans as a model host. Microbial Pathogenesis, 148: 104449. https://doi.org/10.1016/j.micpath.2020.104449.

8. Anusha.S.M, Sivanesh. N.E, Deepa P.R, Surianarayanan M. (2020). Understanding the biocalorimetric and respirometric behaviour of co-culture (R. eutropha, P. putida and A. vinelandii) in poly (3-hydroxybutyrate) batch production. Biochemical Engineering Journal, 155, 107334.

9. Anusha S.M, Sivanesh N.E, Hariram. P, Leelaram. S, Ankitha. R, Vignesh. S, Deepa P.R, Surianarayanan M. (2020). Biokinetics of fed-batch production of poly (3-hydroxybutyrate) using microbial co-culture. Appl Microbiol Biotechnol. ;104(3):1077-1095.

10. Rapallia VK, Banerjee S, Khan S, Jha PN, Gupta G, Dua K, Hasnain MS, Nayak AK, Dubey SK, Singhvi G. (2021). QbD-driven formulation development and evaluation of topical hydrogel containing ketoconazole loaded cubosomes. Materials Science and Engineering: C, 119: 111548 (will be in print version of Feb 21)

11. Satyam Srivastava, B. Vani & Shashikant Sadistap 2020 Machine-vision based handheld embedded system to extract quality parameters of citrus cultivars. Journal of Food Measurement and Characterization Volume 14, pages 2746–2759.

12. Srivastava, S., Vani, B. & Sadistap, S. Handheld, smartphone-based spectrometer for rapid and nondestructive testing of citrus cultivars. Journal of Food Measurement and Characterization (2020): In press

13. Deepa PR, Nalini V, Surianarayanan M, Krishnakumar S. (2021). Towards safer non-volatile tissue fixatives: Evaluation of choline-based ionic liquids for fixing ocular tissues. Ecotoxicol Environ Saf. 2020 Dec 19; 209:111777. doi: 10.1016/j.ecoenv.2020.111777. Epub ahead of print. PMID: 33352431.

14. Subhra Dash, Anirudha K Sahu, Abhilasha Srivastava, Rajdeep Chowdhury, Sudeshna Mukherjee (Nov. 2020). Exploring the extensive crosstalk between the antagonistic cytokines- TGF-β and TNF-α in regulating cancer pathogenesis. Cytokine 2020 Nov 3;155348. doi: 10.1016/j.cyto.2020.155348."

15. Pareek, V., Bhargava, A. and Panwar, J. 2020. Biomimetic approach for multifarious synthesis of nanoparticles using metal tolerant fungi: A mechanistic perspective. Materials Science and Engineering: B, 262: 114771-114778.

16. Tare, M., Chimata, A.V., Gogia, N., Narwal, S., Deshpande, P., Singh, A. (2020). An E3 ubiquitin ligase, cullin-4 regulates retinal differentiation in Drosophila eye. genesis.; 58: e23395. https://doi.org/10.1002/dvg.23395.

17. Irwin, M., Tare, M., Singh, A., Puli, O.R., Gogia N., Riccetti, M., Deshpande, P., Kango-Singh, M. and Singh, A. (2020) A Positive Feedback Loop of Hippo- and c-Jun-Amino-Terminal Kinase Signaling Pathways Regulates Amyloid-Beta-Mediated Neurodegeneration. Front. Cell Dev. Biol. 8:117

18. K C S, Kakoty V, Marathe S, Chitkara D, Taliyan R. Exploring the Neuroprotective Potential of Rosiglitazone Embedded Nanocarrier System on Streptozotocin Induced Mice Model of Alzheimer's Disease. Neurotoxicity Research

19. Kushwaha SK, Bhavesh NLS, Abdella B, Lahiri C, Marathe SA. The phylogenomics of CRISPR-Cas system and revelation of its features in Salmonella. Scientific Reports

20. Mukul Joshi, Idit Ginzberg (2020) Adventitious root formation in crops—Potato as an example. Physiologia Plantarum (doi.org/10.1111/ppl.13305).

21. Bhanot, V., Fadanavis, S.V. and Panwar, J. 2021. Revisiting the architecture, biosynthesis and functional aspects of the plant cuticle: there is more scope. Environmental and Experimental Botany, 183: 104364-104375.

22. Lindblad, J.L., Tare, M., Amcheslavsky, A., Shields, A. & Andreas Bergmann. (2021). Non-apoptotic enteroblast-specific role of the initiator caspase Dronc for development and homeostasis of the Drosophila intestine. Scientific Reports, 2021 (Epub ahead of print).

23. Monika Mahesh Jangir, Shibasish Chowdhury, Vani Bhagavatula Differential response of photosynthetic apparatus towards alkaline pH treatment in NIES-39 and PCC 7345 strains of Arthrospira platensis (2021) Int Microbiol Jan 12. doi: 10.1007/s10123-021-00160-6. Online ahead of print. (1.833)

24. Dhingra D, Marathe SA, Sharma N, Marathe A, Chakravortty D. Modelling immune response to Salmonella during typhoid. International Immunology. Epub ahead of print.

25. Shah RK, Pati S, Saini M, Boopathi PA, Kochar SK, Kochar DK, Das A, Singh S. Reduction of sphingosine kinase 1 phosphorylation and activity in Plasmodium-infected erythrocytes. Frontiers in Cell and Developmental Biology; 2020. 80(8), 1-15.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Prof. Shilpi Garg delivered an invited talk on " Deciphering the importance of Fe-S cluster biogenesis pathway in asexual and sexual stages of Plasmodium" at the National Workshop on Skill based entomology (NWSBE) held from January 27-29, 2020 at Department of Zoology, University of Rajasthan Jaipur

ii) International:

1. Bhanot, V., Fadanavis, S.V., Shobham and Panwar, J. 2020. Can Similarities Between Plastics and Cuticular Wax Facilitate the myco-degradation of Plastics. In: "ASM Microbe 2020", Chicago, Illinois, USA. June 18-22, 2020 (Online).

2. Prof AK Das participated in the Vaibhav Summit themed 'Tuberculosis, Malaria & Leishmaniasis', wherein he was the Panel Moderator for the ,Malaria session. For the Global Summit of NRI Researchers called Vaishvik Bhartiya Vaigyanik (Vaibhav) Summit, BITS Pilani was selected as one of the champion institutes to conduct the Vaibhav Summit on infectious diseases under the Pharmaceuticals and Biotechnology vertical.

3. Misra, T., Tare, M., Jha, P.N. (2020). Investigating the role of bacterial amyloids in biofilm formation and pathogenesis in-vivo. 5th Asia Pacific Drosophila Research Conference, Pune, India."

4. Narwal, S., Rai, A., Tare, M. (2020). Testing neuroprotective potentials of an Ayurvedic compound in Drosophila melanogaster model of Parkinson's Disease" 5th Asia Pacific Drosophila Research Conference, Pune, India."

5. Prof. PR Deepa attended an International Conference, Chem Bio 2020, organized online by IISER-Tirupati. The conference included eminent speakers from research labs and industry from India and abroad, in the frontier areas of Biological Sciences.

6. Prof. AK Das participated in panel discussion in Virtual keystone Symposium Event: The Malaria Endgame, held on April **22, 2020.**

7. Prof. AK Das participated in JIO web talk on 'Internationalization of higher education in the post COVID19 era: Challenges and Opportunities for India' by Dr. Allan E. Goodman, President & CEO, Institute of International Education and Dr. Francisco Marmolejo, Education Advisor, Chairperson's Office, Qatar Foundation & former Lead, Tertiary Education, World Bank – India held on 14 may 2020.

8. Tare, M., Gogia, N., Anuradha, C.V., Singh, A. (2020). A ubiquitin ligase, cul-4 regulate Retinal Differentiation in developing Drosophila eye. 5th Asia Pacific Drosophila Research Conference, Pune, India"

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Shilpi Garg, Vishal Saxena (2020) Reliability of Computational Tools in Molecular Research: Insights from A Case Study in Malaria Parasitology, Souvenir of National Workshop on Skill based Entomology; Ideal International E – Publication; ISBN:978-93-89817-16-4.

2. Subhra Dash, K. Lohitesh, and Sudeshna Mukherjee (2020).Cytoplasmic Signaling Circuitry: An Important Trait of Cancer from the book: Rediscovering Cancer From Mechanism to Therapy, Apple Academy Press, USA.Hard ISBN: 9781771886901 E-Book ISBN: 9781351166560.

3. Bhanot, V., Pareek, V. Fadanvis, S.V. and Panwar, J. 2020. Myco-degradation of plastics. In: New and Future Developments in Microbial Biotechnology and Bioengineering, Singh, J. and Gehlot, P. (Eds.), Elsevier, Amesterdam, Netherlands, pp. 25-34.

4. "Rai, A., Kanodia, H., Narwal,S., Tare, M. "Eye for an eye: A Comparative Account on Compound Eye of Drosophila melanogaster with Vertebrate Eye." Springer Nature Switzerland AG 2020 A. Singh, M. Kango-Singh (eds.), Molecular Genetics of Axial Patterning, Growth and Disease in the Drosophila Eye".

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Webinar on 'Publication Ethics in Scholarly Communications: Why and how to avoid Predatory Journals?' was organized by the Department of Biological Sciences in collaboration with The BITS Library and Cabells. 21 November 2020.

2. Webinar on Multicolor Research Applications of Flow Cytometry, Dept of Biol. Sci. with Beckman Coulter. Sep 19,2020.

3. CROSS CAMPUS WEBINAR "Bio@BITS2020" RESEARCH in BIOSCIENCES, organized by Biological Sciences Dept, Pilani campus. Jul 16-18, 2020.

4. Premas Life Sciences & Department of Biological Sciences organized a two-day webinar on 'NGS Overview & Career Perspectives'. June 8-9, 2020.

5. Mini-colloquium on Emerging and Interdisciplinary Areas of Biological Science Research, organised by Department of Biological Sciences. Presented by 1) Dr. Rahul Pal, NII, New Delhi, 2) Dr. Akhil Banerjea, NII, New Delhi, 3) Prof. Deepak Gaur, JNU, Delhi, 4) Dr. Bhavna BIssa, Central University, Rajasthan. Jan 17, 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. Shilpi Garg delivered an invited talk on " Deciphering the importance of Fe-S cluster biogenesis pathway in asexual and sexual stages of Plasmodium" at the National Workshop on Skill based entomology (NWSBE) held from January 27-29, 2020 at Department of Zoology, University of Rajasthan Jaipur

2. Meghana Tare "A Bird's eye view: Recent Perspectives on Biology of Covid-19" Organized by Research Foundation of India in collaboration with Shri Rewa Gurjar Bal Niketan College, Sanawad. Sponsored by World Federation of Science and Technology, California, USA. (June 16th, 2020)."

3. Meghana Tare "So much, yet so little on COVID-19"" at Prestige Institute of Engineering, Management and Research, Indore.   (April, 2020)."

4. Sandhya Amol Marathe "Characterizing the role of CRISPR-Cas system in Salmonella" in national conference entitled "Host-pathogen interaction: present and future perspective" held from September 24 - 25, 2020 organized by National Institute of Technology, Rourkela

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Gagandeep Singh Saggu, Postdoctoral Research Scientist, National Institute of Allergic and Infectious Diseases, National Institute of Health, Rockville, MD delivered invited talk on "A large conductance ion channel on the malaria parasite digestive vacuole", organised by Department of Biological Sciences on 28 January, 2020.

2. Dr. Manu Smriti Singh, Postdoctoral Fellow at Laboratory of Nano-medicine, Department of Cell Research and Immunology, Tel-Aviv University, Israel delivered a talk on "Three-dimensional tumor model as a robust platform to mimic vascularized tumors in clinic" organised by Department of Biological Sciences on 31 January, 2020.

3. Dr. Dr Sunit Mandad, Research Associate at Department of Neuro and Sensory Physiology University Medical Centre Goettingen GERMANY, delivered a talk on "Quantitative Mass Spectrometry: a tool to investigate neuronal proteome abundance and protein turnover" organised by Department of Biological Sciences on 08 February, 2020.

4. Prof. Abhishek Banerjee, Biosciences Institute, Newcastle University, UK. delivered an online interdisciplinary research talk on 'Physiological and computational approaches to study brain plasticity and decision-making'. (students of all campuses participated) August 17, 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

b. Won by Students:

1. Leena Fageria of our department has won the best story award under DST AWASAR 2019 scheme. Every year DST conducts a story writing competition for PhDs and PDFs, where one's research work has to be written in a story format so that non-scientific community can easily understand the work.

2. Rushikesh Zhawar (2017B1A70977), M.Sc. Biological science student has been awarded prestigious Khorana Fellowship jointly organized by Department of Biotechnology (DBT), Government of India, Indo-U.S. Science and Technology Forum (IUSSTF) and WINStep.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED: NIL

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Biological Society: The B1 students-led Biological Society conducted the following events in the calendar year 2020.

Name of the Event	Date	Description of the event conducted by Biological Society
B.E. Farewell	11 July 2020	The event aimed to bid farewell to the graduating B.E. batch 2016.
Teacher's Day Celebration	5 Sep 2020	The event aimed to celebrate the contributions of faculty members in the life of the students. An online fun-filled session was organised to play games and multiple other activities with our professors.
Informal Orientation	18 Nov 2020 23 Nov 2020	In the event association's seniors informally guided newly admitted first year B.E students and made them aware of the challenges they are going to face as a college student with the possible ways to overcome those.
ormal Orientation	28 Nov 2020	The event was done in collaboration with the faculty members and was meant to formally guide newly admitted first year B.E. and M.E. students and give them insights about their coming college life.
M.E. Orientation	29 Nov 2020	The event aimed to recruit M.E. members in the association.
Biological Sciences Newsletter	24 Dec 2020	The annual newsletter of the Biological Sciences Department was submitted to the CostAA, BITS Pilani for the display in the Apogee's Social Media Handle. The newsletter aims to guide the freshers about the department.
M.E. Farewell	10 Jan 2021	The event aimed to Bid farewell to the passing M.E. batch 2019.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	HPLC	01
2.	REAL TIME PCR	01
3.	WATER PURIFICATION SYSTEM (Milli-Q)	01
4.	FRIDGES	02
5.	APOTOME OBJECTIVE (Microscope component)	01
6.	GENE SPRING SOFTWARE	01
7.	GRAPH PAD PRISM (One Year Academic Licence)	02
8.	SERVERS	01
9.	LED PROJECTOR	01
10.	DESKTOP PC	06
11.	XP-PEN (online teaching aids)	01
12.	Wacom Tablet (online teaching aids)	01
13.	AMBER 20 Software	01

B1.10.2   Department: Civil Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**04**
Associate Professors	05
Assistant Professors	11
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department :Prof. Anupam Singhal

Contact details :   **anupam_singhal@pilani.bits-pilani.ac.in**

Number of Ph.D. Scholars:

Full Time   :   23

Part Time   :   11

Aspirant Scheme :   Nil

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Vasanth Keshav	2015PHXF0004P	"Stability And Failure of Laminated Composite Plates and Cylindrical Panels Subjected to In-Plane Pulse Load"	Dr. S.N. Patel	-
2.	Vidhy Vyash	2013PH300065P	Development of Data-driven Decision-Support Approaches using non-destructive Testing For Enhancing Pavement Management Systems.	Prof. Ajit Pratap Singh	Prof. Anshuman
3	Prashant Bhakar	2013PHXF0106P	Sustainable Management of Groundwater Resources in the Western Arid regions of Rajasthan, India	Prof. Ajit Pratap Singh	Prof. Ravikant Mittal

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of a Cyber-Physical System based Smart Water Grid & Testbed for Community Usage	Civil Engineering	Prof. K. K Gupta	Prof. Ajit Pratap Singh, Dr. Amit Dua, Dr.Kamlesh Tiwari	CPS research of Interdisciplinary Cyber Physical System (ICPS) program of DST, GoI, New Delhi	CEERI Pilani	Rs. 57,77,500 (Total) RS. 27,54,200 (BITS) Rs. 30,23,300 (CEERI)
2	Structural Health Assessment and Rehabilitation Framework based on Cyber Physical System, sponsored by DST New Delhi, (Multi-institutional and multi-disciplinary project)	Civil Engineering	Prof. S. B. Singh, Prof. K. K. Gupta Prof. Kota Solomon Raju	-	DST New Delhi		15.543 Lakhs (Civil Engineering, BITS Pilani) 33.083 Lakhs (CEERI, Pilani) 11.73 Lakhs (EEE Department, BITS Pilani)

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Study of Post buckling Response, Failure and Strength of Functionally Graded Composite Plates with and without Cutouts	Civil Engineering	Prof. S.B. Singh	-	CSIR New Delhi	-	18.5 Lakhs
2	Seismic Vulnerability Assessment of Selected Heritage Structures in the State of Himachal Pradesh adopting output only Vibration Testing and Fragility Curves	Civil Engineering	Prof. S.V.R. Madappa, NIT Puducherry	Prof. S.B. Singh	Ministry of Earth Sciences, New Delhi	-	34.506 Lakhs
3	Waste Management of Generated Sludge from Indian Steel and Steel Related Plants: A Sustainable Business Model	Mechanical Engg and Civil Engg	Prof.SrikantaRoutroy	Prof. Anupm Singhal and Prof. Dipendu Bhunia	Ministry of Steel, Government of India	-	Rs. 38,04,600/-
4	Safety Consultancy for widening & strengthening of existing Bikaner-Phalodi section to Four Lane from Km 4+200 to Km 55+250 and Two Lane with PS from Km 55+250 to km 163+500 of NH-15 on BOT (Toll) basis in the State of Rajasthan	Civil Engineering	Prof. A. K. Sarkar	Prof.Ajit Pratap Singh, Dr. Durgesh Vikram, Dr. R. Srinivas, Dr.Prashant K Sahu	NHAI, New Delhi	-	Rs. 53,50,000
5	Structured Dialogues for Sustainable Urban water Management	Civil Engineering	Prof. Rajiv Gupta	Dr, Abdul Malik Dr. SuchismitaSatpathy Dr. Soundharajan Bankaru Swamy	DST, India	AMU, BITS-Pilani, Hyderabad Amrita School of Engineering	5,09,04,188 (BITS-Pilani campus share:3,29,88,508)

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Design and development of Fixed and Floating Solar PV Installations for water management infrastructures	Civil Engineering	Dr. Ravi Kant Mittal	Dr. Manoj Kumar Soni	First Green Consulting Pvt. Ltd, Gurgaon	-	11.36 lakhs
2	Development of Advanced Environmental Engineering Laboratory including a Faecal Sludge Management Laboratory (AREL-FSM)	Civil Engineering	Prof. Ajit Pratap Singh	Dr. Nishant Roy, Dr. Anupam Singhal, Dr. Banasri Roy	Aditya Birla Finance Limited, Veraval, Gujarat	-	Rs. 1,00,00,000

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of Fire Resistant Natural FRP for Structures	Civil Engineering	Prof. S.B. Singh	Prof. Sudhirkumar Barai	US-INDIA Educational Foundation(USIEF)	BITS PILANI	Cost of travel, lodging and boarding, and honorarium for US Fulbright Expert
2	Fire Resistance Guidelines for Hybrid FRP Structural Components made of Cellulose Fibers Derived from Agricultural Waste	Civil Engineering	Prof. Venkatesh Kodur (Michigan State University, USA)	Prof. S.B. Singh (BITS Pilani); Prof. Vasant Matsagar (IIT Delhi)	University of Nebraska at Omaha: Partnership-2020 for Enhancing US-India Collaboration between Michigan State University (MSU), BITS	-	US $1,36,878.03
3	Costs and remediation of groundwater contamination in India (Extension)	Civil Engineering	Rajiv Gupta (India)		College of Arts and Science at University of Virginia, USA		Project cost $2.5 lack +$7000 ext.

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	A feasibility study on development of Fire Resistant Geopolymer Composites	Civil	Dr. Mukund Lahoti	-	ACRG	-	9.65 Lakhs
2	Failure analysis of MWCNTs-reinforced laminated composite plate subjected to mechanical loads	Civil	Dr. Rajesh Kumar	-	ACRG	-	8.8 Lakhs

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Crime analysis and study for safe cities with emphasis on women safety using technology and societal participation		Prof. Anu Gupta	Rajiv Gupta	-	Crime analysis and study for safe cities with emphasis on women safety using technology and societal participation	Rs. 5,00,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Integrated approach for the efficient removal and recovery of heavy metal catalyst (Zinc) used in viscos fiber industries	Bio, Chemical and Civil Engineering	Prof. S. K. Verma	Prof. Suresh Gupta, Prof.JitendraPanwar, Prof. AjitPratap Singh	Aditya Birla Science and Technology Centre (ABSTC) Mumbai	-	Rs. 49,42,000

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Seismic Response of Tunnels Considering Topographic and Site Effects	Civil Engineering	Dr.Nishant Roy	Dr. Ravi Kant Mittal	R.I.G. BITS, Pilani	-	Rs. 2 lakhs
2	Post buckling analysis of CNT-Reinforced composite plates under different types of in-plane mechanical loads	Civil Engineering	Dr. Rajesh Kumar	Dr.S.N.Patel	RIG, BITS	-	Rs. 2 lakhs
3	A feasibility study on utilizing locally available fly ash to produce geopolymers for structural fire resistance applications	Civil Engineering	Dr. Mukund Lahoti	-	RIG, BITS	-	Rs. 2 lakhs

4. LIST OF RESEARCH PUBLICATIONS

Papers Published by Faculty in Journals

International Publications

1. Vyas V., Singh A.P., Srivastava A (2020). "Quantification of airfield pavement condition using soft-computing technique", World Journal of Engineering, Vol. 17, Issue 6, pp. 877-890. https://doi.org/10.1108/WJE-01-2020-0021

2. Vyas V., Singh A.P., Srivastava A (2020). "Prediction of asphalt pavement condition using FWD deflection basin parameters and artificial neural networks", Road Materials and Pavement Design, https://doi.org/10.1080/14680629.2020.1797855

3. Srinivas R., Singh A.P., Jain V., and Sharma P (2020). "Development of an advanced entropy-based decision support system to assess the feasibility of linking of rivers in a sustainable manner", International Journal of River Basin Management, https:// doi.org/10.1080/15715124.2020.1790579

4. Singh A.P. and Bhakar P (2020). "Development of Groundwater Sustainability Index: A Case study of Western Arid Region of Rajasthan, India", International Journal of Environment, Development and Sustainability, https://doi.org/10.1007/s10668-020-00654-9

5. Srinivas R., Singh A.P., Dhadse K., and Magner J (2020). "Hydroclimatic river discharge and seasonal trends assessment model using an advanced spatio-temporal model for Stochastic Environmental Research and Risk Assessment", Stochastic Environmental Research and Risk Assessment, Vol. 34, pp. 381–396. https://doi.org/10.1007/s00477-020-01780-6

6. Srinivas R., Singh A.P., Jain V., Bhamra R. S., and Sharma P (2020). "Evaluation and Quantification of Pollution Caused by Open Drains in Ganges River Basin Using Multivariate Cluster Analysis", Asian Journal of Water, Environment and Pollution, Vol. 17, Issue 1, pp. 75–82. https://doi.org/10.3233/AJW200008

7. Gill G., Mittal R. K., Dandautiya R., and Purohit N (2020)."Sustainable Utilization of Waste Tire Chips Reinforced Copper Tailings as Structural Fill", Environment, Development and Sustainability, Springer, Vol. 22, Issue.5, pp. 4845-4865. https://doi.org/10.1007/s10668-019-00408-2

8. Gill G., Mittal R. K., and Dandautiya R (2020). "Pressure Settlement Behaviour of Strip Footing Resting on Unreinforced and Tire Chips Reinforced Copper Slag", KSCE Journal of Civil Engineering, Springer, https://doi.org/10.1007/s12205-020-0606-0,

9. Rawat S., Mittal R.K., and Muthukumar G (2020). "Isolated Rectangular Footings under Biaxial bending: A Critical Appraisal and Simplified Analysis Methodology", Practice Periodical on Structural Design and Construction, ASCE, Vol. 25, Issue 3. https://doi.org/10.1061/(ASCE)SC.1943-5576.0000471

10. Mittal R.K., and Gill G (2020). "Pressure Settlement Behaviour of Strip Footing Resting on Tire Chip Reinforced Sand", International Journal of Geotechnical Engineering,Taylor& Francis, Vol. 14, No. 2, pp.162-168. https://doi.org/10.1080/19386362.2017.1408195

11. Vummadisetti S., and Singh S.B (2020). "Postbuckling Response of Functionally Graded Hybrid Plates with Cutouts under In-plane Shear Load", Journal of Building Engineering, Vol. 33, pp. 1-22. https://doi.org/10.1016/j.jobe.2020.101530

12. Singh S. B., and Munjal P (2020). "OUT-of-Plane Response of ECC Strengthened Masonry Wallets with Openings", Korean Society of Civil Engineers (KSCE), Vol. 24, Issue 7, pp-2078-2087. DOI:10.1007/s12205-020-1346-x

13. Singh S. B., and Munjal P (2020). "Engineered cementitious composite and its applications", Materials Today: Proceedings, Vol. 32 (4), pp.797-802, https://doi.org/10.1016/j.matpr.2020.03.743.

14. Singh S. B., Vummadisetti S., and Chawla H (2020). "Development and characterisation of novel functionally graded hybrid of carbon-glass fibres", Int. J. Materials Engineering Innovation, Vol. 11, No. 3, pp. 212-243. https://doi.org/10.1504/IJMATEI.2020.108883

15. Munjal P and Singh S. B (2020). "Out-of-plane Response of ECC Strengthened Masonry Walls", Journal of Structural Integrity and Maintenance, Vol. 5, No. 1, pp. 18-30. DOI:10.1080/24705314.2019.1692165

16. Vummadisetti S., and Singh S.B (2020). "Buckling and Postbuckling response of hybrid composite plates under uniaxial compressive loading", Journal of Building Engineering, Vol. 27, pp. 101002-1-18. https://doi.org/10.1016/j.jobe.2019.101002

17. Tyagi G., Singhal A., Routroy S., Bhunia D., and Lahoti M (2020). "A Review on Sustainable Utilization of Industrial Wastes in Radiation Shielding Concrete", Materials Today: Proceedings (Elsevier), Vol. 32, pp.746–751. https://doi.org/10.1016/j.matpr.2020.03.474

18. Tyagi G., Singhal A., Routroy S., Bhunia D., and Lahoti M (2020). "Radiation Shielding Concrete with alternate constituents: An approach to address multiple hazards", Journal of Hazardous Materials (Elsevier), Vol. 404, pp.1-22. https://doi.org/10.1016/j.jhazmat.2020.124201

19. Pranav S., Aggarwal S., Yang E.H., Sarkar A.K., Singh A. P., and Lahoti M (2020). Alternative materials for wearing course of concrete pavements: A critical review, Construction and Building Materials,Vol. 236, pp.117609. https://doi.org/10.1016/j.conbuildmat.2019.117609

20. Singh V., Kumar R., Jain V., Kumar T. N., and Patel S. N (2020). "Semi-analytical development of dynamic instability and response of multi-scale laminated hybrid composite plate", Journal of Aerospace Engineering, ASCE, In Press, DOI: 10.1061/(ASCE)AS.1943-5525.0001244

21. Sharma R., Bharti S. D., Shrimali M., Roshan A., and Roy N (2020). "Dynamic response of dry ashlar masonry arch using discrete element method", Asian Journal of Civil Engineering, Springer, https://doi.org/10.1007/s42107-020-00345-w

22. Keshav V., Patel S.N., and Kumar R (2020). "Non-linear stability and failure of laminated composite stiffened cylindrical panels subjected to in-plane impulse loading", Structures, Elsevier, In Press, https://doi.org/10.1016/j.istruc.2020.11.021

23. Yadav A., Ambili M., Panda S. K., Dey T., and Kumar R (2020). "Nonlinear damped vibrations of three-phase CNT-FRC circular cylindrical shell", Composite Structures, Elsevier, In Press, https://doi.org/10.1016/j.compstruct.2020.112939

24. Singhal A., Gupta R., Singh A. N., and Shrinivas A (2020). "Assessment and monitoring of groundwater quality in semi –arid region", Groundwater for Sustainable Development, Elsevier, Vol. 11, pp.100381.

25. Mishra A., Patra S., Shukla S. K., Pandey P., Shukla Y., Osmera P., Yadav P., Pandy M., Gupta R., Molina F., Semino C. E., Tiwari A (2020). "Current Scenario of Coronavirus Pandemic", Adv. Mater. Lett., Vol. 11, Issue 4, DOI:10.5185/amlett.2020.041494

26. Kumar A., Khan F. M., Gupta R., and Puppala H (2020). "Preparedness and mitigation by projecting the risk against COVID-19 transmission using machine learning techniques", medRxiv, DOI: https://doi.org/10.1101/2020.04.26.20080655.

27. Raya R. K., and Gupta R (2020). "Rural community water management through directional tunnelling: visual modelling of rainwater harvesting system", Water Practice and Technology, DOI:https://doi.org/10.2166/wpt.2020.060

28. Gupta R (2020). "Water purifying bio-concrete", Adv. Mater. Lett., Vol. 11, Issue 7.

29. Khan F. M., and Gupta R (2020). "ARIMA and NAR based prediction model for time series analysis of COVID-19 cases in India", Journal of Safety Science and Resilience, Vol. 1, Issue 1, pp. 12-18, DOI:https://doi.org/10.1016/j.jnlssr.2020.06.007

30. Ramchandra A. M., and Gupta R (2020). "Trade-off between safety of construction workers and economy in backdrop of Covid-19 ", Advanced Material Letter, Vol. 11, Issue 8, DOI: 10.5185/ amlett.2020.081542

31. Harish P., Gupta R., and Ali A (2020). "An UID based tool to enable social distancing amid COVID-19", Social Science Research Network, DOI: https://dx.doi.org/10.2139/ssrn.3607827

National Publications

1. Vummadisetti S., and Singh S.B (2020). "Boundary Condition Effects on Postbuckling Response of Functionally Graded Hybrid Composite Plates", Journal of Structural Engineering (Madras), Vol. 47, No. 4, pp. 1-17. ISSN: 9700137.

2. Arulanandam, P. M., Singh S. B., and Sivasubramanian M.V. R (2020). "Numerical analysis of reinforced ECC portal frames", The Indian Concrete Journal, Vol. 94, No. 10, pp. 44-54. ISSN: 194565

3. Arulanandam, P. M., Singh S. B., Kanakubo T., and Sivasubramanian M.V. R (2020). "Behavior of Engineered Cementitious Composite Structural Elements – A Review", The Indian Concrete Journal, Vol. 94, No. 6, pp. 05-28. ISSN: 194565

4. Singh S. B (2020). "Engineered Cementitious Composites (ECC): Bendable Concrete for Sustainable and Resilient Infrastructure", The Indian Concrete Journal, Vol. 94, No. 6, pp. 74-75. ISSN: 194565

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

International Conference Publications

1. Shah B., Chaurasia D. and Singh A. P (2020). "Wastewater allocation and pricing model for the efficient functioning of CETP serving a textile industrial cluster", The 3rd International Conference on Trends and Recent Advances in Civil Engineering, TRACE 2020 – Online 20th – 21st August 2020, Noida, India.

2. Shimpi V., Sivasubramanianand M. V. R., and Singh S.B (2020). "Field Measurement and Analytical Modeling of Masonry Arch Skew Bridges", International conference on Structural Analysis of Historical Structures, Barcelona.

3. Tyagi G., Singhal A., Routroy S., Bhunia D., Lahoti M., and Manish V. S (2020). "A Review on Sustainable Utilization of Industrial Wastes in Radiation Shielding Concrete", 3rd ITCSD conference, NITTTR Chandigarh, 19-21st February, 2020.

4. Tyagi G., Singhal A., Routroy S., and Bhunia D (2020). "A critical review on the utilization of Electric Arc Furnace Slag: Application, Challenges and Prospects", 2nd CRSIDE (ASCE) conference, Kolkata India, 2-4th March, 2020.

5. Bhaskar J. K., and Bhunia D (2020). "Fortification of Masonry Infill Walls Susceptible to Earthquakes", 2nd CRSIDE (ASCE) conference, Kolkata India, 2-4th March, 2020.

6. Gupta D., and Lahoti M (2020). "A Review on Application of Phase Change Material (PCM) for Energy Efficient Infrastructure", 2nd CRSIDE (ASCE) conference, Kolkata India, 2-4th March, 2020.

7. Vidyarthi A., and Lahoti M (2020). "A Review on Application of FTIR Spectroscopy in the Characterization of Geopolymers", 2nd CRSIDE (ASCE) conference, Kolkata India, 2-4th March, 2020.

8. Godhat P., Agarwala U., Shah K., Bajpai R., and Lahoti M (2020). "Utilization of Copper Tailings and Marble Dust Wastes to Produce Economical and Environmentally Friendly Concrete", 2nd CRSIDE (ASCE) conference, Kolkata India, 2-4th March, 2020.

9. Singhal A., Singh A., and Gupta R (2020). "3D Prediction of Pollutant Fluoride in Semi-Arid Region for a Sustainable Planning", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies" (CRSIDE2020) Kolkata, March 2-4, 2020.

10. Khan F. M., and Gupta R (2020). "R scherichia coli (E. coli) as an indicator of fecal contamination", The 3rd International Conference on Sustainable Development of Water and Environment (ICSDWE2020), Inha University, South Korea, 13th - 14th January 2020.

11. Gupta R (2020). "Global Water Management: Green Methods", 4th edition of VBRI "Translational Research & Innovation Symposium" with the theme on Sustainable technologies for healthcare and environment, 10th February, 2020 at VBRI Innovation Centre, New Delhi.

12. Gupta R., and Singhal A (2020). "3D Prediction of Pollutant Fluoride in Semi-Arid Region for a Sustainable Planning", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies" (CRSIDE2020) Kolkata, March 2-4, 2020.

13. Gupta R (2020). "A Multi-Sustainable Rainwater Harvesting for Safe Drinking Water", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies" (CRSIDE2020) Kolkata, March 2-4, 2020.

14. Gupta R (2020). "Comparison of Different Spatial Interpolation Techniques to Thematic Mapping of Socio Economic Causes of Crime against Women", 2020 Systems and Information Engineering Design Symposium (SIEDS), Charlottesville, VA, USA, 2020, pp. 1-6, DOI: 10.1109/ SIEDS49339.2020.9106690.

15. Gupta R., Kumar G., and Raya R (2020). "Application of ANN for Sustainability Index", 4th SEE SDEWES Conference on Sustainable development of Energy, water and Environment Systems, June 28 – July 3 2020 in Sarajevo, Bosnia and Herzegovina 2020.

16. Chaurasia D., Vidyarthi A., Shah B., and Gupta R (2020). "Structured dialogue for Scenario Development and Strategy Selection for Water Challenges in Dynamic Cities", 4th SEE SDEWES Conference on Sustainable development of Energy, water and Environment Systems, June 28 – July 3 2020 in Sarajevo, Bosnia and Herzegovina 2020.

17. Gupta R., Rastogi A., Shenoy M. V., Sridhar S., and Gupta A (2020). "Quantitative Analysis of Crime using GIS for Crime against Women", Overcoming Obstacles to Women's Subordination: Socialization, Law, and Structural Inequalities'; The 6th World conference on Women's studies 2020; 27th-29th July 2020, Colombo Srilanka.

18. Sajiith G., Gupta R., Charde M (2020). "Reduction of thermal discomfort and energy consumption: An AI approach", 15th SDEWES Conference on Sustainable development of Energy, Water and Environment Systems, Sept. 1-5 2020 in Cologne, Germany 2020.

National Conference Publications

1. Rawat S., Mittal R.K., Satapathy A (2020). "Experimental Study on Waste Tire Chips-Reinforced Sand using Cyclic Plate Load Test", Proceedings of Indian Geotechnical Conference 2020, at Andhra University College of Engineering, Visakhapatnam, during December 17-19, 2020.

2. Gupta R (2020). "Water sustainability: 5 trillion-dollar economy", Administrative Staff College of India in partnership with the Research and Innovation Circle of Hyderabad (RICH) and Government of Telangana; INK@WASH (Innovations and New Knowledge in Water, Sanitation & Hygiene), 30-31 Jan., 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Kamalesh Kumar, Gada Vivek, "Water Content Effect on Shear Strength Parameters in Coir Fiber Reinforced Pilani Soil: Recent Observations", Book Chapter in the book entitled Recent Developments in Engineering Research Vol. 1, Publisher: Book Publisher International, pp 1-5(published on 14 July, 2020).

2. Kamalesh Kumar, "Interrelation between Safe Bearing Capacity and Angle of Internal Friction of Pilani Soil", Book Chapter in the book entitled New Ideas Concerning Science and Technology Vol. 1, Publisher: Book Publisher International, pp 116-123(published on 27 October, 2020).

3. Kamalesh Kumar, "An Approach to Estimate the Atterberg Limits of Pilani Soil Using Ultrasonics", Book Chapter in the book entitled New Ideas Concerning Science and Technology Vol. 1, Publisher: Book Publisher International, pp 124-130 (published on 27 October, 2020).

4. S. B. Singh, S.V.R. Madappa, and Himanshu Chawla, "Emerging Trends of Advance Composite Materials in Structural Applications", Springer Nature (2020).

5. Dandautiya R., and Singh A. P, "Life cycle assessment of production of concrete using copper tailings and fly ash as a partial replacement of cement", Advances in Sustainable Construction Materials, Lecture Notes in Civil Engineering Vol 68. pp. 75-85. Springer, Singapore (2020).

6. Keshav V., Patel S.N., Kumar R, "Nonlinear Dynamic Buckling and Failure Study of Laminated Composite Plates Subjected to Axial Impulse Loads", Advances in Fluid Mechanics and Solid Mechanics. Lecture Notes in Mechanical Engineering. Springer, Singapore, DOI-https://doi.org/10.1007/978-981-15-0772-4_25, Print ISBN 978-981-15-0771-7 Online ISBN 978-981-15-0772-4.

7. Nandanwar K.G., Rathore D., Gupta R., "A Novel DIY Machine Design to Obtain Secondary Raw Materials from Absorbent Hygiene Waste", Ghosh S. (eds) Waste Management as Economic Industry Towards Circular Economy. Springer, Singapore, 2020.

8. Khan, F. M., & Gupta, R., "Escherichia coli (FCB) as an Indicator of Fecal Contamination in Groundwater: A Review.", Jeon HY. (eds) Sustainable Development of Water and Environment. ICSDWE 2020. Environmental Science and Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-45263-6_21.

9. Gupta V., Rawat S., Mittal R.K., Muthukumar G., "A Brief Review of Structural Aspects of IS 16700:2017. In: Adhikari S., Bhattacharjee B., Bhattacharjee J. (eds) Advances in Structural Engineering and Rehabilitation. Lecture Notes in Civil Engineering", Vol. 38, Springer Singapore (2020). DOI: https://doi.org/10.1007/978-981-13-7615-3_7.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT: 2

1. Prof. S.B. Singh, Prof. Navneet Goyal (Co-ordinators), Prof. Rajiv Gupta, Prof. Dipendu Bhunia (Members of the organizing committee) conducted A webinar on "Smart Cities: Beyond the Pandemics", BITS Pilani, on July 10-11, 2020. Number of Participants: More than 100

2. Dr. R. Srinivas conducted a 4 week workshop on "Global meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives, BITS Pilani (Pilani, Hyderabad, Goa, Dubai)", during October 16th to November 7th 2020. Number of Participant: 500

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. D. Bhunia delivered a keynote lecture on "Ph.D. Guidelines and Tips" at Manuscriptpedia, Chennai, on 2nd July, 2020.

2. Prof. D. Bhunia delivered a keynote lecture on "A Review on Sustainable Utilization of Industrial Wastes in Radiation Shielding Concrete" at 3rd International conference on Clean and Sustainable Development (ITCSD2020), Civil Engineering Department, NITTTR, Chandigarh, February 19-21, 2020.

3. Prof. S.B. Singh delivered a keynote lecture on "Engineered Cementitious Composites (ECC) for Masonry and Concrete Structures", at Indian Construction Week (ICW 2020) held at Delhi on and organized by Construction Industry Development Council (CIDC) an Apex body established by NITI Ayog, Government of India, on 2nd December 2020.

4. Prof. S.B. Singh delivered a keynote lecture on "Engineered Cementitious Composites (ECC) and Its Applications for Masonry Beam", at Institution of Engineers, Rajasthan State Center, Jaipur, on 15th September 2020.

5. Prof. S.B. Singh delivered a keynote lecture on "Innovative Cementitious and FRP Composites for Concrete and Masonry Structures", at NIT Jalandhar at the Short Term Course on "Recent Advancements in Concrete Technology, on 19th September 2020.

6. Prof. S.B. Singh delivered a keynote lecture on "Engineered Cementitious Composites for Structures", at IIT Indore, on 13th October 2020.

7. Prof. S.B. Singh delivered a keynote lecture on "FRP and Engineered Cementitious Composites for Resilient and Efficient Framed Structures for Smartcity Development", International Webinar on Smart Cities: Beyond the Pandemics held at BITS Pilani during July 10-11, 2020, on 10th July 2020.

8. Prof. S.B. Singh delivered a keynote lecture on "Engineered Cementitious Composites for Masonry Structures", 3rd International Conference on Innovative Technologies for Clean and Sustainable Development, at Chandigarh, on 19th February 2020.

9. Prof. S.B. Singh delivered a keynote lecture on "Flexural Strengthening of FRP Beams using CFRP Laminates", Amity Institute of Aerospace Engineering, Noida, on 11th May 2020.

10. Prof. S.B. Singh delivered a keynote lecture on "Application of Advance Composite Materials for Structures", at Enliven Archeive, on 28th April 2020.

11. Prof. Anupam Singhal delivered a keynote lecture on "Sustainable Design of Water Treatment Plant under "TEQIP sponsored – On Line Faculty Development Program (FDP)", Interdisciplinary Approaches to Promote Sustainability using Green Technology (IASGT-2020)" organized by University College of Engineering and Technology, Bikaner Constituent college of Bikaner Technical University, on 20th September 2020.

12. Prof. Anupam Singhal delivered a keynote lecture on "Green Methods for Solid Waste Management under "TEQIP sponsored – On Line Faculty Development Program (FDP)", Interdisciplinary Approaches to Promote Sustainability using Green Technology (IASGT-2020)" organized by University College of Engineering and Technology, Bikaner Constituent college of Bikaner Technical University, on 18th September 2020.

13. Prof. R. Srinivas delivered a keynote lecture on "Assessing the impact of various levels of Hydro-conditioning on conservation practice placement in Plum Creek Minnesota", at 3D Geomatics Hydrogeomorphology - Breachline Subgroup Meeting, Minnesota Board of Water and Soil Resources, USA, on 25th August 2020.

14. Prof. A.P. Singh delivered a keynote lecture on "Green Technologies and Sustainable Engineering", at Dept. of Civil Engineering, Rajasthan Technical University Kota, during December 7-11, 2020.

15. Prof. A.P. Singh delivered a keynote lecture on "Exploring Immobilization Potential of Heavy Metals in Fly Ash and Copper Tailings and Their Sustainable Utilization", at Department of Civil Engineering, B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, during December 7-11, 2020.

16. Prof. Rajiv Gupta delivered aninvited lecture on "Harnessing Technology to Visualize Covid-19 Risk across India'", at Centre for Advanced Studies in Policy Research, Pune, during May 9, 2020.

17. Prof. Rajiv Gupta delivered an invited lecture on "Infrastructure Planning: An AI Approach'", at KDK College of Engineering, Nagpur Civil Engineering Department, American Society of Civil Engineers: Indian section – Western Region, Indian Concrete Institute, Nagpur Centre & ACC Cement, during May 30th, 2020.

18. Prof. Rajiv Gupta delivered an invited lecture on "Application of AI in Civil Engineering; An Overview'", at KLE Dr. M.S. Sheshgiri College of engineering and Technology, Belagavi, during June 26th, 2020.

19. Prof. Rajiv Gupta delivered an invited lecture on "Application of Artificial Intelligence in Civil Engineering", at A.P. Shah Institute of Technology, Thane, during July 21st, 2020.

20. Prof. Rajiv Gupta delivered an invited lecture on "Smart Tools for Sustainable Product Design & Application", at VNIT, Nagpur, during October 21st, 2020.

21. Prof. Rajiv Gupta delivered an invited lecture on "Developing technology innovation for social issues", at International Linkage Degree Program (ILDP), Office, Hiroshima University Japan, during December 21st, 2020.

9.   INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT – Nil

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Prof. S.B. Singh received a Best Academician of the Year 2020 Award from Institution of Engineers, Rajasthan State Center, Jaipur on Engineers Day (15th September 2020).

2. Prof. R.K. Mittal received a Second Prize in Best Paper Prizessponsored by Springer Nature for Paper titled "Experimental Study on Waste Tire Chips-Reinforced Sand using Cyclic Plate Load Test" presented at Indian Geotechnical Conference 2020.

3. Prof. A.P. Singh appointed as a Coordinator, Principal Technical Agency, PMGSY, by National Rural Infrastructure Development Agency (NRIDA), Ministry of Rural Development, Government of India, New Delhi.

4. Prof. A.P. Singh appointed as an Executive Committee Member, by National Rural Infrastructure Development Agency (NRIDA), Ministry of Rural Development, Government of India, New Delhi.

5. Prof. A.P. Singh nominated as an external member of Committee of Courses for Bachelor of Engineering, by Jai Narain Vyas University, Jodhpur, Rajasthan.

6. Prof. A.P. Singh nominated as a Monitoring Committee Member for monitoring compliance of pollution norms in Pali Industrial cluster, by Hon'ble National Green Tribunal, New Delhi.

7. Prof. Anupam Singhal nominated as a External Technical Expert in the BoS for Curriculum and syllabus review for the Program 'Diploma in Civil Engineering' (CE Department, Brainware University, Barast, Kolkata , West Bengal).

8. Prof. Anupam Singhal nominated as a Expert group member for Liquid waste management by IIT Delhi for Unnat Bharat Abhiyan

9. Prof. Anupam Singhal nominated as a Technical expert for dispute on Pali Textile Mills Cluster at RIICO, Udyog Vibhag , Jaipur by Ministry of Industries , Government of Rajasthan.

b. Won by Students:

1. Saurav H. Yadav (2018A2PS0113P) won the prestigious O. P. Jindal Engineering & Management Scholarship (OPJEMS 2020),

2. Shriya Amey Marathe (2017A2PS1015P) got Masters Admission in Paris School of International Affairs for a degree in Environmental Policy.

3. Shriya Amey Marathe (2017A2PS1015P) got Masters Admission in Middleburry Institute of international studies with a scholarship of 9000 dollars per semester.

4. Arvind Sahu (2016A2PS0531P) got AIR 177 in GATE 2020 in Civil Engineering

5. Saumya Gaikwad, (2018A2PS0680P) have been selected for Product Intern at Adobe for summer 2021.

6. Shubham Aggarwal (2018A2PS0093P) has been invited for the 3rd International Conference on Safer Mobility (ICSM'20).

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: Nil

12. PATENTS FILED/PUBLISHED AND GRANTED

➢ A Loading Test Apparatus and Method Thereof, Patent Application No. 202011006637, (Inventors: S. B. Singh, Himanshu Chawla, and Sudhir Vummadisetti, Status: Filed)

➢ System for Water Storage with Heat Exchange for Treating Ambient Air, (Inventors: Puppala Harish, Rajiv Gupta, Status: Awaited)

➢ Adsorbent material and process for Preparation thereof, Patent Application No: 202011011674 (Inventors: Soumya Kar, Rajiv Gupta, Status: Awaited)

13. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

Meetings

Monthly meetings were held to discuss the various ideas and issues pertaining to CEA related activities. Most of the meetings were held regarding 3 major agendas: i) Student Academic/Career Needs and Requirements, ii) Possible events combining Civil Engineering and Online mode and iii) Planning of Events during APOGEE.

Meet with Prof.Nishant Roy to discuss APOGEE events and semester structure of events for proper conduction. All events were brainstormed, and timeline was decided accordingly.

Software Training Workshops

A two-day workshop on Autodesk Revit was also conducted on 8th-9th February 2020 by CEA in which the modelling and levelling of structures were explained. MEP was also explained via detailed guides

Autodesk AutoCAD workshop was organized, especially for 1st year students. Student's problems and doubts were discussed.

ESE and GATE Talk

On 19th April 2020, a talk on Engineering Services Examination (ESE) was conducted by CEA with Mr. Arvind Sahu (Placed in IOCL) and Mr. Nishit Joseph (GATE 2020 AIR 11) as the Guest Speaker. In the talk, they shared preparation methods, their experiences and importance of technical knowledge. Throughout the talk they focused more on difficulties generally faced by the students be it deciding on the future or regarding the branch or the mental stress for the exams and provided suggestions on how to deal with such situations followed by doubt discussion session.

Talk on Smart Cities by Mr. NSN Murty (Partner & Leader, PwC India)

On23rd August 2020, a talk was conducted by CEA on the topic How Smart is your city and the role of Civil Engineers with Mr. NSN Murty as the speaker. Mr. NSN Murty is known as a Thought Leader and Public Speaker in the Smart Cities, GovTech and Government Transformation. In the last 9 years, worked on several First-of-Its-Kind projects/ programs and gained rich experience in Smart Mobility, InfraTech, Public Safety & Security, Integrated Command & Control Centers, Smart Utilities, Smart Governance and Smart Financing. The talk was majorly focused on understanding what exactly a smart city and how civil engineers can contribute to it. Talk was followed by a fruitful discussion and Q&A session.

Newsletters

The Newsletters has been continued from last year under the name "The Caterpillar". Total of 4 issues have been published.

APOGEE Meets

Several APOGEE Paper/Project Meets were held. Intense brainstorming was done to discuss ideas as well as the project pitching rounds to follow. Several exciting events are planned for APOGEE 2021. Emphasis was given to make the APOGEE events better and more challenging. Project/ Paper ideas were encouraged, and the student's doubts were cleared. All events replaced with new and exciting events for online mode.

14 SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No	Software/Equipment	Type	No. of Licenses or Qty.
1.	BIM 360 Design	Software	1
2.	PLAXIS 3D Suite	Software	1
3.	Geo HECRAS Floating Network License 1D & 2D	Software	1
4.	Theodolite Vernier set with stand	Equipment	2
5.	Virtual Reality Headset	Equipment	1

B1.10.3   Department: Chemical Engineering

Number of faculty members (as on 31 December 2020)

Professor	01*
Associate Professor	06
Assistant Professor	10+01*
Lecturers	00

* Off Campus.

Head of the Department   **:** Prof. Banasri Roy

Contact details   **:** banasri.roy@pilani.bits-pilani.ac.in

Number of PhD Scholars   **:** 14 + 2* (* Part Time)

Ph.D. Thesis Submitted during the year   **:** 02

1.   **SPONSORED RESEARCH ACTIVITIES**

PROJECTS SANCTIONED

A.   Government Sanctioned: **NA**

B.   Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Design of inline sensors for heavy metal detection	Chemical Engineering	Somak Chatterjee	Krishna Etika	MNC based in USA	-	27.00

C.   International Sanctioned Projects: **NA**

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Development of composite membranes for desalination applications	Chemical Engineering	Somak Chatterjee	-	ACRG	-	7.75
2	Cytometric Fingerprinting and Machine Learning (CFML) for evamping Biogas Technology and Sustainable Rural Developmet	Chemical Engineering	Abhishek S Dhoble	-	ACRG	-	5.30
3	Development of Novel Catalysts for Pyrolysis derived Bio-oil Upgradation	Chemical Engineering	Arghya Banerje	-	ACRG	-	5.25
4	Role of Oxophilic promoters in the ring-opening of Biomass derived 2-pyrone molecules	Chemical Engineering	Shelaka Gupta	-	ACRG		5.25

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Prevention of Hazardous Field-Firing of Bagasse and Its Sustainable Utilization as a Raw Material in an Innovative Industrial Process	Chemical Engineering	Srinivas Appari	Bahurdeen A, Prashanta K Sahu (BITS Pilani Hyderabad campus)	SPARC-MHRD	Shinji Kudo, Nakabayashi Koji, Kyushu University, Japan	28.79

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
2	Process development for bio-mitigation of flue gases (CO_2, SO_x, and NO_x) using chemolithotrophs and production of value-added products.	Chemical Engineering	Smita Raghuvanshi	Suresh Gupta,	SERB	-	31.61
3	Assessment of Mixed-Matrix membrane system for CO_2 separation for upgradation of Biogas to Bio-Compressed Natural Gas (Bio-CNG)	Chemical Engineering	Dr. Bhanu Vardhan Reddy Kuncharam	-	DST-SERB (SRG	-	24.47

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Understanding emulsion kinetics of surfactants	Chemical Engineering	Pradipta Chattopadhyay	-	Total Oil India Pvt. Ltd.	-	7.90
2	Development of microporous PVC coatings for synthetic leather applications	Chemical Engineering	Dr. Krishna Chaitanya Etika	-	Mayur Uniquoters Pvt Ltd	-	7.57

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Project under Gender Grant Program	Chemical Engineering	Dr. Priya C Sande	-	Association of Commonwealth Universities (ACU), London, UK	-	0. 85

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	Development of metal organic frameworks for ionic contaminants removal	Chemical Engineering	Somak Chatterjee	-	RIG	-	2.00
1	Hybrid Polymer Nanocomposites for EMI Shielding Applications	Chemical Engineering	Dr. Krishna Chaitanya Etika	-	ACRG	-	7.50
4	Development of a novel catalyst for upgradation of pyrolysis derived bio-oil	Chemical Engineering	Dr. Arghya Banerjee	-	RIG	-	2.00
5	Development of bimetallic catalyst for the ring-opening of biomass-derived 2-pyrone molecules	Chemical Engineering	Dr. Shelaka Gupta	-	RIG	-	2.00

3. COMPLETED PROJECTS

A. Completed Government Projects: NA

B. Completed Industry Projects: NA

C. Completed International Projects: NA

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR Lakhs)
1	**JEEWANU: J**udicious **E**ngineering of microbiomes for **E**nhanced sanitation & **W**ater resources, **A**griculture and **N**ational health **U**pliftment	Chemical Engineering	Dr. Abhishek S. Dhoble	NA	RIG	NA	2.00

2. PUBLICATIONS

(i) The faculty of the department published papers in international refereed journals during the year:

1. PK Singh, S Bhanot, HK Mohanta, V Bansal, Design and Implementation of Adaptive Fuzzy Knowledge Based Control of pH for Strong Acid-Strong Base Neutralization Process, Journal of Engineering Research 8 (2).

2. Ramakrishna Chave, Devendra Purbia, Banasri Roy, Vinod M Janardhananm Bahurdeen A, Srinivas Appari, Effect of Calcination Time on the Catalytic Activity of Ni/γ-Al2O3 Cordierite Monolith for Dry Reforming of Biogas, International Journal of of Hydrogen Energy, https://doi.org/10.1016/j.ijhydene.2020.11.125

3. BR Kumar, VK Kumar, E Nagabhushan, KC Etika, Enhanced Thermo-mechanical, Thermal and EMI Shielding Properties of MWNT/MAgPP/PP nanocomposites Prepared by Extrusion, Composites Part C: Open Access, 100086.

4. S Chatterjee, M Mukherjee, S De, Groundwater defluoridation and disinfection using carbonized bone meal impregnated polysulfone mixed matrix hollow-fiber membranes, Journal of Water Process Engineering 33, 101002

5. Anand, A., Raghuvanshi, S., & Gupta, S. (2020). Trends in carbon dioxide (CO2) fixation by microbial cultivations. Current Sustainable/Renewable Energy Reports, 7(2), 40-47.

6. Ashik, U., Asano, S., Kudo, S., Pham Minh, D., Appari, S., Hisahiro, E., & Hayashi, J. (2020). The distinctive effects of glucose-derived carbon on the performance of Ni-based catalysts in methane dry reforming. Catalysts, 10(1), 21.

7. Athira, G., Bahurudeen, A., & Appari, S. (2020). Thermochemical conversion of sugarcane bagasse: Composition, reaction kinetics, and characterisation of by-products. Sugar Tech. https://doi.org/10.1007/s12355-020-00865-4

8. Bhaskaran, K., Bheema, R. K., & Etika, K. C. (2020). The influence of Fe3O4@GNP hybrids on enhancing the EMI shielding effectiveness of epoxy composites in the X-band. Synthetic Metals, 265, 116374.

9. Kumar K, A., Verma, G., Raghuvanshi, S., & Gupta, S. (2021). Defluoridation studies using graphene oxidebased nanoadsorbents. Green Chemistry and Water Remediation: Research and Applications, 35-57.

10. Kuncharam, B. V., & Dixon, A. G. (2020). Multi-scale two-dimensional packed bed reactor model for industrial steam methane reforming. Fuel Processing Technology, 200, 106314.

11. Prakash Singh, R., Mishra, S., Raghuvanshi, S., & Nath Jha, P. (2020). GC-MS analysis of change in fatty acid composition of Halobacterium bacillus Licheniformis HSW-16 under varying salinity condition. Journal of Microbiology, Biotechnology and Food Sciences, 09(04), 290-292.

12. Sharma, S., Aich, S., & Roy, B. (2021). Low temperature steam reforming of ethanol over Cobalt doped bismuth vanadate [bi4(v0.90co0.10)2o11-δ (BICOVOX)] catalysts for hydrogen production. Journal of Physics and Chemistry of Solids, 148, 109754.

(ii) The faculty of the department published papers in international/national conferences during the year:

1. Sharma, P., Sheth, P. N., & Mohapatra, B. N. (2020). Waste-to-Energy: Issues, challenges, and opportunities for RDF utilization in Indian cement industry. Proceedings of the 7th International Conference on Advances in Energy Research, 891-900.

2. Shukla, A., Bhatt, H., & Pani, A. K. (2020, February). Variable selection and modeling from NIR spectra data: A case study of diesel quality prediction using LASSO and Regression Tree. In 2nd International Conference on Data, Engineering and Applications (IDEA) (pp. 1-6). IEEE. https://doi.org/10.1109/IDEA49133.2020.9170708

3. Agrawal, G., Chaudhary, A., & Pani, A. K. (2020, April). Temperature Optimization in Non-isothermal Tubular Reactor using Genetic Algorithm. In 2020 3rd International Conference on Communication System,

Computing and IT Applications (CSCITA) (pp. 23-26). IEEE. https://doi.org/10.1109/CSCITA47329.2020.9137782

4. Chattopadhyay Pradipta (2020, December). Recent Progress on Enhancement of Foam Stability and its Latest Applications in Enhanced Oil Recovery. Proceedings of 4th International Conference on Soft Materials (ICSM 2020), pp. 70.

5. A. Kumar K, G. Verma, S. Raghuvanshi, S. Gupta. "Defluoridation studies using graphene oxide based Nanoadsorbent", Edited by Sanjay K. Sharma, Elsevier, 2020.

6. Chaturvedi, H. and Arvind Kumar Sharma, Syngas Fermentation: Current Studies and Future Outlook, 16th Annual Session of Students' Chemical Engineering Congress (SCHEMCON-2020), [conducted through virtual mode from] IIChE Headquarters, Kolkata, India, Oct. 9-10, 2020.

3. CONFERENCES/WORKSHOPS ATTENDED/PAPERS PRESENTED

i) National:

1. A K Pani attended and presented a paper at 2nd International Conference on Data, Engineering and Applications (IDEA), 2020 held at RGPV, Bhopal

ii) International:

1. Dr. Somak Chatterjee attended "Water Challenges post COVID-19", conducted from 7th -28th May,2020 by IIT Madras and ICCW, Madras.

4. BOOKS/BOOK CHAPTERS PUBLISHED:

1. Ellamla, H. R., & Srinivas Appari, . (2020). Technoeconomic analysis of Biorefinery processes for Biofuel and other important products. Lignocellulosic Biorefining Technologies, 333-351. John Wiley Publishers, ISBN: 978-1-119-56883-4

2. Vyas T., Dhoble A.S., Pandey M., Singhvi G., Human microbiome as drug delivery system, Reference Module in Food Science, Elsevier, 2022, ISBN 9780081005965

3. Basu, D., & Pani, A. K. (2020). Back Pressure Monitoring of Power Plant Condenser Using Multiple Adaptive Regression Spline. In Emerging Research in Data Engineering Systems and Computer Communications (pp. 1-10). Springer, Singapore.

4. S. Chatterjee, I. Sarkar and K. Harish Kumar, Synthesis of thin film nanocomposite membranes and their application in dye removal from wastewater, in M. Shah, S. R. Couto (Eds.), Membrane-Based Hybrid Processes for Wastewater Treatment, Elsevier.

5. L. Biswal and S. Chatterjee, in M. Shah, S. R. Couto (Eds.) Metal organic frameworks (MOFs) in aiding water purification from emerging and ionic contaminants, Removal of Emerging Contaminants from Wastewater through Bio-nanotechnology, Elsevier.

6. L. Biswal, S. Chatterjee and S. Seth, Application of Composite Membrane-Based Technology in Treatment of Textile Industry Effluents in S. Dhiman and M. Mukherjee (Eds.), Waste Management: Opportunities & Challenges for Sustainable Development, CRC Press, Taylor and Francis.

5. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NA

6. INVITED TALKS GIVEN BY BITS FACULTY:

1. Dr Amit Jain delivered an invited talk on the topic "Biosurfactant production by Pseudomonas aeruginosa using EPA priority pollutant waste engine oil as substrate and its oil recovery application", in the International Conference 'CHEM-CONFLUX20' at MNNIT Allahabad during February 14-16, 2020.

2. Dr. Smita Raghuvanshi delivered an invited talk on the topic "Life cycle assessment (LCA) of engineering based processes" in the International Conference 'CHEM-CONFLUX20' at MNNIT Allahabad during February 14-16, 2020.

3. Dr.Smita Raghuvanshi delivered an invited talk on the topic ""Life Cycle Assessment of Processes-

   Interlinking of Ecoinvent database and LCA software", in one day seminar on "Contemporary Environmental Issues: Concepts, Tools and Practices" organised at Department of Environmental Sciences, Central University of Jharkhand - Ranchi on July 24, 2020

4. Dr. Somak Chatterjee served as a resource person during the online five-day Faculty development program on "Domestic and Industrial water and wastewater treatment", organized during 6th to 10th June'2020 and gave a talk on "Natural adsorbents for ionic contaminants removal from groundwater"

5. Arvind Kumar Sharma, The Chemical Sciences: A Touch of History and the Future, Webinar in association with the Royal Society of Chemistry (London), BITS Pilani, Pilani, India, Nov 7, 2020.

7. INVITED TALKS ARRANGED IN THE DEPARTMENT:

1. **Speaker:** Dr. Sandeep Mora, Project and Technical Lead, MERCK (MSD), US.

   Title: Bioprocess Development and Scale-up: Biomaterial, Biobutanol, and Bioethanol

   Date : 03/10/2020 (Thursday)

   Time: 11.00 AM-11:50 AM.

2. **Speaker:** Mr. Kapil Malhotra, Sr. Vice President- Marketing, Gujarat Fluorochemicals Limited

   Title: Fluoropolymers and its applications

   Date: 31/10/2020 (Saturday)

   Time: 5.00 PM-6:00 PM

3. **Speaker:** Prof. Yong Tae Park, Associate Professor, Department of Mechanical Engineering, Myongji University, Korea

   Title: Layer-by-Layer Assembled Multi-Functional Nano Thin Films

   Date: 28/11/2020 (Saturday)

   Time: 11.00 AM-11:50 AM.

4. **Speaker:** Dr. Rishi Gupta, Application Scientist for Characterization division at Anton Paar India Pvt. Ltd.

   Title: **Basics of Gas Sorption Analysis (BET surface area analysis and Catalyst characterization)**

   Date: 20th May 2020

   Time: 11:30 - 13:00 Hrs

8. AWARDS AND RECOGNITIONS WON

i) Faculty: NA

ii) Students:

1. Linisha Biswal, PhD student under Dr. Somak Chatterjee, won the gold award under research scholar category, in the CII MILCA programme, 26-27th December, 2020 for her work on conductive polymeric beads for effluent treatment. She presented the work with a scope to translate the research into an industrial output.

2. AIChE Student Awards:Donald F. Othmer Sophomore Academic Excellence Award was awarded to Gaurav Bellal Natesh (ID: 2018A1PS0027P).

3. AIChE Student Awards:Freshman Recognition Award was awarded to Astitva Kumar Gupta (ID: 2019A1PS0694P).

9. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION: NIL

10. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR:

   1. Ion Selective Electrode for Fluoride (RIG-Somak Chatterjee)

   2. Hydrothermal Autoclave (RIG-Somak Chatterjee)

   3. Ultrasensitive heating cum stirring facility ((Industrial Consultancy-Somak Chatterjee)

   4. Four Probe Electrochemical Detection Setup (Industrial Consultancy-Somak Chatterjee)

   5. Membrane Batch Cell (ACRG-Somak Chatterjee)

   6. Membrane Caster (ACRG-Somak Chatterjee)

11. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

Chemical Engineering Association:

1. The association has started with a series of online talks in the name Chem-E-Talks. For the first of talk of this series, a young entrepreneur Ms. Shikha Shah, Founder and CEO, AltMat was invited and had delivered an invited talk on December 28, 2020.

IIChE Pilani Regional Center:

IIChE PRC and student chapter conducted following events in 2020:

1. CHEMICOOL Challenge, May 2020

>> Various challenges/puzzles related to chemical engineering are posted on IIChE PRC Instagram page and amount raised from the event is donated to PMCARES fund.

Link: https://www.instagram.com/p/B_9TUQQpmwI/?igshid=rehrnbd13v8j

2. Chem-E-Chronicles, November 2020-ongoing

>> Interview of chemical engineering faculties is published on popular blogging site: medium.com.

Link: https://iichebitspilani.medium.com/.

AIChE Pilani Regional Center:

Since the appointment of the current student board, AIChE BITS Pilani has been actively conducting various events and taking initiatives. Till now we have conducted two competitions; Quar-N-Science(Science-based video making competition) and Chem-E-Case(A case study competition on rerouting pharma operations to a sanitiser production), out of which the latter got over 100 registrations from students across India. We conducted two webinars on resume writing and research paper writing. We have also been actively having discussions with AIChE Chapters around the globe to understand how they operate and learn from them. We also started our sister chapter relation with AIChE Chapter at Virginia Tech we have been having meaningful discussions with them ever since, in future we are planning to have collaborative events with them. We also started our WordPress site where we publish articles on chemical engineering and allied fields. We also started our Instagram and LinkedIn accounts to reach more people, we have published many newsletters, informative articles and a podcast series(Titled: What If...?) on these accounts.

You can view our Instagram and LinkedIn Page here:

https://www.instagram.com/aiche.bitsp/?hl=en

https://www.linkedin.com/company/aiche-bits-pilani-student-chapter/?originalSubdomain=in

B1.10.4 Department: Chemistry

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	4
Associate Professors	9
Assistant Professors	3
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department: Prof. Ram Kinkar Roy Contact details: 01596 255279

Number of Ph.D. Scholars:

Full Time   46

Part Time   0

Aspirant Scheme   0

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Sonam Sharma	2014PHXF0003P	-	Dr. Bibhas Ranjan Sarkar	-
2.	Vaishali Saini	2014PHXF0014P	Imidazolium- and Pyridinium- based Compounds as Potential Catalysts and Chemosensors.	Prof. Bharti Khungar	-
3.	Vishal Kachwal	2014PHXF0015P	Development of Solid State Luminescent Smart Materials for Multi-stimuli Probes.	Prof. Inamur R. Laskar	-
4.	Aabid Hamid	2014PHXF0406P	-	Prof. Ram Kinkar Roy	-
5.	Chavi Mahala	2016PHXF0015P	-	Prof. Surojit Pande	Dr.Mrinmoyee Basu

1.   SPONSORED RESEARCH AND CONSULTANCY PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Investigating the Correlation Between Thrmodynamic and Kinetic Parameters Through Density Functional Reactivity Theory (DFRT) Based Approach	Chemistry	Prof. Ram Kinkar Roy	-	SERB-DST	-	41,28,825
2	Synthesis and C-H Bond Functionalization of N-Heterocycles Employing Novel Pincer-type Complexes of Late Transition Metals	Chemistry	Prof. Anil Kumar	-	SERB Project CR G/2020/00 2220	-	-
3	A direct catalytic approach towards the synthesis of C3-substituted pyrroles in non asymmetric/ asymmetric fashion	Chemistry	Dr. Indresh Kumar	-	SERB	-	-
4	The project entitled "Investigation of the nature and origin of intermolecular Se-H- - -X (X = 0, N, S, Sc) hydrogen bonding interaction using matrix isolation infrared spectroscopy and theoretical calculations"	Chemistry	Prof. Shamik Chakraborty	-	SERB, DST agency	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Transition metal-catalyzed synthesis of fused heterocycles via C-C/C-N bond forming strategies	Chemistry	Dr. Rajeev Sakhuja	-	SERB	-	33.28 Lakhs

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting.	Chemistry	Mrinmoyee Basu-	NIL-	DST Inspire	NIL	35,00,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals:

1. Gurpreet Kaur, Rajinder Kaswan, S. C. Sivasubramanian, Anshuman Dalvi. Electrical Conductivity and Thermal Studies on [EMIM] BF4, Li+ and Cu2+ Confined Silica Gel Composites. AIP Conference Proceedings 2265, 030629 (2020)

2. "Quinoline Glycoconjugates as Potentially Anticancer and Anti-inflammatory Agents: An Investigation Involving Synthesis, Biological Screening, and Docking"; Badvel Pallavi, Prachi Sharma, Noorullah Baig, Vimal Kumar Madduluri, Ajay K. Sah, Udit Saumya, Uma S. Dubey, Paritosh Shukla*; ChemistrySelect; 2020; 5, 9878 – 9882; DATE ACCEPTED: 31July2020. doi.org/10.1002/slct.202002345. ISSN: 2365-6549

3. "Green Synthesis, in-vitro Antimicrobial Evaluation, Docking, and SAR Studies of Potent Quinoline-4-Carboxylic Acids; Badvel Pallavi, Rajnish Prakash Singh, Prabhat Nath Jha, Subhash Chander, Sankaranarayanan Murugesan, Prachi Sharma, Paritosh Shukla*; Letters in Organic Chemistry, 2019, 16(11), 874-883. DOI: 10.2174/1570178616666190123121506. ISSN: 1570-1786

4. "Novel Spiro/non-Spiro Pyranopyrazoles: eco-Friendly Synthesis, in-vitro Anticancer Activity, DNA binding, and in-silico Docking Studies"; Paritosh Shukla*, Ashok Sharma, Leena Fageria and Rajdeep Chowdhury; Current Bioactive Compounds (CBC), 2019, 15(2); 257 - 267. DOI:10.2174/1573407213666170828165512. ISSN: 1573-4072

5. Bajaj, K., Pillai, G. G., Sakhuja, R., Kumar, D. Expansion of Phosphane Treasure Box for Staudinger Peptide Ligation, Journal of Organic Chemistry, 2020, 85(19), 12147-12159.

6. Mahesha, C. K., Mandal, S. K., Sakhuja, R. Indazolone-Assisted Sequential ortho-Alkenylation-Oxidative Aza-Michael Addition of 1-Arylindazolone Using Acrylates Under Ru(II) Catalysis, Asian Journal of Organic Chemistry 2020, 9(8), 1199-1204.

7. Sharma, S., Pukale, S. S., Sahel, D. K., Agarwal, D., Manu, D., Mohanty, S., Sakhuja, R., Mittal, A., Chitkara, D. Folate-Targeted Cholesterol-Grafted Lipo-Polymeric Nanoparticles for Chemotherapeutic Agent Delivery, AAPS PharmSciTech, 2020, 21(7), 280.

8. Agarwal, D., Singh, R. P., Jha, P. N., Sakhuja, R. Fabrication of Deoxycholic Acid tethered α-Cyanostilbenes as Smart Low Molecular Weight Gelators and AIEE probes for Bio-imaging, Steroids 2020, 160, 108659.

9. Seliem, I. A., Panda, S. S., Girgis, A. S., Nagy, Y. I., George, R. F., Fayad, W., Fawzy, N. G., Ibrahim, T. S., Al-Mahmoudy, A. M. M., Sakhuja, R. Design, Synthesis, Antimicrobial, and DNA Gyrase Inhibitory Properties of Fluoroquinolone-Dichloroacetic Acid Hybrids, Chemical Biology & Drug Design 2020, 95, 248-259.

10. Mahala, C.; Sharma, M. D.; Basu, M. (2020) Type-II Hetreostructure of ZnO and Carbon Dot Demonstrates Enhanced Photoanodic Performance in Photoelectrochemical Water-splitting. Inorganic Chemistry, 59: 6988-6999.

11. Sharma, M. D.; Mahala, C.; Basu, M. (2020) 2D Thin Sheet Heterostructures of MoS_2 on $MoSe_2$ as Efficient Electrocatalyst for Hydrogen Evolution Reaction in Wide pH Condition. Inorganic Chemistry, 59: 4377-4388.

12. Sharma, M. D.; Mahala, C.; Basu, M. (2020) Sensitization of Vertically Grown ZnO 2D Thin Sheets by MoS_x for Efficient Charge Separation Process Towards Photoelectrochemical Water Splitting Reaction. Int. J. Hydrog. Energy, 45: 12272-12282.

13. Mahala, C.; Sharma, M. D.; Basu, M. (2020) Nanosheets of ZnO/C_3N_4-QDs Function as an Efficient Photoanode in Photoelectrochemical Water Splitting. ACS Applied Nano Materials, 3: 1999-2007.

14. Mahala, C.; Sharma, M. D.; Basu, M. (2020) Near-field and Far-field Plasmonic Effect of Au Nanoparticles on Enhancement of Solar Water-splitting Performance of 2D Nanosheets of ZnO. ACS Applied Nano Materials, 3: 1153-1165.

15. Sharma, M. D.; Mahala, C.; Basu, M. (2020) Photoelectrochemical Water Splitting by In_2S_3/In_2O_3 Composite Nanopyramids. ACS Applied Nano Materials, 3; 11638–11649.

16. Kumari, S., Ray, S (2020). Zeolite encapsulated Ni(II) Schiff-base complexes:improved catalysis and site isolation. New J. Chem., 44, 14953 -14963.

17. Kumaria S., Ramesha A., Das B., Ray S (2020). Zeolite-Y Encapsulated Cobalt(II) Schiff-Base Complexes Employed for Photocatalytic Dye-Degradation & Upcycling CO2. Inorg. Chem. Front. (In Press).

18. Hamid, A. ; Roy, R. K. (2020). Correlation between equilibrium constant and stabilization energy: A combined approach based on chemical thermodynamics, statistical thermodynamics and density functional reactivity theory, J. Phys. Chem. A., 124, 1279-1288.

19. Chaudhary, J.; Mittal, V.; Mishra, S.; Daiya, A.; Chowdhury, R.; Laskar I. R.; Roy, R. K. (2020). A new AIE active, halochromic white light emissive molecule: Combined experimental and theoretical study, J. Phys. Chem. C., 124, 15406-15417.

20. Hamid, A.; Roy, R. K. (2020). Validation of Hammett's linear free energy relationship through an unconventional approach, J. Phys. Chem. A., 124, 5775-5783.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Prof. Ram Kinkar Roy Chaired a session in the international conference titled 'Structure and Dynamics of Molecular and Condensed Matter Systems (ICSD-2020)', organized by IISER Kolkata in Puri, March 1-3, 2020.

ii) International:

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. SUBMITTED & ACCEPTED: BOOK CHAPTER: Chapter 3, Titled: "Chemically Cross-linked Polysaccharides for Biomedical Applications"; Mehak Rastogi, Sunil Kumar Dubey*, Siddhanth Hejmady, Paritosh Shukla, Sanjay Tiwari, Gautam Singhvi; Book: Tailor-Made Polysaccharides in Biomedical Applications; Ref: 978-0-12-821344-5 B978-0-12-821344-5.00003-5; Publisher: Elsevier; submitted in May, 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

- Organised symposium in the Department called as "Theoretical Chemistry Symposium (TCS-2019) during February 13-16, 2019.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Paritosh Shukla presents an invited talk in Birla Balika Vidyapeeth entitled "about water and science" on 21-Sept-2019, in Birla Balika Vidyapeeth auditorium, Pilani.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

Following Faculties delivered invited lecture in the department they also interacted with Faculties and Students.

S.No.	Faculty Name	Univ.	Date
1.	Prof. Srinivasan Sampath	IISc., Bangaluru	26/02/2019
2.	Prof. Naresh Patwari	IIT, Bombay	09/03/2019
3.	Prof. Joydev K Laha	NIPER, Mohali	09/03/2019

10. AWARDS AND RECOGNITIONS

Won by Faculty:

1. Prof. Anil Kumar is selected for CRSI Bronze Medal (2019-20) by Chemical Research Society of India, Bangalore

Won by Students: **NIL**

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED: NIL

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: NIL

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED:

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	High Vacuum Pump with accessories	1
2.	Melting Point Apparatus	2
3.	Maxwell Velocity Distribution	1
4.	Electrode Kinetics	2
5.	Depression of Freezing Point	2
6.	"Q-Chem 5.3 perpetual site license for Linux 64 bit OS" (Software)	1
7.	Chem Draw Professional 19 for windows, academic perpetual license (Software)	1
8.	Gaussian 16 + Gaussview 6 + TCP Linda, site license for single machine type (up-gradation from existing older versions) (Software)	1
9.	Server + Tyrone Camera SS400TR-54	1

B1.10.5 Department: Computer Science & Information Systems

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	03
Associate Professors	03
Assistant Professors	19
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department : **Prof. Sudeept Mohan**

Contact details : 01596-255321

Number of Ph.D. Scholars : **31**

Full Time : **23**

Part Time : **06**

Aspirant Scheme : **02**

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1. SPONSORED RESEARCH AND CONSULTANCY

(i) PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Deep Learning-Based Intrusion Detection System for Defending Android-Based HTML5 Web Applications against Cross-Site Scripting (XSS) Attacks	CSIS	Shashank Gupta	Amit Dua	DSCI National Centre of Excellence	-	5,00,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Modeling Darkweb Users for Smart Criminal Investigation	CSIS	Vinti Agarwal	-	RIG	-	2,00,000
2	QoS Provisioning and Load Balancing in FoG Computing-Based IoT Networks	CSIS	L Rajya Lakshmi	-	RIG	-	2,00,000

(ii). ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Mobile App for Assisting Indian Farmers in Improving Yield by Automatic Identification of Plant Diseases (Rice and Tomato)	CSIS	Sundaresan Raman	-	DST	-	17,73,158
2	Design and Implementation of Content Based Recommender System for Effectively Answering Web based User Queries	CSIS	Yashvardhan Sharma	Lavika Goel	DST	-	16,57,560
3	Development of Deep Learning-Based Intrusion Detection System for Defending Android-Based HTML5 Web Applications against Cross-Site Scripting (XSS) Attacks	CSIS	Shashank Gupta	Amit Dua	DSCI National Centre of Excellence	-	5,00,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Disaster Monitoring from Aerial Imagery using Deep Learning	CSIS	Pratik Narang	-	ACRG	-	7,90,000
2	Modeling Darkweb Users for Smart Criminal Investigation	CSIS	Vinti Agarwal	-	RIG	-	2,00,000
3	QoS Provisioning and Load Balancing in FoG Computing-Based IoT Networks	CSIS	L Rajya Lakshmi	-	RIG	-	2,00,000
4	MOR: An Integrated Model-Based Safety Framework for Complex Inter-Connected Systems	CSIS	Rajesh Kumar	-	RIG	-	2,00,000

(iii). COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Nil						

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Enhancing Cyber Security Approaches using Artificial Intelligence	CSIS	Pratik Narang	-	RIG	-	2,00,000
2	Specification and Enforcement Verification of Dynamic Separation of Duty Constraints in Attribute Based Access Control Systems	CSIS	Sadhana Jha	-	RIG	-	2,00,000

2. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Poonam Goyal, J S Challa, S Srivastava and N Goyal, "Anytime Frequent Itemset Mining of Transactional Data Streams", Big Data Research, 2020, 21, 100146.

2. Chandramani Chaudhary, Poonam Goyal, Navneet Goyal, Y P Phoebe Chen, "Image Retrieval for Complex Queries Using Knowledge Embedding", ACM Transactions on Multimedia Computing Communications & Applications (TOMM) 2020, 16(1) 1-23 Jagat Sesh Challa, Poonam Goyal, Ajinkya Kokandakar, Dhananjay Mantri, Pranet Verma, Sundar Balasubramaniam and Navneet Goyal, "Anytime Clustering of Data Streams while handling Noise and Concept Drift", In Journal of Experimental & Theoretical Artificial Intelligence (TETA), T&F (Accepted)

3. Poonam Goyal, J S Challa, Dhruv Kumar, Anuvind Bhatt, Sundar Balasubramaniam and Navneet Goyal, "Grid-R-Tree: A data structure for efficient neighborhood and nearest neighbor queries in data mining" International Journal of Data Science and Analytics (JDSA), Springer, 2020, 10(1) 25-47 DoI: 10.1007/s41060-020-00208-2

4. S Islam, S Balasubramaniam, S Gupta, S Brajesh, R Badlani, N Labhishetty, A Baid, Poonam Goyal,and Navneet Goyal, "Automatic Parallelization of Representative-based Clustering Algorithms" International Journal of Data Science and Analytics (JDSA), Springer

5. Poonam Goyal, Prerna Kaushik, Pranjal Gupta, Dev Vashisth, Shavak Agarwal and Navneet Goyal, " Multilevel Event Detection, Storyline Generation and Summarization for Tweet Streams", IEEE Transactions Computational Social Systems (TCSS) 2020, Vol. 7(1), pp 8-23. DoI: 10.1109/TCSS.2019.295411

6. Astha Srivastava, Shashank Gupta, Megha Quamara, et al. "Future IoT-Enabled Threats and Vulnerabilities: State of the Art, Challenges and Future Prospects", International Journal of Communication Systems, Wiley, 2020.

7. Arunima Ghosh, Shashank Gupta, Amit Dua, et al. "Security of Cryptocurrencies in Blockchain Technology: State-of-art, Challenges and Future Prospects", Journal of Network and Computer Applications (JNCA), Elsevier, 2020.

8. A. Mehra, M. Mandal, P. Narang, V. Chamola, ReViewNet: A Fast and Resource Optimized Network for Enabling Safe Autonomous Driving in Hazy Weather Conditions, IEEE Transactions on Intelligent Transportation Systems. 2020.

9. P. Garg, A. S. Chakravarthy, M. Mandal, P. Narang, V. Chamola, M. Guizani, ISDNet: AI-enabled Instance Segmentation of Aerial Scenes for Smart Cities, ACM Transactions on Internet Technology. 2020.

10. B. Mishra, D. Garg, P. Narang, V. Mishra, A Hybrid Approach for Search and Rescue using 3DCNN and PSO, Neural Computing and Applications. 2020.

11. R. K. Kaliyar, A. Goswami, P. Narang, DeepFakE- Improving Fake News Detection using Tensor Decomposition-based Deep Neural Network, The Journal of Supercomputing. 2020.

12. B. Mishra, D. Garg, P. Narang, V. Mishra, Drone-surveillance for Search and Rescue in Natural Disaster, Computer Communications, 156, 1-10. 2020.

13. G. Bansal, V. Chamola, P. Narang, S. Kumar, S. Raman, Deep3DSCan: Deep Residual Network and Morphological Descriptor based Framework for Lung Cancer Classification and 3D Segmentation, IET Image Processing, 14(7), 1240-1247. 2020.

14. R. K. Kaliyar, A. Goswami, P. Narang, S. Sinha, FNDNet: A Deep Convolutional Neural Network for Fake News Detection, Cognitive Systems Research, 61, 32-44. 2020.

15. Mahapatra, T. and Prehofer, C. "Graphical Flow-based Spark Programming". Journal of Big Data. 2020;7(1):4. Available from: https://doi.org/10.1186/s40537-019-0273-5

16. Spengler, H., Lang, C., Mahapatra, T., Gatz, I., Kuhn, KA and Prasser, F. JMIR Med Inform 2020;8(7):e15918, "Enabling Agile Clinical and Translational Data Warehousing: Platform Development and Evaluation", URL: https://medinform.jmir.org/2020/7/e15918, DOI: 10.2196/15918

17. Mahapatra, T. Composing high-level stream processing pipelines. J Big Data 7, 81 (2020). https://doi.org/10.1186/s40537-020-00353-2

3. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Indranil Misra, **Mukesh Kumar Rohil**, S. Manthira Moorthi and Debajyoti Dhar, "SPRINT: Spectra Preserving Reflectance Image FusioN Technique for Landsat-8 OLI Panchromatic and Resourcesat-2A LISS-3 Multispectral Data", ISRS-ISG National Symposium on Remote Sensing for Environmental Monitoring & Climate Change Assessment: Opportunities and Challenges (ISRSNS 2020), December 18-19, 2020, SAC-ISRO, Ahmedabad, India.

ii) International:

1. A. Mehta, H. Sinha, P. Narang and M. Mandal, HIDeGAN: A Hyperspectral-guided Image Dehazing GAN, CVPR Workshops, USA, June 2020.

2. Anirudh Srinivasan, Sundaresan Raman, Early Blight Identification in Tomato Leaves Using Deep Learning, International Conference on Contemporary Computing and Applications, Feb 2020, AKTU, Lucknow, India.

3. Sundaresan Raman, Manoj Kannan, Demonstrating Key Concepts through Student-participated Classroom Activities in Computer Programming Course, Evidence based Teaching and Learning, Lilly Conference, Austin, TX Jan 2020.

4. Subham Kumar, Gaurang Bansal, Virendra Singh Shekhawat, "A Machine Learning Approach for Traffic Flow Provisioning in Software Defined Networks", The 34th International Conference on Information Networking (ICOIN 2020) January 7-10, 2020, Barcelona, Spain

5. Ritu Arora,Anand Wani,Ankur Vineet,Bhavik Dhandhalya,Yashvardhan Sharma,Sanjay Goel, "Continuous Conflict Prediction during Collaborative Software Development: A step-before Continuous Integration", Proceedings of the 3rd International Conference on Software Engineering and Information Management, ICSIM '20,ACM Publications, Sydney NSW Australia 12-15 January, pp. 105-109,2020.

6. Harsh Sinha, Sakshi Kalra, and Yashvardhan Sharma, "Text-Convolutional Neural Networks for Fake News Detection in Tweets", 8th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2020), National Institute of Technology Karnataka, Surathkal, Karnatka, India, January 4 - 5, pp. 81-90, 2020.

7. Tarun Kumar and Yashvardhan Sharma, "Character aware Models with Similarity Learning for Metaphor Detection", The Second Workshop on Figurative Language Processing FigLang 2020, The 58th Annual Meeting of the Association for Computational Linguistics (ACL) Fig-Lang@ACL 2020 pp.116-125, July 9-10, 2020.

8. Naman Deep Srivastava, Sakshi Kalra and Yashvardhan Sharma, " Combating Online Hate: A Comparative Study on Identification of Hate Speech and Offensive Content in Social Media Text", 2020 IEEE Recent Advances in Intelligent Computational Systems (RAICS),IEEE, 3-5 December 2020.

9. Vishal Gupta, "Blended SPOC Teaching and Learning Model for Computer Programming Course: Insights and Defeating Challenges", 2020 International Conference on Engineering, Technology and Education (TALE2020).

10. Rathee S., Haribabu K., Patel P., Bhatia A., Gandhi U. (2020) Analysis and Performance Evaluation of Different Methods to Achieve Way-Point Enforcement in Hybrid SDN. In: Barolli L., Amato F., Moscato F., Enokido T., Takizawa M. (eds) Web, Artificial Intelligence and Network Applications. WAINA 2020. Advances in Intelligent Systems and Computing, vol 1150. Springer, Cham. https://doi.org/10.1007/978-3-030-44038-1_18.

11. Indranil Misra, Mukesh Kumar Rohil, S. Manthira Moorthi and Debajyoti Dhar, "Mars Surface Multi-Decadal Change Detection using ISRO's Mars Color Camera (MCC) and Viking Orbiter images", 5th IAPR International Conference on Computer Vision & Image Processing (CVIP 2020), December 4-6, 2020, IIIT Allahabad, India.

12. K. K. Sreelakshmi, J. Jennifer Ranjani, "A Non-Invasive approach for Driver Drowsiness Detection using Convolutional Neural Networks", Proceedings of the 8th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2020), NITK Surathkal, Jan 2020, published in Evolution in

Computational Intelligence (Part of the Advances in Intelligent Systems and Computing book series), Springer, vol. 1176, pp. 135 – 143, 2020.

13. Rajesh Kumar, "An attack tree template based on feature diagram hierarchy", 6th International Conference on dependability in sensors, cloud and bigdata systems and applications (DependSys 2020), 14 - 16 December 2020, Fiji .

14. Rajesh Kumar, Siddhant Singh, Rohan Kela, "A quantitative risk analysis framework for advanced persistent threats", 13th International Symposium on Foundations & Practice of Security, Montreal, Canada, 1-2-3 December 2020.

4. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Shail Saharan, Vishal Gupta (2020) DDoS Prevention: Review and Issues. In: Patnaik S., Yang XS., Sethi I. (eds) Advances in Machine Learning and Computational Intelligence. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-15-5243-4_53.

2. J. Jennifer Ranjani, C. Jeyamala, "Machine Learning Algorithms for Medical Image Security", in the book on Intelligent Data Security Solutions for e-Health Applications, Intelligent Data-Centric Systems, Elsevier, pp. 169 – 183, 2020.

3. Kumar R. (2020) A Model-Based Safety-Security Risk Analysis Framework for Interconnected Critical Infrastructures. In: Staggs J., Shenoi S. (eds) Critical Infrastructure Protection XIV. IFIP Advances in Information and Communication Technology, vol 596. Springer, Cham. https://doi.org/10.1007/978-3-030-62840-6_14, ISBN 978-3-030-62839-0\.

5. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   NIL

6. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Vishal Gupta delivered an Expert Lecture in Government Engineering College, Bharatpur, Rajasthan during Two Week Professional Training Programme on "Design, Develop and Deliver MOOCs and E-Content" from 6th-18th, January 2020.

2. Dr. Amitesh Singh Rajput, delivered an Expert Lecture in the Workshop on Computer Vision and Image Processing, organized by Electronics & ICT Academy at IIT Roorkee during 14 December 2020 to 24 December 2020.

3. J. Jennifer Ranjani has delivered a Webinar titled "Manuscript Preparation using Smart Tools - LaTeX and Overleaf" organized by Sathyabama Institute of Science and technology on May 26, 2020.

4. J. Jennifer Ranjani has delivered a Webinar titled "LaTeX and Overleaf – Powerful tools for writing Research Articles" organized by Ramco Institute of Technology in association with RIT-ISTE & IIC on June 8, 2020.

5. Dr. Sundaresan Raman conducted a Webinar series entitled "Image Processing and Artificial Intelligence" for vitreoretinal experts and research optometrists at Sankara Nethralaya, Chennai, from Apr to July 2020.

6. Dr. Sundaresan Raman conducted a Webinar series entitled "Programming with Python" for vitreoretinal experts and research optometrists at Sankara Nethralaya, Chennai, from Sep to Dec 2020.

7. Dr Rajesh Kumar delivered a webinar titled ``Security risk management for critical infrastructures'' at Global meeting, computational modelling and simulation: Recent innovations, challenges and perspectives held by BITS-Pilani.

8. Poonam Goyal was Invited Panellist in Women in Information Retrieval (WIRE- 2020) held on 18th Dec 2020 in FIRE-2020 from 16th -20th Dec 2020. (https://sites.google.com/view/wire-fire/schedule).

7. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT :   Nil

8. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. J. Jennifer Ranjani along with K. K. Sreelakshmi (HD graduate) won the best paper award at the 8th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2020), NITK Surathkal, January 4 – 5, 2020.

2. Dr. Sundaresan Raman represented BITS Pilani at the Sakura Science Exchange Program organized by the Japan Science and Technology Agency (JST) at Tokyo, Jan 2020.

3. Dr. Sundaresan Raman worked as a research scientist at Sankara Nethralaya, Chennai from Jan-Dec 2020, as part of sabbatical.

b. Won by Students:

1. ANWESH BHATTACHARYA (2016B5A70590P) won Prabhat Award for best outgoing student of the Physics Department, BITS-Pilani.

2. The team 'Innovation Skyline' of ANIRUDH SRINIVASAN CHAKRAVARTHY (2017A7TS1195P) and Shalvi won 'Shukla Schneider Go Green 2020 - Greater India' award at Schneider Electric, Bengaluru, Karnataka.

3. ZAWAR RUSHIKESH BALKRISHNA (2017B1A70977P) won Khorana Scholarship 2020 IUSSTF at Delhi, India.

4. SANKHA DAS (2019A7PS0029P) won Aditya Birla Group Scholarship at Aditya Birla Group, Mumbai.

5. A team of HARSH JHUNJHUNWALA (2018B5A70691P), VIGHNESH N G (2019A7PS0131P), Vigneshwaran Saravanan, Shaurya Banerjee, Hriday Kedia, Akanksha Mudgal, Dev Shah won the 'Magical Leader Award 2019-20 at Toastmasters International Englewood, CO 80112.

6. JIVAT NEET KAUR (2017A7PS0050P) won Grace Hopper Celebration India (GHCI) Student Scholarship at AnitaB.org Belmont, California.

7. The team 'XCODERS' of GOEL PRATYUSH RAM SHARAN (2017B5A70899P), SAMARTH GUPTA (2017B4A70467P), AYUSH AGRAWAL (2017B3A70599P), Aviral Agrawal won Bengalathon 2019 Department of Information, Technology and Electronics, Kolkata WB.

8. ADITI MANDLOI (2017A7PS0160P) awarded Student Scholarship to attend the Grace Hopper Celebration of Women in Computing India (GHCI) 20 conference. AnitaB.org at Belmont, California.

9. PRIYANKA VERMA (2016B3A70492P) awarded for Global Talent Attraction Program Luddy School of Informatics, Computing, and Engineering, Indiana University, Bloomington, USA.

10. SHARMA SIDDHARTH SHREEKUMAR (2019A7PS0064P) won NTSE SCHOLARSHIP NCERT at Sri Aurbindo Marg, New Delhi.

11. KUSHANK MAHESHWARI (2018B4A70679P) won Western Digital Scholarship for Stem Western Digital at Nashville, TN | 37217 United States.

12. The team 'Coder Commandos' of ASHRYA AGRAWAL (2018A7PS0210P), R ROHIT (2018A7PS0224P), UNMESH ROY (2018A7PS0175P) were National Winner at IBM India, Bangalore.

13. ARYAN MEHRA (2017A7PS0077P) awarded Dean's Merit Scholarship at BITS Pilani, Pilani Campus.

14. PRACHI AGRAWAL (2018B5A70716P), AAYUSH KUMAR AGARWAL (2016B5A70716P), MINU RAJEEVE (2018B2A70699P), Aman Verma secured 2nd place at Hackathon-Pravega, IISC Bangalore Indian Institute of Science, Bangalore.

15. ANIRUDH SRINIVASAN CHAKRAVARTHY (2017A7TS1195P), SHALVI SHUKLA (2017B2A40590P) were Global Finalist and Greater India Winner - Schneider Go Green 2020 Challenge at Schneider Electric, Exora Business Park 560 037, Bangaluru, India.

9. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

10. PATENTS FILED/PUBLISHED AND GRANTED: NIL

11. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

List of events organized by the Computer Science Association:

Month	Name of the Event	Brief description of event	Date	Venue
Jan 2020	ART Planning Meet	Discussed the speakers' background and planned work responsibilities among members	6th	Brainstorm Room
	ART Signings Planning Meet	Planned how the signings for ART will be conducted	10th	SAC
	ART Mess Signings	Conducted Mess Signings for ART	12th	Bhawan Messes
	Apogee Internal discussion meet + ART Final Planning meet	Discussed possible new and old events that can be conducted in APOGEE. Planned exact logistics for ART.	15th	Rotunda
	ART Day 1	Day 1 of the talks.	17th	6109
	ART Day 2	Day 2 of the talks.	19th	6109
	Recruitment Meet	Planned recruitment for Second Semester	24th	Rotunda
	Recruitment Interactions	Interactions with Juniors who are wish to join CSA	26th	SAC
	Recruitment Interactions Final	Final round of interactions with juniors	30th	SAC

Month	Name of the Event	Brief description of event	Date	Venue
Feb 2020	APOGEE events meet	Discussed events that can be conducted for APOGEE	9th	Rotunda
March 2020	CSA Website Meet	Planning and discussion for CSA's website	21st	Online
	CSA Website Development	Development on CSA's website starts and work is divided.	24th	Online
April 2020	CSA Website Brainstorm	Development and Planning for CSA's website and blog	15th	Online
May 2020	Semester Planning meet	Deliberation on the schedule for the upcoming year, including ART, mindturner, website, blog and recruitments	13th	Online
June 2020	ART Planning Meet	Preliminary Planning for upcoming ART and timeline discussions	18th	Online
July 2020	CSA Blog Meet	Discussion on structure and plan of the CSA blog	20th	Online
	BITS Feed Meet	Discussion on creating a new website for a common publishing platform for BITSians in all campuses	23th	Online
	BITS Feed Outreach Meet	Planning outreach strategies over all campuses for approaching student clubs and individuals to publish on bits-feed.org	28th	Online
Aug-2020	BITS Feed Meets (7 times)	The core team for BITS Feed met multiple times during the month to create the platform and plan and execute it. It is live at bits-feed.org	1-30th	Online
	CSA Semester start meet	Discussion about the semester and planned activities and their feasibility in online semester.	25th	Online
Sep-2020	BITS Feed Meets (3 times)	The core team for BITS Feed met multiple times during the month to get more partners for the platform and grow it. It is live at bits-feed.org	1-30th	Online
	BITS Feed outreach meets (5 times)	Discussions with clubs and tech teams throughout BITS Pilani, Goa, Hyd about BITS Feed	1-30th	Online
Oct-2020	Meets with CTE, BITS Goa	Meets to plan a university-wide online forum for students in collaboration with CTE, BITS Goa	6th, 15th, 25th	Online
Nov-2020	Recruitment Meetings	Members met to discuss the plan for recruitment of new members in online semester, mindturner was setup and other logistics were taken care of.	1st-6th	Online
	Orientation	An orientation session was conducted to familiarize the new batch with CSA and to inform them about the recruitment procedure	8th	Online
	Mindturner Day1	First day of the CodeBreaking and Puzzles event (which is round 1 for recruitments)	8th	Online
	Mindturner Day2	Second day of Mindturner (which is round 1 for recruitments)	9th	Online
	Mindturner Day3	Third day of Mindturner (which is round 1 for recruitments).	10th	Online
	Recruitment Meets	Multiple interviews, task sessions, etc with potential recruits	15th-30th	Online

12. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment		No. of Licenses or Qty
1.	ARDUINO MEGA (ATMEGA 2560 BOARD)		80
2.	RASPBERRY PI-4 (2 GB)		20
3.	BLUE TOOTH HC-05		80
4.	ESP 8266-01 WIFI		80
5.	SIM 800A MODEM (GSM)		40
6.	XBEE S2C WIRE		80
7.	RFID READER RC522		200
8.	NEO 6M GPS TTL MODULE		20
9.	CAMERA MODULE OV7670		05
10.	RASPBERRY PI CAMERA (5 MP)		05
11.	JOY STICK MODULE		10
12.	DS 1307 RTC MODULE		10
13.	LDR MODULE		10
14.	DHT11 MODULE (TEMP. CUM HUMIDITY)		10
15.	HC SR04 MODULE		10
16.	PULSE RATE HEART SENSOR		10
17.	METAL TOUCH SENSOR MODULE		10
18.	SOIL MOISTURE SENSOR		10
19.	5V/ 1 CH RELAY		10
20.	CURRENT SENSOR ACS 712 - 5A		10
21.	BERG STICK 40*1 MALE (SET OF 10 PCS)		02
22.	JUMPER CABLE (SET OF 200 PCS)		02
23.	SURGE ADEPTOR- 5V (ARDUINO ADAPTOR 5V/1A)		05
24.	ERD MOBILE CHARGER TC-70 (RESPBERRY P14 CHARGER 5V/3A USB WITH C TYPE CABLE)		05
25.	11.1 2200MAH BATTERY (LIPO)		01
26.	SEALED RECHARGEBLE BATTERY 12 V (LI-ION)		01
27.	SANDISK MEMORY CARD 16GB C10		20
28.	ARDUINO KIT (ADVANCE KIT)		05
	Arduino UNO	01	
	USB Cable	01	
	Jumper Cable	60	
	Bread Board 800 point	01	
	Resistor Box	01	
	Led Smm	15	
	Berg Strip Male	02	
	Berge Strip Female	02	
	Buzzer	02	
	SV Stepper Motor with ULN 2003 Driver	01	
	LCD 16 x 2 with 12 C	01	
	4 Digit seven segment display	01	
	IR Module	01	
	RGB Module	01	
	LOR Module	01	
	PIR Sensor	01	
	Ultrasonic Sensor	01	
	SV/1 Channel Relay Module	01	
	4 x 4 Keypad	01	
	Joystick module	01	

S.No.	Software/Equipment		No. of Licenses or Qty
	Rain Drop Sensor	01	
	Bluetooth Sensor HC-05	01	
	MPU 6050 (Accelerometer + Gyroscope)	01	
	DC Motor	01	
	9gm servo motor	01	
	DC water pump	01	
	Sound sensor	01	
	Piezo Sensor	01	
	RF Module	01	
	Touch Sensor	01	
	L293 Motor driver module	01	
	Water level sensor	01	
	Potentiometer 1k, 10k	04	
	Tactile switch	08	
	De pin for Arduino	01	
	9v battery	01	
	Plastic Box	01	
29.	ARDUINO KIT (STARTER KIT)		05
	• Arduino UNO	1	
	• USB Cable	1	
	• Jumper Cable –GO	60	
	• Bread Board 400 Point	1	
	• Resistor box	1	
	• Led Smm	15	
	• LDR	5	
	• Berg Strip Male	2	
	• Berg Strip Female	2	
	• Buzzer	2	
	• IC 74HCS95	1	
	• SV stepper Motor with ULN 2003 Driver	1	
	• LCD 16 x 2 with 12 C	1	
	• 1 Digit seven segment display	2	
	• IR Module	1	
	• Tactile switch	8	
	• De Pin for Arduino	1	
	• 9V Battery	1	
	• Plastic Box	1	
30.	STEPPER MOTOR (NEMA 17 WITH DRV 8825 DRIVER)		05
31.	Dell PowerEdge R740XD Server		01
32.	Logitech BCC-950 Conference Camera		01
33.	Thermal Network Camera		01
34.	HP ProDesk 600 G5 PCI Microtower PCs		04
35.	PTZ Pro2 Camera-Logitech PTZ Pro 2		01
36.	Jabra Speak 810 UC Conference Speaker Phone		01
37.	Lenovo Think Pad L13 Yoga		01

B1.10.6 Department: Economics and Finance

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**02**
Associate Professors	01
Assistant Professors	**06**
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department:

Contact details:

Number of Ph.D. Scholars: 20

Full Time   **: 17**

Part Time   **: 03**

Aspirant Scheme   **: 00**

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Zeeshan	2015PHXF0406P	Determinants And Dynamics of Livelihood Diversification for Household Well-Being in Rural India	Geetilaxmi Mohapatra	Arun Kumar Giri

1. SPONSORED RESEARCH AND CONSULTANCY

(i) PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Determinants of Mispricing in Indian Initial Public Offerings (IPOs)	Economics and Finance	Rajan Pandey	-	RIG	-	100,000
2	India's Integration with Global Value Chains: Issues, Challenges and Prospects	Economics and Finance	Rahul Arora	-	RIG	-	2,00,000
3	Commonality in Stock Market Liquidity: Implication of Global and Domestic Investor Sentiment	Economics and Finance	Dr. Byomakesh Debata	-	RIG	-	2,00,000

(ii). ONGOING PROJECTS

A. Ongoing Government Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Concurrent evaluation of Implementation of Nation Food Security Act in Madhya Pradesh, Rajasthan and Goa	Economics and Finance	Dr. A K Vaish	Dr. Srikanta Routray and Dr. Krishna M	MCA	-	7,92,000
2	Measuring the Vulnerability of Agricultural Households to Climate Change in Arid and Semi-Arid Regions of Rajasthan - A Capacity to Adapt Perspective	Economics and Finance	Dr. Geetilaxmi Mohapatra	-	ICSSR		8,40,000
3	Linking Energy Poverty with Human Development: A Case Study of Two Districts of Rajasthan	Economics and Finance	Dr. A K Giri	-	ICSSR		7,87,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Financial Inclusion	Economics and Finance	Dr. A K Vaish	-	HCL	-	9,50,000

C. Ongoing International Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	India's Integration with Global Value Chains: Issues, Challenges and Prospects	Economics and Finance	Rahul Arora	-	RIG	-	2,00,000

(iii). COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects : NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Technological Development Financial Development and Economic Growth: Empirical Evidence from India	Economics and Finance	Dr. A K Giri	-	RIG	-	1,50,000
2	Determinants of Mispricing in Indian Initial Public Offerings (IPOs)	Economics and Finance	Rajan Pandey	-	RIG	-	100,000

2. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Saigal, T., Vaish, A. K., & Rao, N. (2020), "Intersection of gender with area and occupation in analysing travel behaviour: a case of Rajasthan, India", EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal, Vol. 6 No.9, pp.237–245.

2. Saigal, T., Vaish, A. K., & Rao, N. V. M. (2020), "Gender and class distinction in travel behavior: evidence from India", Ecofeminism and Climate Change, Vol. ahead-of-print No.ahead-of-print. https://doi.org/10.1108/efcc-09-2020-0030.

3. Manu Sharma, Geetilaxmi Mohapatra and A.K Giri (2020), "Beyond Growth: Does Tourism Promote Human Development in India? Evidence from Time Series Analysis", Journal of Asian Finance, Economics and Business, Vol.7, No.12, pp.693-702.

4. Anushka Verma and A K Giri (2020), "ICT Diffusion, Financial Development and Economic Growth: Panel evidence from SAARC Countries", Journal of Public Affairs: An International Journal (John Wiley & Sons Ltd), (online first) https://doi.org/10.1002/pa.2557.

5. Shruti Shastri A K Giri and Geetilaxmi Mohapatra (2020), "Economic growth, renewable and nonrenewable energy consumption nexus in India: Evidence from nonlinear ARDL approach and asymmetric causality analysis", International Journal of Energy Sector Management (IJESM), Vol. 14, No. 4, pp.777-792.

6. Krishna Muniyoor. (2020) "Is there a trade-off between energy consumption and employment: Evidence from India", Journal of Cleaner Production, Vol (255).

7. Byomakesh Debata, P Patnaik and A Mishra (2020), "COVID 19 Pandemic! Its Impact on People, Economy and Environment, Journal of Public Affairs, Accepted and Forthcoming.

8. Byomakesh Debata, Saumya Ranjan Dash and Jitendra Mahakud (2020) Stock Market Liquidity: Implication of Local and Global Investor Sentiment, Journal of Public Affairs, DOI: 10.1002/pa.2231.

9. Neha Gupta and Arya Kumar, Macroeconomic variables, and market expectations: Indian Stock Market, Theoretical and Applied Economics magazine, Volume XXVII (2020), No. 3(624), Autumn, pp. 161-178, 2020.

10. Aditya Sharma, Arya Kumar and Arun Kumar Vaish, Market Anomalies and Investor Behavior, Afro-Asian J. of Finance and Accounting (AAJFA), (Accepted for Publication).

11. Neha Gupta and Arya Kumar, 'Artificial Neural Networks for developing Early Warning System for Banking System: Indian context', Int. J. of Economics and Business Research (Accepted).

12. Takiyar, A. and Rao, N.V.M. (2020), "Impact of globalization on human rights: evidence from Sub-Saharan Africa", International Journal of Social Economics, Vol. 47 No. 12, pp. 1453-1480.

3. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Dr. Rahul Arora has attended three days' National conference (online) on "Financial Implications of COVID-19 on India with special reference to Punjab" from 03-05 June 2020 organized by Gujranwala Guru Nanak Khalsa College, Ludhiana, Punjab. India.

2. Dr. Rahul Arora has attended three days' National Level Workshop on "Structure Equation Modelling using AMOS" from 24-26 August 2020 held in a virtual mode by Department of Statistics, KC College, Mumbai, India

3. Dr. Rahul Arora has attended one-day national webinar on "Naya Kshitij: NEP 2020" held on November 7, 2020 organized by Teaching Learning Centre, BITS Pilani, Pilani Campus, Rajasthan. India.

ii) International:

1. Dr. Rahul Arora has attended seven days' workshop on "Basics of Data Science using Python" from 15-21 June 2020 held in a virtual mode by FsCongress International Congress on Social Science, Ankara, Turkey and Blue Forskning International Research Society, India.

2. Dr. Rahul Arora has attended two days' International webinar on "Smart Cities: Beyond the Pandemics" from 10-11 July 2020 organized by BITS Pilani, Pilani Campus, Rajasthan. India.

3. Dr. Rahul Arora has attended two days' International workshop on "Frontier Analysis with DEA" from 06-07 August 2020 held in a virtual mode by Department of Economics, Panjab University, Chandigarh. India.

4. Dr. Rahul Arora has attended two days' International conference on "Virtual International Conference on Circular Economy: Responsible Management for Sustainability and Circularity" from 14-15 December 2020 organized by University of Bradford, United Kingdom & Indian Institute of Management (IIM) Jammu, India.

4. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Arora N., Arora Rahul. (2020) Output and Employment Linkages of the Primary, Secondary and Tertiary Sectors in the Indian Economy: A Computable General Equilibrium (CGE) Analysis. In: Bathla S., Kannan E. (eds) Agro and Food Processing Industry in India. India Studies in Business and Economics. Springer, Singapore. https://doi.org/10.1007/978-981-15-9468-7_3

5. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT - NIL

6. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Rahul Arora, Assistant Professor, Department of Economics & Finance, delivered three Invited lectures on "CGE Models in International Economic Analysis" in a short term course for the faculty members on Advanced Techniques in Economics Research conducted by Department of Economics, Panjab University, Chandigarh during January 15-21, 2020.

2. Prof. Arya Kumar delivered through webinar on "**Entrepreneurial Mind set and Characteristics**" in the International Entrepreneurship Summer School 2020, organized by Entrepreneurship Hub der TU Braunschweig und der Ostfalia Hochschule for the budding entrepreneurs across countries on 9th Sept. 2020.

3. Prof. Arya Kumar delivered through webinar on "**Technology Entrepreneurship in 21st Century** " in the CVO Chartered Accountant and Cost Accountants' Association Mumbai on 13th Sept. 2020.

4. Prof. Arya Kumar delivered online talk in the GURU-DAKSHATA: 3rd Faculty Induction Programme (online) organized by UGC-Human Resource Development Centre (HRDC), University of Rajasthan, Jaipur UGC Initiatives for Quality in Higher Education and Teacher competencies in the Global Framework between 11th and 15th January 2020

7. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

Talk on "RBI Initatives on MSME" (Talk given by Mr Dinesh Gupta- RBI, Kunar Rahar- Research Officer Department of Economic Policy and research, Reserve Bank of India), February, 2020.

8. AWARDS AND RECOGNITIONS - NIL

9. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION - NIL

10. PATENTS FILED/PUBLISHED AND GRANTED -   NIL

11. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Economics and Finance Association:

The Economics and Finance Association (EFA) aims to provide a unique platform at BITS Pilani, Pilani campus where various students who share similar interests can come together, network, bond and encourage one's own and each other's collective growth and development. EFA strives to cultivate a culture of Economics, Finance, and Business through organizing and participating in several campus and national level competitions. Keeping in mind it's core objectives, EFA took the following initiatives, to promote the learning culture especially for beginners and new admits.

BITS Pilani Trading Challenge, in association with Roostoo: Registration of over 300 people to buy and sell Cryptocurrencies which inculcated the knowledge of trading and various Cryptocurrencies. Collaboration with Fin street: We partnered with Finstreet, which is powered by 5paisa to provide finance courses to BITS students at subsidized rate,

Finstreet is one of the most popular online learning platforms. Partnership with Finance Unlocked: We partnered with London based "Finance Unlocked", which is a unique interactive learning platform to provide finance courses to BITS student free of cost for 3 month, with all the certifications.

EFA Internal Sessions: EFA holds interactive sessions for the members ranging from topics of economics (Macroeconomics, International Trade) to financial concepts (Futures Market, Options Market, IPOs etc). We have research assignments and article writing to further the research acumen of the members.

Eco - Fin Interest Group: EFA organised a Special Interest Group of more than 200 students on campus, with the aim of having intelligent discussions on various topics ranging from study resources, opportunities, and ongoing business events analyses. News Discussion/Topical Debates: Regular daily news discussions are a feature of the interest group, where students from various backgrounds get to learn and share knowledge. Weekly debates are organised on hot topics to promote learning.

EFA Instagram Page: EFA started an Instagram page in November 2020 to increase its reach amongst the campus students. News shots of some of the major economic and finance events are being posted on the page. EFA was able to attain 200 followers, and some of its posts reached 300 interactions. This initiative aims at spreading the relationship between current affairs and its impact on the Indian and global economy.

EFA Session on Comprehending Stock Markets. EFA organized an introductory session on Stock Markets (on 17th January 2021), and it was attended by nearly 200 people. The main aim was to inculcate the knowledge of stock markets amongst the freshers and clear any misconceptions regarding it. Some commonly used jargons were defined for them and as a bonus, a trading terminal was displayed to them. This gave a feel about how actually trading works and analysed performance of some of the top performing stocks. This will pave the way for enthusiasts of finance and stock markets.

Other Initiatives include talks by eminent professionals: Workshop on International Derivatives (Workshop conducted by Future First), Online talk on AI/ML in Finance (Talk given by Siva Visveswara, co-founder topxight, New York)

12. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: NIL

B1.10.7 Department: Electrical and Electronics Engineering & Instrumentation

Number of faculty members (as of 31 December 2020)

Emeritus Professors, Professors	**05**
Associate Professors	**06**
Assistant Professors	**28**
Visiting Faculty	**1**

Head of the Department: **Dr. H D Mathur**
Contact details: **mathurhd@pilani.bits-pilani.ac.in**
Number of PhD Scholars: **Full time 27, Part time 15**

Ph.D. Thesis Submitted during the year: **04**

1. SPONSORED RESEARCH AND CONSULTANCY

(i) SANCTIONED PROJECTS

(a) Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of A Real-Time Crop Advisory System Exploiting Nanotechnology-Based Nitrogen Sensor with the Internet of Farming (IoF) Framework	EEE	Dr. Puneet Mishra	Dr. H D Mathur	Department of Biotechnology, Ministry of Science and Technology, Govt. of India	-	50,00,000
2	Design and Development of MEMS Gyroscope for Naval Applications	EEE	-	Dr. Sujan Venuganti	NRB, DRDO	-	46,00,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Artificial Intelligence Enabled Security Provisioning and Vehicular Vision innovations for Autonomous Vehicles	EEE	Dr. Vinay Chamola	-	SICI Indo-Canada SICRG Award	-	10,00,000

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Device-to-Device Communications in 5G and Beyond Networks: Performance Analysis	EEE	Dr. Sandeep Joshi	-	RIG	-	2,00,000
2	Conceptualization and Implementation of Submonolayer (SML) InAs Quantum Dot (QD) Based Solar Cell	EEE	Dr. Rahul Kumar	-	RIG	-	2,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
3	Investigations on Start-up Methods and Operating Techniques for Distributed Energy Resource Integrated Distribution Static Compensator	EEE	Dr. Ashish Patel	-	RIG	-	2,00,000
4	Design and Development of Nonlinear Robust Control to Mitigate Second-order Harmonic Ripple Problem in Single-phase Inverters with an Improved Dynamic Performance: A Microgrid Application	EEE	Dr. Aditya R Gautam	-	RIG	-	1,00,000
5	Design and implementation of algorithms for drone-based surveillance application	EEE	Dr. G S S Chalapathi	-	RIG	-	1,50,000

(ii). ONGOING PROJECTS

(a) Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of Dielectric Resonator based Displacement Sensor	EEE	Dr. Praveen Kumar AV	-	DST-SERB	-	20,75,000
2	Resource dimensioning and management of smart and sustainable 5Gsmall cells for rural broadband	EEE	Dr. Vinay Chamola		DST-SERB		28,30,000
3	Investigation of Elastic and Inelastic Dephasing in Carbon Nanotube FET	EEE	-	Dr. Navneet Gupta	SERB-DST, New Delhi	-	18,25,450
4	Crime analysis and study for safe cities with emphasis on women safety using technology and societal participation	EEE	Prof. Anu Gupta	Dr. Meetha V Shenoy & Dr. Rajiv Gupta	Indian Council of Social Science	-	5,00,000
5	GaN Gratings-on-Diaphragm Based Optical Pressure Sensing in Harsh Environments	EEE	Dr. Rahul Singhal		SSPL, DRDO, New Delhi		9,66,000
6	Sensitive Explosive Detection in Vapor Phase with Cyclometalated Iridium (III), Platinum (II) and Conjugated Hyperbranched Polymer-based Aggregation Induced Emission Active Nanoprobes	EEE	Prof. I. R. Laskar	Dr. Rahul Singhal	ARMREB, DRDO		32,73,000
4	Soft Computing Framework based Integrated Multi-Sensor array for Water Quality Assessment: Targeting Fluoride as a major parameter	EEE	Dr. K. K. Gupta	-	DST	-	38,70,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
5	Modeling the Drivers and Barriers of Electric Vehicle Penetration in Emerging Economy: A Study of Indian Market	EEE	Dr. Hari Om Bansal	-	ICSSR-IMPRESS	-	5,25,000
6	Development of 1-D nanomaterials based selective sensor system for non-invasive detection of complications of diabetes mellitus and asthma by the breath analysis technique	EEE	Dr. Arnab Hazra	-	Department of Biotechnology, Govt. of India	-	46,50,000
7	Carbon nanomaterials for chemical sensing applications	EEE	Dr. Arnab Hazra	Dr. Navneet Gupta	SPARC, MHRD, Govt. of India	Tel-Aviv University	46,11,610
8	Management of Distributed Energy Resources in Smart Cities: Challenges and Advanced Control Strategies	EEE	Dr. H.D. Mathur	Dr. Bijoy Mukherjee	SPARC, MHRD, Govt. of India	-	42,50,000
9	IoT Based Energy Management System of a Microgrid with Vehicle to Grid (V2G) Feature	EEE	Dr. H.D. Mathur	Dr. Navneet Gupta	DST-ICPS Scheme, Govt. of India	-	47,53,100
10	Development of Improved Design and Control Techniques for Unified Power Quality Conditioner with Distributed Generation (UPQC-DG)	EEE	Dr. H.D. Mathur	Dr. Ashish Patel	Ministry of Power, Govt. of India	-	21,09,000
11	Structural Health Assessment and Rehabilitation Framework based on Cyber-Physical System	EEE	Dr. K. K. Gupta		DST-ICPS		11,73,000
12	Development of Cyber-Physical System based Smart Water Grid for Community usage	EEE	Dr. K. K. Gupta		DST-ICPS		27,54,000
13	Machine Learning Techniques for Resource Allocation in Cell-Free Massive MIMO Communications	EEE	Dr. S.M. Zafaruddin		SERB, DST, Govt. of India		18,40,000
14	Design and Development of Soft Robotic System for selective harvesting of Coffee cherries	EEE	Dr. Meetha. V Shenoy	Dr. Nitin Chaturvedi	DST (Scheme for Young Scientists & Technologist)		39,77,600

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Design and Analysis of Metamaterial Based Antenna for Wearable Application	EEE	Prof. Navneet Gupta		DST-Int. Bilateral Cooperation Division, New Delhi under India-Bulgaria joint project scheme	Prof. Plamen Dankov	11,82,350

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Plasmonic nanostructure based optical sensors	EEE	Dr. Pankaj Arora	-	ACRG	-	8,25,000
2	Image Stitching based decision making for Virtualization of Visual Sensor nodes	EEE	Dr. Meetha V Shenoy	-	ACRG	-	8,00,000

(iii) COMPLETED PROJECTS

(a) Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Study on Electronic Transport Behaviour of Carbon Nanotube-Based Field-Effect Transistors	EEE	Dr. Navneet Gupta	-	DRDO, New Delhi	-	21,81,800

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Al base plasmonic devices for biosensing	EEE	Dr. Pankaj Arora	-	RIG	-	2,00,000
2	Design and Development of a real-time system for positioning in GPS denied environments	EEE	Dr. Meetha V Shenoy	-	RIG	-	2,00,000
3	Deep Learning for Massive MIMO Communications	EEE	Dr. S M Zafaruddin	-	RIG	-	2,00,000
4	Robust Nonlinear Attitude Control of Earth-pointing Satellites using Magnetic/Magneto-Coulombic Torquers	EEE	Dr. Bijoy K Mukherjee	-	RIG	-	2,00,000

2. Publications:

The faculty of the department published 116 papers in international/national refereed journals during the year. (Scopus and SCI indexed)

1. Apoorva, S. Bitragunta and S. Nitundil, "Best beam selection and PHY switching policy for hybrid FSO/RF inter-satellite communication link," in IET Communications, vol. 14, no. 19, pp. 3350-3362, 1 12 2020. doi: 10.1049/iet-com.2020.0515.

2. A. Padhy, S. Joshi, S. Bitragunta, V. Chamola and B. Sikdar "A Survey of Energy and Spectrum Harvesting Technologies and Protocols for Next Generation Wireless Networks," To appear in IEEE Access, doi: 10.1109/ACCESS.2020.3046770.

3. Rahul Sharma, Sainath Bitragunta, `Optimal power adaptive decode-and-forward cooperative device-to-device communication policies,'' IET Communications, Vol. 14, Apr. 2020. pp. 2066–2073. doi: 10.1049/iet-com.2019.0529.

4. Premsai Regalla and A. V. Praveen Kumar, A Fixed-Frequency Angular Displacement Sensor based on Dielectric-Loaded Metal Strip Resonator, IEEE Sensors Journal, 2020 (doi: 10.1109/JSEN.2020.3023449).

5. Anuj Kumar Ojha and A.V. Praveen Kumar, High Gain Broadside Mode Operation of a Cylindrical Dielectric Resonator Antenna using Simple Slot Excitation, International Journal of Microwave and Wireless Technologies (Cambridge University Press), June 2020 (DOI: https://doi.org/10.1017/S1759078720000677).

6. Ritish Kumar and A.V. Praveen Kumar, A Rectangular Slot Antenna with Perfectly conducting Superstrate and Reflector Sheets for Superior Radiation in the 6-9 GHz band, International Journal of Microwave and Wireless Technologies (Cambridge University Press), April 2020 (DOI: https://doi.org/10.1017/S1759078720000355).

7. A.V. Praveen Kumar and Premsai Regalla, A Transmission Mode Dielectric Resonator as a Displacement Sensor, IEEE Sensors Journal, Vo.20, No.1, July 2020.

8. Prateek Sikka, Abhijit Asati, Chandra Shekhar, "High-speed and area-efficient Sobel edge detector on field-programmable gate array for artificial intelligence and machine learning applications" International Journal of Computational Intelligence, Wiley Periodicals LLC, April 2020, DOI: 10.1111/coin.12334.

9. Prateek Sikka, Abhijit R Asati and Chandra Shekhar, "High-throughput field-programable gate array implementation of the advanced encryption standard algorithm for automotive security applications," Springer Journal of Ambient Intelligence and Humanized Computing, 29 July 2020. DOI: 10.1007/s12652-020-02403-2, ISSN: 18685145, 18685137.

10. Prateek Sikka, Abhijit R Asati, Chandra Shekhar, "High-Level Synthesis Assisted Design and Verification Framework for Automotive Radar Processors," Elsevier Microprocessors and Microsystems, DOI: https://doi.org/10.1016/j.micpro.2020.103259, Vol. 78, October 2020.

11. Prateek Sikka, Abhijit R Asati, Chandra Shekhar, "Speed Optimal FPGA Implementation of the Encryption Algorithms for Telecom Applications," Elsevier Microprocessors and Microsystems DOI: https://doi.org/10.1016/ j.micpro.2020.103324, Vol. 79, November 2020.

12. Vineet Kumar, Abhijit Asati, and Anu Gupta, "Dedicated Hardware Architecture for Localizing Iris in VW Images," Elsevier Journal of King Saud University-Computer and Information Sciences, https://doi.org/10.1016/j.jksuci.2020.11.004, Nov. 2020.

13. Prateek Sikka, Abhijit R Asati, Chandra Shekhar, "Power and Area Optimized High-Level Synthesis Implementation of a Digital Down Converter for Software-Defined Radio Applications" Springer Journal of Circuits, Systems, and Signal Processing, https://doi.org/10.1007/s00034-020-01601-9, November 2020.

14. R. Kumar, S. K. Saha, A. Kuchuk, Y. Maidaniuk, Y. I. Mazur, S-Q. Yu and G. J. Salamo, "GaAs Layer on c-plane Sapphire for Light Emitting Sources" Applied Surface Science, Elsevier, DOI https://doi.org/10.1016/j.apsusc.2020.148554, 2020.

15. S. P. Dash and Sandeep Joshi, "Performance analysis of a cooperative D2D communication network with NOMA," IET Communications, vol. 14, no. 16, pp. 2731–2739, October 2020.

16. R. R. Sharma, M. Kumar, S. Maheshwari, and K. P. Ray, "EVD-ARIMA based time series forecasting model and its application for COVID-19 cases", IEEE Transactions on Instrumentation and Measurement (SCI, Impact factor: 3.658) DOI: https://doi.org/10.1109/TIM.2020.3041833.

17. V. Chamola, S. Patra, N. Kumar, and M. Guizani, "FPGA for 5G: Re-configurable Hardware for Next Generation Communication", IEEE Wireless Communications, vol. 7, iss. 3, pp. 140-147, Jun. 2020.

18. T. Alladi, V. Chamola, and Naren, "HARCI: A Two-Way Authentication Protocol for Three Entity Healthcare IoT Networks", IEEE Journal on Selected Areas in Communications, Accepted and, preprint online, DOI 10.1109/JSAC.2020.3020605, Sep 2020.

19. V. Hassija, V. Chamola, V. Gupta, S. Jain, and N. Guizani, "A Survey on Supply Chain Security: Application Areas, Security Threats, and Solution Architectures", IEEE Internet of Things Journal, Accepted & preprint online, DOI: 10.1109/JIOT.2020.3025775, Sept. 2020.

20. V. Hassija, V. Chamola, N. Dara, N. Kumar, and M. Guizani, " A Blockchain and Edge Computing-based Secure Framework for Government Tender Allocation", IEEE Internet of Things Journal, Accepted & preprint online, DOI 10.1109/JIOT.2020.3027070 Sept. 2020.

21. R. Tekchandani, P. Chhikara, N. Kumar, V. Chamola and M. Guizani, "DCNN-GA: A Deep Neural Net Architecture for Navigation of UAV in Indoor Environment", IEEE Internet of Things Journal, Accepted & preprint online, DOI 10.1109/JIOT.2020.3027070, Sept. 2020.

22. V. Chamola, V. Hassija, S. Gupta, A. Goyal, M. Guizani and B. Sikdar, "Disaster and Pandemic Management Using Machine Learning: A Survey", IEEE Internet of Things Journal, Accepted & preprint online, DOI 10.1109/JIOT.2020.3044966, Nov. 2020.

23. V. Chamola, V. Hassija, B. Sikdar, N. Kumar, N. Ansari, "Energy and Latency Aware Resource Management for Solar Powered Cellular Networks", vol. 34, iss. 2, pp. 246-253, IEEE Network, Mar 2020.

24. G. Praveen, V. Chamola, V. Hassija, and N. Kumar, "Blockchain for 5G: A Prelude to Future Telecommunication", vol. 34, iss. 6, pp. 106-113, IEEE Network, Nov 2020.

25. P. Gorla, V. Chamola, V. Hassija, and D. Niyato, "Network Slicing for 5G with UE State-Based Allocation and Blockchain", IEEE Network, Accepted & preprint online, DOI 10.1109/MNET.011.2000489, Sept. 2020.

26. P. Gorla, V. Chamola, V. Hassija, and N. Ansari, "Blockchain-Based Framework for Modelling and Evaluating 5G Spectrum Sharing", IEEE Network, Accepted & preprint online, DOI 10.1109/MNET.011.2000469, Sept. 2020.

27. G.S.S Chalapathi, V. Chamola, C. K Tham, S. Gurunarayan and N. Ansari, "An Optimal Delay Aware Task Assignment Scheme for Wireless SDN Networked Edge Cloudlets," Future Generation Computing Systems, Elsevier, Volume 102, Pages 862-875, Jan. 2020.

28. V. Hassija, V. Gupta, S. Garg, and V. Chamola, "Traffic Jam Probability Estimation based on Blockchain and Deep Neural Networks", IEEE Transactions on Intelligent Transportation Systems, pp. 1-10, DOI: 10.1109/TITS.2020.2988040, March 2020.

29. A. Mehra, M. Mandal, P. Narang, and V. Chamola, "ReViewNet: A Fast and Resource Optimized Network for Enabling Safe Autonomous Driving in Hazy Weather Conditions", IEEE Transactions on Intelligent Transportation Systems, accepted, DOI: 10.1109/TITS.2020.3013099, July 2020.

30. V. Chamola, A. Sancheti, S. Chakravarty, N. Kumar, and M. Guizani, "An IoT and Edge Computing Based Smart Parking Operations Framework for V2G System", vol. 69, iss. 10, pp. 10569-10580, IEEE Trans. on Vehicular Technology, Oct. 2020.

31. V. Hassija, V. Chamola, N. Dara and M. Guizani, "A Distributed Framework for Charge Trading Between UAVs and Charging Stations", IEEE Transactions on Vehicular Technology, vol. 69, iss. 5, pp. 5391 - 5402, May 2020.

32. V. Hassija, V. Chamola, G. Han, J. Rodrigues, and M. Guizani, "DAGIoV: A Framework for Vehicle to Vehicle Communication using Directed Acyclic Graph and Game Theory," IEEE Transactions on Vehicular Technology, vol. 69, iss. 4, pp. 4182 - 4191, April. 2020.

33. G. Bansal, Naren, V. Chamola, B. Sikdar, N. Kumar and M. Guizani, "Lightweight Mutual Authentication Protocol for V2G Using Physical Unclonable Function", vol. 69, Iss. 7, pp. 7234 -7246, IEEE Transactions on Vehicular Technology, July 2020.

34. T. Alladi, Naren, G. Bansal, V. Chamola and M. Guizani, "SecAuthUAV: A Novel Authentication Scheme for UAV-Ground Station and UAV-UAV Communication", IEEE Transactions on Vehicular Technology, Accepted & preprint online, DOI 10.1109/TVT.2020.3033060, Oct. 2020.

35. T. Alladi, S. Chakravarty, V. Chamola and M. Guizani, "A Lightweight Authentication and Attestation Scheme for In-Transit Vehicles in IoV Scenario", IEEE Transactions on Vehicular Technology, Accepted & preprint online, DOI 10.1109/TVT.2020.3038834, Oct. 2020.

36. V. Hassija, V. Chamola, V. Saxena and Richard Yu, "A Parking Slot Allocation Framework Based on Dynamic Pricing Algorithm and Virtual Voting", IEEE Transactions on Vehicular Technology, vol. 69, Iss. 6, pp. 5945 – 5957, June 2020.

37. V. Hassija, V. Chamola and S. Zeadally, "BitFund: A Blockchain-based Crowd Funding Platform for Future Smart and Connected Nation", Sustainable Cities and Society, Elsevier, vol. 60, pp. 1-12, May 2020.

38. V. Hassija, V. Chamola, B. Bajpai, S. Zeadally, "Security Issues in Implanted Medical Devices: Fact or Fiction?", Sustainable Cities and Society, Elsevier, Accepted and available online, DOI: https://doi.org/10.1016/j.scs.2020.102552, Nov. 2020.

39. T. Alladi, V. Chamola, N. Sahu and M. Guizani, "Application of Blockchain in Unmanned Aerial Vehicles: A Review", Vehicular Communications, Elsevier, Vol. 23, article. 100249, June 2020.

40. V. Chamola, V. Hassija, V. Garg, M. Guizani, "A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing Its Impact", IEEE Access, vol. 8, pp. 90225 - 90265, May 2020.

41. A.B. Souza, P. A. Rego, T. Carneiro, J. D. Rodrigues, P. P. Filho, J. N. Souza, V. Chamola, V. H. Albuauerque, and B. Sikdar, "Computation Offloading for Vehicular: A Survey", vol. 8 pp. 198214-198243, IEEE Access, Oct. 2020.

42. V. Chamola, P. Kotesh, A. Agarwal, Naren, N. Gupta, and M. Guizani, "A Comprehensive Review of Unmanned Aerial Vehicle Attacks and Neutralization Techniques", Ad Hoc Networks, Elsevier, Available online, DOI: 10.1016/j.adhoc.2020. 102324, Oct 2020.

43. P. Garg, A. Srinivasan, M. Mandal, P. Narang, V. Chamola, and M. Guizani, "ISDNet: AI-enabled Instance Segmentation of Aerial Scenes for Smart Cities", ACM Transactions on Internet Technology, Accepted July 2020.

44. T. Alladi, V. Chamola, B. Sikdar, and K. K. R Choo, "Consumer IoT: Security Vulnerability Case Studies and Solutions", IEEE Consumer Electronics, vol. 9, iss. 2, pp. 17-25, March 2020

45. T. Alladi, V. Chamola, and S. Zeadally, "Industrial Control Systems: Cyberattack Trends and Countermeasures", Computer Communications, Volume 155, pp. 1-8, Apr. 2020.

46. T. Alladi, Naren, V. Chamola and N. Kumar, "PARTH: A two-stage lightweight mutual authentication protocol for UAV surveillance networks," Computer Communications, Elsevier, vol. 160, pp. 81-90, July. 2020.

47. V. Chamola, A. Vineet, A. Nayyar, and E. Hossain, "Brain-Computer Interface Based Humanoid Control: A Review", vol. 20, no. 13, pp 3620, Sensors, MDPI, June 2020.

48. V. Hassija, G. Bansal, V. Chamola, N. Kumar, M. Guizani, "Secure Lending: Blockchain and Prospect Theory-Based Decentralized Credit Scoring Model", IEEE Transactions on Network Science and Engineering, Preprint online, pp. 1-10, DOI: 10.1109/TNSE.2020.2982488, Mar. 2020.

49. G. Bansal, V. Chamola. P. Narang, S. Aggarwal, and S. Raman, "Deep3DSCan: Deep Residual Network and Morphological Descriptor Based Framework for Lung Cancer Classification and 3D Segmentation", IET Image Processing, vol. 14, Issue. 7, p. 1240 – 1247, May 2020.

50. U. Tripathi, R. Saran, V. Chamola, A. Jolfaei, A. Chintanpalli, "Advancing Remote Healthcare using Humanoid and Affective Systems", IEEE Sensors, Accepted, Dec 2020.

51. G. Verma, B.B Singh, N. Kumar, and V. Chamola, "CB-CAS: Certificate-Based Efficient Signature Scheme with Compact Aggregation for Industrial Internet of Things Environment", IEEE IoT Journal, Vol. 7, Iss. 4, page(s) 2563-2572, April 2020.

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3.   CONFERENCES/WORKSHOP/SEMINAR ATTENDED/ PAPERS PRESENTED:

The faculty of the department presented 57 papers at international/national conferences during the year.

1. "Millimeter Wave Wireless System Modeling with Best Channel Selection Policy," Tooba M. S., Kartik Shrivastava, B. Sainath, To appear in IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS) (WiE track), IIIT, New Delhi, Dec. 2020.

2. "Interference-Constrained Power Adaptive Decode-and-Forward Relaying Policy: Design and Performance Analysis," Rahul Sharma, B. Sainath, To appear in IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), IIIT, New Delhi, Dec. 2020.

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4. "Green Satellite Communication Link Design, Optimization, and Performance Analysis," Nishant Gupta, Sainath Bitragunta, To appear in 7th IEEE Uttar Pradesh Section International Conference on Electrical,

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5. "STPAP: Source Transmit Power Adaptation Policy for Collaborative Wireless Systems," Vidit Jha, Sainath Bitragunta, To appear in TENCON Conference, OSAKA, JAPAN, Nov. 2020.

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49. Gupta R, Rastogi, A, Shenoy, M V, Sridhar, S, Gupta A, " Quantitative Analysis of Crime using GIS for Crime against women", 6th World Conference on Women's Studies (WCWS 2020), 27th -28th July 2020.

50. HP Agrawal, H O Bansal, and Y S Sisodia, "Development of an Intelligent POD Controller to Mitigate Power Oscillations", IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC), VNIT, Nagpur, India, Sep 25-26, 2020.

51. HP Agrawal, H O Bansal, and Y S Sisodia, "Power System Stability Optimization using Differential Evolution Tuned SSSC", IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC), VNIT, Nagpur, India, Sep 25-26, 2020.

52. A Gupta, P Jaiswal, HO Bansal, and R Kumar, "Modeling and analysis of V2G scheme: a Concept in Smart Grid", International Conference on Emerging Trends in Communication, Control and Computing, Lakshmangarh, India, Feb 21-22, 2020.

53. P Kumar K and H O Bansal, "Commercial sustainability of Vehicle-to-Grid Concept: An Overview", International Conference on Emerging Trends in Communication, Control and Computing, Lakshmangarh, India, Feb 21-22, 2020.

54. KV Singh and HO Bansal, "PSIM based Simulation and Hardware Implementation of 1-Phase and 3-phase Shunt Active Filter Based on p-q Theory", International Conference on Emerging Trends in Communication, Control and Computing, Lakshmangarh, India, Feb 21-22, 2020.

55. Sisir Yadav, Ashish Patel, and Hitesh Datt Mathur, "Comparison of power losses for different control strategies of UPQC", in 2020 9th Power India International Conference (PIICON), IEEE, 2020, Murthal, India.

56. Sisir Yadav, Ashish Patel, and Hitesh Datt Mathur, "Comparison of power losses between UPQC and UPQC-DG", in 2020 17th IEEE India Council International Conference (INDICON), IEEE, 2020, New Delhi, India.

57. Satish Kumar Rai, H.D. Mathur, and Shazia Hasan, "Converter Efficiency Improvement of Islanded DC Microgrid with Converter Array", In the proceedings of International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020), January 29-31, 2020, Dubai, UAE.

4. Books Published/Edited /Chapter written/ reviewed articles during the year:

1. G.S.S. Chalapathi, Vinay Chamola, Aabhaas Vaish, and Rajkumar Buyya, "Industrial Internet of Things (IIoT) Applications of Edge and Fog Computing: A Review and Future Directions", Security & Privacy Issues in Fog/Edge Computing, Jie Wu and Wei Chang (eds), Springer, 2020 (in press).

2. Amrithaa Seshadri and Navneet Gupta (2020), INDEXED, International, Title of Book: Advances in Communication, Devices, and Networking, Title of Chapter: Modeling and Analysis of Metamaterial-Based Antenna for Wi-Fi and WLAN Applications, Publisher: Springer-Nature; ISBN: 978-981-13-3449-8.

3. Nishant Gupta, Ankita Dixit, and Navneet Gupta (2020) INDEXED, International, Title of Book: Energy Systems, Drives and Automations, Title of Chapter: Performance Analysis of (13,0) and (17,0) Carbon Nanotube Field Effect Transistors (CNFETs) Publisher: Springer-Nature. ISBN 978-981-15-5088-1 ISBN 978-981-15-5089-8 (eBook).

4. Navneet Gupta., Kavindra Kandpal (2020), INDEXED, International, Title of Book: Materials Horizons: From Nature to Nanomaterials, Title of Chapter: Material Selection Techniques in Materials for Electronics, Publisher: Springer-Nature.

5. Puneet Mishra, Vishal Goyal, and Aasheesh Shukla, "An Improved Grasshopper Optimization Algorithm for Solving Numerical Optimization Problems," In Mohanty M., Das S. (eds) Advances in Intelligent Computing and Communication. Lecture Notes in Networks and Systems, vol 109. Springer, Singapore, Jan 2020.

6. A. Hazra, N. Samane, S. Basu, A Review on Metal Oxide-Graphene Derivative Nano-Composite Thin Film Gas Sensors, Book title "Multilayer Thin Films - Versatile Applications for Materials Engineering, ISBN: 978-1-78985-438-1, Edited by Sukumar Basu, IntechOpen, 2019 DOI: 10.5772/intechopen.90622

7. Maheshwari L., Bansal H.O. (2020) Genetic Algorithm Tuned Sizing Scheme for Grid Integrated Hybrid Energy System. In: Bansal J., Gupta M., Sharma H., Agarwal B. (eds) Communication and Intelligent Systems. ICCIS 2019. Lecture Notes in Networks and Systems, vol 120. Springer, Singapore. https://doi.org/10.1007/978-981-15-3325-9_33

8. Rai S.K., Mathur H.D., Hasan S. (2020) Converter Efficiency Improvement of Islanded DC Microgrid with Converter Array. In: Goel N., Hasan S., Kalaichelvi V. (eds) Modelling, Simulation, and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer, Singapore. https://doi.org/10.1007/978-981-15-4775-1_8

5. Conferences, seminars & workshops conducted/attended

- Webinar on Antenna Design through Simulation using TaraNG:19.1, Coordinated by Prof. Navneet Gupta, Dr. Praveen Kumar AV, and Dr. Rahul Singhal on 29 May 2020.

6. Invited Talks / chairing session by EEE faculty:

1. Dr. Praveen Kumar AV delivered an expert talk as part of online FDP on "Research Challenges and Opportunities in Antenna Design" RCOAD-2020 organized by the Department of ETCE, VSSUT, Burla, Odisha during September 10-14, 2020.

2. Dr. Vinay Chamola delivered an expert lecture on "Security for IoT based Applied Engineering in Agriculture" in ATAL FDP, IIIT Kota,October 14, 2020.

3. Prof. Navneet Gupta gave an invited talk on "Recent Advances and Opportunities in Metamaterial Based Antennas for Wearable Applications" in TEQIP-III Sponsored Online FDP on Research Challenges and Opportunities in Antenna Design (RCOAD-2020) 10.09.2020 to 14.09.2020 organized by the Department of ETCE, V.S. S. University of Technology, Burla, Odisha.

4. Dr. Sandeep Joshi gave an invited talk on "Design Challenges in D2D Communications for 5G Networks", on 3rd Dec. 2020, as an expert for the Workshop on "Design Challenges of IoT with AI and ML Applications", at the National Institute of Technology (NIT) Hamirpur, India.

5. Prof. Abhijit Asati chaired a session in the 530th International Academic Conference on Engineering, Technology, and Innovations (IACETI), Phuket, Thailand on 6 -7 February 2019.

6. Prof. Abhijit Asati delivered an invited lecture at the 530th International Academic Conference on Engineering, Technology, and Innovations (IACETI), Phuket, Thailand on 6 -7 February 2019.

7. Dr. Sandeep Joshi gave an invited talk on "D2D Communication: Modeling, Analysis, and Future Trends", on 27th Oct. 2020, as a guest speaker for the Inauguration of IEEE Photonics Society Student Branch & Workshop on "Frontiers in Photonics", at Vellore Institute of Technology (VIT) Chennai, India.

8. Prof. Navneet Gupta gave an invited talk on "Finding an Appropriate Funding Agency for Your Research" in Webinar conducted by Shankar Netralaya, Chennai on 19th July 2020.

9. Prof. Navneet Gupta was **Session Chair** in 7th Int. Conf. on Microelectronics, Circuits, and Systems (Micro-2020) organized by Delhi Technological University, Delhi during 25-26 July 2020.

10. Dr. Rahul Singhal Co-Chaired a Session on Electromagnetic Field Theory along with Prof. Ke-Li Wu (Dept. of Electronics Engineering, The Chinese University of Hong Kong) at the Asia Pacific Microwave Conference (APMC) in Hong Kong held during Dec 8 -11, 2020 organized primarily by City University of Hong Kong.

11. Prof. Surekha Bhanot delivered an invited talk on the topic on "AI- an eclectic perspective and its role in interdisciplinary research" on Aug 28, 2020, in UIET, Panjab University Chandigarh in online International Conference on Integrated Interdisciplinary Innovations in Engineering (ICIIIE 2020), Aug 28-30, 2020

12. Prof. Surekha Bhanot delivered an expert talk on the topic on "Process Automation and Control Systems (PACS): New Directions" on Sept 7, 2020, in TEQIP-III Sponsored One Week STTP on Recent Trends in Instrumentation Engineering" organized by SLIET, Longowal, and NIT, Uttrakhand during 07 – 11 Sep 2020

13. Prof. Surekha Bhanot delivered a talk on the topic on " Integration of curriculum design in schools---Emphasizing Multidisciplinary Education with an Element of Choice" on Sept 28, 2020, in the webinar "Naya Kshitij: NEP 2020 for Schools Implementation Preparedness, Challenges and Way-Forward in Schools of Rajasthan" organized by TLC, BITS Pilani

14. Prof. Surekha Bhanot delivered a keynote address on "Past, Present & Future of Industrial Automation" on October 5, 2020, as a chief guest of QIP-AICTE Sponsored ONLINE STC on Future of Industrial Automation (FIA – 2020) at Sant Longowal Institute of Engineering and Technology, Longowal, Punjab.

15. Pawan K. Ajmera, Session Chair, MoSICom 2020 (International Conference on Modelling, Simulation & Intelligent Computing), 29-31 January 2020 at BITS Pilani Dubai Campus, Dubai, UAE. Session Chair Date: 30.1.2020

16. Aditya R Gautam gave an expert lecture for an online- workshop on "Matlab and its applications" on 4th to 8th January 2021, jointly organized by Rajasthan Technical University, Kota, and Sri Balaji College of Engineering and Technology, Jaipur under RTU (ATU) TEQIP-III for five days.

17. Dr. Satyendra Kumar Mourya was an Invited speaker in a webinar series on Electronics and Communication Engineering organized by Madanapalle Institute of Technology and Science, Madanapalle, Chittoor district, Andhra Pradesh on July 08, 2020.

18. Dr. Satyendra Kumar Mourya was an Invited Speaker in an FDP program organized by the Department of Electrical Engineering, NIT Patna during 21-27, June 2020.

19. Dr. Satyendra Kumar Mourya was an Invited Speaker in an online lecture series organized by the Department of Electronics and Communication Engineering, IPS College of Technology and Management Gwalior, Madhya Pradesh on May 06, 2020.

20. Dr. Pankaj Arora chaired the session for the 32nd IEEE ICM (International conference on Microelectronics)-2020 in Jordan

21. Dr. Puneet Mishra delivered an Invited Lecture in the Online Seven Days Faculty Development Programme on "Research Challenges in Renewable Energy Technologies" on 15th September 2020 at New Horizon College of Engineering, Bengaluru.

22. Dr. Anantha Krishna Chintanpalli chaired a session in International Conference on Modeling, Simulation, and Intelligent Computing, Jan 29-31 2020, BITS Pilani, Dubai.

23. Dr. Arnab Hazra delivered an invited lecture on "Graphene Field Effect Transistors (GFET) for Sensing Applications" in the Faculty development program on "Electronic Devices, Image Processing and Machine Learning" organized by the Department of ECE, Guru Nanak Institute of Technology, Kolkata-700114 from 11th August to 15th August 2020.

24. Prof Hari Om Bansal delivered an expert lecture TEQIP-III sponsored one week workshop on Sustainable Energy: Challenges and Opportunities, 19-23 Oct 2020, organized by the Department of Electrical Engineering Mahila Engineering College, Ajmer.

25. Prof Hari Om Bansal delivered an expert lecture in ATAL Academy sponsored FDP on Energy Storage for Sustainable Development" Sept 28, 2020, organized by National Institute of Technology, Silchar.

26. Prof Hari Om Bansal delivered an expert lecture in TEQIP-III sponsored Two-week International FDP   on "Techno-Economical and Environmental Aspects of Electrical Energy System for Sustainable Development " Sept 15, 2020, organized by GB Pant Institute of Engineering & Technology, Pauri Garhwal.

27. Prof Hari Om Bansal delivered an expert lecture in TEQIP-III sponsored FDP on Transient stability in power system" Sept 11, 2020, Organized by JEC, Jaipur.

28. Prof Hari Om Bansal delivered an expert lecture in TEQIP-III sponsored FDP on Opportunities and Challenges of e-vehicles in India" Sept 4, 2020, Organized by SKIT, Jaipur.

29. Prof Hari Om Bansal was a member Advisory committee at, National conference on Recent Advancements in machine and space technologies Feb 21-22 2020 at AITS Udaipur.

30. Prof. H.D. Mathur was Chief Guest and Keynote Speaker at AICTE sponsored International Conference on Artificial Intelligence and its applications in Electrical Engineering(ICAIAEE-2020) at YCCE, Nagpur on 18th December 2020.

31. Prof. H.D.Mathur was Invited as Resource Person at AICTE Sponsored by AICTE six-day online Short Term Training Programme (STTP) on "Smart Grid Technologies for Energy Efficiency and Active Demand Side Management", NHCE, Bangalore on 9th December 2020.

32. Prof. H.D.Mathur was invited as Resource Person in AICTE sponsored Faculty Development Programme on " Electric Vehicle Application, Control and Smart Charging using Artificial Intelligence" at MCOE, Pune on 4th and 8th December 2020.

33. Prof. H.D.Mathur was invited speaker in a Short Term Course on "Industry 4.0-Industrial Automation Solutions and Applications". Delivered online talk on "Application of IoT in Energy Management: A Smart City Perspective" at National Institute of Technology, Jalandhar, Punjab. 24th September 2020.

34. Prof. H.D.Mathur was invited as Resource Person in Faculty Development Programme on "Research Challenges in Renewable Energy Technologies" at NHCE, Bangalore on 14th September 2020.

35. Prof. H.D.Mathur was Invited as Resource Person at TEQIP-III Sponsored Online Faculty Development Programme on "Power Electronics Converters: Applications and Their Control" organized by Rajasthan Technical University, Kota and Geetanjali Institute of Technical Studies, Udaipur on 12th August 2020.

36. Prof. H.D.Mathur was Keynote Speaker at International Online Conference on Emerging Trends in Multi-Disciplinary Research "ETMDR-2020", Poornima University, Jaipur on 24th July 2020.

37. Prof. H.D.Mathur was Invited as Resource Person at AICTE Sponsored by AICTE six-day online Short Term Training Programme (STTP) on "Novel Design & Control Strategies and Innovative Technical Practices in LV/HV Modern Switch Gear", SEC, Trichy on 23rd July 2020.

38. Prof. H.D.Mathur was Invited Speaker at International Webinar on Smart Cities: Beyond the Pandemic, 11th July 2020, BITS, Pilani.

39. Prof. H.D.Mathur was Invited as Resource Person at TEQIP-III Sponsored Online Faculty Development Programme on "Challenges and Opportunities in Engineering after COVID-19" at College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur on 1st July 2020.

40. Prof. H.D.Mathur delivered an expert lecture in the Online Faculty Development Program on "Engineering Aspects of Current Learning Needs for Faculty" at Amity University, Kolkata, 27th June 2020.

41. Dr. Meetha .V .Shenoy served as the resource person for the ATAL Academy FDP on 'IoT based Applied Engineering in Agriculture', Organized by ATAL Academy FDP on 'IoT based Applied Engineering in Agriculture', IIIT Kota,14th Oct 2020.

7. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:

- Prof. Romeo Ortega, Professor, Centralesupelec, France visited and delivered a series of Lectures under the SPARC project from 8th to 25th January 2020.

- Prof. Houria Siguerdidjane, Professor, Centralesupelec, France visited and delivered a series of Lectures under the SPARC project from 8th to 24th February 2020.

8. Awards and recognitions won by faculty and students

- Dr. Sainath Bitragunta, Dr. G S S Chalapathi, Dr. Syed Mohammad Zafaruddin, and Dr. Sandeep Joshi elevated to IEEE Senior Member grade

- Dr. Vinay Chamola was awarded IETE Brig. ML Anand Award for contributions in research in the domain of Internet and Networking.

- Dr. Vinay Chamola was elected as an Area Editor of the Ad Hoc Networks Journal, Elsevier.

- Dr. Vinay Chamola was elected as an Associate Editor of IET Quantum Communications, and also IET Networks.

- Dr. Vinay Chamola served as a Guest Editor in Computer Communication Journal, Elsevier (Special Issue on Scalable and Secure Platforms for UAV networks)

- Dr. Vinay Chamola received the Best paper award for the paper "Consumer IoT: Security Vulnerability Case Studies and Solutions" from the IEEE Consumer Electronics Magazine.

- Dr. Pankaj Arora won Young Scientist International Travel Support (ITS) from the Department of Science and Technology (DST) in 2020.

- A patent filed by Dr. H.D. Mathur, Mr. Utkarsh Tripathi, and Dr. Dhananjay Kumar on " Intelligent V2X Power-Sharing Model and Technology Development".

- A patent filed by Dr. Ashish Patel and Dr. H.D. Mathur on "Reduced Measurement-based Power Angle Control of PV integrated Unified Power Quality Conditioner".

- Dr. H.D. Mathur received a start-up grant in Winter 2020 Cohort challenge at BITS, Pilani in 2020.

9. Faculty Development, International Collaboration & Industry/ University Immersion

- Dr. Praveen Kumar AV, as the Indian-lead of the international consortium of academia and industries of India, Sweden, and the Netherlands, has submitted a joint proposal to Globalstars India call, November 2020. The consortium aims at developing an affordable COPD monitoring platform to benefit both the Indian and EU populations.

- International collaborators: Prof. Richard Yu, Fellow, IEEE (Carleton University, Canada) [Cybersecurity and Artificial Intelligence for Connected and Autonomous Vehicles]

- International collaborators: Prof. Mohsen Guizani, Fellow, IEEE, CSE, Qatar University, Qatar [AI and Blockchain Research Center].

- International collaborators: Prof. Nirwan Ansari, Fellow, IEEE, Advanced Networking Laboratory, New Jersey Institute of Technology (NJIT), USA,

- International collaborators: Prof. Dusity Niyato, Fellow, IEEE, Blockchain and AI for 5G Research, School of Computer Science and Engineering, Nanyang Technological University, Singapore.

- International collaborators: Prof. Raj Kumar Buyya, Redmond Barry Distinguished Professor and Director, Cloud Computing and Distributed Systems (CLOUDS) Lab, School of Computing and Information Systems,

The University of Melbourne

- International collaborators: Research Collaboration with Prof Amir Leshem (Bar-Ilan University, Israel) and Prof. Zdenek Becvar (CTU, Prague, Czech Republic)

- International collaborators: Dr. Michael G. Heinz (Purdue University, USA).

10. Significant new equipment/experimental facility added during the year

S.No	Date of Inclusion	New Equipment Added	Amount	Grant/Funding
1	6/6/2020	LEM Voltage sensor LV-25 Voltage sensor with an evaluation board	43425/-	CPRI Project/Dr. H.D.Mathur
2	23/7/2020	AES-ULTRA 96-V2-GSBC,ARM CortexA53/Cortex-R5	39512/-	RIG Grant/Dr. Meetha.v.shenoy
3	15/7/2020	Texas instruments/RF Development tool.	44628/-	RIG Grant/Dr. Meetha.v.shenoy
	-	Intel Real SENSE depth camera & camera modules.	-	-
	-	Intel /Development board & kits other processors	-	-
4	24/7/2020	Three-phase inductive load 5A Continous variable	53050/-	CPRI Project/Dr. H.D.Mathur
	-	Three-phase Resistive load 3kW.	40450/-	CPRI Project/Dr. H.D.Mathur
5	23/7/20	NI-USRP-2900	711595/-	DST-SERB Project/Dr.Syed Mohammad Zafaruddin
	-	NI-USRP-2901	-	
	-	NI LabView	-	
6	11/9/2020	Carbon nanotube single-walled	69409/-	DBT Grant/Dr.Arnab Hazra
		Silicon dioxide fused (granular)		
7	21/9/20	Dell inspiron 7391-i5,window10 ,i5 Screen 13.3"/Ram 8GB ,HDD512SSD/OS	83900/-	Grant over head/Dr. H.D.Mathur
	-	Dell inspiron 3593-i5,window10 /Ram8GB/HDDITB+256GBSSD/Graphic card 2GB	59290/-	Grant over head/Dr. H.D.Mathur
8	1/10/2020	Turtlebot3 burger (INTC)	51126/-	ACRG Grant /Dr. Meetha.v.shenoy
9	6/10/2020	Reactor X150 Robot Arm	128999/-	DST Grant/Dr. Meetha.v.shenoy
10	26/5/20	EMX KITS	37700/-	DRDO/DR. Rahul
11	31/7/20	Mathematica	102000/-	RIG Grant /Dr.Syed Mohammad Zafaruddin
12	5/12/2020	Magnetic Levitation System (from Inteco, Poland)	3,91,500/-	OPERA/Dr. Bijoy K Mukherjee

11. Departmental association/club activities:

Prof. L K Maheshwari Foundation

- Prof. Ramesh Harjani, E.F. Johnson Professor of Electronic Communications, University of Minnesota delivered a distinguished lecture on, "Wireless Communications: SINR" on 12th March 2020 as a part of Prof. L K Maheshwari Foundation Activity.

- Prof. Rajiv Gupta, MD, Ph.D. Neuro and Emergency Radiology, Massachusetts General Hospital and Harvard Medical School, delivered a distinguished lecture on, "My Life's Lessons from BITS and Beyond: A Deep Dive" on 24th January 2020 as a part of Prof. L K Maheshwari Foundation Activity.

- Shri Sunil Sharma, Scientist Solid State Physics Laboratory DRDO, Ministry of Defence New Delhi, delivered an invited lecture, "High Power High-Frequency Devices for Defence Applications" on 7th January 2020 as a part of Prof. L K Maheshwari Foundation Activity.

B1.10.8 Department: Humanities and Social Sciences

Number of faculty members (as on 31st December 2019)

Senior Professors, Professors	-
Associate Professors	8
Assistant Professors	14
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department: Prof. Devika

Contact details: 6168 A, NAB, Vidya Vihar Campus, BITS Pilani, Raj-333031

Number of Ph.D. Scholars:

Full Time   :   26

Part Time   :   10

Aspirant Scheme   :   NIL

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Ms.Namita Ruparel	2017PHXP0005P	(Re)Thinking Positive Workplace/s: A Multisectoral Cross-Sectional Investigation	Dr. Rajneesh Choubisa	-
2.	Ms. SEEMA SINHA	2015PHXP101P	Celebrating the Marginal in Indic Myths: An Alternative Study of the 'Other'	Dr.K.S.Bhattacharya	-
3.	Ms. VIDHI AGARWAL	2013PHXP431P	Evolving contours of the Political: A comparative study on the modes of political communication employed by the movements for the Right to Information and Jan Lokpal between 1996 and 2014	Dr. H. Nair	-
4.	Ms. Shivangi Priya	2014PHXF0007P	Language Maintenance & Shift of Maithili Language after Eighth Schedule Inclusion: A Case Study	Prof. Pushp Lata	Dr. Narayan Choudhary, Lecturer Cum Junior Research Officer, Central Institute of Indian Languages, Mysuru
5.	Ms. SHUBHA DUBEY	2013PHXF0012P	ROLE OF PSYCHOLOGICAL CAPITAL IN RELATION WITH EMPLOYEES' PERCEPTION OF ORGANIZATIONAL VIRTUOUSNESS ON EMPLOYEE PERFORMANCE	Dr. Rajneesh Choubisa	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Gandhiana Bibliography Bilingual (Spanish-English)	-	Hari Nair	Swaha Das Yogendra Sharma	Gandhi Research Foundation	-	Rs. 30,000 from Sep 2020 to March 2021

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1.	Non Technical Written Registers for the Enrichment of Lexical Competence in English : A Course Based Studey	HSS	Chiintalapalli Vijaykumar				**2,00,000**
2.	The Belt and Road Initiative (BRI) in Sri Lanka "Harmonious World" Visa-a-vis Liberal International Order	HSS	Dr. Veena Ramchandran				**2,00,000**

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	An Empirical Study on Accountability and Learning Outcomesin Public School Systems in Rajasthan.	HSS	Dr. Tanu Shukla	Dr. Virendra Singh Nirban	ICSSR IMPRESS	-	10,50,000
2	Influence of English Teachers' Efficacy, Competence, and Motivation on their Instructional Strategies: A study of Secondary School Teachers in Jhunjhunu, Rajasthan"	HSS	Devika (PI)	Dr. Rajni (Co PI)"	Funding Agency NCERT.	-	6,80,400

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Gandhiana Bibliography Bilingual (Spanish-English)	-	Hari Nair	Swaha Das Yogendra Sharma	Gandhi Research Foundation	-	Rs. 30,000 Sep 2020-March 2021

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1.	An Analytical Study of Parenting Practices among Working-Class Women in Urban Kolkata.	-	Madhurima Das	-	RIG	-	2,00,000
2.	Nostalgia, Melancholy and Communist Desire: Left-wing Culture in Kerala in the 1970s	-	Muhammed Afzal P.	-	RIG	-	2,00,000
3.	Non Technical Written Registers for the Enrichment of Lexical Competence in English : A Course Based Studey	-	Chiintalapalli Vijaykumar	-	RIG	-	2,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
4.	The Belt and Road Initiative (BRI) in Sri Lanka "Harmonious World" Visa-a-vis Liberal International Order	-	Dr. Veena Ramchandran	-	RIG	-	2,00,000
5.	Bring back peacocks to pilani	HSS	Prof. Sangeeta Sharma	Dr. Sandhya Marathe, Dr. Anmol Marathe, Dr. Pankaj Sharma and Dr. Sushil Yadav	BITS Alumni	-	12,00,00

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	"Development & Validation of a Prototype of a Web/Mobile App Based Positive Psychological Intervention for Adolescents"	-	Dr. Rajneesh Choubisa	Dr. Gajendra Singh Chauhan Dr.Tanu Shukla	ICMR-ICSSR-SBR	-	17,26,119
2.	"Efficacy & Effectiveness of Information, Education and Communication (IEC) activities for Health Awareness and Promotion Among Women in Rajasthan: Towards a HOPE Approach"	-	Dr. Gajendra Singh Chauhan	Dr.Tanu Shukla Dr.Rajneesh Choubisa Dr. Sailaja Nandigama Dr. RP Pareek	ICMR-ICSSR-SBR	-	25,11,490
3.	"Participatory Exclusions of Women and the Poor in Community Forestry: A Comparative Study of Implementation of the ROFR Act Across 3 States of India"	-	Dr. Sailaja Nandigama	Dr. Sanjiv Kumar Choudhary & Dr. Kumar Sankar Bhattacharya	ICSSR	-	7,00,000
4.	Epistemology Revisited: Postmodern Discourses, Alternative Forms of Cognition and Interdisciplinarity of Knowledge	-	Dr. Anupam Yadav	-	ICPR	-	2,00,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Devika, Punita Raj, Abhijith Venugopal, Bastian Thiede, Christoph Herrmann, Kuldip Singh Sangwan. "Development of the Transversal Competencies in Learning Factories." Procedia Manufacturing 45 (2020) 349-354. doi.org/10.1016/j.promfg.2020.04.031 SCOPUS INDEXED.

2. Sangeeta Sharma & Arpan Bumb (2020). Culture in advertising: model for Indian markets. Journal for Cultural Research, 24(2), 145-158. DOI: 10.1080/14797585.2020.1802143 (Taylor & Francis, Q1 ranked by Scimago, Scopus, Web of Science Indexed)

3. Sangeeta Sharma & Arpan Bumb (2020). Product Placement in Entertainment Industry: A Systematic Review. Quarterly Review of Film and Video. DOI: https://doi.org/10.1080/10509208.2020.1811606 (Taylor & Francis, Q1 ranked by Scimago, Scopus, EBSCO, ProQuest Indexed)

4. Sushila Shekhawat & Sangeeta Sharma (2020). Inculcating Life Skills among College Students through Films. IUP Journal of Soft Skills. 14(3), 52-58. (Cabell's Directory, EBSCO and Proquest indexed)

5. Nayan J. Nath, Sangeeta Sharma, & Shukla Tanu. (2020). Exploring the Liaising Role of Community Health Workers in the Bordering Region of India-Bangladesh: A Mix-Method Approach. Online Journal of Health and Allied Sciences, 19(1). https://www.ojhas.org/issue73/2020-1-1.html (Scopus, EBSCO, DOAJ, Copernicus indexed)

6. Sangeeta Sharma & Arpan Bumb (2020). The Challenges faced in Technology Driven Classes during COVID-19. International Journal of Distance Education Technologies 19(1), pp. 17-39. DOI: 10.4018/IJDET.20210101.oa2 (Scopus, EBSCO, ACM Digital library, Web of Science, ProQuest, INSPEC, ERIC, Cabell Indexed)

7. Sangeeta Sharma & Sushila Shekhawat (2020). Learning Soft Skills through Group Discussion.The IUP Journal of Soft Skills, 14(4). (Cabell's Directory, EBSCO and Proquest indexed).

8. Sangeeta Sharma & Arpan Bumb (2020). Factors Affecting College Students' Effectiveness for Cooperative Learning through Structural Equation Modelling. Universal Journal of Educational Research, 8(9), 4080-4088. DOI: 10.13189/ujer.2020.080933 (Scopus, EBSCO A-Z, Ulrich Indexed)

9. Kumar Neeraj Sachdev, "A Philosophical Assessment of Non-Possessiveness in Teaching and Learning," Global Journal of Human - Social Sciences (G), Vol. XX, Issue V, Version I, Year 2020, pp. 17-20

10. Kumar Neeraj Sachdev, "An Ethical Analysis of a Conflict in Seller-Buyer Relationship in the Marketplace: An Aristotelian Perspective," International Journal of Research in Business Studies, Volume 5, No. 1, June 2020, pp. 71-82

11. Chetna Gupta and Kumar Neeraj Sachdev, "An Account of Ethics, Deontological Theory ppl and Its Applications in Understanding Ethical Impermissibility of Euthanasia," Annals of Bioethics & Clinical Applications, Vol. 3, Issue 2, June 2020, pp. 1-5.

12. Srinivasan, Shrija and Sushila Shekhawat. " India In-Between: Culture and Nation Representation in Jean Renoir's Film The River (1951)". Quarterly review of Film and Video. Routledge: Taylor and Francis Group. DOI: 10.1080/10509208.2020.1838864 (Q1 ranked by Scimago, Scopus, EBSCO, ProQuest Indexed)

13. Srinivasan, Shrija, Sushila Shekhawat and Somdatta Bhattacharya. "Mapping the Evolution of Crime Fiction as a Genre: Eighteenth Century to the Contemporary Times". Rupkatha Journal on Interdisciplinary Studies in Humanities.Vol 12. No. 6. December 2020. pp. 1-12. DOI: 10.21659/rupkatha.v12n6.13.(Indexed in Scopus and Web of Science).

14. "The Teaching Year No One Could Have Planned For", Gajendra Singh Chauhan (2020). Harvard Business Publishing Education, 21 December, 2020.

15. "Infodemic of Fake News: Hope for Print", Gajendra Singh Chauhan (2020). Published in University News, Vol 58, Issue 29, July 20-26, 2020.

16. Shukla, Tanu., Nirban, V. S., & Chakraborty, D. (2020). Comprehending Accountability and Learning Outcomes in School Education. TEST Engineering and Management, 83(2) (Scopus)

17. Shukla, Tanu., Dosaya, D., Nirban, V. S., & Vavilala, M. P. (2020). Factors Extraction of Effective Teaching-Learning in Online and Conventional Classrooms. International Journal of Information and Education Technology, 10(6) (Scopus, EBSCO, CrossRef)

18. Sharma, A.K., Nath, N.J. & Shukla, Tanu (2020). Effect of Religion and Education in the EAG states in India: Evidence from NFHS-4. Socrates Journal, 8(1), 34-39 (EBSCO, CrossRef, Google Scholar, INFLIBNET

19. Dosaya, D., Shukla, Tanu, & Nirban, V. S. (2020). Transformation of Academic Ecology through Information Communication Technology Adoption. International Journal of Information and Education Technology, 10(5), 372377 (Scopus, EBSCO, CrossRef, Google Scholar)

20. Sinha, Seema and Kumar Sankar Bhattacharya. "A Study of Kunti in The Mahabharata". MUSE INDIA, Issue No. 91 (May-Jun 2020). ISSN: 0975-1815.

21. Ruparel, N, Choubisa, R., Sharma, K. & Seth, H. (2020). Assessing the Psychometric Properties of Cultural Intelligence Scale among Indian Employees. Current Psychology. Doi: https://doi.org/10.1007/s12144-020-00814-0 (ISSN:1046-1310) [SCOPUS INDEXED] [IF-2.05]

22. Ruparel, N., & Choubisa, R. (2020). Knowledge Hiding among Organizations: A Retrospective Narrative Review and the Way Forward. Dynamic Relationships Management Journal, 9(1),5-22. Doi: 10.17708/DRMJ.2020.v09n01a01. [SCOPUS & DOAJ Indexed].

23. Chintalapalli Vijayakumar, Modern English Teacher Proxemics and pandemics Volume 29, Issue 3, July 2020 ISBN: 9781913414160

24. Chintalapalli Vijayakumar, Journal of English Language Teaching "Do-It-Yourself" English Courses for Higher Education Volume LXII, Number 2, March-April 2020 ISSN 0973-5208.

25. Das, Swaha, Hari Nair and Yogendra Swaraj Sharma, 'La Bhagavad Gītā y sus interpretaciones políticas modernas' Interpretatio:Revista de hermeneutica, vol. 5, no. 2, pp. 169-184 DOI: 10.19130/iifl.it.2020.5.2.0011 ISSN: 2448-864X

26. Das, Swaha and Hari Nair, 'Reflections on teaching-learning in Gandhi Studies', Studies in Indian Politics, Volume 8, Issue 2, page(s): 281-288 https://doi.org/10.1177/2321023020963841

27. Sailaja Nandigama, (2020), 'Performance of success and failure in grassroots conservation and development interventions: Gender dynamics in participatory forest management in India' , Land Use Policy, Volume 97, 103445, ISSN 0264-8377, https://doi.org/10.1016/j.landusepol.2018.05.061. (Q1 category journal in Scimago list; Impact factor for 2019-20: 3.850).

28. Priya, S., & Lata, P. Language Promotion and the Eight Schedule of the Constitution of India. The Interplays of Language, Society and Culture, edited by Tariq Khan ICOLSI Peer reviewed 40th International Conference of Linguistic Society of India, CIIL, Mysuru and LSI, Pune. 2020. pp 182-189. ISBN: 978-81-946499-8-4 to be indexed in SCOPUS.

29. Lata, Pushp, Capacity Building through Cross Cultural Skills among Engineering Graduates of India: A Case Study of CCS Course at BITS Pilani, published within a scopus-listed proceedings book (publishing group: Springer Nature), Procedia Manufacturing 45 (2020) 349-354. doi.org/10.1016/j.promfg.2020.04.031 SCOPUS INDEXED.

30. Deepak Kumar, Pushp Lata , "Teachers' Perceptions about the Existing CBSE Secondary Grade English Syllabus and the Need for Inclusion of Multimodality," Universal Journal of Educational Research, Vol. 8, No. 12A, pp. 7870-7880, 2020. DOI: 10.13189/ujer.2020.082576. [SCOPUS INDEXED]

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Sangeeta Sharma and Arpan Bumb, "Marketing at the Bottom of the Pyramid: Overcoming Challenges through MICMAC Analysis". Conference on Managing during Turbulent Times (During and Beyond Covid-19) at ITM Business School , Kharghar Navi Mumbai on 25 September 2020.

2. Poonam Vyas and Sangeeta Sharma, "Communication Barriers Faced by Tribal Secondary School Students in Rajasthan". National Conference on Sustainable Development Goals: The way forward towards quality education, gender equality, affordable and clean energy in India at MNIT Jaipur from 10-11 September, 2020.

3. Sangeeta Sharma, "Strengthening the ties: SIP for Japanese delegates to bolster culture exchange". National Conference on Sustainable Development Goals: The way forward towards quality education, gender equality, affordable and clean energy in India at MNIT Jaipur from 10-11 September, 2020.

4. Shrija,Srinivaan and Sushila Shekhawat. Where are they? Position of Women in Law Enforcement in the Online National Conference on Sustainable Development Goals jointly organized by Department of Humanities and Social Sciences, MNIT Jaipur and National Institute of Technology, Uttarakhand in academic collaboration with The Indian Econometric Society, New Delhi on 10 – 11 September, 2020.

5. Das, Madhurima "Responsible Parenting: Theories, Praxis and COVID." National Thermal Power Corporation (NTPC), Khargone (India), May 2020.

6. Sailaja Nandigama and Kumar Sankar Bhattacharya. "Does Responsibilization of Forest Dependent People Lead to Better Forest Management? A Comparative Qualitative Case Study of the Politics of Forest Rights

Recognition in two States of India.". Jaipur National University, The National Seminar on Tribal Development, Jaipur 11th January, 2020.

7.   Aayushi Malhotra and Sailaja Nandigama. "Revisiting the mutual reciprocity of human-ecological systems: Integrating extensive agriculture and transhumant pastoralism in the North Indian states of India." Jaipur National University, The National Seminar on Tribal Development, Jaipur 11th January, 2020.

8.   Mayuresh Vijay Bhise and Sailaja Nandigama. "Tribal Development: Experiences, Problems and Challenges." Jaipur National University, The National Seminar on Tribal Development, Jaipur 11th January, 2020.

ii) International:

1.   Sangeeta Sharma and Arpan Bumb, "Creativity in Advertising: Developing a model for willingness and believability." International Conference on Technology and Business Management (ICTBM-20) in Los Angeles, USA, from 12-13 June, 2020. Conference proceeding at http://www.ictbm.org/ictbm20/ICTBM20CD/pb.pdf

2.   Sangeeta Sharma and Arpan Bumb, "Depiction of culture through advertising." 13th Global Studies Conference at Concordia University, Montreal, Canada, from 4-5 June 2020. More details at https://cgscholar.com/ community/communityprofiles/ global-studies/community updates/ 120696.

3.   Sangeeta Sharma and Arpan Bumb, "Portrayal of Women and Children in Advertising-Review and Analysis". 4th International Marketing Conference on Marketing, Technology and Society at IIM Kozhikode, Kozhikode from 7-9 December 2020.

4.   Kumar Neeraj Sachdev, "A Philosophical Perspective of Value-Oriented Conduct of Educators in Higher Education," online presentation at Seoul - International Conference on Social Sciences & Humanities (ICSSH), sponsored by Eurasia Research and organized by Social Science and Humanities Research Association (SSHRA) at Nine Tree Premier Hotel, Myeongdong, Seoul, South Korea during May 20-21, 2020 (Keynote Speaker)

5.   Kumar Neeraj Sachdev, "An Account of Philosophical and Ethical Thinking in the Current Century," Online Presentation at 22nd International Conference on "Ethical Thinking: Past and Present (ETPP 2020/22)," sponsored by Institute of Ethics and Bioethics, University of Presov, Slovakia and Civic Association "Ethica" at Slovakia during October 15-16, 2020

6.   Kumar Neeraj Sachdev, "An Analysis of an Ethical Conflict in Seller-Buyer Relationship in the Marketplace: A Philosophical Perspective," International Conference on Research in Business (ICRB 2020) on "Together Towards Tomorrow: Tapping the Tempo" held at India International Centre, New Delhi, India on February 16, 2020 (Best Paper Award)

7.   Tanu Shukla, V. S. Nirban and Deepanjana Chakraborty, "Accountability for Quality Education", International Conference on Multi-Disciplinary Research Studies and Education, 29th-30th April, 2020, Kuala Lumpur, Malaysia

8.   V. S. Nirban, Tanu Shukla, Divya Dosaya and Mounika P. Vavilala, "Role of Life Skills in Education for Sustainable Development", Education Beyond the Human (Comparative and International Education Society), 22nd-26th March, 2020, Miami, USA

9.   Mounika P. Vavilala and Tanu Shukla, Well-being & School Engagement of Students at Secondary Level through Capability Approach, HDCA Conference, Jun 29-July 3, 2020, Auckland, New Zealand

10. Tanu Shukla, Madhurima Das and V. S. Nirban. "Evincing Gender Ecology in Indian Science Higher Education", International Conference on Gender and Sexuality, Colombo, Sri Lanka. during 15th-16th October 2020.

11. Sailaja Nandigama, Kumar Sankar Bhattacharya. Aayushi Malhotra, & Mayuresh Vijay Bhise. "Disappearing Spaces for Active Community Participation in Forest Management: A Comparative Study of Forest Rights Act Implementation in India". Paper presented at the FLARE Network (USA) Twitter Conference organized by the University of Michigan, USA held during 26-29 October, 2020.

6.   LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1.   Raj P., Devika (2020) Use of Metacognitive Awareness for the Optimal Utilisation of Competencies in Ill-Defined Situations: A Study of Oskar Schindler (Schindler's List). In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. https://doi.org/10.1007/978-3-030-44248-4_20.

2.   Venugopal A., Singh R., Devika (2020) Role of Self-efficacy in the Learning Output of Engineering Education. In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. https://doi.org/10.1007/978-3-030-44248-4_23.

3. Sangeeta Sharma and Priya C. Sande (2020) Improving Classroom Delivery of Engineering Education Through Design Thinking. In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. https://doi.org/10.1007/978-3-030-44248-4_19 (Published by Springer).

4. Business Correspondence and Report Writing-A Practical Approach to Business and technical Communication, 6Ed. (2020). R C Sharma, Krishna Mohan and Virendra Singh Nirban, McGraw Hill, ISBN: 978-9390113002

5. Shukla, Tanu (2020). Professional Ethics for Organizational Development, Bloomsbury. [ISBN: 978-93-90358-46-5].

6. Virendra Singh Nirban. & Shukla, Tanu (2020). Social Informatics and Psychology:Theory and Practice, Bloomsbury. [ISBN: 978-93-90252-53-4]

7. Krishna Akhil Kumar Adavi, Hari Nair and Swaha Das, 'Gandhi and the 'race' question' in Sanjeev Kumar, ed., 2020, Gandhi and the contemporary world, Oxford and New York: Routledge, pp. 157-168.

8. Mayuresh Vijay Bhise,& Sailaja Nandigama. (2020). "Struggle for Living: The Story of Irular Tribe and The Forest Rights Act (FRA) Implementation in Tamil Nadu". In Deepak Kumar Yogi Eds., "Tribal Development: Experiences, Challenges and Opportunities" Book Enclave Publishers, Jaipur. Book Enclave Publishers, Jaipur. Pp. 187. ISBN: 978-81-8152-543-7.

9. Sailaja Nandigama, "A snapshot of Significant Issues in Tribal Development in India". Book Chapter in Deepak Kumar Yogi eds. 'Indian Tribes and Development Issues', Book Enclave Publishers, Jaipur.

10. Aayushi Malhotra, Sailaja Nandigama, & Pushp Lata. "The Cornered Talks- Discussing Gendered Communication in Tribal Development in India". Book Chapter in Deepak Kumar Yogi eds. 'Indian Tribes and Development Issues', Book Enclave Publishers, Jaipur.

Commentaries/ Opinion Pieces Published

1. Veena Ramachandran (2020)."China Expanding its clout in Sri Lanka's Politics, after dominating economy", The WEEK, 29 July.

2. Veena Ramachandran (2020). "China as a World Leader: Assessing Implications of COVID-19, BRI and a Global Common Destiny", Commentary 4555, Nepal Institute for International Cooperation and Engagement, 08 May.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Sangeeta Sharma, Invited lecture on "Creative Thinking" at SRM University on 31st October 2020

2. Sangeeta Sharma, Invited lecture on "Capacity Building: Role of Effective Presentation in Governance" as a Three Day Online Programme on "Capacity Building towards achieving Good Governance" conducted by AP HRDI (Andhra Pradesh Human Resource Development Institute) on 15th October 2020.

3. Sangeeta Sharma, Invited lecture on "Gender Biases and Issues in Organization" as a part of a Three Day Online Programme on "Protection of Women from Atrocities" conducted by AP HRDI (Andhra Pradesh Human Resource Development Institute) on 14th September 2020.

4. Sangeeta Sharma, Series of invited lectures on "Soft skills development" at IIHMR, Bangalore, on 1-7 August 2020.

5. Sangeeta Sharma, Invited lecture on "Gender bias and Stereotyping, Gender equality and women's rights." This guest lecture was organized by MNIT Jaipur and IIIT Kota's Women cell on 17th June 2020.

6. Sangeeta Sharma, Invited guest lecture on "Improving Communication Competence through Soft Skills" at MNIT Jaipur on 20th February 2020.

7. Gajendra Singh Chauhan, Invited as a Resource Person to deliver a Plenary talk in an International Webinar on "Language, Literature and Media in the Contemporary Times" organized by Pt. Ravishankar Shukla University, Raipur 29th and 30th July, 2020.

8. Gajendra Singh Chauhan, Invited to deliver a course on "Strategic Sports Communication" in Term III of 2-years Executive Post Graduate Diploma in Sports Management (ePGDSM) IIMR between April 6 2020 – June 13 2020.

9. Chintalapalli Vijayakumar, Delivered an invited lecture on "Pandemics and Proxemics: Effective Language Teaching and Learning Strategies" in the International Webinar on "Pandemic Pedagogy: Issues and Challenges" organized by the Department of English, Maharaja Bir Bikram University, Agartala, Tripura on July 24, 2020

10. Chintalapalli Vijayakumar Conducted a webinar on 'Understanding language use for academic purposes' organized by the department of English of Padmavathi Mahila University, Tirupati (19 December 2020)

11. Chintalapalli Vijayakumar Invited speaker for the national seminar on "Designing ELT" conducted by Netaji Open University (NSOU) Kolkata (5 July 2020)

12. Muhammed Afzal P. Invited Lecture on "Thinking Conjuncturally: The Gramscian Turn in Cultural Studies". Three Days E-Workshop on Cultural Studies, organized by the Department of English Studies, Central University of Tamil Nadu, from 21 September 2020 to 23 September 2020.

13. Muhammed Afzal P. Invited Lecture on "Cinema and the Production of Popular Identities". One Day Workshop on "Media, Technology and Textuality", organized by Centre for Comparative Literature and Translation Studies, Central University of Gujarat, on 26 February 2020.

14. Muhammed Afzal P. Invited Lecture on "Cinema and Politics in Kerala: Mukhamukham and the Left Popular". UGC-sponsored refresher course in Media Studies, conducted by the Human Resource Development Centre, University of Calicut on 27 January 2020.

15. Sailaja Nandigama., (January, 2020). Delivered the keynote lecture on "A snapshot of Significant Issues in Tribal Development in India" in the "National Seminar on Tribal Development" on 11th January, 2020, at the Department of Social Sciences, in the Jaipur National University, Jaipur.

16. Sailaja Nandigama., (October, 2020). Delivered Cross Campus (BITS campuses) invited lecture on "How to Write Good Quality Papers aimed at International Journals" organized by the Library of BITS Pilani and the Dept. of HSS, Pilani Campus.

17. Tanu Shukla. (April, 2020). Invited Lecture on Job Oriented Skill Development Program, organized by MAM Pithoragarh, Uttarakhand.

18. Tanu Shukla (September, 2020). Invited Lecture in Research Methodology Training for Faculty of District Institute of Education and Training, Gov. of India, New Tehri, Uttarakhand.

19. Veena Ramachandran. (October 2020). Invited Lecture on the topic, " Minority Politics in China" at the Department of Political Science, Kumaraguru College of Liberal Arts and Science, Coimbatore.

20. Pushp Lata from HSS Department was invited to be part of the panel discussion, ELTAI Webinar 3 - English for Engineers: Redesigning the Curriculum helpd on 25 May 2020 www.youtube.com/watch?v=OyGKlKdleO0, Author: ELTAI IndiaVideo Duration: 78 min, Views: 2.3K on 25 May 2020

21. Pushp Lata conducted an online webinar Awareness on National Education Policy 2020 (NEP)Project Umang, NSS BITS PILANI in collaboration with Teaching Learning Center, BITS pilani is organising a webinar for teachers of nearby schools of Pilani on 25th OCT (SUNDAY) | 3:00-4:00 PM.

22. Pushp Lata took part as a panelist in an online Panel Discussion on English for Engineers: Curriculum Redesigning for ELTAI WEBINAR Session 3 on 10 MAY 2020 from 3.00 to 4.30. pmhttps://www.youtube.com/watch?v=L-MjRbBuvZQ

23. Pushp Lata conducted an online webinar as a resource person for online FDP on ICT and Innovative Teaching Strategies on 12/05/2020 from 01:00 to 02:30 pm at Amity Institute of English Studies and Research, Amity University, Noida.

24. Pushp Lata conducted an online webinar on "Assessment Literacy: Challenges and Innovations" for ELTAI - Coimbatore Chapter for the International Faculty Development Program held during 18-20 June 2020 at PSG College of Technology, Coimbatore as per the following schedule: Meeting URL Day 1: Thu, Jun 18, 2020 9:20 AM - 5:00 PM (IST) https://global.gotomeeting.com/join/456456389

25. Pushp Lata conducted an online webinar on Google classroom for ELTAI India on 31 May 2020 at 11.30 AM through google meet. Given below is the link: meet.google.com/pxb-abyq-uzb.

26. Pushp Lata conducted an online webinar on English for career Development (8th July 2020) as part of Faculty Development Program on Creating a Paradigm Shift: Strategies and Adaptations to Encourage Quality Teaching organized by the Dept. of English, Saranathan College of Engineering, Trichy, during 6th - 8th July 2020. As per the following schedule: Meeting URL 8 July 20202.00 pm -3.30 pm Webinar Jam https://forms.gle/WWnM1AsfzQc5dP676

27. Madhurima Das, May 2020- "Responsible Parenting: Theories, Praxis and COVID." National Thermal Power Corporation, Khargone (India).

9.   INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Veena Ramachandran has initiated Distinguished Lecture Series in Foreign Policy and International Relations. Ambassador Dr. T.C.A. Raghavan (I.F.S. Retired) delivered a lecture on 9th October 2020, on the topic, "India, South Asia and the World".

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Sangeeta Sharma, Received best paper award for "Marketing at the Bottom of the Pyramid: Overcoming the Challenges through MICMAC Analysis" at National Conference on Managing during Turbulent Times held at ITM Business School, Navi Mumbai on 25 September 2020.

2. Sangeeta Sharma, Key Note Speaker in the technical session on Marketing Management of the 12th International e-Conference at Prestige Institute of Management held during December 19th-20th, 2020. The topic of the paper was "Research in Digital Marketing"

3. Dr. Sailaja Nandigama, is invited in July 2020 to join as an Associate Editor in the Scopus indexed, Scimago Q2 ranked "Journal of Environmental Studies and Sciences" (JESS), https://www.springer.com/journal/13412/editors   Journal of Environmental Studies and Sciences (JESS) published by Springer-Nature, USA. Electronic ISSN: 2190-6491; Print ISSN: 2190-6483. (Impact Factor: 1.61; Q2 in Scimago listing).

b. Won by Students: **NA**

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. Sailaja Nandigama has been invited in June 2020 to initiate and participate in an international academic research collaboration under the aegis of the Japan-India International Linkage Degree Program (ILDP) in Hiroshima University, Japan. The proposed collaboration between HU and BITS Pilani, Pilani Campus spans through 2020-21 and incorporates invited lectures/webinars and student & faculty workshops and visits.

2. Dr. Sailaja Nandigama has organised an international webinar under the aegis of the International Academia and Research Committee (IARC) of the Department of Humanities and Social Sciences, in the month of October, 2020. The distinguished speaker Dr. Severine van Bommel, from the University of Queensland, Australia, delivered her webinar on, "Governance of complex agri-environmental systems and development interventions: an interpretive approach".

3. Dr. Veena Ramachandran has organized an international webinar as part of the Distinguished Lecture series in Foreign Policy and International Relations (in collaboration with the International Academia and Research Committee (IARC) of the Department of Humanities and Social Sciences) in the month of November, 2020. The distinguished speaker Dr. Selbi Hanova, Communication for Development Officer, UNICEF, Turkmenistan, delivered her lecture on the topic, " Multilateralism, Regionalism and Sovereignty in 2020: IOs and States".

12. PATENTS FILED/PUBLISHED AND GRANTED

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1. **Devika**, Editor – Musings 2020;

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: NIL

B1.10.9 Department: Mathematics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	02
Associate Professors	06
Assistant Professors	12
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department: Prof. Devendra Kumar

Contact details: 6067-H, NAB

Number of Ph.D. Scholars : 48

Full Time   **:**   48

Part Time   **:**   **-**

Aspirant Scheme   **:**   **-**

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Parvin Kumari	2015PHXF0409P	Boundary-Layer Resolving Numerical Methods for Time-Dependent Singularly Perturbed Parabolic Initial Interval/Boundary Value Problems	Devendra Kumar	
2	Priyanka Kumari	2013PHXF0005P	Difference Sets and Their Applications	P.H. Keskar	
3	K. Satya Pritam	2015PHXF0011P	Prospects of Fractional Calculus in Sustainable Development Goals	Trilok Mathur	Shivi Agarwal
4.	Satyendra Singh Chauhan	2015PHXF0012P	A Study of Varying Viscosity Effect on Physiological Flows Through Microvessels	Ashish Tiwari	
5.	Shruti	2016PHXF0012P	Channel Access and Reliability Assessment in Cellular Mobile Networks: Modeling and Performance Analysis	Rakhee	
6.	Shivani Sharma	2017PHXF0025P	Bayesian Inference in Anisotropic Cosmological Models	Suresh Kumar	

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	A Study of Existence Questions to Elliptic Partial Differential Equations with Gradient Nonlinearities	Mathematics	Gaurav Dwivedi	-	SERB	-	18,62,982/-
2	Staggered Discontinuous Galerkin Method for Kirchoff type Elliptic and Parabolic Problems	Mathematics	Sangita Yadav	-	SERB	-	18,79,240/-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	A parameter-uniform approximation for singularly perturbed parabolic reaction-diffusion boundary value problems	Mathematics	Devendra Kumar	-	DST-SERB	-	6,60,000/-
2	A study of nonlinear polyharmonic boundary value problems with dependence on gradient	Mathematics	Gaurav Dwivedi	-	DST-SERB	-	6,60,000/-
3	A Study of Graphs on Semigroups	Mathematics	Jitender Kumar	-	DST-SERB	-	6,60,000/-
4.	"Development of uniformly convergent methods for two-parameter singularly perturbed boundary value problems"	Mathematics	Devendra Kumar	-	DST-SERB	-	16,87,400/-
5	Numerical Methods and Error Analysis for Solving Coagulation and Non-linear Fragmentation Equations	Mathematics	Rajesh Kumar	-	DST-SERB	-	9,62,500/-
6.	A Benchmarking Analysis of Public Transport Sector of Rajasthan: DEA Approach	Mathematics	Shivi Agarwal	Trilok Mathur	DST, Rajasthan	-	5,59,000/-

A. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Contemporary Earthquake Potential Analysis along the Central and Nepal Himalaya	Mathematics	Yogendra Sharma	Sumanta Pasari	ISC-ROAP and IRDR-ICOE, Taipei	-	USD 15000
2	Collision-induced fragmentation and coagulation: dynamics and numerics	Mathematics	Prof. Ankik Kumar Giri (Indian PI), Prof. Philippe Laurencot (French PI)	Rajesh Kumar	IFCAM	IIT Roorkee, India and Univ. of Toulouse, France	14,61,000/-

C. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Evaporation of nanodroplets in quiescent environment	Mathematics	Anirudh S Rana	-	RIG	-	2,00,000/-
2	`Investigations in Diophantine Number Theory'	Mathematics	Divyum Sharma	-	RIG	-	2,00,000/-

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Mathematics aided Architectural Design layouts	-	Krishnendra Shekhawat	-	SERB	-	1544660/-

3. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	A study of polyharmonic boundary value problems with exponential nonlinearities	Mathematics	Gaurav Dwivedi	-	RIG	-	2,00,000/-
2	Numerical Approximations: Solution and Convergence Analysis for Non-linear Aggregation-Breakage Equations	Mathematics	Rajesh Kumar		RIG		2,00,000/-

4. Papers Published by Faculty In Journals

1. Devendra Kumar, Parvin Kumari, A parameter-uniform scheme for singularly perturbed partial differential equations with a time lag, Numer Methods Partial Differential Eq., 36, 868–886, 2020

2. Devendra Kumar, Parvin Kumari, A parameter-uniform collocation scheme for singularly perturbed delay problems with integral boundary condition, Journal of Applied Mathematics and Computing, 63, 813–828, 2020

3. Devendra Kumar, Parvin Kumari, Parameter-uniform numerical treatment of singularly perturbed initial-boundary value problems with large delay, Applied Numerical Mathematics, 153, 412–429, 2020

4. Upasani, N., Shekhawat, K., Sachdeva, G., Automated generation of dimensioned rectangular floorplans Automation in Construction, 113, 1-11, 2020

5. Shruti and Rakhee Kulshrestha, Channel Allocation and Ultra Reliable Communication in CRNs with Heterogeneous Traffic and Retrials: A Dependability Theory-Based Analysis, Computer Communications, 158, 51-63, 2020

6.   Pasari, S, Sharma Y, Contemporary earthquake hazards in the west-northwest Himalaya: A statistical perspective through natural times, Seismological Research Letters, 91(6), 3358–3369, 2020.

7.   Sharma Y, Pasari S, Ching KE, Dikshit O, Kato T, Malik JN, Chang CP, Yen JY, Spatial distribution of earthquake potential along the Himalayan arc, Tectonophysics, 791, 228556, 2020.

8.   Tiwari A, Narayan AB, Dwivedi R, Swadeshi A, Pasari S, Dikshit O, Geodetic investigation of landslides and land subsidence: case study of the Bhurkunda coal mines and the Sirobagarh landslide, Survey Review, 52, 134-149, 2020

9.   Shekhar, C., Gupta, A., Kumar, N., Kumar, A. and Varshney, S., Transient Solution of Multiple Vacation Queue with Discouragement and Feedback   , Scientia Iranica, Accepted.

10. Shekhar, C., Varshney, S. and Kumar, A., Optimal and Sensitivity Analysis of Vacation Queueing System with F-Policy and Vacation Interruption, Arabian Journal for Science and Engineering, 45(8), 7091-7107, 2020

11. Shekhar, C., Varshney, S. and Kumar, A., Matrix-geometric solution of multi-server queueing systems with bernoulli scheduled modified vacation and retention of reneged customers: A meta-heuristic approach Quality Technology & Quantitative Management, Accepted.

12. Shekhar, C., Kumar, N., Gupta, A., Kumar, A. and Varshney, S., Warm-spare provisioning computing network with switching failure, common cause failure, vacation interruption, and synchronized reneging, Reliability Engineering and System Safety, 199, 106910, 2020

13. Shekhar, C., Kumar, A. and Varshney, S., Load sharing redundant repairable systems with switching and reboot delay   Reliability Engineering & System Safety, 193, 106656, 2020

14. Shekhar, C., Kumar, A., Varshney, S. and Ammar, S. I., Fault-tolerant redundant repairable system with different failures and delays, Engineering Computations, 37(3), 1043-1071, 2020

15. Shekhar, C., Varshney, S. and Kumar, A., Optimal control of a service system with emergency vacation using bat algorithm, Journal of Computational and Applied Mathematics, 364, 112332, 2020

16. Ashish Tiwari, Pallav Dhanendrakumar Shah and Satyendra Singh Chauhan, Analytical study of micropolar fluid flow through porous layered microvessels with heat transfer approach, European Physical Journal Plus, 135 (2), 209, 2020

17. Ashish Tiwari, Pallav Dhanendrakumar Shah and Satyendra Singh Chauhan, Solute dispersion in two-fluid flowing through tubes with a porous layer near the absorbing wall: Model for dispersion phenomenon in microvessels, International Journal of Multiphase Flow, 131, 103380, 2020

18. P K Yadav, A. Tiwari and P. Singh, Motion through spherical droplet with nonhomogenous porous layer in spherical container, Applied Mathematics and Mechanics, 41(7), 1069-1082, 2020

19. Pallav Dhanendrakumar Shah, Ashish Tiwari and Satyendra Singh Chauhan, Solute dispersion in micropolar-Newtonian fluid flowing through porous layered tubes with absorbing walls, International Communications in Heat and Mass Transfer, 119, 104714, 2020

20. Sandeep Dalal, Jitender Kumar, Chromatic Number of the Cyclic Graph of Infinite Semigroup, Graphs and Combinatorics, 36, 109-113, 2020

21. Kulshrestha, R., Jain, M. & Shruti, Performance Analysis of Fractional Guard Channel Scheme with Buffer for Cellular Mobile Networks, Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci., 90, 739–747, 2020

22. Kumar Ankit and Dubey B. Dynamics of prey–predator model with strong and weak Allee effect in the prey with gestation delay, Nonlinear Analysis: Modelling and Control, 25(3), 417-442, 2020.

23. Rajiv kumar, Rajesh Kumar & Kapil Choudhary, Study of the solution of a semilinear evolution equation of a prion proliferation model in the presence of chaperone in a product space, Mathematical methods in applied sciences, 44,1942-1955, 2020.

24. Pradipkumar H. Keskar and Priyanka Kumari, Polynomial Criterion for Abelian Difference Sets, Indian Journal of Pure and Applied Mathematics, 51(3), 233-249, 2020

25. Suresh Pathi, Rajesh Kumar, Vikranth Kumar Surasani, Investigation on agglomeration kinetics of acetaminophen using fluidized bed wet granulation, Asia-Pacific Journal of Chemical Engineering, Accepted.

26. Rajesh Kumar, Yashodhan Gokhale, Vikranth Surasani, Population Balance Modeling with Coupled Agglomeration and Disintegration Processes for TiO2 Nanoparticles Formation and Experimental Validation, Journal of Cluster Science Including Nanoclusters and Nanoparticles, Accepted.

27. Rajesh Pradhan, Siddhanth Hejmady, Rajeev Taliyan, Rajesh Khadgawat, Tarang Gupta, Garima Kachhawa, Rajesh Kumar, Gautam Singhvi & Sunil Kumar Dubey, Simultaneous estimation of parabens

and bisphenol a in ready-to-eat foodstuffs by using QbDdriven high-pressure liquid chromatography method, International Journal of Environmental Analytical Chemistry, Accepted.

28. Rajesh Kumar, Souvik Ghosh, Abhijit Datta Banik, Numerical Study on Transient Behavior of Finite Bulk Arrival or Service Queues with Multiple Working Vacations, Int. J. of Mathematics in Operational Research, Accepted.

29. Nabil Bedjaoui, Rajesh Kumar & Youcef Mammeri, Asymptotic behavior of solution of Whitham-Broer-Kaup type equations with negative dispersion, Journal of Applied Analysis, Accepted.

30. Kocherlakota Satya Pritam, Trilok Mathur, Shivi Agarwal and H. D. Mathur, New Fractional PID-Controller to Mitigate Frequency Variations in Power Systems, Mathematics in Engineering, Science and Aerospace, 11(2), 333-346, 2020

31. Srinivas R.Chakravarthy, Shruti, Rakhee Kulshrestha, A queueing model with server breakdowns, repairs, vacations, and backup server, Operations Research Perspectives, 7, 1-13, 2020

32. Shekhar, C., Gupta, A., Jain, M. and Kumar, N., Transient analysis of computing system with reboot and recovery delay, International Journal of Quality and Reliability Management, Accepted.

33. Shekhar, C., Kumar, A., and Varshney, S.   Parametric nonlinear programming for fuzzified queuing systems with catastrophe   International Journal of Process Management and Benchmarking,10(1), 69-98, 2020

34. Shekhar, C., Kumar, N., Jain, M. and Gupta, A., Reliability prediction of computing network with software and hardware failures, International Journal of Reliability, Quality and Safety Engineering,27(2), 2040006, 2020

35. Shekhar, C., Deora, P., Varshney, S., Singh, K.P. and Sharma, D.C., Optimal Profit Analysis of Machine Repair Problem with Repair in Phases and Organizational Delay, International Journal of Mathematical, Engineering and Management Sciences, Accepted.

36. Shivi Agarwal and Trilok Mathur, A Benchmarking Approach with Missing Values Using Data, Envelopment Analysis for Non-Symmetrical Fuzzy Data, Solid State Technology, 63(6), 4046-4051, 2020

37. Trilok Mathur, Shivi Agarwal, Srikanta Routroy and Akshat Khandelwal, A DEA Model for Systematic Screening of Sustainable Suppliers with Uncertainty, Solid State Technology, 63(6), 4106-4111, 2020

38. Rakhee Kulshrestha and Shruti, Discrete-Time Analysis of Communication Networks with Second Optional Service and Negative User Arrivals. In: Bansal J., Gupta M., Sharma H., Agarwal B. (eds) Communication and Intelligent Systems. ICCIS 2019. Lecture Notes in Networks and Systems, vol 120. Springer, Singapore, 2020.

39. Pasari, S., Stochastic Modeling of Earthquake Interevent Counts (Natural Times) in Northwest Himalaya and Adjoining Regions, In: Bhattacharyya S., Kumar J., Ghoshal K. (eds), Mathematical Modeling and Computational Tools, Accepted.

40. Pasari S., Koundinya NVSS, Statistical modeling of solar energy, In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management, Accepted.

41. Pasari S., Shah A., Time series auto-regressive integrated moving average model for renewable energy forecasting, In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management, Accepted.

42. Pasari S., Shah A., Sirpurkar U, Wind energy prediction using artificial neural networks, In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management, Accepted.

43. Shekhawat K., Pinki, Construction of architectural floor plans for given adjacency requirements, RE: Anthropocene, Proceedings of the 25th International Conference of the Association for Computer-Aided Architectural Design Research in Asia, Accepted.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Divyum Sharma , Workshop on Additive Combinatorics, ICTS Bengaluru, Feb 24-29, 2020

2. Rakhee , Short-term online course on Optimization Theory, Methods and Applications, IIT Roorkee (online), Aug 18-20, 2020

ii. International:

1. Trilok Mathur , Virtual Global Congress on Sustainability for Growth and Development, Nilai University Malaysia and Galgotias University, India (online), July 18, 2020

2. Shivi Agarwal, Virtual Global Congress on Sustainability for Growth and Development, Nilai University Malaysia and Galgotias University, India (online), July 18, 2020

3. Krishnendra Shekhawat, NINTH INTERNATIONAL CONFERENCE ON DESIGN COMPUTING AND COGNITION (DCC'20), Georgia Institute of Technology, Atlanta, USA (online) Dec 15, 2020

4. Krishnendra Shekhawat, 25th International Conference of the Association for Computer-Aided Architectural Design Research in Asia, Faculty of Architecture Chulalongkorn University (online) Aug 5, 2020

5. Jitender Kumar, International Conference in Algebraic Graph Theory and Applications, Presidency University, KOLKATA (online) Nov 21-22, 2020

6. Jitender Kumar, International Conference on Number Theory and Discrete Mathematics, Ramanujan Mathematical Society (online) Dec 11-14, 2020

7. Ashish Tiwari, International Conference on Membrane Process Modeling, Gubkin Russian State University of Oil and Gas, Moscow, Russia (online) Dec 3-4, 2020

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

Book Published

1. Kulshrestha, R. Shekhar, C., Jain, M., Chakravarthy, S.R.: 'Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach', CRC Press (in press).

Book Chapter Published

1. Shekhar, C., Kumar, N., Gupta, A. and Tiwari, R.K.: 'Finite capacity tandem queueing network with reneging', in R. Kulshrestha, C. Shekhar, M. Jain, S.R. Chakravarthy (eds.) Mathematical Modeling and Computation of Real Time Problems: An Interdisciplinary Approach, CRC Press (in press).

2. Shekhar, C., Varshney, S. and Kumar, A. (2020): 'Reliability and Vacation: The critical issue', in M. Ram and H. Pham (eds.) Advances in Reliability Analysis and its Applications, Springer Series in Reliability Engineering, Springer, Cham, pp. 251-292.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. National Mathematics Day on December 22, 2020

2. One day symposium and LaTeX and MATLAB on February 02, 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Trilok Mathur delivered an invited talk on "one day symposium on LaTeX and MATLAB" organised by department of Mathematics, BITS Pilani, Pilani Campus on February 02, 2020.

2. Shivi Agarwal delivered an invited talk on "one day symposium on LaTeX and MATLAB" organised by department of Mathematics, BITS Pilani, Pilani Campus on February 02, 2020.

3. Devendra Kumar delivered an invited talk on "one day symposium on LaTeX and MATLAB" organised by department of Mathematics, BITS Pilani, Pilani Campus on February 02, 2020.

4. Sangita Yadav delivered an invited talk on "one day symposium on LaTeX and MATLAB" organised by department of Mathematics, BITS Pilani, Pilani Campus on February 02, 2020.

5. Trilok Mathur delivered an invited talk on "Fractional Calculus and its Recent Applications in Sustainable Development Goals" in Virtual Global Congress on Sustainability for Growth and Development organised by Nilai University Malaysia and Galgotias University, India during July 18-19,2020.

6. Trilok Mathur delivered an invited talk entitled "Recent Applications of Fractional Calculus" in the TEQIP-III RTU (ATU) sponsored FDP "Recent Advancements In Field of Applied Sciences" held at JEC Kukas, Jaipur, India during August 07-08, 2020.

7. Rakhee delivered an invited talk entitled "Simulation of Stochastic Models using MATLAB" in the e-workshop on Stochastic Modelling, Optimization and Soft Computing organized by Manipal University Jaipur during August 10-14, 2020.

8. Trilok Mathur delivered an invited talk entitled "Fractional Calculus Based Neural Networks" inTEQIP-III RTU (ATU) sponsored FDP "Technology and Innovation in Math Education" organized by Anand International College of Engineering, Jaipur, India during September 14-18, 2020.

9. Chandra Shekhar delivered an invited talk entitled "A Probabilistic Approach in Real-life problem and Optimization problem" in the "Communication Strategies and Statistical Applications" organised by Department of Mathematics and Department of Humanities and Management, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar during September 23-27, 2020.

10. Gaurav Dwivedi delivered an invited talk entitled "Biharmonic equation with exponential nonlinearity on the Heisenberg group" in the "Digital International Conference on Advances Computational Methods-2020" organised by Gujrat university during September 26-27, 2020.

11. Rajesh Kumar delivered an invited talk entitled "Numerical Implementation for Population Balance Models" in Global Meet on "Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives" organised by BITS Pilani during October 16-November 07, 2020.

12. Sumanta Pasari delivered an invited talk on "Earthquake Nowcasting in South Asia: A Statistical Perspective through Natural Times" in the Global Meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives organised by BITS Pilani during October 16-November 07, 2020.

13. Rakhee delivered an invited talk on "Mathematical Modelling: Application of Differential Equations" organised by Amity university on October 31, 2020.

14. Sumanta Pasari delivered an invited talk entitled "Earthquake Forecasting and Earthquake Nowcasting: Extracting Information from Seismic Data" in Online short course for undergraduate students (ILDP-START+) organised by Hiroshima University during December 15-23, 2020.

15. Sumanta Pasari delivered invited lectures entitled "How to Write Mathematical Equations?" in Naya Kshitij: Faculty Development Program organised by TLC, BITS Pilani, Pilani Campus during December 17-22,2020.

16. Trilok Mathur delivered an invited lecture entitled "Ramanujan's Contribution in Riemann Zeta Function" on National Mathematics Day organised by Indira Gandhi University, Meerpur, Rewari, Haryana on December 22, 2020.

17. Shivi Agarwal delivered an invited lecture entitled "Basic Concepts of Data Envelopment Analysis and it's Applications" on National Mathematics Day organised by Indira Gandhi University, Meerpur, Rewari, Haryana on December 22, 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Vipul Kakkar, Central University of Rajasthan, delivered an online talk on December 22, 2020.

2. Prof. G D Veerappa Gowda, TIFR Centre For Applicable Mathematics, Bengaluru, delivered an online talk on First Order Partial Differential Equations on December 05, 2020.

3. Prof. Kamel Hooman, University of Queensland, delivered an online talk on Natural draft dry cooling towers on November 28, 2020.

4. Prof. Tetsuro Tsuji, Kyoto University, delivered an online talk on Numerical analysis of unsteady rarefied gas flows based on the method of characteristics on November 21, 2020.

5. Prof. Satoshi Taguchi, Kyoto University, Hiroshima University, delivered an online talk on Asymptotic theory for a slightly rarefied gas over a boundary with a discontinuous temperature distributionon November 21, 2020.

6. Prof. Togashi Yuichi, Hiroshima University, delivered an online talk on Small-Number Issues in Biological Systems on November 07, 2020.

7. Prof. N. Saradha,CEBS, University of Mumbai, delivered an online talk on Euclid's primes on November 07, 2020.

8. Prof. A K Nandakumaran, IISc Banglore, delivered an online talk on Fourier Series and Transforms: Developments, Properties and Applications on November 07, 2020.

9. Prof. Bibekananda Maji, IIT Indore, delivered an online talk on Ramanujan's formula for odd zeta values on October 31, 2020.

10. Prof. Pawan Kumar Mishra, IIT Bhilai, delivered an online talk on Nonlocal fractional problems involving critical growth on October 31, 2020.

11. Prof. Akshaa Vatwani, IIT Gandhinagar delivered an online talk on Joint extreme values of L-functions on October 24, 2020.

12. Prof. B. V. Rathish Kumar, IIT Kanpur, delivered online talks on Stabilized Variational Multiscale Sub-Grid Finite Element Analysis of Transport Model on October 17, 2020 and October 24, 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: NA

b. Won by Students:

Full Name	Name of achievement/prize/award	Description of the achievement/Prize/Award	Date of Achievment	Issuing Organisation
Kushank Maheshwari	Western Digital scholarship for STEM	It was a monetary scholarship granted by the organisation for bachelor studies.	6/17/2020	Western Digital
Samarth Gupta	Bengalathon Winner	The team emerged as winners of Bengalathon and won a cash prize of Rs 50000.	1/10/2020	Government of West Bengal, NAASCOM
BHARAT AGARWAL	Brainstorm Scholarship	Secured an all India Rank of 67 with State Rank of 3 in Technothlon organised by IIT Guwahati. I also received scholarship of 82 % worth 1,22,000 via a logical scholarship exam called "BRAINSTORM" by CONCEPT EDUVENTURES	8/17/2020	Concept Eduventures Pvt. Ltd.
Amarpal Singh Basra	INSPIRE Scholarship for Higher Education (SHE)	Received scholarship of Rs.1,20,000/- granted by DST for the year 2019-2020 and 2020-2021. A scheme that comes under Innovation in Science Pursuit for Inspired Research, meant for meritorious students undertaking Master's in Natural and Basic Sciences	11/20/2020	Department of Science and Technology, GOI
V.Aravindan	IASc SRFP-2020	Selected by IASc as one of the 69 candidates in the mathematics sub-category to pursue a summer research fellowship under India's eminent researchers.	7/27/2020	Indian Academy of Sciences
Rohit K Bharadwaj	Mitacs Globalink Research Internship	Awarded to only selected students from participating countries. Fully funded research internship of 12 weeks in universities present in Canada.	12/11/2020	Mitacs
Aman Verma	2nd position awarded in IISc Pravega annual hackathon	Hackathon was based on 'How AI can revolutionize medical industry'	-	IISc Bangalore
A.Sudarshan	INSPIRE Scholarships for Higher Education	Was selected for securing JEE rank in the Top 10,000 and CBSE 12th Board marks	8/6/2020	Department of Science and Technology, Govt. of India

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NA

12. PATENTS FILED/PUBLISHED AND GRANTED:

Prof. Rakhee granted the following patent:

Patent No. : 352075

Date of Grant: 24/11/2020

Invention entitled: AN IMPROVED METHOD OF DATA BROADCAST IN WIRELESS ENVIRONMENT.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES:

The 2020 was a bizarre and extraordinary year and it was no different for the Mathematics Association, BITS Pilani. Owing to the pandemic situation, many of our plans and events were modified to adapt to the changed circumstances, kept in the waiting list or even outright shelved. Here is a brief summary of the events conducted by the association in the year 2020.

1.   Annual Math Olympiad Pilani

The year of 2020 started off with expectations and aspirations. On the 19th of January, the Association organized its first major event of the year, the first edition of the AMO or the Annual Mathematics Olympiad.   The participants were from schools of Birla Education Trust, Pilani. These were students of 11th and 12th from the schools, Birla Sishu Vihar, Birla Balika Vidyapeeth, Birla School Pilani and Birla Public school. The event was presided over by Dr. Bhupendra Kumar Sharma, Head of Department, Mathematics Department, and also graced by other faculty members from the department like Professor Balram Dubey, Dr. Chandra Shekhar, Dr. Pradipkumar H Keskar and some faculties from the BET schools. The event witnessed participation of around 200 students from these schools. The paper was based on the CBSE class 11th and 12th syllabus and comprised objective questions to test the student's applicative knowledge. The exam was based on the entrance tests the students give for admissions into undergraduate courses and served as a practice for the same.

2.   Symposium

There goes a saying *"If you wish to be behind the rest, there is no need to run in the reverse direction, just stand still and your competitors will do the job for you".*

In the modern world with all the technological advancements, it is imperative to march forward. And the BITSIANS did just that, the Mathematics Association in collaboration with the Mathematics Department organized a Symposium which was chaired by Dr.Sangeeta Yadav & Dr. Devendra Kumar for the students to get a head start into the world of LaTex. LaTex is a document drafting and preparation tool for high-quality typesetting and is largely used by journals for their paper templates and many people in academia use it for writing their thesis. The LaTex session was followed by another session for MATLAB led by Dr. Shivi Agrawal and Dr. Trilok Mathur. It first started with Dr.Trilok Mathur explaining the fundamentals of MATLAB and then Dr. Shivi Agrawal explained the various visualization approaches in MATLAB. Both sessions were attended in large numbers by students and research scholars alike who were keen on learning to use the software for the upcoming tasks. There was also an award session where mementos were presented to the professors. It was a wholesome session overall.

3.   Farewell 2020

"Be it of the wondrous welkin or the abysmal abyss, Memories are often made of bliss"

It was the first online event conducted by the association. Owing to the circumstances, the students could not bid adieu to the seniors in person and had to do it digitally. But that did not stop us from exchanging greetings with the outgoing batch (2016 Batch) for one final time. It was a fun filled event with many professor speeches and award ceremonies for the best performing students of the outgoing batch. Students also had fun events like the professors singing, guessing the words and other games where the professors, batchies and the seniors participated with zeal and aplomb. The students also unveiled another edition of our annual magazine, *"Infinity and Beyond".* Being an online event there were challenges but the association learnt a lot of new things about managing events digitally and gained experience to conduct upcoming events online.

4.   Teachers Day 2020

"No amount of distance can overpower the bonds between sincere students and faithful faculty"

The teachers' day was also conducted online. Using a combination of google meet and other tools we organized a host of fun events. The celebration was started by some words of wisdom by some of our professors. Then using a combination of google meet and some other online available tools we played many fun games like guess the song and guess the gibberish. It was a fantastic event overall with zealous participation from both the students and our professors.

5.   Math Talk 2020

Students organised a talk by a recent Alumnus of our institute, 2015 batch Mathematics and Computer Science graduate Prashant Rangarajan. He shared his research interest with the attendees, and briefly explained the mathematical aspects of NLP, ML and Time Series analysis. He gave detailed insights about his PS-1 at IISc, and how it helped him get an online project, which in turn helped him get his first publication and further, secure a research internship at EPFL, Switzerland. He also shared his Thesis experience at IISc and his experience so far in his PhD. The session was followed by a Q&A session, where the attendees clarified their doubts. Overall, everyone had a lot to take away from the talk.

6.   Annual Math Olympiad II

"Whatever the blockade, water always weasels its way

The deep dark night, cannot check the light of the day

True talent and genius always get the lasting say"

Due to the Covid situation, students were forced to conduct our Olympiad online on 27th December 2020. Yet neither did it put a dent in our efforts to call students nor in the students' participation. Much like the first edition even this one was based on entrance test format and the questions were multiple choice or integer type. Separate exams were organized for 11th and 12th. The Olympiad was restricted to schools only from the Delhi NCR region. Over a hundred schools were contacted. 11th and 12th grades combined, there was a participation of 150 students. The registration slips and admit cards were distributed online. The exams were conducted via exam.net and monitoring was done via google meet. There was decent turnout to give the exam.

In addition, this year taking maximum advantage of the online semester, the students started an Instagram handle for the association where the students would post content related to mathematics and mathematicians quite frequently. They managed to make about 4 posts in the semester and generated about 60 followers. But they are looking forward to polish our ideas and get going upwards in the upcoming years.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: NIL

B1.10.10 Department of Mechanical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	05
Associate Professors	05
Assistant Professors	22
Lecturers	-
Visiting Faculty	01
Visiting Assistant Professors	-

Head of the Department : Prof. Mani Sankar Dasgupta

Contact details   : dasgupta@pilani.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 34

Part Time   : 06

Aspirant Scheme   : 01

Ph.D. Thesis Submitted during the year: 2020.

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Sangram Keshari Das	2012PHXF0402	Some Investigations on Vision Based Detection and Tracking of Mobile Robot During Navigation in Structured Environment	Prof. Bijay K. Rout	NA
2	Shivani Nain	2012PHXF0424P	Design, Simulation and Experimental Investigations on Scaled Up Branched Flagellated Artificial Nanoswimmer	Dr. Jitendra S. Rathore	Prof N N Sharma
3	Manikandan H.	2013PHXF0003P	Investigations on characterization of surface errors in turning of thin-walled components	Dr. Tufan Chandra Bera	NA
3	Vijaykumar P Sonawane	2013PHXF702P	Techno-Economic and Environmental Assessment of Some Electrical Demand Side Management Options	Dr. M. S. Soni	NA
4	Nitesh Sihag	2014PHXF0009P	An Experimental Analysis of Energy Consumption and Environmental Impacts of Milling Process	Prof. K. S. Sangwan	NA
5	Rahul Priyadarshi	2016PHXF0003P	Some Design Aspects of Post-Harvest Supply Chain for Selected Agriculture Produces	Prof. Srikanta Routroy	Dr. Girish Kant Garg
6	Anuj Dixit	2016PHXF0415P	Design of Government Supported Healthcare Supply Chain to Enhance Availability and Minimize Wastage	Prof. Srikanta Routroy	Dr. Sunil Kumar Dubey
7	Gokhale Nitish Pandurang	2016PHXF0416P	Development and Experimental Investigation of Wire-Arc Additive Manufacturing (WAAM) Based Metal Deposition Process for Producing metallic parts	Dr. Prateek Kala	Dr. Murali Palla

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of a reliable, low-cost, portable, IoT-enabled, optical device for measuring PM2.5 concentration in air	Mechanical Engineering	Dr. Aakash Chand Rai	Dr. Shyam Sunder Yadav	DST	Mr. Anil Kumar Saini (CSIR-CEERI) and Mr. Navjot Kumar (CSIR-CEERI)	35,96,045
2	Neuronal regulation effect of semaphorins in cancer progression	Mechanical Engineering	Dr. Venkatesh K P Rao	Dr. Rajdeep, Dr. Syamantak, Dr. Harikrishnan	SERB CRG	NA	54,00,000
3	Doubling Farm Women's income: Entrepreneurship development through post-harvest and technology integration in arid zone.	Mechanical Engineering	Prof. Srikanta Routroy	Prof. Satyendra K Sharma, Prof. P. Srinivasan, Prof. Jitendra Panwar, Prof. Anupam Singhal and Prof. Krishna M	DST SEED, New Delhi	NA	1,25,23,510
4	Assessment of problem solving and social skills in engineering education: Bridging the gap between academia and industry	Mechanical Engineering	Prof. K. S. Sangwan	NA	Indian Council of Social Science Research (ICSSR)	NA	48,66,800
5	Analysis Design and Development of Low-Cost Cold Storage for Selected Agriculture Products based fully on Solar and Geothermal Energy	Mechanical Engineering	Prof. M S Dasgupta	Dr. Sanjeev Jakhar	DST India	NA	48,66,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Geometric tolerancing and precision measurement skill enhancement	Mechanical Engineering	Prof. K. S. Sangwan	NA	Mitutoyo South Asia Pvt. Ltd	NA	33,00,000
2	Design and Development of Fixed and Floating Solar PV Installations for Water Management Infrastructures	Mechanical Engineering	Prof. R. K. Mittal	Dr. M. S. Soni	First Green Consulting Pvt. Ltd.	NA	11,36,000

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Improved design methodology for high-temperature thermal energy storage systems for concentrated solar power plants	Mechanical Engineering	Dr. Aakash Chand Rai	Prof. P. Srinivasan and Mr. Vivek Tiwari	European Union		2,00,000
2	Joint Indo-German Academy towards Sustainability in Engineering, Education and Entrepreneurship, German Academic Exchange Programme	Mechanical Engineering	Prof. K. S. Sangwan		German Academic Exchange Programme (DAAD)	Prof. Dr.-Ing. Christoph Herrmann	1,79,82,774
3	Educational program for sustainable heating and cooling solutions for India, "EduCool"	Mechanical Engineering	Prof. Souvik Bhattachryya	Prof. M S Dasgupta	Research Council of Norway	NTNU Norway	11,47,000

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	A new perspective on internal forced and mixed convection heat transfer in inclined circular and non-circular tube	Mechanical Engineering	Dr. Suvanjan Bhattacharyya	NA	ACRG	NA	8,00,000
2	Design, fabrication and testing of Lab-scale Printed Circuit Heat Exchanger (LPCHE) for moderate pressure and temperature applications	Mechanical Engineering	Dr. Aneesh A. M.	NA	ACRG	NA	8,25,000
3	Investigation on lightweight high entropy alloy AlCuFeMnMgTi developed using microwave sintering at 2.45 GHz	Mechanical Engineering	Dr. Radha Raman Mishra	NA	RIG	NA	2,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of a fault diagnosis scheme for Aero-Bearing with multiple localized defects using non-linear mathematical modeling and experimental analysis	Mechanical Engineering	Dr. Arun Kumar Jalan	Dr. Sachin U Belgamwar	ARDB (DRDO)	NA	9,99,800
2	Empirical Investigation and Analysis of Factors for Sustainable Growth of Electric Vehicles Manufacturing in India	Mechanical Engineering	Prof. Abhijeet K. Digalwar	NA	ICSSR-IMPRESS	NA	14,70,000
3	Assessment of indoor plants for improving air quality in buildings	Mechanical Engineering	Dr. Aakash Chand Rai	NA	SERB	NA	39,71,340
4	Development of e-waste management strategies for selected e-products in Rajasthan	Mechanical Engineering	Prof. M S Dasgupta	Prof. Srikanta Routroy	DST Rajasthan	NA	7,53,000
6	Development of conductive FDM based rapid tooling for EDM electrode fabrication: application in medical implant manufacturing.	Mechanical Engineering	Dr. Prateek Kala	NA	DST-SERB CRG	NA	21,69,101
7	Dynamic Modelling and Experimental Analysis of Double Row Deep Groove Ball Bearing with Multiple Localized Defect	Mechanical Engineering	Dr. Arun Kumar Jalan	Dr. Sachin U Belgamwar	Aeronautics R&D Board	NA	10,00,000
8	Design and development of MEMS gyroscope for naval applications	Mechanical Engineering	Dr. Venkatesh K P	Mr. Sujan yenuganti	NRB DRDO	Mr. Vinay V (Navy)	46,00,000
9	Waste Management of Generated Sludge from Indian Steel and Steel Related Plants: A Sustainable Business Model	Mechanical Engineering	Prof. Srikanta Routroy	Prof. Anupam Singhal & Prof. Dipendu Bhunia	Ministry of Steel, New Delhi	NA	38,04,600
10	Effective anti-icing strategies for power transmission cables and pipelines using macro structured superhydrophobicity	Mechanical Engineering	Dr. A R Harikrishnan	NA	SERB	NA	30,10,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
NA	NA	NA	NA	NA	NA	NA	NA

C. Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Innovative Technologies for Improving Resource Utilization in the Indo-European Fish Value Chain "ReValue"	Mechanical Engineering	Prof. Souvik Bhattacharyya	Prof. M S Dasgupta, Prof Srikanta Routroy	DBT India	SINTEF Ocean (Norway), Carinsa (Spain)	62,09,200
2	Life Style Life Cycle Assessment	Mechanical Engineering	Prof. K. S. Sangwan	NA	UNEP, IGES, Japan, Swechha, & BITS Pilani	NA	18,33,113

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG /ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Development of Battery Thermal Management System (BTMS) for Electric (EVs) and Hybrid-electric Vehicles (HEVs) using Heat Pipes and phase change material (PCM)	Mechanical Engineering	Dr. Saket Verma	NA	RIG	NA	2,00,000
2	Heat transfer coefficients for transition, quasi-turbulent and turbulent flow in solar air-heater tubes: Experimental Study	Mechanical Engineering	Dr. Suvanjan Bhattacharyya	NA	RIG	NA	2,00,000
3	Design, fabrication and testing of Lab-scale Printed Circuit Heat Exchanger (LPCHE) for moderate pressure and temperature applications.	Mechanical Engineering	Dr. Aneesh A. M.	NA	RIG	NA	8,25,000
4	Numerical investigation of thermal hydraulic performance of hexagonal fin based printed circuit heat exchanger	Mechanical Engineering	Dr. Aneesh A. M.	NA	RIG	NA	2,00,000
5	Study of Interfacial, Evaporation and Ignition Characteristics of Micro-emulsions for Printing, Combustion, Oil Recovery and Machining Industrial Applications	Mechanical Engineering	Dr. A R Harikrishnan	NA	ACRG	NA	7,90,000
6	Numerical failure analysis of structures at different stress-state and subjected to different strain-rate using the finite element methods	Mechanical Engineering	Dr. Faizan Mohammad Rashid	NA	RIG	NA	2,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Design and development of a power assistive hybrid e-trike (PAH e-trike) for differently abled person in rural and urban regions of India.	Mechanical Engineering	Dr. Sachin U. Belgamwar	Dr. Jitenra S. Rathore	DST-SEED/TIDE	CEERI Pilani	67,76,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Study of lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes	Mechanical Engineering	Dr. Varinder Singh	Dr. Tufan Chandra Bera, Dr. S. P. Regalla, Dr. Amit Kumar Gupta	Tube Investments of India Ltd (TIIL), Chennai, India	TIIL India	27,43,500

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	NA	NA	NA	NA	NA	NA	NA

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	RIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Thermal Transport and Electro-Hydrodynamics of Non-Newtonian Fluid flow through Nanochannels	Mechanical Engineering	Dr. A R Harikrishnan	NA	RIG	NA	2,00,000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. National Journals

S.N.	Title	Publication	Author	Indexed
1	NA	NA	NA	NA

2. International Journals

S.No	Title	Publication	Author	Indexed
1	A Review on Fault Diagnosis of Misaligned Rotor Systems	International Journal of Performabilty Engineering, Vol. 16(4), pp. 499-509	Jalan, A. K, Patil, S. and Mittal G.	Scopus
2	Meshfree analysis of non-rectangular sandwich plates based on refined C0 higher order shear deformation theories.	Engineering Analysis with Boundary Elements, 120, pp.180-194	Watts, G., Singh, S. and Pathan, F.	SCI
3	Elastic properties and nonlinear elasticity of the noncarbon hexagonal lattice nanomaterials based on the multiscale modelling	ASME Journal of Engineering Materials and Technology, 143(2):021006	Singh, S., Ravi Raj, B. M., Mali, K. D., and Watts, G.	SCI
4	Evaluation of energy sources based on sustainability factors using integrated fuzzy MCDM approach	https://doi.org/10.1108/IJESM-07-2020-0001	Saraswat S. K. and Digalwar A.K.	Scopus
5	Application of fuzzy AHP approach for the evaluation of sustainable energy sources in India	Mathematical modelling and computation of real time problem, Vol, I , B 145-E 158.	Saraswat, S. K., Digalwar A. K. and Yadav, S.S.	Scopus
6	Evaluation of critical constructs for measurement of sustainable supply chain practices in lean-agile firms of Indian origin-A hybrid ISM ANP approach	Business Strategy and Environment, Vol. 29, No. 3, pp. 1575-1596.	Digalwar, A.K., Narkhede, B. E. Raut R. D.	SCI
7	A systematic review of the integration of best practices for world class manufacturing	Int. J. of Business Excellence, DOI: 10.1504/IJBEX.2020.10023289	Digalwar, A.K., Tusnial, Anirudh	Scopus
8	Social sustainability assessment framework for Indian Manufacturing Industry	Materials Today: Proceedings https://doi.org/10.1016/j.matpr.2019.12.226.	Digalwar A. K. Dambare Sunil and Saraswat, Santosh	Scopus
9	Readiness self-assessment of cement industry for sustainable manufacturing implementation: A case study of India	Procedia CIRP, 90, 449-454	Bhakar, V., Sangwan, K. S., & Digalwar, A. K.	Scopus
10	Performance assessment of residential building envelopes enhanced with phase change materials.	Energy and Buildings 208, 109664	Sharma V and Rai AC	SCI
11	An Integrative Approach for Path Planning and Tracking of Shape Aware Mobile Robot in Structured Environment Using Vision Sensor.	Int. J. Computational Vision and Robotics, April 2020 (Accepted).	Das S.K., Dash S., & Rout, B.K.	Scopus
12	Effect of Hydrogen Enrichment Strategy on Performance and Emission Features of Biodiesel-Biogas Dual Fuel Engine Using Simulation and Experimental Analyses	ASME, Journal of Energy Resources Technology 2020, Vol. -, pp. 1-8. https://doi.org/10.1115/1.4049179	Saket Verma, Kumar K, Das LM, Kaushik SC	SCI

S.No	Title	Publication	Author	Indexed
13	Analysis of metal hydride storage on the basis of thermophysical properties and its application in microgrid	Energy Conversion and Management 2020, Vol. 222, pp. 113217. https://doi.org/10.1016/j.enconman.2020.113217	Kumar K, Alam M, Verma S, Dutta V	SCI
14	Effect of hysteresis band control strategy on energy efficiency and durability of solar-hydrogen storage based microgrid in partial cloudy condition	Journal of Energy Storage 2020, Vol.32, pp. 101936. https://doi.org/10.1016/j.est.2020.101936	Kumar K, Alam M, Verma S, Dutta V	SCI
15	Renewable sources-based DC microgrid using hydrogen energy storage: Modelling and experimental analysis.	Sustainable Energy Technologies and Assessments, Vol 42, pp. 100840. https://doi.org/10.1016/j.seta.2020.100840	Alam M, Kumar K, Verma S, Dutta V	SCI
17	Effect of deposition orientations on dimensional and mechanical properties of the thin-walled structure fabricated by tungsten inert gas (TIG) welding-based additive manufacturing process	Journal of Mechanical Science and Technology, 34(2),701-709.	Gokhale, Nitish P; Kala, Prateek; Sharma, Varun; Palla, Murali	SCI
18	Sustainable techniques in grinding: State of the art review	Journal of Cleaner Production, 121876, Elsevier	Singh, Aswani Kumar; Kumar, Amresh; Sharma, Varun; Kala, Prateek;	SCI
19	Analysis of a hybrid ultrasonic horn profile using finite element analysis	Materials Today: Proceedings, Elsevier	Patel, Lokesh Kumar; Singh, Aswani Kumar; Sharma, Varun; Kala, Prateek	Scopus
20	Thermal analysis of TIG-WAAM based metal deposition process using finite element method	Materials Today: Proceedings, Elsevier	Gokhale, Nitish P; Kala, Prateek	Scopus
21	A novel approach for facile synthesis of Cu-Ni/GNPs composites with excellent mechanical and tribological properties	Material Science and Engineering B, 260, 114643.	Pingale, A. D., Belgamwar, S. U., & Rathore, J. S.	SCI
22	Synthesis and characterization of Cu–Ni/Gr nanocomposite coatings by electro-co-deposition method: effect of current density.	Bulletin of Material Science, 43, 66.	Pingale, A. D., Belgamwar, S. U., & Rathore, J. S.	SCI
23	Effect of graphene nanoplatelets addition on the mechanical, tribological and corrosion properties of Cu–Ni/Gr nanocomposite coatings by electro-co-deposition method	Transactions of Indian Institute of Metals, 73, 99–107	Pingale, A. D., Belgamwar, S. U., & Rathore, J.S.	SCI
24	Establishment of an optical trapping curve for prediction of trapping parameters,	Optik, 208, 164434.	Owhal, A., Boruah, D., & Belgamwar, S. U.	SCI
25	Facile synthesis of graphene by ultrasonic-assisted electrochemical exfoliation of graphite	Materials Today: Proceedings.	Pingale, A. D., Owhal, A., Katarkar, A. S., Belgamwar, S. U., & Rathore, J. S.	Scopus
26	Preparation of novel Zn/Gr MMC using a modified electro-co-deposition method: Microstructural and tribo-mechanical properties.	Materials Today: Proceedings.	Owhal, A., Pingale, A. D., Katarkar, A. S., Belgamwar, S. U., & Rathore, J. S.	Scopus
27	The influence of graphene nanoplatelets (GNPs) addition on the microstructure and mechanical properties of Cu-GNPs composites fabricated by electro-co-deposition and powder metallurgy.	Materials Today: Proceedings, 28, 2062–2067.	Pingale, A. D., Belgamwar, S. U., & Rathore, J. S.	Scopus
28	Development and characterization of Cu-Gr composite coatings by electro-co-deposition technique	Materials Today: Proceedings, 28, 2090–2095	Shelke, A. R., Balwada, Sharma, J. S., Pingale, A. D., Belgamwar, S. U., & Rathore, J. S.	Scopus

S.No	Title	Publication	Author	Indexed
29	Parametric optimization of the generation of the porous layer for lubrication in tube drawing process	Materials Today: Proceedings, Volume 28, Part 3, 2020, Pages 1560-1564.	Patil Mahesh, Singh Varinder, Srinivasa Prakash Regalla, Amit Kumar Gupta, Tufan Chandra Bera, Bade Simhachalam, Krishna Srinivasa	Scopus
30	Tin layer as a solid lubricant for cold tube drawing processes	International Journal of Precision Engineering and Manufacturing-Green Technology, DOI:10.1007/s40684-020-00301-8	Patil Mahesh, Singh Varinder, Srinivasa Prakash Regalla, Amit Kumar Gupta, Tufan Chandra Bera, Bade Simhachalam, Krishna Srinivasa	SCI
31	Urban policymaking for a developing city using a hybridized technique based on SWOT, AHP, and GIS	Journal of Urban Planning and Development (ASCE), accepted for Publication	Tripti Singh Rajput, Anupam Singhal, Srikanta Routroy, Kunal Dhadse and Gaurav Tyagi	SCI
32	Radiation Shielding Concrete with alternate constituents: An approach to address multiple hazards	Journal of Hazardous Materials, Vol. 404, https://doi.org/10.1016/j.jhazmat.2020.124201	Gaurav Tyagi, Anupam Singhal, Srikanta Routroy, Dipendu Bhunia and Mukund Lahoti,	SCI
33	A Simulation-Based Performance Investigation of Downstream Operations in The Indian Surimi Supply Chain using Environmental Value Stream Mapping	Journal of Cleaner Production, Vol. 286, 2021, 125389. https://doi.org/10.1016/j.jclepro.2020.125389	F Abdullah Sultan, Srikanta Routroy and Maitri Thakur	SCI
34	Comparative Analysis of Environment Losses in Steel Manufacturing Supply Chain using Taguchi Loss Function and Design of Experiments	Journal of Enterprise Information Management, Vol. 33 No. 3, pp. 684-700.	Shishir Goyal, Srikanta Routroy and Aman Agarwal	SSCI
35	Post-Harvest Supply Chain Losses: A State-of-the-Art Literature Review and Bibliometric Analysis	Journal of Advances in Management Research, https://doi.org/10.1108/JAMR-03-2020-0040	Rahul Priyadarshi, Srikanta Routroy, Girish Kant Garg	Scopus
36	Supplier Selection Using Hybrid Multi-Criteria Decision-Making Methods	International Journal of Productivity & Performance Management, https://doi.org/10.1108/IJPPM-04-2019-0180	Anirudh Tusnial, Sharma, Satyendra, Parth Dhingra and Srikanta Routroy	Scopus
37	A review on sustainable utilization of industrial wastes in radiation shielding concrete.	Materials Today: Proceedings, Vol. 32, Part 4, pp. 746-751	Gaurav Tyagi, Anupam Singhal, Srikanta Routroy and Dipendu Bhunia	Scopus
38	A DEA Model for Systematic Screening of Sustainable Suppliers with Uncertainty	Solid State Technology, Vol. 63 No. 6, pp. 4106-411	T Mathur, S Agarwal, Srikanta Routroy, A Khandelwal	Scopus
39	Analysis of post-harvest supply chain impediments for rural employability and waste reduction	International of Journal of Services and Operations Management, (Accepted)	Rahul Priyadarshi, Srikanta Routroy and Girish Kant	Scopus
40	Introducing Traceability in the Indian Surimi Supply Chain	Materials Today: Proceedings, DOI: 10.1016/j.matpr.2019.12.333	F Abdullah Sultan, Srikanta Routroy and Maitri Thakur	Scopus
41	Study on Manufacturer-Dealer Relationships for Strategic Alignment	Journal of Global Operations and Strategic Sourcing, Vol. 13 No. 1, pp. 70-87	C V, Sunil Kumar, Hemanth Surya, Srikanta Routroy and Ram Kumar Mishra	Scopus
42	Measuring Performance of Government supported Drug Warehouses using DEA to Improve Quality of Drug Distribution	Journal of Advances in Management Research, Vol. 17 No. 4, pp. 567-581. https://doi.org/10.1108/JAMR-12-2019-0227	Anuj Dixit, Srikanta Routroy and Sunil Kumar Dubey	Scopus
43	A Strategy to Improve Resource Utilization: Case Study of Generic Drug Distribution in Rajasthan	Materials Today: Proceedings, DOI: 10.1016/j.matpr.2019.12.219	Anuj Dixit, Srikanta Routroy and Sunil Kumar Dubey	Scopus

S.No	Title	Publication	Author	Indexed
44	Analysis of Government Supported Healthcare Supply Chain Enablers: A Case Study	Journal of Global Operations and Strategic Sourcing, Vol. 13 No. 1, pp. 1-16	Anuj Dixit, Srikanta Routroy and Sunil Dubey	Scopus
45	Internalizing the External cost of Gaseous and Particulate emissions from coal based thermal power plants in India	International Journal of Particulate Science and Technology https://doi.org/10.1080/02726351.2020.1815256.	P. Srinivasan and Anand Shekhar,	SCI
46	SWOT analyses of high-temperature phase change materials for thermal energy storage	Materials Today: proceedings 10.1016/j.matpr.2019.12.331.	Vivek Tiwari and P Srinivasan	Scopus
47	Investigations on creep life of Alloy 617 material for the final stage superheater coils for ultra-super critical thermal power plants	Materials Today: proceedings 10.1016/j.matpr.2019.10.032.	R. Pavan and P. Srinivasan	Scopus
48	Thermal storage material enhanced refrigerated display cabinet	Materials Today: Proceedings, Volume 28, No. 2, 510-514.	Purohit, N., & Dasgupta, M. S.	Scopus
49	Clinical Decision-Making: Developing a 4 C Model Using Graph Theoretic Approach,	Studies in Engineering and Technology 7 (1), 30-47 https://doi.org/10.11114/set.v7i1.4781	Rajesh P. Mishra, Nidhi Mundra, Girish Upreti, Marcela Villa-Marulandai	ESCI and Scopus
50	RAM Modeling for Performance Analysis of a Coal Handling System	Materials Today: Proceedings, vol. 28, pp. 2149-2155, https://doi.org/10.1016/j.matpr.2020.04.140	Abhishesh Mishra, R P Mishra	Scopus
51	Impediments to Lean Six Sigma and Agile Implementation: An interpretive structural modeling	Materials Today: Proceedings, vol. 28, pp. 2149-2155, https://doi.org/10.1016/j.matpr.2020.04.141	N Mundra, RP Mishra	Scopus
52	Comparative analysis of traditional and fuzzy FMECA approach for criticality analysis of conventional lathe machine,	International Journal of System Assurance Engineering and Management, 1-8, 10.1007/s13198-019-00938-y	G Gupta, RP Mishra	Google Scholar
53	Experimental investigation of biomimetic propulsion through a scaled up branched flagellated artificial nano- swimmer	Australian Journal of Mechanical Engineering, Taylor & Francis 1-10 https://doi.org/10.1080/14484846.2020.1762966	S Nain, JS Rathore and NN Sharma	ESCI and Scopus
54	A systematic literature review on machine tool energy consumption	Journal of Cleaner Production, 275, 123125. https://doi.org/10.1016/j.jclepro.2020.123125	Nitesh Sihag, Kuldip Singh Sangwan	SCI
55	Readiness self-assessment of cement industry for sustainable manufacturing implementation: a case study of India	Procedia CIRP, 90, 449-454. https://doi.org/10.1016/j.procir.2020.02.042	Vikrant Bhakar, Kuldip Singh Sangwan, Abhijeet K Digalwar	Scopus
56	Environmental impact assessment of fly ash and silica fume based geopolymer concrete	Journal of Cleaner Production, 254, 2020, 120147, ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2020.120147	Rishabh Bajpai, Kailash Choudhary, Anshuman Srivastava, Kuldip Singh Sangwan, Manpreet Singh	SCI
57	Development of the Transversal Competencies in Learning Factorie	Procedia Manufacturing 45, 349-354. https://doi.org/10.1016/j.promfg.2020.04.031	Devika, P Raj, A Venugopal, B Thiede, C Herrmann, KS Sangwan	Scopus
58	Integrating virtual and physical production processes in learning factories	Procedia Manufacturing 45, 121-127. https://doi.org/10.1016/j.promfg.2020.04.082	L Büth, M Juraschek, KS Sangwan, C Herrmann, S Thiede	Scopus
59	Numerical simulation and parametric analysis of latent heat thermal energy storage system.	Journal of Thermal Analysis and Calorimetry 141, 2511-2526. https://doi.org/10.1007/s10973-020-10175-2	Manoj Kumar Soni, Nisha Tamar, Suvanjan Bhattacharyya	SCI
60	Experimental and theoretical analysis of hybrid concentrated photovoltaic/thermal system using parabolic trough collector.	Applied Thermal Engineering 171, 115069, https://doi.org/10.1016/j.applthermaleng.2020.115069	Nikhil Gakkhar, Manoj Kumar Soni and Sanjeev Jakhar	SCI
61	Experimental investigation of exergy performance of a water-cooled hybrid photovoltaic thermal	International Journal of Energy 31, 4. https://doi.org/10.1504/IJEX.2020.1	Nikhil Gakkhar, Manoj Kumar Soni and Sanjeev Jakhar	SCI

	collector.	07191		
62	Finite temperature phase behavior of viral capsids as oriented particle shells	Physical Review Letters 124(15), 158101. https://doi.org/10.1103/PhysRevLett.124.158101	Amit R. Singh, Andrej Kosmrlj and Robijn Bruinsma	SCI
63	Effect of input microwave power and insulation on microstructure and tensile properties of cast Al 7039 alloy produced at 2.45 GHz	Journal of Microwave Power and Electromagnetic Energy, 1-18. (2020).	Radha Raman Mishra, Apurbba K. Sharma	SCI
64	Competitive electrohydrodynamic and electro-solutal advection arrests evaporation kinetics of droplets	Langmuir 36 (2020), **DOI:** https://doi.org/10.1021/acs.langmuir.0c01619	Vivek Jaiswal, Shubham Singh, A R Harikrishnan and Purbarun Dhar	SCI
65	Post impact droplet hydrodynamics on inclined planes of variant wettabilities	European Journal of Mechanics-B/Fluids 79 (2020): 27-37. **DOI:** https://doi.org/10.1016/j.euromechflu.2019.08.013	Nilamani Sahoo, Gargi Khurana, A. R. Harikrishnan, Devranjan Samanta, and Purbarun Dhar	SCI
66	Ferro-advection aided evaporation kinetics of ferrofluid droplets in magnetic field ambience	Physics of Fluids 32(8) (2020) **DOI:** https://doi.org/10.1063/5.0018815	Ankur Chattopadhyay, Raghavendra Dwivedi, A. R. Harikrishnan and Purbarun Dhar	SCI
67	Surface declination governed asymmetric sessile droplet evaporation	Physics of Fluids 32(11) (2020). **DOI:** https://doi.org/10.1063/5.0025644	P Dhar, R K Dwivedi, A R Harikrishnan	SCI

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

S.N.	Title of paper/conference	Publication/Conference details	Author/Attendee
1	Online STTP on Flow, Energy and Combustion	December 21-25, 2020, Organized by SVNIT Surat	Dr. Aneesh AM

ii) International:

S.N.	Title of paper/conference	Publication/Conference details	Author/Attendee
1	On-grid system evaluation for EV charging stations using renewable sources of energy,	2020 IEEE International Power and Renewable Energy Conference organized by College of Engineering Karunagappally, Kollam, Kerala, Oct 30-31 and Nov 1, 2020	Rohan George Thomas, Saraswat, S.K., Rastogi Arpit, Digalwar, A. K.
2	Development of Assessment Model for Selection of Sustainable Energy Source in India: Hybrid Fuzzy MCDM Approach	International Conference on Intelligent and Fuzzy Systems (INFUS-2020), Held during 20-22 July 2020 at Istanbul, Turkey, pp. 649-657.	Saraswat, S. K., Digalwar, A. K. and Yadav, S.S.
3	Development of a Shape Aware Path Planning Algorithm for a Mobile Robot	IEEE International Conference on Emerging Trends in Communication, Control and Computing (ICONC3 2020), Feb-21-22nd, Mody University Laxamangarh, India.	Das, S. K., Dash, S. & Rout, B. K
4	Vibration Suppression Strategies for Non deformable Mettalic Strip for Robotic Assembly Operations	IEEE International Conference on Emerging Trends in Communication, Control and Computing (ICONC3 2020), Feb-21-22nd, Mody University Laxamangarh, India.	Jalendra Chetan, Rout, B. K.
5	Complete Scene Parsing for Autonomous Navigation in Unstructured Environments	3rd IEEE International Conference on Intelligent Autonomous Systems 2020, Feb 26-29th, NTU Singapore.	Anirudh S. Chakravarthy, Honnesh Rohmetra, Divyam Goel, Harshan Baskar, Prateek Garg, Rout B.K.
6	Hyper parameter optimization on Viola Jones algorithm for gesture recognition	International conference on Modelling, Simulation and Intelligent Computing, (MoSICom) 2020, Jan 29-31, 2020, BITS Pilani Dubai Campus.	Pande Aditya, Rout B.K. and Das S.K.
7	Residual Vibration Suppression of Non-deformable Object for Robot-Assisted Assembly Operation Using Vision Sensor	Congress on Intelligent Systems, Sep 4-5, 2020	Jalendra Chetan, Rout B.K., Marathe, A.M.

S.N.	Title of paper/conference	Publication/Conference details	Author/Attendee
8	Modelling of Energy Consumption for Milling of Circular Geometry	28th CIRP Conference on Life Cycle Engineering (accepted)	S. S. Pawar, T. C. Bera, K. S. Sangwan,
9	Solution for e-waste collection: vehicle routing optimization	International Conference on Industrial and Manufacturing Systems (CIMS - 2020), NIT Jalandhar, Punjab, INDIA (Accepted)	Shailender Singh, Malhar Tidke, Mani Sankar Dasgupta and Srikanta Routroy
10	Developing cold chain for Indian Surimi supply chain	6th IIR Conference on Sustainability and the cold chain, Nantes, France (Accepted)	Farook Abdullah Sultan, Srikanta Routroy, MS Dasgupta, Souvik Bhattacharyya, Maitri Thakur, and Kristina N. Widell
11	Six Sigma Enablers for Incoming Material Quality Improvement and their interaction in Supplier Domain for Indian Manufacturing Scenario	CoMSO2020: International Conference on Modeling, Simulations and Optimizations, NIT Silchar, India, August 3-5, 2020.	Sudeep Pradhan, Ravi Reosekar and Srikanta Routroy
12	A critical review on the utilization of electric arc furnace slag: Applications, challenges and future prospects",	Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies (CRSIDE 2020)", Kolkata, March 02-04, 2020.	Gaurav Tyagi and Anupam Singhal, Srikanta Routroy, and Dipendu Bhunia
13	A Review on Sustainable Utilization of Industrial Wastes as Aggregates in Radiation Shielding Concrete	3rd International Conference on Innovative Technologies for Clean and Sustainable Development, 19-21 February 2020, Chandigarh, India	Gaurav Tyagi and Anupam Singhal, Srikanta Routroy, Dipendu Bhunia Mukund Lahoti, Veluri S Manish
14	Performance evaluation of a multi-evaporator NH3-CO2 cascade refrigeration system with IHX for seafood processing industry,	14th IIR-Gustav Lorentzen Conference on Natural Refrigerants, Kyoto, Japan 2020	Santosh Kumar Saini, Mani Sankar Dasgupta, Kristina N. Widell, Souvik Bhattacharyya.
15	Effect of motive nozzle exit position in a R-744 two phase ejector, 1st online international conference on recent advances in computational and experimental mechanics	ICRACEM 2020, IIT Kharagpur	Kapil Dev Choudhary, Mani Sankar Dasgupta, Shyam Sundar Yadav
16	Indo-German Center for Sustainable Manufacturing: A Collaboration Between Birla Institute of Technology and Science Pilani and Technische Universität Braunschweig	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. https://doi.org/10.1007/978-3-030-44248-4_1	Uhlig B., Leiden A., Sangwan K.S., Herrmann C.
17	Sustainability Assessment of Sanitary Ware Supply Chain Using Life Cycle Assessment Framework—A Case Study	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. pp. 167-179. https://doi.org/10.1007/978-3-030-44248-4_17	Sangwan K.S., Choudhary K., Agarwal S.
18	A Comparative Analysis of Surface Roughness Prediction Models Using Soft Computing Techniques	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. pp. 149-155. https://doi.org/10.1007/978-3-030-44248-4_15	Garg G.K., Pawanr S., Sangwan K.S.
19	Development of an Electric-Load Intelligence System for Component Level Disaggregation to Improve	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management.	Sihag N., Sangwan K.S.

S.N.	Title of paper/conference	Publication/Conference details	Author/Attendee
	Energy Efficiency of Machine Tools	Springer, Cham. pp. 117-129. https://doi.org/10.1007/978-3-030-44248-4_12	
20	Continuous Kaizen Implementation to Improve Leanness: A Case Study of Indian Automotive Assembly Line	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. pp. 51-69. https://doi.org/10.1007/978-3-030-44248-4_6	Sangwa N.R., Sangwan K.S.
21	Lean Manufacturing Implementation in Ceramic Industry: A Case Study	In: Sangwan K., Herrmann C. (eds) Enhancing Future Skills and Entrepreneurship. Sustainable Production, Life Cycle Engineering and Management. Springer, Cham. pp 21-29. https://doi.org/10.1007/978-3-030-44248-4_3	Bhamu J., Bhadu J., Sangwan K.S.
22	Readiness self-assessment of cement industry for sustainable manufacturing implementation: a case study of India	Procedia CIRP, 90, 449-454. https://doi.org/10.1016/j.procir.2020.02.042	Vikrant Bhakar, Kuldip Singh Sangwan, Abhijeet K Digalwar
23	Development of the Transversal Competencies in Learning Factories	Procedia Manufacturing 45, 349-354. https://doi.org/10.1016/j.promfg.2020.04.031	Devika, P Raj, A Venugopal, B Thiede, C Herrmann, KS Sangwan
24	Integrating virtual and physical production processes in learning factories	Procedia Manufacturing 45, 121-127. https://doi.org/10.1016/j.promfg.2020.04.082	L Büth, M Juraschek, KS Sangwan, C Herrmann, S Thiede

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

S.N.	Title	Publication	Author	Indexed
1	Inverse Heat Conduction and Heat Exchangers	DOI: 10.5772/intechopen.80096, ISBN: 978-1-78985-178-6, Print ISBN: 978-1-78985-177-9, eBook (PDF) ISBN: 978-1-83962-384-4, Published: December 2nd 2020	S. Bhattacharyya and R. C. Mehta	Scopus
2	ReValue project Report–D1. 3: Report on energy efficient refrigeration systems-Surimi case	ISBN: 978-82-7174-394-9 Published: December 2nd 2020	M. S. Dasgupta, S. Routroy,, S. Bhattacharyya, A. Sultan, S. K. Saini, K. N., Widell and M. Thakur,	Scopus
3	ReValue Project Deliverable 1.2 - Logistics and Cold Chain Management Concepts - OC2020 A-094	SINTEF Ocean AS, 2020 https://hdl.handle.net/11250/2675576 Research Council of Norway (RCN) / 281262	M S Dasgupta, S Routroy, S Bhattacharyya, A Sultan, S K Saini, K Gupta, N Kaushik, K N Widell, G M Tveit and M Thakur	Scopus
4	Applications of Heat Transfer Enhancement Techniques: A State-of-the-Art Review	IntechOpen, DOI: 10.5772/intechopen.92873.	Suvanjan Bhattacharyya, Devendra K. Vishwakarma, Sanghati Roy, Ranjib Biswas and Mohammad Moghimi Ardekani"	Scopus
5	Application of optimization and statistical techniques in post-harvest supply chain: a systematic literature survey	Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach (Accepted) T&F Group affiliated	Rahul Priyadarshi, Srikanta Routroy and Girish Kant Garg	Scopus
6	Six Sigma Enablers for Incoming Material Quality Improvement and Their Interaction in Supplier Domain for Indian Manufacturing Scenario	Smart Innovation, Systems and Technologies, Vol. 206, Biplab Das et al. (Eds): Modeling, Simulation and Optimization, Springer Nature."	Sudeep Pradhan, Ravi Reosekar and Srikanta Routroy	Scopus
7	Enhancing Future Skills and Entrepreneurship	Springer Nature Switzerland AG, ISBN 978-3-030-44248-4.	Kuldip Singh Sangwan and Christoph	Scopus

S.N.	Title	Publication	Author	Indexed
		https://www.springer.com/gp/book/9783030442477	Herrmann	
8	Studies on Performance Improvement of an R744 Transcritical Refrigeration System Using Dedicated Mechanical Subcooling	Advances in Air Conditioning and Refrigeration (pp. 33-44). Springer, Singapore	Hazarika, M. M., Ramgopal, M., & Bhattacharyya, S.	Scopus
9	Application of Fuzzy AHP Approach for Evaluation of Sustainable Energy Sources in India	Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach, CRC Press (ISBN 9781003055037)	Saraswat, S. K., Digalwar A.K. and Yadav S.S.	Scopus
10	Development of Assessment Model for Selection of Sustainable Energy Source in India: Hybrid Fuzzy MCDM Approach.	Intelligent and Fuzzy Techniques: Smart and Innovative Solutions (INFUS 2020) Advances in Intelligent Systems and Computing, vol 1197. Springer, Cham. https://doi.org/10.1007/978-3-030-51156-2_75.	Saraswat, S. K., Digalwar A.K. and Yadav S.S.	Scopus
11	Application of Hybrid MCDM Approach for Selection of Sustainable Energy Sources in India, Mathematical Modeling, Computational	Intelligence Techniques and Renewable Energy (MMCITRE2020) Advances in Intelligent Systems and Computing, Vol 1197, Springer	Saraswat, S. K., Digalwar A.K. and Yadav S.S.	Scopus

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

S.No.	Key persons/ Faculty/ Event	Title of the program	Date
1.	Mr. Kishan Khatri, President, ISHRAE Jaipur Chapter, India.	IWRATE 2020	29 June-03 July 2020
2.	International Webinar on Sports Engineering VII	Applied nanotechnology in sports training and coaching	18 December, 2020
3.	International Webinar on Sports Engineering VI	Applied sports analytics and performance measure	21 November, 2020
4.	International Webinar on Sports Engineering V	Musculoskeleton Biomechanics Measuring Kinetics and Kinematics in Sports	17 October, 2020
5.	International Webinar on Sports Engineering IV	Computer Application in Sports	19 September, 2020
6.	International Webinar Sports Engineering III	Sports Training and Technology	12 August, 2020
7.	International Webinar on Sports Engineering II	Lessons of Sports Engineering and Aerodynamics	18 July, 2020
8.	International Webinar Sports Engineering I	Application of sports technology in sports performance	20 June 2020

8. INVITED TALKS GIVEN BY BITS FACULTY

Faculty Name	Details of the Talk Delivered
Dr. Gaurav Watts	• 'Introduction to Meshfree Methods' in AICTE ATAL Academy sponsored 5 Days (Sept. 7 - Sept.11, 2020) Training Programme on Mechanics of Composite Materials and Structures, organised by M.B.M. Engineering College, Jodhpur, Rajasthan, India.
Prof. Abhijeet K. Digalwar	• Conducted two sessions on 'Evaluation of energy sources for sustainable development of energy sector in India' in AICTE sponsored STTP on Advancements in Green Energy for Sustainable Development at Prof Ram Meghe Institute of Technology and Research, Badnera during 10-14 August 2020. • Chief Guest and delivered Keynote address in 2-day e-International conference on 'Recent Innovations in Science, Engineering and Technology organized' organized by Govindrao Wanjari College of Engineering & Technology Nagpur during July 13-14 July 2020. • Invited talk on 'Implications of Industry 4.0 practices on sustainable manufacturing' in TEQIP-II Sponsored STTP on Manufacturing Practices and Industry 4.0 held at

Faculty Name	Details of the Talk Delivered
	Government Engineering College Bikaner on 9th June 2020 through Webinar. • Delivered an invited talk through webinar on Implications of Industry 4.0 in two-day International Webinar on Benefits and Challenges in Industry 4.0 organized by Industrial Engineering Group, School of Automotive and Mechanical Engineering, Kalasalingam Academy of Research and Education, Krishnankovil, Tamilnadu, India between 28th and 29th May 2020.
Dr. Aakash Chand Rai	• Talk on 'Assessment and mitigation of impact of climate change on the cooling energy consumptions in buildings' in an online short-term course conducted by NIT Silchar on 25th August 2020.
Prof. Bijay K. Rout	• Two invited lectures on 'Design Issues for Industrial Robots' organized by KIIT University and BPUT Bhubaneswar on May 27, 2020. • Invited speaker for a FDP on Recent Trends and Advances in Robotics and Automation organized at College of Engineering and Technology, BBSR, BPUT during Sept 21-25, 2020 sponsored by TEQUIP –III. • A talk on 'Design issues with Industrial manipulators' in a TEQIP-III Sponsored Faculty Development Program on Recent Trends and Advances in Robotics and Automation during 21-25 September 2020 at CET Bhubaneswar, BPUT. • A talk on 'Automation activities for Nozzle Closure Bonding at HAT (High Altitude Engine Testing) Facility' on 13 October 2020 at ISRO – Propulsion Research Center, Mahendragiri, TN. • A talk on 'Multi-objective Optimization' at AICTE Sponsored Online STTP on Innovative techniques for sustainable energy development through modeling of mechanical processes from 19 to 24 October 2020 at K.L.N College of Engineering, Madurai. TN. • A talk on 'Design Issues in Industrial manipulators' TEQIP-III Sponsored Faculty Development Program on Computer Aided Manufacturing and Design during Dec 21-25, 2020 organized by RTU Rajasthan. • A keynote talk on 'Simultaneous selection of parameters and tolerances of Industrial manipulators' on 22 December 2020 at IPRoM 2020 International conference held at BITS Hyderabad.
Dr. Suvanjan Bhattacharyya	• A talk on 'Single Phase Thermal Energy Transport Coefficient Enhancement Methods in Heat Exchanger Applications' in a webinar organized by Regent Education & Research Foundation Group of Institutions, Kolkata on 16 August 2020.
Prof. Rajesh P Mishra	• A talk on 'Condition Monitoring for the Online Technology' in a Faculty Development Programme on Reliability, Availability, Maintainability and Safety (RAMS) during August 22-23, 2020.
Prof. M.S. Dasgupta	• A talk on 'Co2 Heat pump for waste heat recovery and utilisation in Diary Industry' in a Webinar series on Reducing Carbon footprint in the Dairy Industry-Future and Challenges (Edition-II), organized by Mansinhbhai Institute of Dairy and Food Technology (MIDFT) on Nov 05, 2020. • A talk on 'Technology application in Sports Performance' in an international webinar organized by National Sports University Manipur and SAI on Nov 26, 2020. • A talk on 'Refrigeration needs for effective utilisation of sea food resources in India' in a webinar series organized by ISHRAE BITS Pilani Student Chapter on June 29, 2020.
Dr. Aneesh A. M.	• An invited talk on 'Fin based Printed Circuit Heat Exchangers for Next generation Reactor Power conversion systems' on May 29, 2020 at RAY2020, organized by Mechanical Engineering Department, Vardhaman College of Engineering, Hyderabad.
Prof. K S Sangwan	• An invited talk on 'Smart Manufacturing' during Short Term Training Program (STTP) on Sustainable Manufacturing for Atma Nirbhar Bharat at Malaviya National Institute of Technology Jaipur, 25 December 2020. • An Invited talk on 'Historical Perspective of Sustainable Manufacturing' during Short Term Training Program (STTP) on Sustainable Manufacturing for Atma Nirbhar Bharat at Malaviya National Institute of Technology Jaipur, 21 December 2020. • An invited talk on 'Smart Manufacturing' during AICTE sponsored short term training program on Advanced Manufacturing Technologies and Applications at Sant Longowal Institute of Engineering and Technology (Centrally Funded Technical Institute), 27 November 2020. • A talk on 'Sustainability and circular economy: A supply chain perspective' during Chintan- Friedrich Ebert Stiftung Foundation Webinar Series on Circular Economy, 27 October 2020. • A talk on 'Industry4.0: Smart manufacturing, digitalization and beyond' during a short-term course on Industry 4.0- Industrial Automation Solutions & Applications at National Institute of Technology Jalandhar, 21 September 2020.

Faculty Name	Details of the Talk Delivered
	• A tech talks during Automotive Component Manufacturers Association (ACMA) India, 15 September 2020. • An invited talk on 'Smart Manufacturing' in a short-term course on Advanced Manufacturing Processes & Applications Program at Malaviya National Institute of Technology Jaipur, 27 August 2020. • An invited talk on 'Reverse logistics and integrated supply chain: network design and research issues' during Short Term Course on Effective Logistics for Sustainable Environment at National Institute of Technology Jalandhar, 12 August 2020. • An invited talk on 'Smart Manufacturing and Cyber Physical Production Systems' at short term training program on Manufacturing Practices and Industry 4.0, Government Engineering College Bikaner, 11 June 2020.
Prof. M. S. Soni	• An invited talk on "Renewable Energy – recent trends, issues and challenges" to faculty and students of P.R. Pote Institute of Engineering and Research, Amravati on 28th May 2020. • An invited talk on "Thermodynamic analysis of integrated PV/T system with earth water heat exchanger." in online AICTE approved Quality Improvement Program – Short Term Course on "Energy and Environment Management for Sustainable Development" organized by Department of Mechanical Engineering, IIT BHU during 07-12 December 2020. • An invited talk on "Renewable Energy – recent trends, issues and challenges" in TEQIP III sponsored two-week international online faculty development program on "Techno-Economic and Environmental Aspects of Electrical Energy Systems for Sustainable Development" organized by Department of Electrical Engineering, Govind Ballabh Pant Institute of Engineering and Technology, Pauri, Uttarakhand, 07-18 September 2020. • An invited talk on "Applications of Solar Thermal Technologies" in AICTE sponsored STTP on "Advances in Green Energy for Sustainable Development (AGE 1)" organized during 10-16 August 2020 at Prof. Ram Meghe Institute of Technology and Research, Badnera-Amravati
Dr. Radha Raman Mishra	• An invited talk on "A newer approach to casting of metallic materials" in TEQIP – III sponsored one week online short-term course on Microwave Material Processing: Opportunities and Challenges organized during 14 – 18 December 2020 at NIT, Uttarakhand. • An invited talk on "Resource-efficient Casting of Metallic Materials using Microwave Energy: Challenges and Opportunities" in online international conference 'Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME'20) organized by Society of Materials & Mechanical Engineers (SOMME) during 19-20 December 2020.
Dr. A. R Harikrishnan	• An invited talk on "Science and Engineering of Droplets: Fundamentals and Applications", NSS College of Engineering, Palakkad organized by IEI Chapter, August 2020

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

S.No.	Name of the invited speaker	Title of the talk	Date	Venue
1	Prof. (Dr.) Pradip Majumdar, Northern Illinois University, USA.	Sustaining Performance of Lithium-Ion Batteries	03/07/2020	Online
2	Prof. (Dr.) Josua P. Meyer, University of Pretoria, South Africa.	Turbulent and mixed convection in tubes	01/07/2020	Online
3	Prof. (Dr.) John P. Abraham, School of Engineering, University of St. Thomas, USA.	How thermal engineering is used in the real world.	30/06/2020	Online
4	Prof. (Dr.) Ali C. Benim, Duesseldorf University of Applied Sciences, Germany.	Challenges in modelling industrial gas turbine combustors.	02/07/2020	Online
5	Prof. (Dr.) Celestino Ruivo, Universidade do Algarve, Portugal.	Thermal Engineering: Some concepts and misconceptions	30/06/2020	Online
6	Prof. (Dr.) M. S. Dasgupta, Birla Institute of Technology & Science, Pilani, India.	Refrigeration needs for effective utilization of sea food resources in India.	29/06/2020	Online
7	Prof. (Dr.) Saravanan, Anna University, India.	Overview of solar cooling technologies.	29/06/2020	Online
8	Prof. (Dr.) Jyotirmay Mathur, MNIT Jaipur, India	Indoor Environment Quality	01/07/2020	Online
9	Mr. Prateek Dutta Roy, Chief Engineering Manager, L&T India.	AC System Design Strategies for	30/06/2020	Online

S.No.	Name of the invited speaker	Title of the talk	Date	Venue
		Sustainable Development		
10	Mr. Vishal Kapoor, ISHRAE, India	Indoor Spaces and COVID-19.	03/07/2020	Online
11	Mr. R. P. Paranjpey, ISHRAE, India.	Natural refrigerants and their application use in HVAC & R.	02/07/2020	Online
12	Prof Christoph Herrmann, TU Braunschweig, Germany	Sustainability thinking and Industry 4.0	26/10/2020	Online
13	Dr Felipe Cerdas, TU Braunschweig, Germany	Life cycle engineering for sustainable production and products	02/11/2020	Online
14	Prof Reza Ashgari, TU Braunschweig, Germany	International Tech. Entrepreneurship	05/11/2020	Online
15	Prof K S Sangwan BITS Pilani, India	Sustainability assessment frameworks and use case studies	19/11/2020	Online
16	Prof Devika, Prof Pushp Lata, Dr Rajni Singh BITS Pilani, India	Cross cultural Workshop	17/12/2020	Online

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Prof. Abhijeet K. Digalwar, Appointed as a member of consultancy cell for development of academic programmes in Chaudhari Devilal University, Sirsa.

2. Prof. P. Srinivasan, The prestigious Platinum Award for the Mentor category of CII MILCA AWARD 2020.

3. Prof. Kuldip Singh Sangwan, Found a place in the top 2% world scientists list by Stanford University researchers in the area of "Industrial Engineering and Automation". https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918 https://drive.google.com/file/d/ 1bUJrvurVVBbxSl9eFZRSHFif7tt30-5U/view.

b. Won by Students:

1. Vivek Tiwari (PhD Student), Infrastructure access travel grant under European Union's Horizon 2020 research and innovation programme (Grant agreement No. 823802).

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Prof. Abhijeet K. Digalwar, Participant of ASM & ASMA's Online Faculty Development Program Series titled 'Online Learning Pedagogy and Effective Use of Case Methodology' conducted between May 17, 2020 to May 21, 2020.

2. Dr. Saket Verma, FICCI-RBS Webinar on 'Shift to Hybrid Learning Model: The New Normal for Education"", Aug 6, 2020. Online Teaching Workshop Series organized by Teaching Learning Centre from August 6 -10, 2020.

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Ajay D. Pingale, Ayush Owhal, Sachin U. Belgamwar, Jitendra S. Rathore, Department of Mechanical Engineering, **Title of the invention** Preparation method of in-situ synthesized Cu-Ni-graphene nanocomposite, **Status:** Indian Patent, Application submitted

2. Tamalika Bhakat, Sachin U. Belgamwar, Ajay Agrawal, N. N. Sharma, Mechanical Engineering, **Title of the invention:** Monochromatic light modulated hydrogel, **Status:** Indian Patent Application submitted

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1. Mechanical Engineering Association

- A talk on Shape Optimization in Plasticity and Fracture Mechanics was organized on 01 January 2020. The speaker was Mr. Jeet Desai, a BITS alumnus who is currently pursuing Ph.D. at Universite' de Paris.

2. BAJA Team

- The group 'Inspired Karters Electric' has secured first position in the event "Formula Bharat 2020" which was held online this year due to COVID 19. (link: https://www.formulabharat.com/results/fsev-2020-results/)

- The group 'Inspired Karters Gravity' has qualified the initial round for NASA Human Exploration Rover Challenge 2020. (link https://www.nasa.gov/stem/roverchallenge/teams/index.html)

- The group 'Formula Student' has participated in the event "Formula Bharat 2021". Results are awaited.

- Self-driving car team named 'Sally Robotics' works at CRIS and they have achieved some initial success

3. Manufacturing Engineering Association

- A talk was conducted on Product system Sustainability. The session was taken by Dr. Manbir Sodhi (University of Rhode Island, USA). The session was an interactive one which concluded with presentation from students of University of Rhode Island, USA. on 11/01/2020.

- A workshop was conducted by one of the pre-final year student of Manufacturing. It was focused on basics and helping students prepare for Machine Design and Drawing Course on 22-23rd Feb 2020.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty
1	Universal tribometer (Pin on disk and ball on disk)	01
2	Portable Aerosol Spectrometer (Rs. 10 lakh, Funding agency: DST, Aug 2020)	01
3	Aerosol Generator (Rs. 5 lakh, Funding agency: DST, Aug 2020)	01
4	Weather Station (Rs. 2 lakh, Funding agency: BITS, July 2020)	01
5	Heat Index Meter (Rs. 20000, Funding agency: BITS, Aug 2020)	01
6	Hot Wire Anemometer (Rs. 15000, Funding agency: BITS, Aug 2020)	01
7	Siemens S1200 Programmable Logic Controller and HMI	01
8	Skin Friction Measurement Device (In Process)	01
9	Building Energy Monitoring Kit (Rs. 1 lakh, Funding agency: OPERA, BITS, March 2020)	01
10	Heat Transfer by Radiation WL-460 (Rs. 6.5 lakh, Funding agency: Capex Equipment 26/04/1007 Mech Dept., Jan 2020)	01
11	Single Syringe Pump220 Volts (Rs. 85000, Funding agency: SERB, Dec 2020)	01

B1.10.11 Department: Management

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	1
Associate Professors	3
Assistant Professors	12
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department: Prof. Leela Rani

Contact details: Email: leela_r@pilani.bits-pilani.ac.in

Phone: +91-01596515334 (O)

+91-01596-515264 (Direct)

Number of Ph.D. Scholars: 29

Full Time: 16

Part Time: 13

Aspirant Scheme: 00

Ph.D. Thesis Submitted during the year: 2020

S.No.	Name	ID	Topic	Supervisor	Co-Supervisor
1	Vijay Kumar Sharma	2013PHXF0512P	Investigating Risk Management Practices And Development Of Strategic Risk Management Framework For Logistics Infrastructure Projects	Dr. Satyendra Kumar Sharma	Prof. Ajit Pratap Singh
2	Dilawar Ahmad Bhat	2014PHXP0415P	Essays on Bank Lending Behaviour and Non-performing Assests in the Indian banking System	Prof. Udayan Chanda	Prof. Anil K Bhat
3	Gaurav Nagpal	2016PHXF106P	Inventory Modeling and Optimization for high technology products with successive generations	Prof. Udayan Chanda	
4	Aditi S. Divatia	2013PHXF0304P	Analysis Of Factors Influencing The Maturity Of Business Intelligence & Analytics (Bi&A) Capability Of Organizations In India	Prof. Jyoti	Prof. Sunil Lakdawala

1. SPONSORED RESEARCH AND CONSULTANCY

(i) PROJECTS SANCTIONED

A. Government Sanctioned: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

(ii) ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Designing a Futuristic Learning Framework for Post Millennial Generation Students of Higher Education Institutions in India	Management	Dr. Jayashree Mahesh	Prof. Anil Bhat	ICSSR	-	8,90,000
2	Developing Active Social Learning Interventions and Assessing their Impact on Environmentally Sustainable Consumption Behavior of Primary Children	Management	Leela Rani	Neetu Yadav	ERIC, NCERT	-	514,500
3	Modelling the Drivers and Barriers of Electric Vehicle Penetration in Emerging Economy: A Study of Indian Market	Management	Hari Om Bansal	Praveen Goyal	ICSSR	-	5,25,000
4	Use of Social Media as a Driver for Innovation in Higher Education in India	Management	Nirankush Dutta	Anil K Bhat	ICSSR	-	10,00,000

B. Ongoing Industry Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

(iii) COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Measuring the Impact of Socially Responsible Supply Chains and Development of Framework for Implementation	Management	Satyendra Kumar Sharma	Saurabh Chadha	ICSSR	-	5,50,000

B. Completed Industry Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects: NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)

3.   LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

1. Nigam Achint, Dewani Prem Prakash, and Behl Anbhishek (2020), "Exploring Deal of the Day: an e-commerce strategy", Benchmarking: An International Journal, Vol. 27 No.10, pp. 2807-2830. (B-category A.B.D.C.)

2. Preeti Tiwari, Anil K. Bhat & Jyoti Tikoria (2020) Mediating Role of Prosocial Motivation in Predicting Social Entrepreneurial Intentions, Journal of Social Entrepreneurship, DOI: 10.1080/19420676.2020.1755993.

3. DA Bhat U Chanda, AK Bhat (2020) "Does Firm Size Influence Leverage" Global Business Review, DOI:doi.org/10.1177/0972150919891616.

4. Kalwani, S., Mahesh, J. (2020). "Trends in organizational behavior: A systematic review and research directions". Journal of Business and Management, Vol. 26 No. 1, pp. 40-78. DOI: 10.6347/JBM.202003_26 (1).0003. (ABDC-C)

5. Arun Kumar Agariya, Jyoti Tikoria (2020) "Development & Validation of Service Quality Scale for Indian Telecom Sector", International Journal of Services and Operations Management, Vol. 37, No. 4, pp. 477-508

6. Sharma, M., & Rani, L. (2020). Environmentally sustainable consumption awareness among children: an empirical study. World Review of Entrepreneurship, Management and Sustainable Development, 16(1), 76-91.

7. Yadav, N. (2020), "Application of System Dynamics Methodology in Performance Management System: A Case Study of Indian Automotive Firm", International Journal of Business Performance Management, Vol. 21, No. 4, pp. 385- 399.

8. Yadav, N. and Waal, Andre de (2020), "Comparison of Indian with Asian organizations using the high performance organization framework: An empirical approach", Journal of Transnational Management, Vol. 25, No. 3, pp. 176- 194.

9. Yadav, N. (2020), IKEA Inc.: The India Way, Emerald Emerging Markets Case Studies (Teaching note is also available), Vol. 10, No. 1.

10. Yadav, N. and Gupta, K. (2020), "Disruptive innovation in Saturated Indian telecom space: A case of Reliance Jio", International Journal of Business Innovation and Research, Vol. 23, No. 1, pp. 127-140.

11. Goyal, P., Kumar, D. and Kumar, V. (2020), "Application of multicriteria decision analysis (MCDA) in the area of sustainability: a literature review", International Journal of the Analytic Hierarchy Process, Vol. 12 No.3.

12. Phulwani, PR, Kumar, D. and Goyal P. (2020), A Systematic Literature Review and Bibliometric Analysis of Recycling Behaviour, Journal of Global Marketing (Accepted).

13. Kumar V., Vandana, Goyal, P. and Kumar, D. (2020), "Enhancing public engagement for green diwali: An initiative of Centre for Sustainability, Growth and Development (CSGD)", International Journal of Social Ecology and Sustainable Development, Vol. 11 No. 4, pp. 15-26.

14. Saha, V., Venkatesh M. and Goyal, P. (2020) "Emerging trends in the literature of value co-creation: a bibliometric analysis", Benchmarking: An International Journal, Vol. 27 No.3, pp. 981-1002

15. Nagpal, Gaurav and Chanda, Udayan. "Economic Order Quantity Model for Two Generation Consecutive Technology Products under Permissible Delay in Payments". International Journal. of Procurement Management (Accepted for publication)

16. Nagpal, Gaurav and Chanda, Udayan. (2020) "Adoption and Diffusion of Hi-Technology Product and Related Inventory Policies: An Integrative Literature Review and Suggestions for Future Research" International Journal of E-Adoption, Vol.12 No. 1, pp. 1-14.

17. Bhat, Dilawar Ahmad, Chanda, Udayan and Bhat Anil, (2020) "Does firm size influence leverage? Evidence from India", Global Business Review (DOI: 10.1177/0972150919891616)

18. Naim, M.F. (2020). Evolving face of workplace learning and development: a case of an Indian HR consulting firm, Strategic HR Review (ahead-of-print) (SCOPUS Indexed, Emerald publishers)

19. Chadha, S. and Dutta, N. 2020. Linking Entrepreneurship, Innovation and Economic Growth: Evidence from GEM Countries. International Journal of Technoentrepreneurship, 4(1): 22-31. The journal is published by Inderscience; ranked as ABDC Category C Journal; Indexed in Scopus, ProQuest etc. Print ISSN: 1746-5370, Online ISSN: 1746-5389.

20. Seth, H., Chadha, S., Ruparel, N., Arora, P.K. and Sharma, S.K. (2020), "Assessing working capital management efficiency of Indian manufacturing exporters", Managerial Finance, 46(8): 1061-1079.

21. Seth, H., Chadha, S., & Sharma, Satyendra (2020). Benchmarking the efficiency model for working capital management: data envelopment analysis approach. International Journal of Productivity and Performance Management. https://doi.org/10.1108/IJPPM-10-2019-0484

22. Tusnial, A., Sharma, Satyendra. K., Dhingra, P., & Routroy, S. (2020). Supplier selection using hybrid multicriteria decision-making methods. International Journal of Productivity and Performance Management. https://doi.org/10.1108/IJPPM-04-2019-0180

23. Srivastava, P. R., Sharma, S., & Kaur, S. (2020). Data mining-based algorithm for assortment planning. Journal of Management Analytics, 1-15. Scopus, ABDC- C

4. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED/INTERNATIONAL

1. Dr. Jayashree Mahesh of Department of Management participated in Academy of Management Discoveries Workshop by Prof. Peter Bamberger, INDAM, Indian Institute of Management, Tiruchirapalli on January 02, 2020.

2. Jayashree Mahesh & Anil K. Bhat, 'An Interpretive-Research Insight into Values-Schema of Generation Z and its Implication for Employee Engagement'. Paper presented at the 6th Biennial Conference of the Indian Academy of Management (INDAM) Architecting Indian Management Scholarship in The Era of Disruption, held at Indian Institute of Management Tiruchirappalli, January 2-4, 2020.

3. Unnikrishnan P M, Jyoti Tikoria & Arun Kumar Agariya (2020) "Business Excellence in Indian SMEs: Issues and Challenges", Published in proceedings of International Conference on Globalizing Indian Thought held in IIM-Kozhikode, during 16-18 January, 2020, pp. 44-50.

4. Dr. Jayashree Mahesh of Department of Management participated in the 'International Conference on Best Teaching Practices for Engaged Student Learning' organized by Teaching Learning Centre (TLC) in collaboration with the three campuses of TLC at BITS Pilani, KK Birla Goa Campus between 12 -15 February, 2020.

5. Sharma, N. & Dutta, N. 2020. "Technology in Omnichannel Retailing: Exploring Agenda for Future Research" in the Pacific Asia Conference on Information Systems (PACIS) organized by the Association for Information Systems (AIS) virtually in Dubai from Jun 20, 2020 to Jun 24, 2020 (PACIS 2020 Proceedings. 26), available at AIS Electronic Library (AISeL). https://aisel.aisnet.org/pacis2020/26.

6. Dutta, N., & Sharma, A. 2020. "Literature Review on Showrooming: Exploring Future Direction of Research" in the 2020 AMA Summer Academic Conference (Summer AMA) organized by American Marketing Association, virtually (Originally planned at San Francisco, California, United States) from Aug 18, 2020 to Aug 20, 2020 (ISBN-13: 978-0-87757-008-0), Vol. 31, pp. 393-395.

7. Naim, M. F. (2020). Interplay of resonant leadership and employee wellbeing in digital economy: Towards a conceptual model. In Proceedings of International Conference of Sustainability and Equity Digital Society, (23-25 November, 2020).

8. MacKenzie Kellen and Deepak Saxena (2020), "Calm my Headspace: Motivations and barriers for adoption and usage of meditation apps during times of crisis", in Proceedings of the 20th International Conference on Electronic Business (ICEB 2020) held in University of Hong Kong, Hong Kong, during December 5-6, 2020.

9. Sheikhar, Chander and Matai, Rajesh (2020). "The linkages between Spare-parts Management and Maintenance Management in Army Supply Chain of Vehicles" in International Conference on Evolution in Manufacturing (ICEM 2020), MNIT Jaipur, December 10-12, 2020.

10. J., Krishna Manasvia and Matai, Rajesh (2020). "Agri-fresh Supply Chain Management: A Systematic Literature Review" in International Conference on Evolution in Manufacturing (ICEM 2020), MNIT Jaipur, December 10-12, 2020.

11. Joshi, Aman K. and Matai, Rajesh (2020). "Cloud computing adoption in Indian MSME manufacturing sector: A Study and Future agenda" in International Conference on Evolution in Manufacturing (ICEM 2020), MNIT Jaipur, December 10-12, 2020.

12. Hari Om Bansal and Praveen Goyal (2020), "Enablers and Barriers of Electric Vehicle in India: A Review", IEE International Symposium on Sustainable Energy, Signal processing & Cyber Security, Organized by Department of Electrical & Electronics Engineering School of Engineering & Technology, GIET University, Gunpur, India. 16-17 December 2020.

13. Leela Rani and Avinash Gautam (2020), Using Market Basket Analysis for a Retail Consumer Cooperative, presented at 6th International Management Conference on "Advances in Management through Research, Innovation & Technology (AMRIT)" from 16-18 December 2020 (held virtually).

Case Study Nil

National:

1. Dr. Achint Nigam participated in startup and entrepreneurship at BITS Pilani, 27-28 February 2020.

2. Yadav, N. (2020), "Case Method as an Experiential Learning Tool for Management Courses", International Conference on Best Teaching Practices for Engaged Student Learning, Organized by Teaching Learning Center, Goa, India February 13-15, 2020.

3. Dr. Achint Nigam participated in Design Thinking workshop by Dr. Pavan Soni at BITS Pilani – 10-18 June 2020.

4. Dr. Jayashree Mahesh of Department of Management participated in the "The Republic of Letters' -A virtual conference for the best minds in learning to reboot and redesign higher education in India, June 24-26, 2020 organized by Ashoka University and Harappa Education.

5. Dutta, N. & Bhat, A. 2020. "Use of Social Media in Higher Education: A Systematic Literature Review" in the 4th International Marketing Conference on Marketing, Technology & Society (ICMTS 2020) organized by Indian Institute of Management Kozhikode (IIM-K) at IIM-K campus from Dec 07, 2020 to Dec 09, 2020.

6. Sharma, N. & Dutta, N. 2020. "Technology for Omni-Channel Retailing: A Systematic Literature Review" in the 4th International Marketing Conference on Marketing, Technology & Society (ICMTS 2020) organized by Indian Institute of Management Kozhikode (IIM-K) at IIM-K campus from Dec 07, 2020 to Dec 09, 2020.

5. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Tiwari P., Bhat A.K., Jyoti (2020). "A Field Research of Nascent Social Entrepreneur's Intention Formation in India" in: Premarajan R.K, Anneleen Forrier and Michael B. Arthur (eds) Career Dynamics in a Global World: Indian and Western Perspectives published by Edward Elgar Publishing Ltd. (In Press).

6. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Dr. Udayan Chanda (Course Director) and Dr. Praveen Goyal (Co-course Director) of 10 days' research methodology course for M.Phil./PhD/PDF scholars sponsored by the Indian Council of Social Science Research (ICSSR) held during 17th-26th February 2020. (Amount Sanctioned- Rs. 5, 50,000)

2. Dr. Nirankush Dutta was one of the resource persons in the 10 Days Research Methodology Course sponsored by ICSSR and organized by the Department of Management, BITS Pilani from 17th February 2020 to 26th February 2020 at BITS Pilani (Pilani Campus).

3. Dr. Satyendra Sharma was Convener of Two-day workshop on "Startups and Entrepreneurship Development", BITS Pilani, Pilani Campus, 27-28 Feb, 2020.

4. Dr. Jayashree Mahesh of Department of Management delivered an online webinar titled "Netiquette for Online Learning" to the students of MBA batches of 2019-2021 and 2020-2022 on July 29,2020

5. Dr. Jayashree Mahesh of Department of Management delivered a session titled "Student Engagement and Breakout Sessions" to the faculty of BITS Pilani (Pilani, Goa, Hyderabad) in the Online Teaching Workshop Series organized by TLC at BITS Pilani, Pilani campus between August 6-10,2020.

6. Prof. Leela Rani was part of Pre-MBA course work webinars (July-Aug, 2020)

7. Dr. Satyendra Sharma was Convener of two-day webinar on "Battling Covid 19- Opportunities and Challenges in Healthcare Sector" 3-4 Oct 2020.

7. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. Leela Rani delivered an online talk on "Principles in General Management" on 27-July 2020.

2. Dr. Neetu Yadav and Dr. Achint Nigam delivered an online talk on "Learning from session on Case method and simulations" on 28-July- 2020.

3. Dr. Jayashree Mahesh delivered an online talk on "Online Teaching and Learning" on 28-July- 2020.

4. Prof. Udayan Chanda delivered an online talk on "Basics of Statistics for Decision making" on 29-July-2020.

5. Dr. Rajesh Matai delivered an online talk on "Basics of Management Science for solving business problem" on 31-July-2020.

6. Dr. Saurabh Chadha delivered an online talk on "Basics of Accountancy and Finance" on 04-August-2020.

7. Dr. Achint Nigam and Dr. Neetu Yadav delivered an online talk on "Discussing a Case" on 08-August- 2020.

8. Dr. Satyendra Sharma delivered an online talk on "Quality Concepts" on 11-August-2020.

9. Prof. Jyoti delivered an online "Brainstorming Session on Crafting the Vision Statement of your Institute", invited by UGC- HRDC as part of Online Faculty Induction Program (Gurudakshta) on 4th November 2020.

8. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Mr. Sunil Bharadwaj - DGM Supply Chain and Strategy, Raymonds Ltd. Delivered a talk on "Impact of COVID-19 on Supply Chain Management" via online mode at the department of Management, BITS Pilani on 19-July-2020.

2. Mr. Jayant Sewak, (BITS Alumnus, MBA 2010) Knowledge Expert – Product Development & Procurement Practice at McKinsey & Company, Chicago, delivered a talk on "Management Consulting and effective use of 2 years' time during MBA" via online mode at the department of Management, BITS Pilani on 25-July-2020.

3. Mr. Rohith Ananth (BITS Alumnus, MBA 2018) Business Analyst at Bombardier, delivered a talk on "Adapting to changes due to COVID-19 & skill sets required" online at the department of Management, BITS Pilani on 26-July-2020.

4. Mr. Rohith Ananth - Business Analyst, Bombardier delivered a talk on "Experience in the industry, Recent changes due to COVID-19, and skill set needed to excel in the industry" via online mode at the department of Management, BITS Pilani on 26-July-2020.

5. Mr. Shakti Nayan (BITS Alumnus, MBA 2019) Consultant- Data Engg at Genpact, delivered a talk on "Data engineering for effective information system" via online mode at the department of Management, BITS Pilani on 01-August-2020.

6. Mr. Sampark A. Sachdeva OYO – Region Head (West) & Chief Coach & Mentor (at a startup), delivered a talk on "Personal branding & impact of social movements on Marketing" via online mode at the department of Management, BITS Pilani on 02-August-2020.

7. Mr. Coumara Radja Ex-President Global Business, ZCL (Earlier Zandu Chemicals), delivered a talk on "International business and challenges" via online mode at the department of Management, BITS Pilani on 06-August-2020.

8. Mr. Manoj Bali HR Analytics lead at Novartis, delivered a talk on "People Analytics" via online mode at the department of Management, BITS Pilani on 08-August-2020.

9. Mr. Murali Aiyer Social Entrepreneur and co–founder of SALTLABS, Ex HR Director CRISIL– engaged in Consulting, Leadership Coaching and Mentoring, delivered a talk on "Leadership Skills and Competencies" via online mode at the department of Management, BITS Pilani on 10-August-2020.

10. Dr. Vineet Sehgal Senior Director, HR, PwC, delivered a talk on "Digital Disruption and its impact" via online mode at the department of Management, BITS Pilani on 12-August-2020.

11. Mr. Sujit Panigrahi (BITS Alumnus, MMS 1994) Co-founder and CEO at Sequoia Fitness and Sports Technology, Additional Director General at Commonwealth Games Delhi 2010, Co-founder of Convergent Technologies, delivered a talk on "Running a Business Enterprise effectively" via online mode at the department of Management, BITS Pilani on 17-August-2020.

12. Mr. Raju Reddy Distinguished Alumnus, BITS Pilani, Founder – Sierra Atlantic, Silicon Valley, delivered a talk on "Entrepreneurship: A lifetime of rewards" via online mode at the department of Management, BITS Pilani on 19-August-2020.

13. Mr. Sameer Dhanrajani, delivered a guest lecture on 26th August 2019. The speaker had great experience in the field of Analytics and guided students about his experiences and the road ahead in times of Covid.

14. Mr. Rohit khullar (Assistant Manager Business Excellence at KPMG) delivered a training workshop on KPMG Lean six sigma (Green belt) certification workshop.

9. AWARDS AND RECOGNITIONS: Nil

10. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. Achint Nigam participated in the Faculty development: - Completed moocs on blockchain and artificial intelligence May-June 2020.

2. Dr. Jayashree Mahesh of Department of Management participated in a FICCI FUTURE-X Faculty Development Program on "Online Teaching- Learning Tools & Pedagogies", 20-24 July, 2020.

3. Dr. Leela Rani attended Faculty Development program: "Teaching with Simulations" organized online by SP Jain Institute of Management and Research {a Private business school affiliated under Bharatiya Vidya Bhavan} in collaboration with Harvard Business School (Boston, Massachusetts, USA); held from 25th June to 27th June 2020.

4. Dr. Udayan Chanda attended online SAS Faculty Development Program on 'Designing curriculum for Big Data management, Artificial Intelligence & Machine Learning' held during 3-6 Nov 2020.

11. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

The Management Association has carried a myriad of activities over the course of the last year. Some of the highlights are events like Simulation X, MoneyBall, Caseium, Abhivyakti, Budget Analytica, "What's in a Brand?", etc. These events were aimed at promoting the various fields of management like Finance, Operations, Marketing, Business Analytics & HR. The events saw a participation of 60+ students for each event across the BITS Pilani Campus. The events like Caseium and Abhivyakti which were held online via D2C platform saw monumental interest with more than 2000 registrations and 200 submissions combined. The association has over the course of its tenure hosted the farewell for Batch 2018-20, the freshers for the Batch of 2020 -2022 and a host of trainings like the KPMG Six Sigma Green Belt Certification Program amongst others. The association raised sponsorship to the tune of Rs. 3,00,000/- for the event Interface 2020 which was themed "Unravel the Enigma" with eminent speakers like Mr. Mathew Cherian (CEO HelpAge India), Mrs. Gayatri Devi Jayan (Vice President WIPRO Ltd), Mr. Sukahanandan (Founder – Veracity Consulting) and Mr. Varindra Sewak (Director – BLS International Services). The event however, had to be called off in lieu of the sudden Covid19 pandemic with subsequent closure of contracts. The association however organized a host of guest lectures with series like "Stepping into the Future" by Vishwakarma (The Operations Club) and lectures by eminent speakers like Mr. Manoj Bali (People Analytics Lead – Novartis), Mr. Sameer Dhanrajani (CEO – Aiqrate Advisory & Consulting), etc. The association has strived to improve the visibility of the department by maintaining active social media handles and by regularly posting information promoting domain knowledge.

Faculty activities:

Personal interviews were conducted online by the faculty members of Management Department. The department organized several workshops in emerging areas related to different functional areas of management. Several projects in various functional areas of management were supervised by the Department faculty members under special oriented projects, study oriented projects, and design oriented projects, reading courses and first degree thesis. Regular faculty and research scholar seminars were conducted in the department. The Department faculty members continued to teach many courses in WILP Programs of the institute. Faculty and research scholars published papers in international journals, national journals and in conference proceedings. Many faculty members working on government sponsored research projects in different areas.

Student activities: Management association organized year-long activities through its clubs structured along four important functional areas of management viz. Marketing, Human Resource Management, Finance and Operations Management. Workshops were organized where students participated for learning and/or certifications.

B1.10.12   Department: Pharmacy

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	03
Associate Professors	03
Assistant Professors	11
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department : Dr. Hemant R Jadhav

Contact details : 3170-G, Department of Pharmacy, Birla Institute of Technology   and Science Pilani, Pilani campus, Pilani – 333031 (RJ)

Email   **:** hod.pharmacy@pilani.bits-pilani.ac.in

Phone/Mobile   **:** +91 (1596) 255206; Office: +91 (1596) 255226

Number of Ph.D. Scholars   : 45

Full Time   : 42

Part Time   : 01

Aspirant Scheme   : 02

Ph.D. Thesis Submitted during the year 2020: Total 06 Thesis

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Nisha Sharma	2015PHXF0412P	Involvement of Histone H3 Methylation, Angiotensin converting Enzyme 2, and Angiotensin II Type 2 Receptor in the Pathogenesis of Acute Kidney Injury under Type 1 Diabetic and Non-diabetic Conditions	Gaikwad Anil Bhanudas	None
2.	Italiya Kishan Shamjibhai	2015PHXF0414P	Development and Evaluation of a Self-assembling Lisofylline-Linoleic Acid Conjugate and its Polymeric Nanoformulation for Treatment of Diabetes Mellitus	Anupama Mittal	None
3.	Saurabh Sharma	2015PHXF0415P	Development and Evaluation of Lipo-polymeric Nano-carriers Containing MicroRNA-34a and Docetaxel for the Treatment of Breast Cancer	Deepak Chitkara	None
4.	K V Krishna	2015PHXF0413P	Design and Evaluation of Lipoprotein Based Donepezil Nano-carriers for the Effective Treatment of Alzheimer's Disease	Sunil Kumar Dubey	R.N. Saha
5.	Dhanashree Surve	2016PHXF0417P	Long-acting Nanoformulations For Targeted Delivery of Anti-Infective Agents	Anil Jindal	None
6.	Priyadeep Bhutani	2016PHXF0506P	Assessment of Anti-Obesity Natural Products for Pharmacokinetics Based Interaction with Quetiapine: In-silico, In-vitro and In-vivo Studies	Paul Atish Tulshiram	Prabhakar Rajanna

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Design and synthesis of inhibitors of Mycobacterium tuberculosis sigma factor-RNAP protein-protein interaction as potential antimycobacterial agents	Pharmacy	Sandeep Sundriyal	Gopal Balasubramanian	ICMR	IISc, Bangalore	41,11,400 (BITS: 22,69,000)
2.	Targeting chromatin modifiers- Jumonji Histone Demethylases in tumor cells surviving acute drug stress: an in vitro and in vivo study	Pharmacy	Rajdeep Chowdhary	Sandeep Sundriyal	ICMR	-	37,10,000
3.	Exploring the mechanism(s) of gut microbiota link to Parkinson Disease pathology and its reversal based on fibroblast growth factor 21 gene delivery through lentivirus system	Pharmacy	Rajeev Taliyan	Dr. Sunil K Dubey Dr. Amit Goyal	ICMR	-	41,00,000
4.	Development of a complete skin substitute by autologous cell grafting using an in-situ forming bioactive scaffold for burn wound healing	Pharmacy	Aniruddha Roy	Archana Singh	DBT	IGIB, New Delhi	25,00,000 (BITS: 17,83,000)

B. Industry Sanctioned Projects: **NIL**

C. International Sanctioned Projects: **NIL**

D. Institute Sanctioned Projects: **NIL**

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Computational design, synthesis and screening of non-hydroxamate lipophilic DXR inhibitors as potential antibacterial/ antimalarial/anti-TB agents	Pharmacy	Sandeep Sundriyal	Mukti N Mishra	SERB	CMAP, Lucknow	30,46,125 (BITS: 30,46,125)
2.	Klotho regulation as a novel therapeutic strategy against acute kidney injury-diabetes comorbidity: Impact of epigenetic driven and epigenetic independent reactivation of endogenous Klotho expression.	Pharmacy	Gaikwad Anil Bhanudas	None	SERB	--	50,33,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
3.	To study the role of hyperglycemia on the progression of acute kidney injury	Pharmacy	Gaikwad Anil Bhanudas	None	SERB	-	47,18,000
4.	Exploring the effects of polyamine and associated metabolic regulation of hypothalamic GnRH-GnIHsynthesis and release during ageing in BALB/cJ mice-	Pharmacy	Dr. Arnab Banerjee	Rajeev Taliyan	SERB	BITS, Goa	34,35,200
5.	Peptide-tethered multifunctional cationic nanocomplexes for delivery of IL-1 receptor antagonist for treatment of type 2 diabetes mellitus	Pharmacy	Anupama Mittal	Dr. Deepak Chitkara	SERB	--	40,46,000
6.	Design, Synthesis, Biological Evaluation and Molecular Modelling Studies of Indolyl Oxoacetamide Quinazolinone Based Hybrid Analogs as Potential Pancreatic Lipase Inhibitors for Obesity Treatment	Pharmacy	Atish T. Paul	None	DST	--	35,00,000
7.	Umbilical Cord Mesenchymal Stem Cells Derived Exosomes as Biogenic Nanocarriers of miRNA and Chemotherapeutic Drug for Reversal of Chemoresistance in Breast Cancer	Pharmacy	Anupama Mittal	Swasti Tiwari & Amrit Gupta	DST-Nanomission	SGPGI, Lucknow	56,46,000 (BITS: 40,57,000)
8.	Gel-based composite formulation containing asiaticoside and neurotensin for rapid healing of diabetic wounds	Pharmacy	Anupama Mittal	Dr.Deepak Chitkara	ICMR	--	25,67,000
9.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Pharmacy	Anupama Mittal	None	DST-Rajasthan	--	12,53,000
10.	Self-assembling, pH-sensitive temozolomide conjugate nanomedicine for treatment of glioblastoma multiforme	Pharmacy	Dr. Deepak Chitkara	Anupama Mittal	ICMR	--	25,12,000
11.	cRGD decorated lipo-polymeric nanoplexes of CRISPR/Cas9 ribonucleoprotein (RNP) for the management of retinal dystrophic conditions	Pharmacy	Dr. Deepak Chitkara	Anupama Mittal	DBT	--	1,25,21,400(BITS:50,04,600)
12.	Discovery of myeloperoxidase (MPO) inhibitors for the potential treatment of critically ill COVID-19 patients with cytokine storm	Pharmacy	Vaibhav A. Dixit	Atish T. Paul	IIT Delhi	--	Computer resources worth Rs. 10,00,000
13.	Health TB project: Design and synthesis of Mycobacterium UDG inhibitors	Pharmacy	Sandeep Sundriyal	None	The Office of PSA	--	10,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
14.	Development and evaluation of lipid based nanoparticles of Quinapyramine and Isometamidium chloride for treatment of trypanosomiasis in camels	Pharmacy	Anil Jindal	Samar Ghorui, Atish Paul	DBT	NRCC, Bikaner	44,72,000 (BITS: 29,04,600)
15.	Rod-shaped polymeric nanoparticles for targeted delivery of artemisinin-derivatives to plasmodium-infected erythrocytes for improved intravenous therapy of cerebral malaria	Pharmacy	Anil Jindal	None	SERB	--	44,30,000
16.	Peptide-decorated pH-sensitive nano-conjugate hybrid micelles for co-delivery of temozolomide and an autophagy inducer, rapamycin, for treatment of glioblastoma multiforme.	Pharmacy	Deepak Chitkara	Gaikwad Anil Bhanudas	DBT	-	41,94,600
17.	Actively targeted nano-formulations for co-delivery of a taxane and antioxidant molecule, alpha lipoic acid, for treating breast cancer.	Pharmacy	Deepak Chitkara	None	DST-Rajasthan	--	11,13,600

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1	Nanotechnology based pharmaceuticals, nutraceuticals and cosmetics: development of platform technology	Pharmacy	Deepak Chitkara	None	Incisive Element LLC, USA	21,37,000
2	In vitro-In Vivo study design: Evaluation of Cardio-reno Protective Effect of Herbal extract and its molecular mechanisms (Role of NO-cGMP pathway)	Pharmacy	Rajeev Taliyan	Dr. Sunil K Dubey	Etika ClinPharma	9,92,000

C. Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Development of a Triggered Release Nano-Formulation for Combined Chemo-Immunotherapy of Cancer	Pharmacy	Aniruddha Roy	Shyh-Dar Li	Shastri Indo-Canadian Institute	University of British Columbia, Canada	10,00,000 (BITS: 10,00,000)
2.	Development of novel anti-leishmanial analogues loaded with novel nano-formulations	Pharmacy	S. Murugesan	Rebeca Alonso CSO (Spanish PI), Dr. Rafael BalañaFouce (Spanish Co-PI),V.G.Chandra Sekhar (Indian Co-I)	DBT (Indo-Spain)	Nanovex Biotechnologies S.L. Spain, University of León, 24071 León (SPAIN) & BITS Pilani, Hyderabad	60,00,000 (BITS: 60,00,000)

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Amount Sanctioned (INR)
1.	RedoxWare: Exploiting the redox enzyme property differences for drug discovery and biotechnological applications	Pharmacy	Dr Vaibhav A. Dixit	None	ACRG	7,50,000/-
2.	Design and Synthesis of conformationally constrained cationic peptidomimetics (CPMs) as antimicrobial agents	Pharmacy	Sandeep Sundriyal	None	ACRG	9,50,000/-
3.	To Decipher the role of oxidative stress-induced inhibition of PKM2 in regulating autophagic induction of Nrf2: Understanding the mechanism of ROS adaptation in breast cancer cells.	Pharmacy	Richa Shrivastava	None	ACRG	1,50,000/-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Exploring the synergism of PPAR-γ agonist and HDAC inhibitor for reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment"	Pharmacy	Rajeev Taliyan	Dr. Deepak Chitkara	DST-Nano	-	32,13,820/-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1.	Quality by design based suspension product development and process optimization	Pharmacy	Gautam Singhvi	Sunil K dubey	Slayback Pharma, Hyderaba, India	5,20,000/-
2.	Design of novel ophthalmic drug delivery system	Pharmacy	Gautam Singhvi	R.N Saha	Slayback Pharma, Hyderabad, India	7,00,000/-

C. Completed International Projects: NIL

D. Completed Institute Projects: NIL

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

1. Dixit, V.A.; Warwickar, J; de Visser, S. How do metal ions modulate the rate-determining electron transfer step in Cytochrome P450 reactions? Chemistry - A European Journal, 26, 2020, 2020-1.

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5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Banoth Karan Kumar, Faheem, Suraj Pyarelal Gupta, K.V.G. Chandrashekar, Murugesan Sankaranarayanan, presented a paper, "In-silico target identification of novel anti-leishmanial β-carboline analogues" in Indian Society for Chemists and Biologists Conference, from January 21-24, 2020 at Nirma Institute of Pharmacy International Conference, Ahmedabad.

2. Faheem, Suraj Pyarelal Gupta, Banoth Karan Kumar, K.V.G. Chandrashekar, Murugesan Sankaranarayanan, presented a paper, "Design and In-Silico study of novel Isatin analogues as potential anti-HIV agents with extended activity against mutant strains" in Indian Society for Chemists and Biologists Conference, from January 21-24, 2020 at Nirma Institute of Pharmacy International Conference, Ahmedabad.

3. Suraj Pyarelal Gupta, Faheem, Banoth Karan Kumar, Murugesan Sankaranarayanan, presented a paper, "In Silico Target Identification Study of Novel Anti-Leishmanial Agents" in Indian Society for Chemists and Biologists Conference, from January 21-24, 2020 at Nirma Institute of Pharmacy International Conference, Ahmedabad.

4. Adinarayana Nandikolla, Singireddi Srinivasarao, Shashidhar Nizalapur, Sankaranarayanan Murugesan and Kondapalli Venkata Gowri Chandra Sekhar, presented a paper, "Design, synthesis and biological evaluation of 2-aminobenzimiazoles as Quorum Sensing inhibitors in Pseudomonas aeruginosa" in Indian Society for Chemists and Biologists Conference, from January 21-24, 2020 at Nirma Institute of Pharmacy International Conference, Ahmedabad.

5. Richa Shrivastava attended Hands-on Training Program for Biopharmaceutical Product Development, from February 03-07, 2020 at ICT Mumbai.

6. Gautam Singhvi presented a paper, "BCS and IVIVC for pharmaceutical product development" in A Two-Day Workshop On: Pharmacokinetic & Pharmacodynamic Modeling and Simulation, from at BITS Pilani, Pilani Campus. 24-25th February 2020.

7. Gautam Singhvi attended a One Week Online Short-Term Course on "Advances in Chemical, Biochemical and Allied Industries", from November 05-09, 2020 (Virtual).

8. Gautam Singhvi attended a conference on Nutraceuticals: Building Consumer Confidence with Scientific Reasoning and Evidence, on September 30, 2020 (Virtual).

9. Gautam Singhvi attended a conference on Naya Kshitij: NEP 2020 for Higher Education Implementation, Preparedness, Challenges and Way-Forward, on November 07, 2020 (Virtual).

10. Murali M Pandey attended a Virtual Conference on Regulatory Aspects and Intellectual Property Rights in Pharmaceuticals on November 28, 2020 (Virtual).

ii) International:

1. Sharma N and Gaikwad AB, presented an E Poster, "Hyperglycemia-associated acute kidney injury increases the susceptibility towards neurological dysfunction: Role of Angiotensin II Type 2 Receptor and Angiotensin-converting Enzyme 2" in 57th ERA-EDTA Congress-Fully virtual-2020, from 06-09 June 2020 held at Virtual, Milan, Italy.

2. Sharma N and Gaikwad AB, presented a paper, "Ischemic renal injury-associated cardiac dysfunction in diabetic and non-diabetic rats: Role of depressor arm of RAS" in International Conference of Cardiovascular Sciences-2020 (ICCS-2020), from 21-23 February 2020 held at DPSRU-New Delhi, India.

3. Sankrityayan H, Malek V, Sharma N, Gaikwad AB, presented a paper, "Simultaneous inhibition of Neprilysin and activation of ACE2 prevented diabetic cardiomyopathy" in International Conference of Cardiovascular Sciences-2020 (ICCS-2020), from 21-23 February 2020 held at DPSRU-New Delhi, India.

4. Hemant R Jadhav attended International Conference on Drug Discovery ICDD-2020, from 29 February- 3 March 2020 held at BITS Pilani, Hyderabad Campus.

5. Rajeev Taliyan attended International Conference of Cardiovascular Sciences-2020 (ICCS-2020), from 21-23 February 2020 held at DPSRU-New Delhi, India.

6. Rajeev Taliyan presented a paper, "Exploring the Synergistic Potential if Rosiglitazone and Suberanilohydroxamic Acid in a Mouse Model of Alzheimer Disease" in Advance in Alzheimer and Parkinson Disease: 2nd AAT-AD/PD™, from 01-05 April 2020 held at Vienna, Austria (Virtual).

7. Aniruddha Roy presented a paper, "Docetaxel and disulfiram loaded tumor extracellular pH-responsive nanocarrier for targeting cancer stem cells" in Vancouver Nanomedicine Day 2020, on 17 September, 2020 at University of British Columbia, Canada (Virtual).

8. Komal Daipule, Mallika Alvala, Banoth Karan Kumar, Murugesan Sankaranarayanan, Yong-Tang Zheng presented a paper, "In-vitro anti-HIV evaluation of novel amide and ether conjugates of 2, 3-diaryl-1, 3-thiazolidin-4-ones" in International Conference on Drug Discovery ICDD-2020, from 29 February - 3 March 2020 held at BITS Pilani, Hyderabad Campus.

9. Shivani Pola, Ramesh Ummani, Banoth Karan Kuma, Murugesan Sankaranarayanan, Achaiah Garlapati presented a paper, "Design, Synthesis, In-Silico Studies and Screening of Novel Chalcones and Their Pyrazoline Derivatives against Mycobacterium Tuberculosis" in International Conference on Drug Discovery ICDD-2020, from 29 February- 3 March 2020 held at BITS Pilani, Hyderabad Campus.

10. Banoth Karan Kumar, Faheem, Kondapalli Venkata Gowri Chandra Sekhar, Murugesan Sankaranarayanan presented a paper "Preliminary investigation of drug repurposing as a direction towards anti-Leishmanial drug discovery", in International Conference on Drug Discovery ICDD-2020, from 29 February- 3 March 2020 held at BITS Pilani, Hyderabad Campus.

11. Atish T. Paul attended International Conference on Drug Discovery ICDD-2020, from 29 February- 3 March 2020 held at BITS Pilani, Hyderabad Campus.

12. Rajeev Taliyan attended 5-days International e-Workshop on Good Clinical Practices & Health Economics, from 17-21 December 2020.

13. Swathi Konda, Murugesan Sankaranarayanan, Chaithanya Marapureddy and Karan Kumar Banoth presented a poster, "Synthesis, anti-inflammatory activity and in-silico studies of some new3-({P-dimethylamino}-benzylidene hydrazinylidene)-1,3-dihydro-2H-indol-2-one derivatives" in Genetics, Geriatrics and Neurodegenerative Diseases Research (GeNeDis) 2020, Heraklion, Crete, Greece, from 8 -10 October 2020 at IEEE World Congress (Virtual).

14. Sandeep Sundriyal attended "2nd Research Workshop", organized by IPCD BITS-Pilani and Hiroshima University, on 20th November, 2020 (Virtual).

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. KM Adki, AP Laddha, Gaikwad AB, YA Kulkarni, "Potential Role of Seeds from India in Diabetes",Nuts and Seeds in Health and Disease Prevention, USA, 2nd Edition, Chapter 26, Pages 365-391, Academic Press, Elsevier, Published in 2020.

2. AP Laddha, KM Adki, Gaikwad AB, YA Kulkarni, "Beneficial Effects of Nuts from India in Cardiovascular Disorders", Nuts and Seeds in Health and Disease Prevention. 2nd Edition, Chapter 32, Pages 453-469, Academic Press, Elsevier, USA., Published in 2020.

3. Nikita Hinge, Murali Monohar Pandey, Gautam Singhvi, Gaurav Gupta, Meenu Mehta, Saurabh Satija, Monica Gulati, Harish Dureja, Kamal Dua, "Nanomedicine advances in cancer therapy", Advanced 3D-Printed Systems and Nanosystems for Drug Delivery and Tissue Engineering, Woodhead Publishing Series in Biomaterials: Elsevier., Published in 2020.

4. Arisha Mahmood, Gautam Singhvi, Prachi Manchanda, Murali Monohar Pandey, Sunil Kumar Dubey, Gaurav Gupta, Dinesh Kumar Chellappan, Ali Seyfoddin Kamal Dua, "Applications of 3D printing for the advancement of oral dosage forms", Advanced 3D-Printed Systems and Nanosystems for Drug Delivery and Tissue Engineering, Woodhead Publishing Series in Biomaterials: Elsevier, Published in 2020.

5. K. Ilango, Baburaj Baskar and Sankaranarayanan Murugesan, "Green chemistry assisted synthesis of natural and synthetic compounds as anticancer agents", Green Approaches in Medicinal Chemistry for Sustainable Drug Design, Elsevier Published in 2020.

6. Subhash Chander, Penta Ashok, Sankaranarayanan Murugesan, "Synthesis and biological significance of 1,2,3,4-Tetrahydroquinoline derivatives: A review", Biological Profile of Versatile Heterocyclic Moieties,Lambert Academic Publishers., Published in 2020.

7. Singhvi G, Hejmady S, Rapalli VK, Dubey SK, Dubey S, "Nanocarriers for topical delivery in psoriasis", Delivery of Drugs, pp. 75-96, Elsevier Publishers., Published in 2020.

8.   Singhvi G, Rapalli VK, Nagpal S, Dubey SK, Saha RN, "Nanocarriers as potential targeted drug delivery for cancer therapy", Nanoscience in Medicine, Volume 1, pp. 51-88, Springer, Published in 2020.

9.   Singhvi G, Rapalli VK, Waghule T, Gorantla S, Pemmadi RV, Patel R, Dubey SK, "Microparticulate drug delivery systems for targeting respiratory diseases", Targeting Chronic Inflammatory Lung Diseases Using Advanced Drug Delivery Systems. pp. 337-357, Academic Press. Elsevier, Published in 2020.

10.   Kaveri M. Adki, Ankit P. Laddha, Manisha J. Oza, Gaikwad AB and Yogesh A. Kulkarni, "Terpenes and Terpenoids in Management of Diabetes & Cardiovascular Diseases", Phytotherapy in the Management of Diabetes and Hypertension, Volume 3, Bentham Science Publishers, Published in 2020.

11.   Ankit P. Laddha, Kaveri M. Adki, Manisha J. Oza, Gaikwad AB and Yogesh A. Kulkarni, "Medicinal Plants from Genus Costus in the Management of Diabetes" Phytotherapy in the Management of Diabetes and Hypertension, Volume 4, Published in 2020.

12.   Atish T. Paul, Ginson George, Nisha Yadav, Arjun Jewani, Prashant A Auti, "Pharmaceutical Application of Bio-actives from Alstonia Genus: Current Findings and Future Directions", Bioactive Natural Products for Pharmaceutical Applications, Springer Nature, Published in 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1.   As part of the platinum jubilee (70th Year) celebrations of the inception of the Department of Pharmacy, a series of three conferences were organized by the department.

  i.   The first in the series, 'International virtual conference on Computer-Aided Drug Design' on October 30-31, 2020. The conference program featured 10 international and national invited speakers who were renowned scientists in the field and received an overwhelming response with above 900 participants.

 ii.   The second conference, 'International virtual conference on Drug Discovery and Delivery' November 6-7, 2020. The conference program featured 12 international and national invited speakers and had an assemblage of 350 participants.

iii.   The third conference, 'Virtual Conference on Regulatory Aspects and Intellectual Property Rights in Pharmaceuticals' on November 28, 2020. The conference program featured 5 international and national invited speakers from various pharmaceutical industries and saw a participation of over 100 participants.

2.   World Pharmacist Day was celebrated by the Department of Pharmacy on 25th Sept 2020. On this occasion, Dr. Anjaneyulu Muragundla, Assistant Vice President, Drug Discovery, BioXcelInveniAI, US & India delivered the Pharmacist Day Lecture entitled, 'Artificial Intelligence (AI) in Drug Discovery and Development: An Overview'. He emphasized the importance of applying the AI concepts to reduce time, cost and efforts involved in drug discovery research by citing some case studies. The celebrations witnessed active participation by around 100 participants including undergraduate, postgraduate, Ph.D. scholars and faculty members of the various departments and colleges.

8. INVITED TALKS GIVEN BY BITS FACULTY

1.   Dr. Vaibhav A. Dixit delivered an invited talk on, "Basics of Molecular Modeling, Drug Metabolism and Drug Toxicity Prediction" at Drug Discovery Hackathon 2020, online, North East Institute of Science and Technology, CSIR-lab on 06-08-2020.

2.   Dr. Vaibhav A. Dixit delivered an invited talk on, "Drug toxicity, metabolism, and implications for biotechnological applications" at CharuChandra college of Pharmacy, Kolkata on 31-08-2020.

3.   Prof. Hemant R Jadhav delivered an invited talk on, "Need of individualization of modern medicine prescription" at National E-Conference titled "Veda's Recognition as Source of Reference in AYUSH, Modern Medicine Pharmacopoeia & Diagnostic Methods" organized from June 20-21, 2020 by Jayoti Vidyapeeth Women's University, Jaipur on 20-06-2020.

4.   Prof. Hemant R Jadhav delivered an invited talk on, "Digital education – Future of learning" at Online Faculty Development Programme on 'Advancement of Digital Education in Pandemic Era' from July 9-11, 2020 at Maharana Pratap College of Pharmacy, Kanpur on 11-07-2020.

5.   Prof. Rajeev Taliyan delivered an invited talk on, "Coronavirus pathogenesis, Challenges and possible drug targets: Focus on chloroquine" at Webinar "COVID -19 challenges" SGMI, Kanpur on 11-05-2020.

6.   Prof. Rajeev Taliyan (Moderator) delivered an invited talk on, "COVID transmission, virulence and possible drug targets" at "Pharmaceutical Care & Management Perspectives of COVID-19 Pandemic" Rayat Bahara University, Punjab on 15-05-2020.

7.   Prof. Rajeev Taliyan (Moderator) delivered an invited talk on, "The role of brain pericytes in dementia and Alzheimer's disease" at E-seminar on "Era of Interdisciplinary Sciences: Vitalize Future Research" Shoolini University, Solan on 24-05-2020.

8.   Prof. Rajeev Taliyan (Moderator) delivered an invited talk on, "Current strategies for prevention and treatment of COVID-19" at "Pharmacologic Treatments for COVID19: what's next?" IPS and Central University Bihar on 22-07-2020.

9.   Prof. Rajeev Taliyan (Moderator) delivered an invited talk on, "Implication of PPAR receptor (s) and Epigenetic mechanisms in the pathogenesis of Alzhiemer's disease" at National Conference on Emerging Trends in Pharmaceutical, Microbiology and Medical Sciences-NCET-PMMS-20 on 22-08-2020.

10. Dr. Richa Shrivastava delivered an invited talk on, "Pharmacological approaches targeting COVID-19 and post pandemic role of pharmacists' ' at PHARMACHEM 20 on 18-06-2020.

11. Prof. Murali M Pandey delivered an invited talk on, "Design and characterization of buccal drug delivery systems" at Faculty Development Programme; Organised by Sathyabama Institute of Science and Technology (Deemed University), Chennai on 23-07-2020.

12. Prof. S. Murugesan delivered an invited talk on, "CADD-Pioneer for the drug discovery in recent times and applications" at AICTE Sponsored one-week Short Term Training Programme (STTP) on "Recent advances in Drug Discovery, Development and Lead Optimization" through virtual media organized by Department of Pharmaceutical Chemistry, JSS College of Pharmacy, Ooty. TamilNadu, India on 10-09-2020.

13. Prof. S. Murugesan delivered an invited talk on, "Computational approaches for the identification of potential inhibitor for the SARS – CoV2 from the Natural product databases" at AICTE Sponsored one-week Short Term Training Programme (STTP) on "Recent advances in Drug Discovery, Development and Lead Optimization" through virtual media organized by Department of Pharmaceutical Chemistry, JSS College of Pharmacy, Ooty. TamilNadu, India on 09-08-2020

14. Prof. S. Murugesan delivered an invited talk on, "Applications of molecular modeling tools in preliminary investigation of anti-leishmanial drug discovery" at DBT, IEEE, EMB sponsored three days e-Workshop on "Docking, QSAR and Molecular Dynamics" organized by Ramaiah Institute of Technology, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Ramaiah University of Applied Sciences, Bengaluru, Karnataka, India on 31.07-2020.

15. Dr. Sunil Kumar Dubey delivered an invited talk on, "Pharmacokinetics: A key player in personalized medicine" at "International Conference on "Personalized Medicine: Concept and Role Players" Era University, Lucknow on 20-02-2020.

16. Dr. Sunil Kumar Dubey delivered an invited talk on, "Pharmacokinetic and Pharmacodynamic Modelling and Simulation" at Faculty Development Programme" sponsored by All India Council for Technical Education, New Delhi, Technocrats Institute of Technology-Pharmacy, Bhopal on 24-01-2020.

17. Dr. Sunil Kumar Dubey delivered an invited talk on, "Phytopharmaceutical Guidelines, Challenges and its Mitigation plan considering current scenario" at ZEON LIFESCIENCES LTD.Vill. Kunja, Rampur Road, Paonta Sahib, (H.P.) on 17-08-2020.

18. Dr. Sunil Kumar Dubey delivered an invited talk on, "Role of Liquid Chromatography Mass Spectrometry in Drug Discovery and Drug Development" at CEG Test and Research Centre Jaipur on 06-02-2020.

19. Dr. Deepak Chitkara delivered an invited talk on, "Multifunctional Lipo-polymeric Nanoplexes for delivering gene based therapeutics and genome editing tools" at National Workshop on Biodosimetry- Perspective on current trends, KS Hegde Medical Academy, NITTE University, 5-7 March 2020 on 05-03-2020.

20. Dr. Sunil Kumar Dubey delivered an invited talk on, "Conducted workshop on PKPD Modelling and Simulation" at UGC-SAP (DRS-II) Sponsored International Seminar-Cum-Workshop On "New Paradigms in Drug Discovery and Delivery Research", Punjabi University Patiala on 26-02-2020.

21. Dr. Sunil Kumar Dubey delivered an invited talk on, "Pharmacokinetic Compartment Modeling and Simulation Techniques" at DNA lab-A Centre for Applied Sciences, Dehradun on 25-09-2020.

22. Dr. Gautam Singhvi delivered an invited talk on, "Dissolution Methodology: A Key Component for Pharmaceutical Product Development" at Ideal College of Pharmacy and Research kalyan on 29-08-2020.

23. Dr. Murali M Pandey delivered an invited talk on, "Career Prospects in Pharmacy" at Orientation & Induction Programme, 2020' Organised by M. R. College of Pharmaceutical Sciences & Research, Bira, Ashoknagar, WB, India on 11-12-2020.

24. Dr. Deepak Chitkara delivered an invited talk on, "NanoBrid Platform Technology: A Scalable multi-component monolithic lipid-polymer hybrid nanoparticles for drug delivery applications" at National Symposium on Integrative medicines and Health: From Basic to Translational Research and Annual Meeting of Translational Biomedical Research Society (TBRS), Shri Ramswaroop Memorial University (SRMU), Lucknow-Deva Road, Barabanki 225003, Uttar Pradesh, INDIA on 06-12-2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Mr. Bhavesh Ubhadiya, Senior Group Manager, WNS global services, delivered a lecture on, "Competitive intelligence and secondary research" on 02 November 2020.

2. Dr. Saurabh Singh, Senior Group Head, Regulatory writing and submissions, Novartis Healthcare Pvt. Ltd. delivered a lecture on, "Drug development and Regulatory writing" on 25 November 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Dr.Atish T. Paul was awarded with Dr.P.D Sethi Memorial National Award 2019 by Anchrom Pvt Ltd in 2020.

2. Gaikwad Anil Bhanudas was invited by Director, National Institute of Pharmaceutical Education and Research [NIPER], Ahmedabad as an expert for the revision of the Pharmacology Curriculum in the month of May 2020

3. S. Murugesan was appointed as an external expert for Doctoral Advisory Committee by JSS Academy of Higher Education and Research, Mysuru.

4. Dr. Gautam Singhvi was co-chair at the Disso Research Presentations India 2020 (DRPI 2020) Online event, organized jointly by the Society for Pharmaceutical Dissolution Science (SPDS) and Association of Pharmaceutical Teachers of India (APTI) conducted from 4-7th June 2020.

b. Won by Students:

1. Mr. Prashant Auti was awarded with DST INSPIRE Fellowship by DST in 2020.

2. Ms. Srividya Gorantla was awarded with DST INSPIRE Fellowship by DST in 2020.

3. Ms. Dhanashree Surve was awarded with Sun Pharma Science Scholar Award 2020 by The Sun Pharma Science Foundation in 2020.

4. Mr. Banoth Karankumar was awarded with NFST, by MHRD, Govt. of India in 2020.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Prof. Hemant R Jadhav, resource person in the panel on June 20, 2020, in National E-Conference titled "Veda's Recognition As Source of Reference in AYUSH, Modern Medicine Pharmacopoeia & Diagnostic Methods" organized by Jayoti Vidyapeeth Women's University, Jaipur on 20th June 2020.

2. Dr. Murali M Pandey attended a webinar on "SICI Programmes Webinar Series: Shastri Covid-19 Pandemic Response Grant (SCPRG) & Shastri Research Grant (SRG)" organized by Shastri Indo-Canadian Institute on 17th July 2020.

3. Dr. Murali M Pandey attended a webinar on "Engineered Mesenchymal Stem Cells for Tumor Targeted Drug Delivery & Pharmaceutical, Healthcare Orientation and Career Guidance" organized by IPGA (Bengal Branch) on 18th and 19th July 2020.

4. Prof. Rajeev Taliyan was invited for a presentation and discussion related to "Neurological disorders by R&D division of Sun Pharma Advanced Research, Vadodara " organized by Sun Pharma Advanced Research Company Ltd. on 22nd January 2020.

5. Dr. Murali M Pandey attended a webinar on "Research Future with Interdisciplinary Collaborations (An International Webinar @ Indo-UK-Jordan Forum)" organized by NIPER-Ahmedabad on 15th September 2020.

6. Dr. Murali M Pandey attended a webinar on "Webinar series no. 2: Lipid excipients: For solubility & oral bioavailability enhancement" organized by Gattefossé India Pvt. Ltd. on 5th, 7th, 9th October 2020.

7. Dr. Murali M Pandey attended a webinar on "Webinar Series 3: Lipid Excipients for Delivering API's Across Skin" organized by Gattefossé India Pvt. Ltd. on 7th, 9th, 11th October 2020.

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Pharmaceutical Composition for Treating Obesity, Indian Patent Application no.202011024478, Inventors: Paul Atish Tulshiram, George Ginson, S N C Sridhar, Sengupta Pracheta, Filed on June 1, 2020.

2. Indolyl Oxoacetamide Analogues as potent Pancreatic Lipase Inhibitors, Indian Patent Application no.202011001052, Inventors: Paul Atish Tulshiram, S N C Sridhar, Sengupta Pracheta, George Ginson, Filed on January 09, 2020.

3. Thiazolidinedione-Indole compounds, Indian Patent Application no.202011049372, Inventors: Paul Atish Tulshiram, George Ginson, Auti Prashant, Sengupta Pracheta, Filed on November 12, 2020.

4. Compositions for Inhibiting Pancreatic Lipase, Indian Patent Application no. 202011049373, Inventors: Paul Atish Tulshiram, Sengupta Pracheta, Yadav Nisha, Prashant Auti, Filed on November 13, 2020.

5. A Self- Assembling Drug Conjugate and method of preparation thereof, Indian Patent Application no. 201911018304, Inventors: Deepak Chitkara, Deepak K. Sahel, Kishan S. Italiya, Saurabh Sharma, Shruti Shah, Anupama Mittal, Reen Jatyan, Filed on May 06, 2020.

6. A lipid-polymer hybrid nanoparticle, Indian Patent Application no. 201921004214, Inventors: Deepak Chitkara, Sudeep S. Pukale, Arihant K Singh, Anupama Mittal, Saurabh Sharma, Filed on February 02, 2020.

7. A lipid-polymer hybrid nanoparticle, PCT Application no.PCT/IB2020/050819, Inventors: Deepak Chitkara, Sudeep S. Pukale, Arihant K Singh, Anupama Mittal, Saurabh Sharma, Filed on February 03, 2020.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1. BITS Pharmaceutical Society at Department of Pharmacy organized the 02 guest lectures as mentioned above.

2. BITS Pharmaceutical Society at Department of Pharmacy organized World Pharmacist Day on 25 September, 2020.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Equipment Name (Quantity)	App. Cost (INR)
01	Gel Extruder	1,15,600
02	Automatic Chemical Analyzer	5,98,500
03	Autoclave vertical	88,520
04	Chair Iron Frame	24,426
05	Deep Freeze 401 L	25,499
06	Biosafety Cabinet	4,76,190
07	CO2 Incubator	4,28,571
08	Inverted Microscope	3,50,000
09	Maffle Furnace (02)	26007
10	HP All In One PC	1,50,360
11	Co2 Cylinder (02)	27,300
12	Laminar Air Flow	45,623
13	Samsung LFD	1,62,750
14	Printer HP	67,620
15	Samsung Fridge (03)	1,14,000
16	Vacuum Pump (02)	1,12000
17	Heating Oven	39,600
18	Rota vapor with Chiller	5,51,251
19	Rota vapor with Chiller	4,93,748
20	Work Station	3,50,000
21	Aluminum Crimping Machine	8,610
22	Aseptic Cabinet	7,550
23	Hot plate (08)	23,600
24	Ampoule Filling Sealing Machine	6,000
25	Double Cone Blender	16,000
26	Ampoule Washing Machine	3,000
27	Ampoule Clarity Machine	3,800
28	Photoelectric Colorimeter	4,600
29	Colorimeter	4,600
30	Hemocytometer (20)	13,000
31	Magnetic Stirrer (06)	1,51,200
32	Workstation	3,50,139
33	Suppository Moulds (25)	12,050
34	Digital PH Meter (03)	15,455
35	Balance Electronics	38,089

S.No.	Equipment Name (Quantity)	App. Cost (INR)
36	Labware Dryer (06)	1,61,892
37	Mortar & Pestle (40)	9,600
38	Arsenic Limit Test (20)	8,200
39	UV Cabinet (02)	5,400
40	Mechanical Stirrer (02)	18,060
41	Magnetic stirrer with Hot plate (04)	71,142
42	Mini Stirrer	8,034
43	High Speed Homogenizer	13,718
44	Sterility Tester	36,200
45	Vacuum Flask	14,300
45	Vacuum Flask	14,300
46	Filtration Pump	1,800
47	Ointment Filing Machine	14,200
43	Magnetic stirrer with Hot Plate(10)	1,77,866
44	Melting Point apparatus	38,148
45	Tablet Making Machine	40,000
46	Cyclo Mixer/ Vortexer (02)	23,100
47	Projector (02)	1,36,500
48	Mini P-Tet with Power supply	1,49,835
49	Samsung Refrigerator	38,000
50	Digital Ultrasonic Cleaner (05)	1,21,710
51	Analytical Balance (06)	2,28,531
52	Test Sieves/Mesh (04)	2,268
53	Ointment Filling Machine	9,450
54	Capsule counter	1,842
55	Refractometer	10,360
56	Atomic Model Set (02)	3,635
57	Copper Water Bath (25)	5,775
58	Franz Diffusion Cell App. (05)	3,018
59	Assy. Pcb card for LC-MSMS	3,81,407
60	Dry Bath	40,000
61	UV Chamber (03)	20,000
62	CO_2 cylinder	30,000
63	Vortex mixer (02)	25,000
64	Melting Point App. (02)	30,000
65	Orbital shaker (01)	61, 425
66	pH meter (01)	78,750

S.No.	Software name	App. Cost
01	Experimental Pharmacology Series (Ex-Pharm Series) Software	39,369
02	Experimental Physiology Series (Ex-Physio Series) Software	19,366
03	Gastro Plus	4,00,000
04	SeeSAR software	5,00,000
05	BIOVIA Materials Studio Teaching Suite	2,70,000
06	Phoenix WinNonlin	2,71,040

B1.10.13 Department: Physics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	05
Associate Professors	10
Assistant Professors	04
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department: Professor Rakesh Choubisa

Contact details: rchoubisa@pilani.btis-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 29

Part Time   : 02

Aspirant Scheme : 00

Ph.D. Thesis Submitted during the year: 2020

S.No.	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Ms. Neelakshi Sharma	2016PHXF0008P	Development of Li + -NASICON based glass-ceramic composites: Novel synthesis route, characterization and applications	Prof. Anshuman Dalvi	-
2.	Mr. Pradeepkumar Yadav	2014PHXF0423P	Theoretical Studies of a Few Pulsar Observables	Prof. Biswanath Layek	-
3.	Mr. Ashis Kumar Pal	2017PHXF0106P	Probing cosmological dark matter and dark energy using post reionization neutral intergalactic medium	Prof. Tapomoy Guha Sarkar	-
4.	Ms. Rashmi Jangir	2013PHXF0103P	Floquet Analysis of Some Periodically Driven Classical and Quantum Systems	Prof. Jayendra N. Bandyopadhyay	Dr. Tapomoy G. Sarkar
5	Ms. Sumita Choudhary	2013PHXF0407P	Semiconducting Metal(Cu, Zn) Oxide Nano-structures: Growth Mechanism, Properties and Gas Sensing Application	Prof. Subhashis Gangopadhyay	Dr. Ajay Agarwal

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.N.	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Higher-Harmonic generation in gases and solids and their implications in attosecond science	Physics	Prof. Amol Holkundkar	Prof. J.N. Bandyopadhyay	DST-SERB	-	23,00,000
2	Study of Driven Quantum Systems: Floquet Engineering of Novel Materials	Physics	Prof. J. N. Bandyopadhyay	Prof. Tapomoy Guha Sarkar	DST-SERB	-	23,91,400
3	Crystallographic orientation (lattice plane) dependent selective gas sensing: A new approach in metal-oxides (MOx) based gas sensor	Physics	Prof. Subhashis Gangopadhyay	Dr. Arnab Hazra	DST-SERB	-	22,37,400

B. Industry Sanctioned Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	UV-Guided study of Blue straggler stars in open clusters and galactic fields	-	Dr. Kaushar Vaidya	-	DOS - ISRO	-	17.72 lacs
2	Investigation on Langmuir-Blodgett films of pristine and functionalized single walled carbon nanotubes and application	-	Prof. Raj Kumar Gupta	-	SERB-CRG	-	45.7 lacs
3	Investigation of Elastic and Inelastic Dephasing in CNT-FET	-	Prof. Niladri Sarkar	Prof. Navneet Gupta	DST - SERB	-	18.25 Lacs
4	Substrate supported transition metal doped alkaline earth clusters as hydrogen storage materials and their applications in hydrogen fuel cell	-	Prof. Debashis Bandyopadhyay	-	DST - SERB	-	20.57 Lacs
5	Study of electronic transport behavior of CNT based FETs	-	Prof. Navneet Gupta	Prof. Niladri Sarkar	DRDO	-	20.69 Lacs
6	Statistical Mechanics of Biopolymers in Confined Geometry	-	Prof. Navin Singh	-	DST - SERB	-	23.42 lacs
7.	Li+ NASICON-Polymer Hybrid Composites for Solid State Supercapacitor Applications	-	Prof. Anshuman Dalvi	-	DST SERB CRG	-	43.97 Lacs
8.	DAE Collaborative research scheme (CRS): EXAFS Investigations on Polymer nanocomposites	-	Prof. Anshuman Dalvi	-	UGC DAE CRS project	-	11 Lacs

B. Ongoing Industry Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

A. Completed Government Projects

S.N.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Electro-optical response of nematic liquid crystals doped with nanorods	-	Prof. Manjuladevi V.	-	DST - SERB	-	Rs.39.2 lacs
2	Theoretical Study of Electron impact double ionization of atoms and molecules	-	Prof. Rakesh Choubisa	-	DST - SERB	-	Rs. 22.63 lacs
3	Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	-	Prof. Madhukar Mishra	-	DST - SERB	-	Rs. 15.85 lacs
4	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	-	Prof. J.N. Bandyopadhyay	Prof. T. G. Sarkar	DST - SERB	-	Rs. 19.12 lacs
5	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	-	Prof. Amol Holkundkar	Prof. J. N. Bandyopadhyay	DST - SERB	-	Rs. 19.7 lacs
6	Investigations on Li+ ion conducting glass-ceramics containing NASICON structured nano crystallites	-	Prof. Anshuman Dalvi	-	DST SERB	-	Rs 37.65 lacs

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Arghya Maity, and Navin Singh, Melting of DNA in confined geometry, European Biophysics Journal, 49, 561-569 (2020)

2. Vaidya Kaushar, Rao Khushboo. K., Agarwal Manan, & Bhattacharya Souradeep, Blue straggler populations of seven open clusters with Gaia DR2, Monthly Notices of Royal Astronomical Society, 496, 2402-2421 (2020), (Impact Factor 5.35) doi:10.1093/mnras/staa1667

3. R. Rajpoot, A. R. Holkundkar, and J. N. Bandyopadhyay, "Regulating the higher harmonic cutoffs via sinc pulse", J. Phys. B: At. Mol. Opt. Phys. 53, 205404, (2020).

4. A. R. Holkundkar, and R. Rajpoot, "Reflection of chirped laser from plasma and its application to attosecond pulse generation", Phys. Scr. 95, 085607 (2020).

5. "Synthesis of mixed ionic electronic Li+-NASICON glass-ceramic nanocomposites for cathode applications" Neelakshi Sharma and Anshuman Dalvi Journal of Solid State Electrochemistry 24, 1625–1638 (2020)

Scopus & SCI indexed, Springer (Impact Factor 2.64)   DOI: 10.1007/s10008-020-04706-y

6. "Li1.3Al0.3Ti1.7(PO4)3 reinforced hybrid polymer composites: Assessment of enhanced Li+ ion transport and potential for solid state supercapacitor applications" M Dinachandra Singh D M Phase Yogesh Kumar and Anshuman Dalvi Journal of Materials Science 55 (9) (2020) 3951-3963 (Scopus ans SCI indexed, Springer Nature)- Impact Factor 3.55

7. Novel Na3Zr2Si2PO12-polymer hybrid composites with high ionic conductivity for solid-state ionic devices, M Dinachandra Singh, D M Phase and Anshuman Dalvi in Materials Letters 262 (2020) 127022 (Scopus,SCI Indexed, Impact Factor 3.20

8. Parul Taneja, Santosh Bhausaheb Khandagale, V. Manjuladevi, R. K. Gupta, Dalip Kumar & Karunesh Kumar Gupta, Heavy metal ion sensing using ultrathin Langmuir-Schaefer film of tetraphenylporphyrin molecule, IEEE Sensors, Vol 20, Pg 3442-3451 (2020) DOI:10.1109/JSEN.2019.2959488, Impact Factor: 3.078.

9. Monika Poonia, V. Manjuladevi, & R. K. Gupta, Ultrathin films of functionalized single-walled carbon nanotubes: A potential bio-sensing platform, Liquid Crystals (Taylor & Francis), Vol 47, Pg 1204-1213 (2020)., DOI: 10.1080/02678292.2020.1718788, Impact Factor: 2.908.

10. Shivaraja S. J., R K Gupta, S. Kumar, & V. Manjuladevi, Enhanced electro-optical response of nematic liquid crystal doped with functionalised silver nanoparticles in twisted nematic configuration, Liquid Crystals (Taylor & Francis), Vol 47, Pg 1678-1690 (2020), DOI: 10.1080/02678292.2020.1755901, Impact Factor: 2.908.

11. Ashutosh Joshi, Manjuladevi V., R. K. Gupta & S. Kumar, Morphological transformation in supramolecular assembly of discotic liquid crystal molecules by silver nanoparticles and its sensing application, Nanotechnology (IOPScience), Vol 31, Pg 365605 (2020),DOI: 10.1088/1361-6528/ab93eb, Impact Factor: 3.399

12. P. Khatri, K. K. Gupta & R. K. Gupta, Drift compensation of commercial water quality sensors using machine learning to extend the calibration lifetime,Journal of Ambient Intelligence and Humanized Computing (SpringerNature), Accepted for publication, August 2020.DOI: 10.1007/s12652-020-02469-y, Impact Factor: 4.594

13. I. Sil, B. Chakraborty, S. J. Shivaraja, A. Kumar, V. Manjuladevi, R. K. Gupta & P. Bhattacharyya, Fabrication, Structural, Electrical and Optical Characterizations of p-Nanoparticles and n- Nanotubes based ZnO Homojunction, IEEE Transaction on Electron Devices, Vol 67, Pg 4256-4261 (2020), DOI: 10.1109/TED.2020.3017464, Impact Factor: 2.62

14. Parul Taneja, V. Manjuladevi, R. K. Gupta, S. Kumar & K. K. Gupta, Facile Ultrathin Film of Silver Nanoparticles for Bacteria Sensing,Colloids & Surface B: Biointerfaces (Elsevier), Vol 196, Pg 111335 (2020) DOI:10.1016/j.colsurfb.2020.111335, Impact Factor: 3.973

15. Punit Khatri, K. K. Gupta & R. K. Gupta, Assessment of Water Quality Parameters in Real-time Environment, SN Computer Science (SpringerNature), 2020.DOI: 10.1007/s42979-020-00368-9

16. Punit Khatri, K. K. Gupta & R. K. Gupta, A Review of Partial Least Squares Modeling (PLSM) for Water Quality Analysis, Modeling Earth Systems and Environment (Springer Nature), 2020. DOI:10.1007/s40808-020-00995-4

17. Shweta Mishra, V. Manjuladevi, R. K. Gupta, S. Kumar, Experimental evidence of continuous isotropic-nematic phase transition in CdS nanowire nanocomposites of a nematic liquid crystal, Liquid Crystals (Taylor & Francis), Dec 2020. DOI: 10.1080/02678292.2020.1849833, Impact Factor: 2.908.

18. Vortex unpinning due to crustquake initiated neutron excitation and pulsar glitches; Biswanath Layek and Pradeepkumar Yadav; MNRAS 499, 455 (2020);   https://doi.org/10.1093/mnras/staa2880

19. Bursts of gravitational waves due to crustquake from pulsars; Biswanath Layek and Pradeepkumar Yadav; J Astrophysics Astron 41, 14 (2020). https://doi.org/10.1007/s12036-020-09631-0

20. Double ionization of helium by twisted electron beam, N Dhankhar, A Mandal, R Choubisa, J. Phys. B: At. Mol. Opt. Phys. 53 155203 (2020)

21. Electron impact single ionization of hydrogen molecule by twisted electron beam, N Dhankhar, R Choubisa, J. Phys. B: At. Mol. Opt. Phys. 54 015203 (2021) (accepted in 2020)

22. Relativistic (e, 2e) study with twisted electron beam on heavy atomic targets, A Mandal, N Dhankhar, D Sébilleau,   R   Choubisa
    arXiv preprint arXiv:2003.06459 (2020)

23. Revisit of (e, 2e) & (e, 3e) processes on atoms with twisted electron impact, N Dhankhar, A Mandal, D Sebilleau,   R   Choubisa
    Journal of Physics: Conference Series 1412 (15), 152055 (2020)

24. Many body phenomenon within multiple scattering approach in PEELS, A Mandal, V Kochetov, N Dhankhar, D Sébilleau, R Choubisa, Journal of Physics: Conference Series 1412 (20), 202021

25. Survival of current in a periodically driven hard-core bosonic system, R. J. Sharma and J. N. Bandyopadhyay, Eur. Phys. J. B 53, 205404 (2020).

26. Multifractal analysis of eigenvectors of small-world networks, A. Mishra, J. N. Bandyopadhyay, and S. Jalan, arXiv preprint arXiv:2010.09024

27. Effect of temperature gradient on heavy quark anti-quark potential using gravity dual model, S. Ganesh and M. Mishra, Prog. of Theor. and Exp. Physics (2020); https://doi.org/10.1093/ptep/ptaa180, [Just published, Vol/Page yet to be available.]

28. Optimized Resistive Switching in TiO_2 Nanotubes by Modulation of Oxygen Vacancy Through Chemical Reduction, A Hazra, A Jan, A Tripathi, S Kundu, PKR Boppidi, S Gangopadhyay, IEEE Transactions on Electron Devices 67 (5), 2197-2204 (2020)

29. Role of Different States of Solubilized Water on Solvation Dynamics and Rotational Relaxation of Coumarin 490 in Reverse Micelles of Gemini Surfactants, Water/12-s-12.2 Br–(s= 5, 6, 8)/n-Propanol/Cyclohexane, R Aggrawal, S Kumari, S Gangopadhyay, S K Saha, ACS omega 5 (12), 6738-6753 (2020)

30. Effect of Size Quantization and Quantum Capacitance on the Threshold Voltage of a 2-D Nanoscale Dual Gate MOSFET, Abhinav Sundar and Niladri Sarkar, Engineering Research Express(IOP) 2(3), 035029 (2020)

31. Application of Density matrix Formalism for Obtaining the Channel density of a Dual Gate Nanoscale Ultrathin MOSFET and its Comparison with the Semi-classical Approach, Surender Pratap and Niladri Sarkar, International Journal of Nanoscience (World Scientific-Singapore), 19(6), 2050010 (2020)

32. Exploiting Hyperbolic Metamaterial as a Substrate for Graphene Surface Plasmonic Cherenkov THz Radiation Source, Nalini Pareek, Niladri Sarkar and Anirban Bera, Applied Physics A(Springer), 126, 882 (2020)

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: **NIL**

ii) International:

1. **Prof. Navin Singh** attended a SPARC workshop on DNA bubble formation: From Physics to Biological functions at Department of Physics, Banaras Hindu University, Varanasi (14-20 February, 2020).

2. **Dr. Kaushar Vaidya** presented a paper (Oral presentation) on Blue Straggler Populations of Open Clusters using Gaia DR2, at the Gaia Symposium: DR2 and Beyond organized by Indian Institute of Astrophysics in the online mode during November 2-6, 2020.

3. **Ms. Aditi Mandal** (co-authors: D. Sébilleau, R. Choubisa, S. Tricot) presented a paper (Oral presentation) on Brief description of Plasmon excitation within multiple scattering approach in Photoemission energy loss spectroscopy, in an International workshop and conference on Evolution of Electronic Structure Theory and Experimental Realization (EESTER 2020), jointly organized by SRMIST KTR (India), IIT Madras (India) and Uppsala University (Sweden), December 14 – 18, 2020.

4. **Ms. Aditi Mandal** (co-authors: D. Sébilleau, V. Kochetov, R. Choubisa, S. Tricot) presented a paper (Oral presentation) on Plasmon modelling in core-level photoemission within multiple scattering approach in 735th WE-Heraeus-Seminar on Exploring Quantum Many-Body Physics with Ultracold Atoms and Molecules, December 14 – 18 , 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Crystalline Silicon Nitride Films on Si (111): Growth Mechanism, Surface Structure and Chemistry down to Atomic Scale, Subhashis Gangopadhyay. Multilayer Thin Films - Versatile Applications for Materials Engineering, Sukumar Basu, IntechOpen, DOI: 10.5772/intechopen.89412 (January 15th 2020).

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

The Physics Department organized in-house Research Scholar Day on 9th March 2020 in which 19 research scholars of the Department presented their research progress.

The Physics Department organized a talk delivered by Dr. Shanthan Reddy, a BITS alumnus, on 26th November, 2020. It was under the initiative by a group of alumni and faculty in association with the Alumni Relations Division under ASPIRE**, an alumni-led mentorship initiative,** to attract and mentor BITS students in research as a career path. It was attended by a large number of undergraduate M.Sc. (Physics) students.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Invited talk, by Dr. Navin Singh, on "Peyrard Bishop model and DNA melting" in SPARC workshop on DNA Bubble formation: From Physics to Biological functions organized by Department of Physics, Banaras Hindu University, Varanasi (14-20 February, 2020)

2. Invited talk (webinar), by Dr. Navin Singh, on "The DNA molecule: A physicist's perspective" in the webinar series organized by Department of Physics, IIT-ISM Dhanbad (13 July 2020)

3. Invited talk (webinar), by Dr. Navin Singh, on "Stability of DNA molecule in confined geometry" in the Global Meet on Computational Modeling and Simulation: Recent Innovations, Challenge, & Perspective organized by BITS Pilani (07 November, 2020)

4. Invited talk (webinar), by Dr. Navin Singh, on "Wave-particle duality: Foundation of Quantum Mechanics" in the webinar series organized by Amity University, Noida (13 December, 2020)

5. Given invited talk "Ultra-intese laser pulse characterization by electron bunches" at 6th International Conference on "Complex Dynamical Systems and Applications - 2020" conducted at Central University of Rajasthan, Ajmer, India on 21st-23rd Feb 2020.

6. Invited talk by Dr. Anshuman Dalvi on "R & D in the field of Lithium ion batteries: Present and Future" for Hioki India on 11th May 2020.

7. Invited talk by Dr. V. Manjuladevi on Electro-optic response of Liquid crystal doped with nanomaterials, V. Manjuladevi, (online Invited talk on 25th May), Online 7 Days FDP on Recent Trends in Materials Science and Engineering, organized by Department of Physics, School of Basic Sciences and Research, Sharda University Greater Noida, 25-31 May, 2020.

8. Invited talk by Dr. Anshuman Dalvi, "Glass and Glass-ceramics for all-solid-state battery applications" on 27th of May 2020, in Online 7 Days FDP on Recent Trends in Materials Science and Engineering, organized by Department of Physics, School of Basic Sciences and Research, Sharda University Greater Noida, 25-31 May, 2020.

9. Invited talk by Anshuman Dalvi on in Recent trends in Modern Physics organized by Indian Association of Physics Teachers (MP Chapter) on" High energy density Batteries: Present and future" on 29th May 2020.

10. Invited talk by Dr. Raj Kumar Gupta on "Scanning Probe Microscopy: Imaging and beyond" in Advanced Functional Materials, Characterization and Application under TEQIP-III on 29th February 2020.

11. Invited lecture (webinar) by Dr. Raj Kumar Gupta on "Selected topics in modern optics" in Mody University, OSA Student Chapter 22nd June 2020.

12. Invited lecture (webinar) by Dr. Raj Kumar Gupta on "Surface plasmon resonance: A wonderful sensing platform" in International Linkage Degree Program, Hiroshima University 22nd December 2020.

13. Invited talk (webinar) by Dr. Raj Kumar Gupta on "Lyotropic mesophases of nanomaterials at interfaces" in National Conference on Liquid Crystals 2020 held at Amity University from 21-23rd December 2020.

14. Invited Talk (webinar) by Dr. Madhukar Mishra, on "The Behaviour of Matter at Extreme High Density and/or Temperature" in International Conference on Research and Innovations in Physical, Biological and Social Sciences for Sustainable Development held during 27th-28th June 2020, at KNIPSS, Sultanpur.

15. Invited Talk by Dr. Anshuman Dalvi on "Chemistry Nobel Prize 2019: A story of development of Lithium-ion batteries" on 19th of January 2020, organized by department of Physics Nagpur University.

16. Invited talk by Dr. Anshuman Dalvi on "Understanding the role of electrolytes in Lithium-ion Batteries" on 28th of December 2020 in Technical Education quality improvement programme (TEQIP) organized by department of physics, IIT Roorkee.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

b. Won by Students:

1. **Ms. Shweta Mishra** was awarded the **best paper award** for her presentation titled "Investigation on Physical Properties of Silver Nanorod Doped Nematic Liquid Crystal" in **National Conference on, Physics and Chemistry of Materials**, 14th - 16th December, 2020, Indore - India organized by Department of Physics, Govt. Holkar Science College, Indore.

2.   **Ms Neelakshi Sharma** secured second position (out of 150 participants) in an advanced materials fabrication international competition on" refractories, advanced ceramics and glasses" 18th July, 2020, Organized under the theme of Atmanirbhar Bharat Abhiyan by Indian Ceramic society Jamshedpur. Neelakshi emphasized on Novel Synthesis route for preparation of glass-ceramic electrolytes for lithium ion batteries. She won a cash prize of Rs 15000.00.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

12. PATENTS FILED/PUBLISHED AND GRANTED: NA

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES:

All students and faculty are default members of B5 (Physics) Association at BITS Pilani. Certain students are selected as post-holders to plan and carry out different activities of the association. A faculty member of the department is appointed to oversee the activities of the association. Currently, Dr. Srijata Dey is the faculty-in-charge of the association. Some of the yearly activities of the association are as follows:

Due to pandemic students of B5 association were not present on campus. Hence association could not execute planned activities.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.N.	Software/Equipment	No. of Licenses or Qty.
1	BET Surface Area Analyzer	1
2	Autolab Electrochemical work station	1
3	Gamry Electrochemical Workstation	1

Academic-Undergraduate Studies

First Degree Thesis

During the year, 373 First-Degree thesis projects have been completed at Pilani campus. The list of completed

First-Degree thesis during Second Semester 2019-20 and First Semester 2020-21 is given in **Annexure 'B1-8'**.

Academic Graduate Studies & Research

Higher Degree Dissertation

During the year, 78 Higher Degree dissertation projects have been completed in Pilani campus. The list of

completed Higher Degree Dissertations during Second Semester 2019-20 and First Semester 2020-21 is given

in **Annexure 'B1-9'.**

B1.11 DIVISION / UNIT / CENTER-WISE ACTIVITY HIGHLIGHTS

Faculty Affairs Division (FAD)

Faculty Affairs Division (FAD) with its office in Pilani Campus is responsible for implementation of all Institutional policies related to faculty, across all BITS campuses at Pilani, Goa, Hyderabad, Dubai and Off-Campus. The division deals with functions related to recruitment, promotions, retirement, extensions, appraisals, terms and benefits of faculty. The activities of the Division for the year, in brief, are given below:

1. **Faculty Recruitment:** Faculty Recruitment has been the prime activity of the Division. It is a continuous process carried round the year, where departments are involved in decision making process, whereas recruitment related logistics are carried out by partnering with a HR outsourcing company, PeopleStrong. Details of the offers made towards faculty positions, joining and acceptance details for on campus and off campus, for the year, are given below.

2. **ON-CAMPUS RECRUITMENT IN 2020**

Position	Offered	Joined				Declined				Yet to Join				
	University	Pilani	Dubai	Goa	Hyderabad	Pilani	Dubai	Goa	Hyderabad	Pilani	Dubai	Goa	Hyderabad	Not Chosen yet
Professor – AL14A	2*				1*					1*				
Associate Professor – AL 13A2	3(2+1*)			1*						2				
Assistant Professor – AL 12	131 (110+21*)	26 (22+4*)	5	18 (13+5*)	28 (23+5*)	4	3	3 (2+1*)	6 (3+3*)	18 (17+1*)	2	6 (4+2*)	6	6
Assistant Professor – AL 11	12 (2+10*)	2*		2 (1+1*)	3 (1+2*)	4*		1*						
Assistant Professor – AL 10	-													
Visiting Assistant Professor	1		1											
Visiting Professor	1				1									
Visiting Faculty	4	1	1	1	1									
Grand Total	154 (120+34*)	92(71+21*)				21(12+9*)				41(37+4*)				

\# Yet to respond, offered in 2020

* Offered in 2019, status in 2020

3. **OFF-CAMPUS RECRUITMENT IN 2020**

Position	Total (offered)	Joined (details)						Declined (details)						Yet to join (details)					
		Delhi	Pune	Chennai	Hyderabad	Bangalore	Mumbai	Delhi	Pune	Chennai	Hyderabad	Bangalore	Mumbai	Delhi	Pune	Chennai	Hyderabad	Bangalore	Mumbai
Professor	-																		
Associate Professor – AL 13A2	5(#4+1*)	1		1	1*	1													
Assistant Professor – AL 12	5	1			2	1						1							
Assistant Professor – AL 10	-																		
Instructors	-																		
Total	10(#9+1*)	8(7+1*)						1						-					

* Offered in 2019, status in 2020.

\# 1 selected in 2020, offer not released.

4. **Faculty Performance Appraisals:** Performance Appraisal for 2016-17 and 2017-18 was completed. Contributions in three key performance areas, namely: - (i) teaching, (ii) research, and (iii) institutional contribution was assessed. The assessments included self-appraisal, appraisal by the Head of the respective departments in consultation with the respective faculty, and/ or Divisional Dean, which was followed by a cross campus committee assessment and then by university level committee. The result was finally distributed to the faculty members.

5. **New Faculty Performance Appraisals:** Performance Appraisal for 2018-19 and 2019-2020 is initiated. Contributions in three key performance areas, namely: - (i) teaching, (ii) research, and (iii) institutional

contribution will be assessed. The assessments will include self-appraisal, appraisal by the Head of the respective departments in consultation with the respective faculty, and/ or Divisional Dean, which will be followed by a cross campus committee assessment and then by university level committee.

6. **Faculty Promotion Process:** It has been initiated and in progress.

   I. For the first time faculty filled the promotion proforma online. The proforma on ERP portal was also provided with pre-filled data related to faculty contribution in Teaching, Research and Institutional Contribution.

   II. The data from various divisions and units (e.g. AUGSD, WILP, PS Division, Admission office, SRCD, AGSRD, resurgence etc.) was collected by FAD and processed through ERP to aid the faculty in filling the promotion proforma.

7. **Change of superannuation age from 60 to 65:** Together 26 faculty applied for superannuation, of which 11 were granted. Following was the result of Grant of Superannuation for the faculty members who applied for the same.:

S.No.	PSRN	Faculty Name	Department
1	P1336	Pushp Lata	HSS
2	P2388	Debi Datt Pant	Physics
3	P1972	Balram Dubey	Maths
4	P0974	Mahesh Radhakrishnan	Pharmacy
5	P0824	S.Gurunarayanan	EEE
6	G0004	Manjuri Kumar	Chemical
7	G0070	Patincharath Nandakumar	Physics
8	G0094	Sutapa Roy Ramanan	Chemical
9	H0092	Mandalika Bala Srinivas	EEE
10	H0438	Niranjan Swain	EEE
11	H0149	Budhiraju Veera Venkata Satya Naga Prabhakar Rao	EEE

8. **Faculty Regularization:** New Appointment as an Assistant Professor, Grade-I in Academic Level-12 is "temporary against a regular position". Once he/she successfully completes three years' period in this position, his/her performance is assessed. If appraisal is favorable, his/her appointment becomes "regular" and is placed as Assistant Professor, Grade-I in academic level 13A1. Together 60 faculty members were assessed for regularization, of which 47 were regularized. Following was the result of Regularization for the faculty members who were assessed for the same.:

S.No.	PSRN	Name of Faculty	Department
1	P3203	Sudeshna Mukherjee	Bio. Sc.
2	P3469	Saurabh Chadha	Mgmt.
3	G0334	Pravin Sakharam Mane	EEE
4	G0674	Vivek Rangarajan	Chem. Engg.
5	G0681	Pradeep Kumar Sow	Chem. Engg.
6	H0557	Sunny Kumar Singh	Eco. Fin.
7	H0558	Bheemeshwar Reddy A	Eco. Fin.
8	H0561	Suchismita Satpathy	HSS
9	P3483	Rajesh Kumar	Maths
10	P3481	Syamantak Majumder	Bio. Sc.
11	P3478	Meghana Tare	Bio. Sc.
12	P3477	Bhanu Vardhan Reddy Kuncharam	Chem. Engg.
13	P2762	Avinash Gautam	CSIS
14	G0690	Sandeep Singh	Mech. Engg.
15	G0693	Richa Singhal	Chem. Engg.

S.No.	PSRN	Name of Faculty	Department
16	G0695	Anirban Roy	Chem. Engg.
17	G0697	Sharad Mahadeo Sontakke	Chem. Engg.
18	G0777	Vijay Madhukar Patankar	Mathematics
19	H0564	Vivek Sharma	Bio. Sc.
20	H0565	Jamma Trinath	Bio. Sc.
21	H0576	Gireesha T M	Bio. Sc.
22	H0581	Ruchi Jain Dey	Bio. Sc.
23	H0566	Lavanya Suresh	HSS
24	D1250	Sartaj Rasool Rather	HSS
25	D1243	Pallab Sanpui	Biotechnology
26	D1248	Nilesh Goel	EEE
27	D1254	Namita Khanna	Biotechnology
28	D1247	Mrutuyanjaya Sahu	HSS
29	D1246	Mainak Dutta	Biotechnology
30	P3482	Vinay Chamola	EEE
31	G0376	Sarang Chandrashekhar Dhongdi	EEE
32	H0573	Mithun Mondal	EEE
33	H0583	Piyush Khandelia	Bio. Sc.
34	H0713	Jaideep Chatterjee	Chem. Engg.
35	P3490	Shashank Gupta	CSIS
36	P3489	Aakash Chand Rai	Mech. Engg.
37	P3487	Venkatesh Kadbur Prabhakar Rao	Mech. Engg.
38	P3470	Nirankush Dutta	Mgmt.
39	P3493	J. Jennifer Ranjani	CSIS
40	P3495	Puneet Mishra	EEE
41	G0699	Amol Anilrao Deshpande	Chem. Engg.
42	G0801	Snehanshu Saha	CSIS
43	H0595	Sudha Radhika	EEE
44	H0598	Prasant Kumar Samantray	Physics
45	H0605	Harish Vijay Dixit	EEE
46	D1260	Angel Arul Jothi Joseph	CS
47	D1261	Vivek Balachandra Kartha	Civil Engg.

9. **OPERA Award:** The awards named OPERA awards (for "Outstanding Potential for Excellence in Research and Academics") are to facilitate and incentivize new faculty to join BITS and excel in research and teaching. The award is in the form of a "joining bonus" paid over 5 years, plus funds to kick-start their R&D and professional development. The award will help compensate new faculty (or provide R&D funds) at par with the best institutions in India. OPERA was awarded to 17 new faculties, out of which 5 faculty members have started working and 9 faculty members are yet to join.

10. **Sabbatical Leave:** The sabbatical leave policy of Birla Institute of Technology and Science, Pilani is intended to promote professional improvement and intellectual growth of faculty resulting in enhancing the quality of education and research at BITS. Total 3 faculties have been granted Sabbatical Leave, 2 faculties from Pilani campus and 1 faculty from Hyderabad campus.

11. **Extra Ordinary Leave:** It is an option given to faculty to avail "extraordinary leave" (EOL) without pay for up to 2 years at a time subject certain conditions. 1 faculty from Goa campus have been granted EOL.

12.   Industry Immersion: The scheme to provide exposure of faculty, who do not have prior industry experience, to an industry in their area of interest with a view to provide them with an opportunity to gain first-hand exposure to processes undertaken by industries in design, manufacturing, marketing, logistics; gain an understanding of how theory learnt in classrooms is translated into practice on the job floor; gain an understanding of technical challenges that industries face in respect of improved design, scaling up their operations, impact on environment, manpower, etc.

Due to COVID 19 pandemic, faculty could not avail this scheme in the year 2020.

13.   Exposure of Faculty to Universities Abroad: Under this scheme, BITS supports faculty members to spend a few weeks at a University abroad (during vacation period). The scheme supports those faculty members who have not visited foreign universities earlier or in the near past. During such exposure, it is expected that faculty members will (among others): (i) gain first-hand exposure to current/latest advances in research, etc., (ii) gain an understanding of lab resources required to initiate research or to use (or to program) equipment, (iii) gain an understanding on how classroom- or lab-based instruction is organized or imparted, AND/OR, (iv) gain an understanding of research methodology, cross-disciplinary collaboration, or collaboration across institutions, etc.

Due to COVID 19 pandemic, faculty could not avail this scheme in the year 2020.

14.   To understand the reasons for faculty attrition, **exit interviews** have been conducted in all the campuses. HR Team of respective campus has assisted FAD in this process. In the year 2020, 16 On Campus and 2 Off Campus exit interviews were conducted in Pilani Campus.

Practice School Division

University-Industry Linkages

An important aspect of education at BITS is its institutionalized linkages with the world of work. The Institute attaches great importance to the University-Industry Linkages and gives mutually reinforcing thrust to it through various avenues like Practice School (PS), Work Integrated Learning Programmes (WILP), Technology Innovation Centre (TIC) and off-campus Ph.D.

Practice School Programme

All integrated first degree and higher degree programmes of the Institute provide for a Practice School option. The past statistics show that almost all the students admitted, opt for this programme. During the calendar year 2020 the Practice School programme was operated at 968 stations, with 27 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 5637 students and 172 faculty members. Categorization of PS stations is given below:

S.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	125 (91)	6 (21)
2.	Design, Development, Consultancy and Software Organization.	384 (285)	235 (101)
3.	National Research Laboratories and other Research centers	25 (19)	53 (50)
4.	Production, Manufacturing and Public Work Units	43 (32)	114 (108)
5.	Publishing Houses, News Agencies and Museums	3 (2)	7 (7)
	Total	**580 (430)**	**415 (287)**

In 2020, an integrated practice school allotment for 5637 students was carried out across Pilani, Goa and Hyderabad campuses. The statistical details of the centre-wise distribution of students and faculty at PS-I stations are given in **Annexure A-7** followed by the details of the Operational Statistics of PS-II and PS for higher degree in **Annexure A-8**. Growth statistics of PS-I, PS-II and PS for higher degree are given in **AnnexureA-9**, while facilities available at various PS-II stations are given in **Annexure A-10**.

Following is the breakup of students who were registered in PS-I, PS-II & PS for Higher Degree:

PS-I	Summer Term 2019-2020	(2846)	2944
PS-II	II Semester 2019-2020	(870)	757
	I Semester 2020-2021	(1215)	1382
PS for Higher Degree			
	II Semester 2019-2020	(423)	554
	I Semester 2019-2020	(02)	00
	Total	**(5356)**	**5637**

Note:-The figures shown in brackets relate to the year 2019.

PS-II Assignments: Institute's Contribution to Industrial Development

Apart from developing skills in professional judgment, data-handling, documentation, decision making ability, etc., in students, the PS-II assignments also relate to real-life problems of the host organizations. PS-II assignments listed in **Annexure A-11** were completed by the final year students at their respective PS-II stations during the year 2019. These assignments directly.

Contribute to the requirements of industrial R & D by fulfilling the ongoing production, modernization, design, development and research needs of the participating industries.

During the year under review 2944 students of Pilani (1017), Goa (866), Hyderabad (1060) & (01) Dubai campuses accompanied by 101 faculty members attended Practice School-I and 2693 students attended Practice School-II. The entire Practice School-II operations were supervised by 71 faculty members residing at the respective locations. For the year 2020, 235 dual degree students have exercised their option of Practice School for both the degrees.

In appreciation of the contribution made by our students towards the professional well-being of the organizations, a stipend**/**out-of-pocket allowance is paid to them by the organizations. The amount of stipend/out-of-pocket allowance has over the years increased, and today the maximum amount paid is Rs.120,000/- p.m. at Goldman Sachs, Bangalore. The average stipend is around Rs.36,000/- p.m. per student. In addition, other facilities like accommodation, subsidized lunch, to & fro travel, etc. are also provided by some of the organizations. Students are paid TA & DA as per the rules of the organization. All overseas organizations pay for to & fro air travel and health insurance in addition to stipend.

During the year under review, the PS activities grew further with the introduction of 380 new PS-II stations (Table 1) and out of pocket allowance was increased at 49 PS-II stations (Table 2).
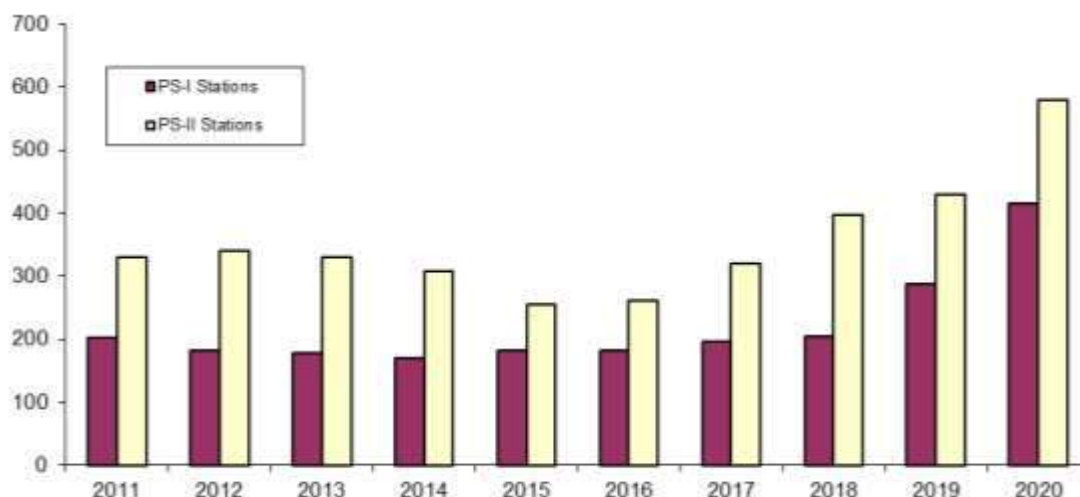
Table 1

PS-II Stations Added during the Year 2019

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
Ahmedabad		
1.	Adani Power	3000
2.	AltMat	10000
3.	Burncal Healthcare Pvt. Ltd.	15000
4.	La Renon Healthcare Pvt. Ltd.	35000
5.	Sopan	12000
Bangalore		
6.	ABB Global Industries and Services Private Limited	25000
7.	Airmeet	30000
8.	Amazon - Machine Learning	60000
9.	Amazon - Operations Manager	60000
10.	American Express - Credit & Fraud Risk (Capabilities)	70000
11.	Asteria Aerospace Pvt. Ltd.	18000
12.	Atkins	20000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
13.	Atyati Technologies	20000
14.	Bogmalo Foods LLP	7000
15.	Bridge Your Network Inc	700
16.	CDM Smith Global Resource Center	15000
17.	Cisco Systems (India) Pvt. Ltd. - Hardware	70000
18.	ClearTax	45000
19.	Clumio India Technologies India LLP	100000
20.	CoffeeBeans Consulting LLP	15000
21.	COGOS Technologies Pvt Ltd.	20000
22.	Confluent India Pvt Ltd.	100000
23.	CueMath Learn Pvt. Ltd	18000
24.	Cypress Semiconductor India Pvt Ltd.	35000
25.	Dreamplug Technologies	12000
26.	Dreamplug Technology - Operations	30000
27.	Dunzo Digital Pvt. Ltd.	30000
28.	E2open Inc.	40000
29.	Emptycup Innovation Pvt. Ltd. - Non tech	20000
30.	Emptycup Innovation Pvt. Ltd. - Tech (Nedo Software)	35000
31.	Enact Systems India Pvt. Ltd.	35000
32.	Enphase Energy	50000
33.	EntHire Inc	10000
34.	Everwell Health Solution	40000
35.	FamPay Pvt. Ltd. - Business Development & Content Writing	8000
36.	GE Digital	30000
37.	GE India Technology Centre	30000
38.	GET MY Parking	50000
39.	Give Foundation	12000
40.	Goodera	25000
41.	Goscale Technologies Pvt. Ltd. - IT	25000
42.	Harness	80000
43.	HelloThinkster	30000
44.	Heraizen Technologies Pvt Ltd	10000
45.	Hevo Technologies India Pvt. Ltd.	65000
46.	Holy Cow Productions	15000
47.	HSBC (WMR/GAC/DATA SCIENTIST)	50000
48.	HSBC Portfolio Management Analytics (PMA)	50000
49.	HSBC Strategic Transaction Group (STG)	50000
50.	i-exceed Technology Solutions	24000
51.	Innoviti Payment Solutions Pvt Ltd	25000
52.	Invento Markerspaces Pvt. Ltd.	20000
53.	IQVIA	20000
54.	JPMS - GR&C AM Investment Market & Principle Risk	75000
55.	JPMS - GR&C Commercial Banking Risk	50000
56.	JPMS (Finance) GR&C Model Risk Governance and Review - Challenger	50000
57.	JPMS GR&C Auto Risk Strategy Analytics	75000
58.	JPMS GR&C Cards Risk Strategy Analytics	75000
59.	JPMS GR&C CCB Business Banking Reporting Strategy	75000
60.	JPMS GR&C CCB Chase 360 Strategy	75000
61.	JPMS GR&C Corporate Risk - Risk Project Solutions	50000
62.	JPMS GR&C Corporate Risk -Firm wide Risk Reporting	50000
63.	JPMS GR&C Credit Forecasting Strategy	75000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
64.	Knolskape Solutions Pvt. Ltd.	25000
65.	Kofluence	10000
66.	Kubric	30000
67.	Lemnisk Pvt. Ltd.	50000
68.	LOGIQ LABS Pvt Ltd (eShipz.com)	20000
69.	Matdev Investment Advisers Pvt. Ltd.	15000
70.	Mavuno Technologies -	10000
71.	Maxim Integrated	25000
72.	MBB Labs Pvt. Ltd.	35000
73.	Megh Computing	25000
74.	Melio	10000
75.	Mobileum	30000
76.	Mocxa Health Pvt. Ltd	10000
77.	Molecular Connections Pvt. Ltd.	15000
78.	Myntra.com	30000
79.	Niyo Solutions	30000
80.	Niyo Solutions Non Tech	25000
81.	Nobroker	40000
82.	nurture.farm (A Subisidiary of UPL Ltd.)	50000
83.	NXP India Pvt Ltd.	28000
84.	Oracle India Pvt Ltd.	50000
85.	Perfios Software Solutions Pvt. Ltd.	15000
86.	PharmEasy	25000
87.	Pixcy	12000
88.	Pixcy - Computer Vision	12000
89.	Pixcy - Marketing Designing	12000
90.	Pixxel (Syzygy Space Technologies Pvt. Ltd.)	30000
91.	Praktice.ai	10000
92.	Praktice.ai - Marketing & Sales	10000
93.	Psi Phi Global Solutions Pvt. Ltd. (OkCredit)	50000
94.	Rupeek Fintech	25000
95.	Rupifi Non Tech	15000
96.	Rupifi Tech	30000
97.	Samsung Semiconductor India Research -Software	50000
98.	Samyojya	20000
99.	SAP Labs	50000
100.	Saveo Healthtech Pvt. Ltd - Non Tech	20000
101.	SENSEI TECHNOLOGIES PVT LTD	25000
102.	Signalchip Innovations Pvt. Ltd.	8000
103.	Synopsys (India) EDA Software Pvt Ltd.	35000
104.	Tata Digital Health	45000
105.	Toshiba Software (India) Pvt Ltd	25000
106.	Trell Experiences Pvt Ltd	50000
107.	Trell Experiences Pvt Ltd (Non tech-Operations)	20000
108.	Trell Experiences Pvt Ltd (Non tech-Product Analyst	25000
109.	Trifacta Inc	60000
110.	Tvami Technologies Pvt. Ltd.	20000
111.	Valorem Stack Pvt. Ltd. (FloBiz)	35000
112.	Viacom 18 Media Pvt. Ltd. - Digital Ventures	25000
113.	Vymo	25000
114.	Wealthy	20000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
115.	Weir Minerals India Pvt Ltd	20000
116.	WickedRide Adventure Ltd.(Bounce)	60000
117.	Wisemonk Services Pvt. Ltd.	10000
118.	ZS Associates	45000
119.	Zwende Design Tech Pvt Ltd	15000
120.	Zwende Design Tech Pvt Ltd - Nontech	8000
California		
121.	Ascendo. AI	20000
122.	BellyMelly	20000
123.	Glocol Networks	10000
124.	NewCo Inc.	15000
125.	Oyla Inc	30000
Chennai		
126.	Arm Soft Technologies	15000
127.	ARVAUTO ECOM PRIVATE LIMITED	15000
128.	ASCO Numatics India Pvt. Ltd. (Emerson Automation Solutions)	15000
129.	BNY Mellon Technology	60000
130.	Congruent Solutions Business Analyst	15000
131.	Congruent Solutions Mobile App.	15000
132.	Congruent Solutions Web Development	15000
133.	Do it Yourself	8000
134.	Enterpreneurship Development and Innovation Institute	20000
135.	Histogenetics	15000
136.	Indium Software	10000
137.	Kovax Abrasives South Asia Pvt Ltd	12000
138.	Lucas TVS Ltd.	10000
139.	MEL Systems and Services Ltd	10000
140.	Rane Madras Ltd	8000
141.	ReferralYogi Technologies Pvt. Ltd.	25000
142.	Scovelo Consulting	8000
143.	TNSTC	0
Coimbatore		
144.	Velan	15000
Dehradun		
145.	Indian Institute Of Remote Sensing	0
Delhi		
146.	AECOM Infrastructure	7500
147.	Amazon - Area Manager	60000
148.	Amazon - Operations Manager	60000
149.	Amazon Professional Services	60000
150.	Central Road Research Institute	0
151.	CL Educate Ltd.	15000
152.	Ecom Express - Business Analysis	30000
153.	Ecom Express Pvt. Ltd. - Business Analysis - Onsite	30000
154.	Flying Homingos Private Limited	10000
155.	Grey Orange Robotics Pvt. Ltd.	20000
156.	Hindustan Times -	25000
157.	Indian Electrical & Electronics Manufacturersâ€™ Association	8000
158.	Insights Alpha	8000
159.	Intercontinental Consultants and Technocrats Pvt. Ltd	10000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
160.	Laneyes LLC	7000
161.	MapMyIndia	10000
162.	MyHQ (Justwork Technologies Pvt Ltd.) -Nontech - Onsite	20000
163.	Nable IT Consultancy Services Pvt. Ltd.	25000
164.	Netcore Solutions	40000
165.	Seygnux Solutions Pvt. Ltd.	7500
166.	Singh Plasticisers & Resins (I) Pvt. Ltd	18000
167.	Takshila Learning Pvt. Ltd.	20000
168.	Takshila Learning Pvt. Ltd. (Non tech)	12000
169.	The Center for Disease Dynamics Economics and Policy India Pvt. Ltd.	35000
170.	ZEE5 India	25000
Faridabad		
171.	Rite Infotech Pvt Ltd	12000
172.	Stowe Research India Pvt Ltd	20000
Ghaziabad		
173.	Mtandt Rentals Ltd.	15000
174.	NutriPal Healthcare Pvt Ltd	20000
175.	NutriPal Healthcare Pvt Ltd - Non Tech	12000
Goa		
176.	CommScope	20000
Gurgaon		
177.	American Express - Credit & Fraud Risk (Capabilities)	70000
178.	American Express Big Data Labs	100000
179.	ANS Commerce - Non tech	8000
180.	ANS Commerce - Tech	10000
181.	Apollo Tyres	18000
182.	Atkins	20000
183.	Class 21A Pvt. Ltd.	25000
184.	Collegedunia Web Pvt. Ltd.	50000
185.	Decimal Technologies	15000
186.	Express Stores - Tech	30000
187.	Express stores -Nontech -Onsite	20000
188.	Indic-ai Foundation for Social Good	30000
189.	IQVIA	20000
190.	MM Aqua Technologies Ltd.	15000
191.	OLX Group	60000
192.	Phone Post	15000
193.	Process 9 - Document Translation System	10000
194.	Process 9 - Neural Machine Translation	10000
195.	Process 9 - Website Translation System	10000
196.	Process 9 - Website Translation System ver 2.0	10000
197.	SequelOne Solutions Pvt Ltd	25000
198.	ShortHills Tech Pvt Ltd(Nontech)	20000
199.	SMEC India Private Limited.	10000
200.	Snap Deal	20000
201.	VenueMonk	10000
202.	VSD Eduventures Pvt. Ltd.	32000
203.	Wake-up Technology Pvt Ltd - Onsite	20000
204.	Wake-Up Technology Pvt. Ltd.	20000
Hosur		
205.	TVS Motors	20000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
Hyderabad		
206.	Aizant Drug Research Solutions Pvt. Ltd.	15000
207.	Alien Developers	10000
208.	Amazon - Machine Learning	60000
209.	Amazon - Operations Manager	60000
210.	Apollo Tele Health Services (ATHS)	15000
211.	Audree Infotech P Ltd.	20000
212.	Balaxi	14500
213.	BSCPL Infrastructure Ltd.	10000
214.	CASHe	15000
215.	CriticalRiver Technologies Pvt Ltd	20000
216.	CtrlS Data Centre Pvt Ltd	25000
217.	Dhruva Space Pvt. Ltd.	8000
218.	Dr. Reddys Laboratories	15000
219.	eKincare (Aayuv Technologies Pvt. Ltd.	35000
220.	Experian	30000
221.	Flyboat	10000
222.	GE Digital	30000
223.	Mahati Infra Services Pvt. Ltd	15000
224.	Micron Technology India Operations	50000
225.	Microsemi India Pvt Ltd	27000
226.	Molde Analytics India Pvt. Ltd.	35000
227.	Mordor Intelligence	15000
228.	My Smart Price - Non Tech	22000
229.	My smart price - Tech	22000
230.	Nagarjuna Construction Company	10000
231.	National Institute of Rural Development and Panchayati Raj	30000
232.	NCPE infrastructure India Pvt.Ltd	10000
233.	Nippon Koei	20000
234.	Oracle India Pvt Ltd.	50000
235.	OYO Rooms	45000
236.	Petasense Technologies Pvt. Ltd	42000
237.	Qualcomm India Pvt Ltd- Bangalore	30000
238.	Quintessential Design	8000
239.	Reild Residential Properties Pvt.Ltd	10000
240.	Saffrongrid Ltd. - Artificial Intelligence Department	21000
241.	Saras Analytics - Nontech	20000
242.	Saras Analytics - Tech	35000
243.	Synchrony	35000
244.	Thomson Reuters	45000
245.	UBS - Group Finance	40000
246.	UBS Group Finance - Hyd/Pune	40000
247.	VCTIP Pvt. Ltd. (Market Data Forecast) Content Writing	18000
248.	Voziq India Pvt. Ltd.	10000
249.	Wavelabs Technologies	20000
250.	Zaggle Prepaid Ocean Services Pvt. Ltd	30000
251.	Zaggle Prepaid Ocean Services Pvt. Ltd - Onsite	30000
Indore		
252.	Vinilok SoluNons Pvt. Ltd.	25000
Jagdishpur		
253.	Indogulf Fertilizers Ltd.	10000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
Jamshedpur		
254.	Tata Steel	18000
Kalpakkam		
255.	Indira Gandhi Centre for Atomic Research	0
Kheda		
256.	Crest Speciality Resins Pvt. Ltd. - onsite	15000
Kolkata		
257.	Asanify Technologies Pvt. Ltd.	25000
258.	Axxela Advisory Services	20000
259.	ITC Limited	60000
260.	Keysight Technologies India Pvt. Ltd.	20000
Kota		
261.	MedCords	20000
Ludhiana		
262.	ALW Lighting India Pvt Ltd	24000
263.	ALW Lighting India Pvt Ltd- Nontech	26000
Mehsana		
264.	Oswal Industries	15000
Mumbai		
265.	ActiveBuildings	10000
266.	AECOM	7500
267.	Agami Realty	5000
268.	Amazon - Operations Manager	60000
269.	BuroHappold Engineering	15000
270.	CACTUS Communications - Product Analysis	40000
271.	CACTUS Communications - Product Management & Software Dev.	50000
272.	Christensen Investor Relations (I) Pvt. Ltd.	10000
273.	Cityflo (Komorebi Tech Solutions Pvt. Ltd.)	50000
274.	Credit Suisse - Equity Research	75000
275.	Credit Suisse - Non-Financial Risk Management	75000
276.	DBOI - Finance	30000
277.	DBOI - GVG	30000
278.	DBOI - Market Risk	30000
279.	DBOI - Valuation Control	30000
280.	DBOI-Rating Analysis	30000
281.	Dolat Capital	25000
282.	FlipSpaces Technology Labs Pvt. Ltd.	7000
283.	HCL Technologies Ltd (Formerly Geometric Ltd)	30000
284.	IDFC First Bank	20000
285.	Indian Energy Exchange Ltd	18000
286.	ION Energy	30000
287.	Jio Platforms Limited	35000
288.	JPMS (Finance) CIB R&A Markets - Sales and Structuring	75000
289.	JPMS (Finance) GR&C Market Risk	75000
290.	JPMS (Fintech) CIB R&A Banking (CRG)	50000
291.	JPMS (Technology - IT) CIB R&A Data Science - Fintech	100000
292.	JPMS (Technology - IT) GR&C Quantitative Research - Fintech	100000
293.	JPMS (Technology - IT) GR&C Wholesale Credit Solutions - Data Science - Fintech	100000
294.	JPMS (Technology-IT) GR&C Model Risk Governance and Review - Ongoing Performance Management	100000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
295.	JPMS (Technology-IT) GR&C Model Risk Governance and Review - Risk Strategy & Execution	75000
296.	JPMS CIB R&A - Markets (Derivatives Analyst Group	75000
297.	JPMS CIB R&A Data Science	100000
298.	JPMS CIB R&A Global Research	75000
299.	JPMS CIB R&A Markets-Equity Derivatives Trading & Structuring	75000
300.	JPMS GR&C Corporate Risk - Risk Project Solutions	50000
301.	JPMS GR&C Credit Risk -Counterparty Credit Infrastructure & Capital	75000
302.	JPMS GR&C Quantitative Research -Fintech	100000
303.	JPMS GR&C WCS - Credit Portfolio Analytics	75000
304.	JPMS GR&C Wealth Management -Data Science -Credit Risk	100000
305.	JPMS-GR&C Credit Risk-Counterparty Credit Infrastructure&Capital	75000
306.	Jupiter	50000
307.	Morningstar - Index data calculation	40000
308.	Morningstar - Indexes - Data and Content	40000
309.	Morningstar - Indexes Product and Sales Operations (IPSO)	40000
310.	Morningstar - Quantitative Research	40000
311.	MSCI Index and Research	60000
312.	Netcore Solutions	40000
313.	Nomura - Change Management Team	75000
314.	Nomura - Finance - Corporate/ Business Advisory	75000
315.	Nomura - Finance - Product Control PnL	75000
316.	Nomura - Finance - Structured Deal Review	75000
317.	Nomura - RMO - Risk Middle Office	75000
318.	Pepper Content Pvt. Ltd.	30000
319.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) - Tech	12500
320.	PM School (ABSORB TECHNOLOGIES PVT. LTD.) Non Tech	7500
321.	Pushstart Media Network Pvt. Ltd.	10000
322.	Receivables Exchange of India Limited	10000
323.	UBS - Group Compliance	25000
324.	UBS Business Solutions (India) Private Limited - Finance Group	40000
Nashik		
325.	Questo Wellbeing Pvt Ltd	10000
Noida		
326.	B and S Consultants	13000
327.	Bisquare Systems Pvt. Ltd. - Onsite	30000
328.	Bunch Microtechnologies Pvt Ltd	20000
329.	Classplus	30000
330.	Clearpack Automation Pvt. Ltd.	25000
331.	DIXON TECHNOLOGIES INDIA LTD	25000
332.	HISP India	10000
333.	IMarc Services	12000
334.	Jubilant FoodWorks Ltd.	25000
335.	NXP Semiconductors	25000
336.	SmartHelio Sarl.	20000
337.	Time Tooth	10000
Pilani		
338.	Pilani AtmaNirbhar Resource Center (PARC)	15000
Portland		
339.	Versa Cloud ERP Inc - Non Tech	15000
340.	Versa Cloud ERP Inc - Tech	15000

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)
Pune		
341.	AgroStar	40000
342.	BNY Mellon Technology	60000
343.	Centre for Development of Advanced Computing	0
344.	Credit Suisse - Global Markets BC & E Efficiency)	75000
345.	DBOI - AC	30000
346.	DBOI - Automation	30000
347.	DBOI - Financial Analytics	30000
348.	DBOI - IF	30000
349.	DBOI - Risk Metrics Analytics	30000
350.	DemandMatrix	35000
351.	Energy Exemplar	40000
352.	HealthRx by Bajaj Finserv Health Ltd.	50000
353.	Integrated Active Monitoring Pvt. Ltd.	8000
354.	Integrated Active Monitoring Pvt. Ltd. - Product & Business Dev.	6000
355.	Johnson Controls	15000
356.	Maritime Research Centre	15000
357.	Markets & Markets	25000
358.	Millet & More Foods	10000
359.	namaste.fit	15000
360.	News Cape Consulting	25000
361.	Nvidia - Software	35000
362.	Praj Industries Ltd.	18000
363.	Quick Heal Technologies Ltd	40000
364.	Sleepiz (India) Pvt. Ltd.	40000
365.	Toshiba Software (India) Pvt Ltd	25000
366.	UBS - Group Compliance	40000
367.	Visteon Corporation	15000
368.	Vuclip India Pvt. Ltd.	60000
Renukoot		
369.	Birla Carbon SKI Carbon Black (India) Pvt. Ltd.	10000
Secunderabad		
370.	Dvara E Registry Pvt. Ltd.	25000
Singapore		
371.	Zluri	15000
Sirohi		
372.	JK Lakshmi Cement Ltd.	8000
Texas (USA)		
373.	Resolvity Inc.	25000
Trivandrum		
374.	Centre For Development Of Imaging Technology	0
375.	Eyenetlabs	10000
376.	Kerala Infrastructure and Technogy for Education	25000
Udaipur		
377.	E-Connect Solutions Pvt. Ltd.	17000
378.	Udaipur Cement Works	8000
379.	Wonder Cement	35000
Vadodara		
380.	Cosmos Impex	17000

Table 2

Increase in Monthly Stipend at PS-II Stations during the Year 2020

S.No	PS-II Stations	Monthly Stipend / out of pocket allowance	
		During 2019	During 2020
Bangalore			
1.	Adobe Systems	50000	100000
2.	Amazon Area Manager	40000	60000
3.	Amazon Development Center	45000	60000
4.	Cisco Systems (India) Pvt. Ltd - Software Engineering	44000	70000
5.	HealthCubed - Onsite	15000	25000
6.	John F Welch Technology Center (GE)	25000	30000
7.	Petasense - Services & App Development	40000	42000
8.	Samsung Semiconductor India R&D Center-Hardware	35000	50000
9.	Sun Mobility	15000	20000
10.	Texas Instruments (I) Pvt. Ltd - Systems	40000	45000
11.	Texas Instruments (I) Pvt. Ltd. -Analog	40000	45000
12.	Texas Instruments (I) Pvt. Ltd. -Digital	40000	45000
13.	VMware Software India Pvt. Ltd.	35000	50000
14.	Walmart Global Technology Services	30000	50000
Chennai			
15.	Amazon Development Center	45000	60000
16.	UST Global- Chennai	20000	25000
Delhi			
17.	Amazon Development Center	45000	60000
18.	myHQ & (JustWork Technologies Pvt. Ltd.) Tech	15000	35000
19.	National Council of Applied Economic Research	6500	15000
Gurgaon			
20.	Zinnov Management Consulting Pvt. Ltd.	15000	18000
Hyderabad			
21.	Amazon Development Center	45000	60000
22.	Amazon Operations (Area Manager)	40000	60000
23.	UBS Business Solutions (India) Private Limited - Group Operations	25000	40000
24.	Xilinx India Technology Services Pvt. Ltd.	20000	25000
Mumbai			
25.	Credit Suisse - Credit Analytics	40000	75000
26.	Credit Suisse - GBIS	40000	75000
27.	Credit Suisse - Global Market Risk Management	40000	75000
28.	Credit Suisse - GM Trading Risk	40000	75000
29.	Credit Suisse - International Wealth Management	40000	75000
30.	Credit Suisse - Prime Services	40000	75000
31.	Credit Suisse - Risk & Finance Data Analytics Reporting	40000	75000
32.	Credit Suisse- Investment Banking and Capital Markets	40000	75000
33.	Hourglass Research	17000	20000
34.	IDfy (formerly Baldor Technologies Pvt Ltd)	45000	50000
35.	MSCI (NPD -Index Research)	40000	60000
36.	UBS - Group RISK	25000	40000
37.	UBS Business Solutions(India)PrivateLimited-Group Operations	25000	40000
38.	VMS (Vakil Mehta Seth) Consultants Private Limited	10000	15000
Nagda			
39.	Grasim Industries Ltd.	8500	10000
Nagpur			
40.	Techture Structures Pvt Ltd.	15000	25000

Noida			
41.	Adobe Systems	50000	100000
Pune			
42.	AFour Technologies	35000	60000
43.	Credit Suisse- Finance Change	40000	75000
44.	Credit Suisse - Risk & Finance Data Analytics Reporting	40000	75000
45.	UBS Business Solutions (India) Private Limited - Finance Group	25000	40000
46.	UBS Business Solutions (India) Private Limited - Group Operations	25000	40000
47.	UBS Business Solutions (India) Private Limited - RAS FINANCE	25000	40000
Sonipat (Delhi)			
48.	Amazon Operations (Area Manager)	40000	60000
Trivandrum			
49.	UST Global Infinity Labs-Robotics	20000	25000

PS Planning

The preparation for running Practice School courses starts almost one year in advance at the PS Division. The process of preparation of student profile, analysis of student preferences and the student allotment for Practice School courses is completely computerized.

PS Instruction Monitoring

After successfully working with WEPSIMS for a number of years, PS Instruction Monitoring has now introduced PSMS (Practice School Management System). It is an online web enabled tool for an efficient and quick data entry, data retrieval and data management. It is efficiently used for automatic letter generation, evaluation and grading for PS I and PS II and student feedback. PS Division makes constant efforts to maintain and increase the efficiency of instruction monitoring.

Students' Involvement in PS Division-based Projects

The PS Division of the Institute has continued to involve students in analysis, documentation, and educational research-based activities of the Division through projects based on Organizational Aspects, Computer Project, First Degree Thesis and Higher Degree Dissertation. In this regard PS Division has involved students in the following Division-based projects:

1. Development of software related to students and faculty allotment; maintenance of zonal and data analysis related to allotment of students at various stations; modification of the already developed allotment modules.

2. Computerization of PS accounts processing.

3. Development and maintenance of web based tools for instruction to PS II faculty; development and modification of software modules for grade and feedback analysis.

4. BITS Pilani offers scholarship of Rs. 66,000/- (for the entire duration of PS-II) to selected PS-II students with CGPA 7.00 and above at various research organizations.

International Programmes & Collaboration Division

To strengthen international collaborations in year 2019, the institute has signed two Memorandum of Understanding with leading universities including (i) University of Central Florida, Orlando (U.S.A.), (ii) La Trobe University, Melbourne, Australia, iii) Macquarie University, Australia and iv) Univerisity of Agder, Norway. To gain professional knowledge in addition to expanding academic and cultural horizons, 264 students of the institute completed their summer internships and/or off-campus thesis in prestigious institutes of countries including Canada, USA, UK, Germany, Singapore, Japan, Ireland, Israel Italy, Switzerland, France, Spain, Malaysia in year 2018-19. 227 out of the total of 264 students spent one semester abroad in prestigious institutes/universities to complete their first degree theses. The institute has seen a nearly two-fold rise in the number of foreign visitors, having forty nine of them this year. Awareness about international programmes has increased considerably through interactive sessions organized by IPCD leading to several students availing a semester exchange at partner foreign universities and direct admission to MS programmes at University of Queensland, Australia. A total of around 50 students from foreign Universities, namely PACE University, Hiroshima University, Cameroon University and Technische Universität Braunschweig spent anywhere from 2weeks to three months on the three Indian campuses of BITS Pilani.

BITS Pilani is continuing efforts to engage with several universities abroad to promote mutual cooperation in the areas of students and faculty exchange and research collaboration. International activities of year 2020 are summarized below.

Student Exchange: To gain professional knowledge in addition to expanding academic and cultural horizons, **Sixty-seven students** spent one semester abroad in prestigious institutes/universities of Canada, UK,

Switzerland, Germany, Slovakia, Singapore, Japan, France, Australia, Finland and USA to complete their first degree theses in year 2020. **Seven Students** participated in ILDP start plus 2020 online program conducted during Dec 15-23, 2020: Mr Kanav & Mr Mohil Sandip Desai were selected for the prestigious IUSSTF **Viterbi Program 2020** by the Indo-US Science and Technology Forum (IUSSTF) and the Viterbi School of Engineering, University of Southern California (USC). Mr Rushikesh Balkrishna Zawar was selected for the prestigious **Khorana Program** for Scholars 2020 by the Department of Biotechnology (DBT), Government of India, Indo-U.S. Science and Technology Forum (IUSSTF) and WINStep Forward (WSF).

Faculty Exchange: Three faculty members delivered lectures in an online short course for undergraduate students (ILDP-START+) from 15th to 23rd December 2020. Eight faculty members continued research collaboration through joint major research projects. Also, faculty members published several research papers in journals of international repute.

Agreement & Memorandum of Understanding: To promote scholarly exchange and international understanding by stimulating and supporting academic and intercultural activities between students from Memorial University of Newfoundland, Canada and **BITS Pilani**, an agreement for the exchange of students under Memorandum of Understanding was signed in February 2020. The Semester exchange agreement between BITS Pilani and specific institutions (ESME Sudria) from the "n+i" consortium was initiated and it is in advanced stage of discussion. ESME Sudria is an institution specialized in new technologies and the proposed student semester exchange involves disciplines Computer Science, Electrical and Electronics Engineering, Electronics and Communication Engineering, Electronics and Instrumentation Engineering. To strenthen international linkages, discussion has been initiated with University of Twente, Netherlands; University of Houston, USA; Purdue University, USA and University of Rennes, France for greater collaboration and to proceed for Memorundum of Understanding.

Online French Language Classes: BITS Pilani in collaboration with French Institute in India Jaipur and the French Embassy, launched an online French Classes for A1.1 certification in the language (the entire duration of 50 hours). The specialised, labelised French language classes, designed and delivered by highly trained French teachers.

International Workshop and Conference: To strengthen networking and understanding with collaborative organizations IPCD, BITS Pilani organized following webinars.

(i) Smart Cities (July 10-11, 2020): A two-day International Webinar on "Smart Cities: Beyond the Pandemics," organized by Birla Institute of Technology and Science, Pilani, Pilani Campus (Rajasthan), India during July 10-11, 2020. The purpose of the International Webinar is to envisage such challenges and discuss how technology can help our cities and towns overcome them in the post COVID-19 era. The event explored the possibility of long term collaborations with partner universities to propose solutions to the problems being currently faced by smart cities post-pandemics and formulate the strategy for the future research directions. Fourteen internationally recognized speakers from Japan, Malaysia, Ireland, USA and Israel in addition to faculty members from BITS Pilani participated and delivered lectures in the multidisciplinary areas of modeling and simulation.

(ii) Global Meet 2020 (16th October to 7th November 2020): Four-weeks Global Meet on "Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives" was organized during 16th October to 7th November 2020. Twenty-five international recognized speakers from USA, Germany, France, Japan, Netherlands, Australia, UK, Singapore, Israel & Malaysia delivered lectures covering various aspects of computation research. Leading national speakers and faculty members of BITS Pilani shared their research activities in the multidisciplinary areas of modeling and simulation. Discussions during the collaboration session of the global meet was planned between speakers and BITS faculty to further strengthen the collaboration with partner universities. Broadly, the event covered the themes of computation in optimization and control, multiscale and multi-physics modeling, computation analysis, environmental modeling, dependability and security, computational biology, chemistry-computational biology, computational mechanics and medicinal chemistry. The primary goal of the Global Meet is to strengthen the university's prominence in computational modeling and simulation by catalyzing the transformative use of innovative developments in a wide range of disciplines to achieve lasting social impact. This is one of the various steps towards developing strong collaborations with academic institutes across the world by building a network for academicians and researchers, allowing them to share their research contributions to modelling and simulation, driven by computational technology, thereby nurturing the future generations to become academic leaders in the field of emergent computational systems.

Software Development and Educational Technology

The Software Development & Educational Technology Unit (SDET Unit) incorporates the Centre for Software Development (CSD) as well as the Centre for Educational Technology (CET). The Unit has a mandate to include identification, establishment, deployment and evolution of appropriate educational technology in order to support effective resource utilization of expertise (teaching / mentoring / collaboration) available at various campuses (both existing and upcoming) as well as enable students and faculty involved in various off-campus work-integrated learning programs of the Institute. Research, development and consultancy in those areas of

computing where it has expertise and interest amongst its nucleus members remain the other important areas of the work for the SDET Unit.

The SDET Unit has four specific sets of activities handled by its two wings: CSD and CET. These wings focus on multimedia, E-learning, web-services, live and stored video streaming as current thrust areas. Its CET wing has its mandate to identify suitable educational technology solutions for on as well as off-campus operations of the Institute and helping in their deployment.

The SDET Unit is involved in the Open-source Moodle LMS based deployment for requirements of the Institute in the form of the Nalanda portal. Recently, this portal has been upgraded and deployed over cloud for better scalability and performance. For quite some time now, it has added the live interactive (bi-directional audio/video/text-based) classroom feature to value add its on-campus student population.

The SDET Unit has played the leading role in designing and establishing a University-wide, Integrated immersive Telepresence Infrastructure with seamless support for very high-quality eye-to-eye contact based meetings between people present in four telepresence rooms across all four campuses of the Institute along with integrated multi-campus interactive lecture delivery and recording support for four class rooms spread over all four campuses of the Institute. Apart from this, SDET is facilitating the video /audio conferencing requirement of the Institute for academic and non-academic purposes.

In addition, the SDET Unit is the official enabler for the BITS-BITSAA joint venture known as Project Embryo (http://www.embryo.org) that is aimed at joint efforts by current students, alumni and faculty for delivery of live lectures by specialist alums as well as joint collaborative research guidance by alums and faculty to on-campus students.

Center for Biotechnology

The Centre has in-house facilities of Genetic Engineering and Recombinant-DNA Technology. The objectives of the Centre are to take up research and development projects from various sponsoring organizations, establishments of University-Industry linkage through various R&D contract projects and conduct periodic Workshops and hands-on training for faculty members, industry personnel and students in the area of advanced molecular biology/biotechnology and bioinformatics. The facilities available are Gel Documentation System, PCR Machines (Gradient and Real-Time), Hybridization oven, Gel electrophoresis equipments, UV-Cross linker,Temperature Controlled Water Bath Shaker, Refrigerated Centrifuges, Ultracentrifuge, FPLC, Nanodrop, Concentrator, Cold Room, Tissue Culture Room, Plant Biotechnology facility, Semi-automated Green House, Radioisotope handling facilities, Liquid Nitrogen Plant, Victor-3 Multichannel counter, Gene Gun, Inverted microscope with camera attachment, Fluorescence Microscope, Oxygraph, and – 80°C Deep Freezer. There is an Insectary facility to facilitate research on mosquito-borne diseases. In the year 2020, approximately 140 first degree and higher degree students were trained in molecular biology techniques through various laboratory courses, and over 160 students completed their projects in the area of modern biology through project type courses and first degree thesis and higher degree dissertations.

Centre for Desert Development Technologies (CDDT)

Established with the financial support from BITS Alumni, C-DDT functions with the primary objective of developing world-class desert development technologies for making the desert bloom. It has joined hands with the Jacob Blustein Institute for Desert Research (BIDR) of Ben Gurion University, Negev, Israel to work in the area of desert development. The activities of the centre revolve around developing affordable and technically less esoteric technologies and integrating them with the existing practices of the desert areas of Rajasthan for economic upliftment, employment generation and poverty alleviation of the people of Rajasthan. Last four years research has been focused on the energy efficient houses. For the purpose four rooms were constructed with different architectural elements. Last two years three International papers are published in International reputed journals and two reputed International conferences and one Ph.D. scholar has completed her doctorate along with some first-degree projects at centre this year. Last year the solar house was integrated with rain water harvesting scheme and tank was covered, extended roof is fabricated to harness more rainwater and some roof tops were connected. This year ground is cleaned and leveled to apply contour irrigation system. Downward slope is made to flow the water in one direction.

CENTRE FOR INNOVATION, INCUBATION & ENTREPRENEURSHIP [CIIE-BITS Pilani]

ALL EVENTS IN 2020

1. **Entrepreneurship Week** (2nd February to 9th February): A week dedicated to events centered around entrepreneurship, designed to equip students with important skills associated with starting up. The start of the event was marked by an inauguration ceremony, followed by 6 events in the subsequent days. E-Week concludes with Bedrock, the annual food fest and restaurant management competition.

2. **Panel Discussion & QnA Session with BITSian Entrepreneur Alumni** (1st May): Panel Discussion between Awais Ahmed, Co-Founder, Pixxel, Abhishek Nayak, Co-Founder, Appsmith, Vaibhav Singh, Co-Founder, Visit. The speakers talked about their journey as entrepreneurs and their learnings from BITS and answered questions from the audience.

3. **Introduction to Product Design with Anoop Kumar** (5th May): Anoop Kumar, Product Designer at CREDD talked about product design – and covered topics like creating products that meet the needs of its users through business strategy, data analysis, user experience design, user research, user interface design, motion design, mockups, and prototypes.

4. **BITS to Startup Webinar** (23rd May): Panel Discussion with Abhinav Asthana, Co-Founder and CEO at Postman and Kushal Bhagia, Co-Founder and CEO at FirstCheque.

5. **UI/UX Masterclass & Workshop: A Hands-on Workshop by Aditya Sharma** (5th-6th September): The workshop was hosted by Aditya Sharma, a Product and Visual Designer at Amazon India. He taught the creation of User-Centered Designs that incorporate the Design Thinking process aiming to build amazing experiences with a hands-on training of Adobe XD.

6. **Demystifying Funding: A deep dive into the World of Funding and VCs with Ankur Jain** (19th September): The session was hosted by Ankur Jain, a VC and Founder of HostelFund, a student-focussed Startup Fund. The session aimed to acquaint attendees with the different stages of funding, what to look out for when raising funding as a student entrepreneur and what the world looks like from the eyes of VCs and culminate with a QnA.

7. **Live Podcast + Q&A with Sriharsha Majety, CEO, Swiggy** (20th October): CEL along with Accel hosted a live podcast followed by an interactive Q&A session with Sriharsha Majety, to learn about his First 500 days of Building Swiggy.

8. **Desert Hack** (25th October – 31st October): Desert Hack is a Startup Hackathon established to promote the culture of entrepreneurship among students by giving them the right opportunities and catalyzing brilliant startups. In the online format, the Top 10 teams were shortlisted from a pool of applicants from the Pilani, Goa and Hyderabad Campus. These teams were given 7 days to build their startup ideas, defining their product and business. They were given access to premium resources and one-on-one mentoring session with industry stalwarts. Desert Hack also consisted of 4 workshops and talks to help the teams in their journey. The competition concluded with the Pitching Day where teams pitched their startups to a panel of VCs and competed for a cash prize of Rs 1 Lakh.

9. **No Code App Building Workshop with Thunkable** (26th October): The workshop was hosted by Thunkable, a no-code app building platform. The workshop included a walkthrough of their product and a tutorial on how one can build mobile apps using their platform without a single line of code and will be concluded with a QnA session.

10. **Jumpstart your Ideas with AWS Server less** (27th October): The workshop was hosted by Dhaval Nagar, Community Leader and Consultant at AWS having more than 10 years of experience in the industry. The workshop was instrumental in learning how to deploy an application on the cloud using various cloud computing services like AWS Serverless and a hands-on demo of the AWS Serverless environment.

11. **Journey to Product Market Fit as a College Startup** (28th October): A panel discussion with Kush Taneja, Founder of FamPay and Anirudh Singla, Founder of Pepper Content. The panel discussion aimed to enlighten the audience on how to build a successful startup that solves a problem that actually requires to be solved.

12. **Introduction to Pitch Deck and Pitching** (30th October): Priyanka Madnani conducted a session to help budding entrepreneurs better their pitch decks and deliver a pitch good enough to get the investors to put their money on them.

13. **Chai with Titan Capital || Pitch for raising funds for your start-up** (4th November): Chai with Titan Capital was an opportunity to navigate the investment landscape, understand different funding options, build relationships with the investor to successfully raise external capital. The session consisted of 5 student founders, where the startups could get feedback on their business plans and metrics.

14. **Summer in a Startup (SiS)** (January-October): A platform to provide summer internships to students on campus in prominent startups across the country. CEL connected over 40 startups looking for student interns to BITS Pilani students.

15. **Rural Entrepreneurship Division (RED):** Interacted with people from nearby rural areas and made the basis for viable business model that can be established. Papad manufacturing was finalized.

16. **Conquest** (20th January – 27th September): Startup Accelerator Program. The features of the program were –

- Two tracks: BITSian Track & Pan India Track

- Mentoring Sessions for the Top 80 startups held Online using Google Meet on 6th and 7th June

- Resources worth INR 1Cr to the finalists. Cash prize of 50 lakhs for Pan India & 2 Lakhs for BITSian Track

- Weekly Online Mentoring Sessions for Top 15 Startups from 15th July to 4th Sept

- Founder AMA sessions with established entrepreneurs for Top 15 Startups 10-15th August

- Investment Workshop for Top 10 from 10th to 20th September

- Guaranteed Investment Opportunity

- Pre-Demo Day on 25th-26th September

- Virtual Demo Day 27th September; Chief Guest: Mohandas Pai & Parthasarathy N.S.

17. 26th April 2020 – **World Intellectual Property Day** - CIIE - BITS Pilani and Corporate Legal Cell, ABMCPL have jointly organized an Awareness Program on **'Patentability of Biotechnology inventions and disclosure requirements for biotech inventions'.** We recognize and re-energize the minds that keep our tech, scientific, and creative worlds turning. It is a day to appreciate the laws that protect our intellectual property.

18. 1st May 2020 – Applications invited for the Boot camp of organized International Entrepreneurship Summer School from Entrepreneurship Hub der TU Braunschweig und der Ostfalia Hochschule.

19. 03-04 October 2020 - Webinar on "Battling COVID -19: Challenges & Opportunities in Healthcare and Bio-Pharma Sector" on 03-04 October 2020. This webinar is jointly organized by the Centre for Innovation, Incubation & Entrepreneurship [CIIE -BITS Pilani] and the Department of Biological Sciences and Department of Pharmacy, BITS Pilani - Pilani campus. The Webinar witnessed 225 participants in each session with honorable presence of Minister of Health & Family Welfare – Dr. Harsh Vardhan, Dr. V. G. Somani – Drug Controller General, India, Dr. Jai Prakash - Secretary-cum Scientific-Director (I/C) Indian Pharmacopoeia Commission, Dr. Anurag Agarwal - Director, Institute of Genomics & Integrative Biology & keynote speakers - C. K. Katiyar, Mark. J. Stevens, Suneet Shukla, Vijay Simha, Vibhav Garg, K Chandrashekhar, Vaibhav Singh, Sridhar Ramanathan.

S.No	Activities performed/Conducted in 2020		Outcomes
1	Call for B-Plan Proposals' Jan 20	Applications : 23 Selected for Incubation : 6	Total funds disbursed: **Rs. 42,25,000**
2	Workshop on Startup and Entrepreneurship Development (27th – 28th February, 2020)	Participants : 70 Keynote Speaker : Mr. C.M.Patil, CEO, Deshpande Startups	Sessions: Technology Entrepreneurship Market Assessment Team Building Preparing Business Plan Product Market Fit Fundraising VC Funding
Online Webinars			
4	Stay afloat Stay on top Stay Relevant series	-Stay Afloat in the Predicted Contracting Economy -Stay Relevant to the Changing Innovation Needs -Stay On top by Adopting New Business Models	
4.a	Ajay Chaturvedi	An Engineer from BITS Pilani and a Graduate in Management of Technology from the School of Engineering and The Wharton School of the University of Pennsylvania.	Blueprint for global economy in the post COVID world Building blocks of economy Supply Demand Dynamic Bharathiya Wealth Creating community aggregators
4.b	Real Win Worth - A tool for introspection by Mr. Viswa Sanjiv	Viswa R Sanjiv is a BITSian intrapreneur with 15+ years of experience across multiple functions, from R&D, product marketing & sales.	Risk Mitigation Strategies Venture Funding
5	Design Thinking Workshop by Dr. Pavan Soni	Dr. Pavan Soni has a PhD from IIM Bangalore (Corporate Strategy & Policy), and is a Former Innovation Evangelist at Wipro.	30 participants Design Thinking Concepts Quick Prototyping Customer Centricity Ideation to Business proposal

6	Masterclass on Creativity, Sweat & Focus by Barry Winkless		What budding entrepreneurs can learn from some of the worlds best musical artists
7	Call for Proposals' Aug 20	Applications : 70	Under Evaluation

Partners : HDFC Bank Ltd, Ministry of Electronics and Information Technology

Funding Partners	MeitY, HFDC Bank Ltd
Technology Partners	AWS, Zoho, Exotel
Incubation Partners	100x VC

Startup Glimpse

Name	Description	Website
Nawgati	Queue Management Startup that is incubated at BITS Pilani. The company hopes to solve the Indian Road Traffic Problem using technology.	https://www.nawgati.com/
Adbits	**Hyper Marketing Platform for Businesses**	https://www.adbits.in/
GreyNight	Aims to build Femto-satellite based tracking systems to provide low-cost access to remote sensing data for wildlife monitoring.	
Urbantrack	One stop solution for last mile mobility	https://urban-track.firebaseapp.com/
Mrudajeev Pvt Ltd	An affordable Soil Health detector	
Forganic	Production of biopesticide using local strains	

Centre for Materials Science and Technology

The objective of the Centre for Materials Science and Technology is to develop and implement projects related to modern materials such as smart materials, biomaterials, fibre-reinforced plastic composites and also related to conventional materials such as metals, ceramics and polymers. The Centre undertakes mechanical and non-destructive testing of various engineering materials and products for evaluating their mechanical properties and for evaluating defects such as cracks, voids, delamination, inclusions etc. Other activities include providing consultancy related to materials aspects and testing/development and analysis in the field of materials science and technology in general. The testing facilities available at the Centre include a conventional Universal Testing Machine of 50 Tons capacity, as well as, a fully computerized microprocessor based Electronic Universal Testing Machine of 100 kN capacity, Heating Chamber for UTM for High Temperature Testing, Hounsfield Tenso-meter, various hardness testing machines such as Brinell, Rockwell, and Vickers Hardness Testers, Rotating Bending Fatigue Testing Machine, Combined Bending and Torsion Fatigue Testing Machine, Strain-gauge testing facility, Izod Impact Testing Machines, Digital impact testing machine, Double disk polisher, Inverted Metallurgy Microscope, Erichsen cupping tester, Circular and plane Polari-scope for photoelastic stress measurement, Single Screw Extruder with Calendering and Pelleti-zation Facilities, Ultrasonic Flaw Detectors, Liquid Penetrant Test kit, Magnetic Crack Detector, Eddy Current Tester, Acoustic Emission Testing equipment, Acoustoultrasonic pocket hand-held AU scanner etc. Wet-lab facility and fume hood for polymer fabrication section. Basic Mechanical fault simulator, Data acquisition system for vibration measurement, Tribometer.

Centre for Robotics and Intelligent System

The objective of the Centre for Robotics and Intelligent Systems (CRIS) is to develop prototypes that provide greater intelligence and higher versatility for robotic tasks under ever-changing constraints of the environment. This objective is set forth to make Indian industry competitive by developing indigenous technical skills, manpower and innovative spirit. Each prototype is developed in four different stages viz. (i) Conceptualization, (ii) Algorithmic development and verification in simulated environment, (iii) Real-time testing and (iv) Integration of automated system. The Centre is well equipped with excellent computational facilities; advanced software packages for circuit design, image processing and mechanical design; micro controller and DSP based driver card for real-time experimentation; experimental bed, Pendubot (inverted pendulum), CRS-Plus robot

manipulator, 4-DOF SCARA manipulator, 5-DOF articulated manipulator, 6-DOF ABB-1410 Industrial Robot, Hydra mobile base, Lab mate, mobile base, Allen Bradley PLC Micro Logix 1500,PLC based Hydraulic and Pneumatic Trainers and many other facilities.

The center is geared to provide research facilities in areas such as intelligent robotics and system design, intelligent control, neural and fuzzy neural based system modeling and control, evolutionary computation, robotic vision and virtual reality. Earlier BITSUMO, which is an autonomous assistant robot, was developed to work in restaurant/ library. In addition to these, an autonomous glider, an autonomous hovercraft, a 14-DOF robotic arm, an intelligent mechatronics ball, a micro-mouse platform and a micro-mouse testing base were developed at CRIS. The center is engaged with the development of humanoid robots. The first breakthrough is in terms of Acyut-1 and Acyut-2 (humanoid). Acyut-I is a dancing robot and which has won several laurels even at international competitive events (Rob games 2008 held at San Francisco, USA and INDEEN Expo, Germany etc.), Acyut-II is much larger and far more capable. It has far better control and using remote command by way of hand movements etc, it can be moved synchronously. These models were demonstrated for their capabilities at Korea, USA, Germany and Japan. The students are currently working on further developments related to Acyut-2 robot with added features Acyut-III had participated in FIRA-2010, Bangalore and created a world record in weight lifting (2.4Kg.) in year 2010.

In same year a mobile Robot (named SHAURYA) participated in Annual student contest organized by DRDO, India and received recognition. Team Acyut have showcased their technologies at in the Tech fest of BITS Pilani Dubai campus and IIT Kanpur, Robotics symposium of RDE Pune (DRDO) and Tech test of NIT Calicut. For their effort the team has been appreciated by scientists of BARC Mumbai and DIT New Delhi. Acyut-IV had been invited to participate in ROBOCUP-2013. AcYut was redesigned completely and a novel system of parallel links is introduced. It stood 2nd in Robocup Iran Open 2013 and stood 4th in Robocup Netherlands 2013. Based on the progress in the area of humanoid robotics, Department of Information Technology (DIT) sponsored a project worth 45 Lacs in year 2013-2015, to develop a humanoid which is capable of stable walking and navigate in a structured environment.

The team has continually improved the software for the robot to incorporate artificial intelligence and computer vision. Acyut V can now play autonomous soccer against another robot and score goals. In February 2015 team AcYut demonstrated humanoid walking and image processing technology in HiSens Workshop at IIT Delhi. In July 2015 the team participated in RoboCup China in Teen Size humanoid league. Continuing the good work the team developed software modules with better algorithms for cognition. Other improvements include up gradation of the camera sensor to new Fish Eye lenses and implementation of feedback system for more stable gait. Team AcYut, BITS Pilani's humanoid robotics team, participated in the RoboCup 2017 held at Nagoya, Japan. Team AcYut had been the only participant from India. They participated in the Humanoid Soccer League and the Humanoid Soccer Drop-in league, where they finished fifth and third, respectively, out of a total of 8 teams.

In March 2018, a student team developed Buddy Bot for DRDO competition and became west zone topper. The team participated in the National Level finals competition and won a prize worth Rs. 60,000. Currently the same team is in the process of developing a driverless car with the developed technology and have achieved the autonomy level II so far and working for autonomy level III. The student team is known as Sally Robotics and has been engaged in research based innovations in the above area.

The research at CRIS involves all aspects of creating and controlling robots such as Mechanical design, Dynamics, Perception, Vision, Navigation, Control and Decision making. Current faculty research includes projects in the areas of Humanoid, Autonomous Car, and use of computer vision, motion planning and control, Machine learning Algorithms.

Centre for Renewable Energy & Environment Development (CREED)

CREED is an interdisciplinary Centre that co-ordinates educational and research activities in the active areas of renewable energy and environment. The objectives of the Centre are (i) to conceive, develop and implement renewable energy applications and environment protection projects, (ii) to develop courses and organize awareness programmes, and (iii) to collaborate with external organizations in the areas of renewable energy education, training and technology development. Some of the existing facilities at CREED include an experimental set up for solar water heating, solar air-heating system, solar stills, and solar photovoltaic power pack with storage battery bank, SPV lighting systems, fluidized bed combustor with gasifier and various instruments related to energy audit and solar resource assessment.

Currently, active research areas of CREED include concentrated solar power and photovoltaic power based policy analysis, emissions and environmental impact of thermal power plants, planning and economics of renewable energy systems, real time operation and control of renewable systems, industrial cogeneration, integrated renewable systems, demand side management, clean development management integrated resource planning, CO_2 based refrigeration, biomass based fluidized bed combustion, biomass pyrolysis etc. The faculty members and research scholars of the center have also visited University of South Florida, USA and TU Braunschweig, Germany for the research purpose under institute's schemes.

The Renewable Energy Club is an exclusively a student managed body that operates under CREED. The Club has undertaken active work in organizing competitions, quizzes, carbon footprint analysis and carbon credits.

Commercial organizations in these areas have evolved out of this club, and are currently owned and operated by BITS alumni.

CENTRES ESTABLISHED WITH STRONG INDUSTRIAL SUPPORT

Embedded Controller Application Centre

This Centre was set up in Collaboration with Motorola India Ltd. The objective of the Centre is to impart detailed understanding of important features of embedded controller architectures and familiarization of advanced concepts in the field of embedded controllers through students projects/Industrial projects, Imparting training to the industry professionals and running short term courses in the field of Embedded System design, developing course modules. The infrastructure of the Centre includes High quality computing facilities, Microcontroller Modular Evaluation Systems, Microcontroller Development Systems, Emulators, Assemblers and Cross compilers for various microcontroller families (ARM, ATMEL, Microchip, Cypress, ST Microelectronics, etc.) DSP processors, logic analyzer and other bench equipments. We have received hardware and software license support under the ARM University program and Texas Instruments University Collaboration.

Teaching Learning Centre (TLC)

The TLC activities for the year 2020 are given below:

TLC Goa Conference 2020 (13-15 February 2020)

The Teaching Learning Centre of BITS Pilani, Pilani Campus, Hyderabad Campus and Goa Campus organized a two-and-a-half days International Conference on "Best Teaching Practices for Engaged Student Learning" from 13 to 15 February, 2020 in the K.K. Birla Goa Campus. With 68 participants from various disciplinary backgrounds, the conference included key note addresses, plenary sessions, workshops, and a panel discussion on pedagogy and student engagement by various stakeholders. The keynote addresses were given by noted educationists and pedagogy-specialists like Prof. Pankaj Jalote, Prof. Adrian Lee, Prof. Cecilia KY Chan, Prof. Sahana Murthy, Dr. Rajlakshmi Guha, and Prof. Patrick Das Gupta. They discussed pertinent issues related to effective teaching in higher education, strategies for student engagement, innovative ways to assess learning outcomes and best practices for nurturing students for life-long learning. The plenary session and panel discussion focussed on experiential learning and student engagement both in and outside the class room. 25 participants also presented posters highlighting their unique pedagogical intervention for making learning fun for the students. The "Sparkler Talk", given by ten of the poster-presenters generated a significant amount of interactions and brain-storming. The conference ended with a valedictory and a lot of hope among the participants to bring in some of the prescribed practices to their own classroom teaching.

TLC Online Teaching Workshop Series (6-10 August 2020)

The Teaching Learning Centre, BITS Pilani, Pilani Campus organized Online Teaching Workshop Series featuring three workshops on Pedagogy in Online Teaching, Methods of Online Teaching, and Technology for Online Teaching during August 6 – 10 August 2020. In the first workshop on Pedagogy in Online Teaching, sessions on breakout rooms and use of Socrative app, gluing traditional and online lecturing, online discussions using Slack, use of tablets and mail-merge, as well as the results of students and faculty survey were discussed. In the second workshop on Methods of Online Teaching, two sessions on flipped mode of teaching, and the learning management platform Canvas were organized. In the third workshop on Technology for Online Teaching, sessions on Google classroom and G-suit tools, Microsoft Teams, the learning management system Nalanda for assessments, and some additional tools for student engagement were organized. A total of 680 faculty members registered for this workshop with over 250 faculty members from the Hyderabad and Goa campuses.

Training Session on Online Assessment using Google Classroom and Microsoft Teams (6 September 2020)

TLC conducted a half-day online training on conducting Online Assessment on 6 September 2020. Dr. Virendra Singh Shekhawat and Dr. Avinash Gautam acted as the resource persons in these training sessions. Dr. Virendra Singh Shekhawat conducted the first session on Preparing Quizzes/ tests using Google forms, which was attended by 133 participants. Dr. Avinash Gautam conducted the second session which was on using Microsoft Forms for Preparing Quizzes/ tests and sharing marks after correcting the same. This was attended by 93 participants.

Overall both the sessions were very well received. Both the resource persons answered the questions and cleared the doubts of the participants. The participants found the sessions very useful, as the sessions were conducted just before the Test 1 series which was to commence the coming week.

SAC and TLC jointly Organized Survey on the proceeding of the Online Semester (November 2020)

Both the Students' Academic Cell (SAC) and the Teaching Learning Centre (TLC) realized that due to the COVID-19 pandemic, all the teachers and students were forced to redefine the teaching-learning process in many ways. A remarkable effort was put by both the teaching fraternity and BITS students to mimic the "regular" teaching-learning process in the turbulent times. Earlier, the feedback was taken on the academic challenges that were faced by both the stakeholders due to this emergency shift to online teaching. Based on the survey

results, an online teaching workshop was organized by TLC BITS before this pre-planned online I semester 2020- 21. As uncertainty regarding the reopening of the campus prevailed, the Students' Academic Cell and the Teaching Learning Centre jointly solicited feedback using Google forms on the online mode of education, both from faculty and students in November 2020. This Survey aimed at gauging the effectiveness of teaching and learning using the new methods of teaching and communication such as Slack, Mentimeter, Nalanda discussion forums, etc., from the point of view of both the stakeholders. It also focused on understanding the students' opinions regarding what changes have worked and what aspects need revisiting for better students' engagement in learning. The Survey also intended to know the challenges teachers face in adapting to the online pedagogical practices and their suggestions to enhance the academic rigour and effectiveness.

A staggering number of 1456 students and 110 faculty members participated in this online Survey enthusiastically. Keeping in view that the student and the faculty community were extremely busy due to the upcoming comprehensive exams, both SAC and TLC jointly decided to share the results in an open event in the next semester. The survey was coordinated by Dr. Krishna Etika and Dr. Muhammed Afzal P.

Naya Kshitij: NEP 2020 School Teachers' Training Workshop (21-25 December 2020)

The "Naya Kshitij: NEP 2020 Teachers' Training Workshop" was organized by the Teaching Learning Centre (TLC), BITS Pilani, Pilani Campus, during 21-25 December 2020. In all, 44 school teachers, including eight principals, joined the workshop as participants. The workshop included presentations and interactive sessions by various resource persons to cover various aspects of effective teaching and learning at the school level. This event was the outcome of the half-day webinar on the "New education policy (NEP) 2020 for schools and its implementation in Rajasthan schools," organized by TLC on 26 September 2020.

The STTW was coordinated by Dr. Gautam Singhvi, Dr. Prashant U. Manohar, and Dr. Meetha. V. Shenoy from TLC BITS, and Mr. Deepchand Lakhwan (school teachers' coordinator). Dr. Kumar Sankar Bhattacharya, Dr. Virendra Singh Shekhawat, Prof. Anshuman Dalvi, Ms. Shikha Joshi, Prof. Devika, and Mr. Deepchand Lakhwan acted as the resource persons in the workshop. Mr. Deepchand Lakhwan (Principal, Mahatma Gandhi Government School, Ghardana Khurd), the school-teachers' coordinator, thanked BITS Pilani and the TLC for arranging the workshop. All the sessions included lectures with hands-on training, which were highly appreciated by the attendees. The workshop ended on 25 December 2020. E-certificate were provided to all the registered participants.

Naya Kshitij: Faculty Development Programme (17-22 December 2020)

The Teaching Learning Centre, BITS Pilani, Pilani campus organized a six-day Naya Kshitij: Faculty Development Programme (FDP) 2020 during 17-22 December 2020. The FDP was coordinated by Dr. Tamali Bhattacharyya and Dr. Shibani Khanra Jha. After the great success of the Webinar Naya Kshitij: NEP 2020 for Higher Education on 7 November 2020, the Naya Kshitij FDP 2020, was conducted to focus on hands-on experience to make the faculty future-ready and improve their skills so that they can plan an outcome-based curriculum, Identify and Develop appropriate module and unit objectives of their courses based on taxonomy. The FDP mainly focused on Online Teaching and Technology-Based Enhanced Learning with due consideration to the pandemic situation of COVID, which has created a sudden transition from the classroom to an online platform.

The FDP was attended by 59 participants (Faculty and Ph.D. scholars) from various higher education institutions from across the country, and from Malaysia and Nepal. The resource generated out of this FDP program was used for helping underprivileged school children.

The FDP ended with a formal vote of thanks, and all the participants were given E-Certificates on 22 December 2020. The participants appreciated all the resource persons and the coordinators for their meticulous efforts and urged the TLC to conduct the subject-specific FDPs in the future.

Call of Proposal: TLC Initiative (December 2020)

For the first time, to support the project ideas focusing on developing and improving teaching-learning outcomes by exploring innovative teaching pedagogy and technological interventions in education, the Teaching Learning Center (TLC), BITS Pilani invited the BITS faculty and students to submit their project proposals for funding in November 2020. The last date to submit the proposal was 7 December 2020. Six project proposals in the student category and five proposals in the faculty category were received. With regard to the selection procedure, a committee of four TLC members was set up to evaluate the projects submitted by the students, whereas to evaluate the faculty projects an external expert committee was requested to provide their recommendations on the received project proposals. Based on the recommendation received from both the committees, the following projects have been selected for funding.

Projects selected in the student category:

1. App for Text to Speech conversion of textbooks for visually impaired, submitted by Rohit Sunil Bohr (2017A7PS0225P)

2. Classification of Questions Based on Natural Language Processing and other Feature Vectors submitted by Kaustubh Dwivedi (2017B5A70615P)

3. Intelligent video recording system for the classroom setting. submitted by Yogya Modi (2018A7PS0235P)

4. A web-based Community Forum for BITSian students and professors submitted by Manas Mishra (2017B5A70546P)

Projects selected in the faculty category:

1. Design of Safe and at-home Pharmaceutical Chemistry experiments to enhance learning outcomes during COVID-19 pandemic submitted by Dr. Vaibhav A. Dixit

2. High impact classroom teaching through industrial case studies from an enhanced project database submitted by Prof. P. Srinivasan

All the PIs accepted the offer. This initiative was coordinated by Dr. Ashutosh and Dr. Tamali Bhattacharyya.

B1.12 CENTRAL FACILITIES REPORT

Central Library

The Library collection is 249107 volumes and during the year 2104 new books were added to the existing collection in various disciplines of Science, Engineering, Technology, Pharmacy, Management, Humanities and general reading materials.

113 print journals and 35 online databases were subscribed. The online resources now cover more than 98103 e-journals for accessing full-text articles and databases related to company and industries. The Library received 84 Theses in print and soft-copy format submitted by the Researchers leading to PhD Degrees.

A total of 36829 books have been issued from the library by the students, researchers, staff and faculty members for their academic and research purpose. Online catalogue users in last Five years are 918713.

Library has uploaded over 10196 news links on the library Portal's "Daily News" The new Brainstorm Room as attracted over 16000 students for various deliberations, Group Discussions, Brainstorming sessions. The library also opened a new Research Zone, Innovation Zone and Maker Space with 3-D printer, Higher Performing Computer, Raspberry Pi4, Arduino kit, and other electronic gadgets and IOTs this year which are being heavily used by the students, research scholars and faculty members.

The library has added some more exciting, creative and collaborative spaces like Ideation Zone, Multimedia studio with advanced equipment' like 75" multi touch screen and digital white board, digital camera, High Performance Computer, Video-Audio editing software, etc to support the creative multimedia activities in the institution.

The library has set up a Text Book Counter where the prescribed textbooks are being made available for quick access.

The library staff have been trained to preserve the rare books which are in a very bad shape with brittle and in dilapidated condition using German Tissue Paper nearly 85 rare books have been so far preserved using this technology.

The development of the state of the art BITS Heritage Gallery an ambitious project by BITS Pilani library is in its final stages. To go with it, a portal has also been developed which provides access to digital content covering photographs, Videos of various events and festivals, books and articles on BITS Pilani etc.

 To support the online teaching, learning and research the Library has made available all the digital content like Databases, E-Journals and E-Books on remote access platform known as Shibboleth where all the students, research scholars and faculty members can access the library resources remotely using this platform. For the first time the BITS Pilani Library has added 215 E-Textbooks to support the online teaching and learning this year. This has enabled faculty, students and research scholars to access them during the COVID 19 situation and it is appreciated by the entire BITS community.

As a part of MOU with UGC INFLIBNET, the library has provided URKUND anti-plagiarism software access to all faculty members and it is now the part of the library portal.

The library has also made available the interactive Library portal called infoBITS and Library App for the benefit of all the users during this pandemic situation. As a new initiative the library has made use of the social networking platforms like Facebook, Instagram, LinkedIn, and YouTube to connect well with the modern tech-savvy users.

Awards and Achievements:

BITS Pilani Library has received the following prestigious awards for its excellent services:

1. Wiley's Digitally Transformed Academic Library Award (Non-Government Category)

2. Informatics Innovation Award for Library's Innovation Zone and Maker Space

3. Mr. Giridhar Kunkur Librarian received the Most Dynamic Librarian Award for Excellence & Leadership in Education by Dynergic Business Solution under the banner Golden AIM Awards

4. Mr. Giridhar Kunkur, Librarian received the prestigious AIMS International Outstanding Management Librarian Award 2020

In addition to the above developments the library has organized many events to popularize library services among the library users as well as to put resources to optimum use:

1. Basant Book Festival from 10 -15 February 2020 including a Contest for BITSians on Water Conservation and Reuse: Implementable ideas in Rural Scenario on 15th February 2020.

2. Academic Writing Competition for Research Scholars of EEE department Celebration of National Science Day: 28 Feb 2020 at 5.10 pm.

3. The BITS Pilani Library has made available the free resources on COVID 19 from all leading and reputed publishers to help those who are working or doing research in this area on 6th May 2020.

4. Webinar on Wiley Online Library Online Training: How it can help researchers 11 June 2020.

5. The people and the principles behind Nature: the what, the why and the how - Springer Nature Webinar on 18th June 2020 at 2.30 pm.

6. State Level Online Awareness Programme on PDS-ShodhShuddhi on 17.08.2020.

7. Awareness about how to PUBLISH FAST. OPENLY. WITHOUT RESTRICTIONS by Taylor and Francis on 17th September 2020.

8. Webinar on "How to write good quality paper aimed at International Journals" by Dr. Sailaja Nandigama on 15th October 2020.

9. Webinar on 'EndNote Training & Certification Program Program Schedule by Clarivate Product Experts

   Session 1 | Monday, 26 October 2020 at 11:30AM

   Session 2 | Wednesday, 28 October 2020 at 11:30AM

   Session 3 | Friday, 30 October 2020 at 11:30AM

10. Academic Writing Competition for Research Scholars in collaboration with the Royal Society of Chemistry for research scholars of the Chemical Engineering Department from 25 September to 20th October 2020.

11. Webinar on The Chemical Sciences: A touch of history and the future by Prof. Arvind Sharma, Associate Professor, Dept of Chemical Engineering to be held on 7 November 2020 and Prize Distribution Ceremony for the Winners of Academic Writing competition.

12. BITS Pilani Library organized International Webinar on "Reinvigorating Libraries and Reinventing Librarianship" on January 5-6, 2021.

13. BITS Pilani Library has organized a Virtual Basant Book Festival-2021 from 11-17 February 2021 where all the faculty members, research scholars and students had an opportunity to browse more than 35000 books on various subject areas from ten different publishers and book sellers.

Facts about the library

The statistics indicate that the Library collection has grown steadily. Some of the significant statistical data about the Library are as follows.

1	Current library holdings	249107
2	Books added during the year (2019-20)	2104
3	Total number of Theses	1219
4	Number of print Journals subscribed	113 + 11(Newspapers)
5	E-journals made available on library site through online databases	40651
6	Online Databases subscribed by the Library	35
7	CD-ROM collection (including VCDs)	2,396
8	Total number of reading seats in the library	950
9	Total library area	65,000 sq.ft
10	E-Resources Downloaded per month	72437
11	Number of Study Carrels	34
12	Total Number of Computers	65

13	Total Number of Kindles	03
14	Total Number of Digitized rare books	5000+
15	Total Number of LED Screens	06
16	Total Number of CCTV Cameras	44
17	MakerSpace equipment (IoTs)	30
18	LED Projectors	03
19	Total number of Library users (members)	5608

Medical Centre (MedC)

Medical centre is providing healthcare services through its team of dedicated specialist doctors. Two doctors, Dr. Rajiv Gupta CMO (Physician) and Dr Sanjana R Bhat, Gynaecologist (Dy. CMO)are fulltime doctors available at the centre while other specialists visit on different weekdays.ENT specialist Dr. H.S.Sankhla visits the centre on every Monday and Thursday evenings, the paediatrician Dr. Karan Singh Beniwal on all Wednesday evenings, the Dentist Dr.Sanjay Katewa on all Saturday evenings, the Ayurvedic doctor Dr.Ramesh Jaju on all Sunday mornings and the homeopathic doctor Dr. Diwakar Pathak is available on all Tuesday evenings. Besides these specialist doctors, a General Duty Medical Officer from Birla Sarvajanik Hospital visits MedC for evening OPD's.

There is a computerized system for registration, investigations and procurement of medicines from MEDC pharmacy thereby making all records available in a digital format and making all transactions cashless. Medicines from the pharmacy are available on prescription only. The pharmacy remains open till 12 midnight on all working days.

MedC has a fully equipped 1 bed emergency observation room equipped with emergency medicines and multi-parametric patient monitor to take care of any medical emergency.Since the lockdown started ,we are running tele consultation at Medical Centre.

Medical centre has a well-equipped clinical laboratory. Besides having fully automated biochemistry and haematology analysers, machines for performing glycosylated -haemoglobin (test for diabetes), serum electrolytes and urine comprehensive examination tests are available. Computerized ECG machine, a spirometer and a digital dental X-Ray unit are also available at MedC. Installation of a new automated immunoassay analyser, for carrying out the Thyroid function test and Serum 25-hydroxy Vitamin D3 test, Hepatitis-C, has been done.

From 1st March 2019-31stApril 2020, medical centre recorded a total of 14149 new patient visits and 18278 were old registrations. 4913 patients underwent various haematology and biochemistry tests.

Besides curative services, the doctors at MedC provide preventive services by sending Emails to the students and staff on various topics of public health importance. The topics covered range from adolescent health, anaemia, nutrition and health, obesity, osteoporosis, diabetes, cardio-vascular diseases etc.MedC has also been conducting health camps at various villages adopted by NSS in collaboration with NSS students.

.Medical Centre has been chosen as a primary care centre for BITS employees covered under ESIC scheme since September 2017.Besides the routine outdoor services provided to these patients, special medical camps are being organized for these patients from time to time. The entire process is computerized, the details of which are provided to ESIC on a monthly basis.

New additions at MedC in the year 2019:

Tread Mill Test

New additions at MedC in the year 2020

Certain new test are being conducted in collaboration with Lal Path Lab Jaipur e.g:- PSA (test for prostate), Vitamin B12

BITS Coop

The BITS Consumers Cooperative Stores Ltd. Continued to extend its services to the staff and students of the Institute. Its total membership as on 31st December 2019 was 4785 consisting of 816 staff members and 3969 students. They were holding 4080 major and 15186 minor shares of the stores. The scope of its activities covers the following:

1. Sale of groceries and vegetables to the staff members;
2. Supply of stationery and general merchandise;
3. Supply of consumables, stationery, equipment and other materials to the Institute and Books to Library;
4. Supply of books to the students;
5. Running a bookshop and organization of a permanent book exhibition;
6. Providing computer and mobile repair services; and Running a Medical Store in the Medical Centre of the

Institute.

Blossom Kids-Zone (BKZ)

The Blossom Kids-Zone (BKZ) is run voluntarily by faculty wives and it takes care of the pre-school training and education of the children in the age group of three to five years. The center primarily caters to the needs of staff children belonging to BITS and the sister organizations.

Institute Functions

Institute functions have been the integral part of BITS as an organization/ institution. In year 2020, BITS Pilani, Pilani campus, as usual practiced in the past, saw the magnificent celebrations of its five institute functions throughout the year viz. (i) Republic Day (26th January), (ii) Founder's Day (Basant Panchami), (iii) Ram Navmi-Birthday of Founder Chairman Shri G. D. Birla (14th April), (iv) Independence Day (15th August), and (v) Gandhi Jayanti (2nd October). Herein, students, staff and faculty enthusiastically attended all these functions and graced the occasions. Over all this, there had been the constant and unconditional direction and support of Vice Chancellor, Director, Dean (Administration) and other Deans (divisions) and Unit Chiefs (units) for all these institute functions.

BITS House Allotment Committee (BITSHAC)

Estate Management Unit also looks at house allotments to staff members of BITS Pilani (BITS House Allotment committee (BITSHAC). The Primary aim of the BITSHAC is to streamline regulatory guidelines for the allocation of accommodations to Staff members and implement a transparent and a fair policy in a consistent manner so that all applicants with similar eligibility characteristics are treated alike with openness while maintaining individual confidentiality to requesting Staff members, following 'Best Practices and Framework of Guidelines', keeping in mind the circumstantial variability and complexities. BITSHAC acts in a manner to encourage equal opportunities and will seek to ensure that information on the Allocations Policy gets disseminated in a consistent manner. The BITSHAC invites applications against a circular / notice from Staff members on a monthly basis in a prescribed format or as and when vacancy arises and does the allotment as per guidelines framed. The document on guidelines has been framed and the same implemented in all campuses with slight variations based on local environment.

BITS Staff Housing Group

The BITS Staff Housing Group constituted in the year 1989-90 by the Institute. For helping the BITS Staff members for having personal houses in the new campus, "Gyan Vihar". The Institute has provided Rs. One lac Fifty Thousand as soft loan to staff members for the construction of the houses. Forty staff members have constructed their houses and many other staff members are planning to start the construction work soon. Both the sectors have been provided with urban electric supply. Two new-cemented road of 300 feet long has been added in sector number one. Streetlight has also been provided. All activates of the Gyan Vihar are under Public Relations Unit.

Loan facilities for Staff members

(i)   Staff Furniture Loan

Under this scheme the staff members get interest free loan re-payable in twenty four monthly installments. Institute provided Rs. 4,80,000/- as loan to 48 staff members for the purchase of various furniture items.

(ii)   Computer Loan

This facility was started in the year 1999 for the purchase of computer for personal use by staff members with a simple interest of 6% per annum. It is being utilized effectively by faculty.

(iii)   Housing Loan

The Institute provides the housing loan upto Rs. 1.50 lacs to staff members for the purchase/ construction/ renovation of houses.

Publications and Media Relations

Publications and Media Relations Unit brought out the following publications during the year: (i) Annual Report (ii) Annual Report – a quick glance (iii) BITS in the News (iv) Bulletin (v) BITSCAN magazine (vi) Visting cards and Letterheads, (vii) Planner (viii) Brochures etc. Besides, the unit gave effective support for coverage of Institute events in the media which is evident from the large amount of media coverage BITS received (both in national and local press) during the year. PMRU regularly sent latest news to the web team of the Institute for updating on the Institute website. Also the PMRU team provided support to various departments and student bodies in branding matters while bringing out their publications, posters, brochures, invitations, etc.

Reprography Section

The Reprography Section takes care of all the in-house printing, binding, and photocopying work (e.g. printing of institute bulletin, annual report, various information brochures, time table, academic regulation, answer booklets and project reports for submission to various Government and other funding agencies). The printing and binding sections have been fully equipped with facilities like off-set B/W printing, heavy-duty photocopier machines, cutting, laminating, stitching, spiral binding, etc. Reprography has a separate question paper printing/copying facility where the scripts related to assignments, tutorials, quizzes, test and comprehensive examination for all courses offered in on-campus or off-campus programs are printed.

Apart from Institute work, the reprography section also caters to the printing and publishing needs of staff and students. Services like photocopying of journal articles, laser printing, binding and lamination of project reports are available. Reprography also supports printing requirements of various student activities like OASIS, APOGEE, BOSM and other activities undertaken by various clubs and associations. The printing and publication requirement of conferences and workshops organized in the Institute is also supported by the reprography.

The following facilities are available for the benefit of students and staff members.

1. Dispatch facility: All the Institute dispatch requirements are catered through reprography either through ordinary/ speed post facility available at the VidyaVihar Post Office, Pilani or through private courier and cargo carriers for both domestic and international destinations as per needs.

2. Photocopying and allied facilities: Photocopying, printing, word processing, binding and laminating facilities are available for students and staff on chargeable basis at the Reprography section. Photocopying service is also available at the BITS Library.

3. Photography facility: Nikon Camera and Flashlight (Set 1: D7000 & SPEEDLIGHT SB-910; Set 2: D7500 & SPEEDLIGHT SB-5000), Umbrella Light (Problitz 300D), Tripod (Manfrotto, 498RC2) and Photo editing

4. Document Designing: Notification poster and advertisements of BITSAT, ME & Ph.D. admissions, faculty recruitment; Cover page designing of Annual report, Bulletin, Research at BITS, BITScan, BITS in the News, News in Alumni, etc.; Greeting card designing; Digital advertisement preparation, All the above-mentioned designing as per BITS Brand guidelines using Adobe creative cloud software.

Instrumentation

The instrumentation unit undertakes regular and annual maintenance of laboratory instruments across the Institute. Instrumentation provides an LCD projection facility for regular class-work in classrooms, workshops, conferences, symposiums, and other academic and cultural activities across the institute and also performs preventive maintenance for these projectors. The instrumentation unit facilitates all the institute programs with high-quality public address systems, digital mixers, loudspeakers, and Lighting equipment to make the events more effective and lively. The instrumentation unit also takes care of digital TV installation and recharges in all the hostel's common rooms.

All classes have been equipped with a projection and microphone facility supported by UPS. Unit has procured some state of art instruments like Kramer switch, multiplayer, Logitech presentation remote, 4 Unit x LED par 64 LED stage par cans light, 36x3W RGB DMX RGB Infinite color mixing with Control mode: Work Auto, Sound Active, Master/Slave, DMX512, LED control panel, Irradiant SRC-146 Lighting Controller, 24 Channel Lighting Controller and also providing Videography using Panasonic memory card camera-recorder.

The instrumentation unit also provides mobile and a cellular connection to faculty and staff members. The instrumentation unit also provides an announcement system in MB Hostel and periodic bell system for classrooms and offices in the institute.

Central Workshop

The Central Workshop of the Institute has shifted to the 2600 sqm new building. The new workshop; in addition to imparting training to the students and catering to the maintenance and research needs of the Institute; is also designed for the 'design to test' concept. When fully functional, any student having an idea can design, prototype and test the part/product in the workshop. CNC machining, Reconfigurable Mini CNC machining, Foundry, Forming, Welding, Carpentry, Advanced Metrology, Learning Factory, Sustainable Manufacturing & Life Cycle Engineering are fully functional. Major equipment added during the year are: coordinate measuring machine (CMM), contour measuring system, vision measuring system, surface roundness tester, profile projector, microscope, micro hardness tester, 4 CNC turning and milling centres, 63 tonne power press, power tools, TIG & MIG welding and dynamometer. The workshop is equipped with state of the art metrology lab and dustless carpentry shop. Students' training consists of training all integrated first degree students through the course 'Workshop Practice' by imparting skills in various manufacturing processes. In addition, students are imparted training for other courses like 'Production Techniques', 'Metal Forming and Machining', 'Casting and Welding', 'Computer Aided Manufacturing', and 'Flexible Manufacturing Systems'. Apart from routine maintenance, fabrication and training, the workshop also accepts jobs on precision fabrication of project work of students, staff and research scholars.

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Software Development and Educational Technology Unit

The Software Development & Educational Technology Unit (SDET Unit) incorporates the Centre for Software Development (CSD) as well as the Centre for Educational Technology (CET). The Unit has a mandate to include identification, establishment, deployment and evolution of appropriate educational technology in order to support effective resource utilization of expertise (teaching / mentoring / collaboration) available at various campuses (both existing and upcoming) as well as enable students and faculty involved in various off-campus work-integrated learning programs of the Institute. Research, development and consultancy in those areas of computing where it has expertise and interest amongst its nucleus members remain the other important areas of the work for the SDET Unit.

The SDET Unit has four specific sets of activities handled by its two wings: CSD and CET. These wings focus on multimedia, E-learning, web-services, live and stored video streaming as current thrust areas. Its CET wing has its mandate to identify suitable educational technology solutions for on as well as off-campus operations of the Institute and helping in their deployment.

The SDET Unit is involved in the Open-source Moodle LMS based deployment for requirements of the Institute in the form of the Nalanda portal. Recently, this portal has been upgraded and deployed over cloud for better scalability and performance. For quite some time now, it has added the live interactive (bi-directional audio/video/text-based) classroom feature to value add its on-campus student population.

The SDET Unit has played the leading role in designing and establishing a University-wide, Integrated immersive Telepresence Infrastructure with seamless support for very high-quality eye-to-eye contact based meetings between people present in four telepresence rooms across all four campuses of the Institute along with integrated multi-campus interactive lecture delivery and recording support for four class rooms spread over all four campuses of the Institute. Apart from this, SDET is facilitating the video /audio conferencing requirement of the Institute for academic and non-academic purposes.

In addition, the SDET Unit is the official enabler for the BITS-BITSAA joint venture known as Project Embryo (http://www.embryo.org) that is aimed at joint efforts by current students, alumni and faculty for delivery of live lectures by specialist alums as well as joint collaborative research guidance by alums and faculty to on-campus students.

Centre for Software Development (CSD)

Software Development and Educational Technology Unit (SDET Unit) at BITS-Pilani is primarily responsible for in-house development of applications, web site development & maintenance, development of mobile applications, and conduct of short term certification programs pertaining to new and upcoming software development technologies.

Information Processing Center

Information Processing Centre (IPC) provides computing facility for students and staff of the Institute. The Centre is responsible for planning, need forecasting and maintenance of computing resources across the Institute. The Centre has signed campus agreement with Microsoft and MATLAB for licensing their product & tools.

With a view to upgrade the computing resources, across the Institute, 30 desktop machines, 30 Laptops, servers, network equipment and a few printers & peripherals were purchased. During the year, Centre has been involved in setting up of Wi-Fi based 600 node network in girls and boys hostel, implementation of identity based access control, Deployment of Biometric attendance systems, and implementation of first phase of campus wide surveillance system using more than 100 CCTV cameras. The Centre has also successfully completed the deployment of 250 port Giga bit network for faculty housing.

The Centre is responsible for maintaining and upgrading the campus wide 5000 data port wired and Wi-Fi network. With the augmentation of existing facilities, the Centre has been able to support conduct of online examinations, structured and unstructured labs for more than 30 courses offered by Computer Science and other departments. The Centre has also been involved in supporting the number of workshops and training programmes conducted in the Institute. The IPC is open on all days throughout the academic session from 08:00 A.M. to midnight and it is closed only for 3 days in every semester. The details of existing facilities in the IPC are given below.

The Center also offers number of high-end computer servers to its users currently it has 16 node HPC cluster, 5 GPU servers with Nvidia tesla cards, and 15 numbers of Intel based SMP servers. These servers offer, variety of operating systems and development tools to the faculty and students. In addition to the servers, the center has 7 labs equipped with 350 latest desktop machines. These systems operate under Linux and Windows environment and support variety of compilers database and software tools such as C, C++, Java, and Microsoft Visual tools, MATLAB, and Rational Rose etc. The central computing facility specifically takes care of the bulk computing needs of under graduate, masters and Ph.D students .

Apart from the above mentioned centralized computing facility, the various departments have their own specialized computing facility.

The BITS Intranet

IntraBITS is a collaboration-category intranet portal deployed and supported by the Software Development and Educational Technology Unit (through its Centre for Software Development) since 1999. Its principal objective has been to enable the faculty and students to leverage appropriate software technologies in the On-Campus educational (teaching, learning, sharing) process. The followings are some of the highlights of the BITS Intranet. This portal has gradually expanded to multiple independent sites linked to it.

- An On-line Learning Management System (Nalanda) built in 2010, atop LAMP and Moodle platforms provides a complementary globally accessible service that aims to serve the entire community, both students and faculty members.

- An online IPC Complaint Management System that provides facility for registering network connectivity related queries of the campus community.

- The BITS Intranet is serving as a vibrant medium for exchange of academic and other ideas among students and faculty.

Human Resource Section

The inception of the Human Resource Section was from September 12, 2018. Subsequent to its creation, CAHU ceased to exist.

The Human Resource Section shortly known as the HR-Section is a facility that maintains the employee personal records, executes the payroll (through ERP), recruits' employees, appraises the employees through the PMS process, organizes training and development programmes for the non-teaching staff, handles the day to day general administration activities for the campus. Some of its key activities are mentioned below:

Activities like appointments, employee on-boarding during recruitment. The Performance Management System (PMS) looks after Promotions, Regularization of the non-teaching staff. Employee Welfare & Statutory Activities like the PF (maintained for all the Indian Campuses), ESIC, Family Pension, Loans (for e.g. Furniture loans, Computer loans & Housing loans) School Education Fee Reimbursements, Medical Bills Reimbursements, Reimbursement of Relocation Expenses, LTC, and any kind of welfare support required for the employees are catered by this office. Issuing Certificates, letters to the staff based on the need. Constant updation of employee information, Disciplinary Actions are some of the major activities handled by this office.

Central Analytical Laboratory Facility

Central Analytical Laboratory (CAL) at BITS Pilani, Pilani campus houses many sophisticated instruments, catering to the needs of the various research Departments like Pharmacy, Biological Sciences, Physics, Chemistry and Chemical Engineering etc. The facility is used for training and teaching of the students as well doctoral research. CAL has a spacious area of 2600 sq.ft and is equipped with latest instruments that includes - Stability Cabinets (For stability testing of drugs and organic molecules), UV-Visible Spectrophotometers, UV-Visible-NIR Scanning Spectrophotometer, IR Spectrophotometer, FTIR Spectrophotometer, Scanning Spectroflourimeter, High Voltage Electrophoresis, Digital Polarimeters, Ultra and Refrigerated Centrifuges, Differential Scanning Calorimeter, Gas Chromatography, High Performance, Liquid Chromatography (with auto-sampler and various detectors), Thermogravimetric Analyzer (Shimadzu), Impedance analyzer, Particle Size analyzer, Rheometer, Ellipsometer and Elemental Analyser (vario MICRO cube). High end equipment's such as 400 MHz NMR spectrophotometer (Bruker AVANCE III), Atomic Force Microscope-Surface Enhance Raman Spectroscopy, Gas Chromatography-Mass spectrometry, Field Emission Scanning Electron Microscope have also been installed. Recently the laboratory has been upgraded with Confocal Microscope. Currently the facility is capable of carrying out research work at all levels including the industrial projects. Apart from using the Central Analytical Laboratory facilities for teaching and training of the First Degree and Higher Degree students, it is extensively used for dissertation and doctoral research, faculty research and consultancy work. It is also used by scientists/faculty from other nearby organizations.

Central Animal Facility

Central Animal Facility at BITS Pilani, Pilani campus is a CPCSEA approved facility with total floor area of 5330 sq. ft. The facility is also approved for in-house breeding of small animals. The facility maintains the animal species like Rats, Mice, Guinea Pigs, Rabbits and Hamsters. It was build up in accordance with guidelines issued by CPCSEA and other regulatory bodies. It is also equipped with incinerator (electrically operated) facility for disposal of the biological and other biomedical waste. The air conditioned facility is maintained by well trained personnel, with a full time veterinarian to take care of the various requirements of the animals. Central Animal Facility caters to the needs of the various research departments like Pharmacy, Biological Sciences and Chemistry, etc. The facility also incorporates Pharmacokinetics, Pharmacodynamics and Pharmacology research laboratory for carrying out advanced research in the areas of pre-clinical pharmacokinetics, bioavailability studies, pharmacological screening of various synthetic/natural origin drugs. The laboratory has sophisticated instruments such as two chamber automated organ bath, laser doppler, noninvasive blood pressure recorder, semi dry transfer apparatus, microtome, RT-PCR, electroconvulsiometer, actophotometer, analgesiometer, light dark apparatus, rotarod etc. Equipments such as surgical anesthesia machine, electrical cautery, deep freezers (-20 and -80°C) and spare air-conditioners are also utilized. The laboratory is upgraded with video documentation system for various animal behavioral studies. Facility is geared to take up various industrial or governmental funded projects in various pre-clinical areas. Recently Air Handling Units and Large Scale Autoclave have been installed.

B1.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS

Maintenance, Renovation and Construction

Apart from carrying out routine maintenance of the Institutional, Hostels & Staff Quarters buildings, Infrastructure facilities like Sewage Treatment Plants,33KV Electrical Sub Station, Roads, Footpath and Street Lights, the following works were taken up during the year either as new construction or as renovation:

Works Completed

1. BEED Gate – Safe attendance provision & water tank installation with supply.

2. Garden Development work at Beed gate side

3. Construction of Shade and road at Beed Gate.

4. Installation and operation of Pedal operated Hand wash machines- 3 Nos. at BITS Gates (Jherli pedi, Main Gate and Beed Gate) to prevent spreading from corona virus in public interest.

5. Provision of Toilets (8 Nos.) & Ramp (2 nos.) for differently abled persons.

6. Provision of Ramps in various buildings in Institute premise.

7. Research scholar space (Maths) and converting two toilets into three in old work shop.

8. Provision of 34 Cubicles and one meeting room in FD-II (R.No. 2219, 2220,2223).

9. Refurbishing of Director's Residence.

10. Chemistry Lab ready in FD-III R.No. 3139, 3209 & 3210.t

11. Fume hood installation in FD-III Chemistry lab 3101 – 3103 & 3139 (8 nos.) with provision of water supply & drainage system.

12. Provision for research scholar lab Room No.2212

13. Conversion of class room into Robotic lab Room No.2211

14. Installation and commissioning of electrical wiring in Chemistry Lab Room No. 3139.

15. UGC Visit - Complete external painting after all necessary repair work of Library, Animal house, Research Lab, STP-2, FD-II & FD-III complete internal lime wash, got ready Mal-A, RAB, BUB, GNB, KRB,VKB, MB old Block, SAC front, Administrative block, V fast hostels rooms & old portion QT & Kitchen Area, LTC front road, Corridor & classes, New workshop front, Auditorium Back stage & Cafeteria.

16. Aluminium partition work done in New Science Block corridor to face lift.

17. Concrete plate form & Fencing around bore wells.

18. Stainless Steel Railing in all entrance portal staircases of NAB.

19. Vacating of FD-III North wing for renovation (plumbing, false ceiling, furniture removal, B/W partitions removal.

20. Provision of Paper setting room (18'X18') in FD-III 2133 Admission office by dint of False ceiling, Aluminium partition, Air Conditioning, PVC flooring & Window blinds & Painting.

21. Epoxy painting on all the exposed pipes of Chiller Plant.

22. Replacement of Cloth curtains with vertical roller blinds (Accounts & Finance office , SRCD 2146 E, Seminar room 2146 – B, Alumni office 2247 N, FD-II 2164 total 19 nos.

23. Shifting of Reprography in FD-III 3161,3162 & 3135 that included preparation of Head reprography's office including Aluminium work, air conditioning & Anti termite treatment.

24. Cleaning of FD-III Back to support Project Parivartan Team for raw material laying.

25. Office space refurbishing with aluminium partition & false ceiling Cluster – 1 office (2 Rooms) & SRCD office.

26. New Work Shop - Correction in Foundry furnace, GI Corrugated sheet shed, Concrete plate form & Railing.

27. Complete painting of pipe lines, grills and other MS Structure in the Cooling plant of NAB.

28. Fence on boundary- Mal Studio Apartments including new pole grouting(100 Rft)

29. Construction of 525 Rft Path way in Meera Bhawan Hostel to connect block V, VI & IX to mess during renovation of MB III & IV.

30. Shifting of Work shop store from Old Workshop to New with a provision of partition wall separating it with electrical panel room.

31. EMU office – Provision of Estate Manager new chamber, Work stations and shifting of Building Store staff by construction of Wall, False ceiling, flooring & Painting.

32. Development of new chambers & work station including false ceiling in Registrar office.

33. Provision of space for Reprography & Glassware in FD- III 3136 & for AUGUS in FD-III 2152.

34. Old chairs & sofa refurbished in Director's office visiting area.

35. Painting work carried out in IPC & CSIS office & lab

36. Maintenance and face lift in Staff quarters (TSF 4 Blocks, D-Type quarters-4 Blocks) converted into Research Scholar Hostels. Installation of new RO & Water cooler in the common area of Bock-No-21 & 21-A.

37. In view of renovation glass ware store room shifted from FD-III 3251 to 3218 & 3137.

38. Providing hut in nursery for electrical cables shift from FD-III.

39. Installation & Commissioning of 45 KWp Roof Top Solar Power Plant on Krishna bhawan roof.

40. Installation of New Electrical wiring in FD-2 in 2218, 2212, 2219, 2220, 2221 & 2223 for cabins for the faculties.

41. Installation and commissioning of 05 numbers of street light poles working with solar power on Bhagirathi Marg in view to enhance the green power energy

42. Installation and commissioning of street light pole –4 Nos. on Poorvi Marg –II to increase the lux level of light in night on road.

43. Change of existing CFL type surface light with LED light -60 Nos. in library.

44. Provided electrical connection for new project of IPC (LRE network replacement project) in staff quarters.

45. Installation, Testing & commissioning of New electrical wiring with conduit at rotunda, NAB building view there was no provision of conduit for electrical wiring due to which frequent breakdown in light circuit.

46. Plantation of 550 in number tree in campus at various locations and development of garden at new Workshop and Cluster -1

47. Ensured and maintained quality housekeeping standard in Institutional Buildings, Student Hostels, Residential housings and Road network in the campus.

48. Ensured effective Sanitization work manually with battery operated spray machine and by using fire brigade with collaboration of Vidya Vihar Nagar Palika to prevent spreading of Corona virus in the tough time of Covid-19 pandemic year.

49. Establishing & maintaining segregated waste – dry/wet collection from residential colonies in the campus.

50. External Painting in staff quarter (60 Nos.) for face lift & Internal Painting in (22 Nos.) quarters.

51. Mesh Fixing work in Block No. 500 & 501 in New Faculty Housing to prevent Pigeon menace

52. Development of two wheeler parking at EMU office

53. SITC of TSE water Supply in Vyas Bhawan, Meera Bhawan 3,4,5 & 6 Block & some staff Quarters.

54. Replacement with new water coolers & AC in Institute & Hostels view ageing more than ten years.

55. Boring and Installation, Testing & Commissioning of New Bore well in campus.

56. Installation and commissioning of New RO -11 Nos. in campus & one in number - 50 Ltr/Hr. RO in Gym ground for availability of purified water for users.

57. Installation & Commissioning of 35 new Air Conditioner in Campus in FD-II & FD-III.

58. Laying of 2.5 Inch HDPE pipe line for interconnection between BW-06 & BW-08 to maintain the required water level reservoir.

59. Installation & commissioning of new water meters -62 Nos. in Staff quarters for monitoring the consumption of water.

Works in Progress

1. Construction of Rain Water Harvesting tank (Capacity – 15000 litres) with boring for recharge pit behind housing (Block 233 & 234) and Construction of Rain water collection tank and pipe line laying in FD-III Lawn & Ram Bhawan premise.

2. Provision of two wheeler parking in FD-II - M Lawn.

3. Development in Creation of Ideation room at Library.

4. Renovation of Suit room (R. No. 6 & 7), Conference hall & Dining Hall at V Fast Hostel, Refurbishment of HoD (EEE) office (Furniture, PVC flooring, painting) and Face lifting of Seminar room (AGSRD – 2146 – B) (Furniture, PVC flooring, painting)

5. Road Survey in progress for finalization of BOQ for road construction

6. Pigeon Protection work in New Work shop at back side gate.

7. Development and providing of space for research scholars in FD-II 2233 & 2235 by means of False ceiling, painting, New work stations (40 nos.).

8. Liaising with Project Parivaran Team for Taking over 44 renovated houses, renovated hostels (MB-III & IV) on completion.

9. Provision of four wheeler parking in GNB & BUB and two Wheeler parking in RAB & KRB.

10. Changing of old faulty street light cable with in new one in campus at various location

11. Electrical wiring works in room 2233 & 2235 in FD-2.

12. MEP support work during the Renovation work of Polycam conference room in central block (Room No.2246).

13. Garden Development work at Dakshin Marg Park, Poorvi Marg-II along with 374-375,   Mandir Marg Park Near Faculty Housing and opposite building store

14. Installation of 100 No. of M S litter bin stand in ROW & hostel Budh Bhawan, Meera Bhawan (III & IV block) and Vyas Bhawan for better litter/waste management.

15. Installation of 50 No. of Aluminum framed soft board to display check lists at washrooms in the Institute buildings and the two hostels Shankar Bhawan & Vyas Bhawan for better monitoring and supervision of housekeeping services.

16. Installation of 700 No. signage for firefighting extinguishers and 200 No. signage for electrical informative displays in Institute buildings & utility buildings for effective operation and safety.

17. Construction of 11 Brick Garbage bins with Pedal operated cover system in campus residential & Institute area, replacing the old precast open type Garbage Bins for hygienic handling of waste.

The developments taken place during FY 2019-20 and proposed developments during FY 2020-21, 2021-22 under **"Project Parivartan"** - Modernisation and Re architecture of existing infrastructure, BITS, Pilani:

1. Hostel infrastructure:

The renovation of Meera Bhawan – Girls Hostel Block 3&4 are completed on 15th November 2020.

The renovation & augmentation of Boys Hostel -Vyas Bhawan is in completion stage with an enhanced seating capacity from 246 to 400 nos.

The renovation of Shankar Vyas mess work is in progress and target date of completion is March 2021. The seating capacity in Dining area is 300nos.

Tender Negotiations are in progress for renovation of Meera Bhawan 1&2 –Girls Hostel & renovation & augmentation of Rana Pratap Bhawan –Boys Hostel.

Further, Tender process is in progress for the renovation & augmentation of Ashok Bhawan (Boys Hostel) and Renovation of RP Mess.

2. Staff Residential accommodation:

Renovation & augmentation of Old - Faculty Housing type C1, D1, E1 - 44 houses is completed in August 2020.

3. Academic Buildings:

The renovation of Faculty Division block FD3 phase 1 is in Progress. There are proposals to take up FD3 phase 2 during this FY 2021-22.

4. Infrastructure facilities work:

Infra Plumbing work for entire campus is in progress.

B1.14   MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR

Centralized purchases unit processes and monitors purchase of equipments and consumables of the institute & also looks after the repair requirements of the equipments. The purchase process includes request of quotations, preparation of comparative statements, indents, bill checking and status reports of purchase. The entire process is managed by computer database containing more than 6000 types of consumable, equipments and 2500 suppliers. The whole process being computerized ensures efficient monitoring, timely acquisition of materials, keeping track of delayed or deferred supply and concurrent remedial action.

Purchase of consumables: The annual purchase list for consumables are finalized by considering the institute requirements and existing stock. The consumables are computer stationery, chemical and glassware, electrical and electronic spares, workshop items, reprography items and sports items. The category in-charges process the requirements of individual groups, units, and divisions, and compile them into a consolidated list. The consolidated list of consumables, along with the estimated budget, is presented before the purchase committee. The purchase committee gives approval to this list after scrutinizing it and suggesting necessary modifications.

Purchase of equipment: The equipment purchase of the institute is normally done under various government sponsored grants like CSIR, DBT project, DST, DST FIST, DBT, etc. and also through the BITS non-recurring grant. The purchase of equipment essentially involves interaction with the user and approval from the purchase committee with regard to the type of equipment, cost, budget head, terms and conditions of purchase, import components etc. On approval, the normal process of purchase is undertaken and in cases of imported items, the required protocol is followed.

New equipments acquired: New equipments purchased in this calendar year include more than 1650 in various engineering and science disciplines for BITS-Pilani. Some of the equipments are also purchased for BITS-Pilani, Goa Campus and BITS, Pilani-Hyderabad Campus. Computational facilities have been substantially strengthened by addition of computer systems and networking hardware. The list of major equipment added during this year for various courses are included in the **Annexure - B1-12.**

Equipments and Accessories for BITS Admission Test (BITSAT)

BITSAT is for admission to integrated admission program for all the three campuses of BITS-Pilani at Pilani, Goa and Hyderabad through a computer based online test conducted by BITS. CPU Procured items like servers, cables, firewalls, laptops, printers, scanners, etc. for this purpose.

B1.15   STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS

Students Union

The Students' Union elected the following executives for 2019-2020:

President	-	Rahul Bubna
General Secretary	-	V Abishek Balaji

Hostel Representatives

Bhawan	Name
Ashok Bhawan	Arun Singh Tomar
Budh Bhawan	Konepalli Bhanu Prakash Reddy
Bhagirath Bhawan	Keval Nandu
CVR	Anmol Awasthi
Day Scholar	Nishchit Soni

Vishwakarma Bhawan	Aman Shukla
Gandhi Bhawan	Vaibhav Kaushik
Malviya Bhawan (A&B)	Egna Praneeth Gummana
Shankar Bhawan	Saksham agarwal
Malviya Studio Apartments	Deepak Gadakh
Meera Bhawan 12378	Likitha Madala
Meera Bhawan	ESHA PAHWA
Ram Bhawan	Reventh Sharma
Ranapratap Bhawan	Kumar Shivam
Krishna Bhawan	Sanyam jain
SR Bhawan A&B	SHAYAN MAJUMDER
SR Bhawan C&D	Harsh Shukla

Secretaries of Clubs

The following were elected Secretaries for various Clubs and Societies:

Coding Club	Divyanshu Mahajan
BITS Embryo	Sanskriti Jindal
Fashion Parade	Manan Kukreja
Film Making Club	Utsav Bhadra
Gurukul	Jaideep Khare
Dance Club	Devansh S. Mishra
Hindi Activities Society	Isha Shaffir
Matrix	Ved Sadani
Mime Club	Rushi Babaria
Mountaineering Club	Vaibhav Gupta
Music Club	Hemant Agarwal
Nirmaan	Shubhechchha Mudras
Nation Service Scheme	Pratik Jain
Oasis English Press	Sabhya Kapur
Oasis Hindi Press	Manaal Parikh
Photography	Satwik Chauhan
Poetry Club	Mankrit Singh
Punjab Cultural Association	Divyanshi Dubey
RadioAktiv	Harmeet Singh Makkar
Ragamalika	Sisir Sanagala
Renewable Energy Club	Ujjwal Gandhi
World Record Society	-------
Audi Force	Karthik Reddy Y
Dept. of Live Events	Aman Mishra
Dept. of Photography	Aayush Atul Verma
Dept. of Theatre	Shravan Nair
Firewallz	N. V. Uday kiran
Informalz	Ansh Shah
Lights	Mustansir Mohammed
Sounds	Vignesh Nagrajan
Stage Controls	Sankalp Sangle
Dept. Art & Publicity	Ruchir Aggarwal
Controls	Nishchay Shopurkar
Dept. of Visual Media	M Sujith Reddy
Publication & Correspondence	Kartikeya Gupta
Reception & Accommodation	Rutul Tarnekar
Sponsorship & Marketing	Rishabh Jain
SMAC	Parth Samnani

Creative Activities Club	Arpit Sodani
The Eastern Outlook	Rishi Ghosh
Department of Sounds	Ayush Aryan
Department of Visual Media	M SUJITH REDDY

The Student Union organized a host of events throughout the year.

Sports Club

The office bearers of the Sports Club constituting the sports committee for the year 2020 were

Sports Secretary

| Anshul Khatkar | 2016C2PS0766P |

Joint Sports Secretaries

Ashrit Tayade	2018A4PS1114P
Riya Ramabadhran	2017B2A40990P
Adithya Shankar	2017A3PS0205P

Captains

Vishal Dixit	Athletics (Boys)	2018A4PS1037P
Neha Sriram	Athletics (Girls)	2018B1AB1126P
Harsh Garg	Badminton (Boys)	2017B3A80544P
Ananya Jain	Badminton (Girls)	2018A2PS1031P
Siddharth Malik	Basketball (Boys)	2018B3A40838P
Pragati Singh	Basketball (Girls)	2017A5PS1083P
Abhilash Sabapaty	Chess	2018B4A40990P
Aakash Shankar	Cricket	2018A4PS0517P
Kesava Garikipati	Football (Boys)	2017A8PS1187P
Ruchi Batra	Football (Girls)	2017B3A70629P
Amod	Hockey	2017A2PS0065P
Prabhu	Powerlifting	2017A1PS0918P
Anirudh	Snooker	2017ABPS0357P
Shrivas Chaterji	Squash	2017B1PS0409P
Parth Gupta	Swimming (Boys)	2017B2A80646P
Navleen Kaur	Swimming (Girls)	2018A1PS0076P
Neeraj	Table Tennis (Boys)	2019H1430609P
Rishika Chowdhury	Table Tennis (Girls)	2019A5PS1082P
Aryaman Agrawal	Tennis (Boys)	2018ABPS0640P
Anushka Singh	Tennis (Girls)	2018A1PS0005P
Samanvay Lamba	Volleyball (Boys)	2017A7PS0022P
Aditi Vashishtha	Volleyball (Girls)	2017B5TS1220P
Pavan Kumar	Carrom	2017A5PS1112P
Utkarsh Agarwal	Ultimate Frisbee	2016B2AB0867P

Student Sports Activities

BITS Open Sports Meet (BOSM)

BOSM 2020: BITS Open Sports Meet (BOSM) is the sports fest of BITS Pilani where around 1300 athletes from various universities of India participate which is conducted in the month of September every year. Due to pandemic the event could not be conducted.

The Intra-BITS Sports Tournaments

i-BOSM 2020: Pre-BOSM event named iBOSM 2020 (Inter Bhavan tournament) was conducted from 10th February 2020 to 15th February 2020 for the following sports: 1. Hockey 2. Chess. 3. Carom. Around 100 students participated in the event.

BITSRun: To create awareness and inculcate the idea of fitness in BITSians, this annual run was themed around the Republic Day this year on 26th January 2020. Around 250 students participated in the event. Starting at Temple Lawns to a track all over campus.

BITSians Day Run: To create awareness and inculcate the idea of fitness in BITSians, this annual run was themed around the Founder's Day this year on 2nd August. Around 200 students participated in the event. Starting at the Main Audi entrance to a track all over campus.

Interbatch 4-Day Workout Challenge: Post lockdown, this event was organized from 23rd April 2020 to 27th April 2020 for keeping the fitness spirit alive even at home in quarantine. Participants from all 5 batches took part in huge numbers to keep the challenge going. More than 100 students participated in the event which was remotely done.

Outstation Participation:

Manipal University Jaipur Sports Fest: The following sports teams 1. Cricket 2. Basketball (Girls and Boys) 3. Tennis (Girls and Boys) took part in the fest from 18th February 2020 to 20th February 2020 at Manipal University Jaipur and brought home laurels in the institute's name. 70 students participated in the event.

Swimming Club: The Swimming Club trains many new students in swimming and around 900 students register every year. Students take part and conduct various events every year in swimming which could not be conducted due to pandemic.

Health Club: The Health Club is equipped with various advanced machines for aerobic and anaerobic exercises. The Health Club has membership of around 1600 students in both semesters every year.

Powerlifting & Bodybuilding Camps are being conducted every semester in Health Club to motivate, train and find more students to increase participation.

Sports participation in Hostels: Various Sports facilities are also available in all hostels like Badminton, Table Tennis, Basketball, Chess and Carom. Good participation of students in hostels is observed as unorganized sports.

Martial Arts: Martial Arts classes are conducted at Student Activity Centre in both morning and evening session. Around 45 students attended the class regularly, out of which 30 students were trained in competitive martial arts skills.

Renovations of various sports facilities are carried out this year like lighting around the Athletic Track & Football field, lighting in Badminton, Table Tennis and Squash Court. The wooden flooring and wall of Squash Court were also renovated.

To encourage and motivate BITS students and staff towards Health & fitness, virtual platforms are being used by sports Staff time to time during pandemic by conducting webinars and fitness sessions. Sports Staff have also updated themselves in their profession by attending several webinars and training sessions during this pandemic year.

A live virtual Yoga demonstration session was conducted on 21st June 2020 celebrating "International Yoga Day" which received an overwhelming response from BITS students and staff.

OASIS 2019

BITS Pilani celebrated the 49th edition OASIS. Its annual cultural festival from 19th October to 23rd October 2019. This festival, managed entirely by the students, was mainly sponsored by Cisco, Realme, Axis Bank. It attached about 1800 outstation participants from about 70 colleges situated all over the country. The festival hosted as many as 90 events which were based on music, art, dance, photography, drama, literature and every other cultured aspect of the college life. The theme of the festival was "Chapter 49: Neo Noir". The Chief Guest of the Inauguration ceremony was Mr. Madhur bhandarkar, the famous Bollywood Director.

The music concerts by Sunidhi Chauhan, EDM night by Nucleya, English prof show by Dan Deacon, Pakshee, Ape Echoes and a comedy show by Biswa Kalyan Rath were among the several highlights of the festival. The festival also witnessed various workshops of dance, music and pottery. Events like desert duel, street and stage plays, fashion parade, Mr. and Ms Oasis, debate, BLAB etc caught the limelight a students from all over the country were able to stage and showcase their talents.

The National service Scheme and NIRMAAN along with several NGO's set up an exhibition for the sale of village potteries, governments and others handcrafts. Nirmaan's wall of Peace was one of the most eye catching thing during Oasis. In the words of Mr. Rahul Bubna, the President of the Students' Union. "OASIS is a 96 hour long cultural extravaganza entirely organized by students and is one of the best cultural festivals in Asia."

APOGEE 2020

APOGEE is the annual international technical festival of BITS Pilani - Pilani Campus. Normally a 3-day long festival with the participation of over 8000 students from 100 colleges, APOGEE 2020, the 38th edition of the technical extravaganza, was set to happen in the last week of March, with 70+ scheduled events including Hackathons, Paper Presentations, Workshops, Exhibitions and more, and the confirmation of speakers like Zed A. Shaw (Author of the best selling "Learn Python the hard way"), Zainab Nagin Cox (US Spacecraft Operations Engineer who has overseen several Mars Missions), Rajagopala Chidambaram (key scientist for the Pokhran nuclear tests) and Henry Throop (Member of the first Pluto Mission team and consultant to NASA) under the Think Again Conclave, but because of setbacks due to the pandemic all did not go as planned. This, however, did not stop exciting and engaging pre-APOGEE events and talks, and mini-fests in 5+ colleges from taking place. Highlightable pre-APOGEE events included the initiative taken to spread awareness for a noble cause by celebrating a "Green Week" and the conduction of Aarohan, a nationwide Olympiad for classes IX to XII. There were various exciting events held during Green Week, including the BITS Pilani Green Run, where BITSians ran the campus to promote sustainability and make the environment greener than before, a painting competition on the topic of water conservation, "Nukkad Natak" by the Hindi Drama Club, and a Human Chain formation. Green Week also saw the circulation of a newsletter called "Green Gazette-2020" with valuable insights on some of the current scenarios in sustainable development, highlighting the interesting initiatives. Talks were also conducted including one featuring Dr. Bala Iyer (core team members of the LIGO-India Mega Project) and a fireside chat with Hari Menon (co-founder and CEO, Big Basket) and Ravi Menon (CEO of HSBC Global Asset Management). All this was in alignment with the aim to keep taking APOGEE a few notches higher every year.

Ragamalika 2020

The first event of the year was the Thyagaraja Aradhana Program organized on January 29,2020 on the eve of the Founders day, preceded by a training workshop in which interested participants were given training in the Pancharatna Kritis by Thyagaraja.

This was followed by a Chamber concert season organized in February spanning a period of 2 days during February 22 to 23 ,2020 at the Raag room wherein member musicians and singers presented mesmerizing Hindustani-Classical and Carnatic pieces of their choices.

The shifting of the semester to an online mode warranted a change in the way concerts have been organized, hence the online semester saw a string of innovative and fresh online concerts streamed on instagram and youtube. The online mode of semester made the students feel a little disconnected with the classical music community; this connection was revived through the organization of online reach initiatives like informative posts and performance clips of great classical singers and musicians through the club's official page on Instagram @ragamalika.bitsp

While the seniors had already left the campus, the end of the online semester brought an official end to some of the senior's college lives. Following the ages old ritual of a psenti concert, the club witnessed an awe inspiring Tabla concert "Long Distance" by Prakhar Sharma on December 25,2020, with the only difference being that the sentiment of the ET audi was replaced by an equally sentimental Youtube stream.

SPICMACAY: No activities.

MATRIX

Second Semester 2019-20

The club attended the Jaipur Literature Festival, which was held from 23 January to 27 January. Talks by Ravish Kumar, Abhijit Banerjee, Jokha Al-Harthi, and Shashi Tharoor, were this year's highlights, along with panel discussions on contemporary issues like Climate Change, and Farmer Distress in India. Book Launches by several authors also took place.

Matrix along with BITS Embryo organized the first session of The Fountainhead Series. The session was held on 4th February where Ms. Dushka Zapata interacted with BITSians on her book 'How to Be Ferociously Happy: And Other Essays'. The Book was first introduced to the gathering by Jaanvi Agarwal, a member of the Club along with Prof. Rishikesh Vaidya.

Matrix contributed in the Basant Book Festival organized by the Library from 10th to 15th February, where Sanghati Roy and Saumitra Rai participated in Dramatized Storytelling. The Club also screened a short film, 'The Red Balloon' (1956), at the festival.

The first book introduction for this year was held on 19th February, named "Meraki". The following books were introduced:

- Americanah (Chimamanda Ngozi Adichie): Aakanksha Kesarwani

- Pan's Labyrinth (movie, directed by Guillermo del Toro): Nikhil Devabhaktuni

- The Secret Diary of Adrian Mole Aged 13 ¾ and The Growing Pains of Adrian Mole (Sue Townsend): Ishan Rai   Several events like 'A Novel Idea' were planned by Matrix in advance for APOGEE 2020, but unfortunately the events could not be carried out due to the closure of campus on 14th March following the

outbreak of COVID-19. The Club maintained an online presence, adapting to the pandemic, through its Instagram Page.

The Semester concluded with an Online Farewell organized by the club for the graduating club members, Ishan Bhanuka and Prachi Agarwal.

First Semester 2020-21

This semester was conducted in Online Mode and all activities of the club were conducted online. The semester started with "Lilo", an introduction where we invited the alumni of the Club for Book Introductions. The event took place on 28th August. The following works were introduced:

• A Lover's Discourse: Fragments (Roland Barthes): Sanskriti Chitransh

• Neuromancer (William Gibson): Arth Abhinav Rohatgi

• tsap sui (A Chinese Troika): Neel Shah

• The Hilarious World of Depression (John Moe): Shubhankar Ranade

On October 1, "Wytai" a book introduction was held, which included the following books:

• Friedrich Nietzsche (Author Intro): R Thapasvvin

• Funny Boy (Shyam Selvadurai): Saumitra Rai

• The Malazan Book of the Fallen (Steven Erikson): Chiraag Thakur Sonder, the Matrix Interactions and Recruitments for the year 2020 was held over the period of two weeks starting from 20th November. The Recruitment consisted of two rounds. In the first-round club members interacted with the newly admitted students on various aspects of Literature and Cinema. In the second-round students introduced a work of art, following which 11 students from 2020 Batch and 3 students from 2019 batch were formally invited to join the club on 5th December.

"Farvel", a Psenti Book Introduction, was held on 2nd December and the following books were introduced:

• Midnight's Children (Salman Rushdie): Piyush Bhatt

• My Antonia (Willa Cather): Isha Bhorkar

The event concluded with a short interaction of club members with Prof. Kumar Sankar Bhattacharya.

National Talent Search Scheme

The number of National Talent Search Scheme Scholarship holders studying in the Institute during the year in various programmes was as follows:

Admission year	No. of students
I Year	12
II Year	29
III Year	18
IV Year	36
Total	**95**

NSS

NSS BITS Pilani comprises of enthusiastic and dedicated volunteers who are well- guided by the esteemed professors to help them build sustainable and comprehensive models for the betterment of people in Pilani and nearby villages including Bhaas, Harinagar, Garinda, Ghumansar, Jherli, and Rayla. It also aims to inculcate a spirit of service in the volunteers which will help them in becoming responsible citizens dedicated to the improvement of our nation and the world at large in every aspect. It also aims to eradicate various stereotypes and malpractices by spreading awareness in villages near Pilani. All the major divisions of NSS: education, health and awareness play their role in this process to make the country a better place to live in. The main motto is to create a better society by helping as many people as possible. A special focus is laid upon women empowerment and child development.

Naari Computer Shiksha (NCS):

On Sunday, the 12th of January 2020, CLP, NSS conducted the first session of

NCS (Naari Computer Shiksha) at a Silai centre in Hanumantpura village.Several women from the village participated in the session and were taught the basics of using a smartphone. All the topics covered were discussed keeping in mind how they could assist them in their stitching work and day to day activities.

Sports Day:

With the aim of holistic development of the students and to inculcate various soft skills amongst the students, sports day was organized for the students of NSS School and EPD on 19th January 2020. Several sports and games which included football, lemon spoon race, long jump, basketball, sack race, were organized along with many more events for the various classes of the students to make the event inclusive and enjoyable for all. The event concluded with appreciating the students for their performance which was complemented by the distribution of

certificates to the winners and participants by Prof. Chandra Shekhar and Prof. Krishnendra Shekhawat.

Career Counselling Sessions:

Recognizing the need for correct and effective career counselling amongst the students of classes 9th to 12th, several career counselling sessions were organized in various schools across the 7 villages covered by NSS, BITS Pilani. The schools which include the likes of Vashisht Pathak, Padia, Goenka and also include NSS School had a wonderful participation from students and helped in making the sessions successful.

Republic Day Celebrations in Garinda and Ghumansar:

Republic Day is not a holiday but a day of pride and glory. With this in mind, teams of volunteers from NSS, BITS Pilani, went to Ghumansar Government School as well as Garinda Government School to celebrate the 71st Republic Day with the students on 26th January 2020. Interactive sessions and cultural activities were also a part of the celebrations in the two schools which concluded by sharing the importance and speciality of the Republic Day Parade at the Rajpath with the students.

Blood Donation Camp:

The 39th edition of the annual Blood Donation Camp was inaugurated on 8th of February by the Director of BITS Pilani, Pilani Campus Prof. Sudhirkumar Barai along with Vice Chancellor Prof Souvik Bhattacharyya, Faculty-in-charge Dr. Ashish Tiwari and the doctors from IRCS. More than 150 volunteers of NSS, BITS Pilani participated in the camp, which saw a footfall of more than 1500. The camp went on for two days and was concluded on 9th of February 2020 after collection of a total of 641 units of blood.

Starting of GSP Sessions:

The volunteers of NSS Bits Pilani conducted a lesson for the school kids of Jherli Government School, Jhunjhunu on 1st February. The lessons conducted mainly in English consisted of various topics ranging from sports and cricket to the Australian wildfires, pollution and global warming.

Health Camp in Garinda:

Volunteers of NSS, BITS PILANI went to Garinda on February 23 with a doctor to conduct the 2nd Health Camp of the academic year. 21 people, most of whom were children below the age of 10 turned up for a check-up. They were asked about their everyday habits, hygiene, vaccination and the common health related issues they face, which showed ear problems and eating mud as the most prevalent ones.

COVID-19 Awareness Calling:

Understanding the need to spread awareness amongst the public to limit the spread of the novel coronavirus, volunteers of NSS, BITS Pilani took the initiative to make everyone across the 7 Villages, covered by NSS, BITS Pilani, aware of the viral disease. Several regular calling sessions were organized to cover more than 400 families across the villages.

Ration distribution:

Owing to lack of savings several families were left without ration supplies even just after the first two weeks into the lockdown. NSS BITS Pilani at such a time took the initiative to coordinate with the government agencies and NGOs to make provision for ration supplies to those who need. The administration of BITS Pilani also came forward to help those in need. Calls were made to people to ask them about their problems and in cases when the problem was deemed to be genuine, they were told to contact the government helplines for assistance. In case they couldn't get assistance from the authorities, NSS helped them get in touch with other organizations willing to help.

Integrated Government Online Training, iGOT:

Owing to the outbreak of COVID-19, the government launched an Integrated Government Online Training, iGOT, program for Doctors, Nurses, Paramedics, NSS Volunteers amongst others. All the volunteers underwent the training for the course Basics of COVID-19 which increased everybody's awareness and knowledge about the viral disease even more and made them capable of making others aware about the same in detail.

Pride Week:

LGBTQIA+ community have been a part of the society for a long time now. The supreme court also nullified Section 377 in 2018 legalizing same-sex relationships thus providing atleast some rights to the queer

community. But still, there are a large number of myths surrounding the community and they are still highly discriminated against in the Indian society. With June being celebrated as pride month across the globe, NSS BITS Pilani organized 'Pride Week' to create awareness and bust the myths about LBTQIA+ community. It was aimed at making people aware about the community and the myths surrounding them. It was a 7 day virtual campaign which was considered to be highly successful.

BITS Yoga Week:

With International Yoga Week being celebrated on 21st June across the world, NSS BITS Pilani in collaboration with Sports Union, BITS Pilani initiated 'BITS Yoga Week', an online campaign to make people work on their physical fitness and engage themselves in yoga. The idea of the campaign was that the lockdown and the pandemic had severely affected everyone's lifestyle and they have not been able to indulge in physical activity to a large extent, this has led to increasing weight, increasing lifestyle problems and eventually a sudden decrease in efficiency and ability to do the basic chores. With the fitness levels going down, NSS BITS Pilani started BITS Yoga Week to reignite the urge to indulge in physical activity amongst the youth.

Initiation of CCC Classes:

We used to deliver our CCC classes at PARC, Harinagar. CCC classes are basically preparation classes for the CCC exam conducted by RSCIT. Due to the pandemic, the lectures are being delivered using an online platform to not allow pandemic hamper the chances of those who are giving their all to ace the examination. The classes which restarted in June 2020 after a break of 3 months, have been going on with full pace and complete efficiency and the students have been well prepared for the exam scheduled in January 2021.

Workshop on Child Abuse and POCSO Act:

Going by the motto of 'Not Me But You' NSS BITS Pilani, in association with NGO Sakshi organized a workshop on awareness about Child Abuse and POCSO Act on 14th July 2020. More than 100 Volunteers actively participated in the workshop. The workshop had three parts, one was a pre webinar survey to gauge the level of awareness volunteers had, then there was an awareness webinar, post which the participants had to fill a feedback form which was more of a survey to gauge how much the participants have been made aware of Child Abuse and POCSO Act.

Atmanirbhar Bharat Abhiyan:

In order to make people aware about the Atmanirbhar Bharat Abhiyan and to promote indegenous goods, NSS BITS Pilani in association with NSS KMV organized an online awareness campaign to reach out to the masses. The campaign included a video to make people aware of the need and benefits of the Atmanirbhar Bharat, a document containing the list of Indian products and companies was shared with everyone and people were also asked to prepare list of changes that they would be bringing in their lifestyle to incorporate Atmanirbhar Bharat Abhiyan.

Initiation of Umang Counselling Program:

Considering the effect that the Pandemic has had on the students studying across various schools in Pilani, volunteers of NSS BITS Pilani started the Umang Counselling Program in July 2020. Students studying across various schools considered for the Umang Mentorship Programme in the previous years were contacted regularly and were provided with online academic resources while doubt clearing sessions were also organized. Along with providing academic guidance, counselling and mental support was also provided by volunteers.

Reopening of NSS School:

With the aim of providing education to the children studying across various schools in Pilani, NSS School started its functioning on 10th August 2020. Due to the semester being online and COVID-19 measures being undertaken, the School shifted online with students being provided online resources, online classes being held and various platforms used to evaluate students and clear their doubts on a regular basis. Owing to the pandemic, the mental health of the students had also been affected, thus several ways were used to make them feel comfortable, to improve upon their mental health. Regular contact was maintained with the students and their parents/ guardian to ensure that they were not facing many difficulties.

Initiation of EPD Classes:

Owing to the pandemic, personality development of students has taken a very big hit. Leaving aside improvement, there have been significant changes in the lifestyle of students of EPD classes who have been facing severe difficulties owing to the financial crunch in their families and lockdown adding to their vows. In such a situation, regular calls were being made to guide and counsel students to cope up with the stress. In august, the english and personality development classes were started for the semester. Owing to the physical distance between the volunteers and students, virtual classrooms along with online platforms were used to serve the purpose. The classes included teaching of English languages using interactive activities while also engaging in tasks pertaining to personality development of students.

Junoon - Unsung Heroes:

Junoon, organised every year in the first/second weekend of September, is an opportunity for NSS BITS Pilani to extend their support and concern to the children with special needs.

Owing to the pandemic restricting movement, and accepting the new normal, a talk was organized under the banner of Junoon - Unsung Heroes. The talk was with Mr. Sharath Gaikwad, a Paralympic Swimmer who has won laurels for India in sporting events all over the globe, on National Sports Day, i.e. 29th August 2020. Junoon - Unsung Heroes was shown live at 8 NGOs across Delhi and Jaipur and more than 50 BITSian students participated in the talk.

Independence Day Awareness- Thanking Armed Forces:

NSS BITS Pilani, in association with NSS, IIT Bombay took Independence Day as an opportunity to thank the armed forces for everything they do for us. A video was shared on social media platforms thanking them for being what they are, apart from the video, volunteers made NSS School students aware about the contribution of Armed forces in our country's safe growth and well being. Students at EPD were asked to write an essay on 'The Indian Army'. The aim of the essay writing assignment was to make students realize the importance of the Armed Forces.

Commencement of Coding Classes:

Coding classes are meant to clear the basics of school going students and make them familiar with the basics of coding in HTML and CSS language. Considering the pandemic, online coding classes commenced for the students of Kids Garden Secondary School on 1st September 2020. Regular classes, sessions, doubt clearing hours were organized and the required number of assignments were given to the students to help them ace the basics of coding.

Teachers' Day Celebration:

NSS BITS Pilani, on the occasion of Teachers' Day requested everyone to remember the best moments of their students' life and recognize the contribution teachers have made in their lives. People were also asked to share their experiences as a student and put it on their social media handles. Apart from that, a special session was also organized for the students of NSS School to celebrate Teachers' Day with the students. The session consisted of several activities that could be done either on WhatsApp or Google Meet and were helpful in further strengthening the bond between volunteers and NSS School students.

Plantation:

Taking forward the idea of helping the Earth restore its beauty and increasing the number of trees as and when we can, the Programming Officers of NSS BITS Pilani organized a plantation drive at BITS Pilani. A few Ashoka trees were planted at various places within the BITS Campus on 6th September 2020.

Literacy Day Celebration:

On the occasion of Literacy Day, a session was held for the students of EPD Classes to make them aware of the general things about literacy. The session also included a quiz about the literacy rate of various states in India, information was given about how a person is classified as a literate, and they were made aware of the various policies of the government, like Right to Education, to improve the literacy rate of the country.

Fit India Movement:

On 15th August 2020, the honourable Prime Minister of India kickstarted the Fit India Freedom Run, a campaign to get people back on the running tracks and to curb the increasing lifestyle problems. Volunteers of NSS BITS Pilani exhaustively supported the movement and participated in the same. A large number of volunteers even registered on the government portal and ran more than 50 kms from 15th August to 2nd October.

BITS Blood Portal:

Keeping in mind the regular shortage in blood faced by several critically affected patients across the nation and the then ongoing use of plasma therapy for the treatment of COVID-19, NSS BITS Pilani in collaboration with Dhoondh created a portal to assist patients get blood in less than 12 hours. The portal has been shared across the BITSian family and the data would be stored with NSS BITS Pilani and Dhoondh only, no third party can have access to the database.

Awareness about National Education Policy 2020:

The National Education Policy 2020, approved by the Government of India on 29 July 2020, outlines the vision of the modern education system in India. Students and teachers across various villages near BITS Pilani have been in doubts regarding the changes that would be occurring in the education system. To ensure that they have a comprehensive idea about the same, a session was organized by the NSS, BITS Pilani in association with TLC, BITS Pilani for the teachers of various schools in the 7 villages near BITS Pilani in the last week of October. Students enrolled in various classes organized by the volunteers of NSS, BITS Pilani were also made aware of the changes through several interactive and educational activities. In order to make every member of BITS Pilani aware about the National Education Policy, a mail was sent to all the BITSian students and faculty

members regarding the same. A document was attached that was supposed to be the guiding light to clear some questions.

National Unity Day:

India is one of the most diverse countries in terms of both cultural and geographical diversity it possesses. Sardar Vallabhbhai Patel was highly responsible for the unification of the country after Independence, thus on his birth anniversary, National Unity Day is celebrated. On the occasion of National Unity Day, NSS BITS Pilani asked everyone to look for the unity in the diversity we Indians have. Volunteers of NSS BITS Pilani took the oath for unity to conclude the National Unity Day.

No Mask No Entry:

As per the guidelines issued by the ministry of Home Affairs, Government of India, entry anywhere without masks is prohibited. Going by the guidelines, NSS BITS Pilani made posters to prohibit entry of outsiders without masks to BITS Pilani. The posters were used at various entry points and at other important places across the campus to make everyone aware of the guidelines and the need to wear a mask whenever outside.

NIRMAAN

Nirmaan is a constructive citizen movement for an empowered India, thereby making the world a better place to live in. Nirmaan has grown into a full-fledged organization with many chapters across the country. Nirmaan was founded on 12th February 2005 by a group of BITS-Pilani University students with a passion for humanity and to fulfill our responsibility towards our underprivileged brothers & sisters.

NIRMAAN PILANI

Nirmaan Pilani currently has more than 200 dedicated student volunteers working in Rajasthan villages to provide better educational and employment opportunities for the poor and the marginalized rural population.

Several projects are being undertaken in the educational field: Disha, Gyan Bodh, School Adoption Program (SAP), Shiksha Ki Ore (SKO), and Utkarsh.

Unnati-1 and Unnati-2 are the exclusive projects undertaken in women empowerment through self-employment in 2 different regions of Baas village.

Participatory Community Development (PCD) aims to understand the community and identify local leaders who will develop their villages.

VOCATIONAL TRAINING PROJECTS

Vocational Training Projects focus on creating a platform for rural women in Baas to earn a livelihood by forming a self-sustainable group, which prepares products and markets them.

1. We conducted a martial arts workshop for girls at National Public School, Baas village.

2. We conducted a workshop in collaboration with a project - Utkarsh for students of standard 8th, Garh School. It covered information about women empowerment and women's rights, teaching them to differentiate between good and bad touch.

3. The initial work for opening a new vocational training center (VTC) at the SKO site (Natt Basti) is done. It will start once college resumes.

4. Celebrated republic day with beneficiaries, women, and children of Bass village. Also, Basant Panchami was celebrated with beneficiaries.

5. Conducted classes for women to get them acquainted with computers and smartphones in collaboration with NSS.

6. 8-10 beneficiaries are learning to stitch bags at the old center (Bass village). Steps for increasing the number of women beneficiaries were also taken.

7. We took steps to establish Unnati 2 as a Self-Help Group. We are just a step or two away from becoming one; work will continue once the semester resumes.

8. We celebrated Basant Panchami with our women beneficiaries in collaboration with Participatory Community Development (Project PCD).

9. We conducted classes for women to get them acquainted with computers and smartphones in collaboration with NSS.

EDUCATIONAL PROJECTS

Educational projects focus primarily on the upliftment of various communities in Pilani like Baas, Court Basti, and Nat Basti by spreading awareness about the importance of education and helping them with their academic curriculum and all-round development.

1. As a part of the Green Week Celebration, we decided to play a game with the kids. An interactive quiz followed it, and it concluded with some innovative advertisements for water conservation.

2. We celebrated Republic Day by sharing videos about freedom fighters and the importance of this day to promote patriotism. It ended with a sweet distribution and national anthem.

3. We worked upon the regularity of visits, and it was significantly improved.

4. We distributed notebooks and other stationery items to the children.

5. One to one interaction of standard nine students studying in Hemant Academy was taken, and an Excel file was prepared for future counselling.

6. Mental ability and English proficiency tests were taken, and the doubts were cleared in detail.

7. We collected contacts of the standard ten students of Hemant Academy to stay in touch with them and guide them in the future.

8. Upon finding that most students of class 9 in Hemant School were inclined towards Civil Services and NDA, a detailed session was conducted along with a demo interview video of SSB.

9. We tried to develop soft skills by conducting GDs (on How can we clean Ganga, ban of firecrackers, etc.), speech on Addiction (Dopamine and related stuff) was carried out.

10. As a part of the pre-APOGEE event, we conducted an article writing competition on "Water Conservation," explained the need to conserve water, and highlighted various methods to save water through visual presentation and videos.

11. After the positive response of the 1st session in Kids' Garden in the previous semester, the 2nd session in Kids' Garden on "Unorthodox Career Options" with a powerful motivational boost at the end.

12. Collaborated with Project Utkarsh for the "General Career Streams" session in Bal Niketan for class 9th and 10th.

13. During the lockdown, we tried our best to provide remote guidance to our base school (Hemant Academy). Hence, we created a WhatsApp group called "Padhai Pe Charcha" to offer study materials, solve doubts, and post daily new facts and riddles.

14. To increase awareness about the RTE Act, we distributed Pamphlets in BAAS Village.

15. Workshop on Conservation of Water with many practical demonstrations were carried out. This turned out to be a massive success as they enjoyed every bit of it.

16. We renovated the room at Shahi center, and now it is fully functional, and classes for children have started there.

17. We conducted three English Learning sessions with the kids at our centers, i.e., Shahi center and Water tank. This was done for the first time, and it was a success.

18. We conducted an Awareness Drive on 'Policies of Government' for farmers, women, and children.

19. We had one dedicated day for an interactive session at Shahi center but then switched to mixing this with daily study sessions.

20. We adopted a new school at Raila and conducted mentorship sessions with the students there.

21. We managed to conduct various inter-project collaborations with Unnati-1 for women empowerment in Garh School and Project Disha for career counseling sessions and project GB Baas.

22. Flash Cards were introduced to improve teaching in English mentoring sessions.

23. We initiated a new mentorship model by integrating E-Learning with personalized teaching techniques. 17/21 of our beneficiaries showcased academic improvements.

24. We managed to fundraise 2.98 lakhs within six days before disruption due to COVID-19.

25. We managed to receive a library grant of more than 200 books from the Pratham organization.

26. Navodaya preparations for selected kids were continued. We received good support and resources from teachers after visiting a Navodaya coaching center in Chirawa near Pilani.

27. Two kids from Natt Basti appeared for the prestigious Navodaya Exam for the first time. Their exam went well, and we are waiting for the results.

28. Special life skill sessions were organized for the overall development of kids. These sessions aimed to improve the soft skills of kids and general awareness to prevent them from getting exploited and empower them.

29. T-shirts were distributed with support from the Student Union in Natt Basti.

30. Green week

31. A survey was conducted in association with PCD to map all the houses residing in the basti and compile all households' data.

32. 14 kids were listed for admissions through RTE, and the documents needed in the process were prepared along with other background work.

33. The most affected section of society due to the Covid-19 pandemic are daily wagers. So, a Ration Distribution drive was organized in collaboration with college authorities amidst the lockdown.

34. Makar Sankranti was celebrated with beneficiaries. The kids enjoyed flying kites with volunteers, and celebrations ended with sweets distribution.

35. Republic Day was celebrated with great enthusiasm. The event included poem recitation and singing of patriotic songs. Prof. Rishikesh Vaidhya and his family graced the occasion.

36. In the new school adopted in Ward No. 2, Pilani, we initially tested students on all subjects to find out their extent of knowledge and the number of requirements further. Planned the handouts and course material accordingly.

37. Set up connections, servers, and everything else required to work for the existing Computer Lab, which was not in use previously. Also, we taught the faculty how to operate the lab and explained the setup.

38. A handout-based course structure for ELP, CLP, and Math was brought into action, which was never done before in SAP in a structured manner. And it worked out quite well but required a bit more practical addition.

39. Spoke to children about their family conditions and requirements and if they needed any exceptional support from us. Also, considered few meritorious kids to be shifted back to Private Schools, who had to drop from private schools due to their financial constraints. This has to be executed in the coming terms.

40. Most importantly, we gained the school's trust and communicated with them about their expectations from us and what's needed to be done, both in terms of education, infrastructure support, and participating in cultural activities together. The new school is supportive and now understands our work quite well.

PARTICIPATORY COMMUNITY DEVELOPMENT

1. In collaboration with SKO, conducted a thorough Survey and Mapping of Natt Basti. Including numbering of houses and small shops inside the Basti.

2. Carried out proper documentation and awareness drive regarding Ayushman Bharat Scheme in Natt Basti. Documentation included additional information like average income, access to the internet, and smartphones, which helped streamline work even during the lockdown.

3. Informed people about the dangers of plastic by a presentation at Natt Basti. To curb its use, an initiative was taken by distributing Cloth Bags.

4. Basant Panchami was celebrated in Shiv Ganga with beneficiaries of women empowerment projects.

5. PCD participated in Poster Presentation competition and their model on Rainwater Harvesting got First prize in Basant Book Festival 2020

YOUTH EMPLOYMENT

1. 28 Forms for computer learning programs were filled from Baas and Khedla village, and the one-month course was going to start from 15th April at PRC (Pilani resource center). Delayed due to lockdown.

2. Four final candidates were selected for the Hotel Management training program. After training for two months, the candidates will be directly placed. This program was going on, and hence any candidate can join it at any point of time. It is also going to be conducted at PRC (Pilani Resource Center) along with the Computer Learning Program and delayed due to lockdown.

3. Members of PRC and students engaged in the Hotel Management program were invited to an event at Khedla Village. The students showcase their skills and discuss their journey and working in the Hotel industry. Project Youth Employment pitched various programs, and a total of 13 forms in multiple areas were filled.

EVENTS

COVID-19 INITIATIVES

1. Project Suraksha

Amid all the uncertainty posed by the COVID-19 pandemic, there arose an idea at the peak of lockdown, and Nirmaan, BITS Pilani, we have the potential to create every brilliant idea into reality. Nirmaan launched Project Suraksha to empower underprivileged rural women and serve the community by making high quality, pure

cotton, and reusable masks available for people's safety. This initiative will directly provide stable income to 25+ women at Unnati stitching centers in Pilani and make them 'Atma-nirbhar.'

All the setup was established in two months by our dedicated team, which has been working virtually from their homes across India, and our unstoppable local volunteers. From virtual training of women to raw material and inventory procurement, every volunteer's commitment that we were able to produce more than 1000 masks within a week's time.

2. Ration distribution

This pandemic has snatched a stable source of bread from many people, but Nirmaan stands firmly with them in these challenging times. Nirmaan, in collaboration with authorities of BITS Pilani, successfully distributed Ration Kits to 30 families in Bass Village in September. Our heartfelt thanks to Sunil Dubey sir for providing us monetary support from the institution's side. It would not have been possible without the Chief Security Officer (CSO) and our faculty in-charge, Dr. Ashish Tiwari.

3. Online mentoring

Education is one of the core competencies of Nirmaan, Pilani chapter, so to make sure our beneficiaries don't miss out on anything in our physical absence, we have taken measures to teach them online. Our beneficiaries range from small kids to adults. We educate them about topics ranging from the school curriculum to the fundamental values and other essential knowledge, such as opening a bank account or RTE's benefit. We have made strides as people who have never used smartphones were taught how to use them to watch online lectures, videos on various topics were created and disseminated online. Many people in and around Pilani were ushered to the internet, which has been our most significant success.

4. Career counselling sessions

Disha conducted a career counselling session in one of the schools adopted by Project Utkarsh. They talked about the career opportunities the students have been in 10th standard—for instance, Jee, Bitsat, Medical, Hotel management, NDA, etc. Disha also does the same for 11th and 12th standard kids in a place called Hemanth Academy.

5. Hotel Management Training

Hotel Management Training will be provided to selected individuals by the Pratham Institute (PARC). Youth employment volunteers will choose interested candidates. Currently, the institute is operating in an online mode. The course is fully designed (with assignments and tests) to train candidates in two stages, stage 1 and stage 2 (course duration :1 month). The candidate must complete both the steps to get a job outside Pilani (salary: 7k-8k). Institute guarantees the 100% placement of the candidates provided they meet the course.

Five candidates were enrolled in COVID times by Youth Employment project, Nirmaan. We hope that they get the job as soon as they complete the course.

7. Scholarships worth five and half lakh rupees

Scholarships worth 5.5 lakhs were given to over 70 deserving students with an aim to prevent drop outs from schools due to increasing financial burdens on families.

Alumni Scholarships

BITS Alumni have instituted several merit-cum-means scholarships. For the First Semester 2019-2020 and Second Semester 2018-2019 the scholarships were awarded to the following students.

Scholarship	I Semester 2019-2020	II Semester 2019-2020
Vamsi Pendyala and Prasanna Kalahasthi Memorial Scholarship	Lakshay Sharma ID No.2018B3A70803P	-
S.S. Seshadri Memorial Scholarship	Rohit Jain ID No.2017A7PS0122P	-
Ramesh D Grover Memorial CMS Computer Scholarships	Madhav Sikka ID No.2018A7PS0243P	-
	Avisha Gupta ID No.2018B3A70105P	-
V & Kamla Krishnamurthy Scholarships	Akshay Singhal ID No.2018B3A70635P	-
	Navaneeth Raghunath ID No.2018A7PS0185P	-
	Punit Lohia ID No.2018B3PS0766P	-
	Vishal Dixit ID No.2018B5PS1037P	-

Scholarship	I Semester 2019-2020	II Semester 2019-2020
	Vansh Bansal ID No.2019B4PS0621P	-
BITSIAN Day Scholarship	Aryan Balyan ID No.2019A8PS0193P	-
	Prerna Khatri ID No.2019A3PS0248P	-
BITS 1986 Batch Scholarship	Muluguru Sobhan ID No.2018A7PS0597P	-
	Rishika Jain ID No.2018B1PS0302P	-
1988 Batch Scholarship	Avish Goel ID No.2018A1PS0734P	-
	Prasun Anand ID No.2018A5PS1002P	-
	Archika Gupta ID No.2018B2PS0083P	-
	Prachi Jha ID No. 2018A5PS1001P	-
	Rohan Kunwar ID No. 2019B5PS0666P	-
	Shubham Sharma ID No. 2019B2PS0925P	-
	Kajal Kukreja ID No.2019B2PS1021P	-
	Shruti Halwai ID No.2019A7PS0003P	-
Rakesh Chandra Scholarship	Aayush Soni ID No.2018B2A30665P	-
Shantha E. Iyer Scholarship	Nitya Mangal ID No.2018A7PS0216P	-
	Khushboo Kumari ID No. 2017A7PS0012P	-
	Mansi Bansal ID No. 2016A2PS0471P	-
	Chitwan Agarwal ID No. 2019B1PS0623P	-
Dr. S.K. Agarwal Scholarship	Kartik Agrawal ID No.2019B1PS0608P	-
M.R. Dalmitya Scholarship	Madhav Rathi ID No.2018A1PS0723P	-
	Anshu Sharma ID No.2018B2A80677P	-
Divya-Dileepan Scholarship	Prakhar Srivastava ID No. 2015B3A70834P	-
Sharman's Family Scholarship	Nikul Jain ID No.2019A8PS0412P	-
	Sandeep Jetwani ID No.2019B2PS0972P	-
Kaura Family Scholarship	Sumukh Subhash Phalgaonkar ID No.2019A7PS0011	

LIST OF ANNEXURES

DETAILS OF ADMISSIONS MADE DURING THE YEAR 2020

(A)   Second Semester 2019-2020

       Doctoral Programmes

Ph.D.	60(25)	
Total	**60 (25)**	

(B)   First Semester 2020-2021

Programme	Planned Numbers	Students Joined I Semester	BITSAT-Cut off Scores	
			Highest	**Lowest**
1. On-Campus Programmes				
(A) Integrated First Degrees				
Group A				
B.E.(Hons.)				
Chemical	80	80(12)	368	270
Civil	80	79(11)	331	254
Computer Science	150	162(12)	422	372
EEE	120	118(10)	382	333
Electronics & Instrumentation	70	70(7)	368	323
Mechanical	95	104(3)	364	298
Manufacturing Engineering	35	43(6)	293	253
B.Pharm.(Hons.)	45	48(25)	363	203
Total	**675**	**704(86)**		
Group B				
M.Sc.(Hons.)				
Bio. Sciences	50	79(15)	314	261
Chemistry	75	81(12)	300	258
Economics	85	85(14)	346	304
Mathematics	90	83(13)	364	286
Physics	80	79(7)	386	283
Total	**380**	**407(61)**		
Group C				
M.Sc.				
General Studies	20	09(06)		
Total	**20**	**09(06)**		
Grand Total	**1075**	**1120(153)**		

Note:

i)   The above list consists of -14- students who are First rank holders from -14- different central/state boards admitted under 'direct admission of board toppers' scheme.

ii)   International students in Pilani Campus 38(10).

iii)   Above numbers also include -26-admissions of staff children and -06- admissions of BET school students, made under special dispensation consisting of -03- in Biological Sciences, -04- in Chemistry, -06- in Economics, -07- in Mathematics, -03- in Physics and -09- in General Studies

2. Higher Degree Programmes:	
M.E.	
Biotechnology	21(15)
Chemical	18(08)
M.E. Sanitation Science	03(00)
Civil (Structural Engineering)	22(06)
Civil (Transportation Engineering)	17(05)
Civil (Infrastructure Engineering)	12(05)
Computer Science	28(02)
Communication Engineering	15(04)
Design Engineering	25(01)
Embedded Systems	17(05)
Manufacturing Systems Engineering	16(01)
Mechanical Engineering	25(04)
Microelectronics	29(02)
Software Systems	44(08)
M.Pharm.	12(06)
M.Pharm.(Pharmaceutics)	19(15)
M.Pharm.(Pharmaceutical Chemistry)	12(08)
M.Pharm.(Pharmacology)	12(09)
MBA	62(21)
Total	**409(125)**

3. Doctoral Programmes :

Ph.D.   88(42)

SUMMARY

	II Semester 2019-2020	I Semester 2020-2021
Programmes		
Integrated First Degree Programmes	-	1120(153)
Higher Degree Programmes	-	409(125)
Doctoral Programmes	60(25)	88(42)
Total	**60(25)**	**1617(320)**

STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2020-2021 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES

(i)   Pilani Campus:

FIRST PRIORITY

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AB	Total
B1	14	05	12	14	--	07	13	04	69
B2	18	03	12	13	--	11	07	04	68
B3	04	02	18	10	--	34	07	04	79
B4	05	08	16	09	--	23	06	02	69
B5	05	03	14	15	--	12	13	09	71
Total	46	21	72	61	--	87	46	23	356

OTHER PRIORITIES

Programmes* From ↓ To →	B5	Total
A7	01	01
Total	01	**01**

Transfer within same tier

Programmes* From ↓ To →	A3	A4	A7	Total
A1			01	01
A2	02			02
A3			02	02
A4	01			01
AB	01			01
B2			01	01
B4			02	02
B5		01		01
Total	04	01	06	**11**

Transfer within B to B

Programmes* From ↓ To →	B3	Total
B1	01	01
B5	01	01
Total	02	**02**

Vertical Transfers: ME First Semester 2020-21

From	To	No. of Students
M.Sc. Physics & B.E.Electrical & Electronics	M.E. Embedded Systems	01
B.E. Electrical & Electronics		01
B.E. Electrical & Electronics	M.E. Microelectronics	02
B.E. Electrical & Electronics	M.E. Software Systems	01
B.Pharm.	MBA	01
	Total	**06**

Vertical Transfers: (Ph.D) First Semester 2020-21

From	To	No. of Students
M.E. SS	Ph.D. Computer Science	02
M.E. CS		
M.E. Mechanical Engg	Ph.D Mechanical Engineering	01
M.E. Civil with Spl. in Transportation Engineering	Ph.D Civil Engineering	02
	Total	**05**

Minor Programs: During the Academic year 2020-2021, 199 students were admitted in Minor Program, out of them 127 are in Finance and 58 are in Data Science and 06 are in Physics and 02 are in PEP and 06 are in Entrepreneurship.

NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2020-2021

Programme	Year of Admissions							
	2015 & earlier	2016	2017	2018	2019	2020	2021	Total
A. Integrated First Degree Programmes								
B.E. (Hons) Chemical	0	4	76(14)	69(13)	70(10)	75(12)	0	**294(49)**
B.E. (Hons) Civil	0	1	77(4)	70(6)	67(8)	78(10)	0	**293(28)**
B.E. (Hons) Electrical and Electronics	0	1	114(9)	109(8)	111(12)	114(10)	0	**449(39)**
B.E. (Hons) Mechanical Engineering	1	5	90(1)	101(1)	95(1)	100(3)	0	**392(6)**
B.Pharm (Hons)	0	7(1)	39(20)	39(14)	43(25)	33(16)	0	**161(76)**
B.E. (Hons)Computer Science	1	5	152(12)	147(10)	145(11)	161(12)	0	**611(45)**
B.E. (Hons) Elecronics & Instrumentation	0	2	69(13)	75(6)	68(5)	66(7)	0	**280(31)**
B.E. (Hons) Manuufacturing Engg	0	1	32(6)	33(5)	38(1)	41(6)	0	**145(18)**
M.Sc (Hons) Biological Science	2	55(7)	49(14)	74(17)	71(13)	76(15)	0	**327(66)**
M.Sc (Hons) Chemistry	7	63(9)	71(14)	57(13)	70(14)	7713	0	**345(63)**
M.Sc (Hons) Economics	6	63(5)	89(14)	82(16)	83(6)	84(13)	0	**407(54)**
M.Sc (Hons) Mathematics	6(1)	63(9)	90(12)	83(14)	75(6)	74(12)	0	**391(54)**
M.Sc (Hons) Physics	0	60(5)	75(14)	72(8)	75(8)	76(7)	0	**358(42)**
M.Sc (Tech) General Studies	1	3	7(4)	8(5)	14(7)	10(6)	0	**43(22)**
B. Higher Degree Programmes								
ME Chemical	0	0	0	0	18(5)	18(8)	0	**36(13)**
ME Computer Science	1	0	0	1(1)	26(5)	28(2)	0	**56(8)**
ME Mechanical	0	0	0	0	17	25(4)	0	**42(4)**
ME Software Systems	2	0	0	0	30(5)	44(8)	0	**76(13)**
ME Microelectronics	0	2	0	0	26(5)	29(2)	0	**57(7)**
ME Communication Engineering	0	0	0	0	21(7)	15(4)	0	**36(11)**
ME Biotechnology	0	0	0	0	22(19)	21(15)	0	**43(34)**
ME Civil with specialization in Transporation Engg	0	0	0	1(1)	15(3)	18(5)	0	**34(9)**
ME Embedded Systems	1	1	0	0	13(5)	17(5)	0	**32(10)**
ME Design Engg	0	0	0	0	23(1)	25(1)	0	**48(2)**
ME Manufacturing Systems Engg	0	0	0	0	15(1)	16(1)	0	**31(2)**
ME Civil with specialization in Structral System	0	0	0	0	21(2)	22(6)	0	**43(8)**
ME Civil with specialization in Infra system	0	0	0	0	12(2)	12(5)	0	**24(7)**
Master of Business Administration	0	1(1)	0	0	68(24)	62(21)	0	**131(46)**
M Pharma	0	0	0	0	12(8)	12(6)	0	**24(14)**
M Pharma with specialization in Pharmacutics	0	0	0	0	20(12)	19(15)	0	**39(27)**
M Pharma with specialization in Pharmacutical Chemistry	0	0	0	0	13(5)	12(8)	0	**25(13)**
ME with Sanitation	0	0	0	0	0	3(0)	0	**3**
M. Pharma with Pharmacology	0	0	0	0	0	12(9)	0	**12(9)**
C. Ph.D	48(18)	44(18)	83(36)	98(35)	122(33)	87(42)	0	482(182)
Total (on-Campus)	**76(19)**	**381(55)**	**1113(187)**	**1119(173)**	**1519(269)**	**1562(309)**	**0**	**5770(1012)**

Note: The numbers in brackets indicate number of female students

SUMMARY

	On-Campus			
	Engineering	**Science**	**Humanities**	**Total**
First Degree	2464 (216)	1828 (279)	204 (98)	4496 (593)
Higher Degree	561(128)	-	231(109)	**792 (237)**
Total	**3025 (342)**	**1828 (279)**	**435 (207)**	**5288 (830)**
Ph.D.				**482 (182)**
			Grand Total	**5770 (1012)**

Note: The numbers in brackets indicate number of female students.

STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	
	86th Award (20.03.2020)	87th Award (08.09.2020)
(i) On-campus Programmes		
A. Integrated First Degrees		
B.E. (Hons.):		
Chemical	0 (0)	4 (1)
Chemical (with Practice School)	5 (0)	34 (4)
Civil	1 (0)	4 (0)
Civil (with Practice School)	7 (2)	26 (1)
Computer Science	5 (0)	13 (1)
Computer Science (with Practice School)	1 (0)	44 (7)
Electrical and Electronics	2 (1)	9 (0)
Electrical and Electronics (with Practice School)	2 (0)	37 (6)
Electronics & Instrumentation	2 (0)	4 (0)
Electronics & Instrumentation (with Practice School)	2 (0)	26 (5)
Manufacturing Engineering	2 (0)	2 (0)
Manufacturing Engineering (with Practice School)	1 (0)	11 (1)
Mechanical	0 (0)	10 (1)
Mechanical (with Practice School)	2 (0)	27 (1)
B.Pharm. (Hons.)	1 (0)	0 (0)
B.E.		
Chemical	0 (0)	8 (1)
Chemical (with Practice School)	0 (0)	52 (10)
Civil	1 (0)	13 (0)
Civil (with Practice School)	1 (0)	47 (3)
Computer Science	1 (0)	16 (2)
Computer Science (with Practice School)	0 (0)	101 (11)
Electrical and Electronics	1 (0)	21 (2)
Electrical and Electronics (with Practice School)	1 (0)	77 (11)
Electronics & Instrumentation	2 (0)	11 (1)
Electronics & Instrumentation (with Practice School)	0 (0)	48 (8)
Manufacturing Engineering	0 (0)	9 (3)
Manufacturing Engineering (with Practice School)	0 (0)	22 (1)
Mechanical	0 (0)	11 (2)
Mechanical (with Practice School)	0 (0)	75 (3)
B.Pharm.	1 (0)	10 (5)
B.Pharm. (with Practice School)	0 (0)	29 (16)
M.Sc. (Hons):		

Biological Sciences	0 (0)	33 (2)
Biological Sciences (with Practice School)	0 (0)	9 (3)
Chemistry	4 (2)	31 (6)
Chemistry (with Practice School)	1 (0)	13 (2)
Economics	0 (0)	43 (7)
Economics (with Practice School)	0 (0)	23 (0)
Mathematics	1 (0)	46 (3)
Mathematics (with Practice School)	1 (1)	6 (1)
Physics	3 (0)	40 (3)
Physics (with Practice School)	1 (0)	2 (1)
M.Sc.		
Chemistry (with Practice School)	0 (0)	2 (1)
Economics (with Practice School)	0 (0)	7 (5)
Mathematics	0 (0)	1 (0)
Mathematics (with Practice School)	0 (0)	5 (0)
Physics	1 (0)	2 (1)
Physics (with Practice School)	0 (0)	5 (4)
M.Sc. (Tech)		
General Studies	1 (0)	2 (0)
General Studies (with Practice School)	1 (0)	10 (3)
Sub Total (i)	**56 (6)**	**1081 (149)**

Note: The numbers in brackets indicate number of female students.

Degrees	No. of degrees	
	86th Award (20.03.2020)	87th Award (08.09.2020)
B. Higher Degrees		
M.E. :		
Biotechnology	0 (0)	12 (11)
Biotechnology (with Practice School)	0 (0)	8 (6)
Chemical	1 (1)	8 (3)
Civil with specialisation in Infrastructure Engineering and Management	0 (0)	3 (1)
Civil with specialisation in Infrastructure Engineering and Management (with Practice School)	0 (0)	6 (1)
Civil with specialisation in Structural Engineering	0 (0)	1 (1)
Civil with specialisation in Structural Engineering (with Practice School)	0 (0)	20 (3)
Civil with specialisation in Transportation Engineering	0 (0)	4 (0)
Civil with specialisation in Transportation Engineering (with Practice School)	0 (0)	14 (2)
Communication Engineering	1 (0)	0 (0)
Communication Engineering (with Practice School)	0 (0)	22 (7)
Computer Science	0 (0)	2 (0)
Computer Science (with Practice School)	0 (0)	15 (5)
Design Engineering	0 (0)	1 (0)
Design Engineering (with Practice School)	0 (0)	17 (1)

Embedded Systems (with Practice School)	0 (0)	17 (5)
Manufacturing Systems Engineering	0 (0)	1 (0)
Manufacturing Systems Engineering (with Practice School)	0 (0)	14 (0)
Mechanical	1 (0)	4 (0)
Mechanical (with Practice School)	0 (0)	15 (1)
Microelectronics	0 (0)	2 (0)
Microelectronics (with Practice School)	1 (1)	24 (5)
Software Systems	0 (0)	4 (0)
Software Systems (with Practice School)	0 (0)	29 (9)
M.Pharm.	0 (0)	7 (5)
M.Pharm. (with Practice School)	0 (0)	5 (2)
M.Pharm.(with specialization in Pharmaceutical Chemistry)	0 (0)	3 (1)
M.Pharm.(with specialization in Pharmaceutical Chemistry) (with Practice School)	0 (0)	3 (0)
M.Pharm. (with specialization in Pharmaceutics)	1 (1)	7 (3)
M.Pharm. (with specialization in Pharmaceutics) (with Practice School)	0 (0)	4 (4)
Master of Business Administration	0 (0)	3 (0)
Master of Business Administration (with Practice School)	0 (0)	54 (15)
Sub Total (ii)	**5 (3)**	**329 (90)**
C. Ph.D.	36 (12)	16 (5)
Sub Total (iii)	**36 (12)**	**16 (5)**
Total On Campus (i+ii+iii)	**97 (21)**	**1426 (244)**

 Note: The numbers in brackets indicate number of female students.

SUMMARY

(i) On-Campus Programmes

Discipline	Engineering			Science			Humanities			Total		
Award	**86th**	**87th**	**Total**	**86th**	**87th**	**Total**	**86th**	**87th**	**Total**	**86th**	**87th**	**Total**
Integrated First Degree	41 (3)	801 (107)	842 (110)	13 (3)	268 (39)	281 (42)	2 (0)	12 (3)	14 (3)	56 (6)	1081 (149)	1137 (155)
Higher Degrees	4 (2)	243 (60)	247 (62)	1 (1)	29 (15)	30 (16)	0 (0)	57 (15)	57 (15)	5 (3)	329 (90)	334 (93)
Ph.D.	-	-	-	-	-	-	-	-	-	36 (12)	16 (5)	52 (17)
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**97 (21)**	**1426 (244)**	**1523 (265)**

Note: The numbers in brackets indicate number of female students.

LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS

S.No.	Name of the Company	Number of offers made	Sector
1.	91 Streets Media	1	IT
2.	AbInBev	3	MF
3.	ABST	2	CH
4.	Accenture	5	IT
5.	Accolite	0	IT
6.	Aditya Birla Data and Analytics	1	ANA
7.	Aequs	4	CH
8.	Afour tech	1	IT
9.	Agnikul	0	IT
10.	Altiostar	3	IT
11.	Amazon	16	IT
12.	Amdocs	6	IT
13.	American Express	5	IT
14.	Analog Devices	2	IT
15.	Anarock	7	IT
16.	APP Dynamics	5	IT
17.	Arcesium	1	IT
18.	Arup	1	IF/MF
19.	Atkins	3	IF
20.	Avaali Solutions	1	IT
21.	Axis Bank	15	IT
22.	Axtria	3	ANA
23.	Axxela Advisory	4	BF
24.	Bain & Company	5	CO
25.	Bajaj Auto	1	MF
26.	Balaxi Ventures Lim.	1	BP
27.	Barclays	5	IT
28.	Boston Consulting Group	4	CO
29.	Bird Eye	5	IT
30.	Boldrocchi	0	MF
31.	BOX8	2	IT
32.	Bridgei2i Analytics	2	ANA
33.	Byjus	13	OT
34.	Cadence	2	ET
35.	Cairn India	4	MF
36.	Capgemini	21	CO
37.	CDM Smith	1	MF
38.	CGI	2	IT
39.	Cipla	2	BP
40.	Cisco	22	IT
41.	Citibank	17	IT
42.	Citrix	6	IT
43.	Codenation	0	IT
44.	College Dunia	2	OT
45.	Color Tokens	0	IT
46.	Credit Suisse	4	BF
47.	D.E. Shaw	3	IT
48.	Dalberg	0	CO

S.No.	Name of the Company	Number of offers made	Sector
49.	Deutsche Bank	11	IT
50.	Delhivery	0	IT
51.	Dell	3	IT
52.	Deloitte	4	IT/CO
53.	DirectI	1	IT
54.	Dr. Reddy's Laboratory	4	BP
55.	EagleView	4	IT
56.	Ecom Express	1	IT
57.	Edgeverve	15	IT
58.	Enphase	2	MF
59.	EXL	4	ANA
60.	Exxon Mobil	6	CH
61.	Ernst & Young	1	IT
62.	Fareportal	3	IT
63.	Flipkart	7	IT
64.	Flow Traders	0	BF
65.	Forbes Marshall	2	MF
66.	Fractal Analytics	21	ANA
67.	Fresh Prints	0	MBA
68.	Futures First	1	BF
69.	GE India	9	MF
70.	Genpact	4	MBA
71.	Goldman Sachs	11	IT
72.	Goodera	1	IT
73.	Google	3	IT
74.	Groww	1	IT
75.	GSMO	1	IT
76.	Haptik	1	IT
77.	Hero Moto	1	MF
78.	Hindalco-(Aditya Birla Group)	5	MF
79.	Hourglass Research	0	MBA
80.	HSBC	23	MBA/IT
81.	IBM	0	IT
82.	ICICI Bank	5	IT
83.	ICICI Lombard	2	MBA
84.	IFB	3	MF
85.	Impact Analytics	3	ANA
86.	Indialends	6	MBA
87.	Indiamart	1	MBA
88.	Indus Insights	4	CO
89.	Intel	16	ET
90.	IOCL	3	MF
91.	IQVIA	9	BP
92.	ISRO	3	MF
93.	JDA Software	2	IT
94.	JP Morgan	21	BF
95.	Jubilant LifeSciences	0	BP
96.	Kinapse	3	BP
97.	KPMG	5	MBA
98.	L&T ECC	3	IF
99.	La Raenon	3	BP
100.	Lenskart	1	IT
101.	Lohia Group	0	MF

S.No.	Name of the Company	Number of offers made	Sector
102.	Lowe's	4	ANA
103.	Manthan Advisors	1	CO
104.	Markets & Markets	4	MBA
105.	Maxim Integrated	1	MF
106.	Maybank	2	MBA
107.	Mechmocha	2	IT
108.	Mediatek	2	ET
109.	Merilytics	4	ANA
110.	Microland	4	ET
111.	Micron	9	ET
112.	Microsoft	22	IT
113.	Morningstar India	1	IT
114.	MuSigma	0	ANA
115.	Myntra	10	IT
116.	Nagarro	8	IT
117.	National Instruments	2	IT
118.	NAV Back Office	3	IT
119.	Nestaway	0	MBA
120.	Nestle India	1	MF
121.	NetApp	4	IT
122.	Netcore	2	MBA
123.	Netcracker	4	IT
124.	Newgen	6	MBA
125.	Ninjacart	1	IT
126.	Novartis	3	BP
127.	Nreach	1	IT
128.	Nucleus	2	IT
129.	Nutanix	2	IT
130.	Nvidia	1	ET
131.	NXP Semiconductors	8	ET
132.	OLA Cabs	10	IT/MF
133.	Oliver Wyman	1	BF
134.	OnePlus	2	IT
135.	Onix Capital	0	BF
136.	Oracle	24	IT
137.	Orbees Medical	2	CO
138.	Oyo	12	IT
139.	PayPal	6	IT
140.	PetaSense	1	MF
141.	Pfizer	3	BP
142.	PharmaAce	6	BP
143.	Piramal Mumbai	1	MF
144.	Praj Industries	1	MF
145.	Publicis Sapient	3	IT
146.	PWC	17	IT/CO
147.	Q3 Tech	5	IT
148.	Qdegrees	1	IT
149.	Qualcomm	10	ET
150.	Quantiphi	4	ANA
151.	Ramboll	2	IF
152.	Reflexis Systems	2	IT
153.	Reliance JIO	7	IT
154.	Samsung Bangalore	22	IT

S.No.	Name of the Company	Number of offers made	Sector
155.	Samsung Noida	3	IT
156.	Samsung Hardware	8	ET
157.	Sapient	2	IT
158.	Schneider Electric	2	ANA
159.	Sedemac	1	ET
160.	Shipsy	1	IT
161.	Signalchip	1	ET
162.	Singh Plasticisers	2	MF
163.	Sling Media	1	IT
164.	Societe Generale	6	IT
165.	Sprinklr	1	IT
166.	SRF	0	CH
167.	Samsung Delhi	2	IT
168.	Standard Chartered	7	IT
169.	Strand Life Sciences	1	IT
170.	Symphony Fintech	1	BF
171.	Symphony Retail AI	5	IT
172.	Synopsis	1	IT
173.	Tally Sol	1	IT
174.	Tata Advanced Systems Ltd	2	MF
175.	Tata AIG	1	MBA
176.	Tata Motors	4	MF
177.	TCG	3	IT
178.	TCS Analytics	8	MBA
179.	Techture	2	MF
180.	Tesco	1	IT
181.	Texas Instruments	3	ET
182.	TheMathCompany	1	IT
183.	Thornton Tomasetti	2	IF
184.	Tiger Analytics	4	IT
185.	Time Tooth	2	MF
186.	Toffee Insurance	3	IT
187.	Toshiba	3	IT
188.	Transorg	1	OT
189.	Turtlemint	1	IT
190.	Uber	4	IT
191.	UBS	0	BF
192.	Udaan	8	IT
193.	UnitedLex	2	IT
194.	Venper Academy	3	OT
195.	Visteon	0	MF
196.	VMS Consultant	3	IF
197.	VMware	6	IT
198.	VVF	2	MF
199.	Wabco	1	MF
200.	Western Digital	6	ET
201.	Wells Fargo	9	MF
202.	Whirlpool	6	MF
203.	William O Neil	2	MBA
204.	Wipro	7	IT
205.	WNS	3	MBA
206.	WSP	1	IF
207.	Xilinx	3	ET

S.No.	Name of the Company	Number of offers made	Sector
208.	Zendrive	1	IT
209.	Zeotap	4	IT
210.	Zilingo	5	IT
211.	Zinnov	11	CO
212.	Zomato	2	IT
213.	ZS	13	CO
214.	Zyla	1	BF
	Total	**902**	

Summary

Total No. of companies: 214

Total No. of appointments offered: 902

Legend:

ANA	Analytics
BF	Banking and Finance
BP	Bio-Pharma
CH	Chemical
CO	Consulting
ET	Electronics
IT	Information Technology
MBA	Masters in Business Administration
MF	Manufacturing
OT	Other (Teaching etc)

LIST OF PROJECTS COMPLETED UNDER CERTAIN PROJECT-ORIENTED COURSES IN THE YEAR 2020

Second Semester 2019-2020 and First Semester 2020-2021

DESIGN PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
1	Aaditaya Raj Roshan	Nishant Roy	Limit Analysis Of Geotechnical Structures In Soil And Rock
2	Aakash Gupta	Saket Verma	Design Of Microchannels In Turbine Blade
3	Aakash Shankar	Mani Sankar Dasgupta	Weight Reduction In Machine Components
4	Aarushi Rustagi	Somak Chatterjee	Matlab Code Development For Dynamic Scale Up Study
5	Aashna Saxena	Aniruddha Roy	Nanoparticle Design And Intracellular Trafficking
6	Aashya	V Manjuladevi	Thin Film Optics
7	Aatman Borda	S Gurunarayanan	Domain Specific Hardware Accelerators
8	Abhijit Kumar	Ajit Pratap Singh	Water Quality Monitoring Through Wireless Sensor Networks
9	Abhinandan Sharma	Abhijit Rameshwar Asati	Implementation Of Ldpc Encoder/ Decoder For 5G Nr
10	Abhinav Kumar	Yenuganti Sujan	Design And Development Of Energy Harvesting Device
11	Abhinav Kumar Singh	Sheth Pratik N	Reduced Order Model (Rom) Development From Cfd Results
12	Abhinav Singh	Mani Sankar Dasgupta	Possibilities Of Compliant Mechanism Systems In The Automotive And Aerospace Industries
13	Abhinav Tuli	Nitin Chaturvedi	Object Detection
14	Abhishek B Chakravarthi	Dheerendra Singh	Estimating Crowd Count And Predicting Stampedes
15	Abhishek Jha	Durgesh Vikram	Influence Of Laterally Positioned Vehicle On Speed Profile
16	Abhishek Pratik	Chandra Shekhar	Fixed Cost Transportation With Discount Mechanism
17	Aditi Arya	Anshuman Dalvi	Design And Development Of Cathode Materials For Lithium Ion Batteries
18	Aditya Agrawal	Rupam Goswami	Nano-Cavity-In-Body Fets For Bio-Sensing Applications
19	Aditya Bhanja	Nishant Roy	Stabilization Of Slopes Using Micropiles
20	Aditya Bhanja	Durgesh Vikram	Comparison Of Traffic Flow Before/After Covid-19
21	Aditya Mithal	Syed Mohammad Zafaruddin	Dangerous Object Detection In Pseudo Colored X-Ray Images Using Deep Learning
22	Aditya Patel	Tufan Chandra Bera	Reduction Of Weight Of Slip Ring Fixture
23	Aditya Pramod Nahata	Arun Kumar Giri	Automated Mathematical Modeling For Financial Time Series Prediction Using Fuzzy Logic, Dynamic Systems, And Fractal Theory
24	Aditya Rustagi	Vinay Chamola	Novel Innovations In Internet Of Things
25	Aditya Sangram Singh Rana	Devesh Samaiya	Ml Based Methods In Video Analytics
26	Aditya Saxena	Mukesh Kumar Rohil	Design Of A System For Text Summarization In The Context Of Bacteriology.
27	Aditya Upadhyay	Lavika Goel	Diseases Prediction In The Different Crops On Satellite Images Using Ml
28	Aditya Upadhyay	Avinash Gautam	Determining Heading Of Person, Obstacle Avoidance
29	Akash Pratap Singh	Vinti Agarwal	Deep Learning Methods On Graphs
30	Akshat Sharma	Surekha Bhanot	Multimodal Emotion Recognition
31	Akshika Goel	Raj Kumar Gupta	Star-Galaxy Classification Using Deep Convolution Neural Network
32	Akshina Jindal	Lavika Goel	Feature Extraction And Classification Of Crop Types Using Satellite Data Of Rajasthan
33	Akul Malhotra	Nitin Chaturvedi	Hardware Acceleration Of Neural Networks Using Post Cmos Devices
34	Alex Mathai	Vaibhav Soni	Commonsense Reasoning
35	Amaayaa Goswami	Anshuman Dalvi	Some Studies On Latp Based Mixed Ionic Electronic Conductors.
36	Aman Anand	Nitin Chaturvedi	Simulation Of Gao Hemt Using Atlas Silvago.
37	Aman Lamba	Navin Singh	Statistical Mechanics Of Fibre-Bundle Model And It
38	Aman Shenoy	Yashvardhan Sharma	Visual Reasoning Based On Text In Images
39	Ambuj Upadhyay	Girish Kant Garg	Development Of A Generalized Energy Prediction Model

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
DESIGN PROJECT			
			For Machine Tools
40	Amey Mukund Shitole	Ashish Patel	Integration Of Blockchain With Iot (In Collaboration With Ceeri)
41	Amisha Srivastava	Ajit Pratap Singh	Watershed Managementlife Cycle Assessment: An Innovative Technique
42	Amit Sanjay Hegde	Suvanjan Bhattacharyya	Design Of An Aerodynamic Flow Control System
43	Amod Gupta	Manoj Kumar	Load Distribution In Slab On Girder Bridges.
44	Ananya Malhotra	Hari Om Bansal	Affordable Rets As Energy Source In Rural India
45	Aniket Agnihotri	Ashis Kumar Das	To Analyze The Binding Of Target Molecule To The Probe On The Sensing Layer Of A Nano Biosensor
46	Aniruddha Jayant Karajgi	Amit Dua	To Solve The Real-Time Problems Using Deep Learning
47	Anirudh Buvanesh	Rajesh Kumar	Numerical Methods For Intergro Differential Equations
48	Anirudh Srinivasan Chakravarthy	Pratik Narang	Geophysical Variable Extraction Using Remote Sensing Image Analysis
49	Anirudh Vijay	J. Jennifer Ranjani	Concealed Weapon Detection Using Image Fusion And Deep Learning
50	Anishkumar S S	Amitesh Singh Rajput	Application Of Dl For Solving Real-Life Problems
51	Ankit Goyal	Rakesh Choubisa	Analysis Of Chaotic Dynamics Using Neural Networks
52	Ankush Khetan	Tufan Chandra Bera	Modelling Of Heat Source And Temperature Prediction In Peripheral Milling
53	Anshuman Mishra	Vinay Chamola	Internet Of Things Enabled Healthcare Applications
54	Anubhav Bansal	Rajesh Kumar	Numerical Methods For Integrodifferential Equations
55	Anubhav Bansal	J. Jennifer Ranjani	Concealed Object Detection Using Thermal Imaging And Surveillance Videos
56	Anusatya Choudhary	P Srinivasan	Temperature Distribution And Life Estimation Of A Gas Turbine Blade At High Temperature.
57	Anusha Kumar	Puneet Mishra	Designing A Lower Limb Exoskeleton Using Fuzzy Pd Controller
58	Anusha Kumar	Puneet Mishra	Efficient Control Of An Upper Limb Exoskeleton
59	Arjun Gupta	Muthukumar G	Modeling And Analysis Of Rc Shell Structures (Domes And Folded Plates)
60	Arpan Bumb	Sangeeta Sharma	A Study On Execution Styles In Online Teaching
61	Arpan Chattopadhyay	Surekha Bhanot	Modified Functional Link Artificial Neural Network
62	Arpan Parikh	Vandana Agarwal	Application Of Deep Learning In Bci
63	Arpit Agarwal	Ashis Kumar Das	Data Analysis Of Microarray Data Of Thrombocytopenia
64	Arpit Mittal	Prateek Kala	Robot Manipulation Using Reinforcement Learning
65	Arpit Mohanty	Prateek Kala	Design And Fabrication Of Biomedical Implants Using 3D Printing
66	Aryaman Agrawal	Tufan Chandra Bera	Reduction Of Weight Of Slip Ring Fixture
67	Aryamick Singh	Anu Gupta	Design And Analysis Of Pvt Variations Immune Sram
68	Aryan A Pareek	P R Deepa	Applications And Potentials Of Lateral Flow Assays In Clinical Diagnostics
69	Aryan Mehra	Pratik Narang	Deep Learning Based Satellite Image Analysis And Image Enhancement Techniques
70	Aryan Mehra	Vinay Chamola	Machine Learning & Deep Learning Across Domains
71	Aryan Pancholi	Saket Verma	Designing & Simulating Heat Transfer Channels
72	Ateeksha Mittal	Meetha V. Shenoy	Implementation Of A Recurrent Neural Network On Zynq 7000-Soc
73	Atharva Tandon	P R Deepa	Applications And Potential Of Lateral Flow Assays In Clinical Diagnostics.
74	Aviral Sethi	Krishna M	Forecasting The Market Potential For Electric Vehicles In India
75	Avish Khosla	Shibasish Chowdhury	Applications Of Machine Learning In Drug Discovery And Development
76	Avishek Roy	Pushp Lata	Framework To Train Students In Intercultural Skill
77	Ayush Jain	Pratik Narang	Design Of Deep Learning Model For Object Detection In Aerial Images
78	Ayush Kumar	Mukesh Kumar Rohil	Cnn For Early Detection Of Rare Diseases
79	Ayush N Deshmukh	Venkatesh Kadbur Prabhakar Rao	Study Of Light And Sound Wave Interference And Its Utility In Microscale Devices
80	Ayush Sharma	Saket Verma	Production Of Biodiesel From Waste Cooking Oil
81	Ayush Srivastava	Shivi Agarwal	Development Of An Algorithm For Fractional Gradient Based Neural Network

DESIGN PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
82	Ayush Vachaspati	Kamlesh Tiwari	User Profiling Using Encrypted Data
83	Baheti Shivam Narayan	Manojkumar Surajkaranji Soni	Design And Development Of Solar Cooker Test Rig.
84	Bajaj Satyajeet Laxmikant	Tufan Chandra Bera	Thermal Aspects Of Peripheral Milling
85	Bhalerao Ameya Shripad	Pawan Kamalkishor Ajmera	Biometric System: Palmprint Recognition
86	Bhalerao Ameya Shripad	Tanu Shukla	Studying Factors Of Organizational Domain And Rela
87	Bhatia Aditya Sandeep	Mukund Lahoti	Accounting And Finance In Civil Engineering
88	Bhavika Gupta	Abhijit Rameshwar Asati	Classification For Biometrics Using Deep Convolutional Neural Networks
89	Botlaguduru Satvik	Yenuganti Sujan	Design And Development Of Bio Medical Sensors
90	Chandraveer Saran	Amit Rajnarayan Singh	Review, Analysis And Design Of Walking Mechanisms
91	Chinmay Nema	Vinti Agarwal	High-Quality Image Extraction From Video For Micro
92	Chintan Malde	Aneesh A M	Modelling Of The Conductive And Radiative Heat Transfer Characteristics Of The Satellite
93	Chitranjan Jain	Rajneesh Kumar	Net Zero Energy Buildings In India
94	Dalal Amol	Satyendra Kr Sharma	Improving Demand Forecasting By Minimising The Bullwhip Effect In A Supply Chain
95	Darshan Agrawal	Rajesh Kumar	Visuals Formalisms Applied To Attack Trees
96	Debabrata Chaudhury	Chandrasekhar	Computer Vision Hardware
97	Deeksha Shridhar Vishnampet	Mani Sankar Dasgupta	Device For Active Flow Control Over Cars And Truck
98	Deepankar K Anand	Virendra S Nirban	Travel Record Management Web Application
99	Deepanshu Sharma	Ajaya Kumar Pani	Kernel Principal Component Analysis
100	Desai Mohil Sandip	Anu Gupta	Design Of High Performance Vlsi Circuits
101	Desai Mohil Sandip	S Gurunarayanan	Transistor Level Design Of High-Performance Sram
102	Deshmukh Mihir Abhay	Kuldip Singh Sangwan	Design Of 5 Axis Tabletop Cnc Milling Centre
103	Dewansh Kaloni	Rakesh Choubisa	Study Of Twisted Photon Processes On Atoms
104	Dhairya Bhorania	Yenuganti Sujan	Piezoelectric Wind Energy Harvesting
105	Dhairya Bhorania	Shishir Maheshwari	Anomaly Detection Using Gan
106	Dhananjay Vijayaraghavan	Meetha V. Shenoy	Performance Analysis Of Multimedia Based Iot Systems
107	Dhananjay Vijayaraghavan	Surekha Bhanot	Application Of Prototypical Networks On Mcu
108	Dhanush Tripathy	Tufan Chandra Bera	Modeling Of Material Removal In Cavitation Machining
109	Dhruv Jain	Akash Agarwal	Modeling Of Impulsive Noise Interference In Digital Video Broadcast(Dvb) Systems.Extensive Literature Review On:
110	Dhruv Sharma	Karri Babu Ravi Teja	Deep Learning Architecture For Lung Disease Detect
111	Dipam Goswami	Krishnendra Shekhawat	Dimensioned Floorplans Using Dissection
112	Disha Jain	Priya Christina S	Tbp Data Modelling For Heavy Oils
113	Divya Kapur	Nitin Chaturvedi	Design Exploration Of Clock Less Circuit
114	Divya Prakash	Mani Sankar Dasgupta	Human Body Kinematics Analysis In Sports
115	Divyam Goel	J. Jennifer Ranjani	Enhancing Of Low Light Images Using Deep Learning
116	Divyansh Makkar	Ajaya Kumar Pani	Independent Component Analysis
117	Dudhavat Kunal Madankumar	Rajneesh Kumar	Application Of Internet Of Things (Iot) For Design Of A Voice Controlled Smart Home System Using Natural Language Processing (Nlp).
118	Fajalia Alark Sunilbhai	Karri Babu Ravi Teja	Implementation Of A Fuzzy Controller Using Verilog
119	G Adityan	Poonam Goyal	Parallelization Of Clustering Algorithms
120	G Sundar	Aneesh A M	Modelling Of Evaporation From Porous Surface
121	G Y Saket Reddy	Manoj Kumar	Development Of Courbon Method For Skew Bridges.
122	G Y Saket Reddy	Manoj Kumar	Development Of Courbon Method For Skew Bridges.
123	G Y Saket Reddy	Ravi Kant Mittal	Regression & Modeling Of Fibre(Wm) Reinforced Soil
124	Garge Sharvari Vivek	Saumi Ray	Use Of Heterogeneous Catalysis In Waste Water
125	Gaurav Bellal Natesh	Suresh Gupta	Applying Data Analytics In Chemical Engineering
126	Gaurav Rathi	Manojkumar Surajkaranji Soni	Solar Pumps For Agriculture Purpose - A Dsm Study
127	Gaurav Sharma	Aneesh A M	Modelling Of The Conductive And Radiative Heat Transfer Characteristics Of The Satellite.
128	Gaurav Sharma	Bijay Kumar Rout	Space Robotics
129	Gouri Sajith	Rajiv Gupta	Adoptation Of Earth Ships
130	Gunank Singh Jakhar	V S Shekhawat	Workload Characterization For Data Center Network
131	Gupta Ansh Nitin	Rajneesh Kumar	Current Trends Of Ai Startups In Pharma Sector: A Study And Future Prospects On Scaling Technology

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
DESIGN PROJECT			
132	Gupta Pranay Pradeep	Debashis Bandyopadhyay	Dft Modelling Of Nanotubes/Clusters As H2 Storage.
133	Hardik Bhatnagar	Meghana Tare	Optimizing Methods Of Machine Learning For Developing Understanding On Disease Datasets
134	Hardik Bhatnagar	Syamantak Majumder	Computer-Aided Prognosis Of Heart Diseases
135	Harpinder Jot Singh	Hari Babu Kotakula	Design And Implementation Of Push-Based Approaches For State Collection
136	Harsh Bhoot	Geetilaxmi Mohapatra	Linkages Between The Pharmaceutical Sector And Economic Development In Major Asean Economies
137	Harshit Shrivastava	Ravi Kant Mittal	Regression& Modelling Of Fibre(Wm) Reinforced Soil
138	Harshwardhan Mittal	I R Laskar	Fabrication Of Oled Device By Synthesiszing Suitable Conjugated Organic Molecule.
139	Hemant Bhartiya	Ajaya Kumar Pani	(P033) Surface Roughness Prediction
140	Himani Sharma	Pushp Lata	Assignment And Module Submission Management System
141	Himanshu Sharma	Amit Rajnarayan Singh	Review, Analysis & Design Of Walking Mechanisms
142	Hitesh Sethi	Nitin Chaturvedi	Study And Design Of Low Power Novel Computing Architecture
143	Honnesh Rohmetra	Bharti Khungar	Graph Convolutional Neural Networks For Chemical Property Prediction
144	Hrishav Raj	Prateek Kala	Robot Manipulation Using Reinforcement Learning
145	Isha Saini	Raj Kumar Gupta	Parallel And Series Integration Of Quartz Crystal Microbalances
146	Ishaan Singh Rawal	Meghana Tare	Optimising Methods Of Machine Learning For Developing Understanding On Disease Datasets
147	Ishan Bhanuka	Hari Babu Kotakula	Time And Space Efficient Methods For Collecting Network State In Real-Time
148	Jaanvi Agrawal	Priya Christina S	Deductions In Plant Growth Experiment
149	Jahnavi Tiwari	Ajaya Kumar Pani	Pems For Coal Fired Thermal Power Plant.
150	Jai Rawal	Aneesh A M	Flow Simulation In A Rotating Microfluidic Channel
151	Jared Dominic Fernandez	Devesh Samaiya	Server Status-Checker With Esp8266-Microcontroller
152	Jash Shah	Yenuganti Sujan	Power Recycling In Evs Using Seebeck Effect
153	Jasmine Kumar	Surekha Bhanot	Smart Stethoscope
154	Jaspreet Kaur Pawa	Syamantak Majumder	Simulation Of Neuron Models Onto Electrical Circuits
155	Jay Kamat	Bijoy Krishna Mukherjee	Satellite Attitude Control
156	Jha Vidit Niriv	Syed Mohammad Zafaruddin	Distributed Resource Allocation For Wireless Networks
157	Jhaveri Ayush Rajesh	Navneet Goyal	Animal Sound Analytics
158	Jithin Kallukalam Sojan	Haribabu K	Flow Scheduling For Qos Realization
159	Jivat Neet Kaur	Surekha Bhanot	Health Recommender System Using Machine Learning
160	Jonnalagadda Sadhana	Rajdeep Chowdhury	Collateral Sensitivity In Reversing Drug Tolerance
161	Joy Parikh	Anu Gupta	Design Verifier For Ics Using Ai
162	Joyoti Disha Rajbongshi	Ashish Patel	Design Of Fpga Based Feedback Controller
163	Jyotiraditya Singh	Srikanta Routroy	Supply Chain Management (Scm).
164	Kanika Saxena	Yenuganti Sujan	Piezoelectric Energy Harvesting
165	Kanishq	Muthukumar G	Comparison Of Techniques Of Analysis For Seismic Evaluation.
166	Kaustav Dutta	Niladri Sarkar	Computational Physics In Quantum Mechanics
167	Kaustubh Dwivedi	J. Jennifer Ranjani	Plant Disease Identification
168	Kaustubh Namjoshi	Yenuganti Sujan	Acquisition Of Biomedical Signals
169	Kavya Gupta	Ashutosh Bhatia	Face Anti-Spoofing In Mobile Phones Using Rgb Camera.(Using Deep Learning Techniques)
170	Khandelwal Harsh Rajkumar	Uma S Dubey	Uncoupling Of Bacterial Immunogenicity From Pathog
171	Khushboo Kumari	Rajesh Kumar	Developing Gui For Attack Tree Repository And Questionnaire
172	Khushi Saini	Anshuman Dalvi	Study Of Semiconductor Devices And Nanostructures
173	Khushi Upesh Doshi	Rajdeep Chowdhury	Overcoming Resistance In Ovarian Cancer
174	Kirti Sharma	Prateek Kala	Making Fused Filament Fabrication 3D Printing Customizable For Different Materials
175	Kishore Sundara Moorthy	Devesh Samaiya	Design Of Display Controller For Led Matrix Panels Using Stm32 Microcontroller.
176	Komal Vasudeva	Vinti Agarwal	Sentiment Analysis On Twitter
177	Krishnadev Reghunath Menon	Venkatesh Kadbur Prabhakar Rao	Bio Energy Harvesting

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
	DESIGN PROJECT		
178	Krishnadev Reghunath Menon	Meetha V. Shenoy	Modelling And Control Of Robotic Arm
179	Kshitij Arora	Rupam Goswami	Nanocavity-In-Body Fets For Bio-Sensing Applications
180	Kushagra Mishra	Rakesh Choubisa	Designing Neural Networks For Chaotic System
181	Lakshaya Maheshwari	Nitin Chaturvedi	Designing Of State Retentive Flip Flop
182	Lakshya Agarwal	Rakesh Choubisa	Study Of Photon And Electron Vortex Beams
183	Lakshya Singhal	Rajiv Gupta	Analysis Of Solar Radiation By Shadow Analysis
184	Laturiya Yash Sanjay	B Vani	Biobased Resources And Value Chain For Future
185	Madhav Sikka	Yashvardhan Sharma	Redesigning Bits Website'S Backend Using Django
186	Mahesh Kaushik	Ravi Kant Mittal	Design Of Statistical Model For Bcr And Study The Dynamic & Static Behavior Of Footing On Tire Chip Reinforced Soil
187	Manan Agarwal	Kaushar Vaidya	Membership Determination And Properties Of Star Clusters
188	Manan Garg	Rajdeep Chowdhury	Application Of Machine Learning In Cancer Prognosi
189	Manan Soni	Rajesh Kumar	Implementation And Visualization Of Numerical Algo
190	Manish	Shivi Agarwal	Multi-Criteria Decision Making Techniques And Appl
191	Manish Saini	Devika	Different Forms Of Dance In Cinema
192	Manit Baser	Syed Mohammad Zafaruddin	Dangerous Object Detection In Pseudo Coloured X-Ray Images Using Deep Learning
193	Mantra Manan Saraswat	Mukund Lahoti	Shotcrete Lining In Tunnels
194	Marathe Shriya Amey	Nishant Roy	Effect Of Local Site Effects On Seismic Response
195	Mashru Harshit Sandeep	Rajesh Kumar	Designing Attack Trees Using Feature Diagrams
196	Mayank Hemant Kulkarni	Prateek Kala	Design And Fabrication Of Biomedical Implants Using 3D Printing
197	Mayank Jasoria	Syamantak Majumder	Designing A Software-Based Architecture For Predicting The Stage Of Chronic Kidney Disease (Ckd)
198	Mayur Dhwaj Singh Khangarot	Nitin Chaturvedi	Study And Design Of Novel Computing Architectures For Low Power.
199	Megh Thakkar	Surekha Bhanot	Deep Learning For Visual Common Sense Reasoning
200	Mehul Sachdeva	Krishnendra Shekhawat	Floorplans And Machine Learning
201	Mihir Pratap Singh	Nitin Chaturvedi	Simulation Of Gallium Nitride Nanowire Hemt Structure
202	Miloni Mittal	Shashank Gupta	A Survey Of Security Issues In Blockchain
203	Moghe Tanmay Subodh	Nitin Chaturvedi	Object Detection
204	Mohit Bhatia	Yenuganti Sujan	Piezo Electric Wind Energy Harvester
205	Mohit Kriplani	Shibasish Chowdhury	Applications Of Machine Learning In Drug Discovery And Development
206	Mohit Kumar Jangir	Muralidhar Rao N V	Hybrid Arima-Ann Model For Exchange Rate Forecast
207	Mohit Vyas	Chandra Shekhar	Design Of Coprocessor For Risc-V Architecture
208	Mukund Madhusudan Jha	Rajiv Gupta	Gis With Ai For A Water Management System
209	Naga Siva Sai Reddy	Yashvardhan Sharma	Identification Of Controversial And Hate Statements In Social Media Text
210	Naga Siva Sai Reddy	Muralidhar Rao N V	Hybrid Arima-Ann Model For Exchange Rate Forecast
211	Naman Kansal	P Srinivasan	Waste Heat Recovery From Internal Combustion Engine And Its Application In Phase Change.
212	Naman Singhal	Rajesh Kumar	Visual Formalism Applied To Attack Trees
213	Nandu Keval Deepak	Akash Agarwal	Modeling Of Impulsive Noise Interference In Electricity Substations
214	Nandu Keval Deepak	Debata Byomakesh	Computational Finance
215	Narkedamilli Venkata Sagar	Anupam Singhal	Developing A Replicable Model For Lake Revival
216	Nayan Nilesh	Rajneesh Kumar	Application Of Internet Of Things (Iot) For The Design Of A Voice-Controlled Smart Home System Using Natural Language Processing (Nlp)
217	Neelabh Sinha	Raj Kumar Gupta	Star-Galaxy Classification Using Deep Convolutional Neural Networks
218	Neelanchal Joshi	Chandra Shekhar	Design Of Coprocessor For Risc-V Architecture
219	Neetigya Sethi	Muthukumar G	Structural Health Monitoring
220	Neha Hada	Yenuganti Sujan	Acquisition Of Bio Medical Signals
221	Neha Raj Sriram	Meghana Tare	Understanding The Mitochondrial Dynamics In The N
222	Nidish Garg	Manoj Kannan	Assessment Of Bits Dual Degree Academic Structure
223	Nikhil Gupta	Vinay Chamola	Ml For Bci Based Humanoid Control

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
DESIGN PROJECT			
224	Nirmal J	A R Harikrishnan	Thermo Hydrodynamics At Micro Nano Scale
225	Nishank Malik	Manoj Kannan	Assessment Of Bits Dual Degree Academic Structure
226	Nishant Gupta	Chandra Shekhar	Design Of A Low Noise Amplifier For Rf Communication
227	Nishant Raman	Meetha V. Shenoy	Performance Analysis Of Multimedia Based Iot Systems
228	Nishchay Goyal	Manoj Kumar	Analysis And Design Of Floor Slab Resting On A Continuous Beam Structure
229	Paidipelly Hemanth Rao	Vinti Agarwal	Mining Twitter For Actionable Intelligence
230	Palash Chowdhury	P R Deepa	Analysis Of Metabolic Flux Using Fluxpyt
231	Pallav Soni	Hare Krishna Mohanta	Chemical Gas Sensor Drift Compensation Using Machine Learning
232	Parth Gupta	Shamik Chakrabarti	Air Pollution Hotspot & Trajectory Detection
233	Parth Kharade	Meetha V. Shenoy	Sensor Fusion Based Positioning For Robotic Applications
234	Parv V Panthari	Akash Agarwal	Modeling Of Impulsive Noise Interference In Electricity Substations
235	Patil Aditya Pramod	Syamantak Majumder	Application Of Microfluidics To Model Blood Vessels
236	Piyush Sinha	Sheth Pratik Nitinchandra	Reduced Order Model Development From Cfd Results
237	Potla Sai Aditya	Abhijit Rameshwar Asati	Hardware Implementation Of Cnn
238	Pradeep Saini	Pushp Lata	Assignment And Module Submission Management System
239	Pranamya Jain	Navneet Gupta	Optimal Selection Of Gate Material For Tfet
240	Pranav Mahajan	Praveen Kumar A.V.	Monopole Mode Dra Design
241	Pranav Sharma	Yenuganti Sujan	Design & Developing Sensors With Smart Materials
242	Prateek Jain	Manoj Kumar Soni	Design Of Organic Solar Cell To Improve Performance And Efficiency
243	Prateek Mahajan	Sai Sesha Chalapathi Gattupalli	Design And Implementation Of Algorithms For Drones
244	Pratik Srivastava	Sheth Pratik N	Reduced Order Model (Rom)Development From Cfdresults
245	Pratyush Pathak	Yenuganti Sujan	Magnetrorhelogical Fluids(Mrf) Based Sensors
246	Praveen Ravirathinam	J. Jennifer Ranjani	Enhancement Of Low Light Images Using Deep Learning
247	Prerna Baranwal	Bijoy Krishna Mukherjee	Type 2 Fuzzy Control For A Power System Application
248	Priyesh Agarwal	Aditya Raw Gautam	Battery Energy Management In Islend Dc Micro Grid.
249	Raaj Dhanwani	Arya Kumar	Financial Distress & Corporate Failure Prediction
250	Raghav Bansal	Anu Gupta	Low Noise Amplifier (Lna) Design On Cadence
251	Raghu Boyalla	Anupam Singhal	Developing A Replicable Model For Lake Revival
252	Rahil N Jain	Krishnendra Shekhawat	Constructing Floorplans With Circulations
253	Rahul Godara	Dipendu Bhunia	Energy-Efficient Building
254	Rahul Kumar	Bijoy Krishna Mukherjee	Robust Control For A Maneuvering Fighter Aircraft
255	Rahul P S S B R	Sheth Pratik N	Aspen Custom Modeler
256	Rahul Sundareshwaran	Pankaj Arora	Design And Simulation Of Ion Sensitive Field Effect Transistors For Chemical/Bio-Chemical Applications
257	Ramachandren Shankar	Vaibhav Soni	Semantic Segmentation Of Road Networks And Buildings From Satellite And Drone Imagery Using Anns
258	Ranjan Tripathi	Rajesh Kumar	Study Of Stability Of Steel Structures Due To Thermomechanical Loading
259	Rawal Ishaan Singh Tavinder Singh	Shibasish Chowdhury	Md Simulations To Understand Structure-Function
260	Revanth P	Mani Sankar Dasgupta	Design & Commercial Of Cold Storage In Rural India
261	Rhythm Goel	Ajaya Kumar Pani	Deep Learning For Process Monitoring
262	Riju Kushwaha	Bijoy Krishna Mukherjee	Emergence And Control Of Chaos In Aircraft Fl. Dyn
263	Rishabh Aneja	Anshuman	Design And Analysis Of A Multi-Storey Building Using Etabs
264	Rishav	Surekha Bhanot	Deep Learning For Visual Commonsense Reasoning
265	Rithik Dilip Rathi	Devesh Samaiya	Embedded Systems Bus Simulator Device (I2C/ Spi/ Uart / Lcd)
266	Rithik Dilip Rathi	S Gurunarayanan	Pipelined Processor Implementation
267	Ritik Pagaria	Richa Shrivastava	Targeting Sarcopenia Using The Metabolic Approach
268	Riya Bhandari	Anirudh Singh Rana	Fundamental Solutions Of Brinkmann Porous Medium
269	Rohan Singh	Somak Chatterjee	Matlab Code Development For Dynamic Scale Up Studi
270	Rohit Sunil Bohra	Nitin Chaturvedi	Object Detection
271	Rohit Venkatesh	Karri Babu Ravi Teja	Fpga Based Implementation Of Rns Based Dsp Systems

DESIGN PROJECT			
S.NO	**NAME OF STUDENTS**	**FACULTY NAME**	**PROJECT TITLE**
272	Rupesh Raj	Nishant Roy	Development Of Gui Using Python For Design & Analysis Of Geotechnical Structures In Opensees
273	Rushabha B	Sainath Bitragunta	Applying Deep Learning For Wireless Systems
274	Saahil Dhaka	Mukund Lahoti	Design Challenges Of Alternate Construction
275	Sachin Yadav	Sangeeta Sharma	Social Media Marketing And Advertising Strategies
276	Sagar Saluja	Debashis Bandyopadhyay	Physical Modelling Of Strings
277	Sakshi Paliwal	Dheerendra Singh	Augmented Reality With Machine Learning
278	Samane Nagesh Sanjay	Meetha V. Shenoy	Implementation Of Recurrent Neural Network On Zynq 7000-Soc
279	Samane Nagesh Sanjay	S Gurunarayanan	Application Specific Reconfigurable Architectures
280	Samarth Tiwari	Smita Raghuvanshi	Estimation Of Rate Kinetic Parameters From Bio Mit
281	Samiksha Gurbaxani	Suresh Gupta	Application Of Data Science In Chemical Engineerin
282	Sanjana Mishra	Debata Byomakesh	Covid 19 And Behavioural Economics
283	Sanjeet Malhotra	Jitender Kumar	A Study Of Power Graphs Associated With Algebraic Structures.
284	Sanskar Jain	Navin Singh	Statistical Mechanics Of Dna/Rna Hairpins
285	Sarthak Chordia	P R Deepa	Medical Application Of Artificial Intelligence
286	Sarthak Singh	Surekha Bhanot	Design And Implementation Of Semantic Gans
287	Satyam Malhotra	Prateek Kala	Optimizing Energy Usage In Welding Based Additive Manufacturing System
288	Saubhagya Shukla	Ajaya Kumar Pani	Concrete Compressive Strength Prediction With Ml
289	Sehajdeep Singh Arora	Nishant Roy	Fragility Assessment Of Tunnels Considering Local Site Effects
290	Shah Kaivalya Himanshubhai	Manoj Kumar	Analysis Of Shear Wall In Building
291	Shah Raj Sanjay	Vinti Agarwal	Mining Large Scale Knowledge Graphs
292	Shah Shrey Tarun	Shamik Chakrabarti	Air Pollution Hotspot & Trajectory Detection
293	Shaily Bhatt	Yashvardhan Sharma	Fake News Detection In Social Media With A Focus On Analysis Of Visual Based Features In Contrast With Content-Based And Context-Based Features For The Task Of Fake News Detection
294	Shaily Bhatt	Poonam Goyal	Image Caption Generation Using Deep Learning Techn
295	Shankara Narayanan	Venkatesh Kadbur Prabhakar Rao	Numerical Analysis Of A Surgical Robot
296	Sharma Paritosh Ashutosh	Srikanta Routroy	Study Of Supply Chain In Event Management: Issues And Challenges In Bits Pilani
297	Sharvari Vivek Garge	Smita Raghuvanshi	Life Cycle Inventory Analysis(Lci) For Comparative Analysisfor Removal Of Flue Gases Fromvarious Methods
298	Shewale Tanvi Satish	Vinay Chamola	Machine Learning For Secure Edge Computing
299	Shikhar Singh	Ashis Kumar Das	To Analyze The Binding Of Target Molecule To The Probe On The Sensing Layer Of A Nano Biosensor
300	Shikhar Vohra	Puneet Mishra	Sensor Design For Position And Velocity Of Valve
301	Shivam Agrawal	Sumanta Pasari	Big Data Analytics In Supply Chain And Logistics
302	Shivangi Singh	Rajesh Kumar	Developing Gui For Attack Tree Repository And Questionnaire
303	Shivansh Agarwal	Srikanta Routroy	Design Project
304	Shivansh Asthana	Prateek Kala	Iiot Implementation In An Automated Process For Data Monitoring And Analysis Via Remote Access.
305	Shorya Jain	P Srinivasan	Creep Finite Element Simulation Of Multilayered System With Interfacial Cracks
306	Shourya Sodhani	Mani Sankar Dasgupta	Weight Reduction Of Car Components By Optimization
307	Shray Mathur	Vinti Agarwal	Mining Large Scale Knowledge Graphs
308	Shristi Kumari	Chandra Shekhar	Estimation Of Waiting Time In The Queueing System: A Machine Learning Approach
309	Shruti Kumari	Suresh Gupta	Application Of Data Analytics In Chemical Engineer
310	Shubham Raj	Shibasish Chowdhury	Using Graph Network Theory For Analysis Of Various Biological Pathways
311	Shubhendu Kumar Tripathi	Vishal Saxena	Assess The Probability Of A Tb Patient Having A Resistant Form Of Tuberculosis Based On The Analysis Of Chest Ct Scan
312	Siddhant Singh	Raj Kumar Gupta	Parallel And Series Integration Of Quartz Crystal Microbalances
313	Siddharth Karandikar	Manoj Kumar	Finite Element Design For Composite Bridges

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
DESIGN PROJECT			
314	Singh Nikita Narendra	Ashutosh Bhatia	Face Anti-Spoofing In Mobile Phones Using Rgb Cameras.(Using Deep Learning Techniques)
315	Snehashish Choudhary	Uma S Dubey	Using Machine Learning Tools For Cancer Detection
316	Sohit Aggarwal	P R Deepa	Novel Bioconversion Strategies For Transforming Agro-Foood Waste Into Valuable Products.
317	Sparsh Wairya	Chandra Shekhar	Design Of Risc-V Processor
318	Sparsh Wairya	S Gurunarayanan	Pipelined Processor Implementation
319	Sreyas Ravichandran	Poonam Goyal	Stream Data Analysis
320	Sumedha Koul	Nishant Roy	Convergence Confinement Method For Cut And Cover Tunnels
321	Sumit Bisht	Krishnendra Shekhawat	Graph Theoretic Approach For Irregular Floorplans
322	Sumukh Nitundil	Anu Gupta	Neuromorphic Ckt Design For Medical Applications
323	Sushant Kumar	Tufan Chandra Bera	Analytical Modelling Of Material Removal In Cavitational Machining.
324	Sushant Kumar Roy	Rajiv Gupta	Application Of Lidar For Water Management System
325	Tanmay Anand	Vinay Chamola	Dl/Ml Based Preprocessing For Iot In Agriculture
326	Tanmay Dixit	Rajneesh Kumar	Modelling Of Household Electricity Consumption With The Aid Of Computational Intelligence Methods
327	Tanmay Khandelwal	Nitin Chaturvedi	Single Stage Object Detection Using Deep Learning Architectures For Xray Images
328	Tarun Tanwar	Virendra S Nirban	Web Portal Design For Department Of Humanities And Sciences.
329	Trinika	Muralidhar Rao N V	Detection Of Asset Pricing Bubbles
330	Trivedi Bhagyesh Tushar	Aneesh A M	Flow Simulation In A Rotating Microfluidic Channel
331	Trivendra Singh	Rajesh Kumar	Implementation And Visualization Of Numerical Algo
332	Tulika Ganguly	Navin Singh	Viral Genome Replication
333	Uday Gupta	J. Jennifer Ranjani	Concealed Object Detection In Thermal Images
334	Ujjawal Gupta	Rahul Singhal	Arduino Based 3-Axis Motion Controller For 2D Scan
335	Utkarsh Agarwal	Kamlesh Tiwari	Given The Gps Probe In Regular Intervals, Identify The Vehicle It Is.
336	Utkarsh Verma	Shibasish Chowdhury	Using Graph Network Theory For Analysis Of Various Biological Pathways
337	Utsav Akhaury	Pankaj Arora	Plasmonic Nanostructures Based Optical Sensors
338	Vaibhav Gandotra	Devesh Samaiya	Designing A Gps Based Digital Clock
339	Varsha Singhania	S Gurunarayanan	Power Optimization Techniques For Cache Memory
340	Vatsal B Seth	Sheth Pratik N	Aspen Custom Modeler
341	Veluri Sai Manish	Ravi Kant Mittal	Design Of Foundations For Static And Dynamic Loads In Difficult Soil Conditions
342	Vibhu I Verma	S Gurunarayanan	Pipelined Processor Implementation
343	Vidushee Geetam	Suresh Gupta	Modelling And Simulation Of Bioreactors
344	Vigynesh Bhatt	V K Chaubey	Design And Simulation Of Vlc Model For Vehicular Communication
345	Vinay U Pai	Anantha Krishna Chintanpalli	Real Time Implementation Of Auditory Filters Using A Dsp Processor
346	Vinay Veerasangappa Kanakeri	Sainath Bitragunta	Applying Deep Learning For Wireless Systems
347	Vineet Chheda	Murali P	Modelling Microstructure And Fracture Of Materials, Using Phase Field Method.
348	Vishakha	Bijoy Krishna Mukherjee	Type-2 Fuzzy Control For A Power System Application
349	Vishal Viswanathan	Ashish Tiwari	Near Wall Effect On Diffusion Process:Cfd Analysis
350	Vishal Mittal	Yashvardhan Sharma	Design And Implementation Of Real-Time Identity Detection System
351	Vishal Mittal	Yashvardhan Sharma	Design And Implementation Of Covid-19 Patient Scre
352	Vishesh Garg	J. Jennifer Ranjani	Concealed Object Detection In Thermal Images
353	Vishnu C Venkatesh	Meetha V. Shenoy	Sensor Fusion Based Positioning For Robotic Applications
354	Vishnu Narayanan	Harshavardhan Settibhaktini	Computational Auditory Nerve Model To Understand The Jittering Stimulus
355	Vishnu P Kashyap	Karri Babu Ravi Teja	Fpga Implmentation Of Neural Networks
356	Vitthal Bhandari	J. Jennifer Ranjani	Land Use And Land Cover Classification
357	Vivek Bishnoi	Rajiv Gupta	Curing Mehods Of Concrete
358	Yash Akhauri	Surekha Bhanot	Encodernets: Exploiting Weight Sharing And Symmetric Quantization In Neural Networks.

DESIGN PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
359	Yash Goswami	Ajaya Kumar Pani	Non-Linear Modelling For Prediction Of Surface Roughness In End-Milling Process
360	Yash Sakhare	Muthukumar G	Modelling And Analysis Of Rc Shell Structures(Domes And Folded Plates)
361	Yash Sanjay Laturiya	Abhijeet Keshaorao Digalwar	Strengthening The Reverse Logistics Value Chain In India
362	Yuvraj Singh Malhi	Rahul Singhal	Optimization Of X-Band Planar Pixel Antenna Design
363	Zala Dhyey Havyang	Rahul Singhal	Design Of Arduino Codes To Control 3-Axis Motion
364	Zawar Rushikesh Balkrishna	Shibasish Chowdhury	Machine Learning For Mirna Target Prediction

LABORATORY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
1	A Adarsh	Inamur Rahaman Laskar	Exploring Vapoluminescent Compounds As Voc Sensors
2	Aaditya Kumar	Meetha V. Shenoy	Resolution Enhancement Of Images Using Convolutional Neural Networks
3	Aakash Bist	Aditya Raw Gautam	Optimisation And Embedded Implementation Of Dl Architectures For Computer Vision Applications
4	Aashish Aggarwal	Somak Chatterjee	Defluoridation Performanceof Different Water-Soluble Metal-Organic Frameworks
5	Aashya	Karunesh Kr Gupta	Dental Biometric Processing
6	Aastha Kataria	Mukesh Kumar Rohil	Time Series Analysis Of Data Using Artificial Neural Networks
7	Aastha Misra	Arghya Banerjee	Catalyst Design For Co2 Valorisation To Chemicals
8	Aatman Borda	Nitin Chaturvedi	Hardware Acceleration Of Face Detection Algorithm
9	Aayush Agarwal	Raj Kumar Gupta	Study Of Surface Plasmon Resonance Phenomenon
10	Aayush Kumar Agarwal	Vinay Chamola	Penetration Testing Of Iot Devices
11	Abhas Mishra	S N Patel	Damage And Fracture In Composite Plates Subjected To Uniaxial In Plane Tensile Loading
12	Abhay Kanodia	Sunil Kumar Dubey	Applications Of Matlab In Pharmacokinetic/Pharmacodynamic(Pk/Pd)Modeling And Simulations
13	Abhijay Kemkar	Amit Rajnarayan Singh	Machine Learning For Structural Health Monitoring
14	Abhimanyu Raj Shekhar	Arghya Banerjee	Catalyst Design For Co2Valorisation To Chemicals (Dme/Methanol)
15	Abhinav Ernam	Sheth Pratik Nitinchandra	Experimental Study On Novel Gasifier
16	Abhinav Kumar	Ashish Patel	Microcontroller/Dsp Based Control Of Power Electronic Inverters In Closed Loop.
17	Abhinaw Kumar	Dipendu Bhunia	Utilization Of Industrial Wastes Into Structural Applications Of Civil Engineering
18	Abhishek Agarwal	Yashvardhan Sharma	Identification Of Controversial Statements/Fake Ne
19	Abhishek Gaur	Prashant Uday Manohar	Designing Virtual Laboratory
20	Abhishek Ghosh	Vinay Chamola	Classification Based Learner For Sdn Based Drone Security.
21	Abhishek Hariharan Iyer	Meetha V. Shenoy	Design Techniques For Manipulation Of Robotic Arm
22	Abhrajit Sarkar	Inamur Rahaman Laskar	The Development And Study Of The Photophysical Pr
23	Adarkar Saujas	Kamlesh Tiwari	Indexing Biometric Modalities
24	Adithya Shankar Bhattiprolu	Avinash Gautam	Physical Multi-Robot Test-Bed In A Lab Environment
25	Aditi Gaur	Anshuman Dalvi	Some Studies On Solid State Supercapacitors
26	Aditi Vashishtha	V Manjuladevi	Dielectric Studies Of Nematic Liquid Crystals
27	Aditya Jyothilal	Hare Krishna Mohanta	Deflouridation Performance Of Different Water Soluble Metal Organic Frameworks.
28	Aditya Nawal	Pawan Kamalkishor Ajmera	Face Recognition Based Attendence Monitoring Sys.
29	Aditya Pramod Nahata	Rupam Goswami	Accelerometer-Based Human Fall Detection Using Convolutional Neural Networks On Sensory Data
30	Aditya Ramachandran	Aditya Raw Gautam	Single Image Depth Estimation Using Deep Learning Techniques
31	Aditya Rustagi	Bharti Khungar	Gas Sensor Accuracy Processing Using Machine Learning
32	Aditya Tulsyan	Kamlesh Tiwari	Deep Learning For Secure Machine Learning
33	Aditya Vasudevan	Poonam Goyal	Design And Development Of Parallel Genome Assembly Algorithm.
34	Aditya Vasudevan	Poonam Goyal	Development Of Genome Assembly Algorithm
35	Aishwarya G Kunkur	Muralidhar Rao N V	Corporate Governance And Risk Governance For Banks

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
**LABORATORY PROJECT**

LABORATORY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
36	Ajay	Yenuganti Sujan	Piezoelectric Based Resonance Sensor
37	Akanksha Kumar	Devesh Samaiya	Monitoring Device For Website'S Server Status
38	Akash Singh	Arun Kumar Giri	Developing Ideas To Fuel The Economic Growth Of Msmes In And Around Pilani
39	Akhilesh Parwal	Prashant Uday Manohar	Designing Virtual Laboratory
40	Akshat Baranwal	Devesh Samaiya	Interactive Voice Response System With Gui
41	Akshay Maheshwari	Inamur Rahaman Laskar	Application Of Luminescence In Explosive Tracing
42	Akshina Jindal	Shibasish Chowdhury	Applications Of Neural Networks In Biological Systems
43	Akshit Khanna	Poonam Goyal	Unsupervised Representation Of Videos
44	Akshit Khanna	Poonam Goyal	Video Retrieval
45	Akshit Patel	Meetha V. Shenoy	Iot System For Real Time Situation Awareness
46	Akul Malhotra	Syed Mohammad Zafaruddin	Distributed Optimisation For Wireless Networks
47	Alex Mathai	Yashvardhan Sharma	Visual Reasoning Based On Text In Images
48	Aman Gupta	Rahul Singhal	Designing An Fso System With 2X2 Mimo Technique
49	Aman Shukla	V K Chaubey	Design Of Device Based Bio Implantable Sensors For Medical Applications.
50	Ambre Krish Narendra	Ashish Patel	Microcontroller/Dsp Based Control Of Power Convert
51	Ambuj Garg	Priyansh Singh	Chemical Characterization Of Copper Tailing Modified Asphalt Mixture
52	Ananya Singh	Priya Christina S	Cfd Simulation Possibilities Ofmultiphase Flow: Virtuallaboratory
53	Ananya Singh	Sheth Pratik Nitinchandra	Experimental Study Of Biomass Gasification
54	Aneri Jain	Arnab Hazra	2D Graphene-Metal Oxide Nanocomposite For Nonvolat
55	Anik Jindal	S N Patel	Failure Analysis Of Cnt Reinforced Laminate Composite Plate Subjected To Uniform And Non-Uniform In-Plane Mechanical Loading
56	Aniket Agnihotri	Arnab Hazra	Development Of Reduced Graphene Oxide Field Effect Transistor For Biosensing Applications
57	Aniket Upadhyay	Krishna M	Smartphone-Based Human Fall Detection
58	Animesh Gaur	Sandeep Sundriyal	Ml Model For Identification Of New Antitb Molecule
59	Anis Sabeer	Anil Rai	Biological Development In Adolescents In Relation With Music And Media
60	Anishkumar S S	Navneet Goyal	Deep Learning Based Ocr For Sanskrit
61	Anjali Kiroriwal	Indresh Kumar	Synthesis And Further Derivatization Of Indole-3-One
62	Anjali Maheshwari	Smita Raghuvanshi	Non-Photosynthetic Conversion Of Flue Gases In Lab Scale Bioreactor
63	Ankit Patra	Rakhee	Application Of Neural Networks And Bayesian Statistics In Data Analysis And Prediction
64	Anmol Gupta	Richa Shrivastava	Epigenetic Regulation Targeting Mirna In Breast Cancer
65	Annyun Das	Vaidya Rishikesh D	Studies In Symmetry Principles In Theoretical Phys
66	Anusha Kumar	Sai Sesha Chalapathi Gattupalli	Design & Implementation Of Algorithms For Drones
67	Anushka Jain	Shibasish Chowdhury	Applications Of Machine Learning And Neural Networks In Drug Targeting
68	Apoorva Rose	Prashant Uday Manohar	Code Development In The Field Of Electronic Struct
69	Apurva Rana	Paritosh Shukla	Synthesis And Characterization Of Some Tacrine Bas
70	Aridaman Walia	V Manjuladevi	Electro-Optic Switching & Dielectric Studies On Lc
71	Arman Mohanty	Abhijit Rameshwar Asati	Data Privacy With Federated Learning For Edge
72	Arpit Agarwal	Poonam Goyal	Design And Development Of Parallel Denovo Assembler For Distributed Memory Architectures
73	Arpit Sharma	Ravi Kant Mittal	Waste Tire Chips In Soil Improvement
74	Arushi Choudhary	Aditya Raw Gautam	Optimization And Embedded Implementation Of Dl Architecture For Computer Vision Application
75	Ashish Kumar	Shibasish Chowdhury	Mirna/Lncrna Target Prediction Using Ai/Ml
76	Atharva Dubey	Vandana Agarwal	Motor Imagery Classification For Bci
77	Avadh Rajesh Harkishanka	Meetha V. Shenoy	Developing Strategies-Robotic Arm Localization,Ctr
78	Avilekh Chauhan	V Manjuladevi	Dielectrics Of Polymer-Dispersed Liquid Crystals
79	Avinash Manoj Sontakke	V Manjuladevi	Electro-Optic Switching & Dielectric Studies On Lc
80	Avish Goel	Banasri Roy	Conversion Of Agriculture Residues To Sugar
81	Ayush Agrawal	Muralidhar Rao N V	Econometric Application Of Garch-Midas Model
82	Ayush Chandak	Nitin Chaturvedi	Home-Based Alarm System To Detect Any Sudden

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
LABORATORY PROJECT			
			Change For Women And Children Care.
83	Ayush Garg	Yashvardhan Sharma	Question Answering System For Closed Domain Systems
84	Ayush Jain	Mukesh Kumar Rohil	An Nlp-Based Classical Mechanics Problem Solver
85	Ayush Kumar	Arun Kumar Giri	Developing Ideas To Fuel The Economic Growth Of Msmes In And Around Pilani
86	Ayushmaan Chhabra	Rupam Goswami	Human Fault Detection : Database Detection In Public Domain, Technique Adopted For Problem Statement Predominantly, Ensemble Method For Fault Detection And Performance Estimation On Benchmark Dataset.
87	Barsode Ankur Narendra	P Srinivasan	Improving The Design For Externally Cooled Hybrid Pv-T System
88	Bhanu Pratap Singh	Mukund Lahoti	Silica Fume Blended Geopolymer Concrete In Pavements
89	Bhumika Nayyar	Ram Kinkar Roy	Generating Qualitative Trends Of Equilibrium Constants From Density Functional Reactivity Theory Based Descriptors.
90	Binay Goyal	Anshuman Dalvi	Fabrication Aspects Of A Li+ Solid Supercapacitor
91	Chaitanya P V S K	Anil Kumar	Synthesis Of Azaheterocycles Via C-H Activation
92	Chheda Valay Nimesh	Somak Chatterjee	Characterization Of Mofs
93	Chinmay Gupta	Anshuman Dalvi	Some Studies On Sodium Ion Supercapacitors
94	Daksh Bajaj	Sandeep Sundriyal	Curation Of Recently Reported Anti-Plasmodium Molecules And Their Chemoinformatic Analysis.
95	Daksh Gupta	Sadhana Jha	Using Deep Learning And Machine Learning Models For Developing A Smart Water Distribution System.
96	Debabrata Chaudhury	Chandra Shekhar	Gpu Architecture
97	Debabrata Chaudhury	Nitin Chaturvedi	Analysis Of Hybrid On-Chip Memory
98	Deepak Jain	Anshuman Dalvi	Synthesis And Characterization Of Supercapacitors
99	Deepankar K Anand	Arun Kumar Vaish	Rainfall Forecasting Using Data Mining Techniques And Its Impact On The Indian Economy
100	Desai Mohil Sandip	Anu Gupta	Static Timing Analysis For Cmos Logic Families
101	Deshmukh Onkar Govind	Pawan Kamalkishor Ajmera	Study Of Biometric System:Palm Print
102	Dewansh Kaloni	Shishir Maheshwari	Image Classification Using Deep Learning
103	Dhanuka Aarnav	J. Jennifer Ranjani	Object Detection In Surveillance Videos
104	Dhivam Pawar	Priyansh Singh	Leaching Effect Of Copper Tailings Modified Asphalt Mixture
105	Dhruv Singhal	Ashutosh Bhatia	Big Data Analysis Of Blockchain
106	Didwania Pranay Rajesh	Girish Kant Garg	Tool Path Optimisation To Reduce The Energy Consumption Of Machine Tools.
107	Diksha Kumari	Arun Kumar Vaish	Rainfall Forecasting Using Data Mining Techniques And Its Impact On The Indian Economy
108	Dipam Goswami	Vinti Agarwal	Microscopic Cell Detection And Classification
109	Dipankar Mohanty	Somak Chatterjee	Defluoridation Performance Of Different Water Soluble Metal Organic Frameworks
110	Dipankar Mohanty	Somak Chatterjee	Defluoridation Performance Of Different Water Soluble Metal Organic Frameworks
111	Dipesh Deshmukh	Rahul Singhal	Visible Light Communication For Vehicular Networks
112	Divyesh Narayanan	Sai Sesha Chalapathi Gattupalli	Neural Signal Processing For Bci Applications
113	Domale Rohan Vaijnath	Shilpi Garg	Characterization Of Hydrogenase Like Nar1 Protein From Plasmodium
114	Dushyant Yadav	Haribabu K	Developing Control Plane Software For Programmable
115	Faizur Rahman	Shelaka Gupta	Effect Of Oxophilic Promoters In The Hydroxygenation Of Lignin Derived Platform Molecules
116	Funde Piyush Bhagwat	Indresh Kumar	Catalytic Synthesis Of Fused Nitrogen Heterocycles
117	G Adityan	Ashutosh Bhatia	Identification Of Tor Traffic Using Ai/Ml Techniques
118	Gala Heet Mahendra	Surojit Pande	Sers Study Using Znin2S4 Substrate
119	Gandhi Atith Nikeshkumar	Lavika Goel	Feature Extraction And Classification Of Crop Types Using Satellite Data Of Rajasthan
120	Gandhi Atith Nikeshkumar	Navneet Goyal	Federated Learning
121	Garge Sharvari Vivek	Smita Raghuvanshi	Waste Water Treatment Using Advanced Oxidation Pro
122	Garvit Taneja	Nitin Chaturvedi	Design And Analysis Of Low Power Computing Architectures For Embedded Applications.
123	Gharpure Supriya Jayant	Meghana Tare	Proteinopathy Binding Studies Using Withaferin A
124	Ghodake Priya Nitin	V Manjuladevi	Semiconductor Nanostructures And Their Application

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
LABORATORY PROJECT			
125	Goel Pratyush Ram Sharan	Anshuman Dalvi	Design And Development Of Solid-State Supercapacit
126	Govind Singh	Kamlesh Tiwari	Indexing Biometric Modalities
127	Gunjas Singh	Vinay Chamola	Humanoid Control Using Bci And Kinect
128	Hamayal Sharma	Sunil Kumar Dubey	Formulation Development And Evaluation Of Poorly Water Soluble Drug
129	Hamayal Sharma	Uma S Dubey	Immunotherapy Of Covid-19
130	Hardik Gupta	Sandhya Amol Marathe	Role Of Crispr-Cas In Endogenous Gene Regulation
131	Harsh Khatri	Shibasish Chowdhury	Classification Of Bacterial Pathogenicity Using Ml
132	Harsh Shah	Muralidhar Rao N V	Monte Carlo Option Pricing Using The Heston Model
133	Harsh Vikram Sulakhe	Poonam Goyal	Text-To-Image Synthesis Using Generative Models
134	Harshit Shrivastava	Dipendu Bhunia	Utilization Of Industrial Wastes Into Structural Applications Of Civil Engineering.
135	Harshvardhan Agrawal	Rahul Singhal	Designing A Fso System With 2X2 Mimo Technique
136	Harshwardhan Mittal	Srikanta Routroy	Studying The Steel Supply Chain
137	Hemantha Krishna Bharadwaj	Vinay Chamola	Deep Learning & Big Data Analytics For Healthcare
138	Himanshu Chaturvedi	Smita Raghuvanshi	Conversion Of Flue Gases On Lab Scale Bioreactor
139	Himanshu Goyal	Smita Raghuvanshi	Non-Photosyntheticconversion Of Flue Gases(Co2/Sox/Nox) In Lab Scalebioreactor
140	Honnesh Rohmetra	Navneet Goyal	Visual Question Answering For Biodiversity Related Applications
141	Hurkat Piyush Radheshyam	Smita Raghuvanshi	Experimental Approach For Design & Development Of Anaerobic Reactor For Conversion Of Mess Waste (Solid Waste) Into Bio-Gas
142	Indraneel Ghosh	Ashutosh Bhatia	Detecting Domains Names Generated By Non-Classical Domain Generation Algorithms In Botnets
143	Isha Bhorkar	Priya Christina S	Piv Instrumentation Setup For Multiphase Flow
144	Ishan Nigam	Syamantak Majumder	Haemodynamics And Cell Modelling
145	Jahagirdar Niranjan Ashok	Navneet Goyal	Deep Reinforcement Learning In Financial Markets
146	Jai Sharma	Ajit Pratap Singh	Groundwater Assessment And Its Management
147	Jai Sharma	Ravi Kant Mittal	Improvement Of Marginal Soil Using Plastic Waste.
148	Jeet Dhebar	Bijay Kumar Rout	Gesture Recognition Methods For Collaborative Robots
149	Jha Vidit Niriv	Sainath Bitragunta	Implementing Power Adaptation In D2D Communication
150	Jhaveri Ayush Rajesh	Navneet Goyal	Mixed Sound Detection Of Bird Species Using Dl
151	Jiandani Raunaq Jitendra	Srinivas Appari	Conversion Of Biomass To Upgraded Bio-Oil Using Catalytic Fast Pyrolysis.
152	Jithin Kallukalam Sojan	Abhishek Mishra	Power Aware Task Scheduling
153	Jivat Neet Kaur	Yashvardhan Sharma	Question Answering System For Online Services
154	Jivjyot Singh	Etika Krishna Chaitanya	Graphene Based Nanocoatings For Emi Shielding Applications
155	Jyotirmoy Pathak	Ashutosh Bhatia	Blockchain Based Distributed App Development
156	K Vignesh	Nitin Chaturvedi	Smart Vision To Measure Ripening Of Coffee Cherrie
157	Kabra Akash Prasad	Geetilaxmi Mohapatra	Spatial Econometric Analysis On The Effect Of Foreign Direct Investment On Pollution In India
158	Kamal Khemka	Srinivas Appari	Conversion Of Biomass Toupgraded Bio-Oil Using Catalyticfast Pyrolysis
159	Kanav	Krishna M	Smartphone-Based Human Fall Detection
160	Kanika Saxena	Devesh Samaiya	Interactive Voice Response System With Gui
161	Kanishq	Mukund Lahoti	Review Of High Volume Ggbs Based Basalt Fibre Reinforced High Strength Concrete At Elevated Temperatures
162	Karan Singh Mathur	Satyendra Kumar Mourya	Design Of 2D Materials For Gas Sensing Application
163	Kartik Wardhan	Syed Mohammad Zafaruddin	Capacity Of Mimo Optical Wireless Systems
164	Katta Siva Kumar	Manoj Kannan	Classification And Segmentation Of Images Related To Ischemic And Hemorrhage/ Retinopathy
165	Kaustuv Banerjee	Amitesh Singh Rajput	Action Recognition Using Low Resolution Images
166	Khushi Saini	Niladri Sarkar	Modeling Of Slow-Wave Structure For High-Efficiency Travelling Wave Tubes.
167	Kislaya Kumar	Nitin Chaturvedi	Design And Analysis Of Low Power Computing Architectures For Embedded Applications
168	Kshitij Bhargava	Prabhat Nath Jha	Microbial Fuel Cell
169	Kumar Mallikarjuna	Kamlesh Tiwari	Question Answering System

LABORATORY PROJECT			
S.NO	**NAME OF STUDENTS**	**FACULTY NAME**	**PROJECT TITLE**
170	Kumar Saurabh	Yashvardhan Sharma	Bits Website Development
171	Kumar Shivam	V Manjuladevi	Dielectrics Of Polymer-Dispersed Liquid Crystals
172	Kushagra Agrawal	Navneet Goyal	Deep Learning Models For Multivariate Time Series Analysis
173	Kushagra Singh	Manoj Kannan	Dev. Of Ai Modeling Suite For Regulatory Decisions
174	Lakshay Sethi	Shelaka Gupta	Conversion Of Hmf To Fdca
175	Lavanya Soni	Haribabu K	Identifying The Originating Network Of A Packet
176	Lawankar Sameer Manish	Anshuman	Experimental Investigation On The Feasibility Of Hydraulic Lime On The Properties Of Fly Ash-Silica Fume Geopolymer
177	M Hari Hara Nithin Reddy	S Murugesan	Insight On Brain Computer Interface
178	Maanvesh Jindal	Yenuganti Sujan	Piezoelectric Energy Harvesting Using Ambient Magnetic Field
179	Madhur Panwar	Poonam Goyal	Knowledge Base Construction For Visual Question Answering
180	Mahesh Kaushik	Anupam Singhal	Utilization Of Electric Arc Furnace Slag In Cement Concrete
181	Mahima Sharma	S Murugesan	Ir Spectroscopy And Process Analytical Technology In Pharmaceutical Industry
182	Maithil Rupesh Mehta	Mukesh Kumar Rohil	Web Data Analytics In Python And R
183	Manan Batheja	Anil Kumar	Functionalization Of Indoles Though C-H Activation
184	Manan Paneri	Sheth Pratik Nitinchandra	Experimental Study On Biomass Gasification
185	Manan Soni	Sundaresan Raman	Disease Detection In Plants
186	Manav Kaushik	Karunesh Kr Gupta	Human Fatigue And Drowsiness Detection In Drivers And Industrial Workers.
187	Manjot Singh	Sheth Pratik N	Refuse Derived Fuel (Rdf)Preparation From Municipalsolid Waste (Msw) And Itscharacterization
188	Mankrit Singh	Nitin Chaturvedi	Smart Vision To Measure Ripening Of Coffee Cherrie
189	Marathe Shriya Amey	Mukund Lahoti	Review Of Properties Of Fibre-Reinforced High Strength High Volume Ggbs Concrete.
190	Medha Bhat	Deepak Chitkara	Dev & Eval Of Hydrophobic Drug Deliv Nanocarriers
191	Megha Paliwal	Rahul Singhal	Fso Links With Spatial Diversity Over Strong Atmospheric Turbulence Channels
192	Meghna Gupta	Smita Raghuvanshi	Design Of Anaerobic Bioreactor For Mess Waste
193	Mihir Garg	Ajit Pratap Singh	Groundwater Assessment And Its Management
194	Moksh Garg	Ashish Patel	Microcontroller/Dsp Based Control Of Power Convert
195	Mudra Surana	Saumi Ray	Conversion Of Co2 To Useful Chemicals
196	Mukul Singla	Meetha V. Shenoy	Strategies For Robot Arm Localization
197	Mungad Ayush Rajendra	Geetilaxmi Mohapatra	Fdi Inflows, Stock Market Developments And Their Impact On Clean Energy Use And Co2 Emissions In Brics Nations.
198	Mustansir Mohammed Mama	Navneet Goyal	Data Visualization Using Topological Data Analysis
199	Naga Siva Sai Reddy	Yashvardhan Sharma	Detection Of Covid-19 Victims Using Ct-Scan Images
200	Nalin Deepak	Meetha V. Shenoy	Control & Guidance For The Robotic Arm
201	Naman Deep Srivastava	Yashvardhan Sharma	Identification Of Hate Speech And Offensive Content In Social Media Text
202	Naman Goenka	Navneet Goyal	Deep Learning Based Ocr For Sanskrit
203	Navya Bhandaru	Sandeep Sundriyal	Cheminformatics Analysis Of Antimalarial Drugs And
204	Neelabh Sinha	Karunesh Kr Gupta	Human Fatigue And Drowsiness Detection In Drivers And Industrial Workers
205	Neetika Khosla	Surojit Pande	Ultrasensitive Chemical Analysis By Raman Spectros
206	Neil Sarkar	Dalip Kumar	Exploration Of 3D Printing In Chemical Processes
207	Nikhil Kumar	Rashmi Ranjan Mishra	Lattice Gas Automata And Lattice Boltzmann Methods
208	Nikunj Garg	Girish Kant	Monitoring Of Energy Consumption Of Cnc Machine.
209	Nirlipta Pande	Muralidhar Rao N V	Forecasting Gdp Growth
210	Nishant Gupta	Anu Gupta	Design Active Filter Circuits For Vlsi Application
211	Nishant Mahajan	Yashvardhan Sharma	Mobile Application Development Projects(Institute Wide)
212	Nitish Gupta	Devesh Samaiya	Developing An Android Application To Sync With Esp8266 Wifi Module For Data Transfer
213	Palash Dhakar	Srikanta Routroy	Studying The Steel Supply Chain In Bhiwani
214	Paras Taneja	Kamlesh Tiwari	Deep Learning For Single Image Yoga Pose Detection
215	Paridhi Chaturvedi	Nishant Roy	Insar For Slope Stability Analysis

LABORATORY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
216	Parth Goyal	Rajan Pandey	Time Series Analysis Of Stock Market Using Macroeconomic And Stock Market Data
217	Patil Aditya Pramod	Smita Raghuvanshi	Experimental Approach Fordesign & Development Ofanaerobic Reactor For Conversionof Mess Waste (Solid Waste) Intobio-Gas
218	Patil Anway Dinesh	V Manjuladevi	Dielectrics Of Polymer-Dispersed Liquid Crystals
219	Patil Kartik Yogesh	Indresh Kumar	Synthesis Of Hybrid Nitrogen Heterocyclic System
220	Piklu Paul	Sailaja Nandigama	Rural Developments And Social Exclusion
221	Piklu Paul	Sailaja Nandigama	Sustainable Development And Smart Cities In India
222	Pooja Tulsyan	Saumi Ray	Homogeneous And Heterogeneous Catalysis Of Nickel Square Planar Complexes To Synthesize Useful Chemicals From Co2
223	Pragati Singh	Vaibhav Dixit	Drug Toxicity Analysis And Exploring The Toxicity
224	Pranav Dinesh Kumar	Aneesh A M	Numerical Survey Of Droplet Evaporation
225	Pranav Sharma	Madhukar Mishra	Maxwell Equations On Matlab And Its Applications
226	Pranay Khariwal	Navneet Goyal	Deep Reinforcement Learning In Financial Markets
227	Pranay Putrevu	Navneet Gupta	Performance Analysis Of Wearable Antennas Using Fl
228	Prateek Garg	Vinay Chamola	Computer Vision Using Deep Learning
229	Prateek Goyal	Rahul Singhal	Analysis Of A Wavelength Division Multiplexed Optical Wireless Communication System
230	Prateek Goyal	Rahul Singhal	Analysis Of A Wavelength Division Multiplexed Optical Wireless Communication System
231	Prateek Mahajan	Syed Mohammad Zafaruddin	Machine Learning Techniques For Resource Allocation In Cell-Free Massive Mimo Communication Networks
232	Prateek Mahajan	Nitin Chaturvedi	Design Of Reconfigurable Cache Architectures
233	Pratyush Pathak	Ashish Patel	Advanced Digital Control Of Power Converters
234	Pullah Bhatnagar	P Srinivasan	Organic Solar Cell Efficiency
235	Puneet Anand	Poonam Goyal	Parallel And Concurrent Data Structures For Mining
236	R Rohit	Sundaresan Raman	Disease Detection In Plants Using Deep Learning
237	Raghav Arora	Meetha V. Shenoy	Investigation Of Image Mosaicing Techniques For Ua
238	Raghav Bansal	Nitin Chaturvedi	Hardware Acceleration Of Face Detection Algorithms
239	Rahul S	Janardan Prasad Misra	Gpu Architecture For Deep Learning Applications
240	Rajat Lunawat	Abhishek Suresh Dhoble	Milk Quality
241	Rajhans Rohit Milind	Navneet Goyal	Developing New Methods For Clustering Multivariate Time Series Data
242	Rastogi Aamil Ashutosh	Anshuman	Effect Of Curing Regimes On Compressive Strength Of Geopolymer Paste Containing Silica Fume
243	Rishabh Arora	Prashant U Manohar	Machine Learning Applications In Atomistic Simulations
244	Rishal Aggarwal	Sunil Kumar Dubey	Pk-Pd Modelling And Simulation
245	Rishav Mishra	Debata Byomakesh	Computational Finance
246	Ritesh Ojha	Yenuganti Sujan	Piezoelectric Based Resonance Sensor
247	Rithik Dilip Rathi	Harshavardhan S	Hearing Aid Implementation By Jitter Reduction
248	Ritik Kandoria	Sadhana Jha	Using Machine Learning And Deep Learning Models For Developing A Smart Water Distribution System
249	Riya Gupta	Priya Christina S	Initial Stages Of Plant Growth
250	Rohan Kumar Rohil	Chandra Shekhar	An Implementation And Analysis For Handwritten Digit Recognition
251	Roshan Roy	Vaibhav Soni	Semantic Segmentation Of Road Networks And Buildings From Satellite And Drone Images Using Anns
252	Rudra Nagalia	Smita Raghuvanshi	Biofiltration Studies For Removal Of Sox And Nox
253	S Jeevapriya	Priya Christina Sande	Study On Efficacy Of Novel Biopesticide On Plant
254	Sachin Nair	Navin Singh	Simulation Of Rarefied Gas Flow Using Dsmc Method
255	Sailab Swarnim	Hitesh Datt Mathur	Implementation Of Various Optimization Techniques In Multi-Area Power System
256	Saksham Agarwal	Dalip Kumar	Design And Synthesis Of Functionalized Bodipys As Solar Cells
257	Saksham Sinha	Abhishek Suresh Dhoble	Anaerobic Digestion
258	Saldanha Murrel Francis	Vishal Saxena	Characterization Of Putative/Hypothetical Proteins Targeted To Epicoplast In Plasmodium.
259	Saldanha Murrel Francis	Vishal Saxena	Characterize Abc Transporter Protein-P.Falciparum
260	Samarth Gupta	Amitesh Singh Rajput	Deep Learning Techniques For Computer Vision
261	Samarth Mahapatra	Ashish Patel	Solar Pumps And Solar Cropping

LABORATORY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
262	Sanchit Lakra	Somak Chatterjee	Defluoridation Performance Of Different Water Soluble Metal Organic Frameworks.
263	Sanchit Lakra	Somak Chatterjee	Preparation And Characterization Of Nanoparticles.
264	Sanidhya Vijaivargia	Shibani Khanra Jha	Land Surface Temp. And Resistivity Mapping By Qgis
265	Sarthak Sehgal	Muralidhar Rao N V	Econometric Application Of Garch-Midas Model
266	Satvik Golechha	Vinti Agarwal	Mining Darkweb Using Graph Neural Networks
267	Satyam Anand	Rajneesh Kumar	Human Behavior Recognition Using Artificial Intelligence
268	Satyam Singh	Nitin Chaturvedi	Smart Vision To Measure Ripening Of Coffee Cherrie
269	Saumil Agarwal	Kamlesh Tiwari	Deep Learning For Indexing On Palmprint Databases
270	Saurabh Rai	Girish Kant	Optimization Of Machining Parameters In Cnc
271	Saurav Harishankar Yadav	Muthukumar G	Influence Of Basalt Fiber On Strength, Deformation
272	Saurav Shenoy P	Aneesh A M	Numerical Study Of Droplet Evaporation Using Level-Set Methods
273	Saurav Virmani	Poonam Goyal	Design And Development Of Multimodal Question Answering System.
274	Savika Yadav	Niladri Sarkar	Flexible Solar Cells
275	Seepana Tirumala Rao	Dipendu Bhunia	Comparison Of Different Strengthening Techniques Of Masonry Infill Frames Or Panels
276	Shah Ansh Sandeep	A R Harikrishnan	Complex Fluid Droplet Evaporation
277	Shah Pratulya Bimal	Prabhat Nath Jha	Bioremediation Of Pharmaceutical Drugs In Wastewater Using Melanin - A Synthetic Biology
278	Shah Raj Sanjay	Ashutosh Bhatia	Big Data Analysis Over The Bitcoin Blockchain
279	Shah Raj Sanjay	Navneet Goyal	Federated Learning
280	Shaily Bhatt	Abhishek	Domain Generalisation And Adaptation For Nlp
281	Shankara Narayanan V	Bijay Kumar Rout	Lsd-Slam On A Ros Based Autonomous System
282	Shantom Kumar Borah	Vinay Chamola	Implementation Of Drone Security Using A Semi-Physical Sdn Testbed.
283	Sharma Prateek Pankaj	Manoj Kumar	Behavior Of Concrete Filled Tubes
284	Shashank Sharma	Sandhya Amol Marathe	Evolutionary Analysis Of Minor Crisprs In Salmonel
285	Shikhar Singh	Hitesh Datt Mathur	Automatic Generation Control Using Support Vector Machine
286	Shivam Somani	Rupam Goswami	Crack Segmentation Using Deep Learning
287	Shivam Somani	Rupam Goswami	Crack Segmentation Using Deep Learning
288	Shivani Soni	Sandhya Amol Marathe	Studying The Regulation Of Siderophore Production By Crisper-Cas System
289	Shivansh Agarwal	Kuldip Singh Sangwan	Industry 4.0 Artificial Intelligence Manufacturing
290	Shrajal Jain	Rupam Goswami	Anomaly Detection In Surveillance Videos
291	Shramay Palta	Vishal Gupta	Darknet Insights Using R And Python
292	Shray Mathur	Lavika Goel	Feature Extraction And Classification Of Crop Types Using Satellite Data Of Rajasthan
293	Shray Mathur	Navneet Goyal	Federated Learning
294	Shreya Johri	Priya Christina S	Piv Instrumentation Set-Up Formultiphase Flow
295	Shreyas Samir Kolte	Nitin Chaturvedi	Smart Vision To Measure Ripening Of Coffee Cherrie
296	Shreyasi Ghosh Ray	Shibasish Chowdhury	Exploring Drug Re-Purposing Strategies In Gbm
297	Shrivastava Anant Vijaykumar	Arun Kumar Giri	Performance Evaluation Of Mutual Funds In India.
298	Shruti Sharma	Avinash Gautam	Robotics And Machine Learning
299	Shubham Aggarwal	Anupam Singhal	Planning Of Smart Cities Using Virtual Reality
300	Shubham Tiwari	Ashutosh Bhatia	P4 Programming
301	Shubhendu Kumar Tripathi	Vishal Saxena	Analyzing Snp Inducing Resistance In M.Tb Using Ml
302	Siddhant Khandelwal	Kamlesh Tiwari	Scene Change Detection
303	Siddhant Khandelwal	Haribabu K	Determining Polling Frequency For State Collecting
304	Siddharth Purohit	Rahul Singhal	Assembling 3-Axis Motion Controller For 2D Scan
305	Siddharth Sambaru	S Murugesan	Target Identification Of Anti-Leishmanial Agents
306	Siddharth Santosh Panpaliya	Girish Kant Garg	Characterization And Evaluation Of Energy Consumption Of Cnc Machine Tool
307	Siddharth Singh	Poonam Goyal	Unsupervised Representation Of Videos
308	Sindhu M	Rajdeep Chowdhury	Analysing Mechanical Properties Of Tumor Cells
309	Singh Jatin Jawahar Lal	Prashant U Manohar	Machine Learning Applications In Atomistic Simulations
310	Singh Jatin Jawahar Lal	Smita Raghuvanshi	Biofiltration Studies For Removal Of Sox And Nox
311	Snehashish Choudhary	Muthukumar G	Sustainable Construction Materials And Practices

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
LABORATORY PROJECT			
312	Sohit Aggarwal	Somak Chatterjee	Defluoridation Performance Of Different Water Soluble Metal Organic Frameworks
313	Som Choudhary	Ajay Kumar Sah	Study The Catalytic Conversion Of Thiol To Thionic Acid Using Molybdenum(Mo) Catalyst
314	Sombuddha Chakravarty	Vinay Chamola	Development Of Protocols And Algorithms For Iot Based Frameworks
315	Sourav A S	A R Harikrishnan	Microscale Transport Process Study
316	Sparsh Kasana	Pratik Narang	Srcd Online Portal Development
317	Sparsh Sharma	Muthukumar G	Behavior Of Concrete Reinforced With Basalt Fibre
318	Sri Sai Ashrith Shakhamuri	Dipendu Bhunia	Comparison Of Different Strengthening Techniques Of Masonry Infill Frames Or Panels
319	Srijan Verma	M M Pandey	Formulation And Characterization Of Stable Amorphous Solid Dispersions For Solubility Enhancement
320	Srishti Jain	Arghya Banerjee	Ab-Initio Catalyst Design For Pyrolysis Derived Bio-Oil Upgradation
321	Srivaishnavi Kalavalapalli	Priya Christina Sande	Study Of Efficacy Of Novel Bio- Pesticide On Plant
322	Subham Kumar Dash	Sadhana Jha	Using Machine Learning And Deep Learning Models For Developing A Smart Water Distribution System
323	Subhanjan Saha	Poonam Goyal	Image Captioning & Video Desc Generation
324	Suchisattam Saran	Prashant Uday Manohar	Designing Virtual Laboratory
325	Supratik Bhattacharya	Ram Kinkar Roy	Qualitative Trend Of The Rate Of Electron Transfer
326	Suraj Singh	Smita Raghuvanshi	Experimental Approach For Design & Development Of
327	Swadhin Saraf	Kuldip Singh Sangwan	Use Of Augmented Reality / Virtual Reality In Manufacturing Processes
328	Swati Taparia	Inamur Rahaman Laskar	Development Of Emissive Based Probes For Efficient
329	Syed Ahsan Abbas	Abhishek	Bio Nlp
330	Tanushri Shrivastava	Uma S Dubey	Vaccination Strategies Against Covid-19
331	Tejas Nimish Shah	Syed Mohammad Zafaruddin	Mitigation And Analysis Of Pointing Error In Optical Wireless Communication Systems.
332	Trivendra Singh	Rajesh Kumar	Implementation Of C/C++ Programming For Numerical Methodes To Solve Ordinary Differential Equations
333	Tussank Gupta	Yashvardhan Sharma	Design And Development Of Bits Notice Board Portal
334	Udayraj Singh	Priyansh Singh	Leaching Effect Of Copper,Tailinhg Modified Asphalt Mixture.
335	Ujjawal Gupta	Anil Kumar	Polyheterocyclic Via Rh-Catalyzed Annulation Rxn.
336	Utkarsh Agarwal	Jyoti	Analysing Company Investment For Innovation.
337	Utkarsh Kedia	Rupam Goswami	Accelerometer-Based Human Fall Detection Using Convolutional Neural Networks On Sensory Data
338	Utkarsh Kumar	Prashant Uday Manohar	Designing Virtual Laboratory
339	Utkarsh Tripathi	Vinay Chamola	Nao Humanoid Control Using Kinect And Bci For Telepresence And Rehabilitation Applications
340	Utsav Akhaury	Praveen Kumar A.V.	Computational Electromagnetics - Fdtd Analysis
341	V Abishek Balaji	Dipendu Bhunia	Comparison Of Different Strengthening Techniques Of Masonry Infill Frames Or Panels
342	V V S Karthik	Paritosh Shukla	Synthesis Of New Tacrine Related Analogs As Anti-Alzheimer'S Agents
343	Vaibhav Ajmera	Devendra Kumar	Solving Pde Using Finite Elements Method
344	Vaibhav Kaushik	Vinay Chamola	Deep Learning For Iot Based Systems
345	Vaibhav Shringi	Rajiv Gupta	Bim Guidelines For The Construction Industries
346	Varsha Singhania	Meetha V. Shenoy	Sensor Fusion Based Positioning For Robotic Applications
347	Varun Goradia	Chandra Shekhar	Reconfigurable Solar Based Battery Charging Using Ann.
348	Vashisht Shekhawat	Shibani Khanra Jha	Use Of Gis In Geothermal Resource Management
349	Vedita Belsare	Atish Paul	Study Of Pancreatic Lipase Inhibitors
350	Vibhu I Verma	V K Chaubey	Study And Implementation Of Bio-Implantable Electronic Devices For Medical Applications
351	Vignesh Jayaraman	Aniruddha Roy	Influence Of 3D Matrix On The Differentiation Of Reprogrammed Monocyte
352	Vinay	Anupam Singhal	Utilization Of Pickling Sludge In Cement Concrete.
353	Vinay U Pai	Syed Mohammad Zafaruddin	Performance Of Terahertz Wireless Communications
354	Vinay Veerasangappa Kanakeri	Syed Mohammad Zafaruddin	Interference Management For Wireless Networks
355	Vipin Arora	Anupama Mittal	Exosomes As Biogenic Drug Delivery Carrier

LABORATORY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
356	Vishal Singh Deoleya	Rakhee	Application Of Neural Networks And Bayesian Statistics In Data Analysis And Prediction
357	Vishesh Jain	Karunesh Kr Gupta	Implementation Of Various Artificial Intelligence Models
358	Vishnupriya Srivastava	Mukesh Kumar Rohil	Security Challenges In 5G Private Network
359	Vishnupriya Srivastava	Mukesh Kumar Rohil	Sanskrit Script Recognition From Hand Gestures
360	Vitthal Bhandari	Lavika Goel	Applications Of Plate Tectonics Neighborhood Search Optimization In Real World Problems
361	Vora Nishchay Nikhil	A R Harikrishnan	Droplet Impact Dynamics
362	Yash Jain	Anshuman	Experimental Investigation On The Effect Of Lime On The Setting Property Of Fly Ash Geopolymer
363	Yash Sarawgi	Rupam Goswami	Damage Identification In Civil Structure Data Using Deep Learning Methodologies
364	Yatharth Singh	Priyansh Singh	Chemical Characterization Of Copper Tailing Modified Asphalt Mixture
365	Yatharth Sreedharan	Sai Sesha Chalapathi Gattupalli	Ml And Blockchain For Water Quality Monitoring
366	Yembarwar Ayush Kishor	Nitin Chaturvedi	Optimisation And Embedded Implementation Of Dl Architecture For Computer Vision Applications

SPECIAL PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
1	Aashya	V Manjuladevi	Applications Of Optical Fibers
2	Aayushi Lohia	Deepak Chitkara	Crispr-Cas9 As A Therapeutic Technology For Genome Editing.
3	Achalla Vaishnav Pavan Kumar	Aniruddha Roy	Virus As A Targeted Therapy Of Cancer
4	Aditya Bhargav	Satyendra Kr Sharma	Effect Of Supply Chain Technologies On Inventory
5	Aditya Tulsyan	Jitender Kumar	Commuting Graph Associated With Algebraic Structure.
6	Agrawal Rohan Ratan	Shilpi Garg	Wheatgrass And It'S Impact On Human Health
7	Agrawal Yash Santosh	Krishna M	Indian Economy : Challenges & Opportunities
8	Akarsh Chaturvedi	Madhukar Mishra	Analysis And Modelling Of Data Acquired From Ligo And Other Open Science Projects
9	Akriti Srivastava	Prabhat Nath Jha	Promoter Modelling Of Prokaryotic Using Ann/Cnn
10	Akshat Baranwal	Yenuganti Sujan	Acquisition Of Biomedical Signals (Ecg, Bp Etc)
11	Aneri Jain	Shivi Agarwal	Fuzzy Dea Models
12	Anjali Kiroriwal	Pushp Lata	Art Of Communication In Project Management.
13	Ankita Chakravarty	Raj Kumar Gupta	Photonics Technology
14	Anushka Dayal	Rajdeep Chowdhury	Understanding Epigenetic Signature Ofdrugtolerance
15	Anwesh Bhattacharya	Vaidya Rishikesh D	Application Of Quantum Field Theory To Restricted Boltzmann Machines And Deep Learning
16	Apoorav Dhingra	Rakhee	Study-Sustainable Supply Chain Mathematical Models
17	Apoorva Gupta	Banasri Roy	Hydrogen Production From Ethanol By Low Temperature Reforming Methods Using Modified Ni-Si/Al2O3 And Ni-Si/Ceo2 Catalysts.
18	Apurv Bajaj	Arun Kumar Giri	Sustainability Through Digital Transformation.
19	Artik Gupta	Rajesh Kumar	Structural Health Monitoring Of Railways Bridge
20	Aryan Mehra	Kumar Neeraj Sachdev	Ethics In Computer Vision
21	Aryan Sharma	Abhishek Suresh Dhoble	Machine Learning Applications/App Development
22	Ashish Kumar	Pankaj Kumar Sharma	Methods Of Plant Flavonoid Characterization
23	Ashish Kumar Tripathi	Rajdeep Chowdhury	Studying The Properties Of Cancer Cells
24	Atharva Tandon	Aditya Raw Gautam	Control Of Power Converters For Renewable Energy Applications
25	Avish Khosla	Rajneesh Kumar	Modelling Of Household Electricity Consumption With The Aid Of Computational Intelligence Methods
26	Ayush Kumar	Shilpi Garg	G6Pd Deficiency And Primaquine: Impact On Malaria
27	Ayush Kumar Bothra	Rajdeep Chowdhury	Studying The Properties Of Cancer Cells
28	Ayushi Agrawal	B Vani	Biobased Resources And Value Chain For Future
29	Bajaj Satyajeet Laxmikant	Abhijeet Keshaorao Digalwar	Application Of Mcdm In Supply Chain Management
30	Bhaskar Sharma	Satyendra Kr Sharma	Effect Of Supply Chain Technologies On Inventory
31	Bhavya Patel	Anupam Singhal	Application Of Passive Design Inspired Net-Zero Energy Buildings In India

	SPECIAL PROJECT		
S.NO	**NAME OF STUDENTS**	**FACULTY NAME**	**PROJECT TITLE**
32	Bhumika Nayyar	Karunesh Kr Gupta	Lung Cancer Detection Using Image Segmentation By Different Algorithms.
33	Chandan Pandey	Ashis Kumar Das	Epigenetic Alterations In P. Falci (Dna Meth.)
34	Chitranjan Jain	Arun Kumar Vaish	Credit Risk Management
35	Devansh S Mishra	Arun Kumar Giri	India'S Policies- Post Coronavirus Times
36	Diksha Kumari	Sailaja Nandigama	Make In India - A Roadmap Of Sustainable Development
37	Dipam Goswami	Krishnendra Shekhawat	Graph Theoretical Algorithms For Rectangular Dualization
38	Divyam Rakesh	B Vani	Study Of Arthrospira And Its Effect On Neurodegenerative Diseases
39	Garima Dhar	Ashis Kumar Das	Bioethics- Based Study Of Viral Contagion
40	Godhat Priyank Jayantilal	S N Patel	Damage And Fracture Analysis Of Laminate Composite Doubly Curved Shell Panels Reinforced With Natural Fibers.
41	Gupta Kavya Rakesh	Sunil Kumar Dubey	Critical Analysis Of Pharmaceutical Supply Chain
42	Hamayal Sharma	Vishal Saxena	Amplification And Cloning Of Plasmodium Abc Transp
43	Hardik Maheshwari	Anshuman	Experimental Analysis Of Biological Self-Healing In Geopolymer Based Concrete Using Bacterial Spores.
44	Harshvardhan Agrawal	Rajesh Kumar	Review And Recent Development In Adomain Decomposition Method For Solving Fragmentation Equation
45	Hebbar Chinmay	Krishnendra Shekhawat	Graph Theoretic Tools For Floorplans Assessment
46	Himanshu Agarwal	Arun Kumar Vaish	To Study The Various Macroeconomic Aspects Of Consumer Microfinance.
47	Isha Saini	Debi Datt Pant	Photophysical Studies Of Molecules
48	Ishan Sanjay Joglekar	Navneet Goyal	Deep Learning Models For Multivariate Time Series Analytics (Nowcasting)
49	Ishita Agrawal	Ashis Kumar Das	Fighting Infectious Diseases With Nanotechnology
50	Jai Rawal	P Srinivasan	Compact Electronic Cooling Using Pcm
51	Jasman Singh Kalsi	Murali Palla	Microstructure Modeling With Phasefield Simulation
52	Jayesh Narayan	Meghana Tare	Using Machine Learning For Neurological Disease Prediction
53	Jonnalagadda Sadhana	Sudeshna Mukherjee	Understanding Organelle Dynamics And Its Cross-Talk With Emt And Cancer Progression
54	Joy Parikh	Chandra Shekhar	Rf-Ic Design Fault Analysis Using Ml Techniques.
55	Kanav	Arya Kumar	Testing The Efficiency Of Indian Stock Markets
56	Kartik Patil	Sharad Shrivastava	Microstructurally - Based Constitutive Modelling Of The Skin - Linking Intrinsic Ageing To Microstructural Parameters.
57	Kartikeya Gupta	Arya Kumar	Predicting Stock Prices Using Technical Analysis
58	Keshav Kumar	Ajay Kumar Sah	Carbohydrate Derivatives In Asymmetric Catalysis
59	Kshitiz Sinha	M M Pandey	Strategies To Enhance Brain Permeation Of Drugs
60	Lakshay Nagpal	Nirankush Dutta	Social Media Marketing
61	Lokesh Lakhotia	Rajesh Kumar	Building Models To Predict The Occurrence Of Cardiovascular Diseases In Humans Based On Symptoms Observed.
62	Malaika Rastogi	P R Deepa	Lateral Flow Assays In Food Safety And Analysis
63	Manasvi Agarwal	Puneet Mishra	Designing An Aqi Sensor Using Neural Networks
64	Manglunia Rishabh Rajkumar	Ajit Pratap Singh	Analysis Of Behaviour Of Movement Of Dust Particles In Rotating Fan
65	Mansi Jain	Aniruddha Roy	Utilizing Data Mining Techniques For Drug Repurposing And Repositioning.
66	Mashru Luve Shailesh	Suresh Gupta	Designing Aqi Predictor Model Using Neural Network.
67	Mayank Prasad	Shibani Khanra Jha	Estimating Carbon Footprint For A Non-Industrial Town: Case Study For Pilani, Rajasthan.
68	Medha Bhat	Deepak Chitkara	Nanotherapeutics For Treatment Of Psoriasis: Current Status And Future Prospects
69	Mehul Gera	Rahul Arora	Trade Competitiveness Of Indian Textile Sector-Vnm
70	Mehul Jain	Ashis Kumar Das	Auto-Immune Disorders:Rheumatoid Arthiritis And Lupus(Sle)

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
SPECIAL PROJECT			
71	Mohit Vyas	Anu Gupta	Design Of Ann-Based Processor
72	Naman Bharti	Shilpi Garg	Disruption Of Calcium Homeostasis In Alzheimer'S
73	Naman Deep Srivastava	Krishnendra Shekhawat	A Study Of Algorithms For Orthogonal Drawings
74	Nandu Keval Deepak	V K Chaubey	Study Of High-Speed Optical Receiver Design
75	Navoneel De	Gautam Singhvi	Understanding Nano-Carriers As Advanced Drug Delivery Systems & Their Associated Biological Permeability.
76	Nidish Garg	Shibasish Chowdhury	Application Of Machine Learning Algorithms To Do Cross-Kingdom Target Prediction
77	Nirav Asher	M M Pandey	Study On Nanocarrier Based Drug Delivery System For Effective Migraine Treatment
78	Nishank Malik	Srikanta Routroy	Study Of Ai Based Forecasting In Supply Chain
79	Nishant Gupta	V K Chaubey	Development Of Fuzzy Logic Control On Fpga
80	P G Padma Vilochani	Kuldip Singh Sangwan	Mathematical Modeling Of Sustainable Supply Chain
81	Paramtap Lal	S N Patel	Damage And Fracture Study Of Laminated Composite Plate Reinforced With Fibers And Carbon Nanotube
82	Parv V Panthari	V K Chaubey	Study Of High Speed Optical Receiver Design
83	Prashant Jha	Satyendra Kr Sharma	Effect Of Supply Chain Technologies Integration On Operational Performance And Businesses
84	Prashant Khandelwal	Krishnendra Shekhawat	A Study Of Algorithms For Orthogonal Drawings
85	Prateek Meliwal	Arun Kumar Giri	India'S Policies Post Coronavirus Times
86	Pratixan Sarmah	Madhukar Mishra	Gauge Theory Of Interactions
87	Pratyush R Bharati	Devesh Samaiya	Uart To Hub75 Converter
88	Priyansha Gupta	Sunil Kumar Dubey	To Design A Predictive Model On The Effect Of Pharmacoeconomic Factors On The Valuation Of Pharmaceutical Companies.
89	Priyanshi Jain	H R Jadhav	Computer Simulations In Pharmacokinetics And Pharmacodynamics
90	Pundlik Aradhya Anand	Saket Verma	Studies On Optimization Techniques For Engineering
91	Raghav Kabra	Arya Kumar	Stock Price Prediction And Trading Strategy-Python
92	Raghu Boyalla	Anupam Singhal	Alternative To Stubble Burning
93	Rahil N Jain`	Krishnendra Shekhawat	Graph Theoretical Heuristics For Rectangular Dualization
94	Rahul Bubna	Rajeev Taliyan	To Study The Pathogenicity Of H1N1 And Sars-Cov-2
95	Rahul Shah	Prabhat Nath Jha	Genetically Modified Crops
96	Rama Teja Gandham	Madhukar Mishra	Theoretical Study On The Physics Of Neutron Stars.
97	Rohan Kela	Rajesh Kumar	Building Models To Predict Occurrence Of Cardiovascular Diseases In Humans Based On Symptoms Observed.
98	Saavy Singh	Balram Dubey	Mathematical Modelling For Biological Systems
99	Sahili Totale	Shibani Khanra Jha	Estimating Carbon Footprint For A Non-Industrial Town: Case Study For Pilani, Rajasthan.
100	Sai Harsha Kantamaneni	Shibasish Chowdhury	Application Of Machine Learning Algorithms To Prediction Cross-Kingdom Target Prediction
101	Sakshi Choudhary	Kamalesh Kumar	Advances In Laboratory Testing And Modelling Of Soils And Shells
102	Sakshi Gupta	S Murugesan	Use Of Predictive Analytics In Drug Design
103	Saldanha Murrel Francis	Atish Paul	Natural Product Based Therapy-Infectious Diseases
104	Samarth Gupta	Balram Dubey	Mathematical Modelling For Biological Systems
105	Samarth Tiwari	Shilpi Garg	Brucellosis:Pathophysiology, Etiology& Diagnostics
106	Sanidhya Kumar Pandey	Anshuman	Experimental Analysis Of Biological Self Healing In Geopolymer Based Concrete Using Bacterial Spores.
107	Sanyam Jain	Richa Shrivastava	Mirna Mediated Epigenetic Regulation In Glioblastoma
108	Saumya Garg	V Manjuladevi	Modeling And Compensation For Sensors By Neural Networks
109	Shivam Agrawal	Srikanta Routroy	Comparative Analysis Of Demand Estimation Of Concrete Material In India
110	Shivam Soni	Devika	Widespread Mobility - Tech With Route Optimization

SPECIAL PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
111	Shivani	Pankaj Kumar Sharma	Study Of Methods For Extraction Compounds
112	Shorya Jain	Gaurav Watts	Fracture Analysis Of Composite Bars, Beams, And Plates Using Extended Finite Element Method
113	Shreya Maheshwari	Anupama Mittal	Diabetic Wound Model: Challenges And Approaches
114	Shubham Singh	Navin Singh	Statistical Mechanics Of Rna Folding
115	Shyamal Sharma	Kamalesh Kumar	Advances In Laboratory Testing And Modelling Of Soils And Shells
116	Siddhant Jain	Amol M Marathe	Transition Curves Of Mathieu-Like Equation Using Homotopy Analysis And Galerkin Projections
117	Siddhant Singh	Rajesh Kumar	Building Models To Predict The Occurrence Of Cardiovascular Diseases In Humans Based On Symptoms Observed.
118	Siddharth Goel	Paul Atish Tulshiram	Converging The Natural Chemistry With Artificial Intelligence For Improved Drug Discovery
119	Siddharth Sambaru	Sunil Kumar Dubey	Role Of Pk/Pd In Repurposing Of Drugs
120	Siddharth Singh	Jitender Kumar	On The Graphs Associated With Algebraic Structures
121	Soham Banerjee	Rakesh Choubisa	Study Of Photon And Electron Vortex Beams
122	Somya Upadhyay	Rashmi Ranjan Mishra	Advanced Topics In Computational Physics, Their Ap
123	Soni Aditya Dhiraj	Abhijeet Keshaorao Digalwar	Adoption Of Industry 4.0 Practices In India Amid C
124	Srijan Verma	Aniruddha Roy	Data Mining From Available Resources For Identifying The Most Potent Drug Combination For Cancer Therapy
125	Sumit Bisht	Krishnendra Shekhawat	Graph Theoretical Algorithms For Rectangular Dualization
126	Surabhi Sultania	S Murugesan	Green Chemistry In Organic Synthesis
127	Suraj Singh	Ashis Kumar Das	Epigenetics (Acetylation) Alterations In P. Falcip
128	Sushant Kumar	Madhukar Mishra	Study On General Theory Of Relativity And String Theory.
129	Sweta Praharaj	S Murugesan	Computer Aided Drug Design In New Drug Discovery
130	Tanmay Dixit	V K Chaubey	Design And Simulation Of Vlc Model For Vehicular Communication
131	Tanuj Khandelwal	Shilpi Garg	Rna Sequence Analysis Of Malaria Parasite
132	Tiwaskar Riddhesh Jayesh	Krishnendra Shekhawat	Triangulation And Bi-Connectivity Algorithms
133	Trivedi Bhagyesh Tushar	P Srinivasan	Compact Electronics Cooling Using Phase-Change Mat
134	Ujjwal Sharma	Arun Kumar Giri	Opportunities & Prospects For Msmes In Jhunjhunu (A District In Rajasthan)
135	Umang Agarwala	Mukund Lahoti	Data Augmentation For Geo-Polymer Concrete Strength
136	Utkarsh Awasthi	Ashis Kumar Das	Lnc Rna In Diseases.
137	Utkarsh Dixit	Prabhat Nath Jha	Biofuel Production By Microbes
138	Utkarsh Tripathi	Meetha V. Shenoy	Emg Biofeedback Technology Development For Stroke Rehabilitation
139	Vaibhav Kaushik	Balram Dubey	Modelling And Numerical Simulation In A Real-World System.
140	Vaidant Agrawal	Debi Datt Pant	Fluroscence Spectroscopy And Application
141	Vedita Belsare	Atish Paul	Study Of Pancreatic Lipase Inhibitors
142	Vibhor Jain	Muralidhar Rao N V	Data Science Application In Investment Management
143	Vighnesh S Mahale	Rajesh Kumar	Structural Health Monitoring Of A Residential Building Under Application Of Fire Load
144	Vigynesh Bhatt	Aditya Raw Gautam	Control Of Power Converters For Renewable Energy Applications
145	Vinay U Pai	Sainath Bitragunta	Energy Efficient Protocol Design For Hybrid Uavs
146	Vishal Singh Deoleya	Akash Agarwal	Study Of Impulsive Noise Environment (Ine) In Electricity Substations
147	Vishesh Garg	Jitender Kumar	Commuting Graph Associated With Algebraic Structure
148	Vishwanatha Ishan	Rahul Arora	Trade Competitiveness Of Indian Textile Sector-Bgd
149	Yanamandala Nitheesh	Aniruddha Roy	Immunotherapy Of Cancer Using Innate As Well As Engineered T-Cell.
150	Yash Goswami	Madhukar Mishra	Analysis And Modelling Of Data Acquired From Ligo And Other Open Science Projects

SPECIAL PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
151	Yash Wardhan Shyam	Muhammed Afzal P	The "New" Women In Contemporary Hindi Popular Cinema.
152	Yatharth Agarwal	Krishna M	Impact Of 20 Lakh Crore Package On Indian Economy
153	Yatharth Sreedharan	Ram Kinkar Roy	Dft For Qualitative Trend Of Equilibrium Constant

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
1	Aadarsh Asthana	Amitesh Singh Rajput	Biometrics
2	Aadish Jain	Sandeep Sundriyal	Recent Trends In Repurposing Existing Drugs To Target Malarial Parasite.
3	Aarjav Jain	Haribabu K	Identifying The Originating Network Of A Packet
4	Aarushi Arun	Banasri Roy	Hydrogen Production Fromethanol By Lowtemperature Reformingmethods Using Modifiedni-Sn/Al 2 O 3 Andni-Sn/Ceo 2 Catalysts.
5	Aaryan Budhiraja	Aneesh A M	Slip Flow And Heat Transfer In Rotating Channels
6	Aashay Garg	Haribabu K	Implementing Security Solution For Networking
7	Aashish Aggarwal	Shelaka Gupta	Ring-Opening Of Biomass-Derived Platform Molecules
8	Aashna Saxena	Sudeshna Mukherjee	Understanding The Genetic And Epigenetic Signatures Associated With Drug Resistance In The Brain
9	Aastha Kataria	Sushila Shekhawat	Emerging Startup Culture And Their Communication With Startups
10	Aayush Attri	Nirankush Dutta	Role Of Social Media In Spreading Fake News And Forming Public Opinion
11	Aayush Kumar Agarwal	Vinay Chamola	Security Provisioning For Medical Observations
12	Abhay Kumar Parashar	Arvind Kumar Sharma	Hydrodynamic And Mass Transfer Aspects Of Fb
13	Abhay Raj Singh	Sushila Shekhawat	Corporate Communication: An Exploratory Study Of Employability Skills For Aspiring Professionals
14	Abhilash Sabapaty	Divyum Sharma	Numeration Systems And Related Functions
15	Abhimanyu Sethi	J. Jennifer Ranjani	Crop Disease Identification Using Deep Learning
16	Abhinandan Sharma	S Gurunarayanan	Design Of High Performance Multiplier Architectures.
17	Abhinav Dhaka	P Chattopadhyay	Effect Of Surfactants Onwashability Of Textilelubricants
18	Abhinav Gupta	Vishal Gupta	Ddos Prevention In Sdn Environment.
19	Abhinav Kumar	Vishal Gupta	Applying Federated Learning For Detection Of Chd.
20	Abhinav Sanjay Swami	Sangeeta Sharma	Peafowl Conservation.
21	Abhinava Arasada	Kamlesh Tiwari	Indexing Palm Print Database
22	Abhishek Gaur	Kamalesh Kumar	Coupled Dem-Cfd Anal. Of Landslide Ind Debrisflows
23	Abhishek Ghosh	N V Muralidhar Rao	Identification Of Kpis In Higher Education Institutions.
24	Abhishek Jain	Srinivas Appari	Conversion Of Methane To Methanol And Ethylene
25	Abhishek Prasad	Amit Dua	Blockchain Applications To Solve Real Life Problem
26	Abhishek Pratik	Chandra Shekhar	Simulating A Multi-Stage Screening Network Based On Queuing Theory And Game Theory
27	Abhishek Pratik	Shishir Maheshwari	Signal Analysis For Biomedical Based Applications
28	Abhishek Yadav	Anupam Yadav	Harmful Effects Of Logical Disability On Ethical D
29	Abhrajit Sarkar	Kuldip Singh Sangwan	Role Of Circular Economics In Industry 4.0
30	Abinash Mishra	Banasri Roy	Hydrogen Production From Ethanol By Low Temperature Reforming Methods Using Modified Ni-Sn/Al2O3 And Ni-Sn/Ceo2 Catalysts
31	Achintya Agrawal	N V Muralidhar Rao	The Empirical Study On The Post Evaluation Of Cross Border Mergers & Acquisitions (Cbas) Of The Emerging Markets And Its Effect On Shareholders' Wealth.
32	Achleshwar Luthra	Navneet Gupta	Electromagnetic Modeling, Design And Optimization Using Artificial Neural Network
33	Achyuth Anand Tadepalli	J. Jennifer Ranjani	Object Detection In Thermal Images/Videos
34	Adit Mittal	Yenuganti Sujan	Acquisition And Analysis Of Biomedical Signals

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S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
35	Aditee Deepak Kulkarni	Meghana Tare	Effects Of Brahmighritha On Neurodegeneration
36	Adithya Srinivasan	Suvanjan Bhattacharyya	Cfd Simulation On Thermohydraulic Characteristics In A Non-Circular Channel With Vortex Generator Inserts.
37	Aditi Arya	Rajneesh Choubisa	Mental Health Awareness: Scenario Of Rural Area In India
38	Aditi Singh	Yashvardhan Sharma	Chatbot Development In Indian Languages Using Rasa
39	Aditya Anand Bangalore	Janardan Prasad Misra	Gpu Architecture For Deep Learning Applications
40	Aditya Deshmukh	Kamlesh Tiwari	Deep Learning For Karate Activity Recognition
41	Aditya Dhingra	N V Muralidhar Rao	A Design For Sustainability Practice Enhancing Financial Derivative.
42	Aditya Ladia	Srikanta Routroy	Demand Estimation Of Different Concrete Materials In India
43	Aditya Masoor	Anupam Yadav	The Art Of Being Emotionless ,The Stoic Way
44	Aditya Nawal	Hitesh Datt Mathur	Medical Parameter Measurements Using Iot Device
45	Aditya Pratap Singh	Priyansh Singh	Time Temperature Superposition On Creep Testing Data Of Asphalt Concrete Mixture.
46	Aditya Ramaswamy	Amit Dua	Modelling 5G D2D Spectrum Sharing Agreements Using Game Theory
47	Aditya Sharma	Amitesh Singh Rajput	Study And Analysis Of Machine Learning Techniques
48	Aditya Tripathi	Suvanjan Bhattacharyya	Transition And Quasi-Turbulent Heat Transfer And Exergy Destruction Analysis For Solar Air Heater.
49	Aditya Tulsyan	J. Jennifer Ranjani	Crop Disease Identification Using Deep Learning
50	Aditya Vishwakarma	Poonam Goyal	Time Series Analytics
51	Advet Mirpury	Manoj Kannan	Effects Of Radiation On Eukaryotic Cells
52	Adya Pathak	Meghana Tare	Assessing The Alzheimer'S Disease From Mri Pattern
53	Agrawal Madhur Ratnesh	P Chattopadhyay	Remediation Technology For Oil Spills In Water
54	Agrawal Rajat Ramesh	Amit Dua	Solving Real Life Problems Using Blockchain
55	Agrawal Tanmay Manoj	Abhishek Suresh Dhoble	Cytometrics
56	Agrawal Yash Santosh	Rahul Arora	Industrial Restructuring In Post-Covid Environment
57	Ahmad Faraaz	Poonam Goyal	Automate The Process Of Ar Content Generation Using Ml.
58	Aishani Chakraborty	Srikanta Routroy	Comparative Analysis Of Construction Supply Chains And Manufacturing Supply Chains.
59	Aishani Chakraborty	Saurabh Chadha	Determinants Of Capital Structure Of Firms In The Renewable Energy Sector.
60	Aishwarya G Kunkur	Madhurima Das	Descriptive Study Of The Problems Faced By Women In Construction Industry- Pilani
61	Aishwarya G Kunkur	Rajan Pandey	Impact Of Covid-19 On The Education Sector- Stocks
62	Aishwarya Kondaveeti	Anirudh Singh Rana	Qnumerical Simulation Of Rarefied Gas Flows
63	Akanksha Kumar	Aditya Raw Gautam	Real-Time Decision Support System For Cervical Cancer Diagnosis Using Images
64	Akanksha Kumar	Chandra Shekhar	Metaheuristic Methods For Optimisation
65	Akarsh G Shroff	Anil Kumar Bhat	Impact Of Social Enterprises In The Education Sector
66	Akash Gupta	Devika	Critical Analysis Of Acting Methods Of Notable Screen Actors
67	Akash Palrecha	Rajesh Kumar	Analyse Tradeoff In Speed And Accuracy When Switching Between Fp16 And Fp32 Precision When Using Pca On A Gpu
68	Akhil Arora	N V Muralidhar Rao	An Empirical Study On The Post Evaluation Of Cross Border Mergers & Acquisitions (Cbas) In Emerging Marketsand Its Effect On Shareholders' Wealth
69	Akhilesh Parwal	Satyendra Kr Sharma	How Crowd Logistics Has Revolutionized The Scm
70	Akriti Srivastava	Hare Krishna Mohanta	Pattern Classification In Robot Using Ann
71	Akshat Bhatnagar	G S Chauhan	Branding Through Social Advertising; Does It Help In Selling?

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
72	Akshat Garg	Muthukumar G	Use Of Basalt Fibre In Fire Resistant Design
73	Akshat Gupta	Karunesh Kr Gupta	Intelligent Data Analytics For Prediction Of Aqi
74	Akshit Achara	Rajesh Kumar	Review And Recent Development In Adomain Decomposition Method For Solving Fragmentation Equation
75	Alfred William Jacob	Yashvardhan Sharma	Natural Language Processing Tools For Indian Langu
76	Alwyn Jose Raja	Madhukar Mishra	Study On Stellar Neutrinos And Dark Matter
77	Aman Garg	Amit Dua	Application Of Reinforcement Learning In Real-Time Scenario
78	Aman Gupta	Akash Agarwal	Study Of Impulsive Noise Environment (Ine) In Electricity Substations
79	Aman Kumar Rana	S B Singh	Structural Health Monitoring Of Structures.
80	Aman Lamba	Saket Verma	Production Of Biodiesel From Waste Cooking Oil
81	Amar Sigireddi	Rajneesh Choubisa	Mergers And Acquisitions
82	Ambuj Saxena	G S Chauhan	Packaging Of Tv News: Structure & Style Of Selected News Channels
83	Ambuj Upadhyay	Rajesh Prasad Mishra	Development Of A Mathematical Model For Prdeiction Of Tool Life Of A Mechanical Component
84	Amey Shitole	Vinay Chamola	Integration Of Blockchain With Iot
85	Amit Sanjay Hegde	A R Harikrishnan	Applications Of Complex Colloidal Solutions In Aerospace Engineering
86	Amlan Routray	Karunesh Kr Gupta	Analysis Of Glaucoma Using Fundus Images
87	Amratanshu Shrivastava	Amit Dua	Agrichain: Supply-Chain Management Foragri Foods Using Block-Chain Technology
88	Amulya Dwivedi	Madhukar Mishra	Ionic Propulsion For Satellites And Spacecrafts
89	Ananya Khandelwal	Navneet Gupta	Material Selection For Micro-Heater For Mems Based
90	Ananya Malhotra	Satyendra Kumar Mourya	Supercapacitors
91	Ananya Singh	V Manjuladevi	Eff. Of Nanomat On Viscoelastic Properties Of Lc
92	Aneri Jain	Jitender Kumar	Study Of Cayley Graphs Associated With Algebraic Structures
93	Aniket Kumar Singh	Priyansh Singh	Finite Element Analysis Of Flexible Pavement Under Different Wheel Configuration Loadings.
94	Anirudh Buvanesh	Ashutosh Bhatia	Electronic Voting Systems Using Blockchain
95	Anirudh Krishna S	Aneesh A M	Analysis Of Supersonic Flow Over Re-Entry Space Modules
96	Anirudh Vijay	Jyoti	Machine Learning As A Decision-Making Tool For Venture Capitalist
97	Anis Sabeer	Tanu Shukla	A Detailed Qualitative And Quantitative Analysis On Indian Start-Up Ecosystem
98	Anjali Khantaal	Arun Kumar Giri	Causes And Consequences Of Poverty After Liberalization In India
99	Anjaney Asreet Rout	Anshuman Dalvi	Some Studies On All-Solid-State Supercapacitors
100	Ankit	Murali Palla	Designing A Carbon Fiber Wheel Rim
101	Ankit Goyal	Navneet Goyal	Machine Learning
102	Ankit Kumar Mishra	Sundaresan Raman	Oct Biomarkers In Dme
103	Ankit Sonthalia	Sumanta Pasari	Neural Networks And Probabilistic Graphical Models For Earthquake Time-Series Data Analysis : An Ensemble Approach
104	Ankita Nanglia	Virendra S Nirban	Comparative Study Of Social Media Usage By Homemaker Women And Their Well-Being
105	Ankur Jain	Priyansh Singh	Modeling Of Viscosity And Temperature Of Asphalt Binders
106	Ankur Nangalia	Nirankush Dutta	Study Of Social Media Marketing Strategies
107	Anmol Kabra	Prabhat Nath Jha	Exploring The Role Of Heat Shock Factors (Hsfs) During Abiotic Stress In Plants
108	Anmol Sharma	Aditya Raw Gautam	Control Of Impedence Source Inverter

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
109	Annyun Das	Rakesh Choubisa	Time Dependent Atomic Scattering In 1 Dimension
110	Anshuman Bahadurmal Jangir	Shamsher Bahadur Singh	Analysis Of Composite Beams
111	Anshuman Mishra	Aditya Raw Gautam	Boost Converters
112	Anubhav Goyal	Srikanta Routroy	Supply Chain Management
113	Anubhav Srivastava	Karri Babu Ravi Teja	Organic Semiconductors: Study Of Carrier Transport
114	Anuraj Som	Arvind Kumar Sharma	Chemical Engineering: A Shift In Paradigm
115	Anusatya Choudhary	Shyam Sunder	Validation Of Precice Based Fsi Solvers And Application To Flow Past An Airfoil
116	Anushka Dayal	Abhishek	Bio-Nlp
117	Anushka Gupta	Nitin Chaturvedi	To Detect Human Drowsiness Using Ml Algorithms.
118	Anushka Jain	Navneet Goyal	Data Structure For Data Mining
119	Anwesh Bhattacharya	Lavika Goel	Question Answering System Design Based On Deep Learning And Natural Language Processing
120	Apoorv Sadana	Pratik Narang	Srcd Portal,Checking Automation & Research Website
121	Apoorva Pandey	Geetilaxmi Mohapatra	Feminization Of Agriculture And Marginalization Of Woman Economic Stake
122	Apurv Kumar Shukla	Shishir Maheshwari	Advanced Signal Processing Techniques For Biomed.
123	Aquib Junaid Razack	Rajiv Gupta	Deep Reinforcement Learning For Traffic Light Control At Intersections.
124	Aradhaya Makkar	Arun Kumar Giri	Natural Capital Accounting
125	Aradhya Makkar	Praveen Goyal	Role Of Technology In Transportation And Trade
126	Archika Gupta	Anil Kumar	Ionic Liquids As Catalyst In Organic Synthesis
127	Arepalle Hima Siva Kalyan Reddy	Rajesh Kumar	Analyzing Attacks On Crypto-Currencies Using Attack-Defense Trees
128	Aridaman Walia	Niladri Sarkar	3D Printing Of Cnts Based Microelectronic Devices
129	Arihant Jain	Neetu Yadav	Estb Rel Bw Esg And Investor Recommendation(India)
130	Aritra Guru	Deepak Sharma	Fabrication Of Novel Thermal Interface Materials (Tim) For Next Generation Micro-Electronics Appplications
131	Arnav Ahuja	Sumanta Pasari	Predicting Earthquake Magnitudes Using Mlp
132	Arpan Bumb	Tufan Chandra Bera	Improving Accuracy Of 3D Machined Parts
133	Arpan Chattopadhyay	Rupam Goswami	Modelling Of P-N Junction Based Biosensors.
134	Arpan Kumar Sharma	Suvanjan Bhattacharyya	Numerical Investigation Of Micro Pin-Fin Heat Sink Cooling In The Main Board Chip Of A Cpu.
135	Arpan Parikh	Vandana Agarwal	Brain Computer Interface
136	Arpit Mohanty	Abhijeet Keshaorao Digalwar	Evolution Of The Automobile Industry With The Onset Of Electric Mobility.
137	Arpit Sharma	B Vani	Conservation Ecology
138	Arsh Tyagi	Chandra Shekhar	Study Of Interjection Of Customers In The Queue
139	Aryaman Bhagat	Pratik Narang	Data Evaluation Using Shapley Value
140	Aryan A Pareek	Ravi Kant Mittal	Recent Advances In Soil Improvement
141	Aryan Gupta	Jyoti	Index Development For Performance Evaluation
142	Aryan Jain	V K Chaubey	Power Electronics - Converters
143	Aryan Kukreja	Syed Mohammad Zafaruddin	Predicting Ipo Pricing Using Machine Learning Techniques
144	Asaf Ahmad Shayaan	Muhammed Puthusseri	Analysis Of Power Struggle Between Class-Representational Characters In Movies And Television Shows.
145	Ashish	Niladri Sarkar	Study Of Nano-Scale Devices
146	Ashish Asthana	Bijay Kumar Rout	Exploration Of Visual Slam Methods
147	Ashish Kumar	Ashutosh Bhatia	Real Time Turn-To-Turn Route Recommendation System
148	Ashrit Shekhar Tayade	A R Harikrishnan	Applications Of Nanofuels In Automotives
149	Ashrya Agrawal	Navneet Goyal	Image Captioning & Video Description Generation

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
150	Ashuutosh Singh Dikhit	Anshuman	Development Of Mix Design Using Geopolymer.
151	Ashwin Saxena	Leela Rani	Understanding Applications Of Business Analytics T
152	Ashwin Sharma	Pradipta Chattopadhyay	Effect Of Surfactants On Washability Of Textile Lu
153	Aswin Anil Kumar	K S Bhattacharya	The Territory Of Desire: Understanding The Roots Of Kashmiri Separatism With Respect To Post-Independence Indian Administrative Policies
154	Atharva Dubey	Prateek Kala	Flexible Manufacturing Systems And Cellular Manufacturing
155	Avi Chaturvedi	Abhijeet Keshaorao Digalwar	Supply Chain Management In The Era Of Industry 4.0
156	Avinash Manoj Sontakke	Yashvardhan Sharma	Design & Implementation Of Rt Identity Detection
157	Aviral Sethi	J. Jennifer Ranjani	Concealed Weapon Detection Using Image Fusion And Deep Learning
158	Aviral Sinha	Yenuganti Sujan	Acquisition And Analysis Of Bio-Medical Signals
159	Aviral Tyagi	Madhukar Mishra	Jet Quenching In Heavy-Ion Collisions
160	Avishek Roy	Pushp Lata	Intercultural Competence Of Indian Engineeringstudents: An Assessment And Need For Developmenttraining
161	Avishek Roy	Sainath Bitragunta	Novel Hybrid Phy Policy In 5G And Beyond
162	Ayush Agrawal	N V Muralidhar Rao	Career Path Modelling: Application Of Machine Learning Techniques
163	Ayush Agrawal	Pratik Narang	Deep Learning For Security Provisioning
164	Ayush Chandak	Tanu Shukla	Study Of Factors Of Organisational Domain & Its R.
165	Ayush Gupta	Poonam Goyal	Image Captioning
166	Ayush Jindal	Praveen Kumar A.V.	Application Of Fdtd In Modeling Electromagnetics
167	Ayush Kumar	Sharad Shrivastava	Modelling And Simulation Of Skin Friction
168	Ayush Kumar Bothra	Kuldip Singh Sangwan	Industry 4.0
169	Ayush Sharma	Ashish Patel	Solar Cells For Energy Harvesting In Iot Circuits.
170	Ayush Singh	Sundaresan Raman	Development Of Mobile App For Identifying Plants
171	Ayush Singhal	Navneet Goyal	Adapt Lab Sop
172	Ayush Srivastava	Ajit Pratap Singh	Application Of Deep Learning In Civil Engineering
173	Ayush Upadhyay	Pawan Kamalkishor Ajmera	Using Dl To Improve Facial Recognition Systems
174	Ayushi Agrawal	Navneet Gupta	Modeling Of The Characteristics Of Otft
175	Baani Ajmani	Devika	Development Of Asian Languages
176	Babita Saini	Virendra S Nirban	Exploration Of Soft Skills Among Non Teachings Staff In Education Institute
177	Bachhav Pratik Manohar	Rajdeep Chowdhury	Developing An Ovarian Cancer Prediction App
178	Baheti Shivam Narayan	Anupam Yadav	Philosophy Of Science
179	Bandewar Anjali Sudhakar	Jitender Kumar	A Study Of Cayley Graphs Associated With Algebraic Structures.
180	Bandewar Anjali Sudhakar	Navneet Gupta	Mathematical Modeling Of Dual Material Gate-All-Ar
181	Barsode Ankur Narendra	Aneesh A M	Study Of Taylor Couette Flow
182	Bharat Bhargava	Sumanta Pasari	Earthquake Detection Using Convolutional Neural Networks
183	Bhaskar Sharma	Nirankush Dutta	Exploring The Use Of Social Media For Higher Education: Academicians Perspective
184	Bhaskar Sharma	Neetu Yadav	Impact Of Sustainability Reporting On Firm Performance Of Indian Listed Companies
185	Bhaskar Sharma	Anil Rai	Classical And Light Music
186	Bhavesh Kotwani	Prabhat Nath Jha	Geographical Biodiversity Of Pseudomonas Spp. On Plant Disease Controlling Potential With Special Reference To The Development And Regulation Of Various Formulations For Commercialization.
187	Bhavika Sajnani	Satyendra Kumar Mourya	Advanced Vlsi Devices
188	Bhavya Gera	N V Muralidhar Rao	A Critical Analysis Of Globalization And Convergence

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			On Firm Productivity
189	Bhavya Gera	Pratik Narang	Deep Learning For Security Provisioning
190	Bhogte Aashay Praveer	Arvind Kumar Sharma	Mass Exchanger Networks –Future Perspectives*
191	Bhoomi Sawant	Yashvardhan Sharma	Question Answering System For Closed Domain Systems
192	Bhushan Raghuvir Thumsi	Aneesh A M	Thermo-Hydraulic Performance Of Fin Based Printed Circuit Heat Exchangers
193	Binay Goyal	Anshuman Dalvi	Review Of Supercapacitors For Energy Storage
194	Botlaguduru Satvik	Yenuganti Sujan	Piezoelectric Excitation Of Clamped-Clamped Beam
195	Botlaguduru Satvik	Muralidhar Rao N V	Econometric Applications Of Garch-Midas Model
196	C Eswar Babu	J. Jennifer Ranjani	Segmentation Of Sar Images
197	C V Krishna Murthy	V K Chaubey	A Computer-Based Visitor Counter For Monitoring Statistics In Real-Time.
198	Chaarvi Bansal	Rajdeep Chowdhury	Analysing Cytoskeleton And Its Association With Organelle Dynamics In Tumor Cells
199	Chahat Jain	Navneet Gupta	Modeling Of Ltps Tft For Active Matrix Displays Addressing Circuits Simulation And Design
200	Chaitanya P V S K	Abhijeet Keshaorao Digalwar	Analysis Of Factors For Sustainable Supply Chain
201	Chandan Pandey	Mukund Lahoti	Self Healing In Concrete
202	Chandraveer Saran	Suvanjan Bhattacharyya	Numerical Study Of Thermohydraulic Characteristics In Solar Air Heater With Different Orientations Of Wavy Ribs
203	Cherith Lavisetty	Manoj Kumar Soni	Rooftop Solar Pv Power Generation With And Without Battery Storage
204	Chinmay Gupta	Amol Holkundkar	Recent Literature On The Laser-Plasma Interaction
205	Chinmay Hebbar	Krishnendra Shekhawat	Graph Theoretical Heuristics For Rectangular Dualization
206	Chinmay Nema	Syed Mohammad Zafaruddin	Machine Learning Techniques For Resource Allocation In Cell-Less Wireless Networks.
207	Chirag C D	Abhishek Mishra	Graph Isomorphism Algorithms
208	Chirag Maheshwari	Sunita Raina	Exploring Caste Politics In India
209	Chirag Maheshwari	Pawan Kamalkishor Ajmera	Study And Implement Finger Vein Biometric Model
210	Chirag Singhal	Karunesh Kr Gupta	Intelligent Data Analytics For Prediction Of Aqi
211	Chokhani Naman Ravi	Rajesh Kumar	Optimal Strategy Synthesis In Attack-Defence Tree(With Moving Target Defence)/With Dynamic Reactive Cms.
212	Daksh Dave	Tanu Shukla	Study Project
213	Deep Patel	P Srinivasan	Water Conservation In Cooling Towers Using Cfd
214	Deepak Jain	Surekha Bhanot	Generating 3D Mesh Models From Single Rgb Images
215	Deepal Choudhary	Devika	Rise Of Feminism In Indian Cinema
216	Deepansh Goyal	Manojkumar Surajkaranji Soni	Headgear Design For Eeg Signal Acquisition
217	Deepanshu Aggarwal	Ravi Kant Mittal	Ground Improvement Using Waste Material
218	Deepanshu Gupta	Pushp Lata	Role Of Meditation In Stress Free Living
219	Deepika Grewal	Rajeev Taliyan	Potential Of Ace Inhibitors And Arbs In Covid-19
220	Deshmukh Sudhanshu Rajesh	Prabhat Nath Jha	Investigating The Role Of Heat Shock Protein Hsp During Abiotic Stress In Plants
221	Devansh S Mishra	Srikanta Routroy	Social Distancing In Supply Chain Management
222	Devansh Sharma	Anupam Singhal	Analysis Of Groundwater In Bits Pilani Campus
223	Devashish Pant	Tapomoy Guha Sarkar	Chaos In Relativistic Regime
224	Devesh Sharma	Gaurav Watts	Numerical Analysis For Structural Bodies
225	Devika Jangid	Madhukar Mishra	To Study The Theory Of Dark Matter And Dark Energy.
226	Dewansh Kaloni	Niladri Sarkar	Semiconductor Device Physics
227	Deyasini Datta	Sunil Kumar Dubey	Understanding The Pharmaceutical Supply Chain In

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
STUDY PROJECT			
			Developing Countries.
228	Dhanuka Aarnav	Rashmi Ranjan Mishra	Advanced Topics In Computational Physics
229	Dhanush Balaji R D	Surekha Bhanot	Application Of Ml In Heart Disease Detection
230	Dhanush Tripathy	V Manjuladevi	Electro-Optic Effect In Nematic Liquid Crystals
231	Dhebar Jeet Nehal	Gaurav Watts	Flutter Analysis In Aircraft Wing
232	Dhruv Jain	Sailaja Nandigama	Impact Of Covid-19 On American Stock Markets
233	Dhruv Paras Mehta	Abhishek Suresh Dhoble	Self-Healing Concrete
234	Dhruv Sharma	Vinay Chamola	Brain Computer Interface Controlled Humanoid
235	Dhruv Singhal	Ashutosh Bhatia	Data Analytics For Bitcoin Blockchain: A Graph Theoretic Perspective
236	Dhruv Singhal	Rajan Pandey	Analysis Of Financial Impact Of Covid-19'
237	Dhulipalla Krishna Swaroop	Harshavardhan Settibhaktini	Development Of Radiometric, Atmospheric Correction Filters For Hyperspectral Camera.
238	Digvijay Singh	Rajdeep Chowdhury	Predicting Tumor Resistance Using Expression Data
239	Diksha Parwana	Richa Shrivastava	Role Of Oncostatin M In Breast Tumor Progression
240	Dimple	Anil Rai	Musician Trinities Of Indian Music
241	Dipanshi Bansal	Sundaresan Raman	Quantitative Retinal Image Analysis
242	Divya Kapur	Bijoy Krishna Mukherjee	Control Design And Simulation For An Artificial Cardiac Pacemaker
243	Divya Lakshmi	Murali M Pandey	Study Of Novel Drug Delivery System Of Alzheimer
244	Divya Tyagi	N V Muralidhar Rao	Globalisation, Poverty And Inequality
245	Divyam Sharma	Jyoti	Viable Marketing Approaches For Used Clothing
246	Divyank Pandey	J. Jennifer Ranjani	Segmentation Of Sar Images Using Convolutional Neural Network.
247	Divyansh Pant	Sailaja Nandigama	Energy From Plastic Waste : Search For Cost Efficient Fuel Generation Technique And Possible Strategies To Organize The Informal Waste Management Sector.
248	Divyesh Narayanan	Puneet Mishra	Design And Analysis Of An Intelligent Adaptive Controller For A Flow Control System
249	Diwan Ritika Sanjay	Mani Sankar Dasgupta	Commercialization Of Technologies To Recycle Plastics Specially Aiming At E-Commerce Businesses.
250	Dushyant Yadav	Hari Babu Kotakula	Design And Implementation Of Push-Based Approaches For State Collection
251	Eashan Sapre	Surekha Bhanot	Image Captioning
252	Effy Oommen John	Vaidya Rishikesh D	Studies In Symmetry Priniciples In Theoretical Phy
253	Egna Praneeth Gummana	Kamlesh Tiwari	Deep Learning For Human General Activity Recogniti
254	Eshan Bhaskar	Krishna M	An Event Analysis Of Too-Big-To-Fail Banks With Re
255	Faizur Rahman	Anirudh Singh Rana	Numerical Modelling Of Underground Fluid Flow
256	Funde Piyush Bhagwat	Abhijeet Keshaorao Digalwar	Impact Of Covid-19 On Business Strategies
257	Gala Het Mahendra	V K Chaubey	Organic Solar Cell Design, Modeling And Simulation
258	Gandhar Vishwas Kulkarni	Divyum Sharma	Numeration Systems And Related Functions
259	Gandhi Akshar Nilesh	Anu Gupta	Frequency Compensation Methods Of Amplifiers
260	Gannu Atharvan	Amit Dua	Deep Learning For Solving Real-Life Problems
261	Garg Prarabdh Nilesh	Ashutosh Bhatia	Trust-Based Protocol For Mobile Cloud Systems
262	Garima Dhar	Manoj Kumar	Comp. & Sustainability Of Plastic Roads In Pilani
263	Garvish Gangwal	Debata Byomakesh	Computational Finance
264	Garvit Taneja	Saumi Ray	Metal Complexes In Medicines
265	Gaurav Bellal Natesh	Sheth Pratik N	Refuse Derived Fuel (Rdf) From Municipal Solid Waste (Msw), And It'S Characterization.
266	Gaurav Rai	Hare Krishna Mohanta	Big Data Analytics In Chemical Engineering
267	Gaurav Rathi	Mani Sankar Dasgupta	Design Of A Braking System Via Hoberman Structures
268	Gaurav Saini	Sangeeta Sharma	To Study The Impact Of Television Advertisements In Rural Areas

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269	Gaurav Sharma	Amol Marathe	Mathematical Modelling Of Rotating Timoshenko Beam
270	Gauri Chaturvedi	Rajeev Taliyan	Detailed Study On Hypoglycemic Encephalopathy And Its Occurance In Bihar
271	Gharpure Supriya Jayant	Suvanjan Bhattacharyya	Computational Fluid Dynamics Use In Biomechanics
272	Ghodake Priya Nitin	Arnab Hazra	Synthesis Of 2D-Electronic Materials
273	Gitansh Pujari	Sundaresan Raman	Machine Learning In Structural Health Monitoring
274	Gobind Sehgal	Pankaj Arora	Periodic Nanostructure-Based Optical Solar Cells
275	Gokul Karthiik M	Praveen Kumar A.V.	Rf Cavity Design For Particle Accelerators
276	Gopesh Kumar Singh	Rajan Pandey	Modeling Of Probability Of Default(Pd), Loss Given Default(Lgd) And Exposure At Default(Ead) Values Used To Calculate The Credit Risk Capital Of A Financial Institution
277	Goyal Rishabh Manoj	Abhishek Suresh Dhoble	To Implement Image Recognition In Python On Foam Samples To Collect Data For Analysis, Classification And Prediction Using Machine Learning.
278	Gundewar Akshay Amol	Yashvardhan Sharma	Natural Language Processing For Indian Languages.
279	Gunjas Singh	Pawan Kamalkishor Ajmera	Gait Recognition Using Convolutional Nn
280	Guntaas Singh	Kamlesh Tiwari	Deep Learning For Group Activity Recognition
281	Gupta Pranay Pradeep	Amitesh Singh Rajput	Study/Analysis Of Deep Learning And Encryption.
282	Gupta Srijen Jagdish	Saket Verma	Development Of A Compact Biogas Reformer For Vehic
283	Gurnoor Singh	Murali P	Modelling Structures And Properties At The Nanoscale
284	Hardik Bhatnagar	Rajesh Kumar	Formal Methods In Biology
285	Hardik Gupta	Sandhya Amol Marathe	Study And Characterise The Use Of Bacteriophages And Crispr Cas System As Anti-Microbial
286	Harman Singh Matharu	S K Choudhary	Origin And Growth Of Punjabi Language.
287	Harman Singh Matharu	Sunil Kumar Dubey	Pharmacokinetic Studies Of Anticancer Agents
288	Harmanjot Kaur	Shibasish Chowdhury	Study The Factors Influencing Gene Regulation By Mirna In Plants With The Help Of Machine Learning
289	Harmeet Singh	Anupam Yadav	Dealing With Climate Change Using Artificial Intelligence.
290	Harsh Agarwal	Srikanta Routroy	Supply Chain Management
291	Harsh Garg	Arun Kumar Giri	Using Fin. News And Nn To Predict Stock Prices
292	Harsh Hrishikesh Kulkarni	Shyam Sunder	Numerical Simulation Of Condensation Of Co2 In An Ejector Using Open Source Code
293	Harsh Khatri	Shibasish Chowdhury	Comparative Analysis Of Bacterial Genome To Differentiate Between Pathogenic And Non-Pathogenic Bacteria
294	Harsh Khatri	Anupam Yadav	Women In Computer Science
295	Harsh Mani Tiwari	Anupam Singhal	Eia Report Onrenukaji Multi-Purpose Dam Project
296	Harsh Shah	Nirankush Dutta	The Role Of Social Media In Higher Education
297	Harsh Sharma	Yashvardhan Sharma	Visual Question Answering Systems Using Dl Tech
298	Harsh Vardhan Mishra	Banasri Roy	Carbonaceous Catalysts For The Conversion Of Agricultural Residues To Sugar
299	Harsh Vikram Sulakhe	Yashvardhan Sharma	Design And Implementation Of Real-Time Identity Detection System
300	Harsh Yadav	Abhishek Mishra	Graph Isomorphisms
301	Harshal Jain	Abhijeet Keshaorao Digalwar	Study Of Different Decision-Making Tools
302	Harshan B	Janardan Prasad Misra	Gpu Architecture For Deep Learning Applications
303	Harshiel B Shah	Prateek Kala	Application Of Machine Learning In Additive Manufacturing
304	Harshit Garg	Amit Dua	Developing A Sustainable Network Model
305	Harshit Goyal	Prashant U Manohar	To Study The Theoretical And Computational Aspects Of Electronic Structure Theory For Closed-Shell System

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	STUDY PROJECT		
306	Harshit Joshi	Meghana Tare	Pd- Mechanisms For Loss Of Dopaminergic Neuron
307	Harssh Mathhur	Manoj Kumar Soni	Exergetic Analysis Of Solar Thermal Power Plant
308	Hemant Vats	Kuldip Singh Sangwan	Studying Various Ways To Remotely Hack Latest Operating System(S) Using Buffer Overflow Exploitation. Industry 4.0- Cyber Security
309	Hemantha Krishna Bharadwaj	S Gurunarayanan	Design Of High Performance Arithmetic Circuits
310	Himanshu Agarwal	Akash Agarwal	To Study The Developments In Machine Learning Applications For Wireless Communications.
311	Himanshu Chaturvedi	Arvind Kumar Sharma	Thermodynamic Analysis Of Selected Bio-Processes
312	Himanshu Gupta	Rakesh Choubisa	Scattering In 1D By Solvable And Elastically Equivalent Potentials
313	Himanshu Pandey	Yashvardhan Sharma	Vqa Systems Using Machine Learning Techniques
314	Himanshu Sharma	Suvanjan Bhattacharyya	Augmented Heat Transfer In Rectangular Solar Air Heater Duct With Swirl Generator.
315	Himanshu Singh	Banasri Roy	Carbonaceous Catalysts Forthe Conversion Ofagricultural Residues Tosugar
316	Himanshu Tiwari	Ashutosh Bhatia	Network Security + Machine Learning
317	Hrishav Raj	Bijay Kumar Rout	Analysis Of Faulty Airbag Deployments Using Profile Monitoring
318	Hritank Singhal	Priyansh Singh	Finite Element Analysis Of Flexible Pavement Under Different Wheel Configuration Loadings.
319	Indraneel Ghosh	Vaibhav Soni	Object Detection In Aerial Imagery
320	Isha Dogra	Banasri Roy	Carbonaceous Catalysts Forthe Conversion Ofagricultural Residues Tosugar
321	Isha Nagpal	Krishna M	Impact Of Mergers And Acquisitions On The Valuation Of Banking Sector
322	Isha Shaffir	Rajeev Taliyan	Link & Role Of Gut Microbiota In Cardiac Disorders
323	Ishan Gupta	Shelaka Gupta	Dehydrooxygenation Of Phenolics
324	Ishan Nigam	Bijay Kumar Rout	Robotics In Biological Applications
325	Ishita Agarwal	Navneet Gupta	Material Selection And Structural Optimization Of
326	Ishita Aggarwal	Shishir Maheshwari	Biomedical Signal Analysis And Machine Learning
327	Ishita Agrawal	Sheth Pratik Nitinchandra	Study On Catalyst For Dimethyl Ether Production
328	Ishita Bhatnagar	Niladri Sarkar	Study Of Transport Properties Of Low Dim Devices
329	Ishita Singhal	Dheerendra Singh	Fact And Hvdc
330	Jahagirdar Niranjan Ashok	Sadhana Jha	Single Image Depth Estimation Using Deep Learning Techniques
331	Jahagirdar Niranjan Ashok	Muralidhar Rao N V	Monte Carlo Option Pricing Using The Heston Model
332	Jai Vashishtha	Abhijeet Keshaorao Digalwar	World Class Manufacturing In The Industry 4.0 Era
333	Jain Piyush Pawankumar	Ankush Chandrakant Jahagirdar	Implementation Of Fourier Neural Networks/ Wavelet Neural Networks
334	Jared Dominic Fernandez	Arya Kumar	Study Of Bitsian Ventures - A Case Study
335	Jashandeep Singh	Debashis Bandyopadhyay	Hydrogen Storage In Small Sized Clusters
336	Jasman Singh Kalsi	Manojkumar Surajkaranji Soni	Csp S- Co2 Cycles For Power Generation And Cooling
337	Jasmine Kumar	Karunesh Kr Gupta	Identification Of Cancer In Human Blood Samples Based On Microscopic Images Using Image Processing.
338	Jay Kamat	Rajiv Gupta	Improvement Of Classification Methods For Remotely Sensed Data
339	Jayesh Narayan	Akash Agarwal	To Study The Developments In Machine Learning Applications For Wireless Communications
340	Jays Jose Thomas	Anil Kumar Bhat	Product Management In Indian Software And E-Commerce Companies
341	Jays Jose Thomas	Bhanu Vardhan Reddy	Review On Applications Of Membrane Separations

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	STUDY PROJECT		
		Kuncharam	Processes In Waste Water Treatment
342	Jeet Rajiv Mehta	Satyendra Kr Sharma	Risk Analysis In Supply Chain
343	Jeet Yadav	Tapomoy Guha Sarkar	A Study Of Geometric Phases In Quantum Mechanics
344	Jeet Yadav	Tapomoy Guha Sarkar	A Study Of Geometric Phases In Quantum Mechanics
345	Jigisha Chandra	Aniruddha Roy	Strategiesfortcellactivationforcancerimmunotherapy
346	Jigyashu Aggarwal	Srinivas Appari	Catalysts For Methane To Methanol To Ethylene
347	Jithin Kallukalam Sojan	Hari Babu Kotakula	Methods For Estimating Delay, Jitter, And Bandwidth In Real-Time.
348	Jonnalagadda Sadhana	Aniruddha Roy	Epigenetics And Genetics Of Cancer Metastasis
349	Joshi Isha Kailas	Rajeev Taliyan	Pathophysiology Of Neuropathic Pain In Cancer And Its Clinical Management
350	Jyotirmoy Pathak	Saumi Ray	Zeolites, Mofs And Their Applications In Water Har
351	Kalimi Venkata Yashwanth Kumar Reddy	Karunesh Kr Gupta	Biometrics Recognition And Authentication By Image Processing
352	Kalit Naresh Inani	Hari Babu Kotakula	Cloud Computing: Time And Space Efficient Distributed Trees For Incremental Updates
353	Kamalesh S	Dheerendra Singh	Crowd Counting And Stampede Prediction
354	Kanav	Avinash Gautam	Task Allocation In Multi-Robotic Systems
355	Kanishk Chaudhary	Amit Rajnarayan Singh	Brownian Dynamics Of Ops With Lammps
356	Kanwaraj Singh	Sailaja Nandigama	Energy Form Plastic: Search For Cost-Efficient Fuel Generation Techniques And Possible Strategies To Organize Informal Waste Management Sectors.
357	Kapadia Sanjeet Jaideep	Anupam Yadav	The Study And Application Of Logic In Computer Science
358	Karan Chauhan	Anirudh Singh Rana	Ultrasonic Wave Propagation In Nano Devices
359	Karan Chauhan	Satyendra Kumar Mourya	Simulation Of Mosfet/Schottky Diode Based On Sic
360	Karandeep Singh Jaggi	Uma S Dubey	Overcoming Stubble Burning
361	Kartik Agrawal	P Srinivasan	Techno Economic Viability Of Solar Thermal Power P
362	Kartik Patil	S U Belgamwar	Fabrication Of Composites With Nanoparticles.
363	Kartikeya Gupta	Arya Kumar	Determinants Of Hedging And Its Effects On Investment And Debt For A Corporate Firm Trading In India
364	Katla Pragna Sri	Anil Rai	Musical Ages
365	Kaustav Dutta	Kumar Neeraj Sachdev	Philosophy Of Buddhism And Its Impact Throughout The Ages
366	Kaustubh Dwivedi	Debashis Bandyopadhyay	Dft Study Of Cluster Supported Ligands
367	Kaustubh Namjoshi	Kamlesh Tiwari	Satellite Image Segmentation
368	Kaustubh R Joshi	Ankush Chandrakant Jahagirdar	Bearing Fault Diagnosis Using Signal-Based And Model-Based Methods.
369	Kaustuv Lahiri	Shyam Sunder	Generation And Validation Of Real Gas Property Tables For Ansys Cfx, Fluent And Openfoam.
370	Kedia Mohit Rajeev	Abhijeet Keshaorao Digalwar	Operations And Supply Chain Management In The Fmcg Sector
371	Kesava Garikipati	Aditya Raw Gautam	Sliding Mode Control(Smc) In Dc-Dc Converter.
372	Keshav Kumar	Dipendu Bhunia	Analysis And Design Of Earthquake Resistant Civil
373	Keshav Mahajan	Nirankush Dutta	Exploring The Use Of Social Media For Higher Education, Students Perspective
374	Keshav Moondra	Uma S Dubey	Overcoming Stubble Burning.
375	Keshav Sethi	N V Muralidhar Rao	A Critical Analysis Of Globalization And Convergence On Firm Productivity
376	Keshav Sethi	Vinay Chamola	Internet Of Things Based Healthcare Platform
377	Khandelwal Harsh Rajkumar	Muthukumar G	Strategic Management In Construction Projevcts
378	Khushi Saini	Vaidya Rishikesh D	Study Of Symmetry Principles In Classical Physics
379	Kodiganti Sushanth	Shishir Maheshwari	Wireless Sensor Network On Board Vessels
380	Koganti Sasank	Sangeeta Sharma	To Study The Impact Of Television Advertisement

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S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
			Versus Internet Advertisement On Audience.
381	Koganti Sasank	Gajendra Singh Chauhan	Significance Of Color Psychology In Advertisement
382	Konepalli Bhanu Prakash Reddy	Praveen Kumar A.V.	Extraction Of Eigenmode Properties Of The Higher-Order Modes Of Cylindrical Dielectric Resonator Antennas(Dras)
383	Koundinya Kuppa	Amit Dua	Deep Learning For Solving Real-Life Problem
384	Krati Gupta	N V Muralidhar Rao	Study Of The Cryptocurrency Market Using An Artificial Financial Market Simulation
385	Krishna Jain	Navneet Gupta	Modeling Of Ltps Tft For Active Matrix Displays Addressing Circuits Simulation And Design.
386	Krishna Suravarapu	Ashutosh Bhatia	Iot Authentication Using Blockchain
387	Krishnadev Reghunath Menon	Prateek Kala	Methods Used For Measuring Respiratory Parameters
388	Kshitij Bhargava	Prabhat Nath Jha	Microbial Fuel Cells
389	Kshitij Gupta	Arun Kumar Giri	Using Fin. News And Nn To Predict Stock Prices
390	Kshitiz Kashyap	Manoj Kumar	Determination Of Economical Span In Long Bridges
391	Kshitiz Khosla	Bijoy Krishna Mukherjee	Robust Control Of Aircrafts
392	Kshitiz Sinha	Paul Atish Tulshiram	Upcoming Advancements In The Field Of Cancer And Diabetes
393	Kulkarni Chaitanya Vishwanath	Biswanath Layek	Application Of Recurrent Neural Networks For Efficient Detection Of Gravitational Wave Events In Ligo Data.
394	Kumar Divij	Karri Babu Ravi Teja	Design Of Very-Low Power Digital Circuits Operating In Sub-Threshold Region
395	Kumar Saurabh	Arun Kumar Giri	Millenials And The Fintech Revolution
396	Kumar Shivam	Somak Chatterjee	A Review On Different Sensors Towards Heavy Metal Detection In Contaminated Stream
397	Kushagra Mishra	Satyendra Kr Sharma	How Crowd Logistics Has Revolutionized The Scm
398	Kushagra Raina	Vaibhav Soni	Object Detection Using Aerial Imagery.
399	Kutala Puneeth	Faizan Mohammad Rashid	Damage Parameter Determination Using Ai
400	L Charukesh Ragavendar	Muthukumar G	Modular Construction
401	Laboni Mandal	Srinivas Appari	Kinetic Modeling Of Catalyst Deactivation
402	Lakhan Bhansali	Niladri Sarkar	Finding Radar Cross Section (Rcs) Using Computational Electromagnetics (Cem).
403	Lakhan Bhansali	Aditya Raw Gautam	Nonlinear Control Of Doubly Fed Induction Generato
404	Lakshay Gahlawat	Rajneesh Choubisa	Mental Health Awareness : The Scenario Of Rural Area In India
405	Lakshay Jain	Girish Kant	Optimization Of Machining Parameters In Cnc
406	Lakshay Nagpal	Girish Kant Garg	Therblig Based Energy Consumption Modelling Of Machine Tools
407	Lakshaya Goel	P R Deepa	Understanding The Human Immune System And Its Role In Cancer.
408	Lakshya Agarwal	Ashutosh Bhatia	Electronic Voting Using Blockchain
409	Lakshya Agarwal	Poonam Goyal	Time Series Analysis Through Deep Learning
410	Lakshya Kwatra	Kumar Neeraj Sachdev	Evolutionary Psychology And Ethics In Society Formation
411	Lavanya Soni	Kamlesh Tiwari	Analysis Of Encrypted Traffic Data And User Profiling
412	Lavish Saluja	Paritosh Shukla	Design And Docking Of New Heterocyclic Molecules As Anti-Alzheimer Agents
413	Lebaka Sai Pavan Kumar Reddy	Anil Rai	Film Music
414	Lisha Lamba	Virendra S Nirban	Big Data In Education Sector
415	Lokesh Lakhotia	Rahul Arora	An Analysis Of Trade In Chemical Products In India
416	Madhav Sikka	Lavika Goel	Applications Of Biogeography Based Optimization With Extinction And Evolution In Sentiment Analysis
417	Madhumitha Muralidharan	Shibani Khanra Jha	Simulation Of Multiphase Flow Through Porous Media

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S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
418	Manaal Sandeep Parikh	Prabhat Nath Jha	Geographical Biodiversity Of Trichoderma Spp. On Plant Disease Controlling Potential And Plant Growth-Promoting Activities.
419	Manan Agarwal	Lavika Goel	Disease Prediction In Different Crops On Satellite Images Using Machine Learning
420	Manan Batheja	Aneesh A M	Thermal Design & Analysis Of Pche
421	Manan Malani	Poonam Goyal	Short Annotation For Fashion Images
422	Manan Paneri	V Manjuladevi	Eff. Of Nanomat. On Viscoelastic Properties Of Lc
423	Manav Chaudhary	Aneesh A M	Structural And Thermal-Hydraulic Analysis Of Lab Scale Printed Circuit Heat Exchanger (Lpche)
424	Manav Kothari	Jitendra Singh Rathore	Fluid Structure Interaction
425	Maniar Aadit Pratik	P Srinivasan	Smart Soot Blowing Using Machine Learning
426	Manikya Varshney	Uma S Dubey	Computational Oncology: Predicting Cancer Response
427	Manish	Aditya Raw Gautam	Electric Vehicles
428	Manish Saini	Anil Rai	Musician Trinities Of Indian Music
429	Mansi Mittal	Prabhat Nath Jha	Intercellular Communication Between Bacteria
430	Mansi Mittal	Abhishek	Bio-Nlp
431	Manul Riteshkumar Patel	Debi Datt Pant	Instrumental Methods Of Fluorescence Spectroscopy
432	Margi Vithalani	Abhijeet Keshaorao Digalwar	Value Chain Analysis To Reduce Production Cost-Evs
433	Mashru Harshit Sandeep	Shibasish Chowdhury	Md Simulations To Understand Structure-Function
434	Mayank Dubey	Anshuman	Development Of Mix Design Using Geopolymer.
435	Mayank Hemant Kulkarni	Navin Singh	Simulation And Prediction Of Fatigue Fracture By Fiber Bundle Model (Fbm)
436	Mayank Jain	Navneet Goyal	Image Captioning And Video Description
437	Mayank Jasoria	Poonam Goyal	Distributed Data Structure For Clustering
438	Megh Thakkar	Yashvardhan Sharma	Visual Reasoning Based On Text In Images
439	Megha Meghna	Gautam Singhvi	Role Of Artificial Intelligence In Healthcare
440	Mehrotra Mitali Mudit	Sudeshna Mukherjee	Cancer
441	Mehul Gera	Jyoti	Strategy Implementation At Tata Steel
442	Mehul Gupta	Sandhya Amol Marathe	Studying And Analyzing Mathematical Models Of Social Behavior In Microorganisms.
443	Mehul Kavdia	Hari Om Bansal	Efficient Charging Scheme For Evs
444	Mehul Sachdeva	P K H Keskar	Introduction To Coding Theory
445	Mihir Garg	Ravi Kant Mittal	Improvement Of Marginal Soil Using Mining Waste
446	Milind Kumar Sinha	Devesh Samaiya	Note Dispensing And Identification System Based On Microcontrollers
447	Milind Kumar Sinha	Rajneesh Choubisa	Examining Hrd-Centred Theories Using Hr Analytics
448	Minu Rajeeve Payyapilly	Shamik Chakraborty	Energy Decomposition Analysis: A Tool To Investigate Non-Covalent Interaction
449	Modi Atharva Somshekhar	Shyam Sunder	Fem Modeling Of Deformation In An Artery With A Non-Linear Elastic Model.
450	Mohak Dudhani	Rajesh Prasad Mishra	Genetic Algorithms Optimization For Rams Applicati
451	Mohammad Fauzaan Qureshi	S B Singh	Application Of Deep Learning In Civil Engineering
452	Mohit Kriplani	Kamlesh Tiwari	Turn By Turn Route Recommendation System Using Ai
453	Mohnish Goyal	Madhukar Mishra	Computational Electrodynamics
454	Mohul Maheshwari	Ashutosh Bhatia	Network Security With Machine Learning
455	Moksh Garg	Debata Byomakesh	Financial Modeling And Forecasting Volatility Of F
456	Monis Mushtaque	S U Belgamwar	Effect Of Different Process Parameters On The Electrodeposition Of Cu-Ni Alloy Composite Coating.
457	Mrigank Bhargava	G S Chauhan	Advertising Strategies For Small Scale Startups: Challenges And Opportunities For New Businesses
458	Mrityunjay Maheshwari	Rahul Arora	Withdrawal From Rcep An Analysis Of Indias Negotiating Offers

	STUDY PROJECT		
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
459	Mrudula Harshawardhan Bhave	Tanu Shukla	Leadership Phenomenon In Consumerism
460	Mrudula Nageswaran	Tufan Chandra Bera	Computer Aided Design And Process Planning In Fixture Design Problems
461	Mudit Shivendra	Yashvardhan Sharma	Poc For Industrial Automation (Industry 4.0)
462	Mudit Wadhwa	Kamlesh Tiwari	Deep Learning For Indexing On Facial Databases
463	Mudra Surana	Saumi Ray	Synthesis,Structure And Clinical Applications Of Cis-Platin As A Potential Drug For Cancer Ailment.
464	Mudra Surana	Ajaya Kumar Pani	Deep Learning Techniques
465	Mudras Shubhechchha Ramchandra	Leela Rani	Applications Of Economics In Management Domains
466	Mukul Jindal	Abhijeet Keshaorao Digalwar	Business Sustainability In The Era Of Industry 4.0
467	Mukul Jindal	Sushila Rathore	Narrative Methods In Selected Indian Hindi Biopic
468	Mukul Singla	Tapomoy Guha Sarkar	Magnetic Systems And Superconductivity
469	Mukund Madhusudan Jha	S N Patel	Fracture Toughness Analysis Of Composite Structures: Beams
470	Muluguru Sobhan	Kamlesh Tiwari	Deep Learning For Indexing On Knuckle Databases
471	Muskan Gupta	Shishir Maheshwari	Biomedical Image Analysis
472	N Sai Kiran	Amol Marathe	Rul Estimation Of Bearings Using Deep Learning
473	N V Saisreya	Jayashree Mahesh	Generation Z And Education System
474	Nadish	Ashish Tiwari	Solute Dispersion In Flow Through Tubes And Channels
475	Nagam Sri Sai Veera Venkat	Tanu Shukla	Organizational Culture And The Determinants: An Exploration
476	Naitik Deepak Khandelwal	Yashvardhan Sharma	Design And Development Of Voice Call Recorder Analyzer
477	Nalajala Naga Sai Praneeth	Karunesh Kr Gupta	Biometrics Recognition And Authentication
478	Naman Agarwal	Ashutosh Bhatia	Block Chain Based Authentication In Iot
479	Naman Aggarwal	H R Jadhav	Cyp1A1 Inhibitors As Anti-Cancer Agents
480	Naman Bharti	Shilpi Garg	Understanding The Physiology Behind Neurological Disorders.
481	Naman Goenka	Yashvardhan Sharma	Analysis Of Visual Based Features In Contrast With Content-Based And Context- Basedfeatures For The Task Of Fake News Detection
482	Naman Mehta	Arun Kumar Vaish	Credit Risk Management And Rating Systems
483	Nandagopal V	Aneesh A M	Investigation Of The Irreversibilities On Large Scale Printed Circuit Heat Exchangers
484	Narendra Maheshwari	Rajneesh Choubisa	Managing Employees Conflict In An Organisation
485	Narendra Maheshwari	Anil Rai	Musical Forms Of Hindustani Sangeet
486	Narkedamilli Venkata Sagar	S U Belgamwar	Study Of Potentio Dynamic Curve To Measure Corrosion Through Cyclic Voltametry
487	Narkedamilli Venkata Sagar	Sangeeta Sharma	Effective Advertising With Photography/Videography
488	Navaneeth Raghunath	Pratik Narang	Computer Vision In Low Visibility Conditions
489	Navkar Mehta	Manoj Kumar Soni	Solar Thermal Incorporation In Coal-Based Power Plant
490	Navleen Kaur	Ajaya Kumar Pani	Application Of Deep Learning In Industrial Processes
491	Navya Bhandaru	Sandeep Sundriyal	Literature Survey Of Emerging Anti-Malarial Agents
492	Nayak Abhay Balchandra	Pushp Lata	A Comparative Study Of Business Practices In India And Malaysia Through A Cultural Lens.
493	Nayak Abhay Balchandra	Pushp Lata	A Comparative Study Of Business Practices In India And Malaysia Through A Cultural Lens.
494	Nayan Jain	Sundaresan Raman	Machine Learning In Retinal Image Analysis
495	Nayini Venkat Aashray	Manoj Kumar Soni	Roof-Top Solar Pv With Vehicle-Grid Connection Analysis
496	Neelaksh Singh	Avinash Gautam	Motion Planning For Quadcopters

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
497	Neelanchal Joshi	Debi Datt Pant	Time-Resolved Fluorescence Spectroscopy
498	Neeraj Karumanchi	Devesh Samaiya	Foreground Segmentation Techniques In H.265/ Hevc Compressed Videos
499	Neetika Khosla	Dipendu Bhunia	Earthquake Resistant Design Of Structures
500	Neha Maheshwari	Debi Datt Pant	Uv- Visible Spectroscopy Of Molecules
501	Neha Raj Sriram	Meghana Tare	Understanding Drosophila As A Model For Autism
502	Neha Saini	Anil Rai	Application Of Music In Rajasthani Culture
503	Neha Saini	Rajneesh Choubisa	Mental Health At The Time Of Covid-19
504	Nehil Agrawal	Jindal Anil Brijbhushan	Obtaining Of Non-Spherical Particles By Mechanical
505	Neil Sarkar	Manojkumar Surajkaranji Soni	Life Cycle Assessment Of Solar Thermal Systems
506	Netratvasheel Tripathi	Sandhya Amol Marathe	To Study Phage-Host Interaction By Analysing The Crispr Spacer Sequences In Salmonella.
507	Niharika Gupta	Prabhat Nath Jha	Role Of Mutation In Evolution And Behavior
508	Nikhil Jain	Banasri Roy	Effect Of Heat Treatment Conditions On The Reducib
509	Nikhil Kumar	Dixit Vaibhav Anil	Review Of The Phase 2 Drug Metabolism Literature.
510	Nikhil Kumar	Neetu Yadav	Green Bonds And Their Global Perception.
511	Nikhil Kumar	Yashvardhan Sharma	Covid-19 Patient Screening Using Thermal Images
512	Nikhil Vashist	Pradipta Chattopadhyay	Impact Of Foams On Coffee Quality
513	Nikhil Vats	Yashvardhan Sharma	Bits Webiste Development
514	Nikita Nawapet	Rajeev Taliyan	Pathophysiology And Drug Treatment Of Panic Disorders And Anxiety
515	Nimish Goyal	Ajit Pratap Singh	Water Demand Modelling For University Campus
516	Nimisha Jain	Anirudh Singh Rana	Numerical Modelling Of Underground Fluid Flow
517	Nimma Sathvik Reddy	Mukund Lahoti	Review On Geopolymer Technology
518	Nipun Gupta	Rajesh Kumar	Novel Fe And Mesh-Free Methods For Solution To Non-Linear Problems
519	Nirlipta Pande	Navneet Goyal	Big Data Analytics
520	Nishant Mahajan	Rajdeep Chowdhury	Developing An Ovarian Cancer Prediction App
521	Nishtha Chitkara	Sudeshna Mukherjee	Cancer Biology
522	Nitin Chhaperwal	Priyansh Singh	Gate Allocation For Flights At Airport
523	Nitin Kumar Sah	Navin Singh	Dna Melting And Energetics Of The Helical Structur
524	Nitin Pant	Yenuganti Sujan	Blood Gas Sensors Both Invasive And Non-Invasive
525	Nitish Gupta	Sushila Shekhawat	2D Animation And Motion Graphics
526	Nitya Mangal	Sadhana Jha	Enforcing Dynamic Sod In Abac
527	Nitya Mangal	Sunil Kumar Dubey	Pharmacokinetic Studies Of Anticancer Agents
528	Padamanabham	Bijoy Krishna Mukherjee	Satellite Attitude Control
529	Padmawar Parth Girish	P Srinivasan	Analysis Of Structural Problems Faced By The Solar Power Industry In India
530	Paidipelly Hemanth Rao	Vaibhav Soni	Object Detection/Semantic Segmentation In Aerial Imagery Using Deep Learning.
531	Palaash Agrawal	Hari Om Bansal	Optimization Of Battery Charging And Operation In A Hybrid Solar Electric Vehicle Using Ai Embedded Bms Design
532	Palash Chowdhury	Pawan Kamalkishor Ajmera	Bio-Metric Fingerprinting Processing
533	Palash Chowdhury	Satyendra Kumar Mourya	Design &Fabrication Of Ga2O3 Based Sensing Devices
534	Palash Dhakar	P Srinivasan	Assessing The Feasibility Of Installing Solar Panels In Campus To Meet The Energy Demand
535	Palash Jain	Shishir Maheshwari	Wireless Communication On Vessels
536	Palchuri Nithin	Manoj Kumar	A Study On Behavior Of Spread Slab Bridges
537	Panpalia Kishan Manoj	Rajesh Prasad Mishra	Impact Of Technology On Labour Market
538	Paras Jain	Chandra Shekhar	Predicting The Performance Of A Parallel Computing System Using Queueing Theoretic And Machine

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
STUDY PROJECT			
			Learning Approach
539	Paras Jain	Pawan Kamalkishor Ajmera	Hci Based Biometrics Using Machine Learning
540	Paras Taneja	Prashant U Manohar	To Study The Theoretical And Computational Aspects Of Electronic Structure Theory For The Closed-Shell System
541	Paridhi Chaturvedi	Vaidya Rishikesh D	Dna Melting
542	Parth Goyal	Karri Babu Ravi Teja	Design Of Ultra-Low-Power Digital Circuits Operating In The Sub-Threshold Region.
543	Parth Gupta	Abhijit Rameshwar Asati	Drowsiness Detection System
544	Parth Samnani	Ankush Chandrakant Jahagirdar	Model Predictive Controller
545	Parusha Jain	Syamantak Majumder	Understanding The Role Of Hyperglycemia In Inducing Endothelial Dysfunction Leading To Cardiovascular Diseases
546	Paryul Jain	Amitesh Singh Rajput	The Working Of Machine Learning Models
547	Pate Amey Vinayak	Haribabu K	Solving Real Life Problems Using Blockchain
548	Patil Saurav Sachin	P Srinivasan	Phase Change Materials For Electronic Cooling Sys
549	Petwe Gaurav Girish	Shyam Sunar Yadav	Fluid Structure-Interaction Of Haemodynamic Flow.
550	Piklu Paul	Virendra Singh Nirban	Technology Interventions In Governance
551	Piyush Hurkat	P R Deepa	Bioconversion Of Food Waste
552	Piyush Sinha	P Chattopadhyay	Study Of Emulsion Kinetics Of Surfactants For Textile Lubricants.
553	Potla Sai Aditya	Abhijit Rameshwar Asati	Study Of Neural Networks For Image Processing Applications
554	Prachi	Prabhat Nath Jha	Synthetic Biological Approach For Production Of G Novel Compounds/Molecules.
555	Prachi Agrawal	Anshuman Dalvi	Supercapacitors: Fundamentals And Applications
556	Prachi Jha	Murali M Pandey	Increasing The Solubility Of Insoluble Drugs
557	Pradeep Saini	Kumar Neeraj Sachdev	Philosophy Of Buddhism And Its Impact Throughout The Ages
558	Pradeep Saini	Sangeeta Sharma	Effect Of Mobile Marketing On Youngsters.
559	Pradeep Singh	Sushila Shekhawat	Creativity In Advertising: A Study Of Cultural Aspects In Selected Advertisements
560	Pradyumna Bang	Karunesh Kr Gupta	Intelligent Data Analytics For Prediction Of Aqi
561	Pragati Singh	R Mahesh	Application Of Brain Machine Interface In Health Care
562	Pragati Singh	Rajeev Taliyan	Studying The Molecular Link Between Gut Microbiota
563	Pragya Chandak	Gaurav Watts	Up Fall Detection Employing Different Sensors
564	Pragya Chandak	Dalip Kumar	Application Of Bodipy Dyes In Dye Sensitized Solar Cells
565	Prakalp Tiwari	Yashvardhan Sharma	Identification Of Controversial Statements & Image
566	Prakhar Agrawal	P Srinivasan	Assessing The Feasibility Of Installing Solar Panels In Campus To Meet The Energy Demand And Cost Analysis
567	Prakhar Mittal	Nishant Roy	Bryophyte Based Ambient Air Filter Development
568	Prakhar Munde	Aneesh A M	Analysis Of Supersonic Flow Over Re-Entry Space Modules
569	Prakhar Munde	Shibasish Chowdhury	Dna Data Storage
570	Prakhar Ranjan	Hitesh Datt Mathur	Iot Enabled Smart Charging Stations For Electric Vehicles Using Cloud Platform And Android
571	Prakher Gaushal	Anirudh Singh Rana	Ultrasonic Wave Propagation In Nano-Devices
572	Pramay Singhvi	Paritosh Shukla	Retrosynthetic Analysis Using Neural Sequence-To-Sequence Models
573	Pranamya Jain	Rupam Goswami	Junctions In Organic Thin Film Transistors
574	Pranat Kashyap	Bijoy Krishna Mukherjee	Robust Control For A Maneuvering Fighter Aircraft
575	Pranav Gupta	Amit Dua	Secure Real-Time Solution To Networks Using Sdn

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
	STUDY PROJECT		
576	Pranav Jain	S U Belgamwar	Study Of Copper Nickel Graphene Hybrid Nano Composite
577	Pranav Krishnan Iyer	A R Harikrishnan	Applications Of Nanofluids In Automotive Technology
578	Pranav Mahajan	Praveen Kumar A.V.	Investigation Of Broadside Null Mode Of A Cylindrical Dielectric Resonator Antenna
579	Pranav Mitan	Sushila Rathore	Communication Of Health News Through Various Media
580	Pranav Sharma	Niladri Sarkar	Studying The Quantum Effects In Nano-Electronics
581	Pranay Khariwal	N V Muralidhar Rao	Globalization, Poverty And Inequality
582	Pranjal Singh	Satyendra Kr Sharma	Maximize The Output On The Assembly Line Using Different Techniques
583	Pranjal Singh Chauhan	Pratik Narang	Computer Vision For Low Visibility
584	Pranshu Mittal	Gaurav Watts	Wave Propagation In Structures Using Spectral Element Method
585	Prashant Jha	Rajneesh Choubisa	Automation And Artificial Intelligence In Human Resource
586	Prashant Khandelwal	Vaibhav Soni	Object Detection In Aerial Imagery
587	Prasun Anand	Rajeev Taliyan	Therapeutic Potential Of Non-Coding Mrna In Cancer
588	Prateek Garg	Pratik Narang	Instance Segmentation In Aerial Images
589	Prateek Jain	Kuldip Singh Sangwan	Smart Product Design In Industry 4.0
590	Prateek Meliwal	Rajan Pandey	A Study On The Performance Of Initial Public Offering Of Companies Listed In Bse
591	Prateek Meliwal	Satyendra Kumar Mourya	Design And Fabrication Of Electronic Nose
592	Prateek Surana	Manoj Kannan	Applications Of Machine Learning In Biology And Medicine
593	Pratham Garg	Kamalesh Kumar	Slope Earthquake Stability
594	Prathamesh Subhash Hinge	Murali M Pandey	Applicationofnanocrystalinvariousdrugdeliverysyst.
595	Pratik Jaideep Potdar	P Chattopadhyay	Impact Of Foams On Food Quality
596	Pratik R Borikar	Rajesh Kumar	Optimal Strategy Synthesis In Attack-Defense Tree(With Moving Target Defence)/ With Dynamic Reactive Cms
597	Pratyaksh Gupta	Debata Byomakesh	Financial Markets
598	Priyank Jairaj	Tufan Chandra Bera	Study On Cavitation Machining/Peening
599	Pundlik Aradhya Anand	Tufan Chandra Bera	Mechanics Of Ball End Milling And Manufacture A Fr
600	Puney Chawla	Satyendra Kr Sharma	Empirical Analysis Of The Reasons For The Failure Of Startups
601	Puney Chawla	Rajneesh Choubisa	Adaptation Of Work From Home In Indian Culture
602	Punya Juneja	Amit Jain	Comparative Analysis Of Biosurfactant Production B
603	Puru Dutt Sharma	Manoj Kumar	Seismic Analysis Of Box-Culverts
604	Pushkar Aggrawal	Pawan Kamalkishor Ajmera	Face Recognition Based Attendence Monitoring Syste
605	R Kartik	Kamlesh Tiwari	Deep Learning For Indexing On Fingerprint Database
606	R Thapasvvin	Hitesh Datt Mathur	Controlling And Realising Circuits Without Physical Setup
607	R Thapasvvin	Kumar Neeraj Sachdev	Role Of Enlightenment In Philosophy And Ethics
608	Raaj Dhanwani	Srikanta Routroy	Supply Chain Risk Mitigation Using Geospatial Data
609	Rachit Agarwal	Kamlesh Tiwari	Turn By Turn Route Recommendation System Using Ai
610	Rachit Mayur Shah	Vinay Chamola	Machine Learning And Blockchain For 5G
611	Rachit Sharma	Shishir Maheshwari	Wireless Sensor Network On Board Vessels.
612	Raghav Agrawal	Ravi Kant Mittal	Improvement Of Marginal Soil Using Industrial/Domestic Waste
613	Raghav Bhatia	Ankush Chandrakant Jahagirdar	Study Of Sliding Mode Control Strategies
614	Raghav Kabra	Arya Kumar	Ipo Mechanism: Retail Investors' Participation, Ipo Pricing And Returns

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S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
615	Raghav Khanna	Divyum Sharma	Introducton To P-Adic Numbers
616	Raghav Raman Garg	Ashutosh Bhatia	Developing Machine Learning Models To Profile Mob
617	Raghav Seth	Sangeeta Sharma	Study Of Emotions In The Field Of Advertisements
618	Raghu Boyalla	Muralidhar Rao N V	Analysis On Macroeconomic Indicators In India
619	Raghurama Varma Gonela	Amit Dua	Deep Learning For Solving Real-Life Problems
620	Rahul Bubna	Srikanta Routroy	To Study The Various Aspects Of Generic Drug Inventory Management In Government Supported District Warehouse.
621	Rahul Bubna	Sunil Kumar Dubey	Theranostic Applications Of Nanoemulsions
622	Rahul Ganesh Prabhu	Avinash Gautam	Coalition Formation In A Multi-Robot System
623	Rahul Godara	Nirankush Dutta	Impact Of Social Media Marketing On Non-Profit Organizations
624	Rahul Gupta	Sunil Kumar Dubey	Novel Formulation Strategy For Treatment Of Cancer
625	Rahul Kumar	Anil Rai	Ethnic Music In Arabic Countries
626	Rahul Poddar	Arun Kumar Giri	Ict Diffusion, Financial Development And Economic Growth: An Empirical Evidence
627	Rahul Ranjan	Devendra Kumar	Finite Element Methods For Odes/Pdes
628	Rahul S	Navneet Gupta	Electromagnetic Design, Modelling And Optimization Using Artificial Neural Networks (Ann)
629	Rahul Shah	Shilpi Garg	Pathophysiology Of Malaria Nephropathy
630	Rahul Shah	Amit Rajnarayan Singh	Numerical Analysis Of Wave-Front Stopping Criteria
631	Rahul Shinde	Tapomoy Guha Sarkar	Cosmology
632	Rahul Singh Bhatti	Jyoti	Transit In Capital: Delhi
633	Rahul Singh Bhatti	Anil Rai	Classical And Light Music
634	Raihan Riaz	Abhijeet Keshaorao Digalwar	Evolution Of The Automobile Industry With The Onset Of Electric Mobility
635	Rajat Middha	Anupam Singhal	Utilization Of Pickling Sludge In Cement Concrete.
636	Rajat Saini	Pushp Lata	Soft Skills For Managers In It Industry
637	Rajat Salgia	Shibani Khanra Jha	Simulation Study - Ground Water & Heat In Fracture
638	Rajebhosale Omkar Veersingh	Abhijit Rameshwar Asati	Image Classification Using Convolutional Neural Network
639	Rajeev Singh Naruka	Amitesh Singh Rajput	Secure Machine Learning In Cloud Computing
640	Raunak Banthia	Ravi Kant Mittal	Analysis And Design Of Substructure
641	Raunit Srivastava	Shibasish Chowdhury	Design Of Mob Application To Capture Disease Stage
642	Rawal Ishaan Singh Tavinder Singh	Rajesh Kumar	Formal Methods In Biology
643	Revanth P	Rajan Pandey	Education & Evaluation During The Times Of Covid
644	Rhythm Goel	Ajaya Kumar Pani	Applications Of Recurrent Neural Network In Chemical Engineering
645	Rishabh Jain	Kamlesh Tiwari	Face Live Attendance
646	Rishabh Jain	Jatin Bedi	Trading Bot For Stock Market
647	Rishabh Sharma	Navneet Gupta	Modeling Of Ltps Tft For Active Matrix Displays Addressing Circuits Simulation And Design.
648	Rishav Das	Avinash Gautam	Robot Path Planning And Exploration
649	Rishav Ghosh	Ravi Kant Mittal	Recent Developments In Ground Improvement
650	Rishav Mishra	Rahul Arora	Impact Of Covid-19 On Economic Growth
651	Rishiraj Acharyya	Rajesh Kumar	Model Checking
652	Ritik Chanana	A R Harikrishnan	Buckling Of Complex Liquid Droplets On Drying.
653	Ritik Pagaria	Gautam Singhvi	Advancement Of Technology In Burn Treatment
654	Ritik Rohan	Shibani Khanra Jha	Influence Of Air Pollutants On Solar Pv Cells
655	Ritik Rohan	Manojkumar Surajkaranji Soni	Advancement In Propulsive Performance Of A Crd Eng
656	Ritik Rohit Bavdekar	Chandra Shekhar	Fuzzification Of Nature-Inspired Metaheuristic

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
			Optimisation Algorithms
657	Ritik Rohit Bavdekar	Vandana Agarwal	Neural Networks In Brain Computer Interface
658	Rituj Mittal	Divyum Sharma	Topics In Number Theory
659	Ritvik Rai	Rajneesh Choubisa	The Neuropsychology Of Decision Making
660	Ritwik Srivastava	Mukund Lahoti	Economic Input-Output Lca
661	Riya Bhandari	Anirudh Singh Rana	Fundamental Solutions Of Brinkmann Porous Medium
662	Riya Bhandari	Surekha Bhanot	Artificial Intelligence Applications
663	Rohan Anand	Aditya Raw Gautam	Integral Sliding Mode Control Of Power Converters
664	Rohan Malik	Suvanjan Bhattacharyya	Heat Transfer Enhancement In Solar Air Heater Duct With Different Roughness Ribs On The Absorber Plate.
665	Rohan Marwah	Sumanta Pasari	Crustal Deformation Analysis Using Pca On Gps Data
666	Rohan Tibrewal	Ankush Chandrakant Jahagirdar	Control Strategies For Ball On Wheel System
667	Rohit Agrawal	Hari Om Bansal	Modelling The Drivers And Barriers Of Electric Vehicle Penetration In Emerging Economy: A Study Of Indian Market
668	Rohit Agrawal	Aditya Raw Gautam	Direct Torque Control Of Induction Motor In Ev
669	Rohit Jain	J. Jennifer Ranjani	Concealed Object Detection: A Thermal Imaging Approach
670	Rohit K Bharadwaj	Sumanta Pasari	Neural Networks And Probabilistic Graphical Models For Earthquake Time-Series Data Analysis : An Ensemble Approach
671	Rohit R	Pratik Narang	Object Detection In Aerial Images.
672	Rohit Sharma	Saumi Ray	Optimizing The Efficiency Of Solar Cells
673	Rohit Venkatesh	Muhammed Afzal P	Analysis Of A Popular American Tv Show And Its Repercussions On The American Socio-Cultural Landscape
674	Rokade Amey Rajendra	Geetilaxmi Mohapatra	Designing Electricity Tariff Plan To Ensure Affordability And Availability.
675	Ronak Bhattad	Satyendra Kumar Mourya	Study Of Mechanism Of Pore Formation In Substrates
676	Ruchi Batra	Rajan Pandey	Optimal Option Trading Strategy Using Python
677	Ruchir Aggarwal	Srikanta Routroy	Supply Chain Management
678	Ruchir Mathur	Prabhat Nath Jha	Genomic Modifications In Plant
679	Ruchit Rai	Somak Chatterjee	A Review On Different Chemical Sensors Towards Heavy Metal Detection In Contaminated Stream.
680	Rudhir Mehra	Madhurima Das	The Influence Of Gender Dynamics In The Indian Entrepreneurial Culture
681	Rumandeep Singh	Bhupendra Kumar Sharma	Dermatoglyphics In Multiple Intelligence
682	Rutul Tarnekar	Krishna M	The Effects Game Theory Has On Behavioural Economi
683	Rutuvi Narang	Bhupendra Kumar Sharma	The Economic Impact Of Covid-19
684	Rutvi	Madhurima Das	Gender Imbalance In India
685	Ryan Roby	Venkatesh Kadbur Prabhakar Rao	Vibrational Energy Harvester
686	Saahil Dhaka	Ashish Tiwari	Solute Dispersion In Flow Through Tubes
687	Saakaar Vashisht	Rajneesh Choubisa	Automation And Artificial Intelligence In Human Resource
688	Saakshi Dikshit	Chandra Shekhar	The Study Of Risc V Architecture And Its Implementations
689	Sachin Nair	Shyam Sunar Yadav	Interaction Of Electrolytic Drop With Elec. Field
690	Sachin Thakur	Jitendra Singh Rathore	Skin Tribology
691	Sachin Tripathi	Rajesh Kumar	Structural Stability Analysis Of Thin-Walled Steel Structures Subjected To Elevated Temperature Due To Fire
692	Sachin Yadav	B K Sharma	Study Of Interaction In Dark Sector Of The Universe
693	Sagar Kaushik	Tapomoy Guha Sarkar	Cosmological Structure Formation

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
694	Sagar Saluja	Sheth Pratik Nitinchandra	Reduced Order Model Development From Cfd Results
695	Sahil Kattna	Sadhana Jha	Database
696	Sahil Singla	Amit Dua	Development Of Blockchain Solution For Supply Chain Management In Agriculture Sector
697	Sahil Singla	Rajneesh Choubisa	Difference In Human Resource Management In Startups And Big Mnc
698	Sahil Yadav	Pratik Narang	Computer Vision In Low Visibility Conditions
699	Sahili Totale	Kamalesh Kumar	Fundamentals Of Infrastructure Management
700	Sai Shravanth Reddy M	Banasri Roy	Carbonaceouscatalysts Agricultural Residue Tosugar
701	Sajay Alex Varghese	Prateek Kala	Industry 4.0
702	Saksham Agarwal	Suvanjan Bhattacharyya	Application Of Cfd In Energy Sector
703	Sakshi Agarwal	Syed Mohammad Zafaruddin	Resource Allocation In Cell-Free Massive Mimo Communications
704	Sakshi Saini	Devika	Cinema: Film And Music
705	Samarth Mahapatra	Bijoy Krishna Mukherjee	Aircraft Dynamics And Control
706	Samarth Tiwari	Meghana Tare	Mathematical Modelling Of Neurodegenerative Diseases
707	Samarth Tiwari	Meghana Tare	Mathematical Modelling For Cell Death In Neurodegeneration
708	Sameer Sharma	Abhijeet Keshaorao Digalwar	Study Of Sem(Structural Equation Modelling) Using Amos.
709	Sameer Sharma	Sanjiv Kumar Choudhary	Long Term Impact Of Covid 19 On The World
710	Samiksha Gupta	Gaurav Watts	Up-Fall Detection Employing Different Sensors.
711	Samina Shiraj Mulani	Amit Dua	Deep And Shallow Neural Networks For Blockchain
712	Samyak Sahu	Vinti Agarwal	Web App For Microscopic Image Analysis
713	Sancheti Pranali Pradeep	Haribabu K	Time And Space Efficient Distributed Trees For
714	Sanchit Ahuja	Pankaj Arora	Plasmonic Nanostructures Based Optical Sensors
715	Sanghati Roy	Suvanjan Bhattacharyya	Thermohydraulic Characteristics And Second Law Analysis Of Turbulent Channel Flow Using Swirl Generators
716	Sanidhya Vijaivargia	Shibani Khanra Jha	Study Of Drilling Technology Of Geothermal Reservoir
717	Sanjana Mishra	Rahul Arora	Financial Resources And Growth Of Msmes In India
718	Sanjeet Malhotra	Amit Dua	Application Of Reinforcement Learning In Real-Time Scenario
719	Sanjeev Singla	Rajan Pandey	Analysis Of Stock Price Movement Using The Machine Learning Approach.
720	Sanket Gill	M M Pandey	Study On Intranasal Drug Delivery Systems
721	Sanyam Jain	Surekha Bhanot	Invertible Conditional Gans For Image Editing
722	Sarthak Bansal	Aneesh A M	Desalination Using Micro-Evaporation
723	Sarthak Sehgal	N V Muralidhar Rao	Career Path Modelling: Application Of Machine Learning Techniques
724	Sarthak Singh	Niladri Sarkar	Study Of Nanoscale Transport
725	Satvik Golechha	Pratik Narang	Computer Vision In Low-Visibility Conditions Using Neural Architecture Search And Generative Adversarial Networks
726	Satyam Bajpai	Madhukar Mishra	Electromagnetic Wave Propagation With Matlab
727	Satyansh Rai	Lavika Goel	Question Answering System Design Usign Deep Learning And Natural Language Processing
728	Saumil Agarwal	Kamlesh Tiwari	Indexing Iris Image Database
729	Saumitra Rai	Rajiv Gupta	Environmental Engineering - Climate Change Studies
730	Saumitra Vatsal Pandey	Ajit Pratap Singh	Water Demand Modelling For University Campus
731	Saumya Gaikwad	Shibani Khanra Jha	Non Isothermal Fluid Flow Through Porous Media
732	Saurabh Rai	Tanu Shukla	Emergence Of Interdisciplinary Domain In Health
733	Saurav Shakti Borah	P Srinivasan	Organic Solar Cell And Efficiency Improvement

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
STUDY PROJECT			
734	Saurav Shenoy P	Anirudh Singh Rana	Level-Set Method For Multiphase Phase-Change Problems
735	Savika Yadav	Debi Datt Pant	Study Of Fluorescence Quenching
736	Sawant Adit Rakesh	Amit Dua	Apl.Of Deep Learning For Solving Realtime Problems
737	Seema Tanwar	Virendra S Nirban	Exploration Of Soft Skills Among Medical Professionals.
738	Seema Tanwar	Sushila Rathore	An Empirical Study Of Fearless Journalism
739	Shagun Bhargava	Prabhat Nath Jha	Genetically Modified Crops In India:Current Status
740	Shah Ansh Sandeep	A R Harikrishnan	Droplet Evaporation
741	Shah Miraj Rajesh	Krishna M	Blockchain From An Economic Perspective
742	Shah Shrey Tarun	Yashvardhan Sharma	Real-Time Identity Detection System
743	Shailendra Singh Rathore	Muhammed Afzal P	To Study The Food Culture Through Social Media.
744	Shakul Sharma	Rajneesh Choubisa	Stress In Employees In It Sector
745	Shaleen Maheshwari	Navneet Gupta	Material Selection For Micro-Heater For Mems Based
746	Shalvi Shukla	Suvanjan Bhattacharyya	Computational Fluid Dynamics
747	Sharang Sharma	Hari Babu Kotakula	Identifying The Originating Network Of A Packet
748	Sharat Mehrotra	Pankaj Arora	Design Of Periodic Nanostructures For An Optical Sensor.
749	Sharekh Kazi	Pawan Kamalkishor Ajmera	Palm Print Recognition Using Python
750	Sharekh Kazi	Virendra Singh Nirban	Study Of Sectors Of Organizational Domain
751	Sharma Prakhar Ashish	Tufan Chandra Bera	Computational Modelling Of Turning Operation For A Free Curve Using Ansys
752	Sharma Prakhar Ashish	Hari Om Bansal	Time Response Analysis Of Fsae Suspension
753	Sharma Prateek Pankaj	Navin Singh	Statistical Mechanics Of Rna Folding.
754	Shashank Prasad	Amit Jain	Biogas Production From Distillery Waste
755	Shashank Sharan Singh	Sandeep Sundriyal	Survey Of New-Anti Malarial Target
756	Shashank Sharma	Sandhya Amol Marathe	To Study Phage-Host Interaction By Analysing The Crispr Spacer Sequences In Salmonella
757	Shashank Tiwari	Vishal Saxena	Molecular Biology, Malaria
758	Shashwat S Dasgupta	Pankaj Arora	Periodic Nanostructure-Based Optical Solar Cells
759	Shashwat Singh	Jyoti	Diff.Strat. Formulation In New Businesses&Startups
760	Shaurya Taparia	Suvanjan Bhattacharyya	Buoyant Air Flow In +Ve Pressure Hospital Rooms
761	Shefali Saraf	Shibasish Chowdhury	Applications Of Machine Learning / Neural Network
762	Sheth Rahil Parag	Rajesh Prasad Mishra	Study And Investigation Of Problems In 3D Printing
763	Shiva Chaudhary	Pankaj Kumar Sharma	Phytochemical Diversity In Plants W.R.T Flavonoids
764	Shivam Arora	Ashis Kumar Das	Understanding Drug Resistance Mechanism In Pathogenic Bacteria
765	Shivam Soni	Jyoti	Transit In Capital: Delhi
766	Shivang Shekhar	Suvanjan Bhattacharyya	Efficient Design Of Heat Exchangers Using Cfd
767	Shivani Agrawal	Srinivas Appari	Kinetic Modeling Of Catalyst Deactivation
768	Shivansh Agarwal	Srikanta Routroy	Supply Chain Management
769	Shivansh Rustagi	Shishir Maheshwari	Biomedical Signal Analysis
770	Shivanshu Tewari	Arvind Kumar Sharma	Chemical Engineering: A Shift In Paradigm
771	Shrajal Jain	Rajan Pandey	Stock Market Forecasting Using Regression Along With Machine Learning
772	Shravan Suresh Nair	Bhupendra Kumar Sharma	Modelling Of Viral Co-Infection Of Plants
773	Shrey Agarwal	Kamlesh Tiwari	Recommendation System Using Xgboost
774	Shreya Gupta	Suvanjan Bhattacharyya	Application Of Cfd In Hvac
775	Shreyans Jain	Haribabu K	Methods For Collecting Real Time Network State
776	Shreyas Kera	J. Jennifer Ranjani	Object Detection In Thermal Images/Videos
777	Shreyasi Ghosh Ray	Shibasish Chowdhury	Exploring The Potentiality Of Repurposing Drugs In Order To Target Cancer-Causing Cells
778	Shrihari Viswanath	Karunesh Kr Gupta	Analysis Of Glaucoma Using Fundus Images

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
779	Shrishti Khicher	Debi Datt Pant	Study Of Edge Excitation Red Shift
780	Shristi Kumari	Vaibhav Soni	Segmentation And Object Detection In Aerial Imagery
781	Shrivastava Anant Vijaykumar	Satyendra Kumar Mourya	Study On Nanoelectronic Devices
782	Shruti Kumari	Dalip Kumar	Activation Of The Lignocellulosic Biomass
783	Shubh Birla	Arvind Kumar Sharma	Hydrodynamic And Masstransfer Characteristics Ofselected Bioreactors
784	Shubham Agarwal	Amit Dua	Developing Real-Timesolutionsfor M2Mcommunications
785	Shubham Aggarwal	Anil Kumar Bhat	Brand Adoption By Retailers
786	Shubham Bansal	Suvanjan Bhattacharyya	Mixed Convection In Tube Flow
787	Shubham Mittal	Abhijit Rameshwar Asati	Study And Application Of Stochastic Computing
788	Shubhank Jain	Kumar Neeraj Sachdev	Immanuel Kant And Modern Philosophy
789	Shyamal Khajuria	Aditya Raw Gautam	Robust Control Techniques For Power Converters
790	Siddhant Dangi	Poonam Goyal	Deep Learning Models For Multivariate Time-Series Analytics
791	Siddhant Dangi	Manojkumar Surajkaranji Soni	Design Of Headgear For Eeg Signal Acquisition
792	Siddhant Jain	Shashank Gupta	Security And Privacy Issues In Fog Computing
793	Siddhant Kharbanda	Sailaja Nandigama	Freedom Of Choice & Usa'S Covid-19 Responses
794	Siddharth Goel	G S Chauhan	Role Of Digitalization In Transforming The B2B Market In India.
795	Siddharth Goel	B Vani	Cyanobacteria: Role In Low Input Sustainable Agric
796	Siddharth Gupta	Hitesh Datt Mathur	Electrical Vehicles In Concept Of Smart Cities
797	Siddharth Jain	Krishna M	National Cyber Security Policy 2013
798	Siddharth Kapoor	Ashutosh Bhatia	Privacy Preserving Machine Learning
799	Siddharth Malik	Rahul Arora	Global Integration And Indian Stock Market
800	Siddharth Mehta	Rajneesh Choubisa	Modern Trends: What Psychology Is Driving Them And How?
801	Siddharth Mukul Awasthi	J. Jennifer Ranjani	Machine Printed Document Recognition
802	Siddharth Pratap Singh	P R Deepa	Understanding The Human Immune System And Its Role In Infectious Diseases.
803	Siddharth Santosh Panpaliya	Rajneesh Choubisa	Human Resource Development
804	Siddharth Singh	Jitender Kumar	A Study Of Enhanced Power Graph Associated With Algebraic Structures
805	Siddharth Singh	Srikanta Routroy	Supply Chain Management
806	Siddharth Tripathi	Abhijeet Keshaorao Digalwar	Study Of Sem(Structural Equation Modelling) Using Amos Software
807	Siddhi Arora	Rajneesh Choubisa	Academic Achievement And Happiness In Students
808	Siddhi Arora	Rajneesh Choubisa	Role Of Hr In Oganizational Development
809	Sidhartha Bhattacharjee	Rahul Arora	Contribution Of The North-Eastern Region (Ner) Of India On Indian Economy
810	Sigireddi Amar	Dipendu Bhunia	Earthquake Analysis Of Multi Storey Structure
811	Singh Nikita Narendra	Poonam Goyal	Image Detection And Video Description Generation
812	Sisir Sanagala	A R Harikrishnan	Impact Of Nanopfuels On Automobiles
813	Smriti Prakash	Rajesh Prasad Mishra	Impact Of Technology On Labour Market
814	Sobat Singh	Shishir Maheshwari	Biomedical Signal And Image Analysis
815	Soham Banerjee	Madhukar Mishra	Path Integral Formulation Of Quantum Mechanics
816	Sohan Sadhu	Suvanjan Bhattacharyya	Efficient Design Of Ahu Using Recovery Devices.
817	Sombit Roy	Tapomoy Guha Sarkar	Quantum Field Theory
818	Sombuddha Chakravarty	Ajit Pratap Singh	Water Quality Monitoring Using Wireless Sensor Networks
819	Somya Upadhyay	Faizan Mohammad Rashid	Damage Detection Using Artificial Intelligence
820	Somya Vijayvergia	Gautam Singhvi	Biomacromolecule For Drug Delivery
821	Sonam Kataria	Anil Rai	Application Of Music In Rajasthani Culture

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
822	Sonam Kataria	Rajneesh Choubisa	Mental Health At The Time Of Covid-19
823	Sonam Verma	Anupam Yadav	Analyzing The Dimension Of Critical Thinking.
824	Sonam Verma	Gajendra Singh Chauhan	Effects Of Corona And Student'S Well Being
825	Sontakke Avanti Dipak	Abhijeet Keshaorao Digalwar	Studies Of Various Lean Manufacturing Tools
826	Sooraj Verma	Sudeshna Mukherjee	Cancer
827	Sparsh Agarwal	Anirudh Singh Rana	A Meshless Method For The Phase Transition Process.
828	Sparsh Aggarwal	Ashish Patel	Novel Algorithm For Optimization In Power Circuits
829	Sparsh Jain	Amit Rajnarayan Singh	Machine Learning In Structural Mechanics
830	Sparsh Kasana	Shashank Gupta	Exploration Of Sybil Attacks In A Network
831	Sparsh Porwal	Manoj Kumar Soni	Implementation Of Solar Thermal Laundry Systems At Laundromat In Bits Pilani Campus
832	Sparsh Sharma	Rajesh Kumar	Computational Analysis
833	Sparsh Wairya	Syed Mohammad Zafaruddin	Jamming In Optical Wireless Communications
834	Sreyas Ravichandran	Poonam Goyal	Stream Data From Social Nets - Adapt Lab
835	Sreyas Ravichandran	Sangeeta Sharma	Analysis Of Elements Of Advertisement Using Ml
836	Sriram Gupta Voruganti	Banasri Roy	Carbonaceous Catalysts For The Conversion Of Agric
837	Srirama Prakhya	Ashutosh Bhatia	Iot Security Implementation Using Blockchain
838	Stuti Narwaria	Rajeev Taliyan	Amyotropic Lateral Sclerosis
839	Subham Agarwal	Ravi Kant Mittal	Bearing Capacity Settlemnt Anlysisof Shallw Founda
840	Subhanjan Saha	Navneet Goyal	Image Captioning & Video Description Generation
841	Subhojit Saha	Richa Shrivastava	Molecular Mechanisms Regulating Renal And Hepatotoxicity Induced By Anti-Cancer Agents .
842	Sudhanshu Gupta	Navin Singh	Effect Of The Molecular Crowder On The Dynamics Of Dna Molecule
843	Sudhanshu Gupta	Hare Krishna Mohanta	Auto-Associative Neural Network
844	Sudhanshu Gupta	Gajendra Singh Chauhan	Amul Butter Advertising Campaign
845	Sudhanshu Sharma	Gautam Singhvi	Chitosan For Topical Drug Delivery
846	Sujeet Srivastava	Aneesh A M	Structural And Thermal-Hydraulic Analysis Of Lab Scale Printed Circuit Heat Exchanger (Lpche)
847	Sunidhi Garg	Rakhee	Lcp And Its Applications In Game Theory
848	Sunil Kumar	Manoj Kumar Soni	Mini Air Cooling System Using The Peltier Effect
849	Sunil Saharan	Rahul Arora	Quantitative Analysis Of Trade Of India
850	Supratik Bhattacharya	Yashvardhan Sharma	Design And Development Of Voice Call Recorder Analyzer And Applying Nlp Techniques On The Obtained Voice Records.
851	Surbhi Goel	Dheerendra Singh	Hvdc
852	Suryansh	Anupam Singhal	Utilization Of Electric Arc Furnace Slag In Cement Concrete.
853	Sushan Kumar Roy	Shibani Khanra Jha	Status Of Geothermal Energy In The State Of Gujarat, India.
854	Suvrat Gupta	Priyansh Singh	Different Mechanical Models For Asphalt Mixtures.
855	Swagat Panda	Tapomoy Guha Sarkar	Dark Energy Modelling
856	Swati Taparia	Ashish Patel	Modeling Of Bits Pilani Electrical Network With So
857	Sweta Praharaj	H R Jadhav	Modeling Approaches For Drug-Polymer Interactions In Drug Delivery Systems
858	Syed Ahsan Abbas	Rahul Arora	Googletrends Data For Unemployment Analysis
859	Syed Ahzam Tariq	Rajesh Prasad Mishra	Rams Analysis For Thermal Power Plant
860	Tamanna Sakhala	Pushp Lata	Soft Skills For School Teachers
861	Tanay Sah	Rajesh Kumar	Novel Fe And Mesh -Free Methods For Solution Of Nonlinear Problems
862	Tanishk Vijay	Shilpi Garg	Study The Genetic Diversity Of Malaria Parasite
863	Tanmay Anand	S Gurunarayanan	Design Of High Performance Arithmetic Circuits.
864	Tanmay Khandelwal	Arun Kumar Giri	Disinvestment / Privatization Of Indian Public Sector Undertaking (Psus) Via Initial Public Offerings(Ipos).

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
865	Tanuj Khandelwal	Shishir Maheshwari	Ml Based Analysis Of Biomedical Signals
866	Tanushri Shrivastava	Uma S Dubey	Perspective On Water Conservation
867	Tanya Garg	Shashank Gupta	Role Of Uavs In Precision Agriculture Techniques
868	Tanya Syag	G S Chauhan	How Digital Marketing Is Important For Retail Commerce
869	Tanya Syag	Nirankush Dutta	Social Media Strategies For Online Shopping Cart
870	Tapas Mazumdar	Navneet Gupta	Mathematical Modelling... Low Power Applications.
871	Tapish Agarwal	Rahul Singhal	Arduino Controlled 3-Axis Translation Stages
872	Tarun Malik	Somak Chatterjee	Review Study Of Different Water Resistant Adhesive
873	Thummala V V Satya Saran	Praveen Kumar A.V.	Design Of Ultra Wide Band Antenna For Industrial Applications
874	Tiwari Tejas Anilkumar	Sai Sesha Chalapathi Gattupalli	Ml For 5G Resource Management
875	Tiwaskar Riddhesh Jayesh	Krishnendra Shekhawat	Floorplanning Algorithms For Planar Triangulated Graphs
876	Trinika	Srikanta Routroy	Supply Chain Management
877	Trivendra Singh	Sushila Rathore	Fake News: Empirical Study Of Print & Online Media
878	Trivikram Choudhury	Puneet Mishra	Study And Implementation Of Control Over Renewable Energy Grids
879	Tussank Gupta	Krishna M	Forecasting The Market Potential For Electric Vehicles In India
880	Ujjwal Gupta	Anupam Singhal	Use Of Geo-Textiles In Wastewater Management
881	Utkarsh Anand	S U Belgamwar	Design And Development Of Power Assisted Hybrid E-Trike For Disabled Person
882	Utkarsh Awasthi	Suvanjan Bhattacharyya	Enhancement Of Heat Transfer In Solar Air Heaters
883	Utkarsh Dixit	Somak Chatterjee	Review Study Of Different Water Resistant Adhesive
884	Utkarsh Dwivedi	Virendra Singh Shekhawat	Marker Placement Problem For Localization In Indoo
885	Utkarsh Kumar Singh	Virendra Singh Shekhawat	Ml Techniques To Improve Routing In Dtns
886	Utkarsh Sharma	Priyansh Singh	Graphical Methods In Aggregate Blending
887	Utkarsh Singh Chauhan	Prabhat Nath Jha	Abscisic Acid Signalling And Abiotic Stress Tolerance In Plants.
888	V Keerthivasan	S K Choudhary	The Co-Existence Of Hindi And Dravidian Languages In South India
889	V Keerthivasan	Vinay Chamola	Ml Applications For The Internet Of Things
890	Vaani Radhakrishnan	Rajan Pandey	Prediction Of Investor Sentiments To Ipos
891	Vagish Garg	Neetu Yadav	Understanding Gig Economy: A Global Perspective
892	Vaibhav Ajmera	Gaurav Dwivedi	Study On Stochastic Differential Equations
893	Vaibhav Garg	Mukesh Kumar Rohil	Study Methods For Creating Coloured 3D Cad Model From Point Set Generation Networks For 3D Reconstruction From Single Image
894	Vaibhav Gupta	S Gangopadhyay	Solar Cells
895	Vaibhav Gupta	Aditya Raw Gautam	Model Predictive Control Of Power-E Converter
896	Vaibhav Shringi	Anshuman	Green Building Materials
897	Vaibhav Srivastav	Navin Singh	Simulation-Based Study Of Rna Motifs
898	Vaidant Agrawal	Rakesh Choubisa	Scattering In 1D By Solvable And Elastically Equivalent Potentials
899	Vaishnavi Kotturu	Vaibhav Soni	Object Detection In Aerial Imagery
900	Varapula Vineeta	Tanu Shukla	Health Measures,Its Effectiveness And Exploration
901	Varun Goradia	Anu Gupta	Analog Vlsi Modelling With Neural Networks
902	Varun Kohli	Vinay Chamola	Brain Computer Interface Humanoid Control
903	Vashisht Shekhawat	S N Patel	Fracture, Toughness Analysis Of Laminated Composite Plate.
904	Vatsal B Seth	Saumi Ray	Study Of Graphene As A Substitute For Silicon And Its Mass Production Techniques.
905	Vedant Parwal	Bijay Kumar Rout	Bayesian Neural Network For Quality Control
906	Vedant Poddar	Hitesh Datt Mathur	Control And Realise Circuits Using A Computer

STUDY PROJECT			
S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
			Interface
907	Vedant Poddar	Hitesh Datt Mathur	Electrical Vehicles In Concept Of Smart Cities
908	Vedant Sanjay Chaudhari	Devesh Samaiya	Foreground Segmentation Techniques In H.265/ Hevc Compressed Videos
909	Vedita Belsare	Richa Shrivastava	Models To Study Angiogenesis
910	Veeresh Krishna	Saumi Ray	Heterogeneous Catalysis
911	Velugubantla Aalap	Anil Rai	Music Therapy
912	Vidhu Arnav Singh	Faizan Mohammad Rashid	Mechanical Properties Of Different Types Of 3-D Printed Objects.
913	Vijayendra Dnyaneshwar Shende	Geetilaxmi Mohapatra	A Comparative Study Of The Pollution Caused Due To Electric Vehicles Versus Conventional Vehicles.
914	Vikram Singh Chundawat	Mukund Lahoti	Prediction Of Concrete Strength Using Data Augment
915	Vinayak Khandelwal	Puneet Mishra	Design And Analysis Of A Variable Gain Intelligent
916	Vineet Chheda	Gaurav Watts	Dynamic Analysis Of Flat Panels In Contact With Fluid
917	Viniti Jain	Avinash Gautam	Multi-Robot Task Allocation Using Cfr
918	Vishal Dixit	Murali P	Mechanical Properties Of Metallic Glass
919	Vishal Kumar Jha	Sanjiv Kumar Choudhary	Linguistics
920	Vishal Kumar Singh	A R Harikrishnan	Evaporation Kinetics Of Water Droplets In Crescent Environment
921	Vishal Mishra	Rajneesh Choubisa	To Determine The Effects Of Automation And Its Impact On Current Business Environment
922	Vishal Viswanathan	A R Harikrishnan	Use Of Nanofluids In Renewable Energy Applications
923	Vishesh Jain	Veena R	Cpec And Its Implications On India
924	Vishnu P Kashyap	Surekha Bhanot	Hsic Bottle Neck For Training Xnor Networks.
925	Vishnu P Katkoori	Somak Chatterjee	Boundary Layer Analysis During Flow Through A Semi-Permeable Membrane
926	Vishnu Raj	Tufan Chandra Bera	Computer Aided Design And Process Planning In Fixture Design Problems
927	Vishvaditya	Navin Singh	Force Unzipping Of Double Stranded Dna
928	Vishwajeet Rajeghatge	Deepak Sharma	Fabrication Of Novel Thermal Interface Materials(Tim) For Next-Generation Microelectronics Applications
929	Vishwanatha Ishan	Neetu Yadav	Impact Of Sustainability Reporting On Firm Performance Of Indian Listed Companies
930	Vishwanatha Ishan	Satyendra Kumar Mourya	Mechanism Behind Formation Of Pores In Substrates
931	Vivek Bishnoi	Shibani Khanra Jha	Study Of Geothermal Power Plant And Its Components
932	Vivek Gupta	Akash Agarwal	Review Of Channel Models For Terrestrialwireless Communications
933	Vyom Chaturvedi	Suvanjan Bhattacharyya	Renewable Energy For Hvac Applications In Residential Buildings.
934	Vysyakh A	Rajiv Gupta	Deep Reinforcement Learning For Traffic Lightcontrol In Intersections
935	Yadav Swapnil Nagnath	Banasri Roy	Hydrogen Production From Ethanol By Low Temperatur
936	Yaganti Sivakrishna	Sangeeta Sharma	Business Growth Of Pepsi And Coco-Cola Through Sales Promotion
937	Yash Batra	Devika	Impact Of Cinema On Indian Youth
938	Yash Gulati	Pawan Kamalkishor Ajmera	Using Dl To Improve Sound Recognition Systems
939	Yash Gupta	Shashank Gupta	Blockchain Application To Solve Real Time Problems
940	Yash Jain	Sai Sesha Chalapathi Gattupalli	Real Life Applications Of Ml, Iot And Blockchain
941	Yash Raj Singh	J. Jennifer Ranjani	Handheld Weapon Detection From Surveillance Videos
942	Yash Sarawgi	Kamlesh Tiwari	Satellite Image Segmentation
943	Yash Vijay	S B Singh	Structural Health Monitoring Of Structures
944	Yash Vijay	Kamlesh Tiwari	Analysis Of Encrypted Traffic Data
945	Yashaswi Pandey	Tapomoy Guha Sarkar	Renormalization Group Study Of 2D Ising Model
946	Yashdeep Gupta	Navneet Goyal	Research Project
947	Yashkalp Sharma	Anshuman Dalvi	Review Of Supercapacitors For Energy Storage.

STUDY PROJECT

S.NO	NAME OF STUDENTS	FACULTY NAME	PROJECT TITLE
948	Yashkalp Sharma	Vinay Chamola	Ml Based Sensor Data Processing For Healthcare Iot
949	Yashodanandan Nayak	Banasri Roy	Hydrogen Production From Ethanol By Low-Temperature Reforming Methods Using Modified Ni-Sn/Al2O3 And Ni-Sn/Ceo2 Catalyst
950	Yashvardhan Rajeshkumar Joshi	Amit Jain	Biogas Production From Energy Crops
951	Yatharth Agarwal	Rahul Arora	Industrial Restructuring In Post-Covid Envnt. - Ii
952	Yatish Agrawal	Prabhat Nath Jha	The Role Of Map K Modules During Abiotic Stress Signaling In Plants.
953	Yegamamidi Karthik Reddy	Abhijeet Keshaorao Digalwar	Manufacturing Management
954	Yogya Modi	Devika	Recurring Patterns Of Creativity In Short Stories.
955	Yogyata Somani	Arun Kumar Giri	Environmental Economics
956	Yuvraj Abhishek	Vaibhav Dixit	Literature Review Of Cpy2D6 Dynamics, Som Models
957	Yuvraj Singh Malhi	Navneet Gupta	Electromagnetic Modeling, Design And Optimization Using Artificial Neural Network
958	Zawar Rushikesh Balkrishna	S K Choudhary	Studies In Indian Sociolinguistics
959	Zawar Rushikesh Balkrishna	Sundaresan Raman	Framework For Detection Of Plant Diseases

NEW COURSES / PROGRAMMES INTRODUCED IN THE YEAR 2020

1. New / Modified Courses:

S. No.	Course No.	Course Title	L	P	U
1	AN F311	Principles of Aerodynamics	3	0	3
2	AN F312	Aircraft Propulsion	3	0	3
3	AN F313	Flight Mechanics and Controls	3	0	3
4	AN F314	Introduction to Flight	3	0	3
5	AN F315	Aircraft Structures	3	0	3
6	BITS F451	Autonomous Mobile Robotics	3	0	3
7	BITS F452	Blockchain Technology	3	0	3
8	BITS F453	Computational Learning Theory	3	0	3
9	BITS F454	Bio-Inspired Intelligence: Algorithms and Applications	3	0	3
10	CS F315	Information and Communication Technologies and Development	3	0	3
11	CS F316	Quantum Architecture and Programming	3	0	3
12	CS F317	Reinforcement Learning	3	0	3
13	CS F425	Deep Learning	3	0	3
14	CS F426	Graph Mining	3	1	4
15	CS F427	Performance Analysis of Computer Networks	3	0	3
16	CS F428	Special Topic in Computer Science	1	0	1
17	CS F429	Natural Language Processing	3	0	3
18	CS G516	Advanced Database Systems	3	1	4
19	CS G518	Internet of Things: Design and Development	3	1	4
20	CS G519	Social Media Analytics	3	1	4
21	EEE F419	Flexible and Stretchable Electronics	3	1	4
22	EEE F420	Biomedical Signal Processing	3	1	4
23	HSS F224	English Skills for Academics	3	0	3
24	HSS F247	Social Informatics	3	0	3
25	HSS F248	Introduction to Disability Studies	3	0	3
26	HSS F249	Politics in India	3	0	3
27	MBA G540	Sports Marketing	3	0	3
28	MBA G541	Operations Strategy	3	0	3
29	ME F112	Workshop Practice	1	1	2
30	ME F216	Materials Science and Engineering	2	1	3
31	ME F217	Applied Thermodynamics	3	1	4
32	ME F218	Advanced Mechanics of Solids	2	0	2
33	ME F219	Manufacturing Processes	3	1	4
34	ME F220	Heat Transfer	3	1	4
35	ME F221	Mechanisms and Machines	3	0	3
36	ME F314	Design of Machine Elements	3	0	3
37	ME F315	Advanced Manufacturing Processes	2	1	3
38	ME F316	Manufacturing Management	2	0	2
39	ME F317	Engines, Motors, and Mobility	2	0	2
40	ME F318	Computer-Aided Design	1	2	3
41	ME F319	Vibrations and Control	3	0	3
42	ME F320	Engineering Optimization	3	0	3
43	MF F216	Materials Science and Engineering	2	1	3
44	MF F217	Machine Drawing	0	2	2
45	MF F218	Transport Phenomena in Manufacturing	3	1	4
46	MF F219	Operations Management	3	0	3
47	MF F220	Metrology and Quality Assurance	2	1	3
48	MF F221	Mechanisms and Machines	3	0	3
49	MF F222	Casting, Forming and Welding	3	1	4
50	MF F314	Design of Machine Elements	3	0	3

S. No.	Course No.	Course Title	L	P	U
51	MF F315	Automation and Control	3	1	4
52	MF F316	Machining and Machine Tools	3	1	4
53	MF F317	Computer Aided Design and Manufacturing	2	1	3
54	MF F318	Nontraditional Manufacturing Processes	3	0	3
55	MF F319	Supply Chain Management	3	0	3
56	MF F320	Engineering Optimization	3	0	3
57	PHA G533	Pharmaceutical Process Chemistry			4
58	PHA G534	Separation and Structure Elucidation Techniques			4
59	PHA G535	Biomaterials			5
60	PHA G536	Cosmetics and Cosmeceuticals	3	2	5
61	PHA G537	Parenteral Product Development			5
62	PHA G538	Immunopharmacology			4
63	PHA G539	Principles of Drug Discovery			4
64	PHA G540	Modern Pharmaceutical Analytical Techniques	3	1	4
65	PHA G548	Chemistry of Natural Drugs	3	2	5
66	PHA G623	Pharmaceutical Applications of Polymers and Biopolymers			5
67	PHA G624	Principles of Toxicology			5
68	PHA G625	Cellular and Molecular Pharmacology			5
69	PHA G626	Pharmacovigilance			4
70	PHA G627	Medical Devices and Testing			4
71	PHY F346	Laser Science and Technology	3	0	3
72	SS G519	Social Media Analytics	3	1	4

2. New / Modified Programs:

A.   A new programme in M. Pharm. with specialization in Pharmacology

Name of the Program	M. Pharm. with specialization in Pharmacology
Preamble	Earlier curricular revision had thrown light on the need based curricular revision with not only updation and strengthening of the curriculum programme including current relevance, but also market demand. A design that imparts education for economic advantage also necessitates periodic review of curriculum to provide the advantage. Improvement based on student learning needs, desired outcomes, feedback, learning activities, fundamental concepts and their application, final assessment, all form a part of actual learning outcomes, leading to professional knowledge with current relevance, work manner, attitude, use of information, skill development, self-managed learning, problem solving, coherence of curriculum, critical thinking, communication, interpersonal skills, besides computer literacy and group work. Based on these, the department has not only proposed changes in existing curriculum and its contents, but also introduced to launch a programme with a specialization in Pharmacology (M.Pharm. with specialization in Pharmacology) which has been long debated in the department for 3-4 years now and also suggested by visitors, discipline experts who visit department on various occasions and during regulatory review process. Extensive and periodic discussions across campus departments and inputs from graduates, alumni and industry people who seek certain knowledge in potential recruits have all been the guiding inputs for these changes in below mentioned curriculum as well as its design.

B.   Strengthening of M. Pharmacy with specialization in Pharmaceutical Chemistry Curriculum

Revision of M. Pharmacy with specialization in Pharmaceutical Chemistry Curriculum has been made on the basis of data and information gathered from top educational institutions within the country as well as abroad in proposing the changes. While quantitative and triangulated research design was not employed for the programmes, informal discussions and open ended questions, feedback from graduates, peers in the field, pharmacy administrators, faculty members, alumni, industries, in both during formal and informal interactions have culminated in the need for proposing the change in curriculum and its contents in Pharmacy curriculum and hence the proposal reflects these observations with focus on outcome based approach to curriculum development. Three major areas of revision in the existing programmes were introduced, namely (i) more specialization and discipline focused core and application oriented courses, (ii) provide awareness, knowledge in emerging areas based on recent technological and scientific developments thereby providing better prospects and opportunities for practice in relevant fields, (iii) integration of related courses thereby reducing duplication of contents and increased relevance between subjects.

C. **Strengthening of M. Pharmacy with specialization in Pharmaceutics Curriculum**

Revision of M. Pharmacy with specialization in Pharmaceutics Curriculum has been made on the basis of data and information gathered from top educational institutions within the country as well as abroad in proposing the changes. While quantitative and triangulated research design was not employed for the programmes, informal discussions and open ended questions, feedback from graduates, peers in the field, pharmacy administrators, faculty members, alumni, industries, in both during formal and informal interactions have culminated in the need for proposing the change in curriculum and its contents in Pharmacy curriculum and hence the proposal reflects these observations with focus on outcome based approach to curriculum development. Three major areas of revision in the existing programmes were introduced, namely (i) more specialization and discipline focused core and application oriented courses, (ii) provide awareness, knowledge in emerging areas based on recent technological and scientific developments thereby providing better prospects and opportunities for practice in relevant fields, (iii) integration of related courses thereby reducing duplication of contents and increased relevance between subjects.

D. **Strengthening of B.E. Mechanical Engineering Curriculum**

With the advent of new technologies and the evolution of market requirements, it becomes necessary to equip the students with the new skill sets for their future. Over the last decade, the focus of the industry and research is moving towards the design and development of greener energy solutions such as electric & hybrid vehicles, novel materials, new manufacturing processes, automation and control, sustainability, and so on. Hence, there was a requirement for the revision and update of the B.E. Mechanical program. Keeping this in view, comments and suggestions from an expert panel consisting of experts from both academia and industry were obtained. The revised curriculum incorporates new content, removes overlap between the course contents optimally, increases the experiential learning and introduces the system-level approach in the pedagogy.

E. **Strengthening of B.E. Manufacturing Engineering Curriculum**

Mechanical Engineering Department in Pilani Campus is presently offering B.E. Manufacturing Engineering program and felt need of revising the program in tandem with curricular revision in B.E. Mechanical Engineering program. To equip the students with the new skill sets for their future, the department proposed changes in the existing curriculum. The new structure has been reviewed by the experts and experts given few suggestions. These suggestions were circulated in written format across the campuses of BITS Pilani and subsequently discussed in cross-campus meetings. The feedback received were utilized to enrich the content. Accordingly, the comments received from the two experts (Prof. Saumitra Paul, IIT Kharagpur; Prof. Prof. Sameer Khandekar, IIT Kanpur), has implemented and the course curriculum was further revised taking inputs from all four campuses and within the credit limit framework of BITS Pilani.

F. **Offering B. E. Electronics and Communication Engineering programme at Pilani Campus**

Considering the market need for Communication Engineers (due to growth in the voice, data, multimedia, machine to machine and IoT), it is proposed to introduce a first degree programme: "B. E. Electronics and Communication Engineering" in the department of EEE at BITS Pilani-Pilani Campus. This programme is already being offered by the other three campuses of BITS Pilani (i.e. Dubai, Goa and Hyderabad). The EEE department at BITS Pilani-Pilani Campus has already been offering a Higher Degree programme in Communication Engineering and have built expertise in the area which they can numerically augment further to support the proposed First Degree programme.

3. Two New Minor Programs:

S.No.	Name	Description
1.	**Minor in Aeronautics**	Aeronautics is an exhilarating field encompassing the fundamentals of aerodynamics (interaction of air with objects in motion), propulsion (power systems responsible for the generation of thrust for providing motion), structures (design of airframes and material characteristics), and flight mechanics (trajectory study and optimization), as applied to air-borne vehicles within the Earth's atmosphere, and to rockets and spacecrafts outside.
2.	**Minor in Water and Sanitation**	Sustainable Development Goal 6 (SDG 6) focusses on Water and Sanitation and the tasks mentioned in SDG 6. Sanitation is also high on agenda of the Indian Government as evident from Swachh Bharat Mission. Trained Postgraduate and working professionals are of high demand. Bill and Melinda Gates foundation had significantly invested in Water, Sanitation and Hygiene programme and they had funded UNESCO IHE and its 8 partners in developing e learning alliance. The foundation's investment strategy in sanitation requires qualified and trained professionals. This minor would equip the students with the skill and knowledge which will help them in gaining insights in the area of water and sanitation.

LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2020

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
— **SECOND SEMESTER 2019-20**					
1	2015B1PS0651P	Rohan Gupta	Development Of Interactive Web Based Tools For Food Biotechnology	P R Deepa	BIO
2	2015B1A80416P	Rashi Khandelwal	Protein Profile In Subcellular Fractions Of Adipocytes	P R Deepa	BIO
3	2015B1A80543P	Anchal Gupta	Mapping Epigenetic Mechanism Of Diabetes Induced Cardiovascular Dysfunction	Syamantak Majumder	BIO
4	2015B1A70478P	Anubrolu Vasudev	Mechanical Properties Of Tumor Cells With Laboratory Equipments.	Rajdeep Chowdhury	BIO
5	2015B1A70424P	Chaitanya Maheshwari	Ml And Neural Network Approaach In Mirna-Mrna Recognition	Shibashish Chowdhury	BIO
6	2015B1A10569P	Arnav Sethi	Comparitive Genomics Of Xanthomonas Oryzae To Identify Virulence Genes Encoding For Signature Proteins.	Prabhat N Jha	BIO
7	2015B1A108941P	Robin Arora	Bioinformatics Analysis Of Camel Milk And Related Experiments	Uma Dubey	BIO
8	2015B1A20887P	Varshith Naidu Edumudi	Developing Effective And Innovative Teaching Methods For Undergraduate Students.	Pankaj Kumar Sharma	BIO
9	2015B1A10877P	Adnan Khan	Study Of Thermostability Of Camel Milk Proteins By Computational Analysis And Wet Lab Work.	Uma Dubey	BIO
10	2015B1A20710P	Abhyuday Sharma	Analysis Of Various Diary Products On Gut Microbiota	Shilpi Garg	BIO
11	2015B1A40892P	Pranav Chaturvedi	Effect Of Milk From A1/A2 Cattle On Gut Microflora	Shilpi Garg	BIO
12	2015B1A80893P	N L Sai Bhavesh	Molecular Pathogenesis- Characterizethe Endogenous Gene Targets Of Crispr-Cas System In Salmonella	Sandhya Marathe	BIO
13	2015B1A30584P	Gaurav Bhandari	Bioinformatic Analysis Of Camel Milk Proteins And Related Validation Studies.	Uma Dubey	BIO
14	2015B1A80827P	Sushant Gupta	Bioinformatic Analysis Of Lactoferin Protein Interaction And Validation	Uma Dubey	BIO
15	2015B1A10540P	Sanchit Bajaj	Developing Case Studies For Biology Specifc Courses.	Pankaj Kumar Sharma	BIO
16	2015B1A10562P	Pulkit Sharma	Polymorphism Studies In P. Falciparum Vaccine Candidate Antigen Trap From Field.	Vishal Saxena	BIO
17	2014B1A10290P	Shubham Choudhary	Comparative Genomics Of Pathogenic Bacteria	Prabhat N Jha	BIO
18	2015B1A30644P	Ankit Agarwal	Studies Of Pdymorphism From Trap & Resa Genes In Plasmodium	Vishal Saxena	BIO
19	2015B1A70773P	Nikhil Ranjan	Conversational Ai For Consumer Query	Nidhi Singh	BIO
20	2015B1A70873P	Kumar Shreshtha	Development Of Ai Models For Adaptive Radiation Therapy	Nikos Paragios	BIO
21	2015B2A10820P	Pratyush Samal	Modelling And Simulation Of A Fluidizedz Bed Gasification System	Dr. Pratik N Sheth	CE
22	2015B4A20628P	Nitant Upasani	Development Of Mathematical Tools The Automated Generation Of Architectural Floor Plants.	Dr. Rajesh Kumar	CE
23	2015B3A20514P	Devesh Vashishtha	Analytical And Experimental Study On The Behavior Of Masonry Infill Frames Under Lateral Loads.	Dr. Dipendu Bhunia	CE
24	2015B1A20878P	Suraj Bansal	An Overview Of Disaster Management System.	Dr. G. Muthukumar	CE
25	2015B3A20660P	Vishal Verma	Strength Behavior Of Soil Improved With Tire Chip And Plastic Strip	Dr. Ravikant Mittal	CE
26	2015B2A20891P	Paritosh Bansal	Optimum Solutions For Footing Resting On Improved Ground.	Dr. Ravikant Mittal	CE
27	2015B5A20754P	Utsav Ajay	Nonlinear Time History Analysis Of Steel Building.	Dr. G. Muthukumar	CE
28	2015B1A20736P	Shubham Raj	Economical Design Of Foundations Subjected To	Dr. Ravikant	CE

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			Dynamic Loads.	Mittal	
29	2016A2TS0724P	Prityesh Raj	Assessment Of Mbbr Technique At Stp Of Bits Pilani.	Dr. Anupam Singhal	CE
30	2016A2TS0719P	Sanket Jain	Assessment Of Asp Technique At Stp Of Bits Pilani.	Dr. Anupam Singhal	CE
31	2016A2TS0579P	Shivam Singh	Decision Support Systems For Water Supply Management.	Dr. Ajit Pratap Singh	CE
32	2016A2TS0613P	Shaurya Singh	Utilization Of Waste Plastic & Tire Chip In Improving Marginal Soil And Mine Waste	Dr. Ravikant Mittal	CE
33	2016A2TS0531P	Arvind Sahu	Decision Support Systems For Water Supply Management	Dr. Ajit Pratap Singh	CE
34	2015B2A20780P	Mohammed Adnan Shafique	Structural Analysis And Forecasting Of Floods And Droughts For A Particular Area Of Interest	Dr Shibani Jha	CE
35	2015B4A20593P	Akshit Bordia	Application Of Machine Learning On Solid Waste Management For Efficient Prediction And Modelling.	Mr. Pratik Jain	CE
36	2015A1TS0599P	Satrajit Neogy	Fault Detection In Complex Chemical Processes.	Dr.Ajaya Kumar Pani	CHE
37	2015B1A10540P	Sanchit Bajaj	Machin Learning In Chemical And Bio Systems Engineering.	Dr. Abhishek Dhoble	CHE
38	2015B2A10839P	Sneha Kumari	Renoval Studies Of Flue Gases (Co2+Sox+Nox).	Dr. Smita Raghuvanshi	CHE
39	2015B2A10871P	Krati Agrawal	Polymer-Based Nanocomposites.	Dr. Krishna C Etika	CHE
40	2015B3A10646P	Neha	Cfd Modelling Of Hollowfibermembrane Basedsystemforgroundwater Filtration	Dr. Somak Chatterjee	CHE
41	2015B4A10481P	Swarnesh Ravi Jha	Mulliscale Modeling Of Packed Bed Reactor Using Matlab & Comsol Of Fwent.	Dr. Bhanu Vardhan Reddy K	CHE
42	2015B4A10518P	Harshit Gupta	Feasibility Of Single Use Plastic	Dr. Suresh Gupta	CHE
43	2015B4A10633P	Shubham Bhatt	Safety Management In Press Urised Water Reactor (Pwr) Using Machine Learning	Dr. H K Mohanta	CHE
44	2015B5A10417P	Shubham Jain	Fault Detection In Multi Phase Flow Facility Using Machine Learning	Dr. Ajaya Kumar Pani	CHE
45	2016A1PS0537P	Damanjot Singh	Computational Fluid Dyamics To Estimate Life Of Ground Water Filteration Nanotubes.	Dr. Somak Chatterjee	CHE
46	2016A1PS0811	Aditya Pai K	Fault Detection In Multiphase Flow Systems	Dr. Ajaya Kumar Pani	CHE
47	2016A1TS0559P	Debshankar Ghosh	Cfd Simulations Of Laminar-To-Turbulent Transition In Biological Systems	Dr.Joshua Brinkerhoff	CHE
48	2015B2A80807P	Harsh Vardhan Awasthi	Development Of Efficient Ternary Metal Chalcogenide Photoelectrodes Forphotoelectrochemical Waer Splitting.	Dr. Mrinmoyee Basu	CHEM
49	2015B2A80886P	Kumar Sarthak	Synthesis Of Smart Gels Exhibiting Thermo Switchable Behaviour And Study Of Its Application In Catalyst Template.	Dr. Madhushree Sarkar	CHEM
50	2015B2A30841P	Ujjwal Panda	Matric Isolatin Spectroscopy Of Astrochemically Significant Molecules.	Dr. Shamik Chakraborty	CHEM
51	2015B2A40889P	Umang Simoniha	Conversion Of Co2 To Useful Chemicals With The Help Of Mcm Based Heterogenous Catalysis.	Dr. Saumi Ray	CHEM
52	2015B2A40286P	Mudit Agarwal	Qualittive Assessment Of Quanching Change Using Dennify Fuctional Reactivity Theory.	Dr. Ram Kinkar Roy	CHEM
53	2015B1A20882P	Mavuluri Rithwik Venkat Ratnam	Synthesis And Application Of Silica Nanocpheres.	Dr. Bibhas Ranjan Sarkar	CHEM
54	2015B2A10846P	Vaibhav Sharma	Cosselating Thermodynamic And Kinetic Aspects Of A Chemical Reaction Through Dennify Functional Reactivity Theory.	Dr. Ram Kinkar Roy	CHEM
55	2015B2A20760P	Kuchibotla Sri Raghu	Synthesis Of Organic Based Mechanoluniscent	Dr. Inamur R	CHEM

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
		Charan	Compound To Help In Structural Health Monitoring.	Laskar	
56	2015B2A40868P	Anshu Agrawal	Development Of Platform For Computing Molecular Electronic Integral.	Dr. Prashant U Manohar	CHEM
57	2015B5A70350P	Soorya Rethinasamy	Compiling For Quantum Computers	Vandana Agarwal	CSIS
58	2016A7PS0037P	Dev Arora	Design Of Computational Intelligence For Image Processing	Lavika Goel	CSIS
59	2016A7PS0073P	Shreyansh Chandak	Solve The Scheduling Problem In Multicore Processor For Discrete Speeds Considering Both State & Dynamic Power	Abhishek Mishra	CSIS
60	2016A7TS0045P	Divesh Uttamchandani	Flow Scheduling For Qos Realization	K Haribabu	CSIS
61	2016A7TS0056P	Siddharth Sekhar Barpada	Supply Chain In Agriculture Using Blockchain	Amit Dua	CSIS
62	2016A7TS0080P	Swarup N	Design Of Implementation Of Incremental Algorithms For Collecting Consistent Network	K Haribabu	CSIS
63	2015B4A70342P	Vighnesh Hegde	Machine Learning Methods For Footwear Impression Comparison	Martin Herman	CSIS
64	2015B4A70407P	Nalin Mittal	Deep Learning Models For Face Recognition Anti-Spoofing In Mobile Phones	Carsten Sinz	CSIS
65	2015B4A70436P	Achal Agarwal	High Performance Gpu Based Graph Analytics	John Owens	CSIS
66	2015B4A70454P	Vikram Waradpande	Representation Learning On Graphs	Avishek Anand	CSIS
67	2015B4A70557P	Prashant Rangarajan	Active Learning For Graph Convolutional Networks	Partha Pratim Talukdar	CSIS
68	2016A7PS0018P	Girinath R	Tool-Tissue Interaction Recognition In Surgical Videos	Nicolas Padoy	CSIS
69	2016A7PS0026P	Akankshya Mishra	Activity Recognition Using Deep Learning	Francois Bremond	CSIS
70	2016A7PS0079P	Mehta Aashay Pinkesh	Ai For Brain Training	Falk Lieder	CSIS
71	2016A7PS0088P	Nischay Agarwal	Implementation Of Bundle Protocol For Riot Os	Ing. Lars Wolf	CSIS
72	2016A7PS0110P	Sankalp Sanjay Sangle	Monitoring And Prediction Of Faults In Networks Using Network-Wide Telemetry	Chan Mun Choon	CSIS
73	2016A7PS0134P	Gautam Pathak	Memory Layout Visualisation Tools For Improved Performance Debugging In Concurrent Software	Trevor Brown	CSIS
74	2016A7TS0052P	Karabee Batta	Large Scale Quantum Networks	Daniel Oblak	CSIS
75	2016A7PS0098P	Anuvind Bhat	Optimization At The Compute & Storage Layer For Performing Large-Scale Data Analytics In The Cloud	Muthian Sivathanu	CSIS
76	2015B2A70842P	Ritaban Roy	Reliable, Sewne And Privacy Preserving Multi-Biometric Person Authentication	Antitza Dantcheva	CSIS
77	2015B4A70777P	Vaishnavi Bhargava	A Study About Explainability And Fairnes In Knowledge Discovery And Algorithmic Decision Making	Miguel Couceiro	CSIS
78	2016ABPS0676P	Saharsh Agarwal	Pipe Climbing Prototype With Load Carrying Ability.	Avinash Gautam	CSIS / ME
79	2015B3A10537P	Patro Divyam Ashok	Participation In Global Value Chains And Economic Growth	Rahul Arora	ECO & FIN
80	2015B3A10642P	Aayush Arya	Trade Liberalisation And Indian Economic Growth	Rahul Arora	ECO & FIN
81	2015B3A10662P	Rohit Gaur	Impact Of Signing Regional Comprehensive Economic Partnership To India	Rahul Arora	ECO & FIN
82	2015B3A30452P	Rahul Motiyani	Digital Transformation And Sustainability	A K Giri	ECO & FIN
83	2015B3A30572P	B Tirumala	Impact Of Ctyptocurrency On Global Economy	N V M Rao	ECO & FIN
84	2015B3A30622P	Mohit Jaiswani	Supply Chain Design In The Agricultural Sector To Reduce Poverty	Satyendra Sharma	ECO & FIN

SECOND SEMESTER 2019-20

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
	SECOND SEMESTER 2019-20				
85	2015B3A70472P	Saurabh Gupta	Critical Analysis Of Disruptive Nature Fintech Companies: Impact Analysis Of Indian Companies	A K Vaish	ECO & FIN
86	2015B3A70834P	Prakhar Srivastava	Analysis And Improvisation Of Techniques Used To Asses Transportation Logistic Management Using Ml And Ai	Satyendra Sharma	ECO & FIN
87	2015B3A80544P	Jammula Priyesh	Interdependance Between Climate Change, Tourism And Environment In India	Geetilaxmi Mohapatra	ECO & FIN
88	2015B3A80563P	Shubham Kumar	Analysis Of Underpricing Of Indian Initial Public Offering	Rajan Pandey	ECO & FIN
89	2015B3A70626P	Anirudha Kemtur	Using Machine Learning And Other Statistical Techniques To Model Human Cognition	Dr Karim Jerbi	ECO & FIN
90	2015B3A80463P	Akshay Jhanwar	Design And Development Of Credit Scoring Model Using Non-Financial Data For Cred: Forecasting Creditworthiness Of Individual Borrowers	Mr. Rahul Harkisanka	ECO & FIN
91	2015B3A80555P	Akshaj Kasliwal	Crowd Logistic And Its Impact On Logistic Industry	Satyendra Sharma	ECO & FIN / MGTS
92	2016A8PS0407P	Bhawana Jain	Development Of A Resonance Based Thickness Sensor For Ferromagentic Sheets	Dr. Sujan Yenuganti	EEE / INSTR
93	2015B3A30471P	Shubham Bhandari	Role Of Big Data Analytics In Intelligent Farming And Its Economies	Dr. H D. Mathur	EEE / INSTR
94	2016A3PS0163P	Pranav Saraswat	Empirical Qanalysis Of Selected Economic And Public Policy Evaluations In India	Dr. Sujan Yenuganti	EEE / INSTR
95	2015B5A30547P	Naren	Securing Drone Communications Using Physically Unclonable Functions	Dr. Vinay Chamola	EEE / INSTR
96	2015B5A80499P	Anubhav Elhence	Securing V2G Communications Using Physically Unclonable Functions (Puf)	Dr. Vinay Chamola	EEE / INSTR
97	2015B2A80865P	Apurva Surya	Learing Methods In Hevc Videos.	Dr. Devesh Samaiya	EEE / INSTR
98	2016A3PS0217P	Het Shah	Rf Microelectronics (Lan Design) & Vilsi Architrecture.	Dr. Chandra Shekar	EEE / INSTR
99	2015B5A30581P	Gokul Srinivassan	Energy Efficient Swipt Policies For Cooperative Aaf - Daf Systems	Dr. Sainath Biragunta	EEE / INSTR
100	2015B5A30429P	Harsh Grover	Application Of Blockchain And Machine-Learning In Internet Of Things.	Dr. Dheerebdra Singh	EEE / INSTR
101	2016A3PS0215P	Nishad Sahu	Application Of Blockchain In Unmanned Aerial Vehickes (Uavs)	Dr. Vinay Chamola	EEE / INSTR
102	2015B4A80573P	Ayush Bansal	Internet Of Thins Application For Vehiculan Networks.	Dr. Dheerebdra Singh	EEE / INSTR
103	201B4A30564P	Mohit Jain	Experiment S On Hearing Based Techniques For Video Analytics	Dr. Devesh Samaiya	EEE / INSTR
104	2016A3PS0192P	Nikhil Khandelwal	Developing Techniques For Super Resolution Of Images (Computer Vision)	Dr. Meeetha V. Shenoy	EEE / INSTR
105	2016A3PS0184P	Aditya Sodhani	Advanced Visi Architecture Forarm Based Processors	Dr. Chandra Shekar	EEE / INSTR
106	2015B5A30384P	Mitul Sharma	Basing Exploration For Low Power Memories For Embedded Application	Dr. Nitin Chaturvedi	EEE / INSTR
107	2015B5A30742P	Ritik Jain	Implementation Of Cnn On Fpga	Dr. Karri Babiu Ravi Teja	EEE / INSTR
108	2015B4A30565P	Vaibhav Mathur		Dr Devesh Samaiya	EEE / INSTR
109	2015B2A30682P	Utkarsh Bansal	Design And Control Of A Bidirectional Dc/Dc Cpnverter For An Electric Vehicle.	Dr. Hari Om Bansal	EEE / INSTR
110	2015B3A80546P	Manan Mehta	Magnetoresistance Investigation In Semiconductor Nanostructures	Dr. Sanjeev Kumar	EEE / INSTR
111	2016A3PS0702P	Abhiroop Bhattacharjee	Liberty Characterization For Reconfigurable-Fets	Dr. Akash Kumar	EEE / INSTR
112	2016A3PS0317P	Akshit Goel	Design And Evaluation Of Throuhtput - Oriented	Dr. Paolo Lenne	EEE /

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			And Latency-Tolerant Accelerators On Fpga.		INSTR
113	2016A8PS0424P	Saksham Consul	Cognitive Tutors And Prostheses For Improving Human Decision- Making.	Dr. Falk Lieder	EEE / INSTR
114	2016A8PS0264P	Vignesh Nagarajan	Exporing Low -Power Architectures For High-Dimensional Computing	Dr. Akash Kumar	EEE / INSTR
115	2016A3PS0193P	Ashutosh Sancheti	Security Provisioning In Internet Of Things	Dr. Biplab Sidar	EEE / INSTR
116	2015B5A80442P	Ishaan Ahuja	Analysis Of N-Dimensional Space For High Energy Physics Tasks	Dr Maritin Vala	EEE / INSTR
117	2016A8TS0278P	Prajit Dhara	Design And Analysis Of A Quantum Repeater Scheme Using Gottesman-Kitaev-Preskill Encoded Qubits.	Dr. Saikat Guha	EEE / INSTR
118	2015B4A80567P	Tanay Agarawal	Mobelling Human Perception And Attention Using Neura Network.	Dr. Sridharan Devarajan	EEE / INSTR
119	2016A3PS0228P	Abhishek Jain	Optical Trapping Of Nanoparticles Using Nanophotonic Structures.	Dr Thomas F Krauss	EEE / INSTR
120	2016A3TS0153P	Chinmay Pandhare	Asynchronous Transcription & Summarization Of Conversations Using Ars.	Dr. Chng Eng Siong	EEE / INSTR
121	2016A3PS0235P	Niranjan Arun Rao	Bidirectional Control Of Robot Using Wearable Sensor And Hap Tic Feedback.	Dr. Harshavardhan Kikkeri	EEE / INSTR
122	2016A8TS0334P	Pratyush Manocha	Modeling Of Grapheme Based Hot Electron Transistor.	Dr. Chandini Usha	EEE / INSTR
123	2016A3PS0261P	Ardra Ayyappath	Codes For Storage Applications.	Dr. Navin Kashyap	EEE / INSTR
124	2016A3PS0261P	Umang Garg	Neuromophic Vision Sensor.	Dr. Abhronil Sengupta	EEE / INSTR
125	2016A3PS0175P	Sahil Mehra	Human Geometry Estimation Using Manocular Images	Dr Venkatesh Babu	EEE / INSTR
126	2016B2A30792P	Tanuj Kumar	Thread Based Transistor For Sensing And Flexible Analog Circuit Design	Sameer Sonkusale	EEE / INSTR
127	2015C2TS0558P	Nikhil Chandrashekhar Bhalerao	Philosophy In Films: A Study Of Selected Works Of Philosophical Directors At Global Level	Prof. Devika	HSS
128	2013B4PS0663P	Sneh J Shah	Mathematical Modelling And Analysis Of Physiological Systems	Dr. Bhupendra Kumar Sharma	MATH
129	2014B4A10648P	Bhavesh S. Navandar	Design And Applications Of Neural Network Algorithms For The Field Of Fractional Calculus And Use The Same To Solve Fractional Integrals	Dr. Trilok Mathur	MATH
130	2015B4A10466P	Kaustubh Sathe	Meshless Finite Element Methods For Pdes.	Dr. Sangita Yadav	MATH
131	2015B4A20684P	Koustubh Gupta	A Survey Of Optimization Techniques For Floor-Planning.	Dr. Krishnendra Shekhawat	MATH
132	2015B4A30464P	Aditya Khandelwal	Numerical Methods For Solving Partial Integro-Differential Equations	Dr. Rajesh Kumar	MATH
133	2015B4A30523P	Saurabh Mittal	Tsunami Intervent Time Distribution	Dr. Sumanta Pasari	MATH
134	2015B4A30630P	Nishit Garg	Applications Of Mathematics In Geodesy	Dr. Sumanta Pasari	MATH
135	2015B4A30663P	Puneet Singh	A Study Of Discrete-Time Retrial Queues With Vacations	Dr. Rakhee	MATH
136	2015B4A40702P	Manthan Goyal	Fluid Structure Interaction Problem Of Blood Flow In A Brain Artery	Dr. Sangita Yadav	MATH
137	2015B4A70625P	Anamya Agarwal	Development Of Graph Theoretic Tools For Rectangular Dualization	Dr. Krishnendra Shekhawat	MATH
138	2015B4A80580P	Aayushmaan Thakur	A Study Of Fuzzified Nature-Inspired Optimization Techniques	Dr. Chandra Shekhar	MATH
139	2015B4A80596P	Aditya Rathi	Optical Character Recognition	Dr. Rakhee	MATH
140	2015B4A80638P	Pragatiasudani	Machine Learning Algorithms For Geostatistical Data Analysis	Dr. Sumanta Pasari	MATH

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
	SECOND SEMESTER 2019-20				
141	2015B4A80686P	Sadrishya Agrawal	Analysis Of Gps Data Using Various Time Series Methods	Dr. Rakhee	MATH
142	2016B4TS0957P	Priyanka	The Distribution Of Primes	Dr. Divyum Sharma	MATH
143	2016A4PS0405P	Pavan R	Isogeometric Analysis Of Laminated Structures	Gaurav Watts	ME
144	2015B3A40513P	Devesh Yadav	Life Cycle Assessment And Demerd Estimetion Of Valve Added Products From Steel Slag	Srikanta Routroy	ME
145	2016ABPS0671P	Chinta Karteeka Naidu	Indentification Of Critical Success Factors For Ciraular Economy Through Reverse Legistics Prespective	A.K.Digalwar	ME
146	2016ABPS0873P	Sajja Hari Kesav	Supply Chain Management Cultural Implications On Supply Chain Performance	Srikanta Routroy	ME
147	2016A4PS0304P	Mallya Akshat Satyanarayan	Simulation And Experimentation Of Phase Change Materials For Spatial Heating	P. Srinivasan	ME
148	2016A4PS0378P	Shyamsundar P.I.	Vision Based Manipulation Of Industrial Robots	B.K.Rout	ME
149	2015B3AB0568P	Kartik Tyagi	Application Of Lean Tools Ano Techniques For Productivity Improvement	A.K.Digalwar	ME
150	2015B4AB0542P	Mayank Raj	E-Waste Management	M.S.Dasgupta	ME
151	2016ABTS0877P	Jayant Singh Rathore	Application Of Mcdm Techniques In Lean Practices	A.K.Digalwar	ME
152	2015B5A40582P	K.Pavithran	Sports Movement Kinematics Data Analysis & Interpretation Using Computers	M.S.Dasgupta	ME
153	2015B4AB0697P	Mayank Saraogi	Neuroelectronic Interface.	Venkatesh K.P.Rao	ME
154	2016A4PS0284P	V.G.V.Rama Jaswanth	Corrasian & Thermal Stresses Study Of High-Tempereture Energy-Storage Materials.	P.Srinivasan	ME
155	2015A4TS0444P	Shubhankar Abhijit Kulkarni	Phase Change Material For Hvac Application.	M.S.Dasgupta	ME
156	2016A4PS0221P	Adil Khan	Computational Simulation Of Cellagen Fiker Rainforced Extra Cellular Matrix And Its Interaction With Tumer Spheroids	Shyam Sunder Yadav	ME
157	2015B4A40360P	Hitesh Raghuvanshi	Design Of Gonal Logistics In Post Hervest Supply Chain.	Srikanta Routroy	ME
158	2015B1A40694P	Animesh Jain	Rotor Systems And Associated Gyroscopic Force, Its Effects And Applications.	M.S.Dasgupta	ME
159	2016ABTS0700P	Vinayak Aggarwal	Supply Chain Of Direct-To-Consumer	Satyendra K Sharma	ME
160	2015B3A40610P	Amit Agrawal	Roujte Optimization Techniques And Delivery Performance: An Overview	Satyendra K Sharma	ME
161	2015B1A40880P	Ayushman Dwivedi	Analytical And Finite Element Modeling Of Themoelastic Behavior Of Skin	Jitendra S.Rathore	ME
162	2015B2A40890P	Surakshit Soni	Development Of Forecasting Welding For Perishable Products Art Consumption Paint	Srikanta Routroy	ME
163	2015B3A40539P	Vibhas Jaiswal	Industry 4.0: "Smart Maintenance" Predictive Maintenance On Banknote Processing Systems	Heidi Schneider	ME
164	2015B2A40837P	Mohit Sidhwani	Ideation And Creation Of An Indigenous, End-To-End Credit System, Providing An Alternative To Credit Cards, Researching Upon Its Three Cress-Fundtional Drivers Via, Sourcing, Information And Pricing, Optimizing Cash Flowa Byforecasting Demand In The Supply Chain.	Ashray Iyengar	ME
165	2015B2AB0819P	Vishnu Madhusudan	Policymaking In Industry 4.0 As A Part Of India'S National Industrial Policy.	Ira Saxena	ME
166	2016ABTS0854P	Kriti Rathi	Rethinking Of Design Spaces In Comosite Structures.	Arlimdo Silva	ME
167	2015B5A40758P	Divya Rathore	Advanced Diagnostics To Determine Li-Ion Cell Failure Mechanisms.	Jeff Dahn	ME
168	2015B5A40621P	S Kaushik Srinivasan	Enhancing Operational Excellence And Standardizing Service Level Offerings For Over 10000+ Retail Outlets Of One Of India'S Largest	Jay Agrawal	ME

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			Oil & Gas Players		
169	2016ABPS0890P	Aryan Sharma	Broad Area-Hyderodynamics Simulations And Large Scale Simulations (Magneto-Hydro) Inplupics Phenomena (Like Stars Etc.)	Luca Baiothi	ME
170	2015B1A40732P	Gokavarapu Sai Sirish	A Microfluidic Platform For Early Diagnosis Of Cancer	L.T. Lim	ME
171	2015B3A40483P	Devanshu Tak	Cad Assembly Visulalization In Ar	Jyoti Anup Bishnoi	ME
172	2015B5AB0504P	Ishan Dave	Dynamic Stability Of Laminated Structures Using Finite Element Method	Gaurav Watts	ME / PHY
173	2015B3A40615P	Aman Gupta	Study Of Reverse Supply Chain In Medical Indusry And Development Of Strategies To Tackle Problem	Satyendra K Sharma	MGTS / ME
174	2016A5PS0367P	Jasveer Singh	Study The Effect Of Formulation Variables And Process Parameters On Characteristics Of Immediate Release	Dr. Gautam Singhvi	PHA
175	2016A5PS0855P	Yogesh Raut	Assesment And Culture Studies Of Bryophytes And Their Therapeutic Effects	Dr. Atish T Paul	PHA
176	2016A5TS0591P	Samadrita Pal	Formulation And Evaluation Of Gold Nanoparticle Of Mucuna Pruriens Extract For Treatment Of Parkinson Disease	Prof. Rajeev Taliyan	PHA
177	2016A5TS0538P	Aditi Singh	Investigating The Dependence Of Ultrasonication Mediated Cancer Cell Killing On Cell Cycle	Dr. Michael Patrick Sheetz,	PHA
178	2016A5TS0734P	Sreemoyee Ghosh	Targeted Delivery Of Biomacromoelcules Such As Protein, Peptide And Nucleic Acid	Prof. Shyh-Dar-Li	PHA
179	2014B5A10832P	Vikash Singh	Particle Production In Heavy Ion Collisions.	Madhukar Mishra	PHY
180	2015B5A30708P	Tanya Aggarwal	Neutrino Mass Hierarchy And Oscillations	Madhukar Mishra	PHY
181	2015B5A30420P	Satyam Bhaskar	Study Of Quark Gluon Plasma At High Matter Density	Madhukar Mishra	PHY
182	2016B5TS0965P	Divya Pant	Ionic And Electronic Transport In Li-Nasicon Based Nanocomposites	Anshuman Dalvi	PHY
183	2015B5A20470P	Divyansh Mangal	Studies In Advanced Classical Field Theory	R Vaidya	PHY
184	2015B5A40750P	Rishav Utkarsh	Studies In Quantum Information And Computation	R R Mishra	PHY
185	2015B5A10737P	Abhisneh Singh	Electro Optic Effect Of Liquid Crystals	Manjuladevi V.	PHY
186	2015B5A40747P	Saurav Shakti Borah	Epoch : Partical-In-Cell Approach To Plasma Physics	Amol Holkundkar	PHY
187	2015B5A40559P	Deshmukh Sarvesh Sandeep	Free Electron Lasers	Amol Holkundkar	PHY
188	2015B5A10755P	Prakhar Kapoor	Relativistic Hydrodynamics In Heavy Ion Collisions: General Aspects And Development	Amol Holkundkar	PHY
189	2015B5A40670P	Akarsh Rastogi	Simulation And Theoretical Work On Surface Plasmon Resonance And Applications In Sensing	R K Gupta	PHY
190	2015B5A20681P	Aman Kumar Rana	Designing Of Nano Cluster/ Nano-Tube, Useful To Absorb Pollutant Elements.	D. Bandyopadhyay	PHY
191	2015B5A20751P	Jinna Harshith Reddy	Identification Of Crystal Lattices Using Microwave Diffraction.	D. Bandyopadhyay	PHY
192	2015B5A20733P	Jagdeesh Peesa	Identification Of Crystal Lattices (Bcc, Hcc, Fcc, Scc) Using Microwave Diffraction.	D. Bandyopadhyay	PHY
193	2015B5A10440P	Udayveer Singh Andotra	Physics Of Compact Astrophysical Objects.	Bswanath Layek	PHY
194	2015B5A30415P	Deepak Vasudevan	Structure Formation In The Reionization Era	T. G. Sarkar	PHY
195	2015B5A10583P	Mukul Rana	Many Body Effects In Ms Simulation Of Spectroscopy	R. Choubisa	PHY
196	2016B5PS0588P	Abhishek Pandey	Foundational Aspects Of Quantum Mechanics	Tejinder Pal Singh	PHY
197	2015B5A70394P	Joy Mukherjee	Design, Implementation And Testing Of A New Experimental Control System For An Optical Latice Apparatus	Sean Hodgman	PHY

SECOND SEMESTER 2019-20

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
198	2015B5A30467P	Sambit Panda	Search For Anistropic Stochastic Background Using Regularized Deconvolution In Data From Gravitational Wave Detectors.	Sanjit Mitra	PHY
199	2015B5A70191P	Sarvesh Srinivasan	Toplogical Order In Condensed Matter Systems	Vijay Shenoy	PHY
200	2015B5A70418P	Biswajit Biswas	Dissertation Unsupervised Methods For Classification Of Dark Matter Substructure In Strong Lensing Images	Sergei V. Gleyzer	PHY
201	2015B5A40532P	Siddharth Singh	Inter-Facial Losses In Superconducting Z-Mon Qubit.	R R Mishra	PHY / ME

FIRST SEMESTER 2020-21

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
1	2016B1A20950P	Bhaskar Rokana	Studying The Distribution Of Saponin Producing Plants In India	Pankaj Kumar Sharma	BIO
2	2016B1A20188P	Kanishk Rajvanshi	Understanding The Functioning Of Protein Docking Software Packages And Performing Test Cases With Phytochemical Ligands.	P R Deepa	BIO
3	2016B1A30936P	Shubham Raj	Using Graph Theory For Analysing Various Biological Networks	Shibasish Chowdhury	BIO
4	2016B1A70939P	Kumar Deovrata	Understanding The Role Of Ezh2 And Its Associated H3K27Me3 In Chronic Kidney Disease	Syamantak Majumder	BIO
5	2016B1A20937P	Ram Karthik Reddy	Covid-19 Structural Comparison	Uma S Dubey	BIO
6	2016B1A10948P	Jatin Arora	Milk Protien Folding And Docking With Respect To Cancer.	Uma S Dubey	BIO
7	2016B1A40945P	Ayush Kumar Bothra	Understanding The Role Of Ezh2 And Its Associated H3K27Me3 In Chronic Kidney Disease.	Syamantak Majumder	BIO
8	2016B1A20940P	Aryan A Pareek	Analysis Of Protein Folding And Docking Software Tools With Test Cases	P R Deepa	BIO
9	2016B1A10195P	Sohit Aggarwal	Analysis Of P.Falciparum Transcriptome To Understand Development Of Plasmodium In Host Cells	Shilpi Garg	BIO
10	2016B1A10861P	Tanvi Gupta	Immune System Studies Using Analytical Tools	Jaykrishnan C	BIO
11	2016B1A40757P	Arpit Mittal	Integrating Behavior Based Decisions Into Frenet Frame Planner	K Madhava Krishna	BIO
12	2016B1A20292P	Modali Sairam Santosh	Eia Case Study In Construction Of A Highway (Nganglam-Dewathang)	Ajit Pratap Singh	CE
13	2017A2TS0857P	Akshay Sharma	To Study And Improve The Scenario Of Solid Waste Management In India	Anupam Singhal	CE
14	2016B1A20922P	Deepanshu Aggarwal	Management Of Solid Waste Using Life Cycle Analysis.	Ajit Pratap Singh	CE
15	2017A2TS0737P	Aamil Ashutosh Rastogi	Modification And Optimization Of Water Supply System In A Secondary City Like Jaipur	Rajiv Gupta	CE
16	2016B3A20553P	Ankur Jain	Doklam To Galwan: Revisiting India-China Border Dispute	Veena R	CE
17	2016B4A20616P	Ayush Srivastava	Image Based Structural Damage Detection Using Convolution Neural Networks And Transfer Learning	Ajit Pratap Singh	CE
18	2015B5A20470P	Divyansh Mangal	Pedestrian Wind Comfort Analysis Of Bits Pilani Campus	Anupam Singhal	CE
19	2016B1A20755P	Sanidhya Kumar Pandey	Characterisation And Qualitative Gradation Of Municiple Solid Waste City Compost	Anupam Singhal	CE
20	2017A2TS0833P	Kunal Rastogi	Simulating The Impact Of Industrialisation On Ground Water Quality In National Capital Region Using Comsol Multi-Physics And Dpsir Framework.	Shibani Khanra Jha	CE
21	2016B2A20820P	Divyansh Kavadia	Seismic Performance Of A Reinforced	Muthukumar G	CE

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			FIRST SEMESTER 2020-21		
			Concrete Structure		
22	2017A2TS0963P	Kushal Singhi	Non-Linear Seismic Analysis Of Tunnels	Nishant Roy	CE
23	2017A2TS0821P	Shubham Premprakash Shukla	To Improve The Scenario Of Water And Wastewater Treatment In India.	Anupam Singhal	CE
24	2017A2TS0856P	Priyank Godhat	Finite Element Analysis Of Functionally Graded Composite Beam	S B Singh	CE
25	2016B1A20906P	Hardik Maheshwari	Optimisation Of Use Of Recycled Aggregates Using Mathematical Tools.	Ravi Kant Mittal	CE
26	2017A2TS0785P	Bhanu Pratap Singh	Life Cycle Analysis Of Infrastructure Systems	Muthukumar G	CE
27	2016B5A20738P	Vaidant Agrawal	Intelligent Transport System (Its)	S N Patel	CE
28	2017A2TS0066P	Sumedha Koul	Study On The Seismic Behavior Of Tunnels Under Varied Conditions	Nishant Roy	CE
29	2016B1A20265P	Aditya Vikram	Improving Geothecnical Properties Of Soil By Waste Material	Ravi Kant Mittal	CE
30	2017A2TS0919P	Suryansh	Study On The In-Plane Behaviour Of Masonry Infill Walls	Dipendu Bhunia	CE
31	2017A2TS0876P	Vinay	Performance Of Masonry Infill Wall Subjected To Out-Of-Plane Loading.	Dipendu Bhunia	CE
32	2017A2TS0708P	Amisha Srivastava	Life Cycle Assessment And Its Implications	Anshuman	CE
33	2016B4A20603P	Mayank Prasad	A Study On Smart City Development.	Ajit Pratap Singh	CE
34	2017A2TS1017P	Siddharth Karandikar	Bituminous Pavement Construction In India	Mukund Lahoti	CE
35	2017A2TS0862P	Abhishek Kumar	Fire Resistant Design	Muthukumar G	CE
36	2016B5A20663P	Vishvaditya	Site Selection For Wildlife Conservation Within Bits Campus	Anupam Singhal	CE
37	2016B3A20577P	Priyadarshi Nihal	Triaxial Response Of Fly Ash Mixed Pilani Soil Based On Direct Shear Test Results	Kamalesh Kumar	CE
38	2017A2TS0956P	Manglunia Rishabh Rajkumar	Application Of Artificial Neural Network In Rock Mechanics Stability Problems	Nishant Roy	CE
39	2017A2TS0895P	Aniket Singh	To Understand Importance Of Seismic And Fire Scenarios.	G.Muthukumar	CE
40	2017A2TS0960P	Paramtap Lal	Structural Dynamics	Dr. Manish Kumar	CE
41	2016B4A10490P	Chilakala Ravi Teja	Enhanced Production Of Biodiesel Using Artificial Neural Networks And Optimization Techniques	Hare Krishna Mohanta	CHE
42	2016B2A10880P	Pratyush Khandelwal	Simulation Of Thermochemical Process Conversion Of Biomass Using Matlab	Sheth Pratik N	CHE
43	2017A1TS0732P	Aman Goyal	Kinetic Studies For Bio Mitigation Of Carbon Dioxide Using Bacterial Species.	Smita Raghuvanshi	CHE
44	2016B5A10717P	Jays Jose Thomas	Designing Anaerobic Digester For Biogas Production	Amit Jain	CHE
45	2016B2A10852P	Som Choudhary	Modeling ,Simulation And Control Of Fluidized-Bed Fermenter	Hare Krishna Mohanta	CHE
46	2016B1A10915P	Danish Nayyar	Fault Detection And Diagnosis Using Machine Learning	Ajaya Kumar Pani	CHE
47	2017A1TS0787P	Abhinav Dhaka	Impact Of Foams On Food Quality, Preparation	P Chattopadhyay	CHE
48	2016B1A10923P	Aditya Pramod Patil	Modelling And Simulation Of Solid Waste Management Solutions	Smita Raghuvanshi	CHE
49	2017A1TS0041P	Isha Dogra	Evaluation Of Mixed Matrix Membranes In Ionic Contaminant Removal	Somak Chatterjee	CHE
50	2016B4A10589P	Sumeet Kumar Singh	Machine Learning And Time-Frequency Analysis In Signal Processing And Simulation For Automatic Detection Of Process Using Applied Wavelet Analysis	Hare Krishna Mohanta	CHE
51	2016B2A10884P	Manu R. Srivathsa	Exploring The Use Of Artificial Intelligence And Machine Learning In Drug Synthesis	Prof Bhaskar Das	CHE
52	2017A1TS0645P	Saksham Sinha	Carbon Capture And Utilisation Using Waste-	Prof. Colin D.	CHE

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			Based Materials	Hills	
53	2017A1TS1151P	Pratik Jaideep Potdar	Developing A Machine Learning Model To Predict The Performance Of A Heterogeneous Catalyst And A Reactor	Dr. Enrico Martinez	CHE
54	2015B2A30847P	Parikshit Singh Shaktawat	Drug Design And Synthesis Studies	Paritosh Shukla	CHEM
55	2016B2A30776P	Abhas Gupta	A Computational Study Of Ground And Excited State Properties Of Aie Active Organic Molecules.	Ram Kinkar Roy	CHEM
56	2014B2A30708P	Deepak Patel	Metal Complexes As Drugs And Therapeutic Agents	Ajay Kumar Sah	CHEM
57	2015B2AB0335P	Arjun Maini	Analysis Of Laminated Structures Under The Study Of Computational Solid Mechanics	Gaurav Watts	CHEM
58	2016B2AB0836P	Kapil Gupta	Bodipy-Based Molecules For Dye-Sensitized Solar Cells	Dalip Kumar	CHEM
59	2016B2A10695P	Pavitra Gautam	Virtual Chemistry Lab	Bharti Khungar	CHEM
60	2016B2A30894P	Utkarsh Tripathi	Understanding And Designing Organic/Inorganic Oximetry Sensors To Gauge Blood Oxygen Levels, Heart Rate And Other Physiological Parameters Important For Covid-19	Dalip Kumar	CHEM
61	2015B2A20785P	Kavish Gupta	Catalytic Chemistry Of Lanthanides	Ajay Kumar Sah	CHEM
62	2016B2A30680P	Shivani Singh	Analyzing The Architecture Of The Internet Of Nano-Things	Sai Sesha Chalapathi Gattupalli	CHEM
63	2016B2A40786P	Sitakanta Mohapatra	Studies In Deep Eutectic Liquids And Other Alternative Solvents For Green Chemistry Applications	Bibhas Ranjan Sarkar	CHEM
64	2016B2A30857P	Aditya Rustagi	Detection Of Diabetic Retinopathy And Determining Early Onset	Soul Lee	CHEM
65	2016B2A20834P	Rawal Kumar Singh	Docking Study Mediated Exploration Of Binding Interaction Of Cyclometalated Iridium(Iii) Complexes With Proteins	I R Laskar	CHEM / BIO
66	2016B1A70822P	Rohan Kela	Practical Counter-Measures In Attack Fault Maintenance Trees.	Rajesh Kumar	CSIS
67	2017A7TS0150P	Abhishek Ashwanikumar Sharma	Sustainable And Scaleable Architecture In Mobile Application Development	Yashvardhan Sharma	CSIS
68	2017A7TS0161P	Kushagra Raina	Prediction Of Disease Severity In Diabetic Retinopathy Patients.	Kamlesh Tiwari	CSIS
69	2016B4A70580P	Salmaan Shahid	Integer Factorization	Abhishek Mishra	CSIS
70	2017A7TS1179P	Asrita Venkata Mandalam	Arabizivec: A Set Of Arabizi Word Embedding Models For Informal Arabic Sentiment Analysis	Yashvardhan Sharma	CSIS
71	2016B5A70144P	Siddhant Singh	Practical Counter Measures In Attack Fault Maintainance Tree	Rajesh Kumar	CSIS
72	2016B5A70590P	Anwesh Bhattacharya	Exploring Chaos Theory In Optimization And Machine Learning With Applications In Galaxy Classification	Dr. Mousumi Das	CSIS
73	2017A7TS1174P	Praveen Ravirathinam	Development Of Novel Machine Learning Algorithms To Analyze Data From Earth-Observing Satellites To Monitor Changes In Land Cover On A Global Scale	Vipin Kumar	CSIS
74	2017A7TS0093P	Ayush Jain	Learning Grounding From Visual Cues - Combining Information From Language And Visual Data For Performing Complex Tasks.	Prof. Katerina Fragkiadaki	CSIS
75	2017A7TS1196P	Divyam Goel	Hierarchical Clustering Of High-Dimensional Data	Dr. Narendra Ahuja	CSIS
76	2017A7TS0040P	Shaily Bhatt	Decoding Transformer-Encoder Models: A Systematic Study On How Bert-Like Models Work. Abstract: Transformer-Encoder Models Are Now Being Used Widely In Many Nlp Problems Both In Academia And Industry. While The Benefits Of Using Them Are	Dr. Sunayana Sitaram	CSIS

FIRST SEMESTER 2020-21

		FIRST SEMESTER 2020-21			
S.No.	**BITS ID**	**NAME**	**TOPIC**	**SUPERVISOR**	**Dept.**
			Evident In The Performance Improvements, The Reason Behind Their Enormous Success Is Yet To Be Decoded. The Best Known Transformer-Based Model Is The Famous Bert Model Which Obtained State-Of-The-Art Results In Numerous Benchmarks. However, We Are Still Far From Understanding The Inner Workings Of Bert. The Lack Of Clarity Of €Why Transformer Models Like Bert Work Remarkably Well€™ Limits Further Reasoning-Driven Improvement In The Architecture. Several Studies Have Now Come Up That Investigate: The Types Of Knowledge Learned By Bert, Where It Is Represented, How It Is Learnt And The Methods Proposed To Improve It. The Focus Areas Of These Studies Range From Syntactic, Semantic And World Knowledge To Its Pre-Training And Finetuning. At The Same Time, Others Focus On The Mechanism Of Learning And Representation Of Knowledge, Including The Significance Of Attention, Distribution Of Knowledge In The Bert Layers And Its Size. A Number Of These Studies Obtain Results That Are In Agreement With One Another In Many Aspects. However, We Also Come Across Some Different And Even Contradicting Evidence And Results In A Few Aspects. Clearly €œbertology†, A Term Loosely Coined To Refer To The Inner Working Of Bert And Similar Models, Has Come A Long Way. However, There Is Still A Lot More To Discover In Order To Fully Understand How And Why Transformer-Encoder Models Like Bert Work So Well. The Focus Of This Thesis Will Be To Perform A Systematic Study Of Bert And Bert-Like Models To Further The Understanding Of Their Inner Workings. We Aim To Conduct Experiments Whose Results Will Enable Us To Answer More Questions And Gain Clarity On The Reasons Behind The Success Of Said Models. We Will Also Use Our Results To Hypothesize, Propose And Test Methods That Can Help To Improve The Performance Of These Models.		
77	2016B3A70492P	Priyanka Verma	Human Computer Interaction Techniques To Investigate User Experience : A Privacy And Security Perspective	Dr. Sameer Patil	CSIS
78	2017A7TS1195P	Anirudh Srinivasan Chakravarthy	Video Object Segmentation	Dr. Hanspeter Pfister	CSIS
79	2017A7TS1172P	Roshan Roy	Video Instance Segmentation In Long-Term, Cross-Scene Shots.	Prof. Hanspeter Pfister	CSIS
80	2017B3TS1202P	Rahul Bansal	Credit Risk Analysis And Modelling	Arun Kumar Vaish	ECO FIN
81	2016B3A20561P	Aman Agrawal	Identification Of New Factors For Predicting The Stock Market During The Covid-19 Era. (Title Subject To Change Based On Further Discussion With The Professor)	Byomakesh Debata	ECO FIN
82	2016B3A70532P	Aviral Sethi	Ai For Finance: News Article/Document Summarization To Save Time Allowing For Effective And Efficient Investment Decisions	Rajan Pandey	ECO FIN
83	2016B3A70501P	Harshavardhana Shrirup	Predicting Time Taken By Economies To Recover From Disasters	N V Muralidhar Rao	ECO FIN
84	2017B3TS1203P	Isha Nagpal	Determinants Of Early Movers In Cross-Border Merger And Acquisition Wave In An Emerging Market: A Study Of Indian Firms	Krishna M	ECO FIN
85	2017A3TS0328P	Kaustubh Ramkrishna Joshi	Study And Implementation Of Signal Processing Algorithms For Bearing Fault	Ankush Chandrakant	EEE / INSTR

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			FIRST SEMESTER 2020-21		
			Diagnosis	Jahagirdar	
86	2017A3TS0315P	Dhulipalla Krishna Swaroop	On-Board Image Processing System For Hsi Data	Abhijit Rameshwar Asati	EEE / INSTR
87	2016B2A30795P	Nemish Murawat	Development Of Deep Learning Models In Order To Model The Genetic Variation Within The Tree Species.	Surekha Bhanot	EEE / INSTR
88	2017A3TS1154P	Vishnu C Venkatesh	Blockchain For Internet Of Vehicles	Vinay Chamola	EEE / INSTR
89	2017A8TS0504P	Shubham Aggarwal	Ambient Energy Harvesting Using Piezo Electric Sensors	Yenuganti Sujan	EEE / INSTR
90	2017A3TS1159P	Nihal Singh	Research And Development In The Area Of Mmwave Radar 4-D Imaging With Design, Verification, And Characterization Of A Prototype.	Mr. Sumeer Bhatara	EEE / INSTR
91	2016B3A30472P	Manav Kaushik	Speech Analysis To Determine Age, Gender And Other Speaker Information Using Natural Language Processing And Deep Learning	Prof. Chng Eng Siong	EEE / INSTR
92	2017A8TS0405P	Simran Sehgal	Speaker Diarization With Kaldi Toolkit	Prof Chng Eng Siong	EEE / INSTR
93	2017A3TS0374P	Varun Kohli	Software Attestation For Internet Of Things (Iot) Devices	Dr. Biplab Sikdar	EEE / INSTR
94	2017A3TS0340P	Shramay Palta	Analyzing The Spread Of Flu Virus Using Breathing Data Collected From Spire Tags.	Professor Ashok Agrawala	EEE / INSTR
95	2017A8TS0277P	Sathe Omkar Dhananjay	Seamless Authentication Mechanisms	Prof. Tony Q.S. Quek	EEE / INSTR
96	2016B5A80109P	Rohan Sanjay Mehta	Optical Parameter Extraction Using Terahertz Time-Domain-Spectroscopy	Prof. Shriganesh Prabhu	EEE / INSTR
97	2017A3TS1160P	Shrideep P Koparkar	Benchmarking Energy Consumption Of Neural Network Benchmarks On A Vliw	Prof. Ahmed Hemani	EEE / INSTR
98	2017A8TS0385P	Abhishek B Chakravarthi	Crowd Count Estimation And Stampede Prediction Using Machine Learning.	Dheerendra Singh	EEE / INSTR
99	2017A8TS1187P	Kesava Garikipati	Cost-Benefit Analysis Of A Product Using Total Supply Chain Cost Approach	Srikanta Routroy	EEE / INSTR
100	2016B3A80494P	Aryan Kukreja	Market Analysis And Financial Aspects Of Iot Industry	Vinay Chamola	EEE / INSTR
101	2016B2A80837P	Manuj Vashist	Applications Of Fast Fourier Transformation In Medical Instruments And Applications	Abhijit Rameshwar Asati	EEE / INSTR
102	2017A8TS0589P	Ananya Malhotra	Electrification Of Rural India From Suitable Renewable Energy Sources (Res-E) Based On Nano-Grids	Karunesh Kr Gupta	EEE / INSTR
103	2016B4A80211P	Prajjwal Bagga	Mems Based Glucose Sensor	Yenuganti Sujan	EEE / INSTR
104	2017A8TS0584P	Rishabh Jain	Named Entity Recognition	Abhishek	EEE / INSTR
105	2016B2A20920P	Kunal Gupta	Business Leaders Strategy To Cope Up With Cover-19	Pushp Lata	HUM
106	2016B3A20524P	Akash Singh	China In Africa- Study On Beijing Consensus.	Veena R	HUM
107	2017D2TS1232P	Rashi Yadav	Role Of Sustainable Development Indicators In Envisioning Smart Cities In India.	Sailaja Nandigama	HUM
108	2017A2TS0816P	Shivam Prateek	Green Engineering And Sustainable Development The Growing Number Of Rural To Urban Migration Has Created A Huge Pressure On The Cities And Town To Provide Adequate Facilities To The Migrants. Their Needs Of Shelter, Conveinient Public Transport, Safe Drinking Water, Sanitation Has Brought Policy Makers On Stand Still On The Question Of Resource Usage Pattern. One Aspect Is To Expand The Urban Infrastructure Using All Our Resources To Fulfil The Growing Needs, While On The Other Hand, There Is An Urgent Need To	Sailaja Nandigama	HUM / CE

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			FIRST SEMESTER 2020-21		
			Address The Growing Environmental Challenges. Population Of India Is Expanding And Is Believed To Achieve Its Peak By The Year 2040. In Order To Sustain The Growing Needs Of Resources Along With Maintaing Stability Of Environment, We Need To Go For Green Engineering Programs, Which Is Ultimately The Key Towards Sustainable Development.		
109	2016B4A10598P	Deepak Agarwal	Analysis Of Ag/Blood-Mediated Transport In Curved Annulus With Exclusive Nature Of Convective Boundary.	B K Sharma	MATH
110	2016B4A40506P	Mayank Dixit	Bocr Analysis Of Crowd Logistics And Efficiency Of Crowd Logistics In Covid Times.	B K Sharma	MATH
111	2016B4A70509P	Nikita N. Singh	Application Of Recurrent Neural Networks In Portfolio Construction.	Trilok Mathur	MATH
112	2016B4A70480P	Akriti Garg	Graph-Theoretic And Optimization Tools For Architectural Layouts	Krishnendra Shekhawat	MATH
113	2017B4TS0559P	Akash Palrecha	Interpretable Image Deblurring With Applications For Large-Scale Biomedical Images	Rajesh Kumar	MATH
114	2016B4A30596P	Vaibhav Kaushik	Study Of Digital Business Models In The Mobility Industry	B K Sharma	MATH
115	2016B4A70622P	Satwadhi Das	Graph-Theoretic Approach To Dissected Floorplans	Krishnendra Shekhawat	MATH
116	2016B4A30478P	Mamarde Tanay Vijay	Survey Of Stochastic Models For Modelling Epidemic	Anirudh Singh Rana	MATH
117	2015B4A10680P	Saurav Lutawa	Study Of Vanadium Oxide Based Energy Efficient Coating Through Molecular Dynamics	Anirudh Singh Rana	MATH
118	2016B4A10638P	Faizur Rahman	Method Of Fundamental Solution For Phase Transition Process	Anirudh Singh Rana	MATH
119	2016B4A70322P	Satyavrat Sharma	Algebraic Number Theory With Applications To Diophantine Equations	Divyum Sharma	MATH
120	2015B4A10481P	Swarnesh Ravi Jha	Flow Through Assemblage Of Porous Particles	Ashish Tiwari	MATH
121	2016B4A70166P	Aaryan Kapoor	Molecular Dynamics Simulation Of Vanadium Oxide	Anirudh Singh Rana	MATH
122	2016B4A80568P	Prerna Baranwal	Development Of Feedback Controlled 3-Axis Helmholtz Coil	Kasturi Saha	MATH
123	2016B4A20637P	Sakshi Choudhary	Understanding Of Single Server Model Of Queues With Switching Costs	Mr. Aditya Kumar	MATH
124	2017A4TS0499P	Vyom Chaturvedi	Economic And Environmental Impact Of Energy Efficient Systems Broad Area: Energy Efficient Systems, Renewable Energy	Suvanjan Bhattacharyya	ME
125	2016B5A40051P	Barsode Ankur Narendra	Machine Learning Based Molecular Dynamics Simulation Of Micro And Nano Scale Fluid Flows.	Aneesh A M	ME
126	2016B1A40904P	Mehul Jain	Temperature Prediction Using Machine Learning In Welding Based Additive Manufacturing System	Prateek Kala	ME
127	2017A4TS0185P	Mrudul Kulkarni	Numerical Modelling Of Fuel Cell Operation.	Saket Verma	ME
128	2016B2A40771P	Harshiel B Shah	Design Of Onion Supply Chain In India: Issues, Challenges And Strategy	Srikanta Routroy	ME
129	2016B5A40664P	Pullah Bhatnagar	Calculation Of External Cost Of Coal-Based Power Plant Based On Years Of Working.	P Srinivasan	ME
130	2016B4A40615P	Priyank Jairaj	Applying Industry 4.0 Tools In Supply Chain Management.	Abhijeet Keshaorao Digalwar	ME
131	2017A4TS0138P	Arshnoor Singh Sachdeva	Numerical Simulation Of Compressible Flows With Phase Change Using Ansys Framework.	Shyam Sunder	ME
132	2016B4A40510P	Amol Dalal	Development Of An Exergy-Based Control Strategy For Low Temperature Combustion	Saket Verma	ME

			FIRST SEMESTER 2020-21		
S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			Engines		
133	2016B1AB0944P	K Rohit Sharadwantha	Error Compensation In The Machining Of A Thin Walled Component	Tufan Chandra Bera	ME
134	2015A4TS0566P	Kurapati Murali Krishna	Numerical Simulations Of The Electrowetting On A Dielectric Phenomenon	Shyam Sunder	ME
135	2016B5AB0687P	Aditya Pola	Solving Differential Equations Using A Data Driven Approach	Girish Kant Garg	ME
136	2016B5AB0706P	Swadhin Saraf	Modeling Of Skin Friction Due To Various Factors	Sharad Shrivastava	ME
137	2016B5AB0711P	Hemant Vats	Cyber Security In Industry 4.0	Kuldip Singh Sangwan	ME
138	2017A4PS0380P	Siddharth Goyal	Development Of Management Strategies For Business Excellence	Abhijeet Keshaorao Digalwar	ME
139	2016B3A40315P	Siddhant Dwivedi	Analysing Supply Chain Risks In Indian Construction Industry	Srikanta Routroy	ME
140	2016B1AB0946P	Divyam Rakesh	Development Of An Integrated Framework Of Six-Sigma, Lean And Agile Manufacturing	Rajesh Prasad Mishra	ME
141	2017ABTS0316P	Pranjal Singh	Aligning System Transformation With Employee Well-Being In Lean Manufacturing.	Rajesh P Mishra	ME
142	2016B2A40878P	Anusatya Choudhary	Thermoeconomic Analysis Of Refrigeration / Heat Pump System	Mani Sankar Dasgupta	ME
143	2015B4A40693P	Manal Garg	Enablers And Inhibitors In Healthcare Reverse Supply Chain	Satyendra Kr Sharma	ME
144	2017ABTS0369P	Abhijeet Borole	Applications Of Machine Learning In Operations Management(Demand Forecasting)	Abhijeet Keshaorao Digalwar	ME
145	2016B2A40792P	Ayush Wadhwa	I Will Be Working On Studying And Aligning Micro Turnerâ€™S Supply Chain And Processes Into A More Sustainable Nature As A Part Of Our Green Energy Initiative. Alongside, Iâ€™Ll Be Analysing The Use Of Fasteners In Evs And Finding Sustainable Solutions For Mtâ€™S Automobile Components Manufacturing To Stay Relevant In The Automobile Industry.	Rajan Babbar	ME
146	2017A4TS0437P	Aishani Chakraborty	Computational Modeling Of Optimization Algorithims	Manbir Sodhi	ME
147	2016B4A40493P	Saurav Shenoy P	Coarsening Of Ni-Based Superalloys	Prof. Abhik Choudhury	ME
148	2017ABTS0957P	Ashutosh Bhatt	Analyzing Startups In The Agri-Tech Sector, Understanding Their Supply Chains And Suggesting Them The Best Practices To Implement By Benchmarking Them With Supply Chain Practices Of Fmcg Companies.	Akansh Jain	ME
149	2016A4TS0412P	Deshmukh Paresh Ganeshrao	Designing Closed Supply Chain Loops For Small Brands, Sustainably And Affordably.	Satyendra Kr. Sharma	MGTS
150	2016A1PS0742P	Rytham Garg	Covid 19 Influenced Risk Global Food Supply Chain	Satyendra Kr Sharma	MGTS
151	2017A4TS0447P	Jyotiraditya Singh	Managerial Economics Of Public Sector Decisions In India	Leela Rani	MGTS
152	2017A5TS1114P	Kandregula Bhaskar	Designing And Evaluation Of Nano Formulation For Drug Delivery	Anupama Mittal	PHA
153	2016A5TS0367P	Jasveer Singh	Application Of Natural Polymer In Drug Delivery.	Gautam Singhvi	PHA
154	2017A5TS1067P	M Hari Hara Nithin Reddy	Brain Computer Interface Ornithopter Drone.	S Murugesan	PHA
155	2017A5TS1112P	Achalla Vaishnav Pavan Kumar	Formulation Development And Evaluation Of Pdt Drug For Treatment Of Skin Cancer	Sunil Kumar Dubey	PHA
156	2017A5TS1062P	Deyasini Datta	Nanocarrier Preparations And Study The Effect Of Formulation And Process Variables On Product Characteristics.	Gautam Singhvi	PHA

FIRST SEMESTER 2020-21

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
157	2017A5TS1111P	Yanamandala Nitheesh	Formulation Development And Evaluation Of Pdt Drug For Treatment Of Breast Cancer	Sunil Kumar Dubey	PHA
158	2016B5A40714P	Dhanush Tripathy	Numerical Solution Of Maxwell Equations	Madhukar Mishra	PHY
159	2016B5A30686P	Rakshit Nanwani	Studies On Superconductivity And Its Applications	Madhukar Mishra	PHY
160	2017B5TS1207P	Shrishti Khicher	Statistical Physics Of Rna Folding	Navin Singh	PHY
161	2016B5A70560P	Parth Misra	Application Aspects Of Non-Linear Dynamics And Chaos	Rakesh Choubisa	PHY
162	2016B5A40681P	Hrithik Adhikari	Study On Nanoparticles In Liquid Crystals	V Manjuladevi	PHY
163	2015B5A80441P	Abhishek Chaturvedi	Study Of Photon Interaction With The Atomic Targets	Rakesh Choubisa	PHY
164	2016A3B50114P	Shantom Kumar Borah	Studies In The Foundations Of Quantum Mechanics And Quantum Information	Rashmi Ranjan Mishra	PHY
165	2016B5A10650P	Himanshu Gupta	Scattering Of Twisted Electron Beam From The Atomic And Molecular Targets	Rakesh Choubisa	PHY
166	2016B5A10648P	Yash Goswami	Studies On Physics Of Graphenes	Madhukar Mishra	PHY
167	2016B5A80522P	Dhruv Malhotra	Study Of Star Clusters Using Numerical Simulations.	Kaushar Vaidya	PHY
168	2016B5A80684P	Utsav Akhaury	Implementation Of A Penrose Diagram Module In Python	Shreyas Bapat	PHY
169	2016B5A40633P	Pratixan Sarmah	Effect Of New Jet Substructure Measurements On Monte Carlo Event Generator Tunes	Deepak Kar	PHY
170	2016B5A70634P	Rushi Jayeshkumar Babaria	Nlp Based Question And Answer Matching For Effective Faq ,Chatbots.	Prof Eng Siong Chng	PHY
171	2016B5A70607P	Manan Agarwal	Machine Learning Models Of Tess Ffi Lightcurves	Dr Michael Fausnaugh	PHY
172	2016B5A70701P	Ankita Chakravarty	Quantum Benchmarking Of Nitrogen Vacancy Centers In Diamond.	Prof. Michel Pioro-Ladriãˆ Re	PHY

LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2020

**SECOND SEMESTER 2019-20**					

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
1	2018H1290016P	Krishnaveni R	Determining The Rate Of Crispr Cas System In Regulating The Pathogenicity Of Salmonella Entrica Serovar Thyphimurium	Sandhya Marathe	BIO
2	2018H1290025P	Sanhita Ghosh	Analyzing Genetic Signature Of Drug Resistance And Understanding The Functional Relevance.	Rajdeep Chowdhury	BIO
3	2018H1290024P	Tejasvini S.B	Unraveling The Role Of P53 And Yap In Tumor Cells.	Rajdeep Chowdhury	BIO
4	2018H1290007P	Prachi Dabhade	Identifying Genetic Signatures Associated With Emt And Its Functional Relevance.	Sudeshna Mukherjee	BIO
5	2018H1290015P	B Shrinidhi	Synthesis And Characterization Of Metal Nanoparticles And Its Biological Appliacions.	Sudeshna Mukherjee	BIO
6	2018H1290017P	Dhanabala Subhiksha R.K	Elucidation Of Protein Involved In Fe-S Cluster Biogenesis Pathway From Plasmodium	Shilpi Garg	BIO
7	2018H1290023P	Santonu Kumar Pradhan	Understanding The Role Of High Glucose Dependent Chnges In Cellular Viscosity In Mediating Epigentic Changes Responsible For Endothelial Dysfunction.	Syamantak Majumder	BIO
8	2018H1290009P	Shreya Fadnavis	Mycodegradation Of Recalcitrant Plastics	Jitendra Panwar	BIO
9	2018H1290014P	Prerika Mathur	Genomic Approaches To Rare Disease Therapies	Vinod Scaria	BIO
10	2018H1290021P	Rajashree Banerjee	Synthesis And Characterization Of Metal Nanoparticles And Its Biological Appliactions.	Ritushree Kukreti	BIO
11	2018H1290021P	R. Rachana	Molecular Studies Of Carbohydrate Metabolisms Related Genes In Rice	Divya P Syamaladevi	BIO
12	2014HS300503P	Shubham Aggarwal	Silica Flume Blended Geo Polymer Concrete In Pavements.	Dr Mukund Lahoti	CE
13	2014HS300720P	Shreyas Pranav	Silica Fume Blended Geo Polymer Concrete In Pavements	Dr Mukund Lahoti	CE
14	2018H1440049P	Deepak Chaurasia	Development Of Decision Support System For Water Management	Prof. Ajit Pratap Singh	CE
15	2018H1440046	Bhoomi Satish Shah	Data Driven Decision Making In Water Resource Management	Prof. Ajit Pratap Singh	CE
16	2018H1440044P	Dheeraj Gupta	Construction Risk Analysis & Extension Of Time Claims	Dr. G. Muthukumar	CE
17	2018H1300074P	Amudha Barathi M	Investigating The Impact Of Aggregation Levels On Fright Production & Freight Trip Production Models: A Segmentation Approach	Dr. Prasanta Kumar Sahu	CE
18	2018H1010027P	Dandigunta Babuji	Judicious Engg. Ofmicrobiomes For Effective Bioprocess Development.	Dr. Abhishek S Dhoble	CHE
19	2018H1010028P	Mehta Harshil Amitbhai	Nickel Catalitic Monolith Reactors For Hyderogen Production.	Dr.Srinivas Appari	CHE
20	2018H1010029P	K Janani	Cfd Characterization Of Gas-Solid Flow In Conventional Homogeneous Regime.	Dr. Priya C Sande	CHE
21	2018H1010030P	Krithika.B	Hybrid Polymer Nanocomposites For Emi Shielding Applications	Dr.Krishna C Etika	CHE
22	2018H1010032P	Avinash Maran Beena	Fault Detection In Tennessee Eastman Process.	Dr. Ajaya Kumar Paani	CHE
23	2018H1010034P	Balivada Kusum Kumar	Integratedapproach(Nano- Adsorbent & Bio-Adsorbent) For The Recovery Of Zn From Fiber Industry Efflucent.	Dr. Suresh Gupta	CHE
24	2018H1010035P	Shrinidhi Sambamurthy	Lca Of Recycling Spent Li-Ion Batteries.	Dr. Smita Raghuvanshi	CHE
25	2018H1010037P	S. Nirmal Kumar	Natural Gas Steam Reforming Using Sulphur-Passivated Catalysts.	Dr. Bhanu Vardhan Reddy K	CHE

	SECOND SEMESTER 2019-20				
S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
26	2013HD120838P	Harsh Sinha	Learning To Dehaze Dense	Pratik Narang	CSIS
27	2014HS030128P	Gaurang Bansal	Real Time Applications Of Sdn In Iot Netoworks	K Haribabu	CSIS
28	2014HS120212P	Nihal M	Biomedical Image Analysis Using Deep Learning	Sundaresan Raman	CSIS
29	2018H1030123P	Subham Kumar	Automatic Disease Diagnosis Using Deep Learning	Sundaresan Raman	CSIS
30	2013H1120285P	Tareq Mohd Nazir	Instruction Set Rendomization For Webassembly		CSIS
31	2018H1230236P	Vivek Rathore	Resource Provisioning And Management For 5Gbase Station Network	Dr. Vinay Chamola	EEE / INSTR
32	2018H1230234P	Atif Jan	Microfabrication And Characterization Of Low Noise Thin Film Transistors (Tfts) For Analog Applications.	Dr. Jan Genoe	EEE / INSTR
33	2018H1420189P	Arpit Rastogi	Fem Analysis Of Manufacturing Process.	T.C.Bera	ME
34	2018H1060220P	A.Aravinda De Chinna	Impact Of Climate Change On Heating And Cooling Energy Consumption Of Buildings In India.	Aakash C.Rai	ME
35	2014HS060855P	Rishabh Gupta	Impact Of Climate Change On Heating And Cooling Energy Consumption In Buildings.	Aakash C.Rai	ME
36	2018H1060216P	Pushkar Anirudha Pandit	Modelling Microstructure Evolution In A Weld Effelted Zone For Eutectics System.	Murali Palla	ME
37	2018H1410155P	Rajat Gupta	Diagnosis Of Defects In Composite Structure Using Experimental Techniques.	Arun Kumar Jalan	ME
38	2018H1410166P	Deepak Sharma	Thermo-Hydrodynamics Of Droplets.	A R Harikrishnan	ME
39	2018H1060211P	Sunil Menaria	Hydrodynamic And Thermal Transport At Microscale.	A R Harikrishnan	ME
40	2018H1490370P	Deepanshu Kumar	Impact Of Political Advertising On Election Outcome	Dr Praveen Goyal	MGTS
41	2018h1490376P	Bhomender Sing Rathore	Effectiveness Of Music In Advertising	Dr Praveen Goyal	MGTS
42	2018H1490353P	Bhuwan Sangwan	Power Sector And Government Regulation	Rahul Varshney	MGTS
43	2018H1080300P	Maithili Kali	Development And Evaluation Of Solid Dosage Form Of Self Assembly Temozolamide	Dr.Deepak Chitkara	PHA
44	2018H1460326P	Mansi Singh	Development And Evaluation Of Docetaxel Loaded Nano-Carries For Cancer	Dr.Deepak Chitkara	PHA
45	2018H1080296P	Niharika Shiva	Acute Kidney Injury And Distal Organ Dysfunction	Prof. Anil B. Gaikwad	PHA
46	2018H1080303P	Pooja Dalip K Rao	Organ Fibrosis	Prof. Anil B. Gaikwad	PHA
47	2018H1080304P	Arisha Mahmood	Design, Characterizatioan And Optimization Of Nano-Carrier System	Dr. Gautan Singhvi	PHA
48	2018H1080302P	Shubham Arus S	Designing Of Polymorphic Nano-Carries For Delivery Of Antioxidants	Dr. Anupma Mittal	PHA
49	2018H1460329P	K Sai Pradyuth	Designing Of In Situe Gelling System Carrying Porous Particle As Drug Delivery Vehicle	Dr. Anupma Mittal	PHA
50	2018H1080297P	Sonia Guha	Devlopment And Evaluation Of Nanospherical Polymoric Micro Nanoparticle Encapsulating Diff Drugs	Dr. Anil Jindal	PHA
51	2018H1470314P	Surbhi	Synthesis Of Alpha Phosphonates As Dxr Inhibitors	Dr. Sandeep Sundriyal	PHA
52	2018H1470313P	Faheem	Design,Synthesis And Study Of Novel Beta -Carboline Analogues As Antileishmania Agents	Prof. S.Murugesan	PHA
53	2018H1470312P	Meet R. Bhatt	Differentiating Glucordination And Sulfonation Of Drug Like Compounds Using Molecular Docking	Dr. Vaibhav A. Dixit	PHA
54	2018H1460324P	Beulah V	Qbd Driven Design Of Matrixs In Matrix Controlled Release Solid Oral Dosage Form	Dr.Murali M Pandey	PHA
55	2018H1460333P	Shreehari Krishna K	Solublity Enhancement Of Poorly Soluble Herbal Extracts	Dr. Atish T Paul	PHA
56	2018H1460327P	Siddhant Harish H	Design And Characterizatioan Of Selected Drugs	Dr.Sunil K	PHA

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
			Loaded Novel Nanocarrier For Cns Disorders	Dubey	
57	2018H1460319P	Vidyadhar Gandla	Design And Devlopment Of Amorphous System For Solublity Enhancement Of Poorly Soluble Drugs	Dr.Murali M Pandey	PHA
58	2018H1460321P	Daksha Anil Rao	Design And Development Of Protien Based Scaffold	Dr.Aniruddha Roy	PHA
59	2018H1080302P	Tanmay Padhye	To Prepare Nanoformulation For Enhancement Of Bioavailblity Of Bcs Class -Iv Drugs	Dr.Aniruddha Roy	PHA

SECOND SEMESTER 2019-20 (table header above)

S.No.	BITS ID	NAME	TOPIC	SUPERVISOR	Dept.
1	2018H1300082P	Sadiya Shaikh	Numerical Simulation Of Consolidation In Embankment Construction	Nishant Roy	CE
2	2019H1010003P	N Aravindh	Non Photosynthetic Conversion Of Flue Gases (Co2, Sox, Nox) In Lab Scale Bioreactor.	Smita Raghuvanshi	CHE
3	2019H1010006P	Ashish Patil	Dual Bed Reforming On Monolith Catalysts	Arvind Kumar Sharma	CHE
4	2019H1010502P	Shukla Suryaprakash Shailendrakumar	Valorization Of Biomass To Aromatics.	Srinivas Appari	CHE
5	2019H1010503P	Ankit Pahwa	Hydrodynamic And Mass Transfer Aspects Of Fluidized Beds	Arvind Kumar Sharma	CHE
6	2019H1010008P	Nishtha Gupta	Synthesis, Characterization, And Testing Of Mof Based Mixed-Matrix Membranes For Biogas Upgradation.	Bhanu Vardhan Reddy Kuncharam	CHE
7	2019H1010011P	Indraja S	Hydrogen Production From Ethanol By Low Temperature Reforming Methods Using Modified Ni Catalysts	Banasri Roy	CHE
8	2019H1010010P	Soham Seth	Mixed Matrix Hollow Fiber Membranes For Desalination Applications	Somak Chatterjee	CHE
9	2019H1010500P	M R Kuladeep	Utilisation Of Crop Residue For Development Of Low Cost Functionalized Adsorbents And Its Applications: Life Cycle Analysis And Techno-Economic Feasibility Analysis	Suresh Gupta	CHE
10	2019H1010007P	Kashetti Shrutika Vijay	Eulerian-Eulerian Cfd Simulation Of Multiphase Flow With Simultaneous Reaction.	Priya Christina S	CHE
11	2019H1010505P	Subhadip Sen	Process Design And Integration Of Rdf Gasification In Cement Manufacturing Process	Sheth Pratik N	CHE
12	2019H1010506P	Arpitha V	Process Monitoring And Fault Detection For Complex Chemical Processes	Ajaya Kumar Pani	CHE
13	2019H1010504P	Aditya Narayanan	Novel Approaches For Revamping Anaerobic Digestion And Other Constituent Technology In Resource-Constrained Scenarios	Abhishek Suresh Dhoble	CHE
14	2019H1010002P	Namrata Kalwani	Design Modifications Of The Biomass Gasifier To Enchance The Tar Cracking	Sheth Pratik N	CHE
15	2019H1010005P	Patel Vashishtha Baldevbhai	Degradation Of Pectin By Hollow Fiber Membrane Immobilized Pectinase	Abhishek Dhoble	CHE
16	2019H1010501P	Akshat Verma	Flame Retarding Nanocoatings For Artificial Leather And Layer-By-Layer Assembly Of Super Gas Barrier Coatings For Food Packaging Applications.	Etika Krishna Chaitanya	CHE
17	2019H1010004P	Arjun Chowdhury	Surfactant Foam-Nanoparticle Systems For Treatment Of Contaminated Soil.	P Chattopadhyay	CHE
18	2019H1010001P	Aditya Pankaj Ranpura	Design Of Soft Sensors For Monitoring And Control Of Complex Industrial Processes.	Hare Krishna Mohanta	CHE
19	2019H1010009P	Aditya Sanjiv Sahani	Biosurfactant Production From Spent Wash	Amit Jain	CHE

FIRST SEMESTER 2020-21 (table header above data rows 1–19)

INVITED TALKS ARRANGED BY THE DEPARTMENT

Department: Biological Sciences

1. Dr. Gagandeep Singh Saggu, Postdoctoral Research Scientist, National Institute of Allergic and Infectious Diseases, National Institute of Health, Rockville, MD delivered invited talk on "A large conductance ion channel on the malaria parasite digestive vacuole", organised by Department of Biological Sciences on 28 January, 2020.

2. Dr. Manu Smriti Singh, Postdoctoral Fellow at Laboratory of Nano-medicine, Department of Cell Research and Immunology, Tel-Aviv University, Israel delivered a talk on "Three-dimensional tumor model as a robust platform to mimic vascularized tumors in clinic" organised by Department of Biological Sciences on 31 January, 2020.

3. Dr. Dr Sunit Mandad, Research Associate at Department of Neuro and Sensory Physiology University Medical Centre Goettingen GERMANY, delivered a talk on "Quantitative Mass Spectrometry: a tool to investigate neuronal proteome abundance and protein turnover" organised by Department of Biological Sciences on 08 February, 2020.

4. Prof. Abhishek Banerjee, Biosciences Institute, Newcastle University, UK. delivered an online interdisciplinary research talk on 'Physiological and computational approaches to study brain plasticity and decision-making'. (students of all campuses participated) August 17, 2020.

Department: Chemical Engineering

1. Speaker: Dr. Sandeep Mora, Project and Technical Lead, MERCK (MSD), US., Title: Bioprocess Development and Scale-up: Biomaterial, Biobutanol, and Bioethanol on 03/10/2020.

2. Speaker: Mr. Kapil Malhotra, Sr. Vice President- Marketing, Gujarat Fluorochemicals Limited, Title: Fluoropolymers and its applications on Date: 31/10/2020.

3. Speaker: Prof. Yong Tae Park, Associate Professor, Department of Mechanical Engineering, Myongji University, Korea, Title: Layer-by-Layer Assembled Multi-Functional Nano Thin Films on 28/11/2020.

4. Speaker: Dr. Rishi Gupta, Application Scientist for Characterization division at Anton Paar India Pvt. Ltd., Title: Basics of Gas Sorption Analysis (BET surface area analysis and Catalyst characterization) on 20th May 2020.

Department: Electrical and Electronics Engineering & Instrumentation

- Prof. Romeo Ortega, Professor, Centralesupelec, France visited and delivered a series of Lectures under the SPARC project from 8th to 25th January 2020.

- Prof. Houria Siguerdidjane, Professor, Centralesupelec, France visited and delivered a series of Lectures under the SPARC project from 8th to 24th February 2020.

Department: Humanities and Social Sciences

1. Dr. Veena Ramachandran has initiated Distinguished Lecture Series in Foreign Policy and International Relations. Ambassador Dr. T.C.A. Raghavan (I.F.S. Retired) delivered a lecture on 9th October 2020, on the topic, "India, South Asia and the World".

Department: Mathematics

1. Dr. Vipul Kakkar, Central University of Rajasthan, delivered an online talk on December 22, 2020.

2. Prof. G D Veerappa Gowda, TIFR Centre For Applicable Mathematics, Bengaluru, delivered an online talk on First Order Partial Differential Equations on December 05, 2020.

3. Prof. Kamel Hooman, University of Queensland, delivered an online talk on Natural draft dry cooling towers on November 28, 2020.

4. Prof. Tetsuro Tsuji, Kyoto University, delivered an online talk on Numerical analysis of unsteady rarefied gas flows based on the method of characteristics on November 21, 2020.

5. Prof. Satoshi Taguchi, Kyoto University, Hiroshima University, delivered an online talk on Asymptotic theory for a slightly rarefied gas over a boundary with a discontinuous temperature distributionon November 21, 2020.

6. Prof. Togashi Yuichi, Hiroshima University, delivered an online talk on Small-Number Issues in Biological Systems on November 07, 2020.

7. Prof. N. Saradha,CEBS, University of Mumbai, delivered an online talk on Euclid's primes on November 07, 2020.

8. Prof. A K Nandakumaran, IISc Banglore, delivered an online talk on Fourier Series and Transforms: Developments, Properties and Applications on November 07, 2020.

9. Prof. Bibekananda Maji, IIT Indore, delivered an online talk on Ramanujan's formula for odd zeta values on October 31, 2020.

10. Prof. Pawan Kumar Mishra, IIT Bhilai, delivered an online talk on Nonlocal fractional problems involving critical growth on October 31, 2020.

11. Prof. Akshaa Vatwani, IIT Gandhinagar delivered an online talk on Joint extreme values of L-functions on October 24, 2020.

12. Prof. B. V. Rathish Kumar, IIT Kanpur, delivered online talks on Stabilized Variational Multiscale Sub-Grid Finite Element Analysis of Transport Model on October 17, 2020 and October 24, 2020.

Department of Mechanical Engineering

1. Prof. (Dr.) Pradip Majumdar, Northern Illinois University, USA.,delivered an online talk on Sustaining Performance of Lithium-Ion Batteries on 03/07/2020.

2. Prof. (Dr.) Josua P. Meyer, University of Pretoria, South Africa., delivered an online talk on Turbulent and mixed convection in tubes   on 01/07/2020.

3. Prof. (Dr.) John P. Abraham, School of Engineering, University of St. Thomas, USA., delivered an online talk on How thermal engineering is used in the real world. on 30/06/2020.

4. Prof. (Dr.) Ali C. Benim, Duesseldorf University of Applied Sciences, Germany., delivered an online talk on Challenges in modelling industrial gas turbine combustors. on 02/07/2020.

5. Prof. (Dr.) Celestino Ruivo, Universidade do Algarve, Portugal.,   delivered an online talk on Thermal Engineering: Some concepts and misconceptions on 30/06/2020.

6. Prof. (Dr.) M. S. Dasgupta, Birla Institute of Technology & Science, Pilani, India., delivered an online talk on Refrigeration needs for effective utilization of sea food resources in India. on 29/06/2020.

7. Prof. (Dr.) Saravanan, Anna University, India., delivered an online talk on Overview of solar cooling technologies. on 29/06/2020.

8. Prof. (Dr.) Jyotirmay Mathur, MNIT Jaipur, India, delivered an online talk on Indoor Environment Quality on 01/07/2020.

9. Mr. Prateek Dutta Roy, Chief Engineering Manager, L&T India., delivered an online talk on AC System Design Strategies for Sustainable Development on 30/06/2020.

10. Mr. Vishal Kapoor, ISHRAE, India, delivered an online talk on Indoor Spaces and COVID-19, on 03/07/2020.

11. Mr. R. P. Paranjpey, ISHRAE, India., delivered an online talk on Natural refrigerants and their application use in HVAC & R., on 02/07/2020.

12. Prof Christoph Herrmann, TU Braunschweig, Germany, delivered an online talk on Sustainability thinking and Industry 4.0 on 26/10/2020.

13. Dr Felipe Cerdas, TU Braunschweig, Germany, delivered an online talk on Life cycle engineering for sustainable production and products on 02/11/2020.

14. Prof Reza Ashgari, TU Braunschweig, Germany, delivered an online talk on International Tech. Entrepreneurship on 05/11/2020.

15. Prof K S Sangwan BITS Pilani, India, delivered an online talk on Sustainability assessment frameworks and use case studies on 19/11/2020.

16. Prof Devika, Prof Pushp Lata, Dr Rajni Singh, BITS Pilani, India delivered an online talk on Cross cultural Workshop on 17/12/2020.

Department: Management

1. Mr. Sunil Bharadwaj - DGM Supply Chain and Strategy, Raymonds Ltd. Delivered a talk on "Impact of COVID-19 on Supply Chain Management" via online mode at the department of Management, BITS Pilani on 19-July-2020.

2. Mr. Jayant Sewak, (BITS Alumnus, MBA 2010) Knowledge Expert – Product Development & Procurement Practice at McKinsey & Company, Chicago, delivered a talk on "Management Consulting and effective use of 2 years' time during MBA" via online mode at the department of Management, BITS Pilani on 25-July-2020.

3. Mr. Rohith Ananth (BITS Alumnus, MBA 2018) Business Analyst at Bombardier, delivered a talk on "Adapting to changes due to COVID-19 & skill sets required" online at the department of Management, BITS Pilani on 26-July-2020.

4. Mr. Rohith Ananth - Business Analyst, Bombardier delivered a talk on "Experience in the industry, Recent changes due to COVID-19, and skill set needed to excel in the industry" via online mode at the department of Management, BITS Pilani on 26-July-2020.

5. Mr. Shakti Nayan (BITS Alumnus, MBA 2019) Consultant- Data Engg at Genpact, delivered a talk on "Data engineering for effective information system" via online mode at the department of Management, BITS Pilani on 01-August-2020.

6. Mr. Sampark A. Sachdeva OYO – Region Head (West) & Chief Coach & Mentor (at a startup), delivered a talk on "Personal branding & impact of social movements on Marketing" via online mode at the department of Management, BITS Pilani on 02-August-2020.

7. Mr. Coumara Radja Ex-President Global Business, ZCL (Earlier Zandu Chemicals), delivered a talk on "International business and challenges" via online mode at the department of Management, BITS Pilani on 06-August-2020.

8. Mr. Manoj Bali HR Analytics lead at Novartis, delivered a talk on "People Analytics" via online mode at the department of Management, BITS Pilani on 08-August-2020.

9. Mr. Murali Aiyer Social Entrepreneur and co–founder of SALTLABS, Ex HR Director CRISIL– engaged in Consulting, Leadership Coaching and Mentoring, delivered a talk on "Leadership Skills and Competencies" via online mode at the department of Management, BITS Pilani on 10-August-2020.

10. Dr. Vineet Sehgal Senior Director, HR, PwC, delivered a talk on "Digital Disruption and its impact" via online mode at the department of Management, BITS Pilani on 12-August-2020.

11. Mr. Sujit Panigrahi (BITS Alumnus, MMS 1994) Co-founder and CEO at Sequoia Fitness and Sports Technology, Additional Director General at Commonwealth Games Delhi 2010, Co-founder of Convergent Technologies, delivered a talk on "Running a Business Enterprise effectively" via online mode at the department of Management, BITS Pilani on 17-August-2020.

12. Mr. Raju Reddy Distinguished Alumnus, BITS Pilani, Founder – Sierra Atlantic, Silicon Valley, delivered a talk on "Entrepreneurship: A lifetime of rewards" via online mode at the department of Management, BITS Pilani on 19-August-2020.

13. Mr. Sameer Dhanrajani, delivered a guest lecture on 26th August 2019. The speaker had great experience in the field of Analytics and guided students about his experiences and the road ahead in times of Covid.

14. Mr. Rohit khullar (Assistant Manager Business Excellence at KPMG) delivered a training workshop on KPMG Lean six sigma (Green belt) certification workshop.

Department: Chemistry

1. Prof. Srinivasan Sampath, IISc., Bangaluru, 26/02/2019

2. Prof. Naresh Patwari, IIT, Bombay, 09/03/2019

3. Prof. Joydev K Laha, NIPER, Mohali, 09/03/2019

Department: Pharmacy

1. Mr. Bhavesh Ubhadiya, Senior Group Manager, WNS global services, delivered a lecture on, "Competitive intelligence and secondary research" on 02 November 2020.

2. Dr. Saurabh Singh, Senior Group Head, Regulatory writing and submissions, Novartis Healthcare Pvt. Ltd. delivered a lecture on, "Drug development and Regulatory writing" on 25 November 2020.

Department: Economics & Finance

1. Talk on "RBI Initatives on MSME" (Talk given by Mr Dinesh Gupta- RBI, Kunar Rahar- Research Officer Department of Economic Policy and research, Reserve Bank of India), February, 2020.

LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

A.   Text Books

S.No.	Author	Title	Publisher	Year
Bio Sciences				
1.	Rastogi, S.C.	An outline of Developmental Physiology	Rajasthan Hindi Granth Academy, Jaipur	1973
2.	Rastogi, S.C.	Essentials of Animal Physiology	Wiley Eastern, New Delhi	1977
3.	Rastogi, S.C.	Experimental Physiology	Wiley Eastern, New Delhi	1982
4.	Mitra, Sandhya	Elements of Molecular Biology	MacMillan	1982
5.	Rastogi, S.C.	Cell Biology	Tata McGraw Hill, New Delhi	1988
6.	Rastogi, S.C.	Biochemistry	Tata McGraw Hill, New Delhi	1993
7.	Rastogi, S.C., Sharma, V.N., Tandon, A.	Concepts in Molecular Biology	Wiley Eastern, New Delhi	1993
8.	Mitra, Sandhya	Essentials of Genetics	Tata McGraw Hill, New Delhi	1994
9.	Mitra, Sandhya	Business of Living	Wiley Eastern, New Delhi	1994
10.	Roy, U., Saxena V.	A Handbook of Genetic Engineering	Kalyani Publications	2007
11.	Ashish Runthala	Hunting Drugs for Potent Antigens in the Silicon Valley	IGI GLOBAL	2010
Chemical				
12.	Khan, F.I., Abbasi, S.A.	Risk assessment of chemical process industries: advanced techniques	Discovery Pub. House	1998
13.	Abbasi, S.A., Krishnakumari, Khan, F.I.	Hot topics: Global warming, acid rain, ozone hole,industrial disasters, dis-infection	Oxford India Pr.	1999
14.	Babu, B.V.	New Optimization Techniques in Engineering	Springer-Verlag, Heidelberg, Germany	2004
15.	Babu, B.V.	Process Plant Simulation	Oxford University Press, India	2004
16.	Babu, B.V.	One Chapter in the Book Advances in Computational Optimization and its Applications	Universities Press, Hyderabad	2007
17.	Babu, B.V., Angira, R.	One Chapter in the Book Soft Computing Applications in Industry	Springer Verlag	2007
18.	Babu, B.V., Angira, Rakesh	Optimization of Industrial Processes using Improved and Modified Differential Evolution	In Soft Computing Applications in Industry, Edited by Bhanu Prasad, Springer-Verlag, Heidelberg, Germany.	2008
19.	Babu, B.V., Ramakrishna, V.	Water Crisis: Origin Identification and Management	In India's Water Crisis, Edited by K R Gupta, Atlantic Publishers, New Delhi	2008
20.	Babu, B.V., Gupta. S.	Removal of Heavy Metal Pollutants from Wastewater Using Low Cost Absorbents	In India's Water Crisis, Edited by K R Gupta, Atlantic Publishers, New Delhi	2008
21.	Ashish M. Gujarathi and B. V. Babu (contributed a chapter in Advances in Chemistry and Chemical Engineering)	Advances in Optimization and Simulation of Low Density Polyethylene (LDPE) Tubular Reactor	Nova Science Publishers, USA	2010
22.	Ashish M. Gujarathi and B. V. Babu (contributed a chapter in Handbook of Optimization)	Multi-objective Optimization of Low Density Polyethylene (LDPE) Tubular Reactor using Strategies of Differential Evolution	Springer, Germany	2010
Chemistry				
23.	Choudhari, Roy T.	Basic Engineering Thermodynamics	Tata McGraw Hill, Bombay	1973
24.	Choudhari, Roy T.	Applied Engineering Thermodynamics	Tata McGraw Hill, Bombay	1973
25.	Gupta, S.P.	Quantum Biology	New Age, New Delhi	1997
26.	Khan, F.I., Abbasi, S.A.	Risk assessment of chemical	Discovery Pub. House	1998

S.No.	Author	Title	Publisher	Year
		process industries: advanced techniques		
27.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics- A Core Course	Prentice Hall, New Delhi	2004
28.	Gupta, S.P., Gupta, R.R.	QSAR & Molecular Modeling Studies in Heterocyclic Drugs II	Springer-Verlag, Berlin	2007
Civil Engineering				
29.	Moondra, H.S. & Gupta, Rajiv	Laboratory manual for civil engineering	CBS, New Delhi	1992
30.	Gupta, Rajiv	Construction planning & technology Second Edition	CBS New Delhi	1994
31.	Ghoshal, S.	Microprocessor based system design	Macmillan Publishers, Gurgaon	1996
32.	Ghoshal, S.	Computer-Aided analysis & design	PHI Learning Pvt. Ltd., New Delhi.	1997
33.	Raju KS, Sarkar AK and Dash ML (Ed);	Integrated Water Resources Planning and Management;	Jain Brothers, New Delhi.	2004
34.	Kumar, Kamlesh	Basic Geotechnical Earthquake Engineering	New Age International Publishers, Limited, New Delhi.	2006
35.	Raju, K.S.	Prediction in Ungauged Basins for Sustainable Water Resources Planning and Management	Jain Brothers, New Delhi	2007
36.	Kulkarni, D.M. & A.K. Sarkar	Engineering graphics with AutoCAD	PHI Learning Pvt. Ltd., New Delhi.	2009
37.	K. Srinivasa Raju & D. Nagesh Kumar	Multicriterion Analysis in Engineering and Management	PHI Learning Pvt. Ltd., New Delhi.	2010
38.	K. Srinivasa Raju & A. Vasan (Ed.)	Sustainable Water Resources Management and Impact of Climate Change	B.S. Publications, Hyderabad.	2010
39.	Sarkar A.K; V R Rao; S S Arkatkar; I Ghosh	Fundamentals of Transportation Systems (Class XI)	Central Board of Secondary Education; New Delhi.	2013
40.	Singh, S. B.	Analysis and Design of FRP Reinforced Concrete Structures,	McGraw-Hill Education Pvt. Ltd., New Delhi & New York	2014, 2015
41.	Kumar, Kamlesh	Basics of Environmental Resource Management	New Age International Publishers, Limited, New Delhi.	2015
42.	Kumar, Kamlesh	Basic Geotechnical Earthquake Engineering	2nd Edition, New Age International Publishers.	2017
Computer Science				
43.	Mathur, A.P., Arora K.S., Reddy U.S.	Introduction to Pascal	Tata McGraw Hill, New Delhi	1983
44.	Mathur, A.P.	Introduction to Microprocessors (Third Ed.)	Tata McGraw Hill, New Delhi	1989
45.	Sharan, S.N.	Fundamentals of Expert System	CBS, New Delhi	1993
46.	Banerjee, Rahul	Architecture and Conceptual Design of the Unix System	Khanna Publishers	1993
47.	Banerjee, Rahul	Internetworking Technologies: An Engineering Perspective	Prentice Hall of India	2003
48.	Ghosh, S.	Programming in C	Prentice Hall of India	2004
Electrical & Electronics Engineering				
49.	Maheshwari, L.K., Anand, M.M.S.	Laboratory Manual for Introductory Electronics Experiments	New Age International Publisher	1979
50.	Jain, R.P.	Modern Digital Electronics	Tata McGraw Hill, New Delhi	1984
51.	Jain, R.P., Anand, M.M.S.	Digital Electronics	Tata McGraw Hill, New Delhi	1984
52.	Ramanan, K.V.	Functional Electronics	Tata McGraw Hill, New Delhi	1984
53.	Iyer, T.S.K.V.	Circuit Theory	Tata McGraw Hill, New Delhi	1985
54.	Nagrath, I.J., Kothari, D.P.	Modern Power System Analysis (Second Ed.)	Tata McGraw Hill, New Delhi	1989
55.	Nagrath, I.J.	Basic Electrical Engineering	Tata McGraw Hill, New Delhi	1991
56.	Maheshwari, L.K., Kapoor, A.	Digital Electronics	McMillan India, New Delhi	1992
57.	Khare, R.P.	Analysis Instrumentation	CBS, New Delhi	1993
58.	Nagrath, I.J., Kothari, D.P.	Power Systems Engg.	Tata McGraw Hill, New Delhi	1994
59.	Nagrath, I.J., Kothari, D.P.	Theory and Problems of Electrical Machines (TMH outline series)	Tata McGraw Hill, New Delhi	1996

S.No.	Author	Title	Publisher	Year
60.	Nagrath I.J., Kothari, D.P.	Electric Machines (Second Ed.)	Tata McGraw Hill, New Delhi	1997
61.	Nagrath, I.J.	Electronics: Analog and Digital	Prentice-Hall of India, New Delhi	1998
62.	Nagrath, I.J. Kothari, D.P.	Theory and Problems & Basic Electrical Engineering	Prentice-Hall of India, New Delhi	1998
63.	Nagrath, I.J. Sharan, S.N. Ranjan, R. Kumar, S.	Signals and Systems	Tata McGraw Hill, New Delhi	2001
64.	Anand, M.M.S.	Electronics Instruments & Instrumentation Technology	PHI	2003
65.	Ghosh, S.	Fundamentals of Electrical and Electronics Engineering	Prentice Hall of India	2003
66.	Khare, R.P.	Fiber Optics and Optoelectronics	Oxford University Press	2004
67.	Bansal, R.C.	One Chapter in the Book Electric Vehicles	CRC Press	2005
68.	Ghosh, S.	Electrical Machines	Pearson Education	2005
69.	Maheshwari, L.K., Anand, M.M.S.	Analog Electronics	Prentice Hall of India, New Delhi	2005
70.	Maheshwari, L.K., Anand, M.M.S.	Laboratory experiments and PSPICE simulations analog electronic	Prentice-Hall of India	2006
71.	Bhattacharya, D.K., Sharma, Rajnish	Solid State Electronic Devices	Oxford University Press, New Delhi	2007
72.	Surekha Bhanot	Process Control-principles and applications	Oxford University Press	2008
73.	Khare, R.P., Dixit, R.K.	Rejuvenation without medicines [English translation of 'Bina Aushadhiyon ke Kayakalp' (in Hindi) by Pt Shriram Sharma Acharya]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
74.	Shambhudass, Khare, R.P.	Companions in Solitude [English translation of 'Sunsan ke Sahachar' (in Hindi) by Pt Shriram Sharma Acharya – Translation by V. A. Shivshankaran]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
75.	Navneet Gupta	Principles of Material Science and Engineering	Dhanpat Rai & Co., New Delhi	2001
76.	Navneet Gupta	Semiconductor Materials and Devices	Dhanpat Rai & Co., New Delhi	2006
77.	Navneet Gupta	Fundamentals of Electronic Devices	Dhanpat Rai & Co., New Delhi	2009
78.	L.S. Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
79.	William Stallings & V K Chaubey (adaptation)	Wireless Communications Networks	Pearson Education Second Edition Indian Subcontiment adaptation	2009
English				
80.	Krishna Mohan, Manerjee, Meera	Developing Communication Skills	MacMillan India Ltd., New Delhi	1990
81.	Sharma, R.C. Krishna Mohan	Business Correspondence and Report Writing (2nd Ed.)	Tata McGraw Hill, New Delhi	1994
82.	Krishna Mohan, Raman, Meenakshi	Effective English Communication	Tata McGraw-Hill, New Delhi	2000
83.	Raman, Meenakshi [Ed.]	English Language Teaching	Atlantic Publishers and Distributors Ltd, New Delhi	2004
84.	Raman, Meenakshi, Singh, Prakash	Business communication.	Oxford University Press	2006
85.	Lata, Pushp Sanjay Kumar	Communicate or Collapse	Prentice Hall of India, New Delhi	2007
86.	Krishna, M., Sharma Sangeeta	Frozen Ripple	Future Publishers, Howrah	2007
87.	Sarangi, J., Mishra Vinod	Explorations in Australian Literature	Sarup and Sons, New Delhi	2007
88.	Meenakshi Raman and Sangeeta Sharma.2017.	Technical Communication- Principles and Practice For Gujarat technological University. .	2nd Edition. OUP: New Delhi..	2017
89.	Raman, Meenakshi Sangeeta Sharma	Technical Communication: English Skills for Engineers	OUP, New Delhi.	2009

S.No.	Author	Title	Publisher	Year
90.	Pushp Lata and Sanjay Kumar	Communicate to Conquer: A Handbook of Group Discussion and Job Interviews with DVD	New Delhi: Prentice Hall of India (PHI)	2010
91.	Chauhan Gajendra S. and Sharma Sangeeta	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015
92.	Chauhan Gajendra S.	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015
93.	Sharma Sangeeta,	Technical Communication- Principles and Practice (Coauthor)	Third Edition. OUP: New Delhi.	2015
94.	PushpLata	Co-author,Communication Skills,	Second Edition, New Delhi: Oxford University Press (OUP),	2015
Engineering				
95.	Nagrath I.J., Madan Gopal	Systems : Modelling and Analysis	Tata McGraw Hill, New Delhi	1982
96.	Nagrath I.J., Madan Gopal	Control Systems Engineering (Second Ed.)	Wiley Eastern, New Delhi	1982
97.	Subramanian, K.R.V., Kadayam, S.R.	System Simulation: An Introduction to GPSS	CBS Publishers, New Delhi	1992
98.	Gupta, A.	Systems Analysis	CBS, New Delhi	1993
99.	Bansal, R.C., Bhatti, T.S., Kothari, D.P.	Small Hydro Power System	Dhanpat Rai and Company	2004
100.	Ghosh, S.	Control Systems: Theory and Applications	Pearson Education	2004
101.	Gupta, Rajiv, Nagrath, I.J.	Introduction to Systems	New Age International Publishers	2005
102.	Ghosh, S.	Network Theory: Analysis and Synthesis	Prentice Hall of India	2005
Humanistic Studies				
103.	Prakash, Nirupama, Dash, Motilal	Conflict Resolution: Peace Development	Jain Brother, New Delhi	2004
104.	Dash, Motilal, Dhyani, Umesh	Entrepreneurship Culture	Allied Publishers, New Delhi	2005
105.	Sachdev, K.N.	Ethics: A Virtue Theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
106.	Sachdev, K.N., Maharana, S.K.	Perspectives on Indian Ethics	Icon Publishers, New Delhi	2007
107.	Maharana, Suryakant	Bhārtrhari on Word and Consciousness: The Advaita Perspective" in Dr. K.S.Prasad (ed.) Language and Mind The Classical Indian Perspective, Vol 2	Decent Books (D.K. Printworld Publishers), New Delhi, pp. 147-148	2008
108.	Prakash, Nirupama	Safe motherhood in globalized world	Routledge, London	2009
Instrumentation				
109.	Anand, M.M.S.	Electronic Instruments and Instrumentation Technology	Prentice Hall, New Delhi	2004
Mathematics/Physics				
110.	Bose, R.K., Joshi, M.C.	Methods of Mathematical Physics	Tata McGraw Hill, New Delhi	1984
Mathematics				
111.	Krishnamurthy, V., Mainra, V.P., Arora, J.L.	Introduction to Linear Algebra	Affiliated East-West Press Pvt. Ltd., New Delhi	1976
112.	Pant, J.C.	Project Management: CPM, PERT, CERT with Linear Programming (Third Ed.)	Jain Brothers, New Delhi	1994
113.	Patnaik, R.K.	Calculus - Differential and Integral	CBS Publishers, New Delhi	1994
114.	Pant, J.C.	Introduction to Optimization: Operations Research (Fifh Ed.)	Jain Bros., New Delhi	2000
115.	Prasad, Devi	Introduction to Numerical Analysis	Narosa, Publishing House	2005
116.	Johnson, R.A., Gupta, C.B.	Miller and Freund's Probability and Statistics For Engineers	Pearson Education, New Delhi	2005
117.	Prasad, Devi	Elementary linear algebra.	Narosa Publishing House	2006
118.	Ganesh, M.	Introduction to fuzzy sets and fuzzy logic.	Prentice-Hall of India	2006
119.	Mishra, B.N.,	Optimization: linear programming	Ane Books	2006

S.No.	Author	Title	Publisher	Year
	Mishra, B.K.			
120.	Dubey, Balram	Introductory Linear Algebra	Asian Books, New Delhi	2007
121.	Gupta, C.B.	Quantitative Methods	Asian Books, New Delhi	2007
122.	Sathpathi, D.K., Mishra, B.K.	Mathematical Modeling	Ane Books India, New Delhi	2007
123.	Ganesh, M.	Basics of Computer Aided Geometric Design : An Algorithmic Approach	IK International Publishing house Pvt. Ltd., New Delhi	2008
124.	Gupta, C.B., Mallik, K.	Engineering Mathematics-I	New Age Publications, New Delhi	2008
125.	Gupta, C.B., Mallik, K.	Engineering Mathematics-II	New Age Publications, New Delhi	2008
126.	Gupta, C.B.	Application of Optimization in Operations Research	IK International Publishing house Pvt. Ltd., New Delhi	2008
127.	Sharma, B.K.	A Text Book of Engineering Mathematics II	Asian Books Pvt. Ltd., New Delhi	2008
128.	Gupta, C.B.	Advanced Mathematics	NAIL, New Delhi	2009
129.	Krishnamurthy, V.	Combinatorics - Theory and Applications	East-West Press Pvt. Ltd., New Delhi. Also repub- lished by Ellis Horwood, U.K.	1985, 1986
130.	CB Gupta, SR Singh and Sandeep Kumar	Advanced Discrete Structure	IK International, New Delhi	2010
131.	DS Chauhan, KN Singh, Paresh Vyas, Rakesh Pandey, Subhash Yadav, Trilok Mathur	Beez Ganita (Algebra)	Vardhman Mahaveer Open University, Kota	2010
132.	SP Goyal, AK Goyal, Vimlesh Soni, Sunil Saxena, Trilok Mathur	Sammishra Vishleshan (Complex Analysis)	Vardhman Mahaveer Open University, Kota	2010
133.	Gupta, Kantesh, Garg, Atul, Shekhawat, K.S., Shekhar Chandra, and Goswamy, Pranay	Differential Equations, Calculus of Variations and Special Functions	Vardhaman Mahaveer Open University, Kota	2010
134.	Gupta, C.B., Singh S. R. and Kumar, Mukesh	Engineering Mathematics	Tata MCGraw Hill Education, New Delhi	2015
Management Studies				
135.	Dhyani, Umesh, Dash, Motilal, Kumar, Arya	Grass Roots Entrepreneurship-Strategy for Development	Jain Book Agency	2004
136.	Sharma, Sangeeta, Singh, Raghuveer	Advertising: Planning and Implementation.	Prentice-Hall of India	2006
137.	Anubhavananda Swami, Kumar, Arya	Management with Difference	Ane Books India, New Delhi	2007
138.	Bhat, Anil, Kumar, Arya	Management – Principles, Processes and Practices	OUP, New Delhi.	2008
139.	Chaudhary, Omvir & Singh, Prakash	Principals of Management	New Age International Publishers	2011
140.	Mechanical Engineering			
141.	Vaishwanar, R.S., Lakshmi-narayanan, V.	A Textbook of Practical Geometry (Ninth Ed.)	Jain Brothers, New Delhi	1992
142.	Mittal, R..K, Nagrath, I.J.	Robotics & Control	TMH	2003
143.	Parasar, B.S.N., Mittal, R.K.	Workshop Practice	Prentice Hall of India	2003
144.	Mittal, R.K., Sharma, N.N.	Emerging Mechanical Technology	RPS Press, Chennai	2007
145.	Prakash, Ravi	Nondestructive Testing Techniques	New Age Int. Publishers, New Delhi	2007
146.	Parashar, B.S.N.	Cellular manufacturing systems	PHI, New Delhi	2009
Pharmacy				
147.	Parimoo, P.	Textbook of Medicinal Chemistry	CBS, New Delhi	1995
148.	Mithal, B.M.	Textbook of Pharmaceutical Formulation (Sixth Ed.)	Vallabh Prakashan, New Delhi	1997
149.	Mithal, B.M.	Textbook of Forensic Pharmacy (Tenth Edition)	Vallabh Prakashan, New Delhi	1998
150.	Parimoo, P.	Pharmaceutical Analysis	CBS, New Delhi	1998

S.No.	Author	Title	Publisher	Year
151.	Mithal, B.M., Saha, R.N.	Handbook of Cosmetics	Vallabh Prakashan, New Delhi	2000
152.	Sriram, D. Yogeeswari, P.	Medicinal Chemistry	Pearson Education, New Delhi	2007
Physics				
153.	Srivastava, Rajesh & Choubisa, Rakesh	Atomic and Molecular Physics	Narosa Publishing House	2011
Science & Technology				
154.	Mitra, C.R., Mandke, Parimal	S & T in Action	Prentice Hall, New Delhi	1988
155.	Mitra, C.R., Mandke, Parimal	Managing S&T – Conceptual Design of Management Tasks	Wiley Eastern Ltd, New Delhi	1989
Economics & Finance				
156.	Machiraju, H.R.	Working of Stock Exchanges in India	Wiley Eastern, New Delhi	1994
157.	Machiraju, H.R.	Principles and Practice of Merchant Banking	Wiley Eastern, New Delhi	1994
158.	Arya Kumar and Anil Bhat	Principles of Management-Competencies/Processes/ Practices/ 2nd edition of the book	Oxford University	2016
B. Other Than Text Books				
159.	Misra, S.D.	Amarakosh with Krishnamitra's Commenty in Sanskrit	Indira Prakashan, Patna	1972
160.	Sharma, R.C.	An approach to King Lear	McMillan, Madras	1975
161.	Mehta, H.C.	Science and Society in the University	Jain Bros., New Delhi	1976
162.	Prasad, S.N.	Studies in Gunedhya	Choukhamba Or-ientalia, Varanasi	1977
163.	Gaur, V.P.	Mahatma Gandhi : A study of his Message of Non- violence	Sterling, New Delhi	1977
164.	Krishna Mohan (Ed.)	Higher Education – A BITS Experiment	BITS, Pilani	1977
165.	Tewary, V.K.	Mechanics of Fibre Composites (International Edition)	Wiley Eastern, New Delhi John Wiley, New York	1978
166.	Prasad, S.N.	Katha Sarit Saagar Tatha Bhartiya Sanskriti	Choukhamba Or-ientalia, Varanasi	1978
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169.	Srivastava, G.P., Tiwari, S.Y.	Special Relativity (Hindi)	Rajasthan Hindi Granth Akadami, Jaipur	1979
170.	Mandke, V.V.	BITS Practice School, A case study in Industry- University Collaboration	BITS, Pilani	1980
171.	Krishna Mohan (Ed.)	Practice School: A New Concept in Higher Education	BITS, Pilani	1980
172.	Sharma, R.C. & others	Scientific Contexts	Tata McGraw Hill, New Delhi	1980
173.	Prasad, S.N.	Kalyanamalla's Anangaranga on Indian Erotics	Choukhamba Ori-entalia, Varanasi	1982
174.	Sharma, R.C. (Ed.)	Modern India, Shifting Perspectives, in honour of Dr. C.R. Mitra	S. Chand & Co., Delhi	1982
175.	Gulati, R.R.	Monochrome & Coloured Television	Wiley Eastern, New Delhi	1983
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181.	Rai, R.S.	Elements – Old & New	NCERT, New Delhi	1990
182.	Rai, R.S.	Applications of Nuclear Radiations	NCERT, New Delhi	1990
183.	Chaturvedi, P.D., Krishna Mohan, Pathak, S.N. (Ed.)	An Improbable Achievement – BITS – A profile of Change	Wiley Eastern Ltd., New Delhi	1990
184.	Krishnamurthy, V.	Culture, Excitement and Relevance of Mathematics	Wiley Eastern Publications, New Delhi	1990
185.	Krishnamurthy, V.	Ten Commandments of Hinduism	Wiley Eastern	1994
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189.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics	Prentice Hall of India	2004
190.	Sharma, Sangeeta, Singh, Raghuvir (Guest Ed.)	International Journal of Communication (Vol. 14)	Bahri Publications, New Delhi	2004
191.	Raman, Meenakshi [Ed.]	Critical Perspective in American Literature	Atlantic Publishers and Distributors Ltd., New Delhi	2005
192.	Raman, Meenakshi, Sharma, Sangeeta, Mishra, Binod [Ed.]	Communicating at Work Shifting Paradigms and Emerging Trends	Jain Brothers, New Delhi	2005
193.	Mishra, Binod [Ed.]	Existential Concern in Novels of Mulk Raj Anand	Adhyayan Publishers & Distributors, Delhi	2005
194.	Ghosh, S.	Control Systems for the JNTU	Pearson Education	2005
195.	Sachdev, Kumar Neeraj	Ethics: A Virtue-theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
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202.	Mishra, Binod	Critical Response to Feminism.	Sarup & Sons Publishers, New Delhi	2006
203.	Mishra, Binod	Grammar in Use (A series of three books for Class VI, VII and VIII)	Arvind Publications, Meerut.	2006
204.	Ghosh, Smarajit	Signals and systems	Pearson Education	2006
205.	Fatmi, S.N.	Social Ecology and Agrarian Classes	Icon Publications, New Delhi	2006
206.	Modak, Pintu, Pareek, R.P.	Exercise and Diabetes Cardiovascular Disease and Obesity.	Jain Brothers, New Delhi	2006
207.	Gupta, S.P., Gupta, R.R. (Ed.)	QSAR and Molecular Modeling Studies in Heterocyclic Drugs I	Springer Verlag, Berlin	2006
208.	Parashar, B.S.N.	Elements of Manufacturing Processes	Prentice Hall of India	2006
209.	Modak, Pintu	Stretch and relax	Khel Sahitya Kendra, New Delhi	2009
210.	Krishna Mohan, Meenakshi Raman	Advanced Communicative English	TMH, New Delhi	2009
211.	Raman, Meenakshi	Soft Skills: Cornerstone of Professional Success	Jain Brothers, New Delhi	2009
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213.	Raman, Meenakshi, Sangeeta Sharma	Professional Communication for UPTU	OUP, New Delhi	2009
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215.	Sharma, Sangeeta	Pester power effect of advertising on Children	CIPS, Jaipur	2009
216.	Sharma, Sangeeta & Binod Mishra	Communication Skills for engineers and scientists	PHI, New Delhi	2009
217.	Mishra, Binod & Gajendra S. Chauhan	Communication in a globalised world	Authors Press, New Delhi	2009
218.	Lata, Pushp & Sanjay Kumar	Communicate to conquer	PHI, New Delhi	2009
219.	Raman, Meenakshi & Sharma, Sangeeta	Technical Communication	Oxford Higher Education	2011
220.	Geetha, B. & Sarwal, Amit	Exploring Science Fiction	SSS Publications, New Delhi	2011
221.	Modad, Pintu & Debnath, KK	Science of Sports Training: A Comprehensive Approach	Sports Publications, New Delhi	2011
222.	Swami Anubhavananda & Arya Kumar	Ethics in Management - Insights from Ancient Indian Wisdom 2nd Edition	ANE Books Pvt Ltd	2014
223.	Leonard.S.Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
224.	Rajiv Gupta and David James	Edited the papers of International Conference on Sports Engineering (ICSE 2017), October 23-25, Jaipur	Excel Printing, New Delhi	2017
225.	Bahurudeen, A, Prasanta K. Sahu, and Nikhil Saboo	Construction materials and technology", National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017	Sponsored by IIT Kharagpur.	2017
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228.	Jagadeesh Anmala	Rainfall-Runoff Modeling Using Artificial Neural Networks and Physically-based Model: Theory, Simulation, and Results	LAP Lambert Academic Publishing, Germany	2010
229.	D. Sriram, P. Yogeeswari	Medicinal Chemistry	Pearson Education, II edition	2010
230.	A. Sajeli Begum, A. B. Ray, M. Sahai	Non-conventional Lignans: Coumarinolignans, Falvonolignans and Stibenolignans" Progress in the Chemistry of Organic Natural Products	Springer Wien NewYork	2010
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232.	H.D. Mathur, N.C. Hien, N. Mithulananthan, D. Joshi, R.C. Bansal	Distributed Generation: A Power System Perspective" Chapter 22 in Handbook on Renewable Energy Technology	World Scientific Publishing Co., Singapore	2011
233.	Ashish K. Sharma and Navneet Gupta	MEMS Switches for RFApplications - A Review," Sensors and Biosensors, MEMS Technologies and its Applications, Second volume	Sensors & Transducers, Canada	2013
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238.	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Ozaa, Anil Bhanudas Gaikwad	Diabetes, diabetic complications and Flavonoids (Chapter-5)	Elsevier	2016
239.	Kalyani H. Barve, Yogesh A. Kulkarni, Anil Bhanudas Gaikwad	Nutraceuticals Therapeutic Agents for Inflammation (Chapter-7)	Elsevier	2016
240.	Mahaveer singh and H R Jadhv	Fast Dissolving oral Films, in Current Advances in fast Dissolving/ Disintegrating dosage form	Bentham Science	2016

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14.	Kumar, A.	e- Banking - Emerging Challenges to Indian Banks, Economics and Finance Association Annual Issue on Money Matters 2005
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16.	Kumar, A.	Managing Change in the Financial Industry through Convergence, Between the Lines, Monthly Newsletter of Management Group, April, 2005
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25.	Mishra, B.	Divine Blessings –a poem in English, "Musings", 2005
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31.	Prakash, N.	Relevance of Social Science Concepts to Health Systems: Eualgesic State Management, In the book Pain Updated - Mechanisms and Effect, Edited by Rashmi Mathur, Anamaya Publishers, New Delhi, pp. 280-286, 2006
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36.	Sharma, S.	Scaling the Inner Parnassus: Unlocking the Creativity, pp 21-22, Phoenix, Souvenir, 2005

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Department: Biological Sciences

1. Shilpi Garg, Vishal Saxena (2020) Reliability of Computational Tools in Molecular Research: Insights from A Case Study in Malaria Parasitology, Souvenir of National Workshop on Skill based Entomology; Ideal International E – Publication; ISBN:978-93-89817-16-4.

2. Subhra Dash, K. Lohitesh, and Sudeshna Mukherjee (2020).Cytoplasmic Signaling Circuitry: An Important Trait of Cancer from the book: Rediscovering Cancer From Mechanism to Therapy, Apple Academy Press, USA.Hard ISBN: 9781771886901 E-Book ISBN: 9781351166560.

3. Bhanot, V., Pareek, V. Fadanvis, S.V. and Panwar, J. 2020. Myco-degradation of plastics. In: New and Future Developments in Microbial Biotechnology and Bioengineering, Singh, J. and Gehlot, P. (Eds.), Elsevier, Amesterdam, Netherlands, pp. 25-34.

4. "Rai, A., Kanodia, H., Narwal,S., Tare, M. "Eye for an eye: A Comparative Account on Compound Eye of Drosophila melanogaster with Vertebrate Eye." Springer Nature Switzerland AG 2020 A. Singh, M. Kango-Singh (eds.), Molecular Genetics of Axial Patterning, Growth and Disease in the Drosophila Eye".

Department: Civil Engineering

1. Kamalesh Kumar, Gada Vivek, "Water Content Effect on Shear Strength Parameters in Coir Fiber Reinforced Pilani Soil: Recent Observations", Book Chapter in the book entitled Recent Developments in Engineering Research Vol. 1, Publisher: Book Publisher International, pp 1-5(published on 14 July, 2020).

2. Kamalesh Kumar, "Interrelation between Safe Bearing Capacity and Angle of Internal Friction of Pilani Soil", Book Chapter in the book entitled New Ideas Concerning Science and Technology Vol. 1, Publisher: Book Publisher International, pp 116-123(published on 27 October, 2020).

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4. S. B. Singh, S.V.R. Madappa, and Himanshu Chawla, "Emerging Trends of Advance Composite Materials in Structural Applications", Springer Nature (2020).

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2. Vyas T., Dhoble A.S., Pandey M., Singhvi G., Human microbiome as drug delivery system, Reference Module in Food Science, Elsevier, 2022, ISBN 9780081005965

3. Basu, D., & Pani, A. K. (2020). Back Pressure Monitoring of Power Plant Condenser Using Multiple Adaptive Regression Spline. In Emerging Research in Data Engineering Systems and Computer Communications (pp. 1-10). Springer, Singapore.

4. S. Chatterjee, I. Sarkar and K. Harish Kumar, Synthesis of thin film nanocomposite membranes and their application in dye removal from wastewater, in M. Shah, S. R. Couto (Eds.), Membrane-Based Hybrid Processes for Wastewater Treatment, Elsevier.

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1. G.S.S. Chalapathi, Vinay Chamola, Aabhaas Vaish, and Rajkumar Buyya, "Industrial Internet of Things (IIoT) Applications of Edge and Fog Computing: A Review and Future Directions", Security & Privacy Issues in Fog/Edge Computing, Jie Wu and Wei Chang (eds), Springer, 2020 (in press).

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5. Shukla, Tanu (2020). Professional Ethics for Organizational Development, Bloomsbury. [ISBN: 978-93-90358-46-5].

6. Virendra Singh Nirban. & Shukla, Tanu (2020). Social Informatics and Psychology:Theory and Practice, Bloomsbury. [ISBN: 978-93-90252-53-4]

7. Krishna Akhil Kumar Adavi, Hari Nair and Swaha Das, 'Gandhi and the 'race' question' in Sanjeev Kumar, ed., 2020, Gandhi and the contemporary world, Oxford and New York: Routledge, pp. 157-168.

8. Mayuresh Vijay Bhise,& Sailaja Nandigama. (2020). "Struggle for Living: The Story of Irular Tribe and The Forest Rights Act (FRA) Implementation in Tamil Nadu". In Deepak Kumar Yogi Eds., "Tribal Development: Experiences, Challenges and Opportunities" Book Enclave Publishers, Jaipur. Book Enclave Publishers, Jaipur. Pp. 187. ISBN: 978-81-8152-543-7.

9. Sailaja Nandigama, "A snapshot of Significant Issues in Tribal Development in India". Book Chapter in Deepak Kumar Yogi eds. 'Indian Tribes and Development Issues', Book Enclave Publishers, Jaipur.

10. Aayushi Malhotra, Sailaja Nandigama, & Pushp Lata. "The Cornered Talks- Discussing Gendered Communication in Tribal Development in India". Book Chapter in Deepak Kumar Yogi eds. 'Indian Tribes and Development Issues', Book Enclave Publishers, Jaipur.

Department: Mathematics

Book Published

1. Kulshrestha, R. Shekhar, C., Jain, M., Chakravarthy, S.R.: 'Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach', CRC Press (in press).

Book Chapter Published

1. Shekhar, C., Kumar, N., Gupta, A. and Tiwari, R.K.: 'Finite capacity tandem queueing network with reneging', in R. Kulshrestha, C. Shekhar, M. Jain, S.R. Chakravarthy (eds.) Mathematical Modeling and Computation of Real Time Problems: An Interdisciplinary Approach, CRC Press (in press).

2. Shekhar, C., Varshney, S. and Kumar, A. (2020): 'Reliability and Vacation: The critical issue', in M. Ram and H. Pham (eds.) Advances in Reliability Analysis and its Applications, Springer Series in Reliability Engineering, Springer, Cham, pp. 251-292.

Department of Mechanical Engineering

1   Inverse Heat Conduction and Heat Exchangers, DOI: 10.5772/intechopen.80096, ISBN: 978-1-78985-178-6, Print ISBN: 978-1-78985-177-9, eBook (PDF) ISBN: 978-1-83962-384-4, Published: December 2nd 2020., S. Bhattacharyya and R. C. Mehta, Scopus.

2   ReValue project Report–D1. 3: Report on energy efficient refrigeration systems-Surimi case, ISBN: 978-82-7174-394-9., Published: December 2nd 2020., M. S. Dasgupta, S. Routroy,, S. Bhattacharyya, A. Sultan, S. K. Saini, K. N., Widell and M. Thakur, Scopus.

3   ReValue Project Deliverable 1.2 - Logistics and Cold Chain Management Concepts - OC2020 A-094, SINTEF Ocean AS, 2020., https://hdl.handle.net/11250/2675576, Research Council of Norway (RCN)/281262, M S Dasgupta, S Routroy, S Bhattacharyya, A Sultan, S K Saini, K Gupta, N Kaushik, K N Widell, G M Tveit and M Thakur, Scopus.

4   Applications of Heat Transfer Enhancement Techniques: A State-of-the-Art Review, IntechOpen, DOI: 10.5772/intechopen.92873., Suvanjan Bhattacharyya, Devendra K. Vishwakarma, Sanghati Roy, Ranjib Biswas and Mohammad Moghimi Ardekani", Scopus

5   Application of optimization and statistical techniques in post-harvest supply chain: a systematic literature survey, Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach (Accepted) T&F Group affiliated, Rahul Priyadarshi, Srikanta Routroy and Girish Kant Garg, Scopus

6   Six Sigma Enablers for Incoming Material Quality Improvement and Their Interaction in Supplier Domain for Indian Manufacturing Scenario, Smart Innovation, Systems and Technologies, Vol. 206, Biplab Das et al. (Eds): Modeling, Simulation and Optimization, Springer Nature.", Sudeep Pradhan, Ravi Reosekar and Srikanta Routroy, Scopus

7   Enhancing Future Skills and Entrepreneurship, Springer Nature Switzerland AG, ISBN 978-3-030-44248-4. https://www.springer.com/gp/book/9783030442477, Kuldip Singh Sangwan and Christoph Herrmann, Scopus.

8   Studies on Performance Improvement of an R744 Transcritical Refrigeration System Using Dedicated Mechanical Subcooling, Advances in Air Conditioning and Refrigeration (pp. 33-44). Springer, Singapore,

1. Hazarika, M. M., Ramgopal, M., & Bhattacharyya, S., Scopus

9   Application of Fuzzy AHP Approach for Evaluation of Sustainable Energy Sources in India, Mathematical Modeling and Computation of Real-Time Problems: An Interdisciplinary Approach, CRC Press (ISBN 9781003055037), Saraswat, S. K., Digalwar A.K. and Yadav S.S., Scopus.

10 Development of Assessment Model for Selection of Sustainable Energy Source in India: Hybrid Fuzzy MCDM Approach, Intelligent and Fuzzy Techniques: Smart and Innovative Solutions (INFUS 2020) Advances in Intelligent Systems and Computing, vol 1197. Springer, Cham. https://doi.org/10.1007/978-3-030-51156-2_75., Saraswat, S. K., Digalwar A.K. and Yadav S.S., Scopus.

11 Application of Hybrid MCDM Approach for Selection of Sustainable Energy Sources in India, Mathematical Modeling,Computational Intelligence Techniques and Renewable Energy (MMCITRE2020) Advances in Intelligent Systems and Computing, Vol 1197, Springer, Saraswat, S. K., Digalwar A.K. and Yadav S.S., Scopus.

Department: Management

1. Tiwari P., Bhat A.K., Jyoti (2020). "A Field Research of Nascent Social Entrepreneur's Intention Formation in India" in: Premarajan R.K, Anneleen Forrier and Michael B. Arthur (eds) Career Dynamics in a Global World: Indian and Western Perspectives published by Edward Elgar Publishing Ltd. (In Press).

Department: Pharmacy

1. KM Adki, AP Laddha, Gaikwad AB, YA Kulkarni, "Potential Role of Seeds from India in Diabetes",Nuts and Seeds in Health and Disease Prevention, USA, 2nd Edition, Chapter 26, Pages 365-391, Academic Press, Elsevier, Published in 2020.

2. AP Laddha, KM Adki, Gaikwad AB, YA Kulkarni, "Beneficial Effects of Nuts from India in Cardiovascular Disorders", Nuts and Seeds in Health and Disease Prevention. 2nd Edition, Chapter 32, Pages 453-469, Academic Press, Elsevier, USA., Published in 2020.

3. Nikita Hinge, Murali Monohar Pandey, Gautam Singhvi, Gaurav Gupta, Meenu Mehta, Saurabh Satija, Monica Gulati, Harish Dureja, Kamal Dua, "Nanomedicine advances in cancer therapy", Advanced 3D-Printed Systems and Nanosystems for Drug Delivery and Tissue Engineering, Woodhead Publishing Series in Biomaterials: Elsevier., Published in 2020.

4. Arisha Mahmood, Gautam Singhvi, Prachi Manchanda, Murali Monohar Pandey, Sunil Kumar Dubey, Gaurav Gupta, Dinesh Kumar Chellappan, Ali Seyfoddin Kamal Dua, "Applications of 3D printing for the advancement of oral dosage forms", Advanced 3D-Printed Systems and Nanosystems for Drug Delivery and Tissue Engineering, Woodhead Publishing Series in Biomaterials: Elsevier, Published in 2020.

5. K. Ilango, Baburaj Baskar and Sankaranarayanan Murugesan, "Green chemistry assisted synthesis of natural and synthetic compounds as anticancer agents", Green Approaches in Medicinal Chemistry for Sustainable Drug Design, Elsevier Published in 2020.

6. Subhash Chander, Penta Ashok, Sankaranarayanan Murugesan, "Synthesis and biological significance of 1,2,3,4-Tetrahydroquinoline derivatives: A review", Biological Profile of Versatile Heterocyclic Moieties,Lambert Academic Publishers., Published in 2020.

7. Singhvi G, Hejmady S, Rapalli VK, Dubey SK, Dubey S, "Nanocarriers for topical delivery in psoriasis", Delivery of Drugs, pp. 75-96, Elsevier Publishers., Published in 2020.

8. Singhvi G, Rapalli VK, Nagpal S, Dubey SK, Saha RN, "Nanocarriers as potential targeted drug delivery for cancer therapy", Nanoscience in Medicine, Volume 1, pp. 51-88, Springer, Published in 2020.

9. Singhvi G, Rapalli VK, Waghule T, Gorantla S, Pemmadi RV, Patel R, Dubey SK, "Microparticulate drug delivery systems for targeting respiratory diseases", Targeting Chronic Inflammatory Lung Diseases Using Advanced Drug Delivery Systems. pp. 337-357, Academic Press. Elsevier, Published in 2020.

10. Kaveri M. Adki, Ankit P. Laddha, Manisha J. Oza, Gaikwad AB and Yogesh A. Kulkarni, "Terpenes and Terpenoids in Management of Diabetes & Cardiovascular Diseases", Phytotherapy in the Management of Diabetes and Hypertension, Volume 3, Bentham Science Publishers, Published in 2020.

11. Ankit P. Laddha, Kaveri M. Adki, Manisha J. Oza, Gaikwad AB and Yogesh A. Kulkarni, "Medicinal Plants from Genus Costus in the Management of Diabetes" Phytotherapy in the Management of Diabetes and Hypertension, Volume 4, Published in 2020.

12. Atish T. Paul, Ginson George, Nisha Yadav, Arjun Jewani, Prashant A Auti, "Pharmaceutical Application of Bio-actives from Alstonia Genus: Current Findings and Future Directions", Bioactive Natural Products for Pharmaceutical Applications, Springer Nature, Published in 2020.

Department: Physics

1. Crystalline Silicon Nitride Films on Si (111): Growth Mechanism, Surface Structure and Chemistry down to Atomic Scale, Subhashis Gangopadhyay. Multilayer Thin Films - Versatile Applications for Materials Engineering, Sukumar Basu, IntechOpen, DOI: 10.5772/intechopen.89412 (January 15th 2020).

LIST OF EQUIPMENTS PROCURED FOR 2020

S.No.	Indent No.	Particulars	Used for Courses / Thesis / dissertation Computational / Administrative Work
Admission			
1	2099	Laptop HP Notebook	
Accounts and Finance Section			
2	394	HP LaserJet Pro MFP M329dn, etc.	
3	523	HP 348 G7 Laptop	
AGSRD			
4	146	Dell Latitude 3400, etc.	
AUGSD			
5	1503	Dell Server Tower Model T30	
6	1536	HP LaserJet Pro MFP M427fdw Printer	
7	2098	Laptop HP Notebook	
8	2386	Kodak S2070 Scaner, etc.	
9	21	Laptop	
10	81	HP Laserjet pro MFP M427fdw	
11	324	Dell Laptops	
12	325	HP 200 AI0	
13	369	Screen Capture Device	
Biological SCiences			
14	1812	Samsung Convertible Refrigerator	
15	22	Precision 5820 XCTO Base	
16	110	LED Projector Casio XJ-V110W	
17	149	HP Desktops	
18	422	HP LaserJet 108w Printer	
19	588	Dell Precision 7920 Tower XCTO Base	
20	649	Quaternary HPLC with Auto Sampler & UV Detector	
21	650	Refrigerator 192 L	
22	651	QuantStudio 3 Real Tie PCR System	
23	652	Surepro Dual Filter Prefiltration System, etc.	
24	657	Lab Techno Sciences Plant Growth Chamber	
25	817	100 x Objective for Apotome Microscope	
26	868	ThermoMixer C Bundle	
27	937	Victor Nivo 3F - Multimode Plate Reader, etc.	
28	938	Thermo Fisher Scientific Forma Ultra Low Deep Freezer	
Chemical Engg.			
29	1743	Membrane Casting Unit	
30	2132	Shimadzu Gas Chromatograph	
31	2134	Hollow Fiber Membrane Preparation Setup, etc.	
32	331	Membrane Batch Filtration Test Setup	
33	476	LCD Projector Bare Lamp for Hitachi CP-X2530WN	
34	669	Dell Desktops	
35	812	Indus Portable Flue Gas Analyzer	
Chemistry			
36	2178	HP 280 G4 MT	
37	2367	Master Node - Tyrone Camarero DS400TN-28R, etc.	

38	**40**	Spectrophotometer	
39	**134**	Rotary Condenser	
40	**214**	Maxwellian Velocity Distribution, etc.	
41	**223**	11 Inch iPad, etc.	
42	**392**	MW772HN/A, 10.2 inch I Pad, etc.	
43	**414**	Chemistry Vacuum System, etc.	
44	**420**	Ultrasonic Cleaner	
45	**514**	300 W Open Frame Power Supply, etc.	
46	**605**	MPA 100 OptiMelt Automated Melting Point System	
47	**630**	Diaphragm Pump	
48	**889**	3KVA UPS System	
49	**923**	Magnetic Stirrer with hot plate	
50	**1013**	Magnetic Stirrer with hot plate	
CIIE			
51	**158**	Apple MacBook Air	
CIVIL			
52	**370**	Automatic Standalone Bomb Calorimeter	
53	**528**	27-inch iMac with Retina 5K display	
54	**1745**	Apple Mac Book Pro 16 inch, etc.	
55	**76**	Delta 3 KVA UPS	
56	**77**	A90 Intelligent GNSS Receiver 555, etc.	
57	**421**	10 CH LVDT data logger	
58	**823**	Core Drilling Machine, etc.	
59	**844**	Total Organic Carbon Analyzer	
CPU			
60	**623**	RO Livepure Pep Star Purification Technology	
CSIS			
61	**1715**	Dell Server	
62	**171**	Arduino Board, etc.	
63	**232**	Dell Poweredge R740XD Server	
64	**250**	HP laserjer Pro MFP M521dw Printer	
65	**296**	Thermal Network Camera, etc.	
66	**377**	HP Desktops	
67	**554**	Multifunction Laser Printer Canon MF244DW	
68	**555**	Laptop: 13 inch Macbook Air, etc.	
69	**556**	PTZ Pro 2 Camera - Logitech PTZ Pro 2, etc.	
Director Office			
70	**1796**	HP Color LaserJet MFP M479dw Printer	
Economics			
71	**1017**	Dell Server	
72	**1018**	Dell Optiplex 5080 Tower XCTO	
73	**2014**	HP Proone-400 G4	
EEE			
74	**2031**	Fluke Digital Multimeter	
75	**2032**	Permanent Magnet Moving Coil	
76	**2033**	Educational Practice Board	
77	**2034**	Transformer, etc.	
78	**2035**	MCBSTM32F400 Evaluation Board	
79	**2036**	DCPS	
80	**2107**	Waspmote LoRa, etc.	
81	**2136**	Comm Sys Teaching bundle, etc.	

82	2305	Yantrika Dead Weight Tester, etc.	
83	244	Magnetic Levitation	
84	473	Dell Optiplex 3070 Tower XCTO	
85	482	New Inspiron 13, etc.	
86	483	Printer HP laserjet Pro MFP M226dn	
87	486	Reactor X 150 Robot Arm, etc.	
88	487	Turtlebot 3 Burger	
89	670	HP 200 Pro G422 All in one PC, etc.	
90	905	HP LaserJet Pro M1136 MFP Printer	
91	982	Single Phase Rectifier Trainer, etc.	
92	984-1	Pulse Generator, etc.	
93	984-2	Digital Storage Oscilloscope,etc.	
94	985	Digital Funcation IC tester	
95	986	Multioutput DC Power Supply, etc.	
96	987	Fluke Make TRMS Multimeter	
EMU			
97	1624	1.0 Ton LG Dual Inverter Split A.C.-3 No.s	
98	1755	2 Ton LG Dual Inverter Split AC, etc.	
99	2109	Submersible Pump	
100	2402	Aster PO650pH meter with regular plastic threaded sensor	
101	2403	Heavy Duty Commercial Ride-on Mower	
102	39	1 ton LG Dual Split AC, etc.	
103	222	Submersible Pump	
104	725	Grundfos make hydropneumatic system panel	
105	990	Light Dependent Relay	
106	1010	LG 2 Ton Dual Inverter Split AC	
ERP			
107	2224	MacBook Pro, Part No. MUHR2	
FAD			
108	262	Dell Latitude 3400, etc.	
GAU			
109	1695	HP Laserjet Pro MFP M226DW Printer	
110	25	Dell Optiplex 7070 Minitower MLK	
111	117	Dell OptiPlex 3070 MT XCTO, etc.	
112	436	Dell Latitude 3400, etc.	
HSS/HULA			
113	492	Canon MF746CX	
114	390	HP AIO	
I.U.			
115	323	Dell Latitude 3410	
116	568	Casio LED Projector, etc.	
117	645	Casio LED Projector, etc.	
IKA Cell			
118	408	Casio Projector	
119	480	HP Color Laserjet Pro MFP M479dw Printer	
IPC			
120	1783	HP Elitebook X360	
121	1798	Delta make 3 KVA UPS	
122	2298	Delta make 3 KVA UPS	
123	2371	Rack Mounting Server	
124	2372	HP Elite Dragonfly, etc.	

125	2373	HP Color LaserJet ProM452dn Printer, etc.	
126	2	CCTV Camera, etc.	
127	8	Rack Mounting Server	
128	9	HP Desktops	
129	88	MX104 Promotional Bundle, etc.	
130	137	Zyxel ADSL Modem	
131	726	Delta make 1KVA ups	
Library			
132	727	CanonEOS M200 camera	
133	894	75" Multi Touch Panel	
Management			
134	1009	Lenovo D32q-20 monitor	
135	1649	Dell Latitude 3400 CTO	
Mathematics			
136	536	HP Desktops	
137	1005	27-inch iMac with Retina 5K display	
Mechanical Engg.			
138	2051	Fastcam Mini	
139	2135	Blower	
140	2306	PLC Training Kit	
141	116	Automatic Weather Station	
142	290	Diffusion Drier	
143	291	Atomizer Aerosol Generator, etc.	
144	292	GRIMM Portable Aerosol Spectrometer, etc.	
145	301	Heat Index WBGT Meter, etc .	
146	551	Workstation	
147	632	Sony Bravia 55 inch	
148	643	High-Performance Computing Machine	
149	644	Dell Inspiron 3880, etc.	
150	720	Syringe Pump Single	
151	820	Original Prusa i3 MK3S 3D Printer Color, etc.	
152	821	Logitech Meetup Logitech meet up conference camera, etc.	
153	822	Viewsonic Interactive Flat Panel, etc.	
Medical Centre			
154	1650	ECG machine, etc.	
155	1761	Microscope Camera ESAW 5MP, etc.	
156	2177	Magnus CH-201i TR Trinocular Microscope	
Pharmacy			
157	1623	Model FL-450XOFR, 450W Ozone Free Xenon Lamp	
158	1671	UV-Micro Cell Path Length	
159	1717	Oil Compressor	
160	1782	Blue Star Deep Freezer	
161	1792	Xenon Lamp	
162	1877	Ampoule filling and sealing machine, etc.	
163	1878	Aseptic Cabinet, etc.	
164	1974	HP LaserJet Pro 500 Color MFP M570dw	
165	2083	Digital Ultrasonic Cleaner, etc.	
166	2084	Samsung Convertible Refrigerator	
167	2216	Vortex	
168	603	HP S01-Pf0305 in Desktop	
169	715	Vertical Autoclave fully automatic, etc.	

170	**716**	Dry Bath with one Block	
171	**736**	Refrigerator 260 Lit Godrej	
172	**737**	Double Door Deep Freezer	
173	**824**	UV Chamber	
174	**825**	Melting Point Apparatus, etc.	
175	**826**	Waterproof pHTestr 20 Tester	
176	**827**	Digital Magnetic Stirrer	
177	**828**	Probe Sonicator, etc.	
178	**877**	Centrifuge 5430R, etc.	
179	**885**	Freeze -4 degree	
180	**886**	Deep Freezer	
Physics			
181	**1525**	Gamry Electrochemical Systems, etc.	
182	**1546**	All In One Cell, etc.	
183	**70**	Balanced Deuterium Tungsten Source, etc.	
184	**72**	Multi Spectrum Tube Housing for Spectral Calibration, etc.	
185	**538**	Dell Computers	
PSD			
186	**1975**	HP LaserJet Pro 500 Color MFP M570dw	
Repro			
187	**1644**	HP LaserJet Pro M1136 Multifunction Printer	
188	**1713**	HP 200 G3 AiO Desktop	
SRCD			
189	**1998**	HP Desktop	
SWD			
190	**1648**	HP ScanJet Pro 2500FL Faltbed Scanner	
191	**2399**	Parallel/Dips Bar, etc.	
192	**213**	Air Compressor with Tanki	
VFAST			
193	**845**	TCL 55" UHD Smart Android TV	
194	**968**	Avro Killer 600	
WILPD			
195	**166**	Dell Vostro, etc.	
Workshop			
196	**85**	MacBook Pro 13, 8GB,512GB, etc.	

LIST OF SOFTWARE PROCURED FOR 2020

S.No.	Indent No.	Particulars	Used for Courses / Thesis / dissertation Computational / Administrative Work
1.	167	Foxit - Foxit Pdf	AUGSD
2.	105	Genespring Software	Biology
3.	354	Graphad Prism 8.4	Biology
4.	719	Amber 20 Software Program	Biology
5.	854	1 Year academic License for GraphPad Prism 8.4	Biology
6.	976	Comsol Multiphysics, etc.	Chemical Engg.
7.	977	AspenOne for Universities	Chemical Engg.
8.	978	OriginPro V2020b Single User	Chemical Engg.
9.	2368	The MedeA Software Platform, etc.	Chemistry
10.	133	Upgrade to Q-Chem 5.3, Large site License	Chemistry
11.	2384	ALC up-gradation of Simulia Software	Civil Engg.
12.	2385	Roscience Software	Civil Engg.
13.	139	Plaxis 3D Suite Academic Perpetual License Single User	Civil Engg.
14.	395	Epsilon 1 Academica, etc.	Civil Engg.
15.	1006	Comsol Multiphysics, etc.	Civil Engg.
16.	1958	Oracle_Cloud_Credits_OCI_forPeopleSoft	ERP
17.	1959	Oracle Cloud Credits_ADW_OAC	ERP
18.	1960	Additional Licenses_People Soft	ERP
19.	1902	Stata / SE Perpetual GradPlan	Economics
20.	1826	NetSim Standard (R&D)	EEE
21.	160	Mathematica Ver. 12.xSingle user	EEE
22.	140	GH Software Perpetual License	ERP
23.	728	Adobe Creative Cloud for Teams	HSS
24.	2219	Microsoft OVS ES	IPC
25.	2257	Turnitin Originality Check: Growth Subscription	IPC
26.	2319	Winhome 10 SNGL OLP NL Acdmc	IPC
27.	238	Pulse NextDay Support for PSA5000, etc.	IPC
28.	242	Seqrite AV Software Subscription Renewal	IPC
29.	491	G Suite Enterprise for Education	IPC
30.	944	CWS Standard Configuration	IPC
31.	722	Bloomberg Terminal Software	Management
32.	2071	License for GastroPlus, etc.	Pharmacy
33.	613	Experimental Pharmacology Series	Pharmacy
34.	625	Dassault Systemes BIOVIA Material Studio Teaching Suite	Pharmacy
35.	626	SeeSAR Software	Pharmacy
36.	838	Phoenix Package for Academic Research	Pharmacy
37.	1622	OriginLab Professional V2020	Physics
38.	71	Lumerical FDTD Solutions with Automation API	Physics
39.	843	Analysis and Design	PSD
40.	2086	WinPro 10 SNGL OLP NL Legalization GetGenuine	Repro
41.	608	Adobe Creative Cloud for Teams	Reprography
42.	1540	WinSvrSTD Core 2019, etc.	SDET
43.	760	Webex Licenses	SDET
44.	857	Adobe Creative Cloud for Teams	SDET
45.	1621	Migration of LABVIEW Software	WILPD
46.	328	Simcenter Amesim Academic Bundle, etc.	WILPD
47.	897	E Books Perpetual License	WILPD

SENIOR OFFICERS AT PILANI CAMPUS

Institute Wide:

Vice-Chancellor: Prof. Souvik Bhattacharyya

Acting Registrar: Prof. Bijay Kumar Rout

Chief, Finance Officer: Mr. Arun Khetan

Director-in Charge, International Programmes and Colloboration: Prof. Sudhirkumar Barai

Dean, Academic-Undergraduate Studies (AUGS): Prof. Ajit Pratap Singh

Dean, Academic-Graduated Studies & Research (AGSR): Prof. M. B. Srinivas

Dean, Alumni Relations: Prof. Arya Kumar

Dean, Faculty Affairs: Prof. Souri Banerjee

Dean, Practice School: Prof. Srinivasa Prakash Regalla

Dean, Sponsored Research and Consultancy: Prof. Sunil Bhand

Dean, Work Integrated Learning Programmes: Prof. S. Gurunarayanan

Campus Specific:

Director: Prof. Sudhirkumar Barai

Dean, Administration: Prof. Sanjay Kumar Verma

Associate Dean, Academic- Undergraduate Studies: Prof. Suresh Gupta

Associate Dean, Academic- Graduate Studies & Research: Prof. Jitendra Panwar

Associate Dean, Faculty Affairs: Prof. Anshuman Dalvi

Associate Dean, Sponsored Research and Consultancy: Prof. Navneet Gupta

Associate Dean, International Programmes and Collaboration: Prof. Dalip Kumar

Associate Dean, Work Integrated Learning Programmes: Prof. P. Srinivasan

Associate Dean, Practice School: Prof. Anil Gaikwad Bhanudas

Associate Dean, Student Welfare : Prof. Srikanta Routroy

Associate Dean, Alumni Relations : Prof. Rajeev Sakhuja

Off-Campus:

Associate Dean, WILP:

1. Prof. Gopalakrishnan Venkiteswaran, Chennai

2. Prof. P.B. Venkataraman, Hyderabad

Associate Dean, Practice School : Prof. Annapoorna Gopal, Bangalore

UNIT CHIEFS

UNIT	NAME
1. Centralised Purchases	Prof. N.V. Muralidhar Rao
2. Placement	Prof. Hari Om Bansal

HEADS OF DEPARTMENTS

DEPARTMENTS	NAME
1. Biological Sciences	Prof. P R Deepa
2. Chemical Engineering	Prof. Banasri Roy
3. Chemistry	Prof. Ram Kinkar Roy
4. Civil Engineering	Prof. Anupam Singhal
5. Computer Science & Information Systems	Prof. Sudeept Mohan
6. Economics & Finance	Prof. Arun Kumar Giri
7. Electrical & Electronics Engineering	Prof. Hitesh Dutt Mathur
8. Humanities & Social Sciences	Prof. Devika
9. Management	Prof. Leela Rani
10. Mathematics	Prof. Devendra Kumar
11. Mechanical Engineering	Prof. Mani Sankar Dasgupta
12. Pharmacy	Prof. Hemant R Jadhav
13. Physics	Prof. Rakesh Choubisa

FACULTY-IN-CHARGE/OFFICIAL

CENTRE/SECTION/ENTITY	NAME
1. First Degree Admission Tests	Dr. S.U. Belgamwar
2. Higher Degree & Ph.D. Admission Tests	Prof. Shamik Chakraborty
3. Estate Management	Prof. Dipendu Bhunia
4. VFAST, Transport & Cafeteria	Dr. Pankaj Kumar Sharma
5. Centre for Innovation, Incubation & Entrepreneurship	Dr. Satyendra Kumar Sharma
6. Educational Technology Support	Dr. Virendra Singh Shekhawat
7. Institutional Knowledge Analysis Cell	Prof. Vishal Saxena
8. Infant Care Centre and Institute Functions	Prof. Shilpi Garg
9. Societal Development (NSS and Nirmaan)	Dr. Ashish Tiwari
10. Publications and Media Relations, Annual Report	Prof. G. S. Chauhan
11. Time Table	Dr. Hari Babu Kotakula
12. Registration & Counseling	Dr. Jitendra Singh Rathore
13. Information Processing Centre and Software Development and Educational Technology	Prof. Yashvardhan Sharma
14. Instrumentation & Reprography	Prof. Sheth Pratik N.
15. Teaching Learning Center	Prof. Pushp Lata
16. Security Section	Shri Kishore Singh
17. Medical Center	Dr. Rajiv Gupta, CMO
18. Human Resources Section	Mr. Arvind Soundarajan
19. Workshop	Prof. K.S. Sangwan

CHIEF WARDEN

Prof. Navin Singh

WARDENS

BHAWAN	NAME
1. Ashok	Dr. Kumar Sankar Bhattacharya
2. Bhagirath	Dr. Shuvendu Narayan Patel
3. Budh	Dr. Sharad Shrivastava
4. Gandhi	Dr. Nitin Chaturvedi
5. Meera	Prof. (Ms.) Surekha Bhanot
	Prof. (Ms.) Rakhee
6. Malviya - A,B,C	Dr. Trilok Mathur
7. Ram	Prof. Dipendu Bhunia
8. Rana Pratap	Dr. Amol M Marathe
9. Krishna	Dr. Arun Kumar Jalan
10. Sir C.V. Raman	Dr. Paritosh Shukla
11. Vishwakarma	Dr. Krishnendra Shekhawat
12. Srinivas Ramanujan	Dr. Krishna M
13. Shankar	Dr. Sunil Kumar Dubey
14. Day Scholar (Warden)	Prof. Ravi Kant Mittal

NON-RESIDENT WARDENS

BHAWAN	NAME
1. Ashok	Dr. Harikrishanan Gopinadhan Nair
2. Bhagirath	Dr. Murali Palla
3. Budh	Dr. Niladri Sarkar
4. Day Scholar	Prof. Ravi Kant Mittal
5. Gandhi	Prof. Devendra Kumar
6. Krishna	Dr. Bibhas Ranjan Sarkar
7. Malaviya	Dr. Biswanath Layek
8. Malaviya (MSA)	Dr. Praveen Kumar A V
9. Meera	Prof. Devika
	Dr. Sailaja Nandigama
10. Ram	Dr. M M Pandey
11. Rana Pratap	Dr. Kamlesh Tiwari
12. Sir C.V. Raman	Dr. Rajiv Taliyan
13. Srinivas Ramanujan	Dr. Srinivas Appari
14. Vishwakarma	Dr. Prashant U Manohar
15. Shankar	Dr. Ashish Tiwari

LIBRARIAN

Shri Giridhar M. Kunkur

HEAD, ACCOUNTS & FINANCE

Shri Satyen Sharma

BITS Pilani

annual

report 2020

Part B2: K.K. Birla Goa Campus

CONTENTS

BITS PILANI - KK BIRLA GOA CAMPUS

B2.1   SENIOR OFFICERS

New appointments

During the year, the following new administrative appointments were made:

The names and designations of senior officers of Goa Campus are given in 'Annexure B2-1'.

B2.2   ADMISSIONS

The number of students admitted in each of the semester is given below.

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (PhD)	Total
Second Semester 2019-20	-	-	35 (17)	35 (17)
First Semester 2020-2021	945 (104)	177 (36)	37 (13)	1159 (153)

The programme-wise details are given in Annexure B2-2 (Part B2).

B2.3   DUAL DEGREES AND TRANSFERS

(a) Dual Degree

During the Academic year 2020-2021, 287 students were permitted to work concurrently for two first degrees under the Dual Degree scheme. See Annexure B2-3 (Part B2) for details.

(b)   Transfer

During the Academic year 2020-21, 10 students [(i) Within same tier :09; (ii) Integrated First Degree to Higher Degree : 00, (iii) Higher Degree to Ph.D.: 01] were permitted to transfer.

B2.4   ACADEMIC CALENDAR

The Academic year of the Institute is divided into two semesters and a summer term.

	Starting Date	Ending date	Number of Instruction days (excluding examination days)
Second Semester 2019-2020	6-Jan-2020 29-June-2020	29-April-2020 8-July-2020	80 9
First Semester 2020-2021(continuing students)	17-Aug-2020	16-Dec-2020	85
First Semester 2020-2021(New Admission 2020)	2-Nov-2020	26-Feb-2020	79
Summer Term 2019-2020	18-May-2020	27-June-2020	39

B2.5   COURSES OFFERED

The number of courses, offered during the year **2020** is as follows:

	Number of Courses offered
Second Semester 2019-2020	303
First Semester 2020-2021(continuing students)	271
First Semester 2020-2021(New Admission 2020)	72
First semester 2020-21 *(24 courses are repeated between continuing and new admission)	319
Summer Term 2019-2020	18

During the year, the following new courses were introduced.

S.No	Comp code	Course No	Course Title
1	21372	BIOT F346	GENOMICS
2	22334	BITS E583	CASE STUDIES I
3	22333	BITS G565	DISSERTATION
4	22305	CHE F423	MEMBRANE SCIENCE AND ENGG
5	22306	CHE F424	RHEOLOGY OF COMPLEX FLUIDS
6	22150	CHE G556	ELECTROCHEMICAL ENGINEERING
7	21585	CHEM F335	ORGANIC CHEM & DRUG DESIGN
8	21391	ECE F341	ANALOG ELECTRONICS
9	21390	ECE F344	INFO THEORY & CODING
10	21706	ECE F377	DESIGN PROJECT
11	21396	ECE F416	DIGITAL COMMUNICATION
12	21393	ECE F472	SATELLITE COMMUNICATION
13	21260	EEE F416	DIGITAL COMMUNICATION
14	21855	EEE F474	ANTENNA THEORY AND DESIGN
15	20471	EEE G613	ADVANCED DIGITAL SIGNAL PROCESSING
16	22322	HSS F371	CITIES-LIFE ISSUES & CONFLICTS
17	22323	HSS F372	INTRODUCTION TO SOCIAL PSYCHO
18	22324	HSS F373	SHAKESPEARE AND POPULAR CULTURE
19	22325	HSS F374	URBAN MODRN & RENEWAL OF PARIS
20	22379	ME F112	WORKSHOP PRACTICE
21	22394	ME F216	MATERIAL SCIENCE AND ENGINEERING
22	22396	ME F217	APPLIED THERMODYNAMICS
23	20262	ME G532	MACHINE TOOL ENGINEERING
24	20056	MPH G510	BIOSTATISTICS & COMPUTERS IN PUBLIC HEALTH
25	22300	SAN G514	SANITATION FINANCING & PROJECT MANAGEMENT
26	22301	SAN G515	EMERGENCY SANITATION & LEADERSHIP

B2.6   REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
Second Semester 2019-2020	3989
First Semester 2019-2020	4374
Summer Term 2019-2020	896

Details of Registration of students for the Second Semester 2017-2018 are given in **Annexure B2-4.**

B2.7   ACADEMIC AND PROFESSIONAL COUNSELING

During the year, the Academic Counseling Board (ACB), estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

	II Semester 2019-2020	I Semester 2020-2021
Total number of students under the purview of ACB at the beginning of the semester	125	120
No. of students declared out of its purview at the end of the semester	73	84
No. of students who left the Institute during the semester	0	0
No. of new students who came under the purview of ACB at the end of the semester	68	10
Total No. of students under the purview of ACB during the next semester	120	36

Academic Counseling cell organized the counseling of students who were under the purview of ACB. It involved the involvement of faculty members as advisors and an external professional counselor whom the students could consult. The parents of students were also called to interact with the ACB.

B2.8   AWARD OF DEGREES AND MEDALS

Award of Degrees

During the year, a total of 736 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
87th Award (vide Board of Governors meeting)	
87.01 held on 09.6.20	4(0)
87.02 held on 18.6.20	2(0)
87.03 held on 03.8.20	5(3)
87.04 held on 04.8.20	936(137)
87.05 held on 11.8.20	2(2)
88 Award (vide Board of Governors meeting)	
88.01 held on 01.12.20	3(1)
88.02 held on 30.12.20	3(2)
88 Award 88.03 88.02& 88.03 (subject to approval from vide Board of Governors meeting in its next meeting)	69(2)
Total:	**1024(147)**

Statistical details of these degrees are given in 'Annexure B2-5, Annexure B2-6'

Award of Medals for Academic Year 2018-2019

The list of students who were awarded various medals, for the students graduated at the end of First Semester, Second Semester and Summer Term of the academic year 2018-2019 in the following table:

S.N.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
Integrated First Degree Programmes (No. of students: 607)						
1	2016A7PS0365G	GARGI BALASUBRAMANIAM	F	9.78	FIRST	GOLD
2	2016A3PS0106G	AKHIL NORI	M	9.74	SECOND	SILVER
3	2016A7TS0022G	GUNJAN CHHABLANI	M	9.65	THIRD	BRONZE

B2. 9   CAMPUS INTERVIEWS AND PLACEMENT FOR THE AY 2019-20

Number of companies which conducted campus interviews	163
No of Students interviewed	7045
No of offers made	596

The statistics (discipline-wise) and the list of organizations which conducted campus interviews during the year is given in Annexure B2-7 (Part B2).

B2.10   DEPARTMENT-WISE REPORT

In the following pages, a brief summary of the main activities and achievements of different departments of the campus is highlighted.

B2.10.1 Department: Biological Sciences

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	06
Associate Professors	08
Assistant Professors	06
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department   : Prof. Srikanth Mutnuri

Contact details   : srikanth@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 46

Part Time   : 05

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Rehan A Deshmukh	2015PHXF0012G	Development of Rapid and Sensitive Molecular Methods for the Detection and Quantification of Escherichia Coli in water.	Prof. Utpal Roy	Co-Supervisor Professor Sunil Bhand
2	Joseph R.D. Fernandes	2015PHXF0014G	Management of Polycystic Ovarian Syndrome (PCOS) by Regulating the Hypothalamic-Hypophyseal-Gonadal Axis (HPG axis) and the Adipokine Profile	Dr. Arnab Banerjee	(DAC Members) Prof. Dibakar Chakrabarty and Dr. IndraniTalukdar
3	Priya Sharma	2015PHXF0003G	Microbial Diversity and Nutrient Recovery using Microbial Fuel Cells	Prof. Srikanth Mutnuri,	(DAC Members) Prof. Kundan Kumar, Prof. S.D. Manjare
4	Guruprasad Talekar	2015PHXF0402G	"Design and Development of Electrochemical System for Decentralized Wastewater Treatment and Energy Recovery"	Prof. Srikanth Mutnuri	(DAC Member) Prof. SD Manjare
5	Bibhudatta Mishra	2015PHXF00013G	"Relating RNA and Protein Structure Variation with Pathogenicity and Screening for Small Molecules with Pan-Serotype Activity in Dengue: A Bioinformatics Study"	Dr. Raviprasad Aduri	(DAC Members) Dr. Ramprasad S. Joshi and Dr. Sukanta Mondal

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Empowered septic tank as a decentralized wastewater treatment system - Second Phase	Biological Sciences	Srikanth Mutnuri	Korneel Rabaey, Ghent University, Belgium	DBT BIRAC and Bill & Melinda Gates foundation	Ghent University Belgium	151.92 Lakh

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
2	Co-digestion of STP secondary sludge with organic wastes in urban/peri-urban areas, process optimization, scale up and field demonstration	Biological Sciences	Srikanth Mutnuri	P Raman, TERI, PV Rao, NIT Warangal, Krishnakumar NIIST Trivandrum	DST	TERI, NIT Warangal, NIIST Trivandrum	500000
3	Mobile Treatment Unit (MTU) Field Study with Water, Sanitation and Hygiene Institute (WASH Institute)	Biological Sciences	Srikanth Mutnuri	Srikanth Mutnuri	WASH Institute		**1000640**
4	Biocompatible nano-vehicle mediated delivery of siRNA into stem cells for targeting pluripotency markers as a potential therapeutic approach in regenerative medicine	Biological Sciences	Meenal Kowshik	Indrani Talukdar, Sutapa Roy Ramanan	CSIR		**3316000**
5	Development of Therapeutic Phages to Combat Drug Resistant Staphylococci Infection (Approved – Not Sacntioned)	Biological Sciences	Malabika Biswas	Prof. Samit Chattopadhyay, Dr. Susmita Ghosh (collaborator)	DST CRG	Prof. Samit Chattopadhyay, Dr. Susmita Ghosh (collaborator)	**4000000**
6	Mitigation of salt stress in Oryza sativa by over expression of ABA dependent With No Lysine Kinase 9 (Approved – Not Sacntioned)	Biological Sciences	Kundan Kumar		SERB CRG		**4271340**
7	DBT BUILDER- Approved	DBT BUILDER	Chemistry, Chemical Eng and Computer Science		DBT		10 cr

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Impact of negative factors and importance of monitoring natural wetland ecosystem.	Biological Sciences	Srikanth Mutnuri	Rajiv Chaturvedi	Chief Conservator of Forests, Jharkhand	-	1700000
2	Study of efficacy of Quinacrine (QC) Non-small cell lung cancer cells.	Biological Sciences	Angshuman Sarkar	-	Goa Cancer Society	-	10,00,000
3	Targeting the amyloid matrix of staphylococcal biofilms for effective management of its recalcitrant infection	Biological Sciences	Nikita Admane	Sumit Biswas Supervisor	DHR	-	4700000
4	Role of MAR Binding Proteins in Human Diseases	Biological Sciences	Samit Chattopadhyay	-	Sir J C Bose National Fellowship (2020-2023) DST-SERB	-	5700000

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned (INR)
1	Generation 2 Reinvented Toilet (G2RT)	Biological Sciences	Shannon Yee Georgia Tech, USA Sonia Grego Duke University, USA, William Leon, Cranfield University, UK, Lotte Kristoferitsch, EOOS Austria, Harald Gründl, Austria, Chris Buckley, UKZN, South Africa, Srikanth Mutnuri, BITS Pilani Goa, India, Sayantani Sarkar, BITS Pilani, Goa India	Srikanth Mutnuri (CoI)	Bill & Melinda Gates foundation	**7325000 (Dollar – 99140.80 USD)**
2	"Integrated Track in Brain and Cognitive Sciences (iBRAIN)" under the Capacity Building in Higher Education 2019 scheme.	Biological Sciences	Veeky Baths	Prof. Boris Gutkin (Ecole Normal Superior, France) in collaboration with Prof. Veeky Baths (BITS, Pilani Goa Campus, India) Prof. Ramesh Mishra (UoH, India), Prof. Yury Shtyrov (Aarhus University, Denmark), Prof. Andriy Myachykov (Northumbria University, UK), Prof. Vasily Klucharev (National Research University, Higher School of Economics, Russia) and Prof. Raul Gainetdinov (Saint Petersburg State University, Russia).	**Erasmus**	**120,00,000**

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Novel Biofilm Resistant Coat for Implant Devices from Moringaoleifera Leaf Extracts.	Biological Sciences	Sumit Biswas	N.N. Ghosh	ICMR	N/A	36,00,000
2	Restoration of windowpane oyster (Placuna placenta Linnaeus, 1758).	Biological Sciences	Sumit Biswas	N/A	WTI	N/A	1,70,000
3	Studies on the effect of Russell's Viper Venom on regulation of cell morphology, apoptosis and further characterization of the active compound(s), ,	Biological Sciences	Dibakar Chakrabarty	Angshuman Sarkar	ICMR	-	28,00,000
4	"Exploration of Antifungal Lead Molecules from the Wild-type Bacillus subtilis RLID 12.1– purification and molecular characterization along with optimizing production".	Biological Sciences	Utpal Roy	Prof. Arunaloke Chakrabarti	DBT	PGIMER, Chandigard	48,69,000 3.5 years
5	"Fine napping of the chromation structure of Key genes involved in reproductive maturation & egg production in dengue vector mosquito Aedesaegyti"	Biological Sciences	Tusar Tirtha Saha	N/A	SERB	N/A	3159412

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
6	Studies on the effect of Evaluation of antifungal activity of Lipopeptides from a wild type Bacillus sp. Mouse Models of invasive Candidiasis, Cryptococcosis and Aspergillosis	Biological Sciences	Utpal Roy	Prof. Arunaloke Chakrabarti	SERB	PGIMER, Chandigard	65,31,000 (Sanctioned)
7	Studies on the effect of Bioleaching of Limestone and clay to remove iron and other transition elements (TI, Cr, Mn, Ni & Zn) (19-20),	Biological Sciences	Srikanth Mutnuri	-	ABST CPL	-	10,00,000
8	Studies on the effect of Bioremediation and digital documentation towards the conservation of Cultural heritage , (19-21)	Biological Sciences	Srikanth Mutnuri	Dr. Geetha Ramprasad Joshi	(DST – SHRI)	-	28,86,000
9	Studies on the effect of Small Scale and Sustainable House hold grey water recycling (Feb.,2017 to Feb 2020)	Biological Sciences	Srikanth Mutnuri	Dr. Hoysall N Chanakya	DST – imprint	-	32,00,000
10	Cloning of spot blotch disease resistance gene in wheat.	Biological Sciences	Rajesh Mehrota	-	CIMM YT	-	15,00,000
11	Studies on Exploring the effects of polyamine and associated metabolic regulation of hypothalamic GnRH-GnIH synthesis and release during ageing in BALB/cJ mice	Biological Sciences	Arnab Banerjee	Dr. Rajiv Taliyan	SERB	-	34,00,000
12	TNF Alpha Mediated Alternative Splicing in Type 2 Diabetes; A genome Wide Approach	Biological Sciences	Ms. Jiss Maria Louis	Dr. Indrani Talukdar	DST(WOS)	-	20,68,000 24th July 2019 3 years
13	Development of PCDA-liposome based detection kit for Alzheimer's disease biomarker.	Biological Sciences	Amrita Chatterjee	Malabika Biswas	DST-SERB	-	26,63,200

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Recovery and purification of enzymes	Biological Sciences	Srikanth Mutnuri	-	Zuari foods and Farms Pvt Ltd	-	7,15,000
2.	Faecal Sludge Management Laboratory	Biological Sciences	Srikanth Mutnuri	-	Sponsored by The Batch of 1966 – 1971	-	50.59 Lakh

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	"Literacy and Cognition Project".	Biological Sciences	Veeky Baths	Dr. Falk Huettig	Max Planck Institute of Psycholinguistics	-	444493.14
2	Studies on the effect of POS "Sanitation , water and solidwaste Management" at the BITS, India – March 2019 to November 2019	Biological Sciences	Srikanth Mutnuri	N/A	EAWAG Switzerland	-	6'165 CHF
3	Global Sanitation Graduate School	Biological Sciences	Srikanth Mutnuri	-	IHE Delft	-	459000 USD
4	Novel micro and nano sensors for anti botic resitance measurement.	Biological Sciences	Sunil Bhand	Dr. Utpal Roy	SPARK	Dr. Bin Xie, Lund University, Sweden	51,00,000

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Enzymatic pretreatment for enhancing Anaerobic Co-digestion of sewage sludge / Septage /Food waste/ MSW for energy production.	Biological Sciences	Srikanth Mutnuri	N/A	LNT	N/A	12,39,000
2	Screening, Isolation and Identification of Novel Antimicrobial Compounds from Potential Mangroves of Goa.	Biological Sciences	Kundan Kumar	Utpal Roy	CSIR	-	20,00,000 3 years
3	Study on the role of TIP family members in arsenite accumulation and their transport in rice.	Biological Sciences	Kundan Kumar	Dr. Sudhakar Srivastava	BRNS	P. SUPRASANNA	29,40,000 3 years
4	Studies on the effect of Developing Bioactive Compound – Enriched functional food Ingrdients for Dilleniaindica and valorization of its pomance. April 2017 to March 2020	Biological Sciences	Srikanth Mutnuri	Anasuya Ganguly	DBT	Dr. Maneshi Puryakatsa, Dr. Abhijit Borah, Assam Agricultural University	16,86,000
5	Studies on the effect of Response of copepods to interactive effects of crude oil pollution and warming , 2nd April 2018 to 1st April 2020	Biological Sciences	Lalita	Mentor: Srikanth Mutnuri	SERB	-	19,20,000
6	Studies on the gene regulation involved in the lytic-lysogenic switch in Staphylococcus aureus temperate bacteriophage Phi11	Biological Sciences	Malabika Biswas	-	DST-SERB	-	21,00,000 3years
7	Principal Investigator in "Introducing cyanobacterial bicarbonate transporters into C3 plants for enhanced photosynthetic performance"	Biological Sciences	Sandhya Mehrotra	Rajesh Mehrota	SERB Core Research Grant	-	37,73,000 3 years (2017-2020)"

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed InternationalProjects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Ram Chavan, Srikanth Mutnuri Title: Domestic wastewater treatment by constructed wetland and microalgal treatment system for the production of value-added products. Journal: Environmental Technology, accepted 30th Jan 2020, Impact Factor 1.91

2. Guruprasad V. Talekar and Srikanth Mutnuri Title: Membrane Selection for Electro chemical Treatment of Septage. Journal : frontiers in Energy Research, accepted 25th February 2020.

3. Rajashree R. Yaragal, Devendra Kumar & Srikanth Mutnuri Title: Development of UPLC-MS/MS method for analyzing phorate: application to wastewater treatment. Journal: Journal of the Iranian Chemical Society, accepted 09th June 2020, Impact Factor 1.742

4. Makhan Kumar, Ansie Martin, Snehal Nirgude, Bibha Chaudhary,Sukanta Mondal and Angshuman Sarkar Title: Quinacrine inhibits GSTA1 activity and induces apoptosis through G1/S arrest and generation of ROS in human non-small cell lung cancer cell lines, Journal: Oncotarget, accepted 05th May 2020, Impact Factor: 3.71

5. Angela Samanta , Geethanjali Ravindran, Angshuman Sarkar Title: Quinacrine causes apoptosis in human cancer cell lines through caspase-mediated pathway and regulation of small-GTPase, Journal: Journal of Bioscience , accepted 01th Jan 2020, Impact Factor: 1.82

6. Fiona Fernandes , Pooja Kotharkar , Adrija Chakravorty , Meenal Kowshik , Indrani Talukdar Title: Nanocarrier Mediated siRNA Delivery Targeting Stem Cell Differentiation, Jounal : Current Stem Cell Research & Therapy, accepted 01th Feb 2020, Impact Factor: 2.6

7. Joseph R D Fernandes , Abhishek Moitra , Kazuyoshi Tsutsui , Arnab Banerjee ,Title: Regulation of the hypothalamic GnRH-GnIH system by putrescine in adult female rats and GT1-7 neuronal cell line, Journal: Journal of experimental zoology. Part A, Ecological and integrative physiology, accepted 10th Feb 2020, Impact Factor: 1.4

8. Sidhali U. Parsekar , Priyanka Velankanni , Shruti Sridhar , Paramita Haldar, Nayan A. Mate , Arnab Banerjee , P. K. Sudhadevi Antharjanam , Aditya P. Koley and Manjuri Kumar Title: Protein binding studies with human serum albumin, molecular docking and in vitro cytotoxicity studies using HeLa cervical carcinoma cells of Cu(II)/Zn(II) complexes containing a carbohydrazone ligand†, Journal: Dalton Tans, accepted 29th January 2020, Impact Factor: 4

9. Laxminarayan Rawat , Harsha Hegde , Sugeerappa Laxmanappa Hoti , Vijayashree Nayak , Title: Piperlongumine induces ROS mediated cell death and synergizes paclitaxel in human intestinal cancer cells, Jounal: Journal of Biomedicine and Pharmacotherapy, accepted August 2020, Impact Factor: 4.5

10. Swapnil Punyapwar & Srikanth Mutnuri, Title: Diversity and functional annotation of microorganisms in French vertical flow constructed wetland treating greywater, Jounal: World Journal of Microbiology & Biotechnology, accepted 10th September 2020, Impact Factor: 2.477

11. Om Prakash Chouhan, Yvette Roske, Udo Heinemann, Sumit Biswas, Title: Structure of the active GGEEF domain of a diguanylatecyclase from Vibrio cholera, Jounal: Biochemical and Biophysical Research Communications accepted 5th March 2020, Impact Factor: 2.71

12. Subhasish Sahoo, Rashmita Samal, Suchismeeta Behera, Aruna Kumar Swain, Sumit Biswas, Pankaj Shrivastava, R. K. Kumawat, Gyaneshwer Chaubey & Hira k Ranjan Dash, Title: Genomic portrait of Odisha, India drawn by using 21 autosomal STR markers Journal: International Journal of Legal Medicine , accepted 24th March 2020, Impact Factor: 2.1

13. Nilesh L. Dahibhate, Utpal Roy, Kundan Kumar*, Title: Phytochemical Screening, Antimicrobial and Antioxidant Activities of Selected Mangrove Species .Journal: Current Bioactive Compounds, accepted 24th March 2020.

14. Nilesh Lakshman Dahibhate, Devendra Kumar & Kundan Kumar , Title: Determination of Bioactive Polyphenols in Mangrove Species and Their in-Vitro anti-Candida Activities by Ultra-High-Performance Liquid Chromatography – Electrospray Ionization – Tandem Mass Spectrometry (UPLC-ESI-MS/MS), Journal: Analytical Letters, accepted 22nd May 2020, Impact Factor: 1.25

15. Priyanka Firmal,Vibhuti Kumar Shah and Samit Chattopadhyay (2020), Title: Insight Into TLR4-Mediated Immunomodulation in Normal Pregnancy and Related Disorders, Journal: Frontiers in Immunology, accepted 19th May 2020, 19;11:807. Doi: 10.3389/fimmu.2020.00807, Impact Factor: 4.6.

16. Rajaswa Patil, Veeky Baths, Title: CNRL at SemEval-2020 Task 5: Modelling Causal Reasoning in Language with Multi-Head Self-Attention Weights Based Counterfactual Detection, Jounal: SemEval-2020, accepted December 2020.

17. Swati Vaish, Divya Gupta, Rajesh Mehrotra, Sandhya Mehrotra & Mahesh Kumar Basantani, Title: Glutathione S-transferase: a versatile protein family, Jounal: 3 Biotech, Published : 27th June 2020, Impact Factor: 2.3.

18. Panch sheela Nogia, Gurpreet Kaur Sidhu, Rajesh Mehrotra, Sandhya Mehrotra, Title: Capturing atmospheric carbon: biological and nonbiological methods, Jounal: 3 Biotech, accepted July 2020, Impact Factor: 2.3.

19. Shweta Redkar ,Sukanta Mondal , Alex Joseph ,K. S. Hareesha, Title: A Machine Learning Approach for Drug-target Interaction Prediction using Wrapper Feature Selection and Class Balancing Jounal: Molecular Informatics, accepted 31th January2020, Impact Factor: 2.375.

20. Junyi Xie, Divya Unni krishnan, Leon Williams , Adriana Encinas Oropesa, Srikanth Mutnuri, Nitin Sharma,Paul Jeffrey,Binxin Zhu & Paul Lighterness, Title: Influence of domain experience on icon recognition and preferences,Jounal: BEHAVIOUR & INFORMATION TECHNOLOGY, accepted 06th July 2020, Impact Factor: 2.375.

21. Hugo Olvera - Vargasa, Nissim Gore – Datara ,Orlando Garcia-Rodrigueza, Srikanth Mutnuri ,OlivierLefebvrea, Title: Electro-Fenton treatment of real pharmaceutical wastewater paired with a BDD anode: Reaction mechanisms and respective contribution of homogeneous and heterogeneous .OH, Journal: Chemical Engineering Journal, accepted 31th July 2020, Impact Factor: 2.375

22. Bibhudutta Mishra, Advait Balaji, Hemalatha Beesetti, Sathyamangalam Swaminathan & Raviprasad Aduri, Title: "The RNA secondary structural variation in the cyclization elements of the dengue genome and the possible implications in pathogenicityJournal: VirusDisease , published 30th July 2020, Impact Factor: 0.99.

23. Kabilan Mani, Gisele Bronner, Judith M. Bragança and Didier Debroas, Title: Transient Dynamics of Archaea and Bacteria in Sediments and Brine Across a Salinity Gradient in a Solar Saltern of Goa, India, Journal: Frontiers in Microbiology, accepted 13th August 2020, Impact Factor: 4.076.

24. Avijit Das , Sukhendu Mandal , Vijay Hemmadi , Vivek Ratre , Malabika Biswas , Title: Studies on the gene regulation involved in the lytic-lysogenic switch in Staphylococcus aureus temperate bacteriophage Phi11. Journal: The Journal of Biochemistry, published 23th July 2020, Impact Factor: 2.47 .

25. Vijay Hemmadi and Malabika Biswas. Title: An overview of moonlighting proteins in Staphylococcus aureus infection. Journal: Arch Microbiol, published 13th October 2020, Impact Factor: 1.884.

26. Jiss Maria Louis, Arjun Agarwal, Raviprasad Aduri and Indrani Talukdar; Title: "Global Analysis of RNA-Protein Interactions in TNF-α Induced Alternative Splicing in Metabolic Disorders" accepted for publication in FEBS Letters, Impact factor 3.057.

27. Vibhuti Kumar Shah, Priyanka Firmal, Aftab Alam, Dipyaman Ganguly and Samit Chattopadhyay (2020) Title: Overview of Immune Response During SARS-CoV-2 Infection: Lessons From the Past. Journal: Frontiers in Immunology, published 7th August 2020,doi: 10.3389/fimmu.220.01949; Impact Factor: 4.6.

28. Tanaya Roychowdhury and Samit Chattopadhyay (2020). Title: Chemical Decorations of "MARs" Residents in Orchestrating Eukaryotic Gene Regulation Journal: Frontiers in Cell and Developmental Biology, published 21 December 2020 ,Impact Factor: 5.2.

29. Sumit Biswas, Om Prakash Chouhan and Divya Bandekar. Title: Diguanylate Cyclases in Vibrio cholerae: Essential Regulators of Lifestyle Switching. Journal: Front Cell Infect Microbiol, published 22 October 2020 , Impact Factor: 4.12.

30. Divya Bandekara, Swati Mohapatrab, Mousumi Hazrac, Saugata Hazrabd, Sumit Biswasa, Title: N-terminal truncation of VC0395_0300 protein from Vibrio cholerae does not lead to loss of diguanylatecyclase activity. Journal: BiophysChem, Impact Factor: 1.995.

31. Akshay Valsaraj, Ithihas Madala, Nikhil Garg, Mohit Patil, Veeky Baths. Title: Motor Imagery Based Multimodal Biometric User Authentication System Using EEG. Journal: 2020 International Conference on Cyberworlds (CW).

32. Kshitij Chhabra, Pranay Mathur, Veeky Baths. Title: BCI Controlled Quadcopter Using SVM and Recursive LSE Implemented on ROS. Journal: 2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC).

33. Nilesh Lakshman Dahibhate, Devendra Kumar and Kundan Kumar. Title: Simultaneous Analysis of Vanillin and Coumarin in Mangrove Plants and Commercial Food Products Using UPLC-ESI-MS/MS. Journal: Current Analytical Chemistry, Impact Factor: 1.36.

34. Kundan Kumar, Susheel Kumar Raina, Sheikh M. Sultan. Title: Arabidopsis MAPK signaling pathways and their cross talks in abiotic stress response. Journal: Journal of Plant Biochemistry and Biotechnology , published 29th September 2020 Impact Factor: 0.773.

35. Suhas Balasaheb Karle, Kundan Kumar,Sudhakar Srivastava,Penna Suprasanna. Title: Cloning, in silico characterization and expression analysis of TIP subfamily from rice (Oryza sativa L.). Journal: Gene, published 08th August 2020 Impact Factor: 2.98.

36. Vijay Hemmadi, Malabika Biswas. Title: Dramatic changes in oligomerization property caused by single residue deletion in S.aureus Enolase, Journal: Molecular biotechnology (MOBI-D-20-00157R3), Accepted for publication, Impact Factor: 2.022.

37. Apoorva Bhattacharya, Tanya Das, Mukherjee S, Khan P, Banerjee S, Dutta A, Banerjee N, Sengupta D, Basak U, Chakraborty S, Dutta A, Chattopadhyay S, Jana K, Sarkar KD, Chatterjee S, Das T. Title: Stemness factors repress SMAR1 to bestow drug resistance in cancer stem cells: Reversal by Aspirin Journal: Science Signaling, 2020 ct 20:13(654):eaay6077. Doi:10.1126/scisignal.aay6077, Impact Factor: 6.5.

38. Dutta A, Dutta A, Roy A, Roy L, Chattopadhyay Samit, Subhrangsu Chatterjee (2020). Title: Immune Response and possible therapeutics in COVID-19, Journal:RSC Advances,Accepted for publication,Impact Factor: 3.1.

39. Richa Pant, ,Firmal P, Shah VK, Alam A and Samit Chattopadhyay. Title: Epigenetic regulation of adipogenesis in development of metabolic syndrome. Journal: Frontiers in Cell and Developmental Biology, Accepted for publication, Impact Factor: 5.2

40. Sanket Gupte, Raviprasad Aduri, Dharm S Jain and Ashwin Srinivasan, Title: IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2020.

41. Ramya R, Utpal Roy, Swetha R, Anviksha,A. Chakrabarti. Title: Improved Production of Two Anti-Candida Lipopeptide Homologues Co-Produced by the Wild-Type B. subtilis RLID 12 under Optimized Conditions, Journal: Currernt Pharmaceutical Biotechnology, Impact Factor: 2.12

42. Rehan Deshmukh, Utpal Roy, S. Bhand, Arun Prusty. Title: A capacitive DNA sensor for sensitive detection of E. coli O157:H7 in potable water: fabrication and analytical performance.Journal:Analyst(RSC.),Published: 30 Jan 2020 , Impact Factor: 4.01

43. Zaiba Hasan Khan, Rajesh Mehrotra, Swati Agarwal, AtulRai, Mounil Binal Mimaya, Sandhya Mehrotra. Title: Co-expression network analysis of protein phosphatase 2A (PP2A) genes with stress-responsive genes in Arabidopsis thaliana reveals 13 key regulators, Journal: Scientific Reports

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Vandana Tomar, Panchsheela Nogia, Namitha Nayak, Rajesh Mehrotra and Sandhya Mehrotra Plant Genetics and Genomcis Conference, 23-24 January 2020, Organised by SRM Institute of Science and Technology, Chennai, Tamilnadu

2. MALABIKA BISWAS, AVIJIT DAS, NATIONAL SEMINAR ON ADVANCEMENT OF BIOLOGY IN THE 21ST CENTURY (February 28-29, 2020) ;Visva-Bharati, Santiniketan, Organised by Department of Zoology, Visva-Bharati, Santiniketan.

3. Samit Chattopadhyay - Conducted two days Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit as a collaborative initiative between India and other countires worldwide, Samit Chattopadhyay and D Sriram

4. Samit Chattopadhyay - Chair a plenary session in the virtual conference on 20-21 November 2020: 'Current Trends and Challenges in Plant Biochemistry

5. Sumit Biswas - Aquatic Ecosystem: Prospect and future challenges on 18-19 July 2020 Organised by Presidency University, Kolkata

6. Veeky Baths - Chaired a session on Bilingualism and cognition : Recent developments, Organised by: Society for Neurochemistry, INDIA SNCI – December 2020

7. Veeky Baths - 34th Annual Conference, Society for Neurochemistry, INDIA SNCI – December 2020, Organised by: Society for Neurochemistry, INDIA

8. Rehan Deshmukh, S. Bhand, & Utpal Roy - Royal Society Chemsitry Tokyo International Conference 2020 (RSC-TIC2020): Optical Biosensing and Devices. 15th-16th December 2020. Tokyo, Japan, Organised by: Royal Soc. of Chemistry

9. Swetha R, M. Madhuri & Utpal Roy - National Virtual Conference on Current Trends and Challenges in Plant Biochemistry and Biotechnology (CTCPBB). 20-21 Nov' 2020, Organised by: Society for Plant Biochemistry and Biotechnology (SPBB), New Delhi and BITS Pilani-K.K.Birla Goa Campus

10. Vijayashree Nayak - International Conference on Nano Science and Technology (ICONSAT-2020), Biswa Bangla Convension Center, Kolkata, March 5-7,2020

11. Meenal Kowshik - International Symposium on Material Sciences and Innovation for Sustainable Society' Goa on August 26 and 27, 2020.Organised by: Dhempe College of Arts and Science and Govt. College, Khandola

ii) International:

1. Veeky Baths- Organised an online I-Brain Mini Symposium in cognitive neuroscience, sponsored by I-Brain Erasmus project on 12th December 2020- Organised by Institute for Cognitive Neuroscience, Higher School of Economics (Moscow, Russia) in collaboration with the Group for Neural Theory, EcoleNormaleSupérieure (Paris, France) and BITS Pilani (Goa Campus, India) Prof. Veeky led the data issues in cognitive neuroscience track

2. Veeky Baths - CTiCPS (Current Trends in Cyber-Physical Systems) 2020 online seminar co-organized by BITS Pilani, India and Telecom Paris, France

6.   LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED - Nil

7.   SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Kundan Kumar - Organized a Virtual National Conference 'Current Trends and Challenges in Plant Biochemistry and Biotechnology' as Organizing Secretary

8.   INVITED TALKS GIVEN BY BITS FACULTY:

1. 34th Annual Conference, Society for Neurochemistry, INDIA SNCI – December 2020. Title of Talk "Alzheimer's Detection Using Speech Analysis" Presented by Veeky Baths, Organized By Society for Neurochemistry, INDIA

2. International Symposium on Material Sciences and Innovation for Sustainable Society' Goa on August 26 and 27, 2020. Title of Talk "Biocompatible nano-vehicle composed of surface modified inorganic nanoparticles for bio-imaging and gene delivery applications. Presented by Meenal Kowshik, Organised By- organised by Dhempe College of Arts and Science and Govt. College, Khandola

3. CTiCPS (Current Trends in Cyber-Physical Systems) 2020 online seminar co-organized by BITS Pilani, India and Telecom Paris, France. Title of Talk: EEG Based Brain Computer Interface: Automation and Control of IoT devices using Visual Identification and Augmented Reality(AR) Interfaces. Presented by Veeky Baths, Organised By co-organized by BITS Pilani, India and Telecom Paris, France

4. NATIONAL SEMINAR ON ADVANCEMENT OF BIOLOGY IN THE 21ST CENTURY ,Title of the talk: The role of gp07 in the developmental pathway of Phi11, presented by: Malabika Biswas, Organised By Department of Zoology, Visva-Bharati, Santiniketan

5. Aquatic Ecosystem: Prospect and future challenges on 18-19 July 2020, Title of the talk: A Journey to the Intertidal Zone: A Tale of two inhabitants ,presented by: Sumit Biswas, Organised By: Presidency University, Kolkata

9. INVITED TALKS / DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

Webinar- BITS Goa Campus

1. Institutional Human Ethics Committee (IHEC) is going to conduct a Webinar on "Current Regulatory Guidelines and Ethical Requirement for clinical trials in India, on Friday, August 21,2020, 12.00 pm

2. Webinar - Innovator Seminar Series Lecture - The speaker for this talk titled "Nuts and Bolts of bio-entrepreneurship" is Dr. Milind Choudhari, CEO, WeInnovate Biosolutions Pvt. Ltd.- 12th November 2020

3. Dr. Taslimarif Saiyed, Director and COO, C-CAMP, (Centre for Cellular and Molecular Platforms) to deliver an webinar on Devising Effective Lab To Land Strategies For Scientific Discoveries In Biotech on August 26

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Samit Chattopadhyay received J C Bose National Fellowship for the year (2020 to 2023)

2. Sumit Biswas - Invited Fellow of the High Energy Accelerator Research organization (KEK), Japan.

b. Won by Students:

1. Akansha Savardekar recived ICMR Fellowship

2. Vijay Hemmadi recived ICMR fellowship

11. Faculty Development, International Collaboration & Industry Immersion: Nil

12. PATENTS FILED/PUBLISHED AND GRANTED: Nil

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: Nil

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Animal Incinerator	01
2.	T100 Thermal cycler	02
3.	CO2 Incubator	01
4.	Millipore Water Purificatio System	01
5.	Laboratory Centrifuge	01
6.	Monocular Microscope	04
7.	Digital Scientific Camera	01
8.	Submarine III, Horizontal electrophoresis Cell	01
9.	MINI-P TET SYS/PPAC Basic - Electrophoresis	01
10.	Gel Doc EZ	01
11.	UV/Vis NANO Spectrophotometer	01
12.	Centrifuge	01

B2.10.2 Department: Chemistry

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	04
Associate Professors	07
Assistant Professors	06
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department : Prof. Halan Prakash, Associate Professor

Contact details: (email) : halanprakash@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 26

Part Time   : 04

Aspirant Scheme   : 02

PhD thesis awarded in 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Arun Kumar Prusty	2013PHXF0406G	Development of Polymer Based Capacitive Sensors for Analysis of Herbicide and Antibiotic Residue in Water and Milk"	Prof. Sunil Bhand	-
2	Mr. Rehan Ahmed Deshmukh,	2015PHXF0012G	"Development of Rapid and Sensitive Molecular Methrods for the Derection and Quantification of Escherichia Coli in Wate	Prof Utpal Roy (Biological Sciences)	Prof Sunil Bhand
3	Sindhuja Sen	2015PHXF0006G	A Computational Investigation of the Photochemical Oxaziridine Conversion and Subsequent Product Formation Pathways of Some Cyclic Nitrone Systems	Prof. Anjan Chattopadhyay	-

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Phadte Apeksha Ashok	2015PHXF0409G	Heteroaromatic push-pull molecules – dibenzodioxins, phenazines, porphyrins: Design, synthesis, electronic properties and anti-tumor activity	Dr. Subhadeep Banerjee	NA
2	Ms. Krishna Kumari Swain	2015PHXF0408G	Development of Miniaturized Enzyme Nanoprobes for Analysis of Heavy Metal Ions in Water and Seafood using Optical Biosensors	Prof Sunil Bhand	Prof AP Koley
3	Mr. Rehan Ahmed Deshmukh	2015PHXF0012G	"Development of Rapid and Sensitive Molecular Methrods for the Derection and Quantification of Escherichia Coli in Wate	Prof Utpal Roy (Biological Sciences)	Prof Sunil Bhand

1. SPONSORED RESEARCH AND CONSULTANCY

1. PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Water Filtration, Advanced-oxidation and Capacitive-deionisation Treatments for removal of Emerging Contaminants in Water (Water-FACTs)" under WTI Call 2019	Chemistry	Prof. Halan Prakash, PI. major project,		DST, India (Water Ttechnology Initiative)	-	105 lakhs.

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
2	28S Ribosomal RNA Capture Assay for the Sensitive Detection of Plasmodium falciparum and Plasmodium vivax (2 years)	(BITSPilani Biological Sciences, BITS,-Chemistry Goa, BITS Hyderabad-EEE)	Prof Ahsis K Das (PI)	Prof Sunil Bhand Chemistry Goa and Prof Sanket Goel EEE Hyderabad	ICMR under MERA scheme	Multicentric project involving BITS Pilani, Goa & Hyderabad alongwith a Kolkata Hospital	(Goa share 32 lakh)
3	Demonstration of a practical solution for removal and monitoring heavy metal ions from drinking water using modified biopolymer 03 yeras	Chemistry	Prof. Amrita Chatterjee	-	DSTE GOA	-	2.15 For first year
4	Dual-functional and band-gap tunable visible-active semiconductors as hosts for single atom catalysts: Co-production of solar fuels and value-added chemicals with high selectivity	Chemistry	Kiran Vankayala*	-	SERB-DST	-	29,19,000

B. Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Recovery of resources from worn-out tires for enabling circular economy (5 years)	Chemistry and Biological Sciences	Prof Sunil Bhand	Prof Utpal Roy (Biological Sciences)	Birla Carbon	Birla Carbon (mentor)	42 lakh

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Novel micro and nano sensors for antiboticresitance measurement (2 Years)	Chemistry	Indian PI: Prof Sunil Bhand (Chem)	-	-	-	-
2	Development of Mesoporous Silica (or Alumina)- SiC-metal nanoparticle based nanocomposites for Radar Absorption Application at High Temperature (ERIP/ER/201803003/M/01/1737)Duration: 3 years	Chemistry	Prof. Narendra Nath Ghosh	-	DRDO, India	-	15,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Development of Novel Biolilm Resistant Coat for Implant Devices from Moringa Leaf Extract Duration: 3 years	Chemistry	Co PI: Prof. Narendra Nath Ghosh	-	Indian Council of Medical Research	-	21,66,600 (for FY 2019-20
4	Photo-irradiation and Adsorption based Novel Innovations for Water-treatment –PANI Water treatment Feb 2019 to Jan 2023 (4 years)	Chemistry	Prof. Halan Prakash , PI, Indian Leader for Drinking water work package	-	DST, Govt of India. (Under the call DST-EU Horizon 2020 water)	-	209 Lakhs
5	Water Filtration, Advanced-oxidation and Capacitive-deionisation Treatments for removal of Emerging Contaminants in Water (Water-FACTs)" under WTI Call 2019	Chemistry	Prof. Halan Prakash, PI. major project,		DST, India (Water Ttechnology Initiative)	-	105 lakhs.
6	A computational investigation on the reaction paths and spectroscopic properties of crown ethers	Chemistry	Prof. Anjan Chattopadhyay	-	BRNS	-	24,80,000
7	A polydiacetylene-based fluorescent sensor for the detection of arsenic species and uranyl ion in water by conventional and nuclear analytical methods. 03 years	Chemistry	Prof. Amrita Chatterjee		BRNS		32,08,000
8	Demonstration of a practical solution for removal and monitoring heavy metal ions from drinking water using modified biopolymer 03 yeras	Chemistry	Prof. Amrita Chatterjee		DSTE GOA		2.15 For first year
9	Steric and Conformational Influences on the Performance of Nonplanar and Highly Functionalized Phenyl- And Heteroaryl-Porphyrins in the Sensing of Anions and Heavy Metal Ions	Chemistry	Prof. Bhavana P	-	SERB	-	28,22,000
10	Design and synthesis of smart supramolecular dyes based on TPE modified PDI–cucurbituril conjugates: their binding and photophysical studies and application in the detection of biogenic polyamines. 3 YEARS	Chemistry	Prof. Mainak Banerjee	-	BRNS	-	28,00,000
11	Development of photocatalyst embedded graphene based membranes for treatment of dye containing waste water under sunlight. Funding Agency: The Aditya Birla Science and Technology Company Private Limited and BITS Pilani; Duration in Months: 36,;	Chemistry	Prof. Mainak Banerjee	As co-I, [Name of Principal Investigator : Dr. N N Ghosh]	ABSTC-BITS	-	Rs 53 lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
12	Dual-functional and band-gap tunable visible-active semiconductors as hosts for single atom catalysts: Co-production of solar fuels and value-added chemicals with high selectivity	Chemistry	Kiran Vankayala*	-	SERB-DST	-	29,19,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Photocatalyst embedded Graphene based membranes for Treatment of Dye containing waste water under sunlight. Funding Duration: 3 years	Chemistry	Prof. Narendra Nath Ghosh	-	Aditya Birla Science and Technology Company Private Limited and BITS Pilani	-	53,00,000
2	Greener Route for Flue Gas Desulphurization	Chemistry	Prof. Ranjan Dey	-	BITS Pilani	-	93,650
3	Emergent Catalytic Behavior of Low Molecular Weight Peptide-Based Supramolecular Fibrils	Chemistry	Dr. Subhasish Roy	-	BITS Pilani	-	2,00,000
4	Versatile catalytic behavior of short peptide-based supramolecular assemblies	Chemistry	Dr. Subhasish Roy	-	BITS Pilani	-	10,00,000
5	"Materials for Nitrogen fixation and water splitting"	Chemistry	Dr. Kiran Vankayala	-	BITS Pilani	-	2,00,000
6	"Single atom catalysts on two dimensional nanosheets for the generation of renewable fuels" – 02 Years	Chemistry	Dr. Kiran Vankayala	-	BITS Pilani	-	9,95,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Nano-based detection of organophosphate pesticides using metal-organic framework conjugates(3 years)	Chemistry	CCPI: Prof Sunul Bhand (BITS Goa) CPI: Prof L Bharadwaj (AINT Noida) CCPI2: Dr Irani Mukherji (IARI N Delhi)	-	National Agricultural Science Fund, Indian Council of Agricultural Research	Multi institute consortia project	2,12,00,000 BITS Goa share 43,20,000
2	Steric and Conformational Influences on the Performance of Nonplanar and Highly Functionalized Phenyl- And Heteroaryl-Porphyrins in the Sensing of Anions and Heavy Metal Ions	Chemistry	Prof. Bhavana P	-	SERB	-	28,22,820

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Computational Study of the Catalytic Mechanism of some Diaryldiselenide-based Glutathione Peroxidase Mimetics, 42 months	Chemistry	Prof. Raghu Nath Behera	-	SERB	-	16,40,000
4	A comprehensive study on mechanochemical sp² C-H bond activation in fivemembered heteroaromatics in a Ball-Mill,	Chemistry	Prof. Mainak Banerjee	-	SERB	-	3057560
5	Experimental and Computational Study of Boron doped TiO_2 and ZnO nanocrystals (March 21, 2017 to December 20,2020)	Chemistry	Dr. Jayadevan. K. P.	Prof. R.N Behera, Co-PI	DST-SERB	-	23.3Lakhs
6	Development of PCDA-liposome based detection kit for Alzheimer's disease biomarker. 03 years	Chemistry	Prof. Amrita Chatterjee	-	SERB	-	26,60,000
7	Design and synthesis of graphene oxide based AIE-sensor for selective detection of Hg(II) and organic mercury in aqueous medium. 03 years	Chemistry	Prof. Amrita Chatterjee	-	UGC-DAE (CSR)	-	7,03,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Sidhali U. Parsekar, Priyanka Velankanni, Shruti Sridhar, Paramita Haldar, Nayan A. Mate, Arnab Banerjee, P. K. Sudhadevi Antharjanam, Aditya P. Koley and Manjuri Kumar: Protein binding studies with human serum albumin, molecular docking and in vitro cytotoxicity studies using HeLa cervical carcinoma cells of Cu(II)/Zn(II) complexes containing carbohydrazone ligand. Dalton Trans., 2020, DOI: 10.1039/C9DT04656A.

2. Sidhali U. Parsekar, Paramita Haldar, P. K. Sudhadevi Antharjanam, Manjuri Kumar and Aditya P. Koley: Synthesis, characterization, crystal structure, DNA and HSA interactions as well as antiproliferative activity of a Cu(II) complex containing a Schiff base ligand formed in situ from the Cu(II)-induced cyclisation of 1,5-bis(salicylidene)thiocarbohydrazide. Applied Organometallic Chemistry, 2020, In press. DOI: 10.1002/aoc.6152.

3. Krishna Kumari Swain, R. Balasubramaniam & Sunil Bhand. A portable microfluidic device-based Fe3O4–urease nanoprobe-enhanced colorimetric sensor for the detection of heavy metals in fish tissue, Preparative Biochemistry & Biotechnology (2020) 50:10, 1000-1013, DOI: 10.1080/10826068.2020.1780611

4. Arun Kumar Prusty, Sunil Bhand: A capacitive immunosensor for tetracycline estimation using antibodymodified polytyramine-alkanethiol ultra-thinfilm on gold. Journal of Electroanalytical Chemistry (2020) 863, 114055A capacitive DOI: http://dx.doi.org/10.1016/j.jelechem.2020.114055

5. Rehan Deshmukh, Arun Kumar Prusty, Utpal Roy and Sunil Bhand. A capacitive DNA sensor for sensitive detection of Escherichia coli O157:H7 in potable water based on the z3276 genetic marker: fabrication and analytical performance (2020) Analyst, 145, 2267-2278 DOI: 10.1039/C9AN02291K

6. Deshmukh, R., Bhand, S. & Roy, U. A novel method for rapid and sensitive detection of viable Escherichia coli cells using UV-induced PMA-coupled quantitative PCR. Braz J Microbiol 51, 773–778 (2020). https://doi.org/10.1007/s42770-019-00161-8

7. Photo Augmented Copper-based Fenton Disinfection under Visible LED Light and Natural Sunlight Irradiation, G Subramanian, H Prakash, Water Research 190, 116719.

8. Pratibha V. Bakre Durga P. Kamat, Ketan S. Mandrekar, Santosh G. Tilve, Narendra Nath Ghosh CuO-NiO-TiO2 bimetallic nanocomposites for catalytic applications Molecular Catalysis 496, 111193 (2020).

9. P Makkar, NN Ghosh*, Snowflake-Like Dendritic CoNi Alloy-rGO Nanocomposite as a Cathode Electrode Material for an All-Solid-State Flexible Asymmetric High-Performance Supercapacitor Device ACS Omega 5 (18), 10572-10580 (2020).

10. Sharanabasava Hiremath, Kaustabh Kumar Maiti, Narendra Nath Ghosh, Mainak Banerjee, Amrita Chatterjee, Reduced Graphene Oxide-Thioguanine Composites for the Selective Detection of Inorganic and Organic Mercury in Aqueous Media, ACS Applied Nano Materials 3 (3), 3071-3079 (2020).

11. Priyanka Makkar, Narendra Nath Ghosh*, A Facile Synthesis of MnFe2O4 Hollow Sphere-Reduced Graphene Oxide Nanocomposite as Electrode Material for All-solid-state Flexible High-performance Asymmetric Supercapacitor, ACS Applied Energy Materials, 3 (3), 2653-2664 (2020).

12. Debasish Borah, Neeharika Das, Nirmalendu Das, Ankita Bhattacharjee, Pampi Sarmah, Kheyali Ghosh, Madhurya Chandel, Jayashree Rout, Piyush Pandey, Narendra Nath Ghosh, Chira R. Bhattacharjee, Alga-mediated facile green synthesis of silver nanoparticles: Photophysical, catalytic and antibacterial activity, Applied organometallic Chemistry, 34 (5), e5597 (2020).

13. Gregory A. Anderson, Raghu Nath Behera and Ravi Gomatam, "Calculation of higher protonation states and of a new resting state for vanadium chloroperoxidase using QM/MM, with an Atom-in-Molecules analysis", Journal of Molecular Graphics and Modelling, 2020, Vol. 99, 107624.

14. Raghu Nath Behera, Nisheal Micheal Kaley, "Computational study of some diselenide-based glutathione peroxidase mimics: Effect of E…N (E = Se/Te) intermolecular interaction and E-E bond strength", Journal of the Indian Chemical Society, 2020, Vol. 97(3), 311-316.

15. Apeksha Ashok Phadte, Anjan Chattopadhyay, Subhadeep Banerjee, Dilawar Singh Sisodiya, Tanya Raghava "Synthesis of Green Emitting Multi-substituted Dibenzodioxins and Related Heteroacenes and Computational Investigation of Substituent Effects on Emission" ChemistrySelect. (2020) 5, 10177-10186

16. A simple and efficient route to 2-arylimidazo[1,2-a]pyridines and zolimidine using automated grindstone chemistry Dharmendra Das Zigmee T. Bhutia Padmini C. Panjikar Amrita Chatterjee Mainak Banerjee Journal of Heterocyclic Chemistry International 2020, July, doi.org/10.1002/jhet.4106 Impact Factor:1.5 Yes

17. Reduced Graphene Oxide–Thioguanine Composites for the Selective Detection of Inorganic and Organic Mercury in Aqueous Media SD Hiremath, KK Maiti, NN Ghosh, Mainak Banerjee, Amrita Chatterjee ACS Applied Nano Materials International 2020, March, VOL NO:3,ISSUE NO:3,B PAGE:3071-3079 Yes

18. Carbon dots-MnO2 based turn-on fluorescent probe for rapid and sensitive detection of hydrazine in water SD Hiremath, B Priyadarshi, Mainak Banerjee, Amrita Chatterjee Journal of Photochemistry and Photobiology A: Chemistry International 2020, February, VOL NO:389,ISS NO:NA,B PAGE:112258 4 Yes

19. Iodine Promoted Efficient Synthesis of 2-Arylimidazo[1,2-a]pyridines in Aqueous Media: A Comparative Study between Micellar Catalysis and an "On-Water" . Zigmee T Bhutia., Padmini C Panjikar., Shruti Iyer., Amrita Chatterjee., Mainak Banerjee   ACS Omega International 2020, May, VOL NO:5, ISS NO:NA,B PAGE:13333-13343 Impact Factor:2.58 Yes

20. Mn(I)-Catalyzed Mechanochemical C-H Bond Activation: C-2 Selective Alkenylation of Indoles Das, Dharmendra ; Bhosle, Akhil ; Panjikar, Padmini ; Chatterjee, Amrita; Banerjee, Mainak ACS Sustainable Chemistry & Engineering International 2020, 8, 51, 19105–19116 Yes

21. A reliable and novel approach based on Thermodynamic property estimation of Low to High Salinities Aqueous Sodium Chloride Solutions for Water Energy Nexus (WEN) applications, Lubna Rehman, Ranjan Dey, Lai Zhiping, Asim Ghosh, Anirban Roy, Industrial & Engineering Chemistry Research, 59 (36), 16029-16042(2020)

22. Performance Evaluation of Wind - Solar Hybrid System in Indian Context, Rahul Shityalkar, Ranjan Dey, Anagha Pathak, Niranjan Kulhare, Sandesh Jadkar, Springer Nature, doi.org/10.1007/978-981-15-5955-6_22; (2020).

23. Densities, Viscosities and excess parameters of octanol with alkyl(C1-C4) acetates at varying temperatures, D. Venkatesan, Joshua Amarnath D., T. Srinivasa Krishna, Piyashi Biswas, Ranjan Dey, Journal of Molecular Liquids, 299(2020)11221.

24. Molecular Interaction studies in binary mixtures of tetrahydrofuran with arene substituted alcohols: acoustic and volumetric study, A. Shakila, T. Srinivasa Krishna, Ranjan Dey and V Pandiyan, Physics Chemistry of Liquids, 58(2),267-279(2020)

25. Banerjee, S.; Phadte, A. A. "β-meso-Annulated meso-Tetraarylchlorins: A Study of the Effect of Ring Fusion on Chlorin Conformation and Optical Spectra" ChemistrySelect. 2020, 5, 11127-11144.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Raghu Nath Behera* and Nisheal Michael Kaleya, "Computational study of some diselenide-based glutathione peroxidase mimics: Effect of E…N (E = Se/Te) intramolecular interaction and E–E bond strength", International Conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2020), National Institute of Technology, Jalandhar, Punjab, India, Feb 13-14, 2020

2. Dilawar Singh Sisodiya and Dr. Anjan Chattopadhyay "A computational investigation on the role of nitro group in quenching the fluorescence of some highly fluorescent molecules through analysis of the non-radiative decay paths" at the 57th Annual Convention of Chemists & RTCS-2020, organized by Indian Chemical Society, December 26-29, 2020. (Oral presentation by Mr. Dilawar Singh Sisodiya)

ii) International:

1. Modifed Hind Ubbelohde Approach for Predicting Viscosity of Binary and Multicomponent Liquid Mixtures, Ranjan Dey and Sanyukta Jain, THERMAM 2020, Institute of Technical Thermodynamics, University of Rostock, Germany, 15th October 2020.

2. Density, Ultrasonic velocity, Viscosity, Refractive Index and Surface Tension of aqueous Choline Chloride with Electrolyte Solutions, Aditi Prabhune, Ranjan Dey, Institute of Technical Thermodynamics, THERMAM 2020, Universty of Rostock, Rostock, 15th October , 2020

3. Mechanochemical Synthesis and Derivatization of Heterocycles, Mainak Banerjee International Conference on Organometallics and Catalysis (ICOC2020). Hotel Holiday Inn, Goa. International 7-10 March, 2020 Invited Speaker NO

4. Mechanochemical C-H Bond Activation of Heterocycles: To Explore the Scope for 1st Row Transitional Metals Dharmendra Das, Amrita Chaterjee and Mainak Banerjee International Conference on Organometallics and Catalysis (ICOC2020). Hotel Holiday Inn, Goa. International 7-10 March, 2020 POSTER NO

5. SYNTHESIS OF AIE ACTIVE NIR FLUORESCENT PROBES - THEIR PHOTOPHYSICAL STUDIES AND POTENTIAL APPLICATIONS IN IMAGING AND SENSING Akhil A. Bhosle, Sharanabasava D. Hiremath, Amrita Chatterjee* and Mainak Banerjee* 15th DAE-BRNS Biennial Trombay Symposium on Radiation & Photochemistry (TSRP-2020), Mumbai, India, International January 5-9, 2020 POSTER NO

6. Quantum dot-cucurbituril-tetraphenylethylene: A three component assembly-disassembly based supramolecular sensor for spermine and spermidine Viraj G. Naik, Mainak Banerjee and Amrita Chatterjee 15th DAE-BRNS Biennial Trombay Symposium on Radiation & Photochemistry (TSRP-2020), Mumbai, India, International January 5-9, 2020 POSTER NO

7. CDs-MnO2 BASED TURN-ON FLUORESCENT ASSAY FOR RAPID AND SENSITIVE DETECTION OF Escherichia coli Sharanabasava D. Hiremath, Mainak Banerjee* and Amrita Chatterjee*15th DAE-BRNS Biennial Trombay Symposium on Radiation & Photochemistry (TSRP-2020) Mumbai, India International January 5-9, 2020 POSTER NO

8. Dr. Roy attended the full agenda of the DST & ACS Virtual Workshop, 30th October, 2020 organized by DST & ACS.

9. Dr. Roy attended the webinar by Nobel laureate Prof. M. Stanley Whittingham hosted by IIT Delhi on 17th September, 2020.

10. Dr. Roy attended one day webinar on "Peptide nucleic acids (PNA): How to make them enter cells?" by Prof. Krishna N. Ganesh on 2nd September organized by National Institute of Pharmaceutical Education and Research (NIPER)- Ahmedabad.

11. Dr. Roy attended ACS Science Talk: Virtual Lecture Series throughout the 2020 year organized by ACS.

12. Dr. Roy attended attended ACS Webinar on "Fundamental of Effective Scientific Writing: Manuscript and Grant" on 6th June, 2020 organized by ACS.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED - Nil

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT - Nil

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof Sunil Bhand Delivered An Invited Talk At BIRAC-SRISTI Ahmedabad Organized Biotech Innovation Ignition School-6 (BIIS) Webinar On Biosensor Technology: Potential Applications, Scope, Challenges And Opportunities" On Thursday 17th December, 2020 Held During Sept 22 To Oct. 12 2020.2. Prof Sunil Bhand Delivered An Invited Talk At BIRAC-SRISTI Ahmedabad Organized Biotech Innovation Ignition School-7 (BIIS) Webinar   On Biosensor Technology: Potential Applications, Scope, Challenges And Opportunities" On Thursday 17th December, 2020 Held During Dec 1-21 2020.

2. Prof. Halan Prakash, Invited Speaker At India-UK SPARC Online Workshop On Water Pollution And River Dynamics, Nov, 19-20, 2020 Conducted By Mahatma Gandhi University, Kottayam, Kerala. India.

3. Prof. Halan Prakash, Invited As A Resource Person For AICTE Sponsored Short-Term Training Program (STTP) On WASTEWATER TREATMENT AND CHARACTERIZATION TECHNIQUES- HANDS-ON EXPERIENCE -WEBINAR SERIES During 1 14-19th Of December. 2020, Conducted By Manipal Institute Of Technology. Karnataka.

4. Prof Ranjen Dey Has Given A Talk On "Solution Thermodynamics And Its Applications", Resource Person At Ugc- Mhrd Faculty Development Programme Refresher Course In Chemistry-Recent Trends In Chemistry Education And Research, 23rd Nov – 5th Dec, 2020, Sgb Amravati University.

5. Prof Ranjen Dey Has Given A Talk On "Use Of Combined Anaerobic Bioreactor And Low Pressure Membrane Filtration System For The Treatment Of Low Strength Wastewater To Recover Renewable Resources" Invited Talk In Fdp Cum Workshop On Waste To Bioenergy, Organized By Sharda University And Mit, 28th Jun -4th July, 2020.

6. Prof Ranjen Dey Has Given A Talk On " Viscosity Predictions Of Binary And Multicomponent Liquid Mixtures Using Newly Developed Routes" At National Seminar On Green Tehnology, Hnb Pg College, Naini, Allahabad, 23-24 Feb, 2020.

7. Prof Ranjen Dey Has Given A Talk On "Some Newly Developed Approaches For Prediction Of Viscosity" In National Webinar On Insights Into Fundamentals Of Chemistry, National Webinar On Insights Into Fudamentals Of Chemistry,Dept. Of Chemistry, Cmp Degree College, University Of Allahabad, Prayagraj, 18th – 20th June , 2020.

8. Prof. Amrita Chatterjee Had Visited Sikkim University And Delivered Invited Talk On Feb 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Prof Bin Xie, Pure and Applied Chemistry Group, Department of Chemistry Lund University Sweden delivered invited lecture "Thermometric and Micro Biosensors" in the institute on jan 30, 2020

2. An invited talk ' How to get your paper accepted in a good journal-An editor's viewpoint' was delivered by Prof. Suresh C. Pillai, PhD, MBA, FIMMM, FRMS; Nanotechnology and Bio- Engineering Research Division, Faculty of Science,Institute of Technology Sligo,Ash Lane, at the Department of Chemistry on Monday, 2 March, 2020.

3. Prof. Mainak Banerjee have organized few talks a) Prof. David Lupton, Monash University, Australia, 06-03-2020; b) Prof. Annynda Dutta, IIT Bombay, 25-02-2020; c) Prof. A. T. Biju, IISC, 28-11-2020.

4. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Nurit Ashkenasy, Department of Materials Engineering and the Ilse Katz Institute for Nanoscale Science and Technology, Ben-Gurion University of the Negev, Beer-Sheva, Israel, Title of the talk: "Peptide Designs for Bioelectronics" on 27-01-2020.

5. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Gonen Ashkenasy, Department of Chemistry, Ben-Gurion University of the Negev, Beer Sheva, Israel, Title of the talk: "The Systems Chemistry of Peptide Networks" on 27-01-2020.

6. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Bin Xie, Department of Pure and Applied Biochemistry, Lund University, Sweden, Title of the talk: "Thermometric and microbiosensors" on 30-01-2020.

7. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Anindya Datta, Department of Chemistry, Indian Institute of Technology Bombay, Powai, Mumbai 400 076, India, Title of the talk: "Elucidation of excited state dynamics in complex systems" on 25-02-2020.

8. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. David William Lupton, School of Chemistry, Monash University, Victoria 3800, Australia, Title of the talk: "Normal Polarity Enantioselective Catalysis Using N-Heterocyclic Carbenes" on 06-03-2020.

9. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Rahul Banerjee, Department of Chemical Sciences, Indian Institute of Science Education and Research (IISER) Kolkata, Mohanpur Campus, Mohanpur, India, Title of the talk: "Porous Framework Materials: What are they good for" on 19-09-2020.

10. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Saptarshi Mukherjee, Department of Chemistry, IISER Bhopal, Bhopal, India, Title of the talk: "Luminescent Metal Nanoclusters: Spectroscopic Signatures and Applications" on 26-09-2020.

11. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Harinath Chakrapani, Department of Chemistry, IISER Pune, Pune, India, Title of the talk: "Generating Hydrogen Sulfide from Organic Compounds" on 31-10-2020.

12. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Gautam Kumar Lahiri, Department of Chemistry, IIT-Bombay, Mumbai-400076, India, Title of the talk: "Metal-Ligand Cooperativity in Molecular Functionalization" on 07-11-2020.

13. Dr. Subhashish Roy had arraged a talk, Speaker: Prof. Akkattu T. Biju, Department of Organic Chemistry, Indian Institute of Science, Bangalore-560012, Karnataka, India, Title of the talk: "Organocatalysis Using N-Heterocyclic Carbenes (NHCs)" on 28-11-2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Prof. Sunil Bhand has been elected as Vice President of BITS Goa Innovaiton, Incubation and Entrepreneurship Society BIGIIES founded in 2020.

2. Prof. Sunil Bhand was reappointed as expert for Intellectual Property cell of State Innovation Council, Government of Goa, India for 2020 to evaluate the ideas for patent application supported by the council

3. Prof. Sunil BhandAppointed expert reviewer for Swiss National Science Foundation to evaluate their Scientific proposal in the area of biosensors (2020)

4. Prof. Sunil Bhand appointed as expert reviewer by Innovate UK in the area of biosensors (2020) and evaluated major proposals.

5. Prof. Ranjan Dey was inivited to join the Editorial Board of Chemical Physics Physical Chemistry (PCCP), as an Associate Editor.

6. Prof. Ranjan Dey was awarded Certificate of Recognition from Journal of Chemical Thermodynamics, Novermber , 2020

7. Prof. Mainak Banerjee acted as reviewer of peer reviewed scientific papers of publishers like: ACS, RSC, Wiley, Elsevier, Bentham science, Oriental J. Chem etc. and reviewed papers of journals like: JACS, Anal Chem, ACS Nano, JOC; Analyst, Chem Comm, RSC Adv., New J. Chem, ChemPlusChem, ChemistrySelect, J. Het. Chem., Spectrochimica Acta etc. In this period, I was invited in the editorial boards of international journals: 1) Frontiers in Chemistry; 2) General Chemistry and I continue as an editorial board member of 1) Oriental Journal of Chemistry (from 2016); 2) Transstellar Journal Publications and Research Consultancy Private Limited (TJPRC, from 2015).

8. Prof. Mainak Banerjee In 2020, I was offered life membership of Indian Society for Radiation and Photochemical Sciences, India, (ISRAPS).

9. Prof. Mainak Banerjee has acted as a judge of the annual symposium of CDFAA, Goa University "Fascinating World of Chemical Sciences", March, 2020.

b. Won by Students

1. Dr Aurna Chandra Singh selected for post doctoral fellowship at Luxembourgh Institute of Technology.

2. Ms. Smita Gupta won the best poster award in the PANIWATER conference held at BITS K K Birla Goa Campus, India, March 3-6th, 2020.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Prof Sunil Bhand delivered an invited talk (webinar) Introduction to the biosensors, fundamentals to applications with focus on environment and food safety on Sept 24 2020 under Sensor Technology FDP program, supported by AICTE New Delhi organized by National Institute of Engineering, Mysuru during Sept 21-25 2020.

2. Prof Sunil Bhand participated in meeting as expert advisory committee of TOCIC Tirupati of DSIR held at Tirupati on Feb 28, 2020.

3. Prof. Sunil Bhand evaluated the PhD thesis of Calcutta University in the area of chemical sensors.

4. Prof Ranjan Dey was invited as Resoruce Person at the UGC-MHRD FDP Refresher Course organized by Sant Baba Ghadge Univeristy, Amravati, Maharashtra, 23rd – 5th December, 2020.

5. Dr. Subhasish Roy reviwed two papers for the journal Chemical Papers (Springer Publication).

6. Prof. Anjan Chattopadhyay reviewed papers for ACS Omega (American Chemical Society), Molecular Physics (Taylor and Francis).

12. PATENTS FILED/PUBLISHED AND GRANTED

1. A device for detection and analysids of mycotoxins. UK Patent No.GB2531924 UK was granted and issued certificate in April 2020 with ICAR GoI as Applicant. Prof Sunil Bhand Gautam Bacher, Lizy Kanungo, Sudhir Chandra and Hardik Pandya as inventors.

2. Indian Patent Application no. 201821027800 filed 24.07 2018 was published with BITS Pilani as applicant. Inventors: Utpal Roy, Rehan Deshmukh, Sunil Bhand. Date Published: 31.01.2020.

3. Filed a provisional patent application no. 202011046287 with BITS Pilani as applicant and Rehan Deshmukh, Utpal Roy and Sunil Bhand as inventors.

4. Prof. N N Ghosh, A Roy, H Aiyar, A Chatterjee, NANOPARTICLES REINFORCED HOLLOW FIBER MEMBRANE (IN Application: 202011053657) dated 10 December 2020.

5. Departmental Associations Activities

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	BET Surface Analyzer (NOVA 2200e)	1
2.	G3540A Agilent 8890 Gas Chromotography System Custom	1

B2.10.3 Department: Chemical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**02**
Associate Professors	**02**
Assistant Professors	**11**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professors	**00**

Head of the Department :   Prof. Saroj Sundar Baral

Contact details   **:**   ssbaral@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   **: 30**

Part Time   **: 07**

Aspirant Scheme   **: 02**

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Dileep M.	2014PH01018G	The effect of point defects on semiconductor photocatalytic behaviour	Prof. Saroj Sundar Baral	NA

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Studies on CO fueled self-sustaining Unmixed Combustion (UMC) reactor for integrated CO2 capture and power/steam generation	Chemical Engineering	Srinivas Krishnaswamy	Dr. Amol Deshpande	DST (Technology Mission Division), in collaboration with University of Machester, UK		(78.61 Lakhs)
2	Predicting grease lubrication behavior: (a) novel methods to determine grease rheology at extremely large shear rates and (b) the role of nanoscale and mesoscale structure of grease in film formation inside tribocontact (CRG/2020/003087)	Chemical Engineering	Asima Shaukat		Approved project (DST-SERB Core Research Grant) 4th Dec:		

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Recovery of Water from Gasious Emmissions	Chemical Engineering	Srinivas Krishnaswamy	Dr. Amol Deshpande / Dr. Anirban Roy	Birla Carbon (Aditya Birla Group) - CSR grant for three PhD students (5 years)		Rs. 63 Lakhs

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Lanthanide doped hydroxyapatite based nano-materials for theranostics applications: Sensing, Imaging, and Therapeutics	Chemical Engineering	Meenal Kowshik	Sutapa Roy Ramanan	DST	-	39,64,700
2	Mesoporousnanocomposites for controlling microbially induced corrosion caused by sulfate reducing bacteria	Chemical Engineering	Sutapa Roy Ramanan		DST SERB		32.6
3	Chlorine resistant Nano Enhanced Polymer Blend Membranes, 3 years	Chemical Engineering	Jegatha Nambi Krishnan	-	DST - SERB	-	31,74,200
4	Ion Selective Sensor for Arsenic Detection in Water medium, 2 years	Chemical Engineering	Jegatha Nambi Krishnan	-	DSTE, Govt. Of Goa	-	2,00,000
5	"Process improvements in Urrakh and Feni production in Goa"	Chemical Engineering	S D Manjare (Principal Investigator)	-	department of Science, Technology & Environment, Govt of Goa |	-	7,50,000
6	Unmixed Reforming (UMR) of Methane for Hydrogen Production	Chemical Engineering	Srinivas Krishnaswamy	-	DST – SERB / BPCL Corporate R&D	-	56,11,100 + 6,00,000
7	Air Quality Impact Assessment of Cargo handling at Mooring Dolphins" September 2018 – March 2019.	Chemical Engineering	S D Manjare	-	Mormugao Port Trust (MPT), Vasco,	-	16,75,600
8	Synthesis of mononuclear as well as homo and hetero dinuclear complexes of Cu(II) and Zn(II) with hard-soft donor ligands and evaluation of their anticancer activities", (sanctioned on 6-11-18	Chemical Engineering	Manjuri Kumar	-	DST- EMR	-	23,05,500
9	Development of suitable material for visible light induced photocatalytic hydrogen production from industrial wastewater	Chemical Engineering	Saroj Sundar Baral	-	Department of Science and Technology, Government of India	-	53,32,000
10	Formulation of bio-functionalized cosmetic emulsions using biosurfactant and essential oil as green ingredients	Chemical Engineering	Vivek R.	-	DST SERB	-	30,27,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
11	Catalytic HI decomposition studies in membrane reactor for hydrogen production (transferred project)	Chemical Engineering	Sharad Sontakke	-	BRNS	-	19,33,000
12	"Surface Water Purification For Handwash And Other Application For Rural India"	Chemical Engineering	Anirban Roy		DST NIDHI PRAYAS		10 Lacs
13	"Studies on hybrid Pressure Retarded Osmosis (PRO)- Reverse Osmosis (RO) system for energy generation utilizing hypersaline RO reject stream"	Chemical Engineering	Anirban Roy		DST - SERB Core Research Grant (CRG)		36.3 Lacs
14	Development of bimetallic catalysts for direct non-oxidative conversion of methane to higher hydrocarbons"	Chemical Engineering	Sharad M Sontakke		DST-SERB (EMEQ),		Rs.42.5 lakhs
15	"Photo-irradiation and Adsorption based Novel Innovations for Water-treatment" (PANI-WATER)"	Chemical Engineering	Prof. Halan Prakash	Sharad M Sontakke	DST-EU (HORIZON 2020)		Rs. 209 Lakhs
16	Continuous Flow Oil-Water Separation System Using Smart Separators Capable of Low-Voltage Wettability Switching",	Chemical Engineering	Pradeep Sow		Early Career Research Award (ECR) – SERB-DST,		46.51
17	Mechanistic approach to design composite metal-carbon nanofiber oxygen electrodes for high-performance metal-air batteries		Richa Singhal		DST SERB		45.59

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Life Cycle Assessment study for Maharashtra Aldehydes and Chemicals Ltd" November 2018-January 2019	Chemical Engineering	S D Manjare	-	Maharashtra Aldehydes and Chemicals Ltd, Mahad, Mumbai	-	7,00,000
2	Performance assessment studies on the production process of Thiamethoxam" July 2018 – December 2018.	Chemical Engineering	S D Manjare	-	DeccanFine Chemicals (India) Pvt Ltd. Hyderabad	-	3,00,009
3	Process Design and Development cost effective method for carbon-silica based hybrid fillers for application in rubber products	Chemical Engineering	S D Manjare		Apolo Tyres		60 lakhs

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Ion selective sensors for heavy metal ion detection in water medium	Chemical Engineering	Jegatha Nambi Krishnan	-	-	BITS Pilani (OPERA Award)	15,00,000
2	"Development of transition metal oxide based nanostructured surfaces for low-voltage tuning of wettability"	Chemical Engineering	Pradeep Sow		Additional Competitive Grant – BITS Pilani,		
3	Application of Unmixed Combustion (UMC) for sustained heat transfer to high heat transfer coefficient liquids	Chemical Engineering	Amol Deshpande		Additional Competitive Research Grant (ACG), BITS Pilani K. K. Birla Goa Campus		(10.00 Lakh)
4	Isolation and characterization of biopolymer producing bacteria, and media optimization based on cheaper substrates for the optimal production of biopolymer	Chemical Engineering	Vivek R		Additional Competitive Research Grant (ACG), BITS Pilani K. K. Birla Goa Campus		
5	Aqueous rechargeable metal-air batteries for large scale energy storage"	Chemical Engineering	Richa Singhal		Additional Competitive Research Grant (ACG), BITS Pilani K. K. Birla Goa Campus		INR 8,77,000/-,
6	Design, Development And Field Trials Of A Prototype For Point Of Source Treatment Of Domestic Waste Water (DWW)	Chemical Engineering	Anirban Roy		Additional Competitive Research Grant (ACG), BITS Pilani K. K. Birla Goa Campus		8 lakhs
7	Synthesis and applications of MOFs	Chemical Engineering	Sharad Sontakke		Additional Competitive Research Grant (ACG), BITS Pilani K. K. Birla Goa Campus		

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Electrochemical Process for Hydroiodic acid (HI) decomposition in Iodine-Sulfur Cycle:A feasibility study (Industry Sponsored Projects).	Chemical Engineering	Pradeep Sow	-	ONGC	-	11,69,000

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Sidhali U. Parsekar, Priyank a Velankanni, Shruti Sridhar, Paramita Haldar, Nayan A. Mate, Arnab Banerjee, P. K. Sudhadevi Antharjanam, Aditya P. Koley and Manjuri Kumar: Protein binding studies with human serum albumin, molecular docking and in vitro cytotoxicity studies using HeLa cervical carcinoma cells of Cu(II)/Zn(II) complexes containing carbohydrazone ligand. Dalton Transactions , Royal Society of Chemistry, DOI: 10.1039/C9DT04656A , 49,2947-2965 **(2020).**

2. Sampatrao Manjare, Nikita Bandekar, Aravind Satish, Arijit Chakraborty, and Prabhakar Sarode (2020), "Air dispersion modelling of coal particles released during handling of cargo at port" Accepted for publication in J of Environmental Modeling and Assessment (IF 1.634, H Index 48).

3. Manjare S D and Nikita Bandekar (2020), "Effect of atmospheric and operational variables on dispersion of bauxite particulates at port" Accepted for publication in J of Environmental Engineering and Management (IF 1.186, H Index 33).

4. Chandresh Dwivedi, Sampatrao Manjare and Sushil K Rajan, "Recycling of waste tire by pyrolysis to recover carbon black: alternative& environment friendly reinforcing filler for natural rubber compounds" Journal of Composite Part B: Engineering, 200 (2020) 108346 (IF 7.635, H Index 132).

5. Manjare S D and Kavita Patil, "Application of Gaussian dispersion model for the assessment of air pollutants from a steel plant in the city of Bokaro, Jharkhand, India" Accepted for publication in Int. J. of Environment and Waste Management, June 2020, (IF 0.410, H Index 16).

6. Amit Shanbag and Manjare S D, "Life Cycle Assessment of Tyre Manufacturing", Journal of Sustainable Development of Energy, Water and Environment Systems, Volume 8, Issue 1, pp 22-34, 2020, DOI: http://dx.doi.org/10.13044/j.sdewes.d7.0260 (SNIP 0.574, H Index 12).

7. A.V.B. Acharyulu, K. Sudhakar, L.R. Singh, S. S. Baral, Rate-limiting Mechanism in Iron Ore Sintering Process with Waste Gas Recycling, Transactions of the Indian Institute of Metals, Accepted (2020), Springer (IF: 21.205; H index: 28, SNIP: , SJR: 0.34).

8. A.V.B. Acharyulu, K. Sudhakar, G. Ramarao, A. Gowthaman, G. Thimmappa, L.R. Singh, S. S. Baral, Thermodynamic and mineralogical aspects of injecting LPG, coke oven gas and oxygen into goethitic iron ore sintering process, Journal of Sustainable Metallurgy, Accepted (2020), Springer (IF: 2.109; H index: 17, SNIP: , SJR: 0.71).

9. M. Dileep, S. S. Baral, Defect engineering in photocatalysis: formation, chemistry, optoelectronics, and interface study, Journal of Material Chemistry A, Accepted (2020), Royal Society of Chemistry (IF: 11.301; H index:185).

10. M. Dileep, K. Janaki, S. S. Baral, Highlighting the importance of optimal defect density through band structure and photocatalytic studies, Applied Surface Science, Accepted (2020), Elsevier (IF: 6.183; H index:174)

11. S. S. Baral, K. Mohanasundaram, S. Ganesan, Selection of suitable adsorbent for the removal of Cr(VI) by using Objective Based Multiple Attribute Decision Making method, Preparative Biochemistry & Biotechnology, Accept, Taylor & Francis (IF: 1.415; H index:27).

12. D. Maarisetty, K. Janaki, S. Sharma, S. S. Baral, P. Mohapatra, Unravelling the rate controlling step in degradation of phenol on a higher potential photocatalyst, Journal of Environmental Chemical Engineering, 8 (2020), 103938. Elsevier (IF: 4.3; H index: 60)

13. D. Maarisetty, S. Mahanta, A. Sahoo, P. Mohapatra, S. S. Baral, Steering the charge kinetics in dual-functional photocatalysis by surface dipole moments and band edge modulation: A defect study in TiO2-rGO-ZnS composite, ACS Applied Materials and interface, 12 (2020), 11679-11692, ACS (IF: 8.758; H index: 199).

14. S. S. Baral, Davide Dionisi, Dileep Maarisetty, A. Gandhi, A. Kothari, G. Gupta, P. Jain, Potential of Biofuel production from microalgae through Municipal wastewater treatment in India, Biomass and Bioenergy, 133 (2020), 105445, Elsevier (IF: 3.551; H index: 169).

15. A. Patil, S. S. Baral, P. Dhanke, V. Kore, Biodiesel production using prepared novel surface functionalised TiO2 nano-catalyst in hydrodynamic cavitation reactor, Materials Today: Proceedings, 27 (2020), 198-203, Elsevier (SNIP: 0.694; H index: 27).

16. Utkarsh Tiwari, Neela Gayathri Ganesan, Jui Junnakar & Vivek Rangarajan. Towards the formulation of bio-cosmetic nanoemulsions: From plant-derived to microbial-derived ingredients. Journal of Dispersion Science and Technology (Accepted Oct 2020) (IF-1.7).

17. Bagcinele D, Vivek Rangarajan, Kim G.Clarke. A simple thin layer chromatography based method for the quantitative analysis of biosurfactant surfactin vis-a-vis the presence of lipid and protein impurities in the processing liquid, Biocatalysis and Agricultural Biotechnology, 25 (2020) (Cite score-2.26)

18. P.K. Sow, Ashwin Y. A design framework for the fabrication of a low-cost goniometer apparatus for contact angle and surface tension measurements, Measurement Science and Technology, (2020),31: 125401

19. Ishita; Singhal, R. Porous Multi-Channel Carbon Nanofiber Electrodes using Discarded Polystyrene Foam as Sacrificial Material for High-Performance Supercapacitors. Journal of Applied Electrochemistry. 2020, 50, 809-820. https://doi.org/10.1007/s10800-020-01433-0.

20. Sow, P. K.; Ishita; Singhal, R. Sustainable approach to recycle waste polystyrene to high-value submicron fibers using solution blow spinning and application towards oil-water separation. Journal of Environmental Chemical Engineering, 2020, 8(2), 102786. https://doi.org/10.1016/j.jece.2018.11.031.

21. Shubham Lanjewar, Anupam Mukherjee, Priyesh Khandewal, Asim K. Ghosh*, Aditi Mullick, Siddhartha Moulik*, Anirban Roy*, "Thermodynamics of Synthesis and Separation Performance of Interfacially Polymerized "Loose" Reverse Osmosis Membrane: Benchmarking for Greywater Treatment" (Accepted), Chemical Engineering Journal (IF : 10.652)

22. Lubna Muzamil Rehman, Ranjan Dey, Zhiping Lai, Asim K. Ghosh, Anirban Roy*, "A Reliable & Novel approach based on Thermodynamic Property estimation of Low to High Salinities Aqueous Sodium Chloride Solutions for Water-Energy Nexus (WEN) Applications" (Accepted), Industrial & Engineering Chemistry Research (IF : 3.573).

23. Arijit Chakraborty & Anirban Roy*, "Water Energy Nexus for Estuarine Systems with Seasonal Salinity Variations: A Thermodynamic Feasibility Analysis of Reverse Osmosis (RO) – Pressure Retarded Osmosis (PRO) Combinations" IWA- Water Supply (accepted) (IF : 0.922).

24. Anupam Mukherjee, Aditi Mullick, Pavani Vadthya, Siddhartha Moulik*, Anirban Roy*, "Surfactant Degradation using Hydrodynamic Cavitation based Hybrid Advanced Oxidation Technology: A Techno Economic Feasibility Study" Chemical Engineering Journal (2020): (IF : 10.652).

25. Anupam Mukherjee, Aditi Mullick, Ravi Teja, Pavani Vadthya, Anirban Roy*, Siddhartha Moulik*, "Performance and Energetic Analysis of Hydrodynamic Cavitation and Potential Integration with Existing Advanced Oxidation Processes: A Case Study for Real Life Greywater Treatment." Ultrasonics Sonochemistry (2020): 105116. (IF : 6.513).

26. Zongyao Zhou, Dongwei Lu, Xiang Li, Lubna M Rehman, Anirban Roy, Zhiping Lai*, "Fabrication of highly permeable polyamide membranes with large "leaf-like" surface nanostructures on inorganic supports for organic solvent nanofiltration." Journal of Membrane Science (2020), 601, 117932.(IF : 7.183).

27. Hydrothermally synthesized N2-UiO-66 for enhanced and selective adsorption of cationic dyes, SN Tambat, DJ Ahirrao, AB Pandit, N Jha, SM Sontakke, Environmental Technology & Innovation 19, 101021

28. Synthesis, characterization and stability of Ni-Ce-Zr trimetallic metal organic framework, AA Meshram, SM Sontakke, Materials Today: Proceedings.

29. Amol Deshpande, Aastha Arya, Comparative CFD simulation studies on monolith and packed bed reactors for oxidation of Cu in unmixed combustion (UMC) process. Chemical Engineering Research and Design 160 (2020) 521–532. (https://doi.org/10.1016/j.cherd.2020.06.021).

30. V. Prabhudesai, A. Meshram, R. Vinu, S. M. Sontakke, "Superior photocatalytic removal of metamitron and its mixture with Rhodamine B dye using combustion synthesized TiO_2 nanomaterial", Accepted, Chemical Engineering Journal Advances.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. D. Maarisetty, S. Mohanta, A. K. Sahoo, P. Mohapatra and S. S. Baral, Synthesis, Characterization and Photocatalytic activity of TiO2-rGO-ZnS nano composites, International Conference on Water, Energy, and Environmental Sustainability (WEES2020), NIT Durgapur, 13th to 15th January, 2020

2. <u>P.K Sow,</u> Frugal designs for affordable science: design of low cost goniometer system for wettability studies, Advances in Chemical Engineering and Science (ACES - 2020), 28-29 February 2020, IISER Bhopal, M.P. India.

3. R. Singhal, "Freestanding Nanofiber Electrodes for Supercapacitors", Nantional Conference on Advances in Chemical Engineering & Science (ACES-2020), IISER Bhopal, 2020.

4. S. Radhakanth, R. Singhal, "Electrospun Manganese Oxide Nanoparticles decorated Carbon Nanofibers as Electrodes for Supercapacitors", International Conference on Electrochemistry in Industry, Health & Environment (EIHE-2020), BARC, Mumbai, 2020.

5. Ishita, R. Singhal, "Porous Multi-Channel Carbon Nanofiber Electrodes for High Performance Supercapacitors using Waste Expanded Polystyrene", International Conference on Electrochemistry in Industry, Health & Environment (EIHE-2020), BARC, Mumbai, 2020.

6. Lubna Muzamil Rehman, Tushar Damani, Tanmay Garg, Vaibhav Sridhar, Vibhor Mittal, Anirban Roy "Analysis of Thermo-acoustical parameters of Hypersaline solutions for applications in Osmotic Power Generation Technologies", International Conference On Advances In Chemical Engineering, AdChE-2020 (Delivered Oral Presentation - Lubna)

7. A. Meshram, S. M. Sontakke, Synthesis, characterization and water stability test for Ni-Ce-Zr trimetallic metal organic framework, ICMS-2020, Tripura University, India (Mar., 2020)

8. D. Saxena, A.A. Meshram, S. M. Sontakke, Production of 5-hydroxymethylfurfural from glucose and sucrose using hydrothermally synthesized metal organic frameworks as catalyst, ACES-2020, IISER, Bhopal, India (Feb., 2020)

9. Amina F.[#], Amol Deshpande, Effect of metal/metal oxide loading on the heat transfer performance of Unmixed Combustion (UMC) based air heating system, International conference on Advances on Chemical Science and Petroleum Engineering – 2020 (ACAPE – 2020), February 22 – 24, 2020 (Paper ID: P137)

10. Amol Deshpande[#], Amina F., Pseudo-homogeneous modeling and CFD simulation of unmixed combustion (UMC) based packed bed reactor for water heating application, International conference on Advances in Chemical Engineering – 2020 (AdChE – 2020), UPES Dehradun, India, February 5 – 7, 2020 (Paper: AdChE/MSO-Paper/0961) [Received the best paper award at the conference]

11. A. Moses K & S. S. Baral, A new one step method for synthesis of dark TiO_2 for photocatalytic hydrogen production, ICMS conference, Agartala, Tripura, March 2020.

12. D. Maarisetty, S. Mohanta, A. K. Sahoo, P. Mohapatra and S. S. Baral, Synthesis, Characterization and Photocatalytic activity of TiO_2-rGO-ZnS nano composites, International Conference on Water, Energy, and Environmental Sustainability (WEES2020), NIT Durgapur, 13 th to 15 th January, 2020

ii) International:

1. Manjuri Kumar, Sidhali U. Parsekar, Priyanka Velankanni and Aditya P. Koley: Design and development of Cu(II)/Zn(II) complexes containing carbohydrazone ligand to study DNA and protein interaction as well as in vitro anticancer activity. GORDON RESEARCH CONFERENCES fron ti ers of science : Status: accepted by the conference chair and invited to present a poster at the 2020 meeting of Metals in Medicine, a highly prestigious Conference, which will be held at Proctor Academy, NH United States from June 28 - July 3, 2020 .Meeting: Metals in Medicine Gordon Research Conference, Dates: June 28, 2020 - July 03, 2020,Location: Proctor Academy in Andover, NH United States

2. Sontakkke, S.M., Prabhudesai, V., Kowsalya, B., Environmental applications of hydrothermally synthesized UiO-66 metal organic frameworks, in: Proceedings of MC-14, RSC, Birmingham, UK (Jul 2019).

3. A. Meshram, S. M. Sontakke, S. Mascarenhas, A. Ganguly, Precipitation of Silica from drinking water in CKDu affected areas of Canacona district, Goa, India: A simple, quick and economic method, in: Proceedings of IWA Water and Development Congress & Exhibition, Colombo, Srilanka, (Dec 2019)

4. P. Sai Pavan Kalyan, Amol Deshpande[#], CFD Simulation of fuel/flue gas section of the fire-tube steam boiler system, Proceedings of the 6th World Congress on Mechanical, Chemical, and Material Engineering (MCM'20) [7th International conference on Heat Transfer and Fluid Flow (HTFF'20)], Virtual Conference (originally expected to held at Prague, Czech Republic), August 16 – 18, 2020 (DOI: 10.11159/htff20.178) [Indexed by Google scholar and Scopus**]**

3. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Anirban Roy, Siddhartha Moulik, Reddi Kamesh, Aditi Mullick, "Modeling in Membranes and Membrane-Based Processes", John Wiley & Sons (June 2020) (ISBN: 978-1-119-53606-2)

2. Shubham Lanjewar, Anupam Mukherjee, Lubna Muzamil Rehman, Amira Abdelrasoul, Anirban Roy (2020) "Thermodynamics of Casting Solution in Membrane *Synthesis"* Chapter in Modeling and Simulation for the Design of Membrane Processes, Edited by Anirban Roy, Siddhartha Moulik, Kamesh Reddi and Aditi Mullick; John Wiley & Sons – ISBN: 978-1119536062

3. Lubna Muzamil Rehman, Anupam Mukherjee, Zhiping Lai, Anirban Roy (2020) "Membrane Technology: Transport Models and Application in Desalination Processes" Edited by Anirban Roy, Siddhartha Moulik, Kamesh Reddi and Aditi Mullick; John Wiley & Sons – ISBN: 978-1119536062

4. S.D. Parashar, A.A. Meshram, S.M. Sontakke, "Electro-photocatalytic degradation processes for dye/colored wastewater treatment", Accepted for Publication, Eds: Bhanvase et al., Elsevier Publication, Jun 2020. Accepted

5. A. Khandelwal, D. Maarisetty, S. S. Baral, Chapter Title: Single-atom photocatalysts for energy and environmental sustainability: A potential step for advancements in photocatalytic applications; Book Edition: MRW: Handbook of Smart Materials, Technologies, and Devices - Applications of Industry 4.0, Springer Nature International Publishing AG, Accepted 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT: NIL

8. INVITED TALKS GIVEN BY BITS FACULTY:

1. Dr. Anirban Roy, "Translational Research : Fundamentals to Products" University of Aveiro, July 24th 2020.

2. Dr. Anirban Roy, "Sustainability in Desalination : Fundamentals to Product Design" Sustainable Technologies for Water Treatment and Desalination STWTD 2020, Nit Calicut, 19th December 2020

3. Sharad M Sontakke: Delivered a guest lecture at IIT, Guwahati (Mar, 2020) and at LIT, Nagpur (Dec, 2020)

4. Saroj S. Baral: Recent Advances in Chemical engineering, IGIT- Sarang, Odisha, November 2020.

5. Saroj S. Baral: Want to be a Chemical scientist- Talk to the expert, Bhubaneswar, Odisha, December 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT :   NIL

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: Nil

b. Won by Students:

1. Jasneet Kaur Pala:The Late Lakshmi Nandakumar Award as the best speaker in the women's category at SCHEMCON 2020

2. Title: "Zero Liquid Discharge Strategy And Related Energetics : A Study Of Thermal Desalination Integrated With Crystallization"

3. Jasneet Kaur Pala: Best paper award in "Modeling and Simulation" at SCHEMCON 2020

4. Title: "Zero Liquid Discharge Strategy And Related Energetics : A Study Of Thermal Desalination Integrated With Crystallization"

5. Anupam Mukherjee: Best Paper Award at SCHEMCON 2020

6. Title: "Study of Hydrodynamic Cavitation based hybrid advanced oxidation technology: A case study for degradation of Sodium dodecyl sulphate "

7. Anupam Mukherjee: BRIC (BIRAC IKP) Award for Goa Idea Exposition 2020 on "Healthcare and Environment" at GIM Goa - in collaboration with ESSIL - includes cash prize of 50,000 INR for furthering development of technology

8. Title: "Prototype Development for Treatment of Grey Water Appliance GeRRy"

11. Faculty Development, International Collaboration & Industry Immersion:

1. KAUST Saudi Arabia - two international journal publications: Dr. Anirban Roy

12. PATENTS FILED/PUBLISHED AND GRANTED:

1. Hollow Fiber Membrane and Preparation thereof - Indian Patent Application No : 202011024477 dated 11 June 2020. List of inventors: Lubna Muzamilrehman, Anirban Roy

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: NIL

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1	BET from Micromeridics	1

B2.10. 4 Department: Computer Science & Information Systems

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**4**
Associate Professors	**4**
Assistant Professors	**16**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professors	**2**

Head of the Department : Prof. Vinayak Naik

Contact details   **:** vinayak@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   **: 15**

Part Time   **: 12**

Aspirant Scheme   **: 01**

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Harsha V	2016PHXF0411G	Secure and Lightweight Communication using Internet of Vehicles for Smart Transportation	Debasis Das	i) Neena Goveas ii) Vijay Kumar (University of Missouri Kansas City, USA)
2	Sanjay Laxmikant Joshi	2013PHXF0301G	Predicting Reliability in Software Product Development Environment	Bharat M. Deshpande	----
3	Sreekrishnan Venkateswaran	2014PHXF0012G	Meta Clouds and Meta Services: Constructing an Abstraction Layer Over Multi-clouds	Santonu Sarkar	----
4.	Trupil Grodhanbhai Limbasiya	2017PHXF0417G	Design of Vehicular Communication Protocols for Secure and Efficient Smart Transportation	Sanjay K Sahay	Debasis Das, IIT Jodhpur

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Agent-Based Simulation of Covid-19: Estimating the spread and disease burden using advanced Epidemiological modeling	CSIS	Vinayak Naik	Raja Sengupta	Indo-Candadian Shastri Institute		20,00,000
2	Agent-Based Simulation of Covid-19: Estimating the spread and disease burden using advanced Epidemiological modeling	CSIS	Raja Sengupta	Vinayak Naik	IC-IMPACT		12,00,000
3	A low power deep spiking neural network for forest surveillance	CSIS	Basabdatta Sen bhattacharya	Sujith Thomas	SERB (CRG)	Teresa Serrano Gotarredona, Andrew Rowley	31,47,973

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Characterization of Students' Feedback for Gaining Actionable Insights	CSIS	Swati Agarwal	none	TLC		1.5L
2	Profiling online abuse detection in hindi-english code-mixed and code-switched natural language text	CSIS	Swati Agarwal	None	ACG		10L
3	Adapting Decision Trees to Edge-weighted Graphs using Watersheds	CSIS	Sravan Danda	None	RIG	Aditya Challa, Laurent Najman	2 L

A2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	An interdisciplinary study in Machine Learning and Classification for Astronomy, EMR/2016/005687	CSIS	Snehanshu Saha	Jayant Murthy	SERB		26 L
2	Mobile App for Improving Survival in Fires through Efficient Egress: The Role of Impromptu Indoor ~WiFi Localization and Georeferenced Building Maps	CSIS	Vinayak Naik	Ashwin Srinivasan	IC-IMPACTS and DST SERB	Raja Sengupta	38,18,512

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	AES: Automated Evaluation systems for Computer programing course in any university	CSIS	Soumyadip Bandyopadhyay	none	RIG	Amey Karkare, Venkatesh Chappala	2L
2	RESCUER – RESidential Cooling Usage for Energy Reduction	CSIS	Vinayak Naik		ACG		5,56,900
3	Link and Content-based Analysis of Online Recruitment in Terorrist Communties	CSIS	Swati Agarwal	none	RIG		2L

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
4	A Multi -layer neural network for dynamic visual scene learning, cognition and implemented on GPU and SpiNNaker	CSIS	Basabdatta Sen Bhattacharya	none	ACG	Jamie Knight, Sussex,	10 L

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Knowledge-Rich Deep Models for Optimisation	CS&IS	Prof. Ashwin Srinivasan	-	SERB	-	27,00,000.00

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	The DataLab Project	CSIS	Ashwin Srinivasan	Tirtharaj Dash	TCS Research, India	-	25,50,000.00
2	Implementation of Artificial Intelligence use cases in Yard Operations and Onboard Ship Operations (Short: Consultancy for Artificial Intelligence)	CSIS	Ramprasad S Joshi	-	Goa Shipyard Ltd. (GSL)	-	26,00,000.00
3	TCS Research Advisory Agreement	CS&IS	Prof. Ashwin Srinivasan	-	TCS	-	7,50,000.00

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	SamaTulyata: Automated Evaluation for Computer Programming Course	CSIS	Soumyadip Bandyopadhyay		TLC		1L

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Tirtharaj Dash,Ashwin Srinivasan,Lovekesh Vig. Incorporating Symbolic Domain Knowledge into Graph Neural Networks, CoRR 2020, 2020 (Data Science).

2. Ashwin Srinivasan,Lovekesh Vig,Gautam Shroff. Constructing generative logical models for optimisation problems using domain knowledge, 1371-1392, 2020 (Core A, Data Science)

3. Rakesh Ranjan Swain,Tirtharaj Dash,Pabitra Mohan Khilar. Lightweight approach to automated fault diagnosis in WSNs, IET Networks, DOI: 10.1049/iet-net.2019.0117, 2020 (SCIMAGO Q2, Networks)

4. Raj K Jaiswal. Position-based routing protocol using Kalman filter as a prediction module for vehicular ad hoc networks, Computers & Electrical Engineering, 83, 106599, 2020 (SCI, Networks , ImpactFactor=2.6)

5. Zaiba Hasan Khan,Swati Agarwal,Atul Rai,Mounil Binal Memaya,Sandhya Mehrotra,Rajesh Mehrotra. Co-expression Network Analysis of Protein Phosphatase 2A (PP2A) Genes with Stress-Responsive Genes in Arabidopsis thaliana Reveals 13 Key Regulators, Scientific Reports, Nature Publishing Group, DOI: https://dx.doi.org/10.1038%2Fs41598-020-77746-z, 10, 2020 (SCIMAGO Q1, ImpactFactor=4.576)

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: Nil

ii) International:

1. Abhiraj Hinge,Pranav Garg,Neena Goveas. Image Processing for UAV Using Deep Convolutional Encoder–Decoder Networks with Symmetric Skip Connections on a System on Chip (SoC), International Conference on Intelligent Computing and Smart Communication 2019, DOI: ISBN 978-981-15-0633-8, 1009-1015, 2020, Springer, Singapore (Short) (Networks)

2. Mouli Rastogi,Syed Afshan Ali,Mrinal Rawat,Lovekesh Vig,Puneet Agarwal,Gautam Shroff,Ashwin Srinivasan. Information Extraction from Document Images via FCA based Template Detection and Knowledge Graph Rule Induction, 2020 IEEE/CVF Conference on Computer Vision and Pattern

3. Recognition, CVPR Workshops 2020, 2377-2385, 2020, Seattle, WA, USA (Long) (Core A, Data Science)

4. S Giridher,A Gupta,S Jaiswal,Vinayak Naik. Predicting Human Response in Feature Binding Experiment Using EEG Data, Networked Healthcare Technology (NetHealth'20), 2020, India (Short) (SCI, Networks)

5. K Phokela,Vinayak Naik. Use of Smartphone's Headset Microphone to Estimate the Rate of Respiration, Networked Healthcare Technology (NetHealth'20), 2020, India (Short) (SCI, Networks)

6. Sharan Ranjit S,Raj K Jaiswal. Single Image Intrinsic Decomposition Using Transfer Learning, 12th International Conference on Machine Learning and Computing, 418-425, 2020, China (Long) (Others, Data Science)

7. Aman Kumar Singh,Raj K Jaiswal. DDoSify: Server Workload Migration During DDOS Attack In NFV, 9th International Conference on Software and Computer Applications, 364-369, 2020, Malaysia (Long) (Others, Networks)

8. Rajaswa Patil,Somesh Singh,Swati Agarwal. BPGC at SemEval-2020 Task 11: Propaganda Detection in News Articles with Multi-Granularity Knowledge Sharing and Linguistic Features based Ensemble Learning, 14th International Workshop on Semantic Evaluation, Co-located with 28th International Conference on Computational Linguistics (COLING), 2020, Barcelona, Spain (Long) (Core A, Data Science)

9. Swati Agarwal,Rahul Thakur,Utkarsh Yadav,Hemant Rathore. Socio-Cellular Network: A Novel Social Assisted Cellular Communication Paradigm, The 91st Vehicular Technology Conference: VTC2020-Spring, DOI: https://ieeexplore.ieee.org/document/9129642, 2020, Antwerp, Belgium (Long) (Core B, Networks)

10. Sujith Thomas,Aditya Kapoor,Narayanan Srinivasan. Effect of a colour-based descriptor and stimuli presentation mode in unsupervised categorization, Proceedings of the 42nd Annual Conference of the Cognitive Science Society (p. 3531), 3531, 2020, Toronto, Canada. (Poster) (Core A, Data Science)

11. P Sharma,D Gosain,H Sagar,C Kumar,A Dogra,Vinayak Naik,H Acharya,S Chakravarty. SiegeBreaker: An SDN Based Practical Decoy Routing System, Privacy Enhancing Technologies Symposium, 2020, Canada (Long) (Core B, Networks)

12. Sujith Thomas,Narayanan Srinivasan. Better learning of partially diagnostic features leads to less unidimensional categorization in supervised category learning, Proceedings of the 42nd Annual Conference of the Cognitive Science Society (pp. 3444--3450), 3444--3450, 2020, Toronto, Canada (Short) (Core A, Data Science)

13. Rachit Rastogi,Ritika Jaiswal,Raj K Jaiswal. Renewable Energy Firm's Performance Analysis Using Machine Learning Approach, Procedia Computer Science, Elsevier, 500-507, 2020, Belgium (Long) (SCI, Data Science)

14. Sharan Yalburgi,Tirtharaj Dash,Ramya Hebbalaguppe,Srinidhi Hegde,Ashwin Srinivasan. An Empirical Study of Iterative Knowledge Distillation for Neural Network Compression, European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, DOI: ISBN 978-2-87587-074-2, 217-222, 2020, Bruges, Belgium (Core B, Data Science)

15. Soundarya Krishnan,Rishab Khincha,Lovekesh Vig,Tirtharaj Dash,Ashwin Srinivasan. A Case Study of Transfer of Lesion-Knowledge, MICCAI-International Workshop on Medical Image Learning with Less Labels and Imperfect Data, DOI: https://doi.org/10.1007/978-3-030-61166-8_15, 138-145, 2020, Lima, Peru (Long) (Data Science

16. Dheryta Jaisinghani,Naman Gupta,Mukulika Maity,Vinayak Naik. Adaptive ViFi: A Dynamic Protocol for IoT Nodes in Challenged WiFi Network Conditions, International Conference on Mobile Ad-Hoc and Smart Systems, 2020, India (Long) (Core B, Networks)

17. Bhavye Jain,Kaustubh Trivedi,Swati Agarwal,Rahul Thakur. MeshSOS: An IoT Based Emergency Response System, In 54th The Hawaii International Conference on System Sciences, 2020, Hawaii (Long) (Core A, Systems)

18. Shourya Shukla,Rahul Thakur,Swati Agarwal. Distributed Vehicular Dynamic Spectrum Access for Platooning Environments., IEEE 92md Vehicular Technology Conference VTC Spring, 2020, Helsinki, Finland (Long) (Core B, Networks)

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Bedir Tekinerdogan , Rakshit Mittal , Rima Al-Ali , Mauro Iaconod , Eva Navarroe ,Soumyadip Bandyopadhyay ,Ken Vanherpen and Ankica Barišic, "A feature-based ontology for cyber-physical systems", Chapter 3, Book Title : Multi-Paradigm Modelling Approaches for Cyber-Physical, Elsevier Press. ISBN No. 9780128191064

2. Holger Giese , Dominique Blouin , Rima Al-Ali , Hana Mkaoua , Soumyadip Bandyopadhyay , Mauro Iacono , Moussa Amrani , Stefan Klikovits and Ferhat Erata "An ontology for multi-paradigm modelling", Chapter 4, Book Title: Multi-Paradigm Modelling Approaches for Cyber-Physical, Elsevier Press. ISBN No. 9780128191064

3. NoDominique Blouin, Rima Al-Ali , Holger Giese , Stefan Klikovits , Soumyadip Bandyopadhyay , Ankica Barišic and Ferhat Erata, "An integrated ontology for multi-paradigm modelling for cyber-physical systems" , Chapter 5, Book Title:Multi-Paradigm Modelling Approaches for Cyber-Physical, Elsevier Press, ISBN No. 9780128191064

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Summer AI Symposium, May 2020

2. CTiCPS, Oct 2020

3. Microsoft Research (MSR) organized the fifth edition of the **Academic Research Summit 2020**, in partnership with the Association for Computing Machinery (ACM) India and **BITS Pilani Goa**. The summit will be held on the 30th and 31st of January 2020 at the BITS Goa campus.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Snehanshu Saha, Linear Algebra and Optimization, SNSIT National mathematics Day, KeyNote: Dec 22

2. Snehanshu Saha, Small Data to Big Data: Elegant and Speedy AI computations, Invited Talk, IEEE MPCIT International Conference, Dec 12, Shimoga

3. Snehanshu Saha, Efficient Inference methods in Gene Expression Data, India-Russia CPS Scientific Webinar, Oct 29

4. Snehanshu Saha, Machine Learning in Astronomy, Osmania University, Oct 23-24.

5. Snehanshu Saha, Learning Theory in Deep Networks, Shiraz University, Iran, Oct 13.

6. Snehanshu Saha, Adversarial Learning in Extragalactic-Galactic classification, SpaceAI-European Conference on Artificial Intelligence, Sept 24.

7. Snehanshu Saha, Interpretability under Adversarial Attacks, Summer AI symposium, BITS Pilani Goa, July 10.

8. Snehanshu Saha, Evolution of AI techniques:Classical and Deep Learning Approaches, NIAS Bangalore, July 1.

9. Snehanshu Saha, Adaptive Learning in Deep Nets, Nitte Institute Of Technology Bangalore, June 1.

10. Snehanshu Saha, Swarm Optimizers, IEEE Computer Society Bangalore, May 4.

11. Vinayak Naik, Smart Transportation for Smart Cities" at Current Trends in Cyber-Physical Systems (CTiCPS), Oct 10 - Oct 11, 2020

12. Vinayak Naik, "Smart Transportation for Smart Cities" at Russian-Indian Scientific AI and CPS Webinar, Oct 28 - 29, 2020

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Prof. Paritosh Pandya from TIFR delivered a talk on "Logical Specification and Optimal Synthesis of Robust Controllers and Runtime Enforcement Shields" on 14th Feb 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Snehanshu Saha, IETE Fellow, February 2020

b. Won by Students:

S.No.	Name of the Student / Name of the Team	ID No.	Name of the Award	Name of the Institution/Organisation from where the award has been received	Address of the Agency giving award	Month & Year of receiving award
1	Tirtharaj Dash	2016PHXF0421G	AWSAR Award (2019)	Department of Science and Technology (DST), India	Technology Bhavan, New Mehrauli Road, New Delhi-110 016.	2020
2	Rakshit Mittal	2017A8B40984G	ACM SRC Gold winner	PLDI 2020		2020
3	Team Meraki Aditya Choudhary	2017A7PS0041G	Code For Good 2020 Hackathon	JPMorgan Chase	J.P. Morgan Tower, Off CST Road, Kalina, Santacruz East, Mumbai, 400098, India	2020
4	Team #22 - Aditya Ahuja, Adithya Niranjan	2017A7PS0080G, 2016B4A70444G	Received a grant of £10,000 to work on developing machine learning system for ECMWF's data services. Details - https://esowc.ecmwf.int/	European Centre for Medium-Range Weather Forecasts	Reading, United Kingdom	May, 2020
5	Team HVM - Harshvardan Walia, Mehul Mohan, Vinit Kumar Munjal	2017B4A71027G, 2017A7PS0935G, 2017A7PS0148G	8th in HCL HACK IITK 2020, Meritorious Team	Interdisciplinary Center for Cyber Security and Cyber Defense of Critical Infrastructures, IIT Kanpur	IIT Kanpur, Uttar Pradesh 208016	August 2020
6	Parth Padia	2016B5A70404G	Undergraduate School on Experimental Quantum Information Processing (USEQIP)	University of Waterloo	IQC, Waterloo	January, 2020
7	Ayushi R Dubal	2019A7PS0099G	Google Women Techmakers APAC Scholarship 2020	Google		June 2020
8	Mayank Chaturvedi	2017B4A70548G	Google Kick Start - Rank 50/8000+ in India	Google		July 2020
9	Shejal Gupta	2017A7PS0122G	Ranked 132 across the globe in Google Code Jam to I/O for Women 2020, invited to attend Google I/O at Mountain View, California.	Google		Feb 2020
10	Sharan R Y	2016B4A70295G	GSoC 2020	Google		May 2020
11	Shejal Gupta	2017A7PS0122G	Invited to Software Product Sprint 2020, Google, an invite-only program desigend for aspiring technologists by Google	Google		July 2020

S.No.	Name of the Student / Name of the Team	ID No.	Name of the Award	Name of the Institution/Organisation from where the award has been received	Address of the Agency giving award	Month & Year of receiving award
12	Sharan R Y	2016B4A70295G	Pariticipated	Thirty-seventh International Conference on Machine Learning		July 2020
13	Team Coffe2Code - Vivek Sengar, Somil Gupta	2017A7PS0084G, 2017A7PS0142G	Finalist and Winner of "You've Got Skills Award" in Great India Alexa Hackathon	Amazon Alexa		April 2020
14	Rishab Khincha	2016B5A70517G	International Program Associate - awarded by RIKEN, Japan to conduct fully funded Research for upto six months	RIKEN Cluster for Pioneering Research, Japan	Tokyo, Japan	June 2020
15	Rishab Khincha	2016B5A70517G	Runner-up, Goldman Sachs Intern Coding Challenge	Goldman Sachs		July 2020
16	Rishab Khincha	2016B5A70517G	One of 50 students selected for HCI+AI4SG track for Google Research India AI Summer School	Google AI	Bangalore	August 2020
17	Rishab Khincha, Soundarya Krishnan	2016B5A70517G, 2016B5A70472G	Abstract Accepted for Oral Presentation at IVSP, Singapore	IVSP	Singapore	March 2020
18	Soundarya Krishnan	2016B5A70472G	One of 50 students selected for HCI+AI4SG track for Google Research India AI Summer School	Google AI	Bangalore	August 2020
19	Soundarya Krishnan	2016B5A70472G	Recipient of the Grace Hopper Celebration India Scholarship 2020 for deserving women students from computing, engineering and IT backgrounds.	Anita B.org	Bangalore	July 2020
20	Arshia Arya	2016B3A70489G	Received full-scholarship to attend the Thirty-seventh International Conference on Machine Learning 2020 under the Diversity and Inclusion Programm	Thirty-seventh International Conference on Machine Learning 2020 under the Diversity and Inclusion Programm	San Diego, CA	July, 2020
21	Arshia Arya	2016B3A70489G	One of 50 students selected for HCI+AI4SG track for Google Research India AI Summer School	Google AI	Bangalore	August, 2020

S.No.	Name of the Student / Name of the Team	ID No.	Name of the Award	Name of the Institution/Organisation from where the award has been received	Address of the Agency giving award	Month & Year of receiving award
22	Varun Bankar	2018B2A70295G	GSoC 2020 under CERN-HSF organisation	Google		May 2020
23	Priyesh Srivastava, Rajath Reghunath, Tanmay Dixit, Hariram R	2017A7PS0061G	Recieved best paper award at 12th International Conference on Communication Systems and Networks	IEEE	Bangalore	January 2020
24	Priyesh Srivastava, Amandeep	2017A7PS0061G	Top 50 Teams in Flipkart GRID Challenge 2020	Flipkart		July 2020
25	Alish Dipani	2016A7TS0005G	Teaching Assistant for an International Computational Neuroscience Summer School	Neuromatch Academy	USA	July 2020
26	Mehul Rastogi	2016A7TS0087G	Teaching Assistant for an International Computational Neuroscience Summer School	Neuromatch Academy	PA,USA	July 2020
27	Ruturaj Atul Godse	2019A7PS0002G	ACM India Coding Contest			Nov-20
28	Team Vikings: Ashwani Kottapalli Wahib Sabir Kapdi Abhijeet Swain Akash Jha Anshuman Singh	2018B4A70646G 2018A3PS0247G 2018B4A70540G 2018B5A80893G 2018A4PS0512G	Individual: 1)MANTRA Innovator of the Year 2)Prospect Top 100 in Tech under 21 Team AugVirtz: 3) Top 5 in Social Category : Facebook School of Innovation AR Open Program Team Vikings: 4)First Prize - Elixar AR Challenge by CEERI, Nvidia (With Akash Jha) (whole team prizes:) 5) First Prize in Gaming Category : HAB 59 Hackathon 6) Second Position - EVOTECH 4.0			1)Nov 2020 2)August 2020 3)August 2020 4) August 2020 5) August 2020 6) September 2020
29	Dev Churiwala Ameya Laad Anish Mulay Arijit Gupta Smitesh Patil	2018B1A70602G 2018A7PS0124G 2018B3A70907G 2018A8PS0856G 2018A7PS0167G	First Runners-Up at the Global PyTorch Summer Hackathon, 2020			Oct-20
30	Richi Dubey	2017A7PS0099G	HERCULES Prize- edition 2019/2020			Oct-20
31	Richi Dubey	2017A7PS0099G	Google Summer of Code 2020			Aug-20

S.No.	Name of the Student / Name of the Team	ID No.	Name of the Award	Name of the Institution/Organisation from where the award has been received	Address of the Agency giving award	Month & Year of receiving award
32	Richi Dubey	2017A7PS0099G	McGill Summer Undergraduate Research in Engineering(SURE) Award 2020			May-20
33	Pranav Ballaney	2018B1A70635G	Google Summer of Code 2020			Aug-20
34	Pranav Ballaney Shruti Sridhar Ameya There Yogen Borkar Gourav Saha Saransh Gokhale Naman Choudhary Arya Agarwal Suhas Badadal M Ithihas Shrilaxmi Patil	2018B1A70635G 2017B1A10997G 2018B5A70885G 2018A1PS0659G 2018B1AA0639G 2018B3A30033G 2018B1AA0931G 2017B1A10831G 2018B1A40600G 2018B1AA0607G 2018B5A80889G	Gold Medal, along with Special Prizes for the Best Software Tool and the Best Composite Part at the International Genetically Engineered Machine (iGEM) Competition 2020			Nov-20
35	ANIRUDH NAGARAJ Ganesh Reddy Kotamreddy	2018A7PS0216G (2018AAPS0353H) (BITS Hyderabad)	Research Paper [USING EPANET AND DEEP LEARNING TO PREDICT AND LOCALIZE LEAKS IN SMART WATER GRIDS] will be presented at IETE, NTPC-2021 on 03rd January 2021. Result of Paper Presentation awaited, will be updated in https://drive.google.com/drive/folders/1THvSIsZS9aFyR-yiobXaI0UW8C_FfnFR?usp=sharing			December 2020/January 2021
36	Kiran Nunna	2019A7PS0067G	ACM ICPC			Dec-20
37	Akshay Ithihas Madala Nikhil Garg Mohit Patil(alumni)	2018B1A70608G 2018B1AA0607G 2016B1A30597G	Under the guidance of Prof Veeky Baths we published a paper titled "Motor Imagery-Based Multimodal Biometric User Authentication System Using EEG" at the 2020 International Conference on Cyberworlds (CW), 272-279, in the biometrics category. The paper can be found here: https://ieeexplore.ieee.org/document/9240525			Jul-20

S.No.	Name of the Student / Name of the Team	ID No.	Name of the Award	Name of the Institution/Organisation from where the award has been received	Address of the Agency giving award	Month & Year of receiving award
38	Soumik Dhua	2018A7PS0155G	ACM India - National Student Coding Contest			Nov-20
39	Khyati Jain	2016B5A70471G	Winner, MIT COVID Hackathon: India Turning the tide			Aug-20

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Board of Directors: HappyMonk Technologies, Sept 2020-Sept 2025 (Contact: Snehanshu Saha)

2. MoU between Telecom ParisTech and BITS Pilani, Nov 2020 to Dec 2023 (Contact:: Soumyadip Bandyopadhyay and Dominique Blouin)

3. MoU between McGill University, Canada and BITS, Pilani Dec 2020 to Nov 2025 (Contact Vinayak Naik)

12. PATENTS FILED/PUBLISHED AND GRANTED - Nil

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

S.No.	Name of event	Brief description of event	Date From (DD-MM-YY)	Date To (DD-MM-YY)
1	Practice School Station Talks	Conducted Sessions for pre-final year students to help choose their ideal PS2 stations and allocation forms.	01-06-20	05-12-20
2	Department Week Competitions	Conducted department week competitions along with CTE. These include: 1. Hackathon 2. Competitive coding competition 3. Data Science Competition	24-03-20	16-04-20
3	Oracle AI/ML Workshop	Conducted a Industry workshop on AI/ML and Cloud by Oracle. 40 students and 5 faculty members participated.	16-02-20	16-02-20
4	Interview Experience Series	Shared interview experience of multiple seniors.	01-09-19	30-04-20
5	Department Mentorship Programme	This year we started with a department mentorship program for freshmen with 25 3rd/4th year mentors.	01-09-19	30-04-20

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	High Performance Computing Dell PowerEdge servers	8
2.	NVIDIA DGXS GPU-based server	1
3.	Lab PCs (Dell OptiPlex 3070 Micro XCTO)	100
4.	Senses Interactive Intelligent Panel, 75"	1
5.	RTX 2080 GPU Server, ACG with PI as Prof. Basabdatta SB	1
6.	Server-workstation (Precision 7820 Tower XCTO Base, Intel Xeon Gold 5218R, 64 GB DDR4 memory, 2TB SATA Hard Drive, 512 GB class 40 SSD, Nvidia Quadro RTX 5000 16GB) - Purchased using RIG and OPERA grants with Principal Investigator as Dr. Sravan Danda	1

B2.10. 5 Department: Economics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**00**
Associate Professors	**03**
Assistant Professors	**06**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professor	**00**

Head of the Department   : Prof. Aswini Kumar Mishra

Contact details   : 0832-2580258; aswini@goa.bits-pilani.ac.in

Number of Ph.D. Scholars :

Full Time   : 16

Part Time   : 07

Aspirant Scheme   : 0

Ph.D. Thesis Submitted during the year:

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Anil Kumar	2013PHXF0509G	Differentials in Health Care services, the Burden of Healthcare and the Need for Comprehensive Social Health Insurance: Evidence from the State of Bihar in India	A K Mishra	D Patnaik

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED:

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Food Insecurity, Intra-household Dynamics, and Life course Outcomes. [Funding: UK Research and Innovation	Economics	Sukumar Vellakkal	-	MRC UK Government	Lancaster university and Imperial college London	Rs 52 lakhs

D Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Impact of "Make in India" and new IPR policy on Innovation of MNCs and Indian MSMEs in Medical Device Sector	Economics	Rajorshi Sen Gupta	Aswini K Mishra	ICSSR IMPRESS	-	6.3 lakhs

B Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Towards a healthy consumption pattern for preventing chronic diseases in India: pattern and determinants in the consumption of substance, healthy and unhealthy diets over 1983-2012	Economics	Sukumar Vellakkal	-	PHRI-DST	-	Rs. 18.5 lakhs

B Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

(a) SCOPUS/ SSCI/ ABDC /WoS :31

1. Amonkar, R. V., Sengupta, T., Patnaik, D. (2020). OCTO SCM: Optimizing iron ore supply chain exports. Emerald Emerging Markets Case Studies. 10(4). DOI: 10.1108/EEMCS-04-2020-0129.

2. Amonkar, R., Roy, V., Patnaik, D. (2020). 'Service Supply Chain in Sea Port Logistics: Assessment Based on Logistics Service Providers' accepted for publication in Supply Chain Forum: An International Journal.

3. Coutinho, S., Prasad, Ch.V.V.S.N.V., Prabhdesai, R. (2020). 'Antecedents and Outcomes of Patient Satisfaction: A Study of Dialysis Centers in India' accepted for publication in Journal of Datta Meghe Institute of Medical Sciences University.

4. Duppati, G., Rao, N. V., Matlani, N., Scrimgeour, F., Patnaik, D. (2020). Gender diversity and firm performance: evidence from India and Singapore. Applied Economics. 52(14), 1553-1565. DOI: 10.1080/00036846.2019.1676872.

5. Ganguly, D., Patnaik, D. (2020). 'Insurgency and Economic Development in the North East India-In light of Look East and Act East Policy' accepted for publication in Contemporary South Asia.

6. Goel, M., T. Dixit, P. Srivastava, R. Reghunath and R. Hariram, "Cloud-based Mobile and Web application to support managing the treatment of Tuberculosis," 2020 International Conference on COMmunication Systems & NETworkS (COMSNETS), Bengaluru, India, 2020, pp. 29-34, doi: 10.1109/COMSNETS48256.2020.9027426.

7. Jaiswal, R., Uchil, R. (2020), Time-Varying Conditional Profitability of Momentum Strategies in Commodity Futures Market: Evidence from India. Asian Journal of Business and Accounting. 13(2) 245-276. DOI: 10.22452/ajba.vol13no2.9.

8. Kumar, A., Mishra, A. K., Patnaik, D. (2020). Current state of healthcare in India: A critical appraisal of the national health protection scheme and way forward. Journal of Sociology and Social Anthropology. 11(1-2), 100-109. DOI: 10.31901/24566764.2020/11.1-2.347.

9. Kumar, A., Mishra, A. K., Patnaik, D. (2020). National Health Policy, 2017- A Milestone towards Health Security in India? Some Annotations. Journal of Social Sciences. 60(1-3), 21-27. DOI: 10.31901/24566756.2019/60.1-3.2254.

10. Manogna, R. L., Mishra, A. K. (2020). Agricultural production efficiency of Indian states: Evidence from data envelopment analysis. International Journal of Finance and Economics. DOI:10.1002/ijfe.2369.

11. Manogna, R. L., Mishra, A. K. (2020). Exploring the role of family ownership in internationalization: empirical investigation of Indian firms. Review of International Business and Strategy. DOI: 10.1108/RIBS-05-2020-0058.

12. Mishra, A. K., Bhardwaj, V. (2020). Wealth distribution and accounting for changes in wealth inequality: Empirical evidence from India, 1991–2012. Economic Change and Restructuring. DOI: 10.1007/s10644-020-09290-9.

13. Mishra, A. K., Jain, S., Abid, M. (2020). Non-performing assets and its determinants in the Indian banking system: An empirical analysis using dynamic panel data models. International Journal of Finance and Economics. DOI: 10.1002/ijfe.2102.

14. Mishra, A. K., Jain, S., Abid, M., Manogna, R. L. (2020). Macro-economic determinants of non-performing assets in the Indian banking system: A panel data analysis. International Journal of Finance and Economics. DOI: 10.1002/ijfe.1989.

15. Mishra, A. K., Jain, S., Manogna, R. L. (2020). Does corporate governance characteristics influence firm performance in India? Empirical evidence using dynamic panel data analysis. International Journal of Disclosure and Governance. DOI: 10.1057/s41310-020-00098-7.

16. Naik, S., Prasad, Ch.V.V.S.N.V. (2020). 'Risk and Risk Management: a Historical Review and Research Agenda' accepted for publication in International Journal of Business Continuity and Risk Management.

17. R L, M., Mishra, A. K. (2020). Does institutional ownership and internationalization affect corporate social responsibility in emerging economy firms? An empirical evidence from India. Journal of Asia Business Studies. DOI: 10.1108/JABS-12-2019-0361.

18. R L, M., Mishra, A. K. (2020). Price discovery and volatility spillover: an empirical evidence from spot and futures agricultural commodity markets in India. Journal of Agribusiness in Developing and Emerging Economies. 10(4), 447-473. DOI: 10.1108/JADEE-10-2019-0175.

19. R L, M., Mishra, A. K., Sinha, A. K. (2020). Does institutional ownership affect firms' international investments? Empirical evidence from India. Journal of Strategy and Management. DOI: 10.1108/JSMA-12-2019-0210.

20. Rastogi, R., Jaiswal, R., Jaiswal, R.K.(2020).Renewable Energy Firm's Performance Analysis Using Machine Learning Approach. Procedia Computer Science. 175, 500-507. DOI: 10.1016/ j.procs. 2020. 07. 071.

21. Sen Gupta, R., M. Anjal. (2020). Estimation of Value of Time of Toll Road Users in India. International Journal for Traffic and Transport Engineering (IJTTE). 10(4), 508-518. DOI: 10.7708/ijtte.2020.10(4).09.

22. Shaikh, S., Fernandes, M. J., Patnaik, D. (2020). An investigation of impact of volatility and benchmark index returns on ETF returns. International Journal of Mechanical and Production Engineering Research and Development. 10(1), 1039-1048. DOI: 10.24247/ijmperdfeb202097.

23. Shukla, R. (2020). Market Structure, Entry Barriers, and Firms R&D Intensity: Panel Data Evidence from Electronics Goods Sector in India. Journal of Industry, Competition and Trade. 20, 115-137. DOI: 10.1007/s10842-019-00308-1.

24. Sinha, A. K., Mishra, A. K., Manogna, R. L. & Prabhudesai, R. (2020). "Determinants of sustainable financial and innovation performance: a panel data analysis of Indian manufacturing SMEs", Int. J. Business and Globalisation. (In Press)

25. Swain, R., Patnaik, D. (2020). 'Banking Governance Parameters Differentiated by Size: Impact on Agency Cost' accepted for publication in Indian Journal of Corporate Governance.

26. Swain, R., Patnaik, D. (2020). 'Macro Financial Analysis of VAR from Banking Stocks' accepted for publication in International Journal of Business Continuity and Risk Management (IJBCRM).

27. Sofi Arfat Ahmad, M. Y. Bhat and Mishra A. K. (2020). "Testing Spatial Interactions in Kaldor's Growth Laws: A Cross-Country Analysis." Journal of Public Affairs.

28. Thomas, S., Mridula Goel and Dipak Agrawal (2020) "A framework for analyzing financial behavior using machine learning classification of personality through handwriting analysis" Journal of Behavioral and Experimental Finance, Elsevier, Vol. 26, June 2020, 100315, https://doi.org/10.1016/j.jbef.2020.100315.

29. M. Y. Bhat, M.S. Bhatt and Sofi Arfat Ahmad (2020). "Valuing Biodiversity Attributes: A Choice Experiment Design" Environmental Monitoring and Assessment. Vol. 192, Article No. 499.

30. M. Y. Bhat, M.S. Bhatt and Sofi Arfat Ahmad (2020). "Valuing Biodiversity of Dachigam National Park: A Choice Experiment Application" Management of Environmental Quality. Vol. 31(6), PP. 1569-1585.

31. Janita, B., Fledderjohann, J,.Vellakkal S, Stuckler D (2020). Subsidising rice and sugar? The Public Distribution System and Nutritional Outcomes in Andhra Pradesh. Journal of Social Policy, 1-25. doi:10.1017/S0047279420000380.

(b) UGC/Indian Citation Index:

(c) Others:01

1. Yadav, S. L., Patnaik, D. (2020). 'Health Status of Tribal Women across India with special Reference to Odisha' accepted for publication in Conference Volume on 'Teaching Methodology of Tribal Students.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED:14

1. Prasad, Ch.V.V.S.N.V,, Naik, Sankalp (2020): Benefits of Enterprise Risk Management: A Systematic Review of Literature, 11th Global Conference on Business and Social Science, Bangkok, Thailand, December 11-12, 2020.

2. Naik,Sankalp, Prasad, Ch.V.V.S.N.V, (2020): Understanding Risk and Risk Management, Anvesh-2020 Doctoral Research Conference In Management, Institute of Management, NIRMA University, November 26-27, 2020.

3. Prasad, Ch.V.V.S.N.V,, Prabhdesai, R., Sinha, A., Bhat, A. (2020): Determining the Impact Entrepreneurial Orientation on SME Alliance Formation, International Conference on Economics and Finance, BITS Pilani, K K Birla Goa Campus, January 23-25, 2020.

4. Prasad, Ch.V.V.S.N.V, & Durgaprasad, A. V. S. (2020) Supply Chain Coordination and Managing Supply chain Risks and Uncertainties, 7th AIMS International Conference on Management, IIM Kozhikode,, Jan 2-4, 2020

5. Shukla, R. (2020). Presented a paper titled "Incentive to Innovate and Market structure" at the 2nd Rajagiri Conference on Economics and Finance (RCEF 2020).

6. Shukla, R. Paper titled "Sources of Finance and In-house R&D: A Study of electronic firms in India" accepted for presentation at 34th Eurasia Business and Economics Society (EBES) Conference - Athens, Greece on January 6th, 7th, and 8th, 2021.

7. Sheetal Thomas, Mridula Goel Anmol Agarwal and Asadali Abbas Hazariwala "Application of Machine Learning to Analyse Handwriting Features of Neuroticism" in 2nd International Conference on Data Science, Machine Learning & Applications (ICDSMLA) (05-06 December, 2020) organized by Springer Conference, Pune, India.

8. Sheetal Thomas, Mridula Goel "Identifying Mutual Fund Investment Behaviour Using Handwriting Analysis" in 1st International Conference on Behavioural Economics and Finance (16-18 December, 2020) organised jointly by Institute of Public Enterprise (IPE) and India Behavioural Economics Network (IBEN).

9. Bhand U. and Goel M. (2020) "Commercialization of Life Sciences Technologies in Indian Academic Institutions: Challenges and Mechanisms", International Conference on Economics and Finance (ICEF 2020), BITS Pilani, K. K. Birla Goa Campus, January 23-25, 2020.

10. R.L., Manogna and Mishra, A.K. (2020), "Can the FMCG stock market investors hedge the risk in Agricultural Commodity markets? Empirical evidence from India", 2nd International Conference on Economics and Finance, ICEF-2020, organized by BITS Goa & University of Missouri, January 23rd to 25th 2020, India.

11. Sinha, A.K., Mishra, A.K. and R.L., Manogna (2020), " Performance of small firms and the determinants of research and development investment in India: A panel data analysis", 2nd International Conference on Entrepreneurship & Family Business, ICEFB-2020, organized by IIT Bombay & G. Brint Ryan College of Business, January 9th to 11th 2020, India.

12. R.L., Manogna and Mishra, A.K. (2020), "Financialization of Indian Agricultural Commodities: The Case of Index Investments", 9th International Conference on Futures and Other Derivatives, ICFOD-2020, organized by Fudan University and Beihang University, December 4th to 5th 2020, Zhuhai, China.

13. Aswini Kumar Mishra, Pratyush Pradhan, Divya Revankar (2020): Eliciting Time, Risk and Social preferences: Experimental Evidence from India, International Conference on Economics and Finance, BITS Pilani, K K Birla Goa Campus, January 23-25, 2020.

14. Sinha, A. K., Mishra, A. K., & Manogna, R. L. (2020) ". Examining the Performance of MSME firms in India: An Empirical Analysis at Industry Level", The 2nd International Conference on Economics & Finance. At: The Department of Economics, BITS Pilani K K Birla Goa Campus in association with Trulaske College of Business, University of Missouri, USA.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

Books Published/Edited/Chapters in Books (No.):03

Books:

1. A. K. Mishra, V Arunachalam, S. Mohapatra & D. Olson (Eds.). (2020) The Financial Landscape of Emerging Economies: Current State, Challenges and Solutions, Published by Springer Nature. ISBN-13: 978-3-030-60007-5.

2. Patnaik, D. (2020). Discovering Policy Imperatives for Industrial Development, Published by BlueRose Publishers, New Delhi. ISBN: 978-93-90396-30-6.

3. Patil, P., & Patnaik, D. (2020). Forest Accounting, Published by Himalaya Publishing House. ISBN: 978-93-90515-42-4.

Books Chapters:09

1. Mohapatra, S., & Mishra, A. K. (2020). The Evolving Financial Landscape in Emerging Markets and Developing Economies. In: Mishra A. K., Arunachalam V., Mohapatra S., Olson D. (eds) The Financial Landscape of Emerging Economies. Springer Book Series: Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. Springer, Cham. https://doi.org/10.1007/978-3-030-60008-2_1 (pp. 1-14).

2. Manogna, R. L., & Mishra, A. K. (2020). Can the FMCG Stock Market Investors Hedge the Risk in Agricultural Commodity Markets? Empirical Evidence from India. In: Mishra A. K., Arunachalam V., Mohapatra S., Olson D. (eds) The Financial Landscape of Emerging Economies. Springer Book Series: Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. Springer, Cham. https://doi.org/10.1007/978-3-030-60008-2_5 (pp. 55-69).

3. Bhardwaj, V., & Mishra, A. K. (2020). How Do Household and Spatial Factors Matter While Examining Inequality in Credit Availability? Evidence from an Emerging Economy. In: Mishra A. K., Arunachalam V., Mohapatra S., Olson D. (eds) The Financial Landscape of Emerging Economies. Springer Book Series: Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. Springer, Cham. https://doi.org/10.1007/978-3-030-60008-2_7 (pp. 79-110).

4. Baral, R., & Patnaik, D. (2020). Influence of Board Composition on Agency Cost and Its Governance Outcomes. In: Mishra A. K., Arunachalam V., Mohapatra S., Olson D. (eds) The Financial Landscape of Emerging Economies. Springer Book Series: Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application. Springer, Cham. https://doi.org/10.1007/978-3-030-60008-2_9 (pp. 123-147).

5. Henriques, M., & Patnaik, D. (2020). Social Media and Its Effects on Beauty. In: Peesley M., Levine P., Santos J. S.(eds) Open access peer-reviewed chapter - ONLINE FIRST. https://doi.org/10.5772/intechopen.93322.

6. Patnaik, D., & Keertana (2020). Analysing Telecom Frauds for Regulation. In: Henriques E., Dessai K. G., Kamat R. (eds) Digital India: Initiatives, Issues and Challenges. Broadway Publications. ISBN-9789380837789.

7. De'sa, S., & Patnaik, D. (2020). The Impact of the Pharmaceutical Industry of Hyderabad in the Pollution of the Godavari River. In: Bandyopadhyay, S., Magsi, H., Sen, S., Ponce Dentinho, T. (eds) Water Management in South Asia. Springer.

8. M. Y. Bhat and Arfat Ahmad Sofi (2020). "Economics of Bioenergy in India" in M. Y. Bhat et. al. Eds. Energy Economics and the Environment: Preservation, Conservation and Sustainability, Sage.

9. Arfat Ahmad Sofi and Subash S. (2020). "FDI, Labour Market and Welfare: How Inequality Navigates Welfare Loss?" in Siddharthan and Narayan Eds. FDI, Technology and Innovation, Springer, PP. 223-243.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT:01

1. The Department of Economics, BITS Pilani K K Birla Goa Campus in association with Trulaske College of Business, University of Missouri, USA organized its second International Conference on Economics and Finance (ICEF-2020) which will be held in BITS, Pilani K K Birla Goa Campus, Goa, India during January 23-25, 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY: Debasis Patnaik

1. Keynote Speaker-Presented a joint paper on Health Status of Tribal Women Across India with special Reference to Odisha' with Phd Scholar Ms Shashi Lata Yadav in a KISS National Conference Volume on 'Teaching Methodology of Tribal Students' in September 2019.

2. Paper presented at National Conference at Government College of Commerce and Economics at Borda, Margoa On "Identifying and Monitoring Telecom Frauds"on 7th February 2019.

3. As Invited Speaker, Presented a paper at International Conference in Madhu Sudan Law College, Cuttack on 9th February 2019 on "Role of Labor factor in Industrial Planning ".

4. Presented Indian National Budget 2019-20's Fiscal Implications to Goa University students on 4 February 2019-From 2.30PM - 4.30 PM.

5. On Invitation of Karnataka Government, undertake two sessions of 1.5hrs each on 24th Feb2019 at Directorate of Higher Education, Dharwad, Karnataka.

6. Presented Paper on Invitation on 'Application of Historical Methods to Social Sciences Research at Directorate of Higher Education, Government of Karnataka at Dharwad Campus Building on 24th February 2019.

7. As Chief Speaker, Delivered a Presentation as Resource Person on Pedagogical Interface of Natural Sciences and Social Sciences and Goa Reforms on 29th Feb2020 on Invitation by Directorate of Higher Education, Government of Goa on an Innovation Platform for all College and University Students and Scholars and Institutes Invited by Government of Goa.

8. Invited Speaker at International Congress on Societal Impact of Sciences Integrated into Research at Oslo Metropolitan University, Norway from 27-29 November 2019.

9. KeyNote Speaker at National Conference at Government College of Commerce and Economics on 18th January 2020 on 'Bank Mergers".

10. Paper presented at National Conference at Government College of Commerce and Economics at Borda, Margao On "Consumer Decision Making in Social Media Advertising" on 7th February 2020.

11. Gandhian approach to Regional Equity: Looking through the Eyes of the Co-operative'-Jt Paper (with Riyanka Baral) presented at Asia Rising Conference in Paris Convention Hall on August 27 2019.

12. Tribal Education: Search for a Holistic Alternative- Keynote speaker at KISS Conference on July28 2019- Kalinga Institute of Social Sciences, deemed to be University and Centre of Excellence announced by Government of India.

13. Resource Person and Presented 'Assessment of economic growth: Aspects and prospects in South Pacific Countries till 2015' at International Conference on Accounting, Finance and Business on Aug 24 2019 at RDA-Jaipur

14. Resource Person and Invited Speaker on 'Managerial Decision-Making Models' at College of Commerce and Economics, Margao, Goa.

15. Presented a Paper on Economic Growth in Thailand, Bangladesh, Goa and Kerala at Lebua Towers, Bangkok, Thailand on 14-15 March 2020.

16. Looking at Industrial Growth through Lenses of Productivity and Equity in India- Febraury 8, 2020 International Conference at Madhusudan Law University, Cuttack.

17. Presented paper on Behavioural Issues in Green purchase from a Consumer's Perspective On 18th Dec2020 in The First International Conference on Behavioral Economics and Finance (ICEF) at Institute of Public Enterprise, Hyderabad, Telangana State.

18. Presented a Webinar to Yogi Vemana University in October on Behavior of Financial Markets in Covid19 on Invitation.

19. Presented a Webinar on Invitation to Rama Devi Women's University at Bhubaneswar on Mental Health Health Issues during Covid 19.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT: Nil

10. AWARDS AND RECOGNITIONS:

a. Won by Faculty:

 Debasis Patnaik:

1. Member, Board of Studies, Department of Economics, MIT, World Peace University, Pune from December 2020.

2. Served as PhD External Examiner in University of Cochin, Central University of Hyderabad, Kalinga Institute of Industrial Technology.

3. Served as External Examiner for Recruitment of Faculty by Government of Goa.

b. Won by Students:

1. Abhishek Kumar Sinha: Best Case Study Award at the Annual Conference on Emerging Markets Innovation held at Goa Institute of Management

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. Debasis Patnaik: Conducted MDP for PNB MetLife Executives at ITC Grand Goa on 9th August 2019, Budget amount of Rs7.7 lakhs (Rural Insurance).

12. PATENTS FILED/PUBLISHED AND GRANTED: **NIL**

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: **NIL**

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED:

S.No.	Software/Equipment	No. of Licenses or Qty.
1	EViews-12.0 Version	5

B2.10.6 Department: Electrical & Electronics Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**4**
Associate Professors	**4**
Assistant Professors	**19**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professors	**00**

Head of the Department : Prof. Abhijit Pethe

Contact details   : 0832-2580860; abhijitp@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 21

Part Time   : 11

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	MPSoC Based Automated Digital Signal Processing System for Tokamak Reflectometry	EEE	A Amalin Prince	--	BRNS		25.29 Lakh

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Flying Ad hoc Network for disaster rescue operations (SERB-SRG/2019/001204)	EEE	Sarang Dhongdi	--	SERB	-	21,56,000/-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Image Processing and Machine Learning Techniques for Leather Species Identification	EEE	A Amalin Prince	-	TCS	-	23 Lakh

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Design and Development of Underwater Acoustic Modem	EEE	Sarang Dhongdi	-	ACRG	-	8.88 Lakhs
2	Design and Simulation of Micro devices for Development of Reliable Biosensor	EEE	Gautam Bacher	-	ACRG	-	10 Lakh

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Software Defined Radio (SDR) Based GNSS (GLONASS + IRNSS)	EEE	Nitin Sharma	-	ISRO	NA	33 Lakhs

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	High Power Compact UWB TEM Antenna and Mode Converter Design	EEE	Ashish Chittora	-	ACRG	-	9.5 lacs

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Mittal R., Prince A.A., Nalband S., Robert F., and Fredo A.R.J., (2020) 'Low-Power Hardware Accelerator for Detrending Measured Biopotential Data', IEEE Transactions on Instrumentation and Measurement, [early access] DOI: 10.1109/TIM.2020.3018235.

2. Varghese A., Jain S., Prince A.A. and Jawahar M., (2020) 'Digital microscopic image sensing and processing for leather species identification', IEEE Sensors Journal, vol.20 (17), pp. 10045 - 10056.

3. Gibin C.G., Bittu N, Buch JJU, Prince A.A., Neena G. and Surya P., (2020) 'Characteristics of Arbitrary Ramp Generator: A tuning voltage setup for the FMCW Reflectometer', IEEE Transactions on Instrumentation and Measurement, vol.69, pp. 3481-3492.

4. Gibin C.G., Abhishek M., Sriyash C., Prince A.A., Buch JJU and Surya P., (2020) 'A Novel and efficient hardware accelerator architecture for signal normalization', Circuits, Systems & Signal Processing, vol.39, pp. 2425-241.

5. Rathod A., Thakker R. and Prince A.A., (2020) 'Parameter Extraction of PSP MOSFET Model in Multi-core Zynq SoC Platform', Elsevier Procedia Computer Science, vol.171, 1027-1036.

6. Aloke Saha, Rakesh Kumar Singh, Pragya Gupta & D. Pal, "DPL-based novel time equalized CMOS ternary-to-binary converter", International Journal of Electronics, Vol. 107, Issue 3, pp. 431-443, 2020

7. Aloke Saha, Rakesh Kumar Singh, Pragya Gupta & D. Pal, "DPL-based novel CMOS 1-Trit Ternary Full-Adder", Accepted in International Journal of Electronics, Ahead of publication.

8. Li, X., Sanyal, A. K., Warier, R. R., & Qiao, D. (2020). Landing of hopping rovers on Irregularly-shaped small bodies using attitude control. Advances in Space Research, 65(11), 2674-2691.

9. S.K. Khare, A. Nishad, A. Upadhyay, and V. Bajaj, Classification of emotions from EEG signals using time-order representation based on the S-transform and convolutional neural network, Electronics Letters, 2020.

10. A. Nishad, A. Upadhyay, G.R.S. Reddy, and V. Bajaj, Classification of epileptic EEG signals using sparse spectrum based empirical wavelet transform, Electronics Letters, vol. 56, pp. 1370-1372, 2020.

11. S Nagaraju, LJ Gudino, BV Kadam, Ramesha CK, J Rodrigues, Hybrid area exploration–based mobility-assisted localization with sectored antenna in wireless sensor networks, International Journal of Communication Systems 33 (4), e4220, 2020.

12. VV Khairnar, CK Ramesha, LJ Gudino, A Parasitic Antenna with Independent Pattern, Beamwidth and Polarization Reconfigurability, Wireless Personal Communications, 1-19, 2920.

13. Laxminarsimha Chary Kandlakunta, Sreekanth G B, M. K. Deshmukh, Nitin Sharma, Marine Soundscape and Fish Chorus in an Archipelago Ecosystem Comprising Bio-diverse Tropical Islands off Goa Coast, India", Accepted for publication in Aquatic Ecology, 54, PP. 475–493, 2020.

14. Junyi Xie , Divya Unnikrishnan , Leon Williams , Adriana Encinas-Oropesa , Srikanth Mutnuri ,Nitin Sharma , Paul Jeffrey , Binxin Zhu & Paul Lighterness, Influence of domain experience on icon recognition and preferences,Behaviour & Information Technology, 2020: DOI: 10.1080/0144929X.2020.1795260

15. Abhijit Dey, L. M Joshi; Rohan Chhibba; Nitin Sharma, A study of Ionospheric effects on IRNSS/NavIC positioning at equatorial latitudes, Accepted for publication Advances in Space Research.

16. N. Balakrishnan, Malak Shah, K R Anupama and Nitin Sharma, Optimization of Flight and Maintenance Planning for Defence Aviation with Modified Artificial Bee Colony Algorithm, Accepted for Publication Defence Science Journal. (Impact factor 0.730)

17. A. Parameswaran and H. S. Sonalikar, "Design of Airborne Radome Using Novel Temperature Dependent Electromagnetic Modeling," Progress In Electromagnetics Research C, Vol. 104, 37-52, 2020.

18. Y. S. Zanwar, A. Parameswaran, and H. S. Sonalikar, "Optimization of Gimbal Parameters to Improve the Boresight Error Performance of Airborne Radomes," Progress In Electromagnetics Research M, Vol. 90, 127-135, 2020.

19. Ashish Chittora, Swati V. Yadav, "Periodic Printed Semi-Annular Substrate Loaded TM01 to TE11 Mode Converter", International Journal of Microwave and Wireless Technologies (Cambridge University press, EuMA), July 2020.

20. Swati V. Yadav, Ashish Chittora, "A Compact Ultra-Wideband TEM Horn Antenna for High Power Microwave Applications ", Microwave and Optical Technology Letters (Wiley-Blackwell Publications) , July 2020.

21. A. Chittora, "Design of A Compact TM01 to TE11 Mode Converter with Tuning Screws", International Journal of RF and Microwave Computer Aided Engineering (Wiley-Blackwell Publications), May 2020.

22. M. V. Yadav, S. Baudha and I. Srivastava, "Design of a miniaturized and compact printed antenna for UWB spectrum," Telecommunications and Radio Engineering, 79 (2020), pp. 1529-1538.https://dx.doi.org/ 10.1615/TelecomRadEng.v79.i17.40

23. M. V. Yadav and S. Baudha, "A Miniaturized Printed Antenna with Extended Circular Patch and Partial Ground Plane for UWB Applications," Wireless Personal Communications, (2020), pp. 01-13.https://doi.org/10.1007/s11277-020-07716-1

24. M. V. Yadav and S. Baudha, "A compact mace shaped ground plane modified circular patch antenna for ultra-wideband applications," Telecommunications and Radio Engineering, 79 (2020), pp. 383-397.https://dx.doi.org/10.1615/TelecomRadEng.v79.i5.20

25. S. Baudha, M. V. Yadav and Y. Bansal, "A compact slot antenna for ultra wideband applications,"Telecommunications and Radio Engineering, 79 (2020), pp. 213222. https://dx.doi.org/ 10.1615/ Telecom Rad Eng.v79.i3.30

26. S. Hota, S. Baudha, B. B. Mangaraj, M. V. Yadav, "A novel compact planar antenna for ultra-wideband application," Journal of Electromagnetic Waves and Applications, 34 (2020), pp. 116-128. https://doi.org/10.1080/09205071.2019.1689854

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: Nil

ii) International:

1. Mascarenhas E., Nalband S., Fredo A.R.J. and Prince A.A., (2020) 'Analysis and Classification of Vibroarthrographic Signals using Tuneable 'Q' Wavelet Transform,' 7th International Conference on Signal Processing and Integrated Networks (SPIN2020), pp. 65-70, February 27-28, Noida, India, IEEE.

2. K. Bandla, A. Hari, Sourabh Sethi Krishnan & D. Pal, "Design of High Speed and Low Offset SR Latch Based Dynamic Comparator", IEEE Tensymp, 5-7 June 2010, Dhaka, Bangladesh, Listed in IEEE Xplore

3. K. Bandla, A. Hari Krishnan & D. Pal, "New Topology of Low Power, High Speed and Area Efficient Dynamic-Latch Comparator for SAR-ADC's", IEEE 2020-ITCE, 8-9 February 2020, Mövenpick Resort Aswan, Egypt, Listed in IEEE Xplore

4. Akhilesh G. Naik, Debarshi Deka & D. Pal, "ASIC Implementation of High-Speed Adaptive Recursive Karatsuba Multiplier with Square-Root-Carry-Select-Adder", 11th IEEE LASCAS, 25-28 Feb. 2020, San Jose`, Costa Rica, Listed in IEEE Xplore

5. Sudeep Baudha, Manish Varun Yadav and Ishita Shrivastav, "A novel approach for compact antenna with parasitic elements aimed at ultra-wideband applications," 14th European Conference on Antennas and Propagation (EuCAP 2020), Copenhagen (Denmark), March 15-20, 2020. https://doi.org/10.23919/ EuCAP48036.2020.9135503

6. Balajee R S and Sudeep Baudha, "Planar Antenna with Rectangular Parasitic Patch and Strip for Ultra-wideband Applications," International Symposium on Antennas and Propagation, India, 2020

7. Joshi A, Dhongdi S, Kumar S, Anupama KR. Simulation of Multi-UAV Ad-Hoc Network for Disaster Monitoring Applications. In2020 International Conference on Information Networking (ICOIN) 2020 Jan 7 (pp. 690-695). IEEE.

8. Ansa Shermin S., Malhotra A., Dhongdi S., "TSP Algorithm for Optimum Path Formulation of AUV for Data Collection in Underwater Acoustic Sensor Network." In Proceedings of Fifth International Congress on Information and Communication Technology. ICICT 2020. Advances in Intelligent Systems and Computing, vol 1183. Springer, Singapore. https://doi.org/10.1007/978-981-15-5856-6_16

9. VV Khairnar, CK Ramesha, LJ Gudino, A Survey on Beamwidth Reconfigurable Antennas, International conference on Modelling, Simulation and Intelligent Computing, (MoSiCom 2020).

10. Verma and A. Pethe, "Modelling and Analysis of Multi-Junction Photovoltaic Cells", IEEE INDICON, December 2020

11. Aakash Gupta, Ankit Kalra and Hrishikesh S. Sonalikar, A Wide Band Square Loop Circuit Analog Absorber with Low Periodicity, IEEE International Conference on Advanced Communication Technologies and Signal Processing (IEEE ACTS 2020), 4-6 December 2020, NIT Silchar, India.

12. Romesh Srivastava, Aparna Parameswaran and H. S. Sonalikar, On Design of Airborne Radomes with Brent's Method for Radiation Pattern Peak detection, 4th International Conference on Optical & Wireless Technologies (OWT 2020), 3-4 October 2020, MNIT Jaipur, India, Springer.

13. Aniruddh Dwarkanath, Anita Agrawal, "Ultrasonic Guided Waves for Structural Health Monitoring Applications", 2020 IEEE International Students' Conference on Electrical,Electronics and Computer Science (SCEECS), Vol , I , B 1-E 7

14. R. D. Govenker, A. Y. Phatak, R. Bajpai and N. Gupta, "Outage Analysis of mmWave Integrated Device-to-Device Communication System under Nakagami Fading Channel," in National Conference on Communications (NCC) , Kharagpur, India, 2020, pp. 1-6.

15. Kaur, S. Kaushik, R. Bajpai, N. Gupta, "Performance Analysis of Millimeter-Wave Based Device-to-Device Communications System", in Proceedings of International Conference on Telecommunications, Indonesia, 2020.

16. R. Shanbhag, R. Bajpai, N. Gupta, A. Kumar, "Performance Analysis of Multi-Armed Bandit Based Resource Allocation Algorithms for D2D Communication Systems",in Proceedings of International Conference on Telecommunications, Indonesia, 2020.

17. Khokar, R. Bajpai, N. Gupta, "Best User Selection for NOMA-aided Full-duplex Cooperative D2D Communications System" in Proceedings of International Conference on Telecommunications, Indonesia, 2020.

18. R. Bajpai, A. Kulkarni, G. Malhotra, N. Gupta, "Outage Analysis of OFDMA Based NOMA Aided Full-Duplex Cooperative D2D System", in Proceedings of International Conference on Telecommunications, Indonesia, 2020.

19. Kumar, J. Eldho, S. Pandey, R. Bajpai, N. Gupta, " Outage Analysis of D2D based Ultra-relaibale Low latency Communication System under Nakagami-m Fading Channel", accepted in proceedings of IEEE ANTS 2020, Delhi, India.

20. S Mishra, R. Bajpai, N. Gupta, V.K. Singh, " Machine Learning and Caching based Efficient Data Retrieval Framework", accepted in proceedings of IEEE ANTS 2020, Delhi, India.

21. R. Bajpai, K. Nawandar, S. Nag, N. Gupta, "Outage Analysis of Millimeter Wave Assisted Full-Duplex Cooperative D2D communications System with Non-orthogonal Multiple Access", accepted in proceedings of IEEE ANTS 2020, Delhi, India.

22. N. Gupta, R. Bajpai, A. Kumar, V.A. Bohara, "Multiuser Hybrid Cooperative Device-to-Device Communications System with Best User Selection" accepted for proceeding in IEEE WCNC 2021, Nanjing, China, April 2021.

23. Ashish Chittora, Swati V. Yadav, , " A Compact Circular Waveguide Polarizer with Higher Order Mode Excitation" , IEEE CONECCT 2020 Conference, Bangalore, July 2020.

24. Swati V. Yadav, Ashish Chittora, "A Compact High Power UWB TEM Horn Antenna" , IEEE CONECCT 2020 Conference, Bangalore, July 2020.

25. Ravishankar P. Desai and Narayan S. Manjarekar "Design of Diving System Controller for an Autonomous Underwater Vehicle" 2020 First IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC) held in Visvesvaraya National Institute of Technology, Nagpur, M.S., India during 25th to 26th September 2020.

26. Ravishankar P. Desai and Narayan S. Manjarekar "Controller Design for Decoupled Model of an Autonomous Underwater Vehicle" 2020 First IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC) held in Visvesvaraya National Institute of Technology, Nagpur, M.S., India during 25th to 26th September 2020.

27. Ravishankar P. Desai and Narayan S. Manjarekar "Design of Robust Depth Controller for an AUV with Disturbance" 2020 IEEE 17th India Council International Conference (INDICON), held in Netaji Subhas University of Technology Dwarka Sector-3, Dwarka, Delhi, 110078, India during 11th to 13th December 2020.

28. R. Kadlimatti, "Good Code Sets via Coprime Powers," 2020 IEEE International Radar Conference (RADAR), Washington, DC, USA, 2020, pp. 262-267.

29. R. Kadlimatti, "Good Code Sets Based on Triangular Chirps with Signed Segments and Different Slopes," 2020 IEEE International Radar Conference (RADAR), Washington, DC, USA, 2020, pp. 280-285.

30. N. Chordas-Ewell, K. Xu, R. Kadlimatti, A. T. Fam, J. H. Choi, "Vibrating Antenna Doppler Radar," to be published in the proceedings of the 17th European Radar Conference, 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED NIL

1. A. Nishad and A. Upadhyay, "Empirical wavelet transform based classification of surface electromyogram signals for hand movements," in Modelling and Analysis of Active Biopotential Signals in Healthcare, Volume 1. Institute of Physics Publishing, 2020, pp. 9.1–9.31.

2. V.V Khairnar, CK Ramesha, LJ Gudino, Modeling Simulation and Intelligent Computing, Springer, Pages 487-494, January 2020.

3. Ramesha C K, Adapted the Indian edition of Microelectronics by Behzad Razavi, Wiley India Ltd.

4. Pramila Jakhar, Amitesh Kumar, mangal Das, P. Rajagopalan, Various Aspects of MOSFET Technology for 5G Communications, CMOS Analog IC Design for 5G and Beyond, 978-981-15-9864-7, 487959_1_En.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT - Nil

8. INVITED TALKS GIVEN BY BITS FACULTY

1. A Amalin Prince: Tuning Voltage Setup and Data Processing for FMCW Reflectometer, National Symposium for Commemorating 30-years of ADITYA Tokamak, Entrepreneurship Development Institute (EDI) of India, Gandhinagar, 27-28 January 2020, Gujarat, India.

2. Dipankar Pal: "Technical Education in India: Yesterday, Today & Tomorrow", delivered in the International Conference on Innovation in Engineering Sciences, Management and Technology - (ICIESMT 2019), held in S. B. Jain Institute of Technology, Management and Research, Nagpur on 12 December 2019. (Since it was held after the 2019-Annual Report was submitted, it is included in 2020-Annual Report)

3. Dipankar Pal: "Do's and Don'ts in Newsletters: An Editor's Perspective", delivered in the International Newsletter Editors' Meetup organised by IEEE Bangladesh Section, on 05 September 2020.

4. Nitin Sharma: Delivered invited Guest Lectures on Acquisition of GNSS Signals in ECE Department of Osmania University on Feb 28 2020.

5. Nitin Sharma: Delivered invited Guest Lectures on Acquisition and Tracking of GNSS Signals in 5 days workshop on 'Global Navigation Satellite System (GNSS)' organized at NIT Mizoram Dec 21- 22, 2020.

6. Pramila Jakhar, Invited talk in faculty development programme on "Next Generation Semiconductor Devices" from December 11-13, 2020, organized at Rajasthan Technical University, Kota and Geetanjali Institute of Technical Studies, Udaipur.

7. Pramila Jakhar, Invited talk in FDP course on "Next-Generation Semiconductor Devices for high-end applications" (21st-27th June 2020) organized by NIT Patna in association with Electronics & ICT Academy and sponsored by: Minister of Electronics and Information Technology, Govt. of India.

8. Pramila Jakhar, Invited talk in FDP on "Renewable Energy: Research to Industry" at NIT Patna in association with Electronics & ICT Academy, from 22nd Aug to 6th Sep 2020.

9. Ramesha C.K, 1. Delivered a key note address on the topic " Renewable Energy Resources" Sri Bhuvandendra College, Karkala, Karataka State on 29-Februrary 2020.

10. Naveen Gupta, Device to device communications: A paradigm for 5G and next-generation cellular networks, VIT Bhopal on 20th October 2020.

11. Ashish Chittora, "Applications of Microwave Engineering" at Kasturba Institute of Technology, Pitampura, Delhi on 26-7-2020.

12. Ashish Chittora, "Applications of Microwave Engineering and High Power Microwaves" at Nirma University, Ahmedabad, Gujarat on 29-09-2020.

13. Gautam Bacher, Delivered an Invited talk on "Electrochemical Impedance Spectroscopy (EIS) Based Biosensor" in the one week Workshop on "BIOSENSORS: Fundamentals to Advances, Scope & Applications" organized by Ramaiah Institute of Technology, Bangalore from 3rd to 8th August, 2020.

14. Sudeep Baudha Expert talk on Commercial use of Antenna at LNCT Bhopal (Online) on 27 June 2020

15. Sudeep Baudha Conducted online Short Term Training Program on Fundamentals of Electromagnetic Theory and Waves under TEQIP (MHRD Gov. of India) from 7 to 24 July 2020

16. Sudeep Baudha Conducted an Online Workshop on Electromagnetic Theory For RGPV Students under TEQIP (MHRD Gov. of India) from 29 June to 1 July 2020

17. Sudeep Baudha Conducted online Short Term Training Program on Electromagnetic Field Theory (EMFT) under TEQIP (MHRD Gov. of India) from 17 to 19 September 2020

18. Sudeep Baudha conducted a Webinar on Emerging Technologies for the Effective Management of Pandemic at IETE sub centre Indore on 2 November 2020

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Webinar on "Power of Electromagnetics : Trends & Technologies" on 5 August 2020 given by Sumith S Pillai, Designtech Systems Ltd.

2. Webinar on "Microwave Measurements using Vector Network Analyzer" on 6 August 2020 given by Sadanand Bhatt, Senior Technical Support Manager - Anritsu India.

3. Webinar on "Advancement in Packet Based Communications. Part - II" delivered by Dr. Amar Nath Ray, ATT&C, Kansas, USA, on 20th July 2020.

4. Webinar on "fifth-generation (5G) and its applications delivered by Dr. Parag Aggrawal, 5G Architect, Wipro Limited, Bengaluru, on 28 November 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: NIL

b. Won by Students:

1. Rahul Shanbhag:: Worked on the project, 'Performance Analysis of Multi-Armed Bandit Based Resource Allocation Algorithms for D2D Communication Systems' under Dr. Naveen Gupta as part ofa Design Project at BITS Goa during Sem 1 of Academic Year 2019-2020. Paper was submitted to ICT 2020 in February under Naveen Sir's guidance and was accepted and presented successfully at ICT 2020.The project aimed at focusing on a problem pertaining to the future of 5G communication and the challenges it faces. The project primarily consisted of the application of Reinforcement Learning techniques for resource allocation to device-to-device systems, in order to improve throughput. We used different approaches to solve the multi-arm bandit problem and successfully integrated the algorithms into a D2D underlay communication system.

2. Shashwat Mishra: My research paper got selected in IEEE ANTS conference 2020 which is coauthored by Dr. Naveen Gupta. We propose an efficient data retrieval framework that uses caching based on the popularity of the pages where the popularity of pages is determined by the number of hits it gets over a month, which is the learning phase of the model and how frequently a given web page is requested. The proposed framework uses a causal decision tree in the background to determine the popularity of pages according to which the algorithm decides whether a given page is worthy of being cached or not. Results show that our proposed model outperforms the conventional data retrieval models in terms of cache missed probability.

3. Soham Deshpande, Devashish Gupta and Stuti Panda: IUCAA had organized an antenna design competition called SWANtenna20 for the Sky Watch Array Network (SWAN). The go,al was to design a novel dual-polarized antenna element for astronomical observations at low radio frequencies. Over 39 teams from 32 Indian educational institutions registered, involving more than 200 students and 60 mentors. The BITS Goa team consisted of 3 Project RT members who worked under the guidance of Dr. Sudeep Baudha. The BITS Goa team was shortlisted to present their design to a jury consisting of a few of the best antenna experts in India. Further, our design is now shortlisted in the final stage which is prototyping. This will be done when the COVID-19 situation improves.

4. Anhad Veer Khokar: In the past academic year, I worked on a project in the field of Full Duplex Device-to-device communications, under the guidance of Dr. Naveen Gupta. As a result of this project, my first research paper titled: 'Best User Selection for NOMA-Aided Full Duplex Cooperative D2D Communication System' -A.Khokar, R.Bajpai, N.Gupta was accepted at the 27th International Conference on Telecommunications. Website link: http://ict-20.org/

5. Arjit Verma: The paper is titled "Modelling and Analysis for Multi-Junction Photovoltaic Cells". The research was inspired by the drive to improve the solar cell efficiency from the typical standard of 10-20%. With the guidance of Prof. Pethe, who shared my interest in this field, we were able to come up with a design with multiple junctions that's 43.32% efficient. This was the culmination of months of literature review, Sentarurus simulations, and MATLAB simulations. Ultimately, I presented the findings in a paper and presented it at INDICON 2020, an IEEE affiliated conference.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Nitin Sharma: PhD Student Mr Abhijit Dey is offered a visiting research student position at Hong Kong Polytechnic University as a part of my collaboration with Prof LT Hsu and Dr Bing XU in the field of GNSS research.

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Title of Invention: A device for detection and analysis of mycotoxins

   Inventors: Sunil Bhand, Sudhir Chandra, Hardik Pandya, Gautam Bacher, Lizy Kanungo

   Status: UK Patent GRANTED dated 29.04.2020 as GB2531924B

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES - Nil

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Atmel ATXMEGAA3BU-XPLD boards with Atmel JTAGICE3 debuggers	25

B2.10.7 .Department of Humanities and Social Sciences

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**00**
Associate Professors	**06**
Assistant Professors	**09**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professor	**00**
Visitng Professor	**01**

Head of the Department : Prof. Reena Cheruvalath

Contact details   : 0832-2580141; reena@goa.bits-pilani.ac.in

Number of Ph.D. Scholars

Full Time   : 20

Part Time   : 11

Aspirant Scheme   : 0

Ph.D. Thesis Submitted during the year: 2020:

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Sebastiao Anthony Rodrigues	2013PHXF0411G	Intra-inter conflicts and sustainability issues in the fisheries of Goa: An environmental ethical Approach	Reena Cheruvalath	NIL
2	Ranjit Manuel Jude Rodrigues	2013PHXF0503G	A Select Study of Public Speaking Anxiety among Undergraduate students in Non-Professional Colleges in the State of Goa .	Shalini Upadhyay	NIL
3	Harinder Singh	2016PHXF0018G	India's Maritime Goodwill Curve: Prospects And Feasibility Study .	R. P. Pradhan	NIL

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned : NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Evaluation' as a teaching method: A new pedagogical model to improve knowledge and critical thinking among students	Humanities & Social Sciences	Reena Cheruvalath	Geetha B	NCERT	NIL	3,88,500

B. Industry Sanctioned Projects : NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects: NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects :

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Impacts and prospects of computer gaming on academic and socio- cultural progress of undergraduate students at BITS- Pilani K K Birla Goa Campus	Humanities & Social Sciences	Sayantani Sarkar	-	Teaching Learning Centre	-	92,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
2	G2RT	Humanities & Social Sciences	-	Sayantani Sarkar	Gates foundation	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Assessing the impact of climate change on mountain communities in the Spiti Basin, Himalaya	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		SAC, ISRO, Ahmedabad		25 Lakhs
2	Undertaking study for mapping forest arears vulnerable to climate change in India based on high resolution computer model based projections	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		Forest Survey of India, Ministry of Env. Forest, Govt. of India		9.13 Lakhs
3	Implications of Ujjawala scheme for forest conservation efforts in the state of Jharkhand	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		Forest Department Government of Jharkhand		9.68 Lakhs
4	Jharkhand Wetland Study	Humanities & Social Sciences	Srikanth Mutnuri	Rajiv Kumar Chaturvedi& Mohan Kumar Bera	Forest Department Government of Jharkhand		17 Lakhs
5	Assessment of Pradhan Mantri Ujjwala Yojana in Jharkhand	Humanities & Social Sciences	Rajiv Kumar Chaturvedi	Mohan Kumar Bera	Govt. of Jharkhand		9,68000/-
6	Coping with Displacement due to River Erosion in the Indian Sundarban and Lower Assam	Humanities & Social Sciences	Mohan Kumar Bera		ICSSR		4.5 Lakhs

B. Ongoing Industry Projects :NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Studying the Climate Vulnerability in Peanut Cropping System in Junagadh district of Gujarat	Humanities & Social Sciences	Rajiv Kumar Chaturvedi	-	IORA Ecologicals, under The Forest-PLUS 2.0 program	-	3.25 lakhs

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	A-ReflecT: Modeling meta-cognitive processes in reflective reading and its open book assessments; SPIRITS 2020: the Program for Promoting the Enhancement of Research Universities	Humanities & Social Sciences		Geetha Bakilapada vu	Ministry of Education, Culture, Sports, Science and Technology), Japan	Kyoto University, Japan and IIT Bombay	41, 34,000
	Title: English Translation of Two Literary Works in Malayalam, Haritha Niroopanam Malayalathil (Ecocriticism in Malayalam) and Aa Aa Aanakkathakal (Those Elephant Stories)	Humanities & Social Sciences	Rayson K. Alex		Association for the Study of Literature and Environment (USA)		USD 1000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
2	From NDCs to pathways and Policies: Transformative climate Action After Paris	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		IDDRI, France (International)		15000 EUR

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects :

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Climate Change Impact Assessment in Thiruvananthapuram Division Kerala	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		IORA Ecologicals, under The Forest-PLUS 2.0 program		4.81 Lakhs
2	Risk & Uncertainty Assessment for Railway Infrastructure due to Impacts of Climate Change	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		IIM Ahmedabad		2.24 Lakhs
3	Preparation of Goa state Action plan on climate change, concept note and DPR	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		NABARD Consultancy Services Pvt Ltd		3.65 lakhs

B. Completed Industry Projects: NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects: NA

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	ACB students study sponsored by TLC	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		BITS, Goa		0.5 Lakhs
2	Additional Competitive Grant from BITS Goa	Humanities & Social Sciences	Rajiv Kumar Chaturvedi		BITS, Goa		2.5 Lakhs

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Da Silva, S. Bo Nielsen, K & Bedi, h. P. (2020) Land use planning, dispossession and contestation in Goa, India, The Journal of Peasant Studies, 47:6, 1301-1326, DOI: 10.1080/03066150.2020.1822822

2. Reena Cheruvalath. 2020. Analyzing the concept of 'paradox' in the Liar Paradox arguments. Cultura. International Journal of Philosophy of Culture and Axiology, Philosophy Documentation Center,17(1):87-98.

3. Bhattacharya, Amitendu. "Six Poems by Sambhunath Chattopadhyay: Translated from the Bengali and Annotated." Journal of Postcolonial Writing, vol. 56, no. 6, 2020, pp. 860-64.

4. Basu, S and Banerjee, B (December-2020).Impact of Environmental Factors on Mental Health of Children and Adolescents: A Systematic Review. Children and Youth Services Review, Vol (119), Elsevier. 7409; https://doi.org/10.1016/j.childyouth.2020.105515

5. Basu, S., Banerjee, B. (September-2020). Prospect of Brainwave Entrainment to Promote Well-Being in Individuals: A Brief Review. Psychological Studies, 65(3) , 296-306; https://doi.org/10.1007/s12646-020-00555-x, Springer Nature

6. Geetha Bakilapadavu. Learning Analytics of Critical Reading Activity: Reading Hayavadana during Lockdown. 28th International Conference on Computers in Education. Asia-Pacific Society for Computers in Education. November 2020 (Scopus indexed conference Proceedings)

7. Upadhyay, S and Upadhyay, N. (2020). Incorporating Twitter for Second Language Acquisition: Framework and Evidence, The Asian EFL Journal.

8. Hareesh A G: [Ontological Indeterminism and Immanence – Some Aspects of the Metaphysics of Organism. European Journal of Science and Theology. 16 (6). pp. 1-11.]

9. K.A.Geetha. Housing the Unhomely: A Study of Srilankan Panchamar Fiction" (2020) Interventions: International Journal of Post Colonial Studies https://doi.org/10.1080/1369801X.2020.1784023

10. K.A.Geetha. " Memory as Communication : An Analysis of the Reclamation of Panchami Lands" (2020) Interventions : International Journal of Post Colonial Studies https://doi.org/10.1080/1369801X.2020.1753549

11. K.A.Geetha. "In Perennial oppression : Internalised Ideologies of the Devadasis" Journal of International Women's Studies Vol 21: 2 (2020) 67-75 https://vc.bridgew.edu/jiws/vol21/iss2/7

12. Strapasson Alexandre, Jeremy Woods, Vanessa Pérez-Cirera, Alejandra Elizondod, Diego Cruz-Cano, Julien Pestiaux, Michel Cornet, and Rajiv Kumar Chaturvedi (2020) Modelling carbon mitigation pathways by 2050: Insights from the Global Calculator, Energy Strategy Reviews, 29, 100494. https://doi.org/10.1016/j.esr.2020.100494

13. Edirisi et al including Rajiv Kumar Chaturvedi (2020) Saline Soil Reclamation Index As An Efficient Tool For Assessing Restoration Progress Of Saline Land. Land Degradation and Development. https://doi.org/10.1002/ldr.3641

14. Bhattacharya, Amitendu. "Selected Poems of Sukanta Bhattacharya: Translated from the Original Bengali." Asiatic: IIUM Journal of English Language and Literature, vol. 14, no. 2, December 2020, pp. 144-47. (NON-SCOPUS)

15. Chhavi Rathi & RP Pradhan; "The Critical Analysis of Optimisation of Vizhinjam Port resulting in Nations Slow Economic Growth"; Journal of Indian Ocean Rim Studies, Vol. 3, Issue 2, November 2020. (NON-SCOPUS)

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. NilakDatta. "Orwell's 'Doublethink" as Post-Industrial Post-Truth".International Seminar on " A Century in Retrospect: Literary Signposts and Watersheds of the Last Hundred Years." Organized by Department of English.Shoolini University, Himachal Pradesh, May 18-22. 2020.(Virtual Conference Presentation.)

2. Rajiv K Chaturvedi "Climate Change in the Himalayan region", Himalaya International Conference, IISc, Bangalore (Oct, 2020)

3. R. P. Pradhan- Department of Political Science and IQAC, Dwijendralal College International webinar on "Regional (Dis)agreement : Rhetoric Or Reality? Looking Through the Lens of Recent Sino-Indian Skirmishes" on 05th Aug. 2020.

4. R. P. Pradhan- "Covid-19 Effect On Higher Education in India: The New Normal Dynamics", Key Note address at the National Webinar on Higher Education in Eara of Covid-19 Pandemic: Challenges & opportunities", Dept. of Education, Indira Gandhi Govt. College, Tezu, Arunachal Pradesh, 11 June 2020.

5. R. P. Pradhan- "Covid-19 Impact on Global Order: Thucydides Trap or Great Convergence", Key Note Address at the Online International Workshop, Dept. of Political Science, Kumar Bhaskar Varma Sanskrit & Ancient Studies University, Nalabari, Assam, 05-12 July 2020.

6. Comparing and contrasting Peri-urbanization in Kolkota: A study of eastern and the southern fringers of the city, International Conference on Planning Sustainable Regions: The Social- Economic-Ecological Triad Amity University, Kolkata, February 13-15, 2020 organized by Regional Science association, India.

ii) International:

1. K.A.Geetha. "A Study of Caste and Social Hierarchy within the Devadasi System"at the 6thWorld Conference on Women Studies organized by TIIKM and Bridge Water State University , July 2020

2. Cheruvalath, R., Manalo, I. and Ayabe, H. 2020. "Planning as a metacognitive strategy, diagram use, and th of moral reasoning" at SIG 8 Meets SIG 16 Dresden 2020 in DGUV Congress, Dresden, Germany

3. NilakDatta. " Masculine Nationalism and the American Frontier: Sight-marking Literature on Daniel Boone in the Long Nineteenth Century". International Conference on Tourist Imaginaries and Mobility in the United States. University of Versailles Saint-Quentin en Yvelines, Guyancourt, France. February6-7 2020)

4. NilakDatta. "Tourist vs. Traveler: The Legacy of Mark Twain's The Innocents Abroad (1869)". Mini Melow 2020.INTERNATIONAL CONFERENCE ONFOUR HUNDRED YEARS OF AMERICAN LITERATURE: BACK TO THE BASICS. 20th International Conference.Hosted by Shoolini University. (October9-11 2020)..)

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. NilakDatta. "Habitable Utopias and their Preservation: The Case Study of Daniel Boone"MEJO: The MELOW Journal of World Literature. Vol. 4, Feb 2020. Volume Title: Sunny Pleasure Domes and Caves of Ice: Utopias and Dystopias of World Literature. ISSN:2581-5768.DOI: 10.21659/mejo19.v8n3

2. NilakDatta. "Teaching George Orwell's 'Doublethink' as Post-Industrial Post-Truth."The Twentieth-Century: Literary Signposts and Watershed: An Anthology of Essays.Edited Purnima Bali and NeerajPizar. Manju Jaidka (Publisher) Kindle. Pp. 69-73. ISBN: B08GLW992P. ASIN: B08GKZPYTR.

3. NilakDatta and MajnuJaidka (Edited& Compiled) Covid's Metamorphosis: Stories of our Corona Times. Manju Jaidka (Publisher) Kindle. . ASIN :B08HQR3W85.

4. K.A.Geetha "Embedded Hierarchies and Subjugated Differences : A Study of Tamil Dalit Women" in Reading Dalit : Essays on Literary Representations (ed) G.J.V.Prasad (2020) pp 122-131

5. Rajiv Kumar Chaturvedi: Sustainable Plant Nutrition and Soil Carbon Sequestration Co-Editor Springer Nature.

6. Dr. R P Pradhan and Capt. Harinder Singh, " Island Chains & India's Maritime Goodwill Curve: Revisiting Mackinder's Round World", Connecting Asia: Understanding Foreign Relations, Organizations and Contemporary Issues, (eds) debashish Nandy, Kunal Books, New Delhi, 2020

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT:

1. R. P. Pradhan- Convener, International webinar on "Changing Dynamics of International Order & India's Foreign Policy Choices, Challenges and Options", Jointly Organized by Department of Humanities & Social Sciences, BITS Pilani Goa Campus & Electronic Journal of Social and Strategic Studies, 31 October 2020: 1400h [IST] onwards. Five Indian & European Diplomats, two International Academics along others presented their papers.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Reena Cheruvalath, Invited as a Resource Person, All India Council for Technical Education (AICTE) Sponsored Two Week Online FDP on "Nurturing Morals, Work Ethics & Accountability for Technical Teachers," Dept. of Computer Science, VRSEC, 7th - 19th December 2020

2. Reena Cheruvalath, Invited as a Resource Person, All India Council for Technical Education (AICTE) Sponsored Two Week Online FDP on "Professional Morals, Work Ethics, Accountability for Teachers in Technical Education," Dept. of Computer Science, VRSEC, 19th- 31st November, 2020.

3. Reena Cheruvalath, Invited Speaker in ISEC 2020 (SE4AI), IIITDM, Jabalpur, 27th February, 2020, Topic: Artificial Intelligence and Ethics

4. Geetha Bakilapadavu, Invited as a Resource Person, Learning Analytics for Humanities and Design Education (Workshop), 7th ICCE workshop on Learning Analytics (LA) Technologies & Practices for Evidence-based Education . November 2020

5. Geetha Bakilapadavu, Invited Speaker, Visual Literacy and Moving Images: Notes from the Classroom. The 3rd International Workshop of the Society of the Cognitive Science of Culture (SCSC 2020) held at BITS Pilani, K K Birla Goa Campus. February 2020

6. Da Silva, S (2020) 'Land commodification and dispossession for Tourism; using the case study of a Large Tourism and Golf Course project in the village of Tiracol in North Goa' at TAOYAKA On-site Training

Program organised jointly by Hiroshima University, Indian Institute of Management, Ahmedabad (IIMA) and BITS (Goa campus) on 18 Feb 2020 at BITS-Pilani K K Birla Goa Campus.

7. Hareesh A G , Invited speaker, A talk on 'Understanding Philosophy' at the School of HSS, Indian Insititute of Technology, Tirupati on 09th Septemeber, 2020

8. K A Geetha: Invited speaker for a Faculty development Webinar on Gender Sensitization organized by B.T.M.College, West Bengal. Presented a paper titled "Gendering Caste : A Study of Dalit Women".

9. NilakDatta. "Literary and Cultural Studies: Challenges for Researchers in the 21st Century." Professor Som.P. Ranchan Memorial Annual Lecture. 19-October-2020. English Teachers' Forum of Himachal Pradesh.

10. Rajiv Kumar Chaturvedi. "Environmental Policies Process in India" at BHU, Varanasi, India (Webinar) 23rd Dec, 2020.

11. Rajiv Kumar Chaturvedi. "IUCN Red List of Ecosystems (RLE) Typologies and Principles of Classification: Assessing ecosystem risks for prioritisingconservation in Mountain Ecosystems of S. Asia" Webinar 14 December, 2020-12-28 (International).

12. Rajiv Kumar Chaturvedi. Climate Change in Goa, Public talk, by Govt. of Goa 29 Dec 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Invited Prof. Kingshuk Chatterjee, Department of History, Calcutta University, given a talk on Safeguarding the Islamic Republic - Generational Shift and Structural Factors Shaping Tehran's Foreign Policy.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Rajiv Kumar Chaturvedi. Nominated as member of the Awards Committee, for Goa Biodiversity Board

2. R.P.Pradhan. Invited to serve as "Distinguished Fellow- Political Economy", Centre for Public Policy Research (CPPR), Kerala, Sep - Oct 2020 onwards.

3. Sayantani Sarkar: Member of editorial board of Indian Journal of Regional Science, Regional Science Association of India (2019-2021)

b. Won by Students:

1. Mahesh K. Varghese, KSCA Fellowship 2020 - Research Grant, Agency: Kerala Chalachithra Academy, Kerala

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

- Rajiv Kumar Chaturvedi. Research collaboration with IDDRI, France;

- Rajiv Kumar Chaturvedi. Imperial College, London.

- Reena Cheruvalath, Research Collaboration with Kyoto Univeristy and Waseda University, Japan

12. PATENTS FILED/PUBLISHED AND GRANTED: NA

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: NA

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED :   NA

B2.10.8 Department: Mathematics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**00**
Associate Professors	**04**
Assistant Professors	**13**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Assistant Professors	**00**

Head of the Department :   Dr. Jajati Keshari Sahoo

Contact details   : 08322580441; jksahoo@goa.bits-pilani.ac.in

Number of Ph.D. Scholars: 33

Full Time   : 27

Part Time   : 6

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Ashish Kumar Nandi	2015PHXF0017G	Iterative Methods for Linear and Multilinear Systems Based on Splittings	Jajati Keshari Sahoo	-
2.	Shah Parth Mukeshbhai	2016PHXF0022G	Study on Various Cosmological Models using Dynamical Systems	G. C. Samanta	Mayank Goel
3.	Godinho Aloysius Q	2014PHXF0001G	Studies in Neighbourhood Magic Graphs	Tarkeshwar Singh	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Numerical Approximation of Optimal Control Problems Using Virtual Element Method	Mathematics	Anil Kumar	Prof. Sarvesh Kumar, IIST Trivandrum	DST - SERB	-	19,07,000.00
2	Modelling and Forecasting the Effects of Long Term Interventions on COVID-19 using Network- based Approach	Mathematics	Anupama Sharma	-	DST - SERB	-	5,00,000.00
3	Modelling of Recurrent Infectious Diseases: Understanding the Sustained and Non-periodic Epidemic Patterns	Mathematics	Anupama Sharma	-	DST - SERB	-	6,60,000.00
4.	Entanglement, non-local games and quantum error correction - an operator algebraic viewpoint	Mathematics	Mizanur Rahaman	-	DST - SERB	-	12,46,357.00

B. Industry Sanctioned Projects: NA

C. International Sanctioned Projects: NA

D. Institute Sanctioned Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Modeling the Multi-scale Dynamics of Recurrent Infectious Diseases	Mathematics	Anupama Shrama	-	RIG	-	2,00,000
2	Completely positive maps in quantum information theory	Mathematics	Mizanur Rahaman	-	RIG	-	2,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Theoretical and Numerical Study of the Control Problems Involving Differential Equations with memory terms	Mathematics	Anil Kumar	-	DST-SERB	-	6,20,000.00
2	Magic and Antimagic Labeling of Graphs	Mathematics	Tarkeshwar Singh	NIL	DST-SERB	-	19,54,832.00
3.	Partial Migration Phenomenon: A Game Theoretic Approach to Causes and Consequences.	Mathematics	Anushaya Mohapatra	-	DST-SERB	-	12,05,000.00
4.	A study of homotopy invariants of a model category	Mathematics	Shilpa Gondhali	-	DST-SERB	-	6,60,000.00

B. Ongoing Industry Sanctioned Projects: NA

C. Ongoing International Sanctioned Projects: NA

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	The Effect of Environmental fluctuations on the evolution of partial migration phenomenon	Mathematics	Anushaya Mohapatra	-	RIG	-	2,00,000

3. COMPLETED PROJECTS :

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Some Studies on Neighborhood Magic Graphs	Mathematics	T. Singh	Anil Kumar	DST	-	12,69,000.00
2	A Study on the Inequalities Involving Complex Polynomials	Mathematics	Prasanna Kumar	-	NHBM	-	13,04,100.00
3	Bernstein Type Inequalities for the Polar Derivative of a Polynomial	Mathematics	Prasanna Kumar	-	CSIR	-	16,46,000.00

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
4	Predictive Mathematical Modeling and Analysis for Effective Diagnosis and Control of Diabetes Mellitus with associated Co-infections and Diseases among Indians	Mathematics	P. Danumjaya	V. Shree Hari Rao	DST-SERB	-	15,68,490
5	Theoretical and Numerical Study of Elliptic and Parabolic Partial Differential Equations with Interfaces	Mathematics	P. Danumjaya	-	NBHM	-	13,48,100

B. Completed Industry Projects: NA

C. Completed International Projects: NA

D. Institute Projects: NA

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Dhayal Rajesh, Muslim Malik, Syed Abbas, Anil Kumar and Sakthivel Rathinasamy, "Approximation Theorems for Controllability Problem Governed by Fractional Differential Equation" accepted for publication in the International J. of Evolution Equations & Control Theory, 2020 (DOI: 10.3934/eect.2020073).

2. Prasanna Kumar, On the Inequalities Concerning Polynomials, Complex Analysis and Operator Theory, 14(6), 1-11, 2020.

3. Ritu Dhankhar and Prasanna Kumar, A Remark on a Generalization of the Cauchy's Bound, Comptes Rendus de l'Academie Bulgare des Sciences, 73(10), 1333-1339, 2020.

4. Ritu Dhankhar, Narendra Kumar Govil and Prasanna Kumar , On Sharpening of Inequalities for a Class of Polynomials Satisfying $p(z) \approx zn\ p(1/z)$, Studia Scientiarum Mathematicarum Hungarica, 57(2), 255-266, 2020.

5. Santosh Kumar Bhal, P. Danumjaya, G. Fairweather, High-order orthogonal spline collocation methods for two-point boundary value problems with interfaces, Mathematics and Computers in Simulation, 174 (2020) 102–122.

6. Santosh Kumar Bhal, P. Danumjaya, G. Fairweather, The Crank–Nicolson orthogonal spline collocation method for one-dimensional parabolic problems with interfaces, J. Comput. Appl. Math. DOI: https://doi.org/10.1016/j.cam.2020.113119, (2020).

7. Santosh Kumar Bhal, P. Danumjaya, G. Fairweather, A fourth–order orthogonal spline collocation method for two-dimensional Helmholtz problems with interfaces, Numer Methods Partial Differential Eq. 2020;1–19. https://doi.org/10.1002/num.22505 (2020)

8. Pabitra Kumar Pradhan and Manoj Pandey, Symmetry analysis and optimal system of generalized Chaplygin gas equations with a source term, Mathematical Methods in the Applied Sciences, 2020, 43, 6081- 6092.

9. Sweta Govekar, Pabitra Kumar Pradhan and Manoj Pandey, Evolution of contact and weak discontinuity waves in two phase drift flux model, Int. J. Appl. Comput. Math., (2020), 6, 127.

10. Shilpa Gondhali, The complex K* ring of the complex projective Stiefel manifold. Journal of Algebraic Combinatorics 51 (2020), no. 3, 455- 468.

11. Dijana Mosic, P. S. Stanimirovic, J.K. Sahoo, R. Behera, V. N. Katsikis, One sided weighted outer inverse of tensors, Journal of Computational & Applied Mathematics, 2020.

12. D. Gerontitis, R. Behera, J.K. Sahoo, P. S. Stanimirovic, Improved finite-time zeroing network for time-varying division, Studies in Applied Mathematics, 2020.

13. R. Behera, Dijana Mosic, J.K. Sahoo, P. S. Stanimirovic, Weighted Inner Inverse for Rectangular Matrices, Quaestiones Mathematicae, 2020.

14. R. Behera, G. Maharana, J.K. Sahoo, Further results on weighted core-EP inverse of matrices, Results in Mathematics, 75(4):1-21, 2020.

15. R.K. Roul, J.K. Sahoo, A novel approach for ranking web documents based on query-optimized personalized PageRank, International Journal of Data Science & Analytics, 2020.

16. J.K. Sahoo, R. Behera, P. S. Stanimirovic, V. N. Katsikis, Computation of outer inverses of tensors using the QR decompositions, Computational & Applied Mathematics, 2020.

17. R. Behera, A.K. Nandi, J.K. Sahoo, Further results on the Drazin inverse of even-order tensors, Numerical Linear Algebra with Applications, 2020.

18. R. Behera, J.K. Sahoo, Generalized inverse of Boolean tensors via Einstein product, Linear & Multilinear Algebra, 2020.

19. J.K. Sahoo, R. Behera, Reverse-order law for core inverse of tensors, Computational & Applied Mathematics, 39(11), 2020.

20. J.K. Sahoo, R. Behera, P. S. Stanimirovic, V. N. Katsikis, H. Ma, Core and Core-EP Inverses of Tensors, Computational & Applied Mathematics,39(9), 2020

Journals (National): NA

Proceedings in Conferences:

1. J. Deshmukh, R.P. Subbanarasimha, P. Bassin, V.S. Bitra, S. Srinivasa, Anupama Sharma, An Interactive Simulator for COVID-19 Trend Analysis, Demo paper at ACM India Joint International Conference on Data Science and Management of Data (CODS-COMAD) 2021, Bangalore, India, January 2-4, 2021.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Tarkeshwar Singh delivered an invited talk on Application of Some Domination Parameters of Graphs, National Webinar on Applications of Mathematics and Contemporary use of its Scientific & Technical Terminology in Hindi (AM-CUSTT-H-2020), jointly organized by Commission for Scientific and Technical Terminology, MHRD, Govt. of India, India and School of Computational and Integrative Sciences, JNU, New Delhi, during, June 14-16, 2020.

ii) International:

1. Tarkeshwar Singh attended and chaired a session in 6th India-Taiwan Conference on Discrete Mathematics (ITCDM-2019), at Department of Mathematical Sciences, IIT-BHU, Varanasi, during Nov.15-18, 2019.

2. Tarkeshwar Singh chaired a paper presentation session in Four-Day online National Conference on Pure and Applied Mathematics(NCPAM-20202) organized by Department of Mathematics, KLS Gogte Institute of Technology, Belagavi, during August 11-14, 2020.

3. Tarkeshwar Singh chaired two sessions on (k,d)-Skolem Graceful Graphs, in International Conference on Recent Trends in Mathematics to Graphs, Newworks and Petri Nets (ICRTMA-GPN-2020) at School of Computational and Integrative Sciences, JNU, New Delhi, during July 20-24, 2020.

4. P. Danumjaya attended the 5th International Conference on Numerical Analysis and Optimization, Sultan Qaboos (NAOV-2020), University, Muscat, Oman January 6-9, 2020.

5. Manoj Pandey presented a paper entitled "Evolution of contact and weak discontinuity waves in two phase drift flux model" at AUS-ICMS 2020, American University of Sharjah, UAE.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED: NA

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT: NA

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Tarkeshwar Singh delivered an invited talk on Magic and Antimagic Graphs, in the International Conference on Graph Theory and its Applications at Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore, during Jan.04-06, 2019 and also chaired a session.

2. Tarkeshwar Singh delivered an invited talk on Application of Some Domination Parameters of Graphs, National Webinar on Applications of Mathematics and Contemporary use of its Scientific & Technical Terminology in Hindi (AM-CUSTT-H-2020), jointly organized by Commission for Scientific and Technical Terminology, MHRD, Govt. of India, India and School of Computational and Integrative Sciences, JNU, New Delhi, during, June 14-16, 2020.

3. Tarkeshwar Singh delivered an invited talk on (k,d)-Skolem Graceful Graphs, in International Conference on Recent Trends in Mathematics to Graphs, Networks and Petri Nets (ICRTMA-GPN-2020) at School of

Computational and Integrative Sciences, JNU, New Delhi, during July 20-24, 2020 also chaired two sessions.

4. Tarkeshwar Singh delivered an invited talk on On Additively Skolem Graceful Graphs in International Webinar on Graph Labelings and Applications (ICGLA-2020) organized by University of Goa during Sept. 17-20, 2020 also chaired two sessions and C-chairman of the conference.

5. Anushaya Mohapatra delivered a talk in a weekly seminar which was held by Department of Physics, BITS Pilani K K Birla Goa Campus on 29th July, 2020.

6. Himadri Mukherjee delivered a talk at Dempe College, Goa on Continued fractions of Ramanujan, Dec 2020.

7. Jajati Keshari Sahoo delivered a talk at O.P.S. Mahavidyalaya, Odisha on Iterative methods for a large singular system based on matrix splitting on 5th December, 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. February 25, 2020, Dr. Snehanshu Saha, Department of Computer Science and Information Systems and APPCAIR, BITS-Pilani Goa Campus, Goa, delivered a lecture on "Planet Habitability via Modeling and Machine Learning".

2. January 30, 2020, Prof. R. N. Mohapatra, University of Central Florida, Orlando, Florida, USA, delivered a lecture on "On Optimal Frames for Erasers".

3. January 07, 2020, Prof. D. Subbaram Naidu, University of Minnesota Duluth, USA, delivered a lecture on "Convergence and Integration of Mathematics and Engineering (Optimal Control Systems

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: NII

b. Won by Students: NIL

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION:

Collaborations:

1. Prasanna Kumar

- Prof. N. K. Govil, Department of Mathematics and Statistics, Auburn University, USA.

2. Tarkeshwar Singh

- Prof. Tao-Ming Wang, Applied Mathematics, Tunghai University, Taiwan.
- Prof. Amitava Bhattacharya, School of Mathematics, TIFR, Mumbai.
- Prof. Arumungam, Applied Mathematics, Amritha Vishwavidyapeetham, Coimbatore.

3. P. Dhanumjaya

- Prof. Graeme Fairweather , Senoir Editor in AMS, USA.
- Prof. V Sree Hari Rao, Foundation for Scientific Research and Technological Innovation, Hyderabad.

4. Anil Kumar

- Prof. Sarvesh Kumar, Department of Mathematics, IISST, Thiruvananthapuram.
- Prof. Vijay Kumar, Amity Institute of Applied Sciences, Amity University, Uttar Pradesh, Noida.

5. Jajati Keshari Sahoo:

- Dr. Ratikanta Behera, Department of Mathematics & Statistics, IISER, Kolkata.
- Prof. Predrag Stanimirovic, Faculty of Science & Mathematics, University of Nis, Serbia.
- R. N. Mohapra, Department of Mathematics, University of Central Florida, USA

6. Vijay M. Patankar:

- Prof. C. S. Rajan, Dean, School of Mathematics, TIFR, Mumbai.
- Prof. Stephan Baier, Department of Mathematics, School of Mathematical Sciences, Ramakrishna Mission Vivekananda Educational and Research Institute, Kolkata.

7. **Manoj Kumar Pandey:**

- Dr. Dia Zeidan, School of Basic Sciences and Humanities, German Jordanian University, Jordan.

8. **Anushaya Mohapatra:**

- Prof. Prof. Patrick De Leenhere, Department of Mathematics, Oregon State University, USA.

12. PATENTS FILED/PUBLISHED AND GRANTED : NA

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: NA

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: NA

15. ANY OTHER INFORMATION:

1. P. Danumjaya is associate editor for the international repute journal "Differential Equations and Dynamical Systems", Springer Publisher.

2. Shilpa Gondhali and Himadri Mukherjee are acting as instructors for Maths for Vigyan Jyoti project (funded by a govt. agency) at Jawahar Navodaya Vidyalaya, Canacona-South Goa.

B2.10.09   Department: Mechanical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**02**
Associate Professors	**02**
Assistant Professors	**18**
Lecturers	**00**
Visiting Faculty	**01**
Visiting Assistant Professors	**00**

Head of the Department :   Dr. RANJIT S PATIL

Contact details   :   ranjitp@goa.bits-piani.ac.in, 08322580209, 09923138587

Number of Ph.D. Scholars : 28

Full Time   : 19

Part Time   : 09

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Satish Mullya	2013PHXF0507G	Process Simulation and Experimental Investigation on Inter-electrode gap of Micro Electric Discharge Milling	G Karthikeyan	Ranjit S Patil

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED:

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Fatigue Life Assessment Study of Polymeric materials	Mechanical	Dr. Vikas Chaudhari	Prof. Sachin Waigaonkar	John Deere, Pune	-	5.90 lakhs

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS :

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Microfluidics sperm cell sorting device: addressing male infertility factor	Mechanical	Dr. Siddhartha Tripathi	None	SERB-DST	None	27.41 lakhs
2	A study on energy barrier to buckling in cylindrical shells	Mechanical	Dr. Sandeep Jose	None	DST-SERB	None	32.87 Lakhs
3	Evaluation of Mechanical Performance of the 3-D Printed PEEK Polymer used in Space Applications	Mechanical	D M Kulkarni	Vikas Chaudhari Inian Thiruselvam	ISRO	None	36.29 Lakhs
4	Design and Development of Innovative SHM System using Embedded Piezo based Active Sensing Approach for Delamination Detection in Multi-Layer Composite Structures	Mechanical	Dr. Devendra G. Patil		SERB-DST		28.87 Lakhs
5	Drag Reduction by suppressing the Bi-stability character of the wake	Mechanical	Shibu Clement	Pritanshu Ranjan	ARDB	None	20.805 Lakhs

B. Industry Ongoing Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Ongoing Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Ongoing Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Isolation of white blood cells using a passive hydrodynamic microfluidic device	Mechanical	Dr. Siddhartha Tripathi	None	ACRG	None	9 Lakhs
2.	Feasibility Study of Innovative Piezo-based System for Inhibition of Subsea Algal Growth and SHM of Marine Structures	Mechanical	Dr. Devendra G. Patil	None	ACRG	Noe	9.27 Lakhs

3. COMPLETED PROJECTS:

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	An acoustic study, characterization and standardization of the Sarasvati Veena	Mechanical engineering	Prof. P.M. Singru	Prof. Radhika Vtahsan	DST-SERB		36.96 lakhs

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Study of lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes	Mechanical Engineering	Dr. Varinder Singh	Prof. Amit Kumar Gupta, Prof. S P Regalla, Dr. T C Bera	Tube Investments of India Ltd.	-	27.445 lakh

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	A study on energy barrier to buckling in cylindrical shells	Mechanical	Dr. Sandeep Jose	None	ACRG	None	10 lakhs
2	Experimental and Numerical Study on Crashworthiness of Aluminium-Composite Collapsible Energy Absorber under Quasi-static Loading.	Mechanical	Dr. Kiran Mali	None	ACRG	None	5.25 Lakhs
3	Thermal characterization of Heat pipe with nanofluids by infrared thermography	Mechanical	Dr. Vadiraj Hemadri	None	ACRG	None	9 Lakhs

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS:

Papers Published by Faculty In Journals:

1. Mahesh Dasar, Ranjit S Patil, "Hydrodynamic Characteristics of a 2D2D Cyclone Separator with a Finned Cylindrical Body", Powder Technology (Elsevier), 363, 541-558, 2020.

2. Abhilash K Tilak, Ranjit S Patil, "Study of Effects of Novel Cross-Sections of Microchannel Heat Sink on Thermohydraulic Performance", ASME Journal of Heat Transfer (ASME), 142(4), 044506, 2020.

3. Vishal V. Patil, Ranjit S. Patil, "Experimental Investigations to Predict Optimistic Biodiesel(s) and its Optimistic Operating Conditions by Varying Ignition Delay Period and Fuel Spray Pressures for Lower Emissions and Better Performance", Journal of Mechanical Engineering Science (IMechE Part C), 234 (19), 3809-3902, 2020.

4. Mahesh Dasar, Ranjit S Patil, "Studies on Separation Efficiency and Energy Conservation through Novel Finned Cyclone Separator", ASME Journal of Heat Transfer (ASME), 142(4),042104, 2020.

5. Mahesh Dasar, Ranjit S. Patil, "Effects of Helical Fins with Semi-Circular in Cross-Section on the Performance Characteristics of Novel Finned Cyclone Separators", Journal of Mechanical Engineering Science (IMechE Part C), 234 (17), 3509 -3520, 2020.

6. Tilak A.K., Patil R.S., 2019. "Effect of Chitosan Surfactant Concentration on the Thermal Conductivity and Viscosity of Al2O3 + CNT Hybrid Nanofluid", Journal of Physics: Conference Series, 1455, 012004, 2020.

7. Tripathi, S.; Agrawal, A. Blood Plasma Microfluidic Device: Aiming for the Detection of COVID-19 Antibodies Using an On-Chip ELISA Platform, Transactions of the Indian National Academy of Engineering, 5, 217–220, 2020.

8. Laxmi, V., Tripathi, S., Joshi, S. and Agrawal, A., Separation and Enrichment of Platelets from Whole Blood Using a PDMS-Based Passive Microdevice,Industrial & Engineering Chemistry Research, 59, 4792-4801, 2020.

9. Rajawat, A., Tripathi, S., Disease diagnostics using hydrodynamic flow focusing in microfluidic devices: Beyond flow cytometry, Biomedical Engineering Letters, 10,241-257, 2020.

10. Patil, M., Singh V., Gupta, A.K., Regalla, S.P.,Bera, T.C., Simhachalam, B. and Srinivasa, K., (Accepted for publication Nov. 27, 2020). Tin layer as a solid lubricant for cold tube drawing processes. International Journal of Precision Engineering and Manufacturing-Green Technology (Springer-Nature) (SCOPUS, SCI Indexed : Impact factor 4.171)

11. Patil, M., Singh V., Regalla, S.P., Gupta, A.K., Bera, T.C., Simhachalam, B. and Srinivasa, K., (2020). Parametric optimization of the generation of the porous layer for lubrication in tube drawing process. Materials Today: Proceedings.Vol. 28(3), 1560-1564. (SCOPUS Indexed)

12. Patil, M., Singh, V., Simhachalam, B. and Srinivas, K., (2020) "Effect of new lubrication technique in tube drawing", Materials Today Proceedings, Vol. 28(2), 426-431. (SCOPUS Indexed)

13. Saluja, R.S. and Singh, V., 2020. A fuzzy multi-attribute decision making model for selection of welding process for grey cast iron. Materials Today: Proceedings. Vol. 28(2), 1194-1199. (SCOPUS Indexed)

14. Chandrashekhar Chauhan, P.M. Singru, Radhika Vathsan. The effect of the extended bridge on the Timbre of the Sarasvati Veena: a numerical and experimental study. Journal of Measurement in Engineering. Extended SCI (accepted on October 23,2020)

15. Chandrashekhar Chauhan, P.M. Singru, Radhika Vathsan. Vibro-acoustic Modeling, Numerical and Experimental Study of the Resonator and its Contribution to the Timbre of Sarasvati Veena, a South Indian Stringed Instrument, Journal of Acoustical Society of America. (SCI, SCOPUS), (accepted for publication on 29.12.2020)

16. Kumar, Manoj H., Sandeep Jose, C. Lakshmana Rao, and Arun K. Tangirala. "Tailoring the stability of an axially compressed circular-cylindrical shell using piezoelectric patch actuators." MECHANICS OF ADVANCED MATERIALS AND STRUCTURES (2020) (SCI, Scopus indexed).

17. Suhas A, Sandeep J, Amal S S, Kiran DM (2021) "The effect of dynamic snapping on critical buckling load prediction of an axially compressed cylindrical shell using energy barrier method", Advances in Engineering design, Lecture notes in Mechanical Engineering (Scopus indexed) (Accepted)

18. Naveen KS, Pritanshu Ranjan, Shibu Clement, " The effect of rear cavity modifications on the drag and flow field topology of a Square Back Ahmed Body," Proc IMechE Part D: J Automobile Engineering. (Accepted)

19. Harichandra Chandekar, Swadesh Dixit, Vikas Chaudhari and Sachin Waigaonkar (2020), Analysis of Short Jute Fiber-Polypropylene Composite: Experiment and Simulation, Journal of Natural Fibers, ACCEPTED (Taylor & Francis Journal, Impact Factor- 2.622, SCIE & Scopus indexed).

20. Swadesh Dixit., Vikas Chaudhari., Kulkarni D.M.(2020), Mode-I Fracture Investigations of Pressure Vessel Steels: Experimental and Simulation study, Journal of Materials Engineering and Performance, 29, 7179–7187 (Springer Journal, Impact Factor- 1.652, SCIE & Scopus indexed).

21. Harichandra Chandekar, Sachin Waigaonkar and Vikas Chaudhari (2020), Effect of chemical treatment on creep-recovery behavior of jute-polypropylene composites, Journal of Materials: Design and Applications (Part L), (SAGE Journal, Impact Factor- 2.014, SCIE & Scopus indexed)

22. Harichandra Chandekar, Vikas Chaudhari and Sachin Waigaonkar (2020), A review of jute fiber reinforced polymer composites, Materials Today: Proceedings, 26(Part 2), 2079- 2082 (Elsevier Journal, Scopus indexed).

23. Swadesh Dixit, VikasChaudhari, D.M. Kulkarni (2020), Effect of tempering time on mechanical and fracture behavior of SA 387 Gr. 11 pressure vessel steel, Journal of Materials Processing Technology, 276:116419 (Elsevier Journal, Impact Factor- 4.7, SCIE & Scopus indexed).

24. S. N. Pozhil, Narayanan M. Menon, Sachin D. Waigaonkar, Vikas Chaudhari (2020), An analytical model to predict the creep behaviour of linear low-density polyethylene (LLDPE) and polypropylene (PP) used in rotational moulding, Materials Today: Proceedings, 28 (Part 2), 888- 892 (Elsevier Journal, Scopus indexed).

25. Swadesh Dixit, Vikas Chaudhari (2020), Evaluation of fracture parameters to simulate fracture process zone for SA 516 pressure vessel steel, Materials Today: Proceedings, 28 (Part 2), 721- 724 (Elsevier Journal, Scopus indexed).

26. Harichandra Chandekar, Vikas Chaudhari, Sachin Waigaonkar and Adlete Mascarenhas, (2020), Effect of chemical treatment on mechanical properties and water diffusion characteristics of jute-polypropylene composites, Polymer Composites, 41, 1447-1461 (Wiley Journal, Impact Factor- 2.3, SCIE & Scopus indexed).

27. Eaga, AKhil., Bhosale, Sanjyot. and Mali, Kiran. 2020. Formulation of Statistical Model to Determine Natural Frequencies of the Cantilever Beam for Linear Variation of Circular Perforation Along the Length. Romanian Journal of Acoustics and Vibration. 16, 2 (Apr. 2020), 106-112.

28. Pritam Kulkarni, Kiran D. Mali, Sandeep Singh,An overview of the formation of fibre waviness and its effect on the mechanical performance of fibre reinforced polymer composites,Composites Part A: Applied Science and Manufacturing,Volume 137,2020,106013,ISSN 1359-835X,

29. Rushikesh, Shinde, Mali Kiran, M. Kathiresan, and Kulkarni Dhananjay. "Experimental and Numerical Study on Crashworthiness Parameters of Mild Steel Square Tube under Quasi-Static Axial Compression." International Journal of Vehicle Structures & Systems 12, no. 2 (2020): 113-117.

30. Singh, Sandeep, Ravi Raj, Kiran D. Mali, and Gaurav Watts. "Elastic Properties and Nonlinear Elasticity of the Noncarbon Hexagonal Lattice Nanomaterials Based on the Multiscale Modeling." ASME Journal of Engineering Materials and Technology 143, no. 2 (2020).

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED:

i) National: Nil

ii) International:

1. Abhilash K Tilak, Ranjit S Patil, "Two-phase numerical simulation of the effect of hybrid nanofluid on the performance of microchannel heat sink",8th International and 47th National Conference on Fluid Mechanics and Fluid Power (FMFP 2020), IIT Guwahati, 9-11th December 2020.

2. Rajavamsi Gangipamula, Pritanshu Ranjan, Ranjit S Patil, "Hydraulic Noise Reduction in a Volute Pump Using Source Modification - A Test Data Correlation and Numerical Simulation Approach",8th International and 47th National Conference on Fluid Mechanics and Fluid Power (FMFP 2020), IIT Guwahati, 9-11th December 2020.

3. Patil, M., Singh V., Regalla, S.P., Gupta, A.K., Bera, T.C., Simhachalam, B. and Srinivasa, K., (2020). Parametric optimization of the generation of the porous layer for lubrication in tube drawing process. International Conference on Aspects of Materials Science and Engineering(ICAMSE 2020), PU, Chandigarh. May 29-30, 2020.

4. Bhagat, K. R., Ranjan, P. (2020, July). Flow past a heated rotating horizontal cylinder in cross-flow. In AIP Conference Proceedings (Vol. 2248, No. 1, p. 050004). AIP Publishing LLC. https://doi.org/10.1063/5.0013235

5. Koppa Shivanna, N, Ranjan, P, Clement, S. "Numerical Investigation of a Square Back Vehicle Equipped With a Single Cavity and Multi-Cavity." Proceedings of the ASME 2020 ASME. https://doi.org/10.1115/FEDSM2020-20213.

6. Nikhil S. Mane, Vadiraj Hemadri "Effect of surfactant and nanoparticle materials on the stability and properties of CuO-water and Fe3O4 water nanofluids" ASME 2020 Heat Transfer Summer Conference https://doi.org/10.1115/HT2020-9034

7. Mane, SN, Hemadri, VA. Study of the effect of preparation parameters on thermal conductivity of metal oxide nanofluids using Taguchi method. 8th Eur. Conf. Ren. Energy Sys. 24-25 August 2020, Istanbul, Turkey

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED :

1. Laxmi, V.,Tripathi, S., Agrawal, A., Current Status of the development of Blood based Point of Care Microdevices, Mechanical Sciences, Springer, 169-196, 2020.

2. Saluja R.S. and Singh V. (2020) MADM-Based Approach for Selection of Welding Process for Aluminum Tube Manufacturing. In: Venkata Rao R., Taler J. (eds) Advanced Engineering Optimization Through Intelligent Techniques. Advances in Intelligent Systems and Computing, vol 949. Springer, Singapore (SCOPUS Indexed) DOI: https://doi.org/10.1007/978-981-13-8196-6_39

3. Saluja R.S., Singh V. (2019) Subjective Factors Consideration in the Selection of Welding Technique for Welded Tube Manufacturing. In: Narayanan R., Joshi S., Dixit U. (eds) Advances in Computational Methods in Manufacturing. Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore (SCOPUS Indexed) DOI: https://doi.org/10.1007/978-981-32-9072-3_18

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT: NIL

8. INVITED TALKS GIVEN BY BITS FACULTY:

1. Ranjit S Patil, "Energy Conservation & Pollution Control using Novel Finned Cyclone Separators in the Power Industries" - Energy and Environment Management for Sustainable Management, AICTE Approved Quality Improvement Program, IIT BHU, Varanasi UP, India, 12th December 2020.

2. Dr. G. Karthikeyan gave, Invited talk on "Smart Factory: Shaping the Factory of the Future" at NIT Tiruchirappalli Faculty Development Program on Industry 4.0 between 14th to 18th September 2020. My session was on 16-09-20 between 2:30 to 4PM.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT: NIL

10. AWARDS AND RECOGNITIONS:

(i). Won by Faculty:

S.No.	Name	Association/Society member
1	Ranjit S Patil	Jury for the Industry Samurai Award 2020 organized by Dynamic Manufacturing India (DMI), 5th December 2020.
2.	Dr. Kiran Mali	Worked as session chair for "International conference on applications of fluid dynamics(ICAFD 2020)" Organised VIT AP University in association with University of Johannesburg, South Africa.December 13-15, 2020.

(ii). Won by Students:

1. Aniruddha Nayak(2018A4PS0850G) and Vivek Gupte(2018B1A40948G) won second prize globally in NASA Challenge: A Common Restraint and Mobility Aid System for Multiple Gravity Environments. In this challenge, we had to design a restraint and mobility aid system for space habitat enclosures that can be compatible with multiple gravity situations and can be reconfigured based on the gravity situation that it is deployed in. The winners for this challenge were announced on September 11, 2020. You can find more details about the challenge here: https://grabcad.com/challenges/nasa-challenge-a-common-restraint-and-mobility-aid-system-for-multiple-gravity-environments

2. Devanshu Wakhale(2017A4PS0293G), Aniruddha Nayak(2018A4PS0850G), and Vivek Gupte (2018B1A40948G) won the first runners up prize at the University of Queensland Engineering Design Hackathon India. In this hackathon, we had to design a low-cost, easy to manufacture Covid-19 Ventilator. The final design presentation was held on October 21st and the winners were announced the same day.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED:

1. Pritam Kulkarni, Kiran Mali, Sandeep Singh, IN Patent Application: 202011016480 - Title: A Device For Conducting Three-Point Or Four-Point Flexural Fatigue Strength Testing of A Specimen. Filed Dated 16 April 2020.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES:

SAE (BAJA, SUPRA, AERO).

Students of Society of Automotive Engineer-AERO club (SAE-AERO club) have participated in the drone design competition. The team secured 3rd rank among the 440 teams participated. Students participated in a Sustainability Challenge: 'Drone-a-thon: Propelling Sustainability' organized for start-ups, Industry Associations for Drones, and Academia. This hackathon is in collaboration with 3DEXPERIENCE Lab and the Drone Federation of India.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED:

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Phantom C210 High Speed Camera	1
2	Displacement controlled lateral probing arrangement	1
3	NI USB-6366 Multifunctional DAQ	1
4	NI myDAQ University kit	2

B2.10.10 Department: Physics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**02**
Associate Professors	**08**
Assistant Professors	**08**
Lecturers	**00**
Visiting Faculty	**00**
Visiting Professors	**01**

Head of the Department : Radhika Vathsan

Contact details   : radhika@goa.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 23

Part Time   : 00

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Ms. Chithira P. R	2013PHXF016G	"Studies on Zn0 and Sn02 based diluted Magnetic Semiconductors".	Dr.Teny John	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED:

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS :

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	" Investigation of electronic and structural properties of low dimensional hybrid materials using first principles calculations" (Project duration: 18 April 2019-20 April 2021)	Physics	Dr. Swastibrata Bhattacharyya	-	BITS Pilani (Research Initiation Grant)	-	2,00,000
2	"First principles study of new two dimensional electrode materials for metal ion batteries" (1 Nov 2019- 31 Oct 2021)	Physics	Dr. Swastibrata Bhattacharyya	-	BITS Pilani (Additional Competitive Grant)	-	10,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	"Studies on biomolecular transport through nuclear pore complexes using a dual fluorescence channel confocal microscope" (March 2017 to March 2020)	Physics	Dr. P. Nandakumar	Dr. Meenal Kowshik	SERB	-	44,04,104
2	"Spin Seebeck Effect in novel heterostructures" (March 2017 to March 2020)	-	Dr.R S Patel	Dr. Pratap Kumar Sahoo and Dr. Kartik Senapati (NISER Bhubaneshwar	SERB, DST Govt. of India	-	51,00,000
3	"An acoustic study, characterization and standardization of the Sarasvati Veena (EMR/2016/002338)" (March 2017- February 2020)	Physics	Dr. Pravin M Singru	Dr.Radhika Vathsan	DST-SERB	-	36,95,560
4	"To look for the signatures of space-time noncommutativity at high energy colliders"(21st March 2017 - 20th March 2020)	Physics	Dr. Prasanta Kumar Das	-	SERB, GOVT. OF INDIA	-	18,85,000
5	"Study on Dark Energy, Dark Matter and Cosmic Acceleration of the Universe in Modified Gravity " (1st May 2017 - 30th April 2020)	Physics	Dr.Gauranga Charan Samanta	Prasanta Kumar Das	CSIR, GOVT. OF INDIA	-	16,96,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals:

1. <u>Payel Sarkar</u>, <u>Prasanta Kumar Das</u>, <u>Gauranga Charan Samanta</u> " Inflationary cosmology- A new approach using Non-linear electrodynamics".

2. An Equation of State for Magnetized Neutron Star Matter and Tidal Deformation in Neutron Star Mergers by NK Patra, T Malik, D Sen, T K Jha, H Mishra; The Astrophysical Journal 900 (1), 49 (2020).

3. Effect of Λv coupling on liquid gas phase transition in warm asymmetric nuclear matter by BK Sharma, S Sathees, MK Meghaa, T K Jha; Nuclear Physics A 1002, 121974 (2020).

4. Correlation among oxygen vacancy and doping concentration in controlling the properties of cobalt doped **ZnO nanoparticles,P.R. Chithira, Teny Theresa John, Journal of Magnetism and Magnetic Materials 496,** 165928 (2020).

5. T. Joseph, Brownian dynamics study of driven partially pinned solid in square array of pinning centers: Enhanced pinning close to the melting transition, Physica A, 556 124737 (2020)..

6. T. Joseph, An alternative proof for Euler's rotation theorem, Mathematical Intelligencer 42, 44-49(2020).

7. C Malavika1, R Anu Roshini1, R S Surya Kanthi1 and E S Kannan "Single crystal flake parameters of MoS2 and MoSe2 exfoliated using anodic bonding technique and its potential in rapid prototyping ."

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED : Nil

i) **National:** **Nil**

ii) **International:** **Nil**

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED: Nil

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT: Nil

8. INVITED TALKS GIVEN BY BITS FACULTY:01

1. Prof. Prasad Naik delivered Lecture" Understanding Waves called Solitons "on 7th February 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT: 09

1. Prof. Joseph Samuel, RRI, Bangalore visited the Institute on 1th November 2020 . He delivered Lecture on "Lorentzian Geometry of Quantum Entanglemen"

2. Prof. Kyoungchul Kong, University of Kansas, Lawrence,KS, USA visited the Institute on 28th September 2020. He delivered Lecture on "Particle Physics in Computing Frontier".

3. Prof. P S Bhupal Dev, Washington University, St.Louis, USA visited the Institute on 7th September 2020. He delivered Lecture on "The Elusive Neutrinos".

4. Prof. Tirthankar Roy Choudhury, NCRA,TIFR, Bangalore visited the Institute on 28th August 2020. . He delivered Lecture on "The Final Frontier of Observational Cosmology: The First Stars in theUniverse"

5. Prof. Parameswaran Ajith, ICTS, TIFR, Bangalore visited the Institute on 26th August 2020. He delivered Lecture on "Gravitational lensing of gravitational waves: A new frontier"

6. Prof. Kajari Mazumdar, TIFR, Mumbai visited the Institute on 13th August 2020. He delivered Lecture on "Unbelievable pursuit of the unimaginable"

7. Prof. Ravi Subrahmanyan, Director, Raman Research Institute, Bangalore visited the Institute on 13th January 2020. He delivered Lecture on " The first atoms, stars, and galaxies in the Univers"

8. Prof. Ravi Subrahmanyan, Director, Raman Research Institute, Bangalore visited the Institute on 14th January 2020. He delivered Lecture on " Cosmic Dawn"

9. Dr. Arun Sehrawat, Postdoctoral Fellow, HRI, Allahabad visited the Institute on 26th November, 2019. He delivered Lecture on " Allowed region and uncertainty relations for angular momentum observable"

10. **AWARDS AND RECOGNITIONS**

   a. **Won by Faculty:**   **Nil**

   b. **Won by Students:**   **Nil**

11. **FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: Nil**

12. **PATENTS FILED/PUBLISHED AND GRANTED: Nil**

13. **DEPARTMENTAL ASSOCIATIONS ACTIVITIES: Nil**

14. **SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED**

B2.11   DIVISION / UNIT/ CENTRE-WISE ACTIVITY

ALUMNI RELATIONS CELL

Distinguished Alumnus Awards 2020

BITS Distinguished Alumni Awards (DAAs) 2020 were conferred upon BITSians through inviting nominations for more than a period of one and a half month. A committee constituted for selection and to recommend having renowned personalities from Industry and Academia was constituted. The awards are in recognition of the significant and outstanding contributions made by recipients in the area of entrepreneurship or academic teaching and/or research, corporate leadership or professional management of businesses. The twelve DAA awardees for the year 2020 are as under:

#	Name and Affiliation	Category
1.	Prof. Milind Tambe, Gordon McKay Professor of Computer Science & Director, Center for Research in Computation and Society (CRCS), Harvard University	Academia and Research
2.	Prof. Gerard George, Dean, Lee Kong Chian School of Business and Lee Kong Chian Chair Professor of Innovation and Entrepreneurship, Singapore Management University	
3.	Prof. Krishnan Balasubramanian, Emeritus Professor, School of Molecular Sciences, Arizona State University	
4.	Prof. Madan Pillutla, Professor of Organizational Behaviour, London Business School; Area Leader, Organizational Behaviour, Indian School of Business	
5.	Prof. Aditya. P Mathur, Professor Emeritus, Dept. of Computer Science, Purdue University; Centre Director, iTrust, Director, National Satellite of Excellence DeST-SCI and Professor, Singapore University of Technology and Design	
6.	Ms. Revathi Advaithi, CEO, Flex; Member, Board of Directors, Uber	Corporate Leadership
7.	Mr. Kishore Rajvanshy, Founding Managing Director of Fleet Management Ltd, a Caravel Group Company	
8.	Mr. Jayan Ramankutty, Member, Board of Directors at Essmart; Managing Partner, KRK Ventures II LLC	Entrepreneurship/ Public Life/ Philanthropy
9.	Mr. Anurag Jain, Chairman, Access Healthcare & Managing Partner, Perot Jain	
10.	Mr. Rakesh Verma, Chairman and Managing Director, MapmyIndia	
11.	Mr. Subhash (Bill) Malhotra, President & CEO, Claridge Homes, Ottawa, Canada	
12.	Mr. Sunil Nanda, Board Member of Pilani Atmanirbhar Resource Center	

This is in recognition of their significant and outstanding contributions to Academic and Research, Corporate Leadership or Entrepreneurship.

- **BITSAA Global Meet (BGM) 2020 was held on 17th-19th January, 2020.** BITS Alumni Association BITSAA, with their alma mater BITS Pilani, organized the 4th edition of Global Meet of its alumni at the BITS Pilani, K K Birla Goa Campus. BITSAA has over 84000 alumni spanning over six decades. BGM which was held between 17-19 January 2020 was attended by over 1100 participants which included alumni of the four different campuses where BITS Pilani is present namely, Pilani, Dubai, Goa and Hyderabad. This BGM followed in the footsteps of the three previous successful BGMs which were held in Delhi, Hyderabad and Dubai starting from 2011 at an interval of three years. The current edition of the event was unique as it has many firsts to its credit. The educator, innovator & ecowarrior, SonamWangchuk set the tone for the event with an inspiring vision of simplicity and sustainability. The event matched his vision of environment

consciousness in the best way – it was eco-friendly and used no disposables or single use plastics and instead used steel bottles, water dispensers and reusable crockery. A gutsy move that proved that if people can take a little inconvenience, we can make dramatic changes to our consumption. Using technology to reach a much wider audience, the entire three day event was available over a phone app which connected the organizers, who are alumni themselves, with the delegates, and all main events were telecast live to reach worldwide audiences. The Chancellor, Dr. Kumar Mangalam Birla in his welcome note called upon alumni as brand custodians to "come together as an active entity to infuse new ideas and possibilities" and to benchmark themselves with the alumni of the most prestigious schools globally. The Vice Chancellor, Prof. Souvik Bhattacharya exhorted the alumni to work together on the journey to excellence in his welcome address. An alumnus of the institute, RevathiAdvaithi, CEO of Flex, a US 25 billion dollar company with over 177,000 employees and ranked amongst the top 50 most powerful women, presented great insights into managing businesses - with repeatable processes and consistent goals, inspiring the girls to break all ceilings and students to pursue their dreams. The articulate cricketer and engineer Anil Kumble enthralled the audience with his journey with his plan B, cricket. Plan A of course was engineering. The theme of the event was Finding Purpose, Creating Value, Inspiring Excellence. Each of these themes inspired multiple sessions running in parallel tracks. Speakers and topics ranged from India's space odyssey, building unicorns and careers in social causes and sports and startup pitches under BITS spark. Alumni mentored the present students in a special session. An interaction with the current directors of all campuses and the alumni relations team gave a view on the current goings on in the campuses and future plans. Running multiple tracks under the hobBITS umbrella unearthed extraordinary and powerful stories of individuals who set out to do something different. Alumni in civil services discussed their challenges and contributions for the country. Sanjay Jalona, CEO L&T Infotech, received recognition as a distinguished alumnus of the institute. Proving that engineers can be creative too, exhiBITS showcased charcoals, sketches, oil paints, digital art photography and book covers by the alumni. Arko Mukhaerjee, a world musician captured the evenings with his mellifluous rendition of folk songs in many languages and contemporary music that had the participants spontaneously break out dancing under the stars. RamananLaxminarayan of Princeton University, another Distinguished Alumnus of BITS Pilani, delivered an electrifying valedictory address exhorting current students to embrace the massive technology trends that will change our world and to build their careers around solving some of the greatest challenges mankind has ever faced. Lively performances by the alumni, students of dance, drama, and mime and art clubs added to the fun elements. The event ended on a high with an electrifying and charging drum circle and a surprise dance performance by the students. The logistics of the events were massive involving coordinating people moving across Goa and were managed smoothly by the organizing team. With something for everyone, an opportunity to learn, network, relax and reconnect, the event hit the sweet spot with the alumni and set new high standards for global reunions.

Alumni Research Talks (ART):

- The second edition of Alumni Research Talks (ART) were conducted on 15th of February, 2020, in BITS Pilani, K. K. Birla Goa Campus, comprising of interactive sessions by six eminent alumni of BITS Pilani, who shared their stories of success, and delved a bit into their research interests, and how they could affect the future as we know it. The event was graced by the Director of the campus, Prof G. Raghurama and Associate Dean of Alumni Relations, Prof. Veeky Baths. A series of talks were given by these eminent alumni of BITS Pilani, who include:

  o Prof. Y.N. Mohapatra, Professor of Physics and Materials Science, IIT Kanpur,

  o Prof. Jugal Kishore Verma, Professor of Mathematics, IIT Bombay,

  o Dr. Shruthi Sridhar Vembar, Faculty Scientist, Institute of Bioinformatics and Applied Biotechnology, Bangalore,

  o Prof. Subrat Kar, Professor & Head, SeNSE, IIT Delhi,

  o Prof. Subramanian Yashonath, Professor of Solid State and Structural Chemistry Unit, IISc Bangalore and

  o Prof. Patrick Das Gupta, Professor of Physics and Astrophysics, University of Delhi.

These talks were given to enlighten the students attending by dipping toes into their research interests, and inspiring them with their tales of successes. Numerous colleges and universities throughout Goa were invited to attend, including IIT Goa, GEC, Agnel Polytechnic and the Padre Conceicao College of Engineering.

Director's e-Party 2020:

- Director's e-Party for the Graduating Class 2020 was held on 17th July, 2020. For every BITSian, Director's Tea Party is an event that holds a special place in their lives. It has always been a gathering which is full of emotions, memories, heavy hearts and a sense of achievement. This year, it was organised, not physically but virtually due to the COVID-19 pandemic. The class of 2020 was addressed by the Director of BITS Pilani K K Birla Goa Campus, Prof. G. Raghurama and The Associate Dean of Alumni Relations Cell, Prof. Veeky Baths along with Ms. Sukhnandan Vohra and Mr. Hari Menon, who appreciated the spirit of resilience

of the batch of 2020 and gave them best wishes for they are torch-bearers of BITS Pilani that will lead the future.

BITSians' Day 2020:

- BITSian day was celebrated on 7th August, 2020 virtually this year. ARC, BITS Goa welcoming all together by taking a step forward for overall wellbeing. We invited BITSians while performing Yoga asanas / working out and upload a picture tagging us @bitsgoa_arc (Insta Handle) or @AlumniRelationsBITSGoa (Facebook Handle) with the hashtag #bitsiansday. We also hosted a contest named "NOSTALGIC BITS" to share with us the reminiscing pictures that took back to those Good'ol Campus times. The best 3 pictures were given BITS Goodies delivered to their doorsteps.

Embryo and on-campus lectures: Apart from the organization of various events, the ARC was also involved in organizing regular lectures and talks from numerous alumni who have achieved success in their respective fields. Maintaining a strong alumni network, ARC has organized several talks in LTs and the telepresence room to enable the student community to benefit from the interactions held with the alumni. The following is a list of events conducted this year:

S. No	Date	Title of the Talk	Speaker details
1	11th Jan, 2020	BITS2Civil Services	Ms. Arushi Sharma, IRS
2	16th Jan, 2020	1980 batch interaction	Many including Mr. Harish Bhat, Mr. Mukul Khare and others
3	18th Jan, 2020	Town Hall session	Prof. Amit Sheth
4	13th Feb, 2020	BITS2BSchool	Mr. Ganesh S. Nagarsekar and Mr. Amrit Mann
5	15th of February, 2020	Alumni Research Talks (ART)	Prof. Y.N. Mohapatra, Prof. Jugal Kishore Verma Dr. Shruthi Sridhar Vembar, Prof. Subrat Kar Prof. Subramanian Yashonath and Prof. Patrick Das Gupta
6	13th May, 2020	Webinar on IIC's new tech fellowship	Ms. Aastha Patel
7	30th May, 2020	CAT Champs	Mr. Shubham Pandia & Mr. Kaushik Gaikwad
8	13th of Jun, 2020	BITS2MS/PhD	Mr. Abhijith Asok Mr. Varun Nayak & Mr. Pratik Manwani
9	20th Jun, 2020	BITS2GRE	Mr. Pragnesh Patel & Mr. R S Balajee
10	9th Aug, 2020	BITS2Civil Services	Mr. Saurav Pandey & Ms. Malavika G Nair
11	15th Aug, 2020	BITS2Defence	Col. Rakesh Sharma Major Praveen Vimal and Air Vice-Marshal Rakesh Chopra
12	7th November 2020	A conversation with Yashoraj Tyagi	Mr. Yashoraj Tyagi

ACADEMIC GRADUATE STUDIES &RESEARCH DIVISION

First Degree Thesis On Campus list Second Semester 2019-20

S.No	Name	ID no	Place of thesis
1	Saurav Mehta	2015B1A40808G	BITS-PilaniK.K.Birla Goa campus
2	Mehta Yash Hasmukh	2015B5A40553G	BITS-PilaniK.K.Birla Goa campus
3	Sarthak Udai Singh	2015B1A40739G	BITS-PilaniK.K.Birla Goa campus
4	Hayagriv Raman	2016A8PS0678G	BITS-PilaniK.K.Birla Goa campus
5	Himanshu Jindal	2015B4A10567G	BITS-PilaniK.K.Birla Goa campus
6	PoojanThaker	2016A7PS0089G	BITS-PilaniK.K.Birla Goa campus
7	Shivank Sikka	2016A1PS0702G	BITS-PilaniK.K.Birla Goa campus

S.No	Name	ID no	Place of thesis
8	SAYANTAN GHOSH	2015B5A30534G	BITS-PilaniK.K.Birla Goa campus
9	SAI TEJA JINKA	2015B3A80543G	BITS-PilaniK.K.Birla Goa campus
10	Jiwesh Kushal	2015B5A40624G	BITS-PilaniK.K.Birla Goa campus
11	Aashish Agarwal	2015B3A80411G	BITS-PilaniK.K.Birla Goa campus
12	Aditya. V. T	2015A4PS0391G	BITS-PilaniK.K.Birla Goa campus
13	Shubham Yadav	2015B4A40294G	BITS-PilaniK.K.Birla Goa campus
14	Deshmukh Nikhil Sanjay	2015B4A10570G	BITS-PilaniK.K.Birla Goa campus
15	Siddharth Mohan	2016A4PS0187G	BITS-PilaniK.K.Birla Goa campus
16	Harshil Sumra	2015B3A40358G	BITS-PilaniK.K.Birla Goa campus
17	ROHITH V ROY	2016A4PS0293G	BITS-PilaniK.K.Birla Goa campus
18	Shubham Sharma	2015B2A10707G	BITS-PilaniK.K.Birla Goa campus
19	Dhakane Siddharth Ranjeet	2015B4A80502G	BITS-PilaniK.K.Birla Goa campus
20	Kumar Manas	2015B2A10654G	BITS-PilaniK.K.Birla Goa campus
21	Rajat Tewari	2014B1A10944G	BITS-PilaniK.K.Birla Goa campus
22	Aayush Soni	2016A7PS0720G	BITS-PilaniK.K.Birla Goa campus
23	Aman Arora	2015B4A10389G	BITS-PilaniK.K.Birla Goa campus
24	Himanshu Gupta	2015B5A40633G	BITS-PilaniK.K.Birla Goa campus
25	Pathak Amol Pratik	2015B5A30614G	BITS-PilaniK.K.Birla Goa campus
26	Prashant Agnihotri	2015B1A10809G	BITS-PilaniK.K.Birla Goa campus
27	Mayank Bhandarkar	2014B5A10898G	BITS-PilaniK.K.Birla Goa campus
28	Ananya Singh	2016A7PS0013G	BITS-PilaniK.K.Birla Goa campus

First Degree Thesis Off Campus list Second Semester 2019-20

S.No.	Name	ID NO	Place of Thesis
1	Aditya Ketkar	2016A7PS0081G	Autonomous University of Barcelona
2	Aman Agarwal	2015B5A70626G	International Centre for Theoretical Sciences
3	Abhineet Nigam	2015B2A10744G	IISc Bangalore
4	KaustavTamuly	2016A3PS0132G	Microsoft Research, Bengaluru
5	Taha Faraz	2015B1A40807G	Indian Institute of Science, Bengaluru, Karnataka
6	Chiranjeetsinh Jadeja.	2015B5A30470G	Raman research institute, Bangalore
7	Sarthak Munjal	2014B5A70701G	Microsoft, Hyderabad
8	Eeshan Singh	2015B4A40440G	Delhi
9	Aviral Agrawal	2015B4A70571G	Sydney, Australia
10	SachinDarade	2016A7PS0011G	University of Auckland, Auckland, New Zealand
11	Roshan JaisimhaDattatri	2015B5B40064G	OzGrav-University of Western Australia, Perth, Western Australia 6009
12	Koustubh Bhagat	2016A4PS0226G	IIT Bombay
13	Karuna Grewal	2016A7PS0012G	Max Planck Institute for Software Systems
14	Alok Gokhale	2015B5A30426G	IIT Bombay
15	Shikhar Rastogi	2015B3A70532G	NTU, Singapore
16	ANUSHKA NAYSE	2016A3PS0655G	USA
17	Kamal A	2015B1A70306G	InSTEM,bangalore
18	AYESHA PATNAIK	2016A1PS0567G	IIT Bombay, India
19	SUDEEP S KATAKOL	2015A7B40001G	COMPUTER VISION CENTER, UAB, BARCELONA, SPAIN
20	ShreeshKeskar	2015B3A70477G	Macquarie University, Sydney, NSW, Australia
21	ADIT VINAY DESHMUKH	2015B3A70400G	INRIA Sophia-Antipolis, Valbonne, France

S.No.	Name	ID NO	Place of Thesis
22	Aditya Bansal	2016A7PS0088G	Dublin, Ireland
23	Abhishek Kumar Pandey	2016A1PS0762G	IIT Delhi, New Delhi, India
24	BaibhavPhukan	2016A3PS0186G	Institut de Recherche en Informatique de Toulouse (IRIT)
25	Saloni Dash	2015B4A70292G	Rensselaer Polytechnic Institute
26	Mohammad Abid	2015B3A30414G	Lucknow
27	Gunjan Chhablani	2016A7PS0022G	University of Pittsburgh, School of Medicine
28	Prakhar Aggarwal	2015B2A10748G	Positive Plastics Pvt Ltd.
29	Ameya Sinha	2016A7PS0049G	Microsoft
30	Ish Mohan Gupta	2015A1B50701G	Pennsylvania State University
31	Chinmay Gandevikar	2015B5A40327G	Tata Institute of Fundamental Research
32	Sugam Budhraja	2016A7PS0064G	Knowledge Engineering and Discovery Research Institute (KEDRI), Auckland University of Technology
33	Shivani Mansingh	2015B1A80805G	Max Planck Institute
34	ROHAN JAMES	2015B3A70159G	Carnegie Mellon University
35	PRITHVIRAJ CHUMBLE	2015B1A10755G	UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN (UIUC)
36	JASMEET KAUR	2015B2A70642G	CARNEGIE MELLON UNIVERSITY, USA
37	Kunal Kamtikar	2015B4A40188G	Pune
38	B.Aravindh Shankar	2015B5A80515G	Purdue University
39	Akshay Kumar	2014B5A80671G	IIT Bombay
40	SourayanBasu Bal	2013B2A10685G	Indian Institute of Technology, New Delhi
41	KAPI KETAN MEHTA	2016A4PS0174G	NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE
42	Mayank Jhamtani	2015B4A30591G	Indian Institute of Science, Bangalore
43	Rishi Raj Grandhe	2015B3A70544G	Bangalore, India
44	Simran Khanuja	2015B3A70423G	Microsoft Research, Bangalore
45	Mehul Rastogi	2016a7ps0087g	The Pennsylvannia State University
46	Esha Swaroop	2015B5A70656G	Institute for Quantum Computing, University of Waterloo, Canada
47	Anish Bhobe	2016A7PS0030G	Telecom Paris
48	Raghav Maheshwari	2015B1A80763G	Varroc Engineering Limited, Elpro Compound, Pune
49	ShubhranshJagota	2015B3A70348G	MIT Media Labs
50	Aditya Sinha	2015B3A70352G	Microsoft Research India, "Vigyan", Lavelle Road, Bengaluru, Karnataka
51	Shriya TP	2016A7PS0060G	DFKI, Germany
52	AkshayDharmavaram	2015A7A30039G	Indian Institute of Science
53	Prarthana Chakrabarti	2016A1PS0527G	Georgia Tech
54	BHAKTI KHAKKAR	2016A8TS0256G	IIM-A, Ahmedabad
55	Aiswarya Subramanian	2015B4A70585G	Center for Computational Brain Research, IIT Madras, India
56	NIRVAN ANJIRBAG	2016A3PS0711G	Indian Institute of Science, Bangalore
57	Shashank Sharma	2015B5A30453G	University of Washington
58	Raghav Arora	2015B5A70559G	Hamburg University, Germany
59	Ajay Mohan	2015B5A40500G	Indian Institute of Science, Bangalore
60	Manav Dhingra	2015B2A10817G	Radiation Medicine Centre, BARC
61	Komal Gupta	2015B5A30330G	UNSW Canberra Space
62	Divyanshu Gupta	2015B5A30506G	Zernike, University of Groningen, Groningen, the

S.No.	Name	ID NO	Place of Thesis
			Netherlands.
63	Aravind Venugopal	2015B3A70474G	Claritics India
64	Manu Singh	2015B4A70708G	Microsoft Research, Bangalore
65	Akash Vaish	2015B4A70706G	Massachusetts Institute of Technology
66	Aakash Rajawat	2016A4PS0269G	National University Of Singapore, Singapore
67	S Siddharth Kumar	2015B1A40802G	Bangalore, India
68	N S Anirudh	2015B4A30407G	Barcelona, UPF
69	NisargSheth	2016A3PS0113G	TU Dresden, Germany
70	S.Karthik	2016A4PS0715G	University of Sao Paulo , Brazil
71	Sumangala Patki	2015B5A70178G	Carnegie Mellon University, Pittsburgh, Pennsylvania, US
72	Devesh Lohia	2014B2A80785G	Moksha Digital, Bengaluru, India
73	Manhar Gupta	2016A4TS0156G	The University of Queensland
74	Nayana B	2015B5A70600G	IISER Pune
75	Sai Krishna Teja Sadhu	2015B1A80743G	Cold Spring Harbor Laboratory, NY, US
76	Mridul S Kaimal	2015B1A10641G	Indian Institute of Science, Bangalore

First Degree Thesis on Campus list First Semester 2020-2021

S.No.	Student Name	ID No	Organization
1	Mahotsav Priya	2017A1TS0894G	BITS-Pilanik.K.Birla Goa Campus
2	Dwarkesh Suresh ShenviMandrekar	2017A4PS0250G	BITS-Pilanik.K.Birla Goa Campus
3	Sarthak Rapartiwar	2016B4TS0478G	BITS-Pilanik.K.Birla Goa Campus
4	Piyush Raj	2016B1A40768G	BITS-Pilanik.K.Birla Goa Campus
5	Rudraksh Vivek	2016B1A40753G	BITS-Pilanik.K.Birla Goa Campus
6	Gourav Roy	2017A4PS0534G	BITS-Pilanik.K.Birla Goa Campus
7	Aman singhyadav	2016B2A10539G	BITS-Pilanik.K.Birla Goa Campus
8	Aman Kumar Singh	2016B2A70520G	BITS-Pilanik.K.Birla Goa Campus
9	Rushabh Sanjiv Shah	2016B4A70408G	BITS-Pilanik.K.Birla Goa Campus
10	Sohail Suleman Zaveri	2016B5A70484G	BITS-Pilanik.K.Birla Goa Campus
11	Ranjit Singh	2016B2A70536G	BITS-Pilanik.K.Birla Goa Campus
12	Gopal Gopakumar	2016B3A70347G	BITS-Pilanik.K.Birla Goa Campus
13	Mayur Arvind	2016B1A70603G	BITS-Pilanik.K.Birla Goa Campus
14	Arun Girisan	2016B4A70246G	BITS-Pilanik.K.Birla Goa Campus
15	Anumolu Varsha	2017A7TS0089G	BITS-Pilanik.K.Birla Goa Campus
16	Chirag Midha	2017A7PS0964G	BITS-Pilanik.K.Birla Goa Campus
17	SHREYANS VERMA	2016B3A10296G	BITS-Pilanik.K.Birla Goa Campus
18	Shah Rahul Mukeshbhai	2016B3A10335G	BITS-Pilanik.K.Birla Goa Campus
19	Lakshay Dhingra	2017A4TS0688G	BITS-Pilanik.K.Birla Goa Campus
20	Simran Singh	2017A8PS0602G	BITS-Pilanik.K.Birla Goa Campus
21	K.B.Aditya Reddy	2016A3TS0144G	BITS-Pilanik.K.Birla Goa Campus
22	Sagar Sarbadhikary	2017A8PS0631G	BITS-Pilanik.K.Birla Goa Campus
23	Dev Kumar Singh	2017A1TS0779G	BITS-Pilanik.K.Birla Goa Campus
24	Yash Bhardwaj	2017A4TS0411G	BITS-Pilanik.K.Birla Goa Campus
25	Kaushik Iyer	2017A3TS0162G	BITS-Pilanik.K.Birla Goa Campus
26	Singh Ashish Shailesh	2016B1A80736G	BITS-Pilanik.K.Birla Goa Campus
27	Anamitra Dey	2016B1A40792G	BITS-Pilanik.K.Birla Goa Campus
28	Nipunvijayvargiya	2016B3A40348G	BITS-Pilanik.K.Birla Goa Campus

S.No.	Student Name	ID No	Organization
29	Vaibhav Singh	2016B3A40392G	BITS-Pilanik.K.Birla Goa Campus
30	Tushar Damani	2017A1TS0725G	BITS-Pilanik.K.Birla Goa Campus
31	G Karthik Krishna	2016A4PS0281G	BITS-Pilanik.K.Birla Goa Campus

First Degree Thesis Off Campus list First Semester 2020-2021

S.No	Name	Id No	Place Of Thesis	Country of Thesis
1	Srija Dutta	2017A4PS1908G	Georgia Institute of Technology, Atlanta, Georgia, USA	USA
2	Rahul B S	2016B4A80470G	UC Louvain, Ottignies-Louvain-la-Neuve	Belgium
3	Abhinav Pathak	2017A7TS0937G	University of New South Wales, Sydney, NSW	Australia
4	Meet Parikh	2017A4TS0471G	Indian Institute of Technology, Madras	India
5	Nishanth Sanjeev	2017A7TS0970G	Harvard University, Cambridge, MA	United States
6	PARRIVESH NS	2017B5TS0619G	Donders center for brain, cognition and Behavior, University of Radboud, Nijmegen	Netherlands
7	Akanksha Sahoo	2017A8TS0683G	Swiss Prosthetics, ETH Zurich, Zurich, Switzerland	Switzerland
8	Aditya Phopale	2017A4TS0673G	Indian Institute of Technology, Madras	India
9	VedSirdeshmukh	2017AAPS1934G	Imperial College, London	England
10	Harnoor Dhingra	2017A7TS0081G	Lawrence Berkeley National Laboratory (UC, Berkeley), Berkeley, California	United States of America
11	Pranav Guruprasad	2017A7TS1918G	Lawrence Berkeley National Laboratory, Berkeley, California	United States of America
12	Arpit Verma`	2016A8PS0322G	Raja Ramanna Centre for Advanced Technology,Indoe,MP	India
13	AnanyShrey Jain	2017A4PS0920G	IIT Roorkee	India
14	FenilSuchak	2016B3A70541G	Spotmentor Technologies, Gurgaon, Haryana	India
15	Mohit Sushil Gupta	2017AATS0385G	National Institute of Oceanography, Dona Paula, Goa	India
16	Rishikesh Vanarse	2017A7TS1913G	University of Nevada, Reno, Nevada	United States of America
17	Sarthak Agarwal	2016B4A70511G	Trinity College Dublin, Dublin 2, Ireland	Ireland
18	Harshal Deshpande	2017A3TS0315G	University of Nevada, Reno, Nevada	USA
19	Aditya Rajendra Pujari	2017A1TS0414G	International Centre for Theoretical Sciences, TIFR, Bangalore, Karnataka	India
20	Ajay Subramanian	2017AAPS0371G	Center for Computational Brain Research, IIT Madras, Chennai, Tamilnadu	India
21	Pranav Mahajan	2017AATS0277G	NDCN, Oxford University	England
22	Anurag Pratap Singh	2016B1A40790G	ABB-GISPL	India
23	Aditya Kapoor	2017A7TS0963G	Carnegie Mellon University, Pittsburgh ,Pennsylvania	Unoted States of America
24	Ojit Mehta	2017A3PS0372G	Carnegie Mellon University, Pennsylvania, Pittsburgh	USA
25	Arshia Arya	2016B3A70489G	Microsoft Research Lab - India, Bangalore, Karnataka	India
26	ShangethRajaa V	2016B4A30442G	Nanyang Technological University	Singapore
27	Pranay Mathur	2017A8TS0487G	University of Nevada, Reno	United States of America
28	Sagar Bogadi	2016B4AA0396G	ABB Global Industries and Services Private	India

S.No	Name	Id No	Place Of Thesis	Country of Thesis
	Manjunath		Limited, Bangalore, Karnataka	
29	Anusha Sanjeev Pradhan	2017A3TS1900G	PavillionData Systems India Pvt Ltd, Pune, Maharashtra, India	India
30	AdrijaChakravorty	2016B1A10618G	Western University, London, Ontario	Canada
31	Ganeshan Malhotra	2017A8TS0512G	Indraprastha Institute of Information Technology, Delhi	India
32	Soundarya Krishnan	2016B5A70472G	MIT Media Lab, Boston, Massachusetts	USA
33	Rajaswa Ravindra Patil	2017A3TS0334G	Indraprastha Institute of Information Technology (IIIT) Delhi	India
34	Sharan R Y	2016B4A70295G	Massachusetts Institute of Technology, Cambridge, Massachusetts	United States
35	Kanishque Kumar	2017A4PS0442G	Indian Institute of Technology, Kanpur	India
36	Rahul N Shanbhag	2017AAPS0228G	Indian Institute of Science, Bangalore	India
37	Akash Chaudhary	2016B5A30743G	ARL, Tropical Marine Science Institute, National University of Singapore, 12A Kent Ridge Road Singapore 11922	Singapore
38	Ashutosh Vashist	2017A1PS0892G	National Council of Applied Economic Research, New Delhi, Delhi	India
39	Ishaant Agarwal	2016B5A30103G	ETH Zurich	Switzerland
40	Rahul Karajgikar	2017A7TS0050G	Santa Clara University, Santa Clara, California	USA
41	Gaurav Sangle	2016B4A70448G	Georgia Institute of Technology, Atlanta, Georgia	United States of America
42	Abhishek Jain	2016B2A70584G	IIM ahmedabad	India
43	Mithun M Nair	2017A4TS0507G	IIT Kharagpur	India
44	Nikhil Garg	2016B1A30597G	3IT, Universite de Sherbrooke, Sherbrooke, Quebec	Canada
45	NipunAGarwal	2017A8PS0572G	MIT Media Labs, Cambridge, MA	United States Of America
46	Tanmay Dixit	2016B2A30593G	Indian Institute of Technology Bombay Powai, Mumbai 400076, Maharashtra	India
47	ParthPadia	2016B5A70404G	TU Delft	Netherlands
48	Ashwin Vaswani	2017A7PS0960G	QTIM Lab, Athinoula A, Martinos Center for Biomedical Imaging,Boston, United States	United States
49	Gaurav Satyanath	2017AATS0312G	Nanyang technological University (NTU)	Singapore
50	Rishab Hemant Khincha	2016B5A70517G	Massachusetts Institute of Technology	United States of America
51	Rishikesh Veer	2016B1A80630G	The Energy and Resources Institute (TERI), New Delhi	India
52	K Karthik	2016B5A30502G	TU Delft,Netherlands,Remote Thesis	Netherlands
53	Sharad Chitlangia	2017A8TS0472G	CMU, Pittsburgh, Pennsylvania	USA
54	Aditya Anand	2017A4PS0339G	ITER, St Paul Lez Durance ,Aix-en-provence	France
55	Raghav Prasad	2017A7TS0297G	W.M. Keck Center for Neurophysics, UCLA, Los Angeles, California	USA
56	Madhur Kalia	2016B4A70275G	Nanyang Technological University, Singapore	Singapore
57	Lavanay Thakral	2016B5A70566G	MIT Media Lab, MA	USA
58	Amal Desai	2017A7PS1919G	University of Florence, Florence	Italy
59	Aswin Narayanan	2017B5TS0237G	Tata Institute of Fundamental Research, Mumbai	India
60	Ranka Pranay Vivek	2016B4A80446G	MetronLabs Software Technologies Pvt Ltd,	India

S.No	Name	Id No	Place Of Thesis	Country of Thesis
			Bangalore, Karnataka	
61	Harshit Yadav	2016B3A30428G	IIT Kharagpur	India
62	PrathmeshThorwe	2017AAPS0206G	Embedos, Santacruz, Maharastra	India
63	TanishDhariyal	2017A4PS0413G	Delhi University, Delhi	India
64	Advait Rane	2017A7PS0135G	MIT Media Lab, Cambridge, Massachusetts	United States
65	Himalaya Sharma	2016B1AA0760G	Technische Universität Wien (TU Wien), Institute of Computer Engineering, Embedded Computing Systems (191/2), Treitlstrasse 3, 2nd floor, 1040 Vienna	Austria
66	G V S S Jaideep Ram	2016B5A30516G	ISR/IST, Univ. Lisboa, Lisbon, Lisboa	Portugal
67	Nishita Bhatia	2016B3A70349G	IIM Bangalore, Bangalore, Karnataka	India
68	Aakash Jeremiah	2016B5A80432G	Identy(Metron Consulting Labs), Banglore, Karnataka	India
69	Shubham Joshi	2015B1A10767G	Central University of Rajasthan, Ajmer, Rajasthan	India
70	HarshalMarathe	2017A1TS0635G	Indian Institute of Technology Bombay, Powai, Mumbai, Maharashtra	India
71	Tejas Uday Rane	2017A4PS0918G	Robert Bosch Center for Cyber-Physical Systems, IISc, Bangalore	India
72	Aditi Sathe	2016B1PS0604G	International Institute of Information Technology (IIIT), Gachibowli, Hyderbad - 500 032	India
73	Vaibhav Kulshrestha	2015B1A30760G	University Health Network, Toronto, Ontario	Canada
74	Shashwat Hemant Kakkad	2017A8TS0488G	Tata Institute of Fundamental Research, Mumbai	India
75	Shikhar Tiwari	2016B4A80325G	FPL Technologies, Pune, Maharashtra	India
76	Siddesh Patil	2017A1PS0849G	Deepak Silicate Pvt. Ltd,Gwalior,Madhya Pradesh	India
77	Nikita Agrawal	2017A3TS1903G	Universal Robots, Bangalore, Karnataka	India
78	Shubh Khandelwal	2017A1PS0773G	Deepak Silicate Pvt Ltd, Gwalior, Madhya Pradesh	India
79	Sashya Sinha	2017AATS1930G	Computer Enterprises, Inc. America	India
80	Nihal Reddy Pingali	2017A3TS1904G	Singareni Collieries Company Limited	India
81	Mukund Vinay Agarwal	2017AATS0380G	RISE Labs,Indian Institute Of Technology-Madras, Chennai,Tamilnadu	India
82	KIRAN M S	2017A4PS0461G	Virginia Commonwealth University	United States
83	AHAN M R	2016B4A30487G	Microsoft Research India Lab, Bangalore, Karnataka	India
84	Khyati Jain	2016B5A70471G	Microsoft Research India Lab, Bangalore, Karnataka	India
85	Shourya Singh	2017A4PS0668G	Jamna Auto Pvt. Ltd.	India
86	Mohit Bhandari	2016B2A80564G	Sensum research, Mumbai, Maharashtra	India
87	ANISH SHARMA	2016B2A40585G	Ocwen Financial Solutions pvt ltd	India

Second Semester 2019-2020 M.E. "On-campus DISSERTATION

S.No.	Name	ID NO	Organization
1	Narendran T	2018H1030068G	BITS-PilaniK.K.Birla Goa Campus
2	Enuganti Pavan Kumar	2018H1030053G	BITS-PilaniK.K.Birla Goa Campus
3	Pranav Kalikate	2018H1410076G	BITS-PilaniK.K.Birla Goa Campus
4	Yaswanth Narayana	2018H1410093G	BITS-PilaniK.K.Birla Goa Campus

S.No.	Name	ID NO	Organization
5	GEETHIKA M	2018H1290004G	BITS-PilaniK.K.Birla Goa Campus
6	SOUMYADIPTA BANERJEE	2018H1030044G	BITS-PilaniK.K.Birla Goa Campus
7	Archana Yadav	2018H1290002G	BITS-PilaniK.K.Birla Goa Campus
8	Deshmukh Rashid A. S.	2018H1410098G	BITS-PilaniK.K.Birla Goa Campus
9	Vipul Ritwik	2018H1410183G	BITS-PilaniK.K.Birla Goa Campus
10	Navneet Panesar	2018H1290015G	BITS-PilaniK.K.Birla Goa Campus
11	Shantanu Kulkarni	2018H1030066G	BITS-PilaniK.K.Birla Goa Campus
12	P Sai Pavan Kalyan	2018H1010027G	BITS-PilaniK.K.Birla Goa Campus
13	V Sree Kavya	2018H1010024G	BITS-PilaniK.K.Birla Goa Campus
14	Dolly Saxena	2018H1010022G	BITS-PilaniK.K.Birla Goa Campus
15	Rohit thakran	2018H1010020G	BITS-PilaniK.K.Birla Goa Campus
16	LubnaMuzamil Rehman	2018H1010021G	BITS-PilaniK.K.Birla Goa Campus
17	Kumar Vishwa Ranjan	2018H1010026G	BITS-PilaniK.K.Birla Goa Campus
18	Akshay Gaikwad	2018h1010031g	BITS-PilaniK.K.Birla Goa Campus
19	AnegondiNateriAchyuth	2018h1010028g	BITS-PilaniK.K.Birla Goa Campus
20	Pruthivi G	2018H1010030G	BITS-PilaniK.K.Birla Goa Campus
21	Rishi Raj Tripathi	2018h1010029g	BITS-PilaniK.K.Birla Goa Campus
22	Kishlay Bhaskar	2018H1010032G	BITS-PilaniK.K.Birla Goa Campus
23	Romy Roy	2017H1290001G	BITS-PilaniK.K.Birla Goa Campus
24	ParthaSarathiKalita	2018H1010023G	BITS-PilaniK.K.Birla Goa Campus
25	Akanksha Nambiar	2019H1520900G	BITS-PilaniK.K.Birla Goa Campus
26	Mithra Gireesh	2019h1520903G	BITS-PilaniK.K.Birla Goa Campus

Second Semester 2019-2020 M.E. "Off-campus DISSERTATION

S.No.	Name	ID NO	Place of Dissertation
1	Sanchi Ahuja	2018H1290007G	CSIR-IICB, Kolkata, West Bengal
2	Forona B	2018H1290001G	Strand life sciences, Bangalore
3	Santhoshisadhanaa GS	2018H1290019G	Strand life sciences, banglore
4	Shilpa V Mishra	2018H1290011G	ICRISAT
5	Sivakumar S	2018H1290003G	Indian Institute of Science, Bengaluru
6	NikhilaHarikumar	2018H1290006G	Indian Institute of Science, Bangalore
7	Uma Matlani	2018H1290017G	IIT-Bombay
8	Saurabh Misal	2018H1410110G	Indian Institute of Technology, Kanpur
9	DEBARATI SARKAR	2018H1290018G	ICRISAT, PATANCHERU, Hyderabad, TELANGANA, India.
10	PRIYANKSHU MHATRE	2018H1410089G	Quest Global Engineering Services Pvt.Ltd.,Belgavi-591245
11	Suyash Kumar Mishra	2018H1410090G	NUS Singapore
12	Prakhar Verma	2018H1410087G	Quest global(Belgaum)
13	Malaika Afra Taj	2018H1400118G	National university of Singapore
14	Mayank Singh	2018H1410111G	Quest Global Belgaum
15	Adarsha Puranik	2018H1410082G	Quest Global, Belgaum
16	RAVU DHEERAJ	2018H1410078G	Quest global engineering services private limited, Belagaum
17	JOHN CHERIAN	2018H1410107G	QUEST GLOBAL, BELGAUM
18	Ananya Misra	2018H1290013G	Calcutta School of Tropical Medicine, Kolkata
19	Kena Sharma	2018H1290016G	The Gene Box, Mumbai
20	Anusha Koul	2018H1290012G	Omix research and diagnostic laboratories, Bangaluru

First Semester 2020-2021 M.E. "on-campus DISSERTATION

S.No.	Student Name	ID No	Organization
1	Shravani Pankaj Kharote	2019H1010006G	BITS-PilaniK.K.Birla Goa campus
2	Jasneet Kaur Pala	2019H1010004G	BITS-PilaniK.K.Birla Goa campus
3	Akshat Khandelwal	2019H1010007G	BITS-PilaniK.K.Birla Goa campus
4	Gnanakumar barani	2019H1010008G	BITS-PilaniK.K.Birla Goa campus
5	satyamshree	2019H1010002G	BITS-PilaniK.K.Birla Goa campus
6	Simarpreet Singh Lion	2019H1010009G	BITS-PilaniK.K.Birla Goa campus
7	Shahi Anmol Vinodkumar	2019H1010005G	BITS-PilaniK.K.Birla Goa campus

First Semester 2020-2021 M.E. "off-campus DISSERTATION

S.No.	Name	ID NO	Place of Dissertation
1	Keyur Kumar Namdev	2019H1510089G	Eram Scientific solutions pvt. Ltd, 5th Floor, KEK Tower, opp. TRIDA & Police HQ, Nandavanam, Vazhuthacaud, Thiruvananthapuram, Kerala 695010
2	Nirupama Nair	2019H1510087G	Eram Scientific Solutions Pvt Ltd, Trivandrum, Kerala, India
3	KoushalKandagatla	2019H1510090G	Warangal,Telangana
4	Hiranya Tallam	2019H1510088G	CDD SOCIETY, BANGALORE, KARNATAKA,INDIA
5	Pulkeshin Dubey	2019H1510091G	CDD Society Bengaluru (Karnataka)

CATEGORY-WISE DISTRIBUTION OF Ph.D. STUDENTS ON ROLLS DURING THE YEAR 2019

S.No.	CATEGORY	NO. OF STUDENTS ON ROLL	
		II Sem 2019-2020	I Sem 2020-21
1.	Staff	10	10
2.	Staff (Pre-Ph.D course work)	0	0
3.	Research Scholars	279	303
	GRAND TOTAL	**289**	**313**

I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem 2019-2020	26	26	25	01
I Sem 2020-21	36	36	34	02
Total	**62**	**62**	**59**	**03**

II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem 2019-2020	0	0	0	0
I Sem 2020-21	0	0	0	0
Total	**02**	**02**	**02**	**0**

III.Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total	(ii)	Aspirants(Part Time) of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	00		06		56

Discipline wise Break-up	
Biological Sciences	10
Chemistry	12
Chemical	05
EEE	01
Mathematics	08
Mechanical	06
CSIS	05
Humanities & Social Sciences	03
Econimics	06
Pharmacy	00
Physics	06
Civil	00

COMMUNITY WELFARE

The Community Welfare Unit facilitated the following activities during the calendar year 2020.

Republic day was celebrated with a flag hoisting ceremony and performance of patriotic songs by the students of Music Club. The Independence day was celebrated while following the guidelines for pandemic and the live telecast was broadcasted. Religious festivals such as Pongal, Lohri, Basant Panchami (which is also BITS Pilani Founder's Day), Durga Pooja, Ramnavami were celebrated using digital platforms, with active participation of BITS community. An online get together was organized in which the staff and their children actively participated. The children's magazine "The Little Wings" which is an initiative by Mr. Amarnath Dar is also circulated every month. The magazine is designed, contributed and edited by the staff children under the mentorship of Prof. Anasuya Ganguly and Mrs. Muktayi Patil. BITS, Pilani K.K.Birla Goa Campus also observed 6th 'International Day of Yoga' through Digital Platform Theme: Yoga @ Home and Yoga with Family, on Sunday, the 21st June 2020, Large number of student, staff, faculties and their family members participated in the Yoga online session through "YouTube", Google Hangout and Facebook Live.

Other than using the digital platform for celebrating functions, several measures were taken during pandemic. Campus level Crisis Response Team headed by director Prof. Raghurama G. was formed with other members as follows:

1. Prof. Bharat Deshpande, Acting Dean, Administration (Convenor)

2. Dr Raghavendra K.M., Chief Medical Officer

3. Prof. Sunil Bhand, Dean, SRCD

4. Prof. Meenal Kowshik, Associate Dean, SRCD

5. Mr Anand K Patil, Incharge, Purchase, Stores, Estate Maintenance

6. Mr Arjun C Halarnkar, Public Relation Officer

7. Mr Pradip Kumar Yadav, Chief Security Officer

The role of this team was to coordinate, facilitate and update the campus resident's information and their requirement during pandemic. In view of the sudden and prolonged lock down fund was raised by BITS Alumni affairs and BITS faculty and non-teaching staff which was utilized to provide the ration to daily wages employees and others in need.

Sanitization and other related works such as making markings for keeping a safe distance for controlling the pandemic are carried out on routine basis to locations like medical Centre, security gate and other commonly used areas. Indigenously designed and manufactured foot operated sanitizer stands are provided to main locations of campus buildings to avoid contacts to sanitizer bottle. The markings for keeping a safe distance for controlling the pandemic are made at public places like shopping Centre, etc.as per government protocol.

The Student Activity Center, apart from providing sports and wellness facilities to the students and campus residents, also has a designated as Music/Yoga/prayer hall that is being well utilized by the whole campus community.

The SAC also houses musical instruments including violins, sitars, tanpuras, veenas, tablas, harmoniums, electronic, tanpura and tabla, and keyboards. Many books on music are kept there for reference of the students, taken on lien from the Central Library. The unit also facilitated procurement of new instruments and repair of old ones for the students' Music Club.

Interested staff, their children and students are learning Sanskrit using a certificate course viz. 'Non Formal Education in Sanskrit' sponsored by Central Sanskrit University, Govt. of India (NFSE Scheme) which is running on digital platform.

The Medical Centre has been providing OPD services as well as 24 x 7 emergency medical services to all the campus residents. A 24x7 ambulance service is also available. An in-house medical store is available at the medical Centre and a lab collection point to provide diagnostic facilities has been functioning with a tie-up with a diagnostic laboratory. The Medical Centre has state-of-the-art equipment such as Multi parameter monitors, Defibrillator, ECG machine, Syringe pumps, Dental Chair, etc.

Clinics in Orthopaedic, Dermatology, OBG, ENT, Paediatrics, Dental Surgery, Physiotherapy etc run with visiting specialists available on call basis with prior appointments.

The center for mental health and rehabilitation run by M Power is operating and provides counseling services to students and staff. It has also conducted workshops for students, and workshops for mental health awareness.

Drinking water hygiene on campus is maintained by periodic testing of water at all the water coolers installed in food outlets, hostels and administrative buildings. Water testing from a few crucial points for the campus supply is also being implemented.

A campus-wide waste-segregation programme that was successfully launched last year has now been strengthened in collaboration with Goa Health Management Services (M/s GHMS) in safe disposal and recycling after door - to - door collection. As a start, standalone dustbins holder is provided to staff quarter to avoid littering of waste due to overtopping etc. And similar type is planned to extend to the other areas of campus. For the proper segregation of sanitary napkins and thereafter their disposal, yellow dust bins are provided exclusively at many locations of residential as well as hostel area. The same is collected separately and taken for incineration.

The annual cultural festival WAVES was celebrated as WAVES League Edition which included a plethora of events such as Jukebox, Rapsody, Inverse, Sizzle, Irshad which were hosted live on PayTM insider. BITS Technical Gazette was released by IEEE BITS Goa. This magazine aims to present a peek at the various initiatives and activities that the various technical clubs and organizations on our campus have undertaken throughout the past year. This magazine features the Aerodynamics Club, CTE, BitsKrieg, the Developers' Society, the Electronics and Robotics Club, SEDS Celestia, SAiDL, Wall Street Club, iGem, and the BITS Goa Chapter of the SAE, along with Project Kratos and Project RT.

A relatively new initiative, the Academic Assistance Programme by CTE(Center for Technical Education) where a senior helps juniors in academic problems by teaching them different subjects as per requirement have shown a huge success. In addition to this debate workshops have been organized under guidance of seniors to develop confidence and oratory skills in the new students.

Srutilaya a student-run club for promoting Indian Classical Music and Dance organized its annual Thyagraja Aradhana in memory of Saint Thyagraja, lecture demonstration by prominent vocalist Smt. Mausami Maitra and a concert in the memory of Prof. Suresh Ramaswamy which witnessed the performances by violin maestro Shri Yadnesh Raikaras well as by BITS-Goa alumni Sukrut Tamhankar, Balakrishnan R., and Apoorvaa Deshpande.

CENTER FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP (CIIE)

- During 2020 Indian patent applications were filed by the following Faculty members along with their PhD Scholars. Several other Invention Disclosures are also in the pipeline.

- Singh Pragya, Prof Krishnaswamy Srinivas, Ponnani K.N.,Rawat Jaya,Verma Ankur

- Prof Jegatha Nambi Krishnan, Shrey Grover,Arya Agarwal,Arnav Deshpande

- Prof Jegatha Nambi Krishnan,Sampada Bokade,Swastic Singh, Prof Sutapa Roy Ramanan

- Prof Kulkarni Pritam Vivek, Prof Mali Kiran Dinkar, Prof Singh Sandeep

- Rehman Lubna Muzamil, Prof Roy Anirban

- Prof Pravin Singru

- Prof Naren Ghosh, Prof Anirban Roy, Hemantkumar Aiyer (Abstcl), Amit Chatterjee (Abstcl)

- Rehan Deshmukh, Prof Utpal Roy, Prof Sunil Bhand

Other Notable Achievements related to CIIE:

- BITS Goa alumnus startup Postman became a unicorn. It's valued at $2Billion

- On campus startup Codedamn.com has around 20,000 registered users on it's coding platform.

- Huloq chatbots was selected among top 20 startups in Conquest '20

- Algo kart reached the finals of Y-combinator S'19. It is building a new platform called 50X investment

- Sarthak Chakrabarti and Sayan launch an alternative to Chinese app Xender (as part of Atmanirbhar Bharat). https://play.google.com/store/apps/details?id=com.techberriesindia.shareflee

- Corporate Legal Cell, ABMCPL and CIIE - BITS Pilani jointly organized an Awareness Program on 'Patentability of Biotechnology inventions and disclosure requirements for biotech inventions" on 26 April 2020 (World Intellectual Property Day)

- The BITS GOA Innovation, Incubation and Entrepreneurship Society (BGIIES) got registered in 2020. BGIIES has been formed to scale up innovation and creation of startups on campus and promote academic entrepreneurship.

CENTRAL SOPHISTICATED INSTRUMENTATION FACILITY (CSIF)

1.0 Preamble:

Central Sophisticated Instrumentation Facility (CSIF) is envisioned as a "State of the Art" facility at BITS Pilani - K K Birla Goa campus, which will house high end research equipment. The facility is open for faculties of all the BITS Pilani campuses as well as for researchers from other academic organizations and industries. A dedicated CSIF is operational in new academic block. A team of three technical lab staffs, two nucleus faculty members and one faculty in charge (FIC) manages the operations of the facility.

Website: https://www.bits-pilani.ac.in/goa/csif/home

2.0 Progress in the year 2020:

This year a Bruker Nuclear Magnetic Resonance (NMR) spectrometer was added to the facility. The installation of AVANCE NEO 500 MHz NMR spectrometer was finished in December 2020. The Ascend 11 Tesla magnet from Bruker has both a solution state and solid state probe. The console is equipped with two independent RF channels for the detection of various nuclei such as ^1H, ^{13}C, ^{15}N, ^{31}P, ^{19}F, ^{29}Si, ^{11}B, ^{17}O, ^{77}Se, ^{109}Ag and ^{119}Sn. It also has the capability of Multi Receiver Technology for sequential and parallel acquisition of multiple nuclei at a given point of time. The 5mm smart probe has variable temperature range from + 150 °C to – 150 °C and with a sensitivity of (a) ^1H sensitivity > 800:l (0.1% ethyl benzene) (b) ^{13}C sensitivity > 355:1 (10% ethyl benzene). A 4mm CPMAS H/X VTN double resonance probe is available for SB solid state NMR with a temperature range from – 50 °C to +80 °C. Topspin 4.0 acquisition and processing licence includes data acquisition modules along with structure analysis software as well as NMRSIM for experiment simulation. The facility is available for use for both BITS Pilani researchers and academic & industrial users outside the university on pay and use model.

3.0 Equipment at CSIF

Presently CSIF has the following equipment:

Equipment	Make and Model
Field Emission Scanning Electron Microscope (FESEM)	FEI Quanta FEG 250
Liquid Chromatography - Mass Spectrometry (LCMS)	Agilent Technology 6460 Triple Quadrupole LC/MS
Confocal microscope	Olympus Corporation FV3000
Raman Spectrometer	LAB RAM HR Horiba
X-ray Diffractometer	Bruker D8 Advance
Nuclear Magnetic Resonance (NMR) spectrometer	Bruker AVANCE NEO 500 MHz
Nano Particle Analyzer & Autotitrator	Nanoplus & Nanoplus AT
Sputter coater	LEICA EM ACE-200
Critical Point Drying	LEICA EM CPD-300
Ultramicrotome	LEICA EM UC7
Tissue processor	LEICA EM TP

4.0 CSIF Staff

At present CSIF has the following staff members:

Name	Date of Joining	Remarks
Laxminarayana Muriki	02.06.2018	Worked till 16.12.2020
Kumar Kanneboina	13.05.2019	Taking responsibility of LCMS, XRD, and Confocal Microscope
Lakshya Raj Khatri	20.12.2019	Taking responsibility of NMR, and Raman Spectrometer

INTERNATIONAL PROGRAMMES AND COLLABORATION DIVISION (Goa Campus)

MoU/ Agreement has been Signed with the following International Universities

- MoU with Télécom Paris, France on 09th November, 2020

Significant Events Organized

- IPCD, Goa Campus organized TAOYAKA On-site Training Program in collaboration with Hiroshima University & Indian Institute of Management, Ahmedabad. 15 graduate students participated in the program held during 12th to 20th February 2020

- IPCD hosted Dr Peter Martin and Dr. Mark Mc Court from School of Mechanical and Aerospace Engineering, Queens University, Belfast, N. Ireland, during their visit to Goa Campus towards collaborative meeting on 20th January 2020.

- IPCD, BITS Pilani conducted "Global Meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives" during Oct 16th 2020 to Nov 07th 2020

- IPCD, BITS Pilani and Hiroshima University, Japan jointly organized the 2nd Joint International Workshop for Faculties & PhD students held on 20th Nov 2020.

Invited Talks

- Ms. Anupama Sharma, Maaharey Consultant Service, visited K K Birla Goa Campus to deliver an Informative session on 'Study in USA/Germany and other Countries' on 13th Jan 2020

- Prof Ratna Ghosh, Distinguished James McGill Professor and W.C. Macdonald Professor of Education McGill University, Canada visited K K Birla Goa Campus deliver an invited talk on "Inclusion as a concept in society and education" on 18th Feburay 2020

- Mrs. Shubhada Choudhury, DAAD Office, Mumbai conducted an info session for students on "Study and Research Opportunities in Germany and information on DAAD WISE Scholarships" on 04th March 2020

Travel Grants

- IPCD provides partial travel grants to students every semester who pursue their First-Degree thesis at international universities/ institutes abroad.

- Total 40 students visited international universities / institutes abroad for their First-Degree off campus thesis in Sem II AY 2019-20. Out of 17 applicants who had applied for partial travel grant, 10 students were selected for the grant from IPCD in SEM II, AY 2019-20 (Jan 2020 - May 2020)

Outbound Students

- Ms. Awani khodkumbe ID: 2016A8TS0331G attended Semester Exchange Program at University of Twente, Netherlands during Semester II, AY 2019-20 (January- June 2020)

- Two students Mr. Mihir Ketan Vora ID: 2018A3PS0755G and Mr. Aditya Jabade ID: 2018A8PS0436G selected for ILDP Start Plus 2020 Internship program conducted online by Hiroshima University in December 2020.

PRACTICE SCHOOL:

The pratice school divison provides a platform that facilitates and promotes partnership and intellectual exchange between academia and industry. It provides the students an opportunity to work on relevant industrial and real life assignments under the guidance of professional experts and supervision of BITS faculty.

During SEM II, 2019-20 and SEM I, 2020-21, 649 first degree students and 125 higher degree students have undergone PS-II from K K Birla Goa campus. Dr. Narayan Suresh Manjarekar. was involved as PSII faculty from Goa campus.

During summer term 2020, total of 866 students went to 310 PS-1 stations from the K K Birla Goa Campus. A total number of 12 Faculty members accompanied the students for PS-1 as shown in the following table.. The campus students also contributed by opening 16 PS stations.

PS 1-2020 Faculty Members

Sr.No	PSRN	Faculty Name
1	G0072	V V S N V Prasad Chundru
2	G0108	Pravin Madanrao Singru
3	G0192	Ramprasad Savlaram Joshi
4	G0432	Narayan Suresh Manjarekar
5	G0693	Richa Singhal
6	G0695	Anirban Roy
7	G0753	Devendra Gokul Patil
8	G0757	Soumyadip Bandyopadhyay
9	G0792	Rakesh R. Warier
10	G0793	Noel Prashant Ratchagar
11	G0794	Kanchan Manna
12	G0800	Anurag Nishad

PUBLICATIONS DIVISION:

The Publications and Media Relations Division published the BITScan Semester Newsletter Issue 18 and 19 and the Convocation Proceedings 2019 in this year. The division also regularly sent Press Releases to National and local media after every Campus event. The website Banner News and Latest News were also updated regularly with current events. Various student achievements, campus events and significant research projects were published in Local and National media.

PUBLIC RELATIONS:

Public Relations office coordinated following events:

S.No	Topic	Date	Convener
1	Visit of Goan Diaspora Youth under the aegis of 12thKnow Goa Programme organized by MEA, Govt. of India	07th Jan 2020	PR Office
2	Project Review Meeting	10th Jan 2020	Director's Office
3	BITSAA Global Meet- 2020	17th -19th Jan 2020	Director's Office
4	2nd Annual International Conference on Economics and Finance (ICEF-2020)	22nd – 24th Jan 2020	Dr. Aswini Kumar Mishra
5	TEDx BITS Goa 2020	26thJan 2020	CSA
6	Microsoft Research Labs (MSR) & ACM India	29th 31st Jan 2020	Dr. Bharat Deshpande
7	Quark -2020 | Annual Tech Festival	31st Jan 02nd Feb 2020	CSA
8	3rd Annual Workshop of the Society for the Cognitive Science of Culture (SCSC)	04th -06th Feb 2020	Dr. Veeky Baths
9	DAE workshop	10th -11th Feb 2020	Dr. Sunil Bhand
10	Alumni Research Talk	14th -16th Feb 2020	Alumni Relations Cell
11	TAOYAKA Onsite Training Program	16th -20th Feb 2020	IPCD
12	School and International Conference on Photoirradiation and Adsorption based Novel Innovations for Water Treatment (PANI WATER) under the framework of PANIWater Indo-EU, EU-DST sponsored project	02nd -5th March 2020	Dr. Halan Prakash

Teaching, Learning Centre

During the year 2020, Teaching Learning Centre at KK Birla Goa Campus evolved its programs further and worked on its vision, which is to provide a foster a thriving culture for excellence in teaching-learning processes. It provided a forum to discuss and evolve new ideas in education to address current challenges. The following activities were carried out by Teaching Learning Centre during the year 2020.

TLC organized the following seminars.

1. Prof Gaurav Dar, Dr. A Baskar & Prof. Radhika Vathsan gave seminar on 24th October 2020. The title of the seminar was "Online Teaching". Around eight participants were present.

TLC conducted Intensive teaching workshops (ITW) for new faculty members.

1.   NA (Could not organize this FY due to Covid. Will be organizing next FY).

Conferences

1.   "International Conference on Best Teaching Practices for Engaged Student Learning" Conference held in Goa Campus from 13th to 15th February, 2020. The workshop was organized by TLC of all campuses.

2.   Prof. Rajesh Mehrotra & Prof. Gaurav Dar from Teaching-Learning Center attended the Virtual Conference Online Access held in USA "The Teaching Professor Virtual Conference" on 27th May 2020. The workshop was organized by Magna Publications.

Research Project in pedagogy

3.   Research project on "Impact and prospects of computer gaming on academic and socio-cultural progress of undergraduate students at BITS-Pilani K. K. Birla Goa Campus" was funded by the TLC. The Principal investigator for the project was Dr. Sayantani Sarkar from Humanities & Social Sciences Department. A Research Assocsate was also hired for the project.

4.   Research project on "Characterization of Students' Feedback for Gaining Actionable Insights" was funded by the TLC. The Principal investigator for the project was Dr. Swati Agarwal of Computer Science & Information Systems Department.

B2.12 CENTRAL FACILITIES REPORT

CENTRAL LIBRARY

The Library complex of BITS, Pilani – K K Birla Goa Campus comprises of a spacious building covering an area of 3512 m^2. It is designed to provide several reading halls, apart from a large area earmarked for books storage. The Library has been provided with a wireless network whereby users can access the internet using their laptops. The Library is equipped with modern furniture well designed taking into consideration the future growth of the Library collection and the needs of the users. Presently, it has a seating capacity of 550+ which is likely to be expanded in the coming years.

The Library remains open throughout the year (except on 5 public holidays) from 09.00 am to 11.00 pm on all working days, from 9.00 am to 8.00 pm on Saturdays and from 10.00 am to 8.00 pm on Sundays and other holidays when the academic session is on. And during exams the timings are further extended from 09.00 am to 02.00 am. During recess and vacations, it is open from 09.00 am to 05.00 pm.

The Library web-site has been linked with the Institute home page for easy access. The home page was designed and developed by students. The Library had been using LIBSYS Library Management Software to automate all its housekeeping activities; from July 2014 a switch to LibLime Koha software system has been made. The Library Koha Web OPAC includes advanced search options for books and journals. The Library also hosts an online repository of publications of the students and faculty members of the Campus. As of now, these services (Koha OPAC and the repository) are accessible only while connected to the Campus intranet. In future, Internet connectivity will be offered.

The Online Portal

We have our catalogue and transactions management on the Koha server which is a FLOSS. We also are developing a repository of our own (campus-level) research output like theses and publications. Together, using FLOSS tools, we are in the process of organizing a Library portal that we hope will become an academic social networking platform for the Campus. Sooner or later, this will become a component in the University-level library portal in the offing for some time. We have taken the opportunity created after the exit of a staff member to recruit a person with a technical profile instead of non-tech library professionals, in order to drive this development forward. This is a new beginning.

Acquisition and circulation

The Library collection has reached 40991 volumes, growing by 3%. The average growth in the last decade had been around 10%. The decline in this year had been foretold, during the budgeting exercise for the current FY: unfavorable exchange rate rise and aggressive price rise by journal publishers is putting pressure on the share of journals and online resources in the budget. In order to continue subscriptions to all the important content, the Library has been forced to cut down on the budget for books.

Reference Section

The Library has a good collection of reference materials, like encyclopedias and handbooks. However, a clear trend among users has emerged that is making the print versions obsolete: the rise in the use of online databases and search engines. The Library, through deliberations in the Library Committee, is planning to shift to this mode in future. Just as many journal and online content publishers are raising subscription rates, there is also a mitigating trend of free online access and shared resources. The Library is gearing up to become an efficient facilitator for accessing this online treasure trove through Koha.

Journals and Online Resources

The Library subscribes to 43 Indian Journals and 9 Foreign Journals in print, 5 online journals, 16 digital library (which includes access to 19009 E-journals) packages for researchers of different disciplines. Digital library packages include IEL Online, ASME, ScienceDirect, ProQuest, ACM Digital library etc. The Library home page gives links to the resources available, for easy location and access. Useful articles, news, newspaper clippings are displayed from time to time on the notice board for the information of readers.

To help the readers further, Libray has adopted Shibboleth, a standard-based open source software. This authenticats authorized users seamless access to e-resources from anywhere, anytime. The part time research scolars will benefit much from this facility.

Other services

The Library has a collection of 35 educational video cassettes and 1496 CDs. The Library keeps the readers informed of all the books added to the Library through a regular display of new arrivals as well as updates on email. From time to time book exhibitions by publishers are arranged to facilitate faculty members selecting books for the library.

New Reading Lounge

As a part of an effort to make library a happening place on campus, a new lounge area has been designed in the library. Created with the purpose of encouraging reading, it brings a welcome splash of color to the library. A plush room boasts of comfortable couches and carpet flooring meant to dampen sound and allow discussion between students without disturbing those outside the room. These spaces play host to book discussions; in future we want to organize author talks and more. We have earmarked exhibition spaces on the walls for displaying artwork, encouraging our Campus community's creativity. Some new installation for this purpose, including a glass-board for brainstorming and collaboration, is happening now. Reading area that welcomes younger children is also developed with couches. Our Library is an alcove of reading, collaborating and thinking.

COMPUTER CENTRE

(A)   Computer Hardware

S.No	Make	Configuration	Number	Area of utilization
01	DELL 7010	Intel Core i7 Processor,8GB RAM,1TB HDD	22	Central Computing Labs, Various Department Labs, Faculty members and Staff members for carrying out their academic teaching and research work.
02	Dell Optiplex 9020 MT	Intel Core i7, 4th Generation, 8GB RAM, 1TB HDD	50	
03	Lenovo Edge73	Intel Core i7 Processor,8GB RAM,500GB HDD	56	
04	Dell Optiplex 3010	Intel Core i3 / i5 Processor, 8GB RAM,500GB/1TB HDD	100	
05	Dell Optiplex 9020	Intel Core i7 Processor, 8 GB RAM,1 TB HDD	39	
06	Dell Optiplex 390	Intel Core i3 Processor,8GB RAM,500GB HDD	11	
07	HP Prodesk	Intel Core i7 8th Gen Processor,16 GB RAM,1 TB HDD	60	
08	HP Prodesk	Intel Core i7 Processor,16 GB RAM,1 TB HDD	73	
09	Dell Optiplex 755	Intel Core 2 Duo Processor,2GB RAM,160GB HDD	66	
10	HP ProDesk 400	Intel Core 7i Processor,16GB RAM, TB HDD	40	
11	Lenovo G510	Intel Corei5 Processor,4GB RAM,500GB HDD	22	Faculty members and Staff members for carrying out their academic teaching and research work
12	HP 440G5	Intel Core i7 Processor,16 GB RAM,1 TB HDD	50	
13	Dell Latitude E5430	Intel Core i3 Processor,4GB RAM,500GB HDD	18	
14	Dell Vostro 1550	Intel Core i3 Processor,4GB RAM,500GB HDD	17	
15	Dell Latitude 3400	Intel Core i7 Processor,16 GB RAM,1 TB HDD	50	
16	Dell Vostro 3550	Intel Core i3 Processor,4GB RAM,500GB HDD	56	
17	Dell Vostro 3500	Intel Core i3 Processor,4GB RAM,500GB HDD	25	
18	HP Tablet PC	Intel Core i3 Processor, 2GB RAM, 500GB HDD	4	
19	HP Elite Book Tablet 2730P	Intel Core i3 Processor, 2GB RAM, 500GB HDD	1	

(B)   Servers

S.No.	Server	Make	Qty	Configuration	OS
Network servers					
1	DNS	IBM	3	[IBM x3650 M4, Dual Processors(6 Core),16GB RAM, 500GB Hard Disk]	Windows 2016
2	DHCP	IBM	2	[IBM x3650 M4, Dual Processors(6 Core),16GB RAM, 500GB Hard Disk]	Windows 2016
3	LDAP	IBM	2	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3GB Hard Disk]	Cent OS
4	Network Monitor (Notice)	DELL	1	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 128 RAM ,4 TB Hard Disk]	Windows server 2016
5	Cacti Monitor	DELL	1	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	RedHat
6	CC Tv	DELL	1	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 128 RAM ,70 TB Hard Disk]	Windows server 2016
7	Antivirus	DELL	1	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 128 RAM ,4 TB Hard Disk]	Windows server 2016
8	NTP Server	DELL	-	Dell PowerEdge T610 - tower - Xeon E5620 2.4 GHz - 16 GB RAM - 1 TB Hard Disk	Windows Server 2012
Communication Servers					
1	Web Server	IBM	3	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows server 2016
2	Call Manager	Cisco	1	[Cisco BE6000, 2.4 GHz,10MB Cache, 8GB DDR3 RAM Dual Rank, 500GB SATA_ 7.2K RPM SFF Hot Plug/Drive Sled Mounted]	Cisco Business Edition 6000 - Software App Version 10.X
3	Call Account/Reporting tool	DELL	1	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 128 RAM ,4 TB Hard Disk]	Windows Server 2012
4	SWD Server	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
5	Teeme & Dashboard	DELL	1	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 128 RAM ,4 TB Hard Disk]	Windows 2012
6	Application Server	DELL	2	[DELL Intel Xeon E5-2620 v4, Dual Processors(6 Core), 32 RAM ,4 TB Hard Disk]	Windows Server 2016
Academic Servers					
1	Academic FTP	IBM	1	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Fedora
2	Staff/ Faculty FTP	IBM	1	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Fedora
3	Mech (Ansys, MATLAB,etc)	IBM	2	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows 2016
3	Course Management (Moodle)	IBM	1	[IBM x3650 M4, Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	CentOS
4	BITSAT	DELL	3	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
(C) COMPUTER CENTER (Central Facility)					
Central Computing Lab, Zone I			DELL 7010 [Intel Core i7 Processor,8GB RAM,1TB HDD] Dell Optiplex 9020 [Intel Corei7, 4th Gen, 8GB RAM, 1TB HDD] DELL 3040 [Intel Core i7 Processor,8GB RAM,1TB HDD]	12 46 42	Windows 10 and Linux Office 2010, AutoCAD Modelsim, Xilinx
Central Computing Lab, Zone II			Dell Optiplex 3010 [Intel Core i3 / i5, 8GB RAM,500GB/1TB HDD] Lenovo Edge73 [Intel Core i7,8GB RAM,500GB HDD]	67 21 12	Windows 10 and Linux, Office 2010, AutoCAD Modelsim, Xilinx
Central Computing Lab, Zone III			HP ProDesk 400[Intel Core 7i Processor,16GB RAM, TB HDD] Lenovo Edge73 [Intel Core i7,8GB RAM,500GB HDD] Dell Optiplex 7010 & 9020 [Intel Core 2 Duo, 2GB RAM,320GB HDD]	76 22 9	Windows 10 and Linux, Office 2010, AutoCAD Modelsim, Xilinx
Central Computing Lab, Zone III- A			HP Probook 450 G5 i7 8thGen 16GB RAM, 1TB HDD	60	Windows 10 and Linux Office 2010, AutoCAD Modelsim, Xilinx

(D) **Operating System and Software Licenses**		
Windows	Windows 10	400
Windows	Windows Server Standard 2012 / 2016	50
Seqrite	Seqrite End point Security	850
Microsoft Office	Office 2010 and Office 2016	400

Network Facilities

Campus Local Area Network

The Campus LAN Project of BITS Pilani – K K BIRLA Goa Campus is a state of the art, completely switched, voice-enabled LAN infrastructure. LAN is able to provide 100 Mbps fibre channel network connectivity to all faculty cubicles, offices, library, Labs, lecture theatres, workshop, auditorium all hostel rooms, staff quarters, visitors' guest house, shopping complex, student activity centre & other public facility locations in the campus. There are 5000+ nodes across the campus.

The network is a three-layer network, namely core, distribution and access. The core &   distribution   layer   is connected through gigabit fibre optic backbone, while the access layer is using enhanced CAT6 / CAT6A cabling. The network is designed to provide link level and device level redundancy.

Wi-Fi Network

The Institute building, Visitors' Guest House, Student Activity Center and Medical Center are provided with a secured Wi-Fi network facility. The Wi-Fi solution used for this is from RUCKUS. All hostels have WiFi connectivity. This Wi-Fi solution is using CISCO access points.

Cloud Based Services (e-mail and File Storage)

University e-mail solution is supported by Google for 30,000 users of BITS campuses and WILP students. This solution is an integrated solution covering e-mail with 30 GB space, file storage with 50 GB space, collaboration tool, file sharing, personal web-pages, calendaring system, etc.

LAN Security

The LAN security is provided by Sophos XG 750 firewall with high availability and redundancy. The facility also supports high availability of internet lines and support on-demand bandwidth at any location with load balancing.

Voice Communication

All faculty members have been provided with a laptop/desktop and VoIP telephone facility in their chambers. The VoIP facility facilitates receiving of incoming call directly on the individual telephone.

Video Communication

Multi-point video conferencing facility is made available using the POLYCOM HDX machine. This facility is utilized for online meetings of research groups in India as well as across the world apart from the administrative meetings.

Internet Bandwidth

S.No.	Area	Bandwidth Allocated	Service Provider
01	Hostels, Guest House	500 Mbps	GWave EtherNet Express
02	Institute Building, Staff Quarters	750 Mbps	Vodafone Vodafone Reliance Jio
03	Wifi Hostels, Academic building and Quarters	1000 Mbps	Vodafone Reliance Jio
04	Cross Campus Teaching and Lectures/talks from BITS Alumni using web-based technology	45 Mbps	Tata Tele Services

Cross Campus Connectivity

S.No.	Area	Bandwidth Allocated	Service Provider
01	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Datacenter co-hosted at Mumbai for the ERP applications.	5 Mbps	Tata telecom
02	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Datacenter co-hosted at Mumbai for the BITS Connect 2.0 applications.	75 Mbps	Tata Telecom

Virtual Class Room (BITS Connect 2.0)

The virtual classroom is set up at K K BIRLA Goa campus. This facility will enable faculty to deliver lectures to all four BITS campuses simultaneously; alumni and experts to remotely deliver lectures and conduct workshops or panel discussions to multiple BITS campuses simultaneously, with recording and streaming of lectures. Telepresence classroom provided for delivering and receiving interactive lectures between all the BITS campuses. These facilities used for cross campus courses, guest lectures, administrative meetings and online meetings of research groups in India as well as across the world.

Telepresence Conferencing Room (BITS Connect 2.0)

An 18+16 seat CISCO Telepresence (CISCO Room 70 Dual) conference room allows impressive multipoint teleconferencing facility among all the BITS campuses. CISCO Telepresence will transform the meeting spaces into a video collaboration hub for connecting teams across the globe or local meetings. Room 70 Dual comprising a powerful codec, a quad-camera, and 70" dual 4K display(s) with integrated speakers and microphones. It offers sophisticated camera technologies that bring speaker-tracking and auto-framing capabilities for a people-focused and people/content-focused experience. Telepresence at K K BIRLA Goa campus facilitate virtual meetings for academic and administrative decisions at University level. Licenses for WebEx (web conferencing software) have been provided to all the faculty to facilitate discussions related to course work and research. This facility will also open up avenues of multimedia collaboration with anybody outside the campus activities, seminars, annual functions and other such activities.

Bring your own device (BYOD)

As a part of an effort to make Computer Centre Lab enhancement, collaborative learning with students own personal digital devices on campus, bring your own device (BYOD) area has been designed in the Computer Centre Lab. It is created with the purpose of encouraging students to use technology to support their academic learning and research. Students are permitted to bring devices that can connect to the campus Wired/Wi-Fi network for any accessible digital content.

CCTV Network

CCTV systems provide surveillance capabilities used in the protection of people, assets and systems through an Internet Protocol camera (IP camera) system). This system capable of a higher-resolution video recording and thus provide better, clearer images and perform in low-light recording situations. Presently, we have 110 IP cameras connected through the local area network to dedicated local storage media with 30 days of recording.

Workshop

The central workshop is equipped with following equipment's purchased during the year **2019** are as follows:

S.No.	Particulars
1	Spin coating systems spin NXG-P1, Spin coater-substrate holder PT FE- 50MM, Vacuum Pump (one each)
2	Phantom Camera, MIRO C210 with capture connector, 8GB Memory, 120GB Flash, Battery, Color AND Lens, C-Mount (2/3") 100 MM F2.8 Manual Iris Megapixel KOWA LM100JC
3	5-Axis Vertical Machining Center with accessories.
4	Voltage Stabilizer 45 kVA, Air Dryer 20 cfm, and other accessories for 5-axis VMC.
5	2 Channel 25 MHz Arbitrary Function Generator
6	3 HP Reciprocating Type Oil Lubricated Air Compressor
7	Servo Control Voltage Stabilizer 40 KVA, Air Cooled 3 phase 40kVA I/P 295V to 465V Input MCB Bypass Switch
8	Upright Refrigerator, 2-8 Deg. C,2. 4CU.FT
9	Magnetorheological (MR) Damper mRHEO S-ACTIVE G2
10	Bandsaw Machine, "SHREE" Brand, Model No. HTB200 - Hinge Type - 200 MM
11	Cmos Laser Sensor (Sensor Head) Il-100 (qty – 1 no.), Cmos Laser Sensor(Sensor Head) Il-S065 (qty – 1 no.), Cmos Laser Sensor (Amplifier Unit) Il-1000 (qty – 2 nos.) and Cable For Gv-T Series Op-87056 (qty – 2 nos.)
12	40khz 300w Ultrasonic Generator (qty – 1 no.) and 50W 40 khz Ultrasonic Transducer (qty – 6 nos.)
13	Makler Sperm Counting Chamber
14	Standard DC LVDT (0 -600mm), Standard DC LVDT (0-300mm) and Long range position transducers (0-0.5 m) (one each)
15	2260B-30-36 Programmable Power Supply, Max voltage – 30V, Max Current -36A (Tektronix Keithley Make)

S.No.	Particulars
16	Sieve Shaker with six Sieves(Brass, 200mm dia x 50mm H) having 20x4 line alphanumeric LCD display and alphanumeric keypad in MS powder coated cabinet. With lid and receiver for 200mm dia x 50mm h sieves.
17	Hot Air Assembly for Existing Flexural Creep Setup, Microprocessor Based PID temperature controller, Suitable to fit Flexural Creep Setup HxDxW (12" x 6"x 32"), Temperature Room Temp to 200 Deg C, Temperature Accuracy +/- 1 Deg C
18	Environmental Stress Cracking Resistance Apparatus. (ESCR) Inner and Outer complete SS body (As Per ASTM D 1693) Model: DPPL-ESCR-1-8T, 8 Test Tubes Accomodation Model,
19	Compression Moulding Press M/C. Manual Version Hydraulic Press for Sheet Moulding Application, Press Capacity: 20 Ton Hydraulic Jack System Maximum Working Platon Size for Sheet Mould: 160 X 160 X 4 mm
20	UPS - 20 KVA online UPS with inbuilt isolation (Three Phase I/P & O/P) with 25 nos. of 12 V 100 Ah batteries to provide approx 60 Mins backup.
21	Upgradation of memory from 16GB DDR4 ECC Registered @ 2666 MHz modules with 32GB DDR4 ECC Registered @ 2666 MHZ Modules.
22	UPS - 3 KVA Double Conversion Online UPS From Fuji Consul Neowatt with 12 V 26 AH Batteries – 08 nos. for 30 mins backup.

Central Facilities & Monitoring:

The central facilities on campus include central water receiving and distribution facility, central electric power receiving distribution center, Sewage Treatment plant, Diesel Generator, and central Air-conditioning plant. The details of these facilities are as follows:

Central Facilities	Installed Size/Capacity
PWD Water Connection	600cumec
Water Storage Sump	1800 cumec . Three tanks of 600 cumec each
Utility II building	Water tanks of 1,30,000 ltrs, and 1,00,000 ltrs each of flusing and irrigation are provided to cater to the newly constructed residential blocks.
Utility I building	Domestic tank – 2,60,000 ltrs, Flushing- 1,30,000 ltrs and Irrigation – 1,30,000 ltrs constructed to cater to the new academic block, DH side hostels, D mess.
Overhead Water Tank	150 cumec. Water pumped from the main sump to over head tank and distributed to campus residences through gravity.
No. of Bore Wells	5 Nos. / 55 cumec
GEB Electricity Supply	3000KVA and 2000 KVA transformers at 33 KV substations is energized with distribution of load by completing loop. A separate 11 KV line connected at PCC2 for AC plant with 1000 KVA transformer
Transformer	500/1500/750/750 KVA at PCC1,2,3 and 4 respectively. 3000KVA and 2000 KVA transformers installed at 33 KV substation step down power from 33 KV to 11 KV. At utility I building, two of 1000 KVA transformers are charged to connect load to new cademic block, hostels and dining area.
Diesel Generator	2X500 connected to main building lighting, 750 KVA DG connected to air condition plant. One 62.5 installed for pump house for to pump water in case of power failure another 62.5 installed at VGH and 35 KVA DG connected to medical centre. Recently added 2X750 KVA to new academic block,1X250 KVA for common lighting to recently developed tower buildings
Air Condition Plant	660 TR load connected to main building includes class rooms, cubicles, computer centre, Library and Auditorium etc.
VRV units at new academic block (Air condition)	25 TR capacity of four units are provided to DLT5 to DLT8. Two of 15 TR are provided to four class rooms D101 to D 104.For computer science labs & cubicles provided with 108 HP (85 TR), For EE provided with 126 HP (100 TR)
Sewage Treatment Plant	Capacity 600 cumec and treated water is used for campus garden watering with the expansion of sewage plant, it is planned to connect the treated water to flushing ti newly built hostels & residences, for which separate flushing tanks are provided.
Renewable energy	Two, 6.75, 3.75 and 4.5 KW solar roof top panel are installed and connected to street lights. With this we have completed around 85% street lights on solar.
Solar Water Heater	All hostels existing as well as newly buil are backed with solar water heater for hot water requirement
Tele presence class room	200 capacity class room has been built for across three campus live class with the help of latest technology.

B2.13   MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS

BIO Nest: A separate block has been constructed and developed in association with Birac bio nest and has been occupied by incubates

Four more Lecture halls and four class rooms are added in the new academic block to accommodate additional students other than the existing lecture halls and class rooms.

Three residential blocks of C type are added having 2 and half bedroom of 48 flats. And one tower comprising residential flats associated to medical centre with 9flats of single bed room and two of two bed room.

Three departments, i.e. Computer science, EEE, and Physics have moved to new academic block from the existing main building owing expansion n labs, cubicles.

The entire existing campus buildings are repainted to external surface as well as replacing of Mangalore tiles with monier tiles to roof to increase the building life expectency.

Hostels

With the addition of one more hostel to exisiting with a capacity of each 100 rooms with double sharing.
Attached new dining hall has been commissioned to cater to the added students.

B2.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR

S.No.	Asset Description	Department	Rate	Qty	Purchase Value
1.	Dell OptiPlex 3070 MT XCTO	AUGSD	1,06,417.77	2	2,12,836
2.	Riso Digital Duplicator RISO SF 5130	AUGSD	3,29,042.66	1	3,29,043
3.	Animal Incinerator	Biological Sciences	3,54,000.00	1	3,54,000
4.	Digital Scientific Camera (CMOS) with Imaging Software for bright-field, Phase Contrast, Fluorescence, Dark Field, DIC Applications – 1 No.	Biological Sciences	1,29,800.00	1	1,29,800
5.	Centrifuge 5424R (refrigerated), 230V/50-60Hz, knob version, incl. rotor FA-45-24-11, aerosol-tight	Biological Sciences	3,36,000.00	1	3,36,000
6.	T100™ Thermal Cycler — PCR Machine (1861096)	Biological Sciences	2,10,000.00	1	2,10,000
7.	MINI-P TET SYS/PPAC Basic - Electrophoresis (1658025)	Biological Sciences	1,15,500.00	1	1,15,500
8.	Gel Doc EZ (1708275) with Sample Tray , GEL DOC EZ UV (1708271), Sample Tray , GEL DOC EZ White (1708272)	Biological Sciences	5,04,000.00	1	5,04,000
9	UV/Vis NANO Spectrophotometer (NABI)	Biological Sciences	5,77,500.00	1	5,77,500
10.	Epson Projector Model – EB-108	Computer Centre	37,848.00	10	3,78,480
11.	Epson Projector Model – EB-536wi	Computer Centre	57,000.00	4	2,28,000
12.	Dell Optiplex 7070 MT XCTO	Computer Centre	74,340.00	20	14,86,800
13.	Dell Power Edge R840 Server	Computer Centre	13,29,903.66	1	13,29,9044
14.	Dell Power Edge R840 Server	Computer Centre	13,29,903.66	1	13,29,9044
15.	Dell Power Edge R540 Server	Computer Centre	9,25,061.00	1	9,25,061
16.	VALRACK 42Ux800Wx1000D	Computer Centre	55,500.12	10	5,55,001
17.	Daikin make Air-cooled variable speed compressor chiller unit. Free charge of Eco-friendly refrigerant R-410 with power saving scroll compressor. - 18 HP (16.4TR) (High Side AC)	Computer Centre	3,02,717.50	2	6,05,435
18.	Dell Latitude 3410	Computer Centre	74,340.00	20	14,86,800
19.	Dell Power Edge R840 Server	Computer Centre	14,16,000.00	2	2,832,000
20.	ADVANCE NEO 500 MHz NMR Spectrometer HIGH PERFORMANCE DIGITAL NMR	Central Equipment	4,67,000.00	1	4,67,000

S.No.	Asset Description	Department	Rate	Qty	Purchase Value
	SPECTROMETER with Accessories	Facility			
21.	Dell OptiPlex 3070 SFF XCTO	Chemical Engineering	71,862.00	2	1,43,724
22.	Semi-Micro Balance (New advanced model) Make-Shimadz, Model-AP125WD (Dual range) Type: Semi-micro, Calibration: Internal Display: 0.01mg/0.1mg , Capacity: 52g/120g Pan size: Ø 91	Chemical Engineering	2,07,100.00	1	2,07,100
23.	SS 316 High Pressure Reactor 200ml Volume.	Chemical Engineering	2,71,400.00	1	2,71,400
24.	Fume Hood for general Chemistry (7 feet standard model)	Chemistry	3,81,500.00	1	3,81,500
25.	Semi-Micro Balance (New advanced model) Make-Shimadzu Model-AP225WD (Dual range) Type: Semi-micro Calibration: Internal Display: 0.01mg/0.1mg Capacity: 102g/220g Pan size: Ø 91	Chemistry	2,20,725.00	1	2,20,725
26.	Shimadzu UV-VIS Spectrophotometer, UV-1780 (Including UV Software)	Chemistry	3,83,500.00	1	3,83,500
27.	Double Beam UV-Vis Spectrophotometer Make : Systronics India Model - Type AU 2702	Chemistry	3,62,523.00	1	3,62,523
28.	Rudolph Research Analytical AUTOMATIC DENSITY METER MODEL DDM2911	Chemistry	6,79,980.00	1	6,79,980
29.	DELL OptiPlex 3070 Micro XCTO,	Computer Science and IS	55,047.00	35	19,26,645.00
30.	DELL OptiPlex 3070 Micro XCTO,	Computer Science and IS	55,047.00	35	19,26,645.00
31.	DELL OptiPlex 3070 Micro XCTO,	Computer Science and IS	55,047.00	30	16,51,410
32.	Senses Interactive Intelligent Panel, 75"	Computer Science and IS	2,71,400.00	1	2,71,400
33.	Senses Interactive Intelligent Panel, 75"	Economics	2,71,400.00	1	2,71,400
34.	IBM Engineering Systems Design Rhapsody Developer for C++, C, and Java Authorized User License + SW Subscription & Support 12 Months, Part Number: D09PCLL, (Node Locked Three Users License)	EEE	3,20,370.00	3	9,61,110
35.	SIMULIA CST STUDIO SUITE (60 user teaching licence)	EEE	14,80,984.00	1	14,80,984
36.	OptiPlex 5070 MT XCTO	EEE	70,800.00	6	4,24,800
37.	Zedboard Zynq-7000 ARM/FPGA SoC development Board	EEE	38,940.00	4	1,55,760
38.	Atmel JTAGICE3 debuggers	EEE	8,557.36	25	2,13,934
39.	Tyrone Camerero Workstation with accessories	Faculty Affair Unit	2,08,110.00	1	2,08,110
40.	3000 KVA,33/11 KV Transformer with OLTC tap changeover arrangement,	Maintenance Department	35,36,143.01	1	35,36,143
41.	Outdoor, Oil Cooled, Single Phase Wound Primary Dead Tank, OIP Insulated Current Transformer to IS:2705/1992, (PR'2679(A).)	Maintenance Department	39,530.00	3	1,18,590
42.	Outdoor, Oil Cooled, Single Phase, single pole,Dead Tank, OIP Insulated earthed type voltage Transformer to IS:3156/1992, (PR-981 (C)	Maintenance Department	42,480.00	3	1,27,440
43.	Environmental Stress Cracking Resistance Apparatus. (ESCR) Inner and Outer complete SS body (As Per ASTM D 1693) Model: DPPL-ESCR-1-8T 8 Test Tubes Accomodation Model	Mechanical Engineering	1,40,184.00	1	1,40,184
44.	DELL OptiPlex 3070 SFF XCTO	Physics	57,171.00	7	4,00,197
45.	Dell OptiPlex 7470 All-in-One CTO	Practice School	95,720.12	2	1,91,440
46.	TORO RIDE ON MOWER Toro Time-Cutter® SS4225 42" (107 cm)	SAC	4,64,800.00	1	4,64,800
47.	Ultimaker Manager Station	Sandbox Lab	2,82,491.00	1	2,82,491

S.No.	Asset Description	Department	Rate	Qty	Purchase Value
48.	Voltera V1 PCB Printer	Sandbox Lab	4,99,999.04	1	4,99,999
49.	UV- Visible Spectrophotometer Single Beam, Make-Labline.	SRCD	1,36,658.00	1	1,36,658
50.	Resiiente Master Node:	SRCD	3,12,680.00	1	3,12,680
51.	Resiliente Compute Node:	SRCD	4,96,867.40	5	24,84,337
52.	1200ºC High Temperature Muffle Furnace	SRCD	1,29,150.00	1	1,29,150
53.	1200ºC Horizontal Split Tube Furnace with Quartz Tube	SRCD	1,31,250.00	1	1,31,250
54.	ANT PC PHEIDOLE XE4210 BH with accessories	SRCD	6,20,000.00	1	6,20,000
	Total				3,61,11,072

B2.15 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVAL

All the sports activities at BITS Goa campus are conducted under the supervision of the SAC/SWD headed by the Physical Education Instructor. In addition to this, there is sports secretary from the student council. The main function of the SAC is to promote sports culture, provide world class sports facilitates for daily sporting activities, organize sports in various sports disciplines and build institute teams for the participation and Further select the best among them for the National and other leveltournaments. SAC alsoorganizes staff sports events annually.

The sports infrastructure at BITS Goa Campus is broadly categorized into two major facilities: Indoor and outdoor sports, Any student, staff/faculty can avail any of the above facilities as per his/her convenience. Recent Upgradation carried out in the year 2019-20 are Cunstruction of Two New Synthethic all weather Tennis Courts, Upgradation of Gym with latest exercise machines, Upgradation of Badminton hall with standard LED Flood lights and upgradtion of Table Tennis Hall with flood lights with rubbersized flooring.

Football

Institute Football team won the IInd Division GFA league Februay 2020, organized by Goa football Assocaition and qualified for the Ist Division

Award of Scholarship to Students

SCHOLARSHIP	NO. OF. STUDENTS	AMOUNT
Institute Merit and Merit-cum-Need Scholarship	863	59572986
Students Aid Fund	25	935000
MMVY	3	450000
DTE, Chhattisgarh	1	20000
ADITYA BIRLA GROUP SCHOLARSHIP	3	300000
WESTERN DIGITAL SCHOLARSHIP	4	549784

Note : Students are also in receipt of INSPIRE, NTS, KNPY, National Scholarships

LIST OF ANNEXURE

NAME AND DESIGNATION OF SENIOR OFFICE BEARERS OF GOA CAMPUS

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
1.	0631	Prof. Gunaje Raghurama	EEE / Director	Director	Senior Professor
2.	0095	Prof. Sunil Bhand	Chemistry / Sponsored Research and Consulting Division	Dean, Institute Wide	Professor
3.	0006	Prof. Dhananjay Madhukar Kulkarni	Mechanical Engineering / Administration	Dean	Professor
4.	0080	Prof. Srikanth Mutnuri	Biological Sciences	HOD	Professor
5.	0310	Prof. Saroj Sundar Baral	Chemical Engineering	HOD	Associate Professor
6.	0318	Prof. Halan Prakash	Chemistry	HOD	Associate Professor
7.	0729	Prof. Vinayak Naik	Computer Science & Information Systems	HOD	Senior Professor
8.	0338	Prof. Aswini Kumar Mishra	Economics	HOD	Associate Professor
9.	0735	Prof. Abhijit Jayant Pethe	Electrical & Electronics Engineering	HOD	Associate Professor
10.	0123	Prof. Reena Cheruvalath	Humanities and Social Sciences	HOD	Associate Professor
11.	0416	Dr. Jajati Keshari Sahoo	Mathematics	HOD	Associate Professor
12.	0482	Dr. Ranjit Shankarrao Patil	Mechanical Engineering	HOD	Assistant Professor
13.	0062	Prof. Radhika Vatsan	Physics	HOD	Assistant Professor
14.	0078	Prof. Bharat Madhusudan Deshpande	Computer Science & Information Systems / Academic Graduate Studies and Research	Associate Dean	Professor
15.	0010	Prof. Neena Goveas	Computer Science & Information Systems / Academic Under Graduate Studies	Associate Dean	Professor
16.	0094	Prof. Sutapa Roy Ramanan	Chemical Engineering / Faculty Affair Division	Associate Dean	Professor
17.	0710	Prof. Rajesh Mehrotra	Biological Sciences/ International Programs & Collaboration	Associate Dean	Associate Professor
18.	0033	Prof. Meenal Kowshik	Biological Sciences / Sponsored Research & Consulting	Associate Dean	Professor
19.	0025	Prof. Sachin Damodharrao Waigaonkar	Electrical & Electronics Engineering / Practice School Division	Associate Dean	Associate Professor
20.	0299	Prof. Anupama Karuppiah	Electrical & Electronics Engineering /Work Integrated learning Programmes	Associate Dean	Professor
21.	0333	Prof. Ramesha C. K.	Electrical & Electronics Engineering / Student Welfare Division	Associate Dean	Associate Professor
22.	0082	Prof. Veeky Baths	Biological Sciences / Alumuni Relations Division	Associate Dean	Associate Professor
23.	0729	Prof. Vinayak Naik	Computer Science & Information Systems / Computer Centre	FIC	Professor

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
24.	0107	Prof. Amalin Prince A	Electrical & Electronics Engineering / Placement	FIC	Associate Professor
25.	0189	Dr. Rashmi Chauhan	Chemistry / Community Welfare	FIC	Assistant Professor
26.	0604	Dr. Rajorshi Sen Gupta	Economics / Centre for Innovation, Incubation and Entrepreneurship (CIIE)	FIC	Assistant Professor
27.	0089	Prof. Gaurav Dar	Physics / Teaching Learning Centre	FIC	Associate Professor
28.	0377	Prof. Ram Shanker Patel	Physics / Central Sophicticated Instrumentation Facility (CISF)	FIC	Associate Professor
29.	0211	Prof. P Bhavna	Chemistry / Instruction	FIC	Professor
30.	0364	Prof. Amrita Chatterjee	Chemistry / Registration	FIC	Associate Professor
31.	0362	Prof. Chandradew Sharma	Physics / Academic Research	FIC	Associate Professor
32.	0021	Dr. Vikas Vinayak Chaudhari	Mechanical Engineering / Admissions	FIC	Assistant Professor
33.	0488	Dr. Malabika Biswas	Biological Sciences / Academic Counselling & Monitoring	FIC	Assistant Professor
34.	0414	Prof. Angshuman Sarkar	Biological Sciences / Student Welfare Division	Chief Warden	Associate Professor
35.	0009	Mr. Anand K. Patil	Purchase & Stores & Estate	IC	Estate Manager
36.	0050	Dr. Anuradha Voolapalli	Library	IC	Deputy Librarian
37.	0230	Dr. Raghavendra Kota Madhyastha	Medical Centre	IC	Chief Medical Officer
38.	0658	Mr. Sailesh Narayan Mohanty	General Administration	IC	Deputy Registrar
39.	0668	Mr. Arjun Chandrakant Halarnkar	Public Relations	IC	Public Relations Officer

NAMES OF WARDENS OF GOA CAMPUS

S.No.	GPSRN	Name	Hostel	Activity
1.	G0414	Prof. Angshuman Sarkar		Chief Warden
2.	G0343	Dr. Amit Setia	CH-1	Warden
3.	G0334	Dr. Pravin Sakharam Mane	CH-2	Warden
4.	G0414	Prof. Angshuman Sarkar	CH-3	Warden
5.	G0420	Prof. Alamelu Geetha Krishnamurthy	CH-4	Warden
6.	G0588	Dr. Jegatha Nambi Krishnan	CH-5	Warden
7.	G0414	Prof. Angshuman Sarkar	CH-6	Warden
8.	G0671	Dr. Shilpa Suresh Gondhali	CH-7	Warden
9.	G0621	Dr. Himadri Mukherjee	AH-1	Warden
10.	G0500	Prof. Kundan Kumar	AH-2	Warden
11.	G0372	Dr. Manoj Kumar Pandey	AH-3	Warden
12.	G0072	Dr. V.V.S.N.V. Prasad Chundru	AH-4	Warden
13.	G0228	Dr. Kiran Dinkar Mali	AH-5	Warden
14.	G0056	Dr. Varinder Singh	AH-6	Warden
15.	G0565	Dr. Raviprasad Aduri	AH-7	Warden
16.	G0124	Dr. Sunilkumar Vattezhath	AH-8	Warden
17.	G0363	Prof. Mainak Banerjee	AH-9	Warden
18.	G0492	Dr. Sukanta Mondal	DH-1	Warden
19.	G0492	Dr. Sukanta Mondal	DH-2	Warden
20.	G0114	Prof. Sanjay Kumar Sahay	DH-3	Warden
21.	G0114	Prof. Sanjay Kumar Sahay	DH-4	Warden

DETAILS OF ADMISSIONS MADE DURING THE YEAR 2020

(a)   Second Semester 2019-20

   Doctoral Programmes:
   Ph.D.   35(17)
                                            35(17)

(b)   First Semester 2020-21

   Doctoral Programmes:
   Ph.D.   37(13)
                                            37(13)

1. Integrated First Degree Programmes

	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
Group A			
B.E.			
Chemical	73(16)	300	248
Electrical & Electronics	89(10)	330	306
Mechanical	117(05)	312	269
Computer Science	176(09)	387	347
Electronics & Instrumentation	87(09)	330	293
Electronics & Communication	91(14)	347	320
	633 (63)		
Group B			
M.Sc.			
Biological Sciences	53(08)	296	246
Chemistry	56(07)	289	249
Economics	70(07)	335	290
Mathematics	76(15)	304	265
Physics	57(04)	338	271
	312 (41)		
Group C			
M.Sc.			
Information Systems			
Total :	**945(104)**		

2. Higher Degree Programmes :

M.E.
   Biotechnology   18(10)
   Embedded Systems   29(04)
   Computer Science   41(08)
   Micro Electronics   31(04)
   Chemical Engineering   12(04)
   Design Engineering   20(01)
   Mechanical   21(01)
   Sanitation Science,Technology and Management   01(01)
M. Phil. In Liberal Studies   04(03)
                                  Total   **177(36)**

3. Doctoral Programmes :
   Ph.D. – Full Time   31(11)
   Ph.D. – Part Time   05(01)
   Ph.D. Aspirant Scheme   01(01)

SUMMARY

		II Semester 2019-20	I Semester 2020-21
On-Campus Programmes			
Integrated First Degree Programmes		-	945(104)
Higher Degree Programmes		-	177(36)
Doctoral Programmes		35(17)	37(13)
	Total	**35(17)**	**1159 (153)**

B2: A4

Annexure `B2-3'
(1 Page)
Ref. AR 2020, Page No. B2-1

STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2020-2021TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES

(ii)   K.K. Birla Goa Campus:

FIRST PRIORITY (Dual Degree)
(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓To→	A1	A3	A4	A7	A8	AA	Total
B1	5	9	7	6	12	7	**46**
B2	10	11	14	4	10	4	**53**
B3	2	5	6	36	6	12	**67**
B4	1	6	10	23	11	12	**63**
B5	1	11	12	17	6	10	**57**
Total	**19**	**42**	**49**	**86**	**45**	**45**	**286**

OTHER PRIORITY

Programmes* From ↓ To →	A1	A3	A4	A7	A8	AA	B1	B2	B3	B4	B5	Total
A1	-	-	-	-	-	-	-	-	-	-	-	**-**
A3	-	-	-	-	-	-	-	-	1	-	-	**1**
A4	-	-	-	-	-	-	-	-	-	-	-	**-**
A7	-	-	-	-	-	-	-	-	-	-	-	**-**
A8	-	-	-	-	-	-	-	-	-	-	-	**-**
AA	-	-	-	-	-	-	-	-	-	-	-	**-**
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**-**	**-**	**1**

B-B Transfer

Programmes* From↓To→	B1	B2	B3	B4	B5	Total
B1	-	-	-	-	-	-
B2	-	-	-	-	-	-
B3	-	-	-	-	-	-
B4	-	-	1	-	-	**1**
B5	-	-	2	-	-	**2**
Total	**-**	**-**	**3**	**-**	**-**	**3**

Transfer

	A1	A3	A4	A7	A8	AA	Total
A1	**-**	**-**	**-**	**-**	**-**	**-**	**-**
A3	**-**	**-**	**-**	**-**	**-**	**5**	**5**
A4	**-**	**-**	**-**	**-**	**-**	**-**	**-**
A7	**-**	**-**	**-**	**-**	**-**	**-**	**-**
A8	**-**	**-**	**-**	**-**	**-**	**1**	**1**
AA	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B1	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B2	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B3	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B4	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B5	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total	**-**	**-**	**-**	**-**	**-**	**6**	**6**

*Legend:

A1: B.E. Chemical,   AB: B.E.   Manufacturing,
A2: B.E. Civil,   B1: M.Sc. Bio. Sciences
A3: B.E. Electrical & Electronics,   B2: M.Sc. Chemistry
A4: B.E. Mechanical,   B3: M.Sc. Economics,
A5: B.Pharm.),   B4: M.Sc. Mathematics,
A7: B.E. Computer Science,   ,   B5: M.Sc. Physics,
A8: B.E. Electronics and Instrumentation,   C2: M.Sc. General Studies,
AA: B.E. Electronics & Communication,   C6: M.Sc. Information Systems
                                              C7: M.Sc. Finance.

NUMBER OF STUDENTS REGISTERED

Second Semester 2019-2020

Programme	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Chemical	-	-	-	-	3(0)	48(9)	76(12)	71(7)	75(13)	273(41)
EEE	-	-	1(0)	-	1(0)	71(5)	81(9)	81(7)	84(8)	319(29)
Mechanical	-	-	-	-	3 (0)	63(1)	95(1)	102(2)	102(6)	365(10)
Computer Science	-	-	-	-	3(0)	94(9)	162(14)	171(9)	171(12)	601(44)
Electronics & Instrumentation	-	-	-	-	1(0)	72(10)	75(9)	79(10)	83(12)	310(41)
Electronics & Communication	-	-	-	-	-	-	80(15)	88(10)	89(8)	257(33)
M.Sc.(Hons)										
Biological Science	-	-		1(0)	43(5)	39(5)	24(9)	44(4)	46(4)	197 (27)
Chemistry	-	-	1(0)	2(0)	39(4)	36(2)	35(10)	45(4)	54(14)	212(34)
Economics	-	-	-	2(0)	42(4)	46(9)	66(14)	73(4)	68(7)	297(38)
Mathematics	-	-	-	2(0)	42(8)	44(3)	70(11)	65(10)	67(10)	290(42)
Physics	-	-	1(0)	5(0)	40(4)	38(2)	45(7)	56(9)	58(6)	243(28)
Total	0	0	3(0)	12(0)	217(24)	551(54)	809(111)	875(72)	897(100)	3364(367)
B. Higher Degree Programmes										
Biotechnology	-	-	-	-	-	-	1(0)	17(16)	15(10)	33(26)
Design Engg.	-	-	-	-	-	-	-	38(3)	22(1)	60(4)
Embedded System	-	-	-	-	-	-	-	29(13)	25(8)	54(21)
Chemical Engg.	-	-	-	-	-	-	-	12(3)	7(3)	19(6)
Microelectronics	-	-	-	-	-	-	1(0)	33(6)	24(4)	58(10)
Computer Science	-	-	-	-	-	-	-	38(10)	39(10)	77(20)
Mechanical									24(0)	24(0)
Sanitation									5(2)	5(2)
M.Phil Liberal studies									2(2)	2(2)
Total	-	-	-	-	-	-	-	43(51)	163(40)	332(91)
Grand Total	0	0	3(0)	12(0)	217(24)	551(54)	810(111)	901(148)	1055(130)	3696(458)

First Semester 2020-2021

Programme	Year of Admission									Total
	2012	2013	2014	2015	2016	2017	2018	2019	2020	
A. Integrated First Degree Programmes										
B.E.(Hons.)										
Chemical	-	-		1(0)	1(0)	77(12)	72(8)	75(13)	68(16)	294(49)
EEE	-	-	0	1(0)	5(0)	81(9)	80(7)	83(8)	85(9)	335(33)
Mechanical	-	-	-	-	2(0)	95(1)	104(2)	102(6)	109(5)	412(14)
Computer Science	-	-	-	-	2(0)	163(14)	171(9)	171(12)	176(9)	683(44)
Electronics & Instrumentation	-	-	-	1(0)	8(1)	75(9)	79(10)	84(12)	87(9)	334(41)
Electronics & Communication	-	-	-	-	-	80(15)	89(11)	89(8)	87(14)	345(48)
Biological Science	-	-	-	3(0)	39(5)	24(9)	44(4)	46(4)	52(8)	208(30)
Chemistry	-	-	-	1(0)	36(2)	35(10)	45(4)	54(14)	55(7)	226(37)
Economics	-	-	-		43(8)	66(14)	73(4)	68(7)	69(6)	319(39)
Mathematics	-	-	2(0)	2(0)	42(2)	70(11)	65(10)	67(10)	74(14)	322(47)
Physics	-	-	1(0)	3(0)	35(2)	46(7)	55(9)	58(6)	56(4)	254(28)
Total	**-**	**-**	**3(0)**	**12(0)**	**213(20))**	**812(111)**	**877(78)**	**897(100)**	**918(101)**	**3732(410)**
B. Higher Degree Programmes										
	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Biotechnology	-	-	-	-	-	-	-	15(10)	17(9)	32(19)
Design Engg.	-	-	-	-	-	-	-	22(1)	19(1)	41(2)
Embedded System	-	-	-	-	-	-	-	25(8)	29(4)	54(12)
Chemical Engg.	-	-	-	-	-	-	-	7(3)	11(3)	18(6)
MicroElectronics	-	-	-	-	-	-	-	24(4)	30(4)	54(8)
Computer Science	-	-	-	-	-	-	1(0)	39(10)	39(8)	79(18)
Mechanical	-	-	-	-	-	-	-	24(0)	20(1)	44(1)
Sanitation	-	-	-	-	-	-	-	5(2)	1(1)	6(3)
M.phil	-	-	-	-	-	-	-	-	4(3)	4(3)
Total	**-**	**-**	**-**	**-**	**-**	**-**	**1(0)**	**161(38)**	**172(34)**	**332(72)**
Grand Total	**-**	**-**	**3(0)**	**12(0)**	**213(20))**	**812(111)**	**878(78)**	**1058(138)**	**1098(135)**	**4064(482)**

C. PhD Programmes

	Year of Admission											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Semester II 2019-2020	1(1)		1(1)	19(8)	10(2)	26(11)	39(13)	61(19)	74(35)	62(27)		293(117)
Semester I 2020-2021	1(1)		1(1)	13(7)	9(2)	19(8)	39(14)	61(19)	72(33)	61(26)	34(15)	310(126)
Summer term 2019-2020	-	-	-	-	-	-	-	-	-	-		-
Grand Total	**2(2)**	**-**	**2(2)**	**32(15)**	**19(4)**	**45(19)**	**78(27)**	**122(38)**	**146(68)**	**126(46)**	**34(15)**	**603(243)**

Summer Term 2019-2020

Programme	2013	2014	2015	2016	2017	2018	2019	Total
Chemical	-	-	-	-	-	70(7)	-	70(7)
EEE	-	-	-	-	1(0)	79(7)	-	80(07)
Mechanical	-	-	-	-	1(0)	101(2)	-	102(2)
Computer Science	-	-	-	-	3(0)	171(9)	-	174(9)
Electronics & Instrumentation	-	-	-	-	-	77(10)	-	77(10)
Electronics & Communication	-	-	-	-	2(1)	87(10)	-	89(11)
Biological Science	-	-	-	-	8(1)	44(4)	-	52(5)
Chemistry	-	-	-	-	5(1)	45(4)	-	50(5)
Economics	-	-	-	-	2(0)	73(4)	-	75(4)
Mathematics	-	-	-	-	9(1)	59(7)	-	68(8)
Physics	-	-	-	-	4(0)	53(09)	-	57(9)
Sanitation (higher degree)	-	-	-	-		2(2)	-	2(2)
Total	**-**	**-**	**-**	**-**	**35(4)**	**861(75)**	**-**	**896(79)**

STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees 87th Award 09.6.20,18.6.20,03.8.20, 04.8.20,11.8.20	No. of degrees 88th Award 01.12.20, 30.12.20
(i) Integrated First Degree		
B.E.		
Chemical	14(2)	3(0)
Chemical (with Practice School)	65(9)	10(0)
Electrical and Electronics	20(4)	3(0)
Electrical and Electronics (with Practice School)	91(6)	8(0)
Mechanical	15(0)	3(0)
Mechanical (with Practice School)	88(4)	8(0)
Computer Science	40(12)	4(0)
Computer Science (with Practice School)	106(11)	6(0)
Electronics and Instrumentation	14(4)	1(0)
Electronics and Instrumentation (with Practice School)	93(10)	**7(1)**
Biological Sciences	16(1)	**1(1)**
Biological Sciences (with Practice School)	25(4)	**-**
Chemistry	16(2)	-
Chemistry (with Practice School)	25(2)	-
Economics	22(3)	-
Economics (with Practice School)	27(2)	-
Mathematics	31(6)	1(0)
Mathematics (with Practice School)	14(3)	1(0)
Physics	37(4)	-
Physics (with Practice School)	8(0)	3(0)
Sub Total	**767(86)**	**69(2)**

Degrees	No. of degrees 87th Award	No. of degrees 88th Award
(ii) Higher Degree		
M.E.		
Chemical Engineering	12(3)	-
Computer Science	4(0)	-
Design Engineering	12(0)	-
Biotechnology	15(13)	-
Embedded Systems	1(1)	
Design Engineering (with Practice School)	26(3)	-
Computer Science (with Practice School)	34(10)	-
Microelectronics(with Practice School)	34(6)	-
Biotechnology (with Practice School)	3(3)	-
Embedded Systems (with Practice School)	28(12)	-
M. Phil. Liberal Studies	2(2)	
Sub Total	171 (53)	-
Ph.D	11 (3)	6(4)
Total	**949(142)**	**75(5)**

SUMMARY

Award	87 Award	88Award	Total
Integrated First Degree	767(86)	69(2)	836(88)
Higher Degree	171(53)	-	171(53)
Ph.D	11 (3)	6(4)	17(7)
Total	**949(142)**	**75(6)**	**1024(148)**

Note: The numbers in brackets indicate number of female students.

88 AWARD OF DEGREES TO BE APPROVED BY THE BOARD OF GOVERNOR

Programme	Dist	I	II	Total
B.E.(Hons.)(Chemical)(with Practice School)	0	3	7	10(0)
B.E.(Hons.)(Chemical)	0	1	2	3(0)
B.E.(Hons.)(Electrical and Electronics)(with Practice School)	0	4	4	8(0)
B.E.(Hons.)(Electrical and Electronics)	0	1	2	3(0)
B.E.(Hons.)(Mechanical)(with Practice School)	2	-	6	8(0)
B.E.(Hons.)(Mechanical)	1	1	1	3(0)
B.E.(Hons.)(Computer Science)	0	0	4	4(0)
B.E.(Hons.)(Computer Science)(with Practice School)	0	1	5	6(0)
B.E.(Hons.)(Electronics and Instrumentation)	0	1	1	2(0)
B.E.(Hons.)(Electronics and Instrumentation) (with Practice School)	0	2	5	7(0)
B.E.(Hons.)(Electronics and communication)	0	0	4	4(0)
B.E.(Hons.)(Electronics and communication) (with Practice School)	0	0	4	4(0)
M.Sc.(Hons.)(Biological Sciences)	0	0	1	1(0)
M.Sc.(Hons.)(Biological Sciences) (with Practice School)	0	0	0	-
M.Sc.(Hons.)(Economics) (with Practice School)	0	0	0	-
M.Sc.(Hons.)(Economics)	0	0	0	-
M.Sc.(Hons.)(Physics) (with Practice School)	1	2	0	3(0)
M.Sc.(Hons.)(Physics)	0	0	0	-
M.Sc.(Hons.)(Chemistry)	0	0	0	-
M.Sc.(Hons.)(Maths) (with Practice School)	0	2	0	2(0)
M.Sc.(Hons.)(Maths)	0	1	0	1(0)
Sub - Total	4	19	46	69(2)
M.E				-
Ph.D.				6(4)
TOTAL				75(6)

Note: Numbers in brackets indicate total females

B2: A11

LIST OF THE ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS

LIST OF THE COMPANIES VISITED / RECRUITED FOR THE AY 2019-20

S.No	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
1	159 Solutions	70	6	AN
2	AB InBev	50	0	ET
3	Aditya Birla Management Corporation	1	1	CO
4	Aequs	15	2	MF
5	Amazon	140	19	IT
6	AMD	11	3	ET
7	American Express	2	2	IT
8	Analog Devices	52	4	ET
9	Anarock	156	6	IT
10	Apple	1	1	IT
11	Aranca	1	1	IT
12	Arcesium	2	2	IT
13	ARM Embedded Technologies	2	2	ET
14	Arup	26	1	MF
15	Atlassian	67	3	IT
16	Aurigo	2	2	IT
17	Axxela Advisory Services LLP	42	1	BF
18	Blackridge Research & Consulting	4	0	AN
19	BNY Mellon	29	0	IT
20	Bounce	206	9	IT
21	Bridge i2i Analytics	25	1	AN
22	Browser Stack	70	3	IT
23	Byju's	63	10	OT
24	Cisco	28	8	IT
25	Citibank	58	0	IT
26	Codenation	150	0	IT
27	Cognizant	62	2	IT
28	Cogoport	1	1	AN
29	Commscope	18	2	MF
30	Confluent	1	1	IT
31	Credit Suisse	4	4	BF
32	Cypress Semiconductors	31	1	ET
33	D.E SHAW India Pvt Limited	1	1	IT
34	Daikin	8	2	MF
35	Dalberg Advisors	29	0	CO
36	Deccan Fine Chemicals	18	2	CH
37	Deutsche Bank	18	9	IT
38	Direct-i (Digital & Site Mobility)	120	9	IT
39	Dunzo	150	2	CO
40	EagleView	44	5	IT

S.No	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
41	Edge verve-infosys	66	5	IT
42	Energy Exemplar	38	2	IT
43	Ernst & Young	22	4	AN
44	Espressif Systems	39	0	ET
45	EXL Service	23	1	AN
46	ExxonMobil	26	2	CH
47	FICO	75	7	IT
48	Flipkart	178	3	IT
49	Flow Traders	111	0	BF
50	Forbes Marshall	10	3	MF
51	Fractal Analytics	103	5	AN
52	Futures First	94	5	BF
53	GE India Technology Centre	26	5	MF
54	Gene Box	5	2	BP
55	Goldman Sachs	89	11	IT
56	Google	153	5	IT
57	Groww	3	3	IT
58	Happay	2	2	IT
59	Here Maps	1	1	IT
60	Honeywell	65	4	CH
61	HSBC	111	8	IT
62	IBM	79	3	IT
63	IFB Industries	20	3	MF
64	IMI Mobile	1	1	AN
65	Indus Insights	127	5	CO
66	Infoworks	126	5	IT
67	Intel	10	10	ET
68	Intuit	4	4	IT
69	Ion Energy	26	3	ET
70	IQVIA	70	7	AN
71	Jivox	76	1	IT
72	JP Morgan & Chase	13	13	IT
73	JP Morgan & Chase-Quant	1	1	IT
74	JP Morgan Services	5	5	BF
75	KPMG	105	4	AN
76	L&T Limited	28	1	MF
77	Lenskart	1	1	IT
78	Linecraft	37	2	MF
79	Lowe's	1	1	AN
80	Madha Engineering College	1	1	OT
81	MathWorks	163	8	IT
82	Mckinsey & Co	130	1	CO
83	Media.net	117	0	IT
84	Merilytics	80	11	AN
85	Micron	1	1	ET

S.No	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
86	Microsoft IDC	103	16	IT
87	NetApp	34	4	IT
88	NetCracker	29	4	IT
89	Netskope	70	1	IT
90	Nomura	1	1	BF
91	Novartis	10	2	BP
92	Nutanix	101	8	IT
93	Nvidia Corporation	2	2	ET
94	NXP Semiconductors	23	1	ET
95	Ola Electric	44	3	ET
96	Omix Labs	1	1	BP
97	OnePlus	34	3	IT
98	Oracle	100	26	IT
99	Oracle Financial Software Solutions	32	8	IT
100	OYO Rooms	50	16	IT
101	PayPal	78	3	IT
102	Paytm	1	1	IT
103	PhonePe	118	6	CO
104	Pokarna	7	2	CH
105	Postman	115	2	IT
106	Praj Industries	8	2	MF
107	Publicis Sapient	31	2	IT
108	Qualcomm	56	12	ET
109	Quantiphi	57	4	AN
110	Quest Global	26	6	MF
111	Raam Group	39	2	OT
112	Rapido	100	8	IT
113	RBL Bank	27	2	IT
114	Reflexis Systems	8	2	IT
115	Reliance Industries Limited	2	2	CH
116	Reliance Jio	120	14	IT
117	Rossari Personal Care Pvt Ltd	1	1	CH
118	Rubrik	1	1	IT
119	Samsung Semiconductor India Research(SSIR)	1	1	ET
120	Sattva Media and Consulting	1	1	CO
121	Sedemac	28	1	ET
122	Service Now	50	3	IT
123	Shipsy	1	1	IT
124	Signalchip Innovations	15	1	ET
125	Singh Plasticizers & Resins Pvt Limited	9	2	MF
126	Skill Lync	25	1	OT
127	Strand Life Sciences	1	1	BP
128	Sun Mobility	1	1	IT
129	Tabner Inc	1	1	IT
130	Tally Solutions	39	2	IT

S.No	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
131	Target Corporation	39	8	IT
132	Tata Advanced Systems Limited	22	2	MF
133	Tata Motors	20	1	MF
134	Tejas Networks	50	6	ET
135	Tesco & Tesco Analytics	79	12	IT
136	Texas Instruments	60	8	ET
137	The Math Company	12	1	OT
138	Thermax	1	1	MF
139	Thorogood Associates	95	5	CO
140	Tiger Analytics	43	1	AN
141	Toshiba	21	3	IT
142	Uber	120	5	IT
143	UBS	7	5	BF
144	Udaan	132	5	IT
145	UnitedLex	25	3	IT
146	Upgrad	1	1	IT
147	UST Global	1	1	IT
148	Utsaah Lab, CPDM, IISc Bangalore.	1	1	BP
149	Value Prospects	1	1	OT
150	Viacom 18	1	1	IT
151	Visteon	19	3	MF
152	VM Ware	1	1	IT
153	Webware	4	3	IT
154	Wells Fargo	57	4	IT
155	Western Digital (WDC)- Sandisk	56	11	ET
156	Xilinx	21	2	ET
157	Zendrive	1	1	IT
158	Zeotap	1	1	IT
159	ZF-Wabco	12	1	MF
160	Zinnov Management Consulting	1	1	CO
161	Zoomcar	24	0	IT
162	ZS Associates	191	15	AN
163	Zynga Games	85	0	IT
	Total	**7045**	**596**	

Summary

Total No. of Companies:	**163**
Total No. of Students Interviewed:	**7045**
Total No. Appointments offered including multiple offers:	**596**

Legend:

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO – Consulting, AN - Analytics, ET: Electronics, BF: Banking Finance, BP – Bio Pharma, OT – Others.

BITS Pilani

annual
report 2020

Part B3: Hyderabad Campus

CONTENTS

B3.1 SENIOR OFFICERS AND APPOINTMENTS

I.   Senior Officers

a)   Prof. G Sundar, Senior Professor and Director, BITS Pilani Hyderabad Campus and Director, Off-Campus Programme and Industry Engagement.

b)   Prof. Niranjan Swain, Professor and Dean, Dean - Administration

c)   Prof. Suman Kapur, Senior Professor and Dean, International Programmes and Collaboration Division (University Wide)

d)   Prof. Souri Banerjee, Professor and Dean, Faculty Affairs Division (University Wide)

e)   Prof. Srinivasa Prakash Regalla, Professor and Dean, Practice School Division (University Wide)

f)   Prof. MB Srinivas, Professor and Dean, Graduate Studies & Research (University Wide)

g)   Prof. C R Hota, Professor In-charge, BITS Entrance Examinations

h)   Prof. P Yogeeswari, Professor In-charge, of Centre for Innovation, Incubation and Entrepreneurship (CIIE).

II.   New appointments

a)   Amlan Behari Dey, Manager, IT, WILP

b)   Adil Bashir, Program Coordinator, WILP

The names and designations of senior officers of Hyderabad Campus are given in Annexure 1 (part B3)

B3.2 ADMISSIONS

The number of students admitted in each of the semesters is given below.

	&Integrated First Degree Programmes		Higher Degree Programmes		Integrated Higher Degree Programmes		*Doctoral Programmes (PhD Full-time)		$Doctoral Programmes (PhD Part-time)		Total
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	
Second Semester 2019-20	-	-	-	-	-	-	62	32	13	4	**75 (36)**
First Semester 2020-21	1164	210	310	87	-	-	55	26	10	2	**1539 (325)**
										Grand Total	**1614 (361)**

& Incl. of both – BITSAT category & International Students category
* Incl. of both – Full time & Faculty input
$ Incl. of both – Part time & Aspirants

B3.3 DUAL DEGREE AND TRANSFERS

During the Year 2020, a total no of 307 students (out of 307 offers: Priority 1 – 307, Other Priorities - 0) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given Annexure2 (Part B1).

TRANSFERS:

During the Year 2020, a total no of 14 students (11 A-A transfers + 3 B-B transfers) were permitted to transfer from the initial allotment of First Degree programme to the other programmes of First Degree to pursue under the Transfers scheme as per details given in Annexure-2 (Part B1).

VERTICAL TRNASFERS:

During the year 2020, Four students were permitted to transfer from Higher Degree to Ph.D. Programme and One student was permitted to transfer from First Degree to Higher Degree at Hyderabad Campus.

B3.4   ACADEMIC CALENDAR

The Academic year of the Institute is divided into two semesters and a summer term.

	Starting Date	Ending Date	No of Instruction Days (Excluding Examination Days)
Second semester 2019-2020	07.01.2020	29.04.2020	82
First Semester 2020 -21	18.08.2020	28.11.2020	82
Summer Term 2019-2020	18.05.2020	24.06.2020	33

B3.5   COURSES OFFERED

The number of courses, offered during the year 2019 are as follows:

	Number of Courses Offered
Second semester 2019-2020	366
First Semester 2020-2021	384
Summer Term 2019-2020	24
During the year the following new courses are added	
Second semester 2019-2020	11
First Semester 2020-2021	7

The list of new courses added is attached as a separate **Annexure 3** (Part B3).

B3.6   REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
Second Semester 2019-2020	4927
Summer Term 2019-2020	1180
First Semester 2020-2021	5563

Details of Registration of students for the First Semester 2020-2021 are given in Annexure 4 (Part B3)

B3.7   ACADEMIC AND PROFESSIONAL COUNSELLING

II Semester 2019 – 2020

There were **78** students under the purview of the Academic Counselling Board (ACB) at the beginning of the First Semester 2019 - 2020. At the end of First Semester 2019-2020, **42** students who have fulfilled the minimum academic requirements as per the Academic Regulations and the stipulations laid down by the ACB were declared outside the purview of ACB. **1** student left the Institute at the end of First Semester 2019-2020 and **94** new cases came under the purview of ACB at the end of First Semester 2019-2020. The total number of students who are under the purview of ACB at the beginning of Second Semester 2019-2020 is **129**.

The details are given below:	No. of Students
Under the purview of ACB at the beginning of First Semester 2019 – 2020	78
Declared outside the purview of ACB at the end of First Semester 2019-2020	42
Left the Institute	1
Continue to be under the purview of ACB	35
New cases referred to ACB at the end of First Semester 2019-2020	94
Under the purview of ACB during Second Semester 2019-2020	129

First Semester 2020 – 2021

There were **129** students under the purview of the Academic Counselling Board (ACB) at the beginning of the Second Semester 2019 - 2020. At the end of Second Semester 2019-2020, **98** students who have fulfilled the minimum academic requirements as per the Academic Regulations and the stipulations laid down by the ACB were declared outside the purview of ACB. **14** new cases came under the purview of ACB at the end of Second

Semester 2019-2020. The total number of students who are under the purview of ACB at the beginning of First Semester 2020-2021 is **39**.

The details are given below:	No. of Students
Under the purview of ACB at the beginning of Second Semester 2019 – 2020	129
Declared outside the purview of ACB at the end of Second Semester 2019-2020	104
Continue to be under the purview of ACB	25
New cases referred to ACB at the end of Second Semester 2019-2020	14
Under the purview of ACB during First Semester 2020-2021	39

B3.8   AWARD OF DEGREES

Convocation was conducted on Sunday 04th August, 2019, the Vice Chancellor Prof. Souvik Bhattacharyya have participated in the Convocation of the campus for award of various degrees (First Degree (744), Higher Degree (147) and Ph.D (31)) to 922 students.

LIST OF INTEGRATED FIRST DEGREE PROGRAMMES FOR AWARD OF MEDALS

S.No.	Name and ID No	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
1	SKANDA VAIDYANATH, 2016A7TS026H	9.93	FIRST	GOLD
2	ANSUMAN DIBYAYOTI MOHANTY, 2016A7PS0043H	9.92	SECOND	SILVER
3	TANMAY GIRISH KULKARNI, 2015B3A70647H	9.86	THIRD	BRONZE

During the year, a total of 914 students graduated and the details are as follows:

S.No	Programmes	B.E. (Hons.)	M.Sc. (Hons.)	M.Sc. (Tech.)	H.D.	Ph. D	Total
First Degree							
1.	Chemical Engineering	41	-	-	-	-	41
2.	Civil Engineering	48	-	-	-	-	48
3.	Electrical & Electronics Engineering	71	-	-	-	-	71
4.	Mechanical Engineering	58	-	-	-	-	58
5.	B. Pharmacy	13	-	-	-	-	13
6.	Computer Science Engineering	127	-	-	-	-	127
7.	Electronics and Instrumentation	40	-	-	-	-	40
8.	Electronics and Communication	83	-	-	-	-	83
9.	Manufacturing Engineering	26	-	-	-	-	26
10.	Biological Sciences		22	-	-	-	22
11.	Chemistry		25	-	-	-	25
12.	Economics		40	-	-	-	40
13.	Mathematics		36	-	-	-	36
14.	Physics		29	-	-	-	29
	Sub-Total (FD)	507	152				659
Higher Degree							
1.	M.E. (Chemical Engineering)	-	-	-	6	-	**6**
2.	M.E. (Computer Science)	-	-	-	31	-	**31**
3.	M.E. (Mechanical)	-	-	-	21	-	**21**
4.	M.E. (Microelectronics)	-	-	-	27	-	**27**
5.	M.E. (Communication Engineering)	-	-	-	19	-	**19**
6.	M.E. (Biotechnology)	-	-	-	19	-	**19**

7.	M.E. (Civil with specialization in Transportation Engineering)	-	-	-	14	-	**14**
8.	M.E. (Design Engineering)	-	-	-	23	-	**23**
9.	M.E. (Civil with specialization in Structural Engineering)	-	-	-	22		**22**
10.	M. Pharm.(with specialization in Pharmaceutics)	-	-	-	18	-	**18**
11.	M.E.(Mechanical with specialization in Thermal Engineering)	-	-	-	19	-	**19**
						Sub-Total (HD)	**219**
	Ph.D						**36**
	Grand Total						**914**

B3.9   CAMPUS INTERVIEWS AND PLACEMENT

Number of companies which conducted campus interviews	194
Number of interviews	8736
Number of offers made	707

The discipline-wise statistics and the list of organizations which conducted campus interviews during the year are given in **Annexure 5** (Part B3).

B3.10   Department-wise report

B3.10.1   Department of Biological Sciences

Number of faculty members

Senior Professors, Professors	04
Associate Professors	04
Assistant Professors	10
Lecturers	0
Visiting Faculty	0

Head of the Department   :   Prof Jayati Ray Dutta

Contact details   :   jayati@hyderabad.bits-pilani.ac.in

Number of PhD Scholars   :   53

Full Time   :   43

Part Time   :   10

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Lipids and cyclic-mediated regulation of the lytic cycle in Toxoplasma gondii (Start Date: 01 January 2021)	Biological Sciences	Nishith Gupta	--	Wellcome Trust - DBT	Sergio Grinstein (Toronto) Stefan Tenzer (Germany) Takeharu Nagai (Japan)	4.5 Crore
2	Industrial-scale thermophilic biomethanation of food waste and sewage sludge for production of bioenergy and biofertilizer	Biological Sciences	Sankar Ganesh	Ankur Bhattacharjee and Supradeepan Katiresan	DBT	--	29.65 Lakhs
3	To improve the efficiency of genome editing with CRISPR-Cas9 and- to create novel sources of epigenetic variation in plants,Sponsored by:DBT, Govt. of India,Duration in Months	Biological Sciences	Gireesha T M	Dr. Meenakshi Sundaram, Dr. C.N. Neeraja (ICAR-IIRR, Hyderabad) and Dr. Channakesha va Chikkaputtaia h (CSIR-NEIST Jorhat Assam)	DBT	-	~1 crore
4	To delineate domain-specific functions of Histone Deacetylase 6 (HDA6) in gene regulation and genomic instability and- to develop a novel non-transgenic epigenetic mutagenesis tool for plant improvement via HDAC modulation	Biological Sciences	Gireesha T M	-	SERB	Prof. Craig Pikaard, (HHMI, Indian University, USA)	40-50 lakhs
5	Role of reversible m6A RNA methylation in oral cancer	Biological Sciences	Piyush K	Vivek Sharma	CSIR	-	25 lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
6	Development of an endogenous STING agonist adjuvanted Mycobacterium bovis BCG vaccine to enhance efficacy against tuberculosis.	Biological Sciences	Ruchi Jain Dey	Prof. Willam R Bishai Johns Hopkins, USA and Dr. B. Dey NIAB, India	DBT -Indo-USA Vaccine Adjuvant grant		95.45 Lakhs; Approved/Awaiting Sanction
7	"Glucocorticoid receptor (GR)-targeted liposomal nano-platform for drug sensitization, EMT-reversal toward effective treatment of aggressive oral cancer"	Biological Sciences	Kumar Pranav Narayan		DBT	Dr. Rajkumar Banerjee CSIR-IICT	1.43 Crore
8	Antibacterial, host-modulating and regenerative nanofibers membrane for guided tissue regeneration	Biological Sciences	Kumar Pranav Narayan		DBT	Dr. Jyotsnendu Giri	80 Lakhs
9	Molecular Genetics of Schizophrenia.	Biological Sciences	K. Naga Mohan	Vidya Rajesh	DST	-	60.4 lakhs
10	Clinical Evaluation of a cost-effective and rapid MDR-TB diagnostic kit and development of a point of care device for large-scale screening. Funding Agency: Department of Health Research (DHR)	Biological Sciences	K. Naga Mohan	Sanket Goel	DHR	Aparna Srikantam	~97.59 lakhs (Approved, Sanction Letter Awaited)
11	A pilot study for evaluation of 15 Copy Number Variants (CNVs) among schizophrenia patients from India.	Biological Sciences	K. Naga Mohan	Vidya Rajesh	ICMR	-	33.5 lakhs (Approved, Sanction Letter Awaited)
12	Stem cell models to study the interplay between DNMTs and HDACs in schizophrenia	Biological Sciences	K. Naga Mohan	Trinath Jamma	SERB	-	~40-50 lakhs (Approved, Sanction Letter Awaited)
13	DBT-BUILDER (Interdisciplinary Life Science Programme fir Advanced Research and Education: Neurosciences)	Biological Sciences	K. Naga Mohan	Pragya Komal Vidya Rajesh		Department of Pharmacy Balaram Ghosh Onkar Kulkarni Punna Rao Ravi Yogeeswari P	300 lakhs Approved (Sanction letter awaited)

B.   Industry Sanctioned Projects: - NIL -

C.   International Sanctioned Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	To study the regulation of second messenger (p)ppGpp mediated stress response and develop its inhibitors	Biological Sciences	Kirtimaan Syal		International Seed Tech Grant-USA (Instruments support)	-	30,000 USD 22,73,400 INR

D.   Institute Sanctioned Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	(p)ppGpp mediated inter-cell communication and biofilm formation	Biological Sciences	Kirtimaan Syal		Research Initiation Grant, BITS-Pilani, Hyd		2 lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
2	Differential expression and regulation of GluN2A/GluN2B subunit containing NMDA receptor by Src kinase in MAM-induced cell based model of schizophrenia	Biological Sciences	Pragya Komal		Additional Research Initiation Grant, BITS-Pilani, Hydl		7 lakhs

2. ONGOING PROJECTS

A. Ongoing Government Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Harnessing mucosal immunity towards improved resistance against tuberculosis.	Biological Sciences	Ruchi Jain Dey		Ramalingaswami Re-entry Fellowshi, DBT	William R Bishai (Johns Hopkins, USA) David Leweinsohn (OHSU, USA)	32.5 lakhs
2	Development of rapid point-of-care diagnostic kit for infections associated with combat war wounds and sepsis in armed forces. (Collaborative project with Lepra Society, EEE, BITS Hyd)	Biological Sciences	Ruchi Jain Dey	Dr. Aparna Srikantam (Lepra Society) Dr. Trinath Jamma (Dept of Biological Science, BITS Hyd)	DRDO	Prof. Sanket Goel (EEE, BITS Hyd)	39.85 lakhs
3	Design and development of rapid and cost-effective point-of-care, nano-based nucleic acid biosensors for prognosis, diagnosis and Management of infection-induced infertility in females. (For Hosting ICMR SRF fellow)	Biological Sciences	Ruchi Jain Dey	-	ICMR	Dr. Aparna Srikantam, Lepra Society, Dr. J.B Sharma Aims, New Delhi	16.5 lakhs
4	Epigenetics of megabase-scale rRNA gene regulation and genomic instability of rDNA and telomeres	Biological Sciences	Gireesha T M	-	Ramanujan Fellowship SERB	Prof. Craig Pikaard, (HHMI, Indiana University, USA)	38 lakhs
5	Economic Construction Practice Using Bacterial Inclusions in Concrete to Improve its Durability	Biological Sciences	A. Kar	Jayati Ray Dutta	CSIR		17 lakhs
6	Conditional pathogenesis: understanding why potentially beneficial rhizobacteria turn pathogenic under certain environmental conditions.	Biological Sciences	Sridev Mohapatra		DBT		45 lakhs
7	Sequence based design and characterization of peptide amyloid nanomaterial: Exploring functionality	Biological Sciences	Ramakrishna Vadrevu	Krishan Rangan	BRNS		29 lakhs
8	Probing the functional and regulatory role of m6A reversible RNA methylation in skeletal myogenesis and muscle wasting	Biological Sciences	Piyush K	-	SERB		56 lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
9	Mechanistic basis of abnormal neurogenesis due to HSAN1E-associated DNMT1 mutation and pharmacological intervention for phenotypic correction.	Biological Sciences	K. Naga Mohan	Vidya Rajesh	DBT	-	68.4 lakhs
10	Molecular Genetics of Schizophrenia.	Biological Sciences	K. Naga Mohan	Vidya Rajesh	DST	-	60.4 lakhs

B.   Ongoing Industry Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Evaluation of the efficiency of bacterial inclusions in concrete	Biological Sciences	A. Kar	Jayati Ray Dutta	Aliens Developers Pvt. Ltd.		11.52 lakhs

C.   Ongoing International Sanctioned Projects: - NIL -

D.   Ongoing Institute Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	To elucidate novel mechanisms of SnRK1-AMPK family kinases in plant antiviral defense and human metabolism regulation	Biological Sciences	Gireesha T.M.	-	(Additional RIG) BITS-Pilani, Hyderabad	-	9.95 lakhs

3. COMPLETED PROJECTS

A.   Completed Government Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Protein structure and stability modulation due to In-Cell and InVitro Crowding: Molecular insights on the origin of the effects of crowding	Biological Sciences	Ramakrishna Vadrevu	Hanudatta Atreya	DST	--	54 lacs
2	Mechanistic basis of abnormal neurogenesis due to HSAN1E-associated DNMT1 mutation and pharmacological intervention for phenotypic correction.	Biological Sciences	K. Naga Mohan	Vidya Rajesh	DBT	-	68.4 lakhs

B.   Completed Industry Projects: - NIL -

C.   Completed International Projects: - NIL -

D.   Completed Institute Projects: - NIL -

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

1.   Ren B, Kong P, Hedar F, Brouwers JF, Gupta N* (2020) PMID: 33303967

     Phosphatidylinositol synthesis, its selective salvage, and inter-regulation of anionic phospholipids in Toxoplasma gondii. Communications Biology, 3(1), 750

2.   Vo Kim Chi, Günay-Esiyok Ö*, Liem N, Gupta N* (2020) PMID: 33335684

     The protozoan parasite Toxoplasma gondii encodes a gamut of phosphodiesterases during its lytic cycle in human cells. Computational & Structural Biotechnology Journal, 18, 3861-76

3.   Li F, Qin P, Ye L, Gupta N, Hu M* (2020)

     A novel BR-SMAD protein controls the larval development in barber's pole worm Haemonchus contortus. Microbial Cell (in press)

4. Ruchi Jain Dey, Bappaditya Dey, Alok Kumar Singh, Monali Praharaj and Bishai WR.BCG over-expressing an endogenous STING agonist provides enhanced protection against pulmonary tuberculosis. The Journal of Infectious Diseases April 2020 (Published in print; 221(7) pii: jiz116. doi: 10.1093/infdis/jiz116., 1048-1056, 2020.) (Impact Factor: 5.186, Scopus Indexed; ISSN:0022-1899)

5. Gargi Prasad S., Neha Priyadarshini, Aveepsha Bera and Gireesha Mohannath (2020). Together we are on; together we are off- A conserved rule for ribosomal RNA (rRNA) gene regulation? Journal of Plant Biochemistry and Biotechnology. (2020). 29(4):743-753.

6. Kirtimaan Syal* (2020) Newly Identified Limitations of diagnostic tools for COVID19 and consequences. Journal of Medical Virology (Wiley) doi: 10.1002/jmv.26673 (In press)

7. S. Kaur, D. Yadav, S. Singh, M. Kumari, D. Kumar, Kirtimaan Syal, R. Bhattacharyya and D. Banerjee. (2020) Selocalcitol: Scope of inhalational formulation for prevention and cure of COVID-19 illness. Research Square doi: 10.21203/rs.3.rs-63402/v1 (preprint)

8. Kirtimaan Syal*(2020) COVID-19: Herd immunity and convalescent plasma transfer therapy. Journal of Medical Virology (Wiley) . 92:1380-1382.

9. B. R. Kiranmaye, Jayati Ray Dutta, A. Kar, C. Parimi, S. Raju, Optimization of culture parameters of Pseudomonas alcaligenes for crack healing in concrete, Materials Today: Proceedings, Elsevier, 16th Jan, 28, 713-716, 2020. https://doi.org/10.1016/j.matpr.2019.12.284.

10. B. Aniket; N., Yamini; Boppudi, Naga Sai Sriteja; R. Ganesan*; Jayati Ray Dutta*, Highly Dispersed Nanocomposite of AgBr in g-C_3N_4 Matrix Exhibiting Efficient Antibacterial Effect on Drought-Resistant Pseudomonas putida Under Dark and Light Conditions. ACS Applied Materials & Interfaces, Apr, 12, 21481-21493, 2020. https://pubs.acs.org/doi/10.1021/acsami.0c05158.

11. Anurag Gautam,* Pragya Komal,* Ram Sevak Singh, Prabhat Gautam, S. K. V. Manjari, R. S. Ningthoujam*; corresponding author; Hard core proof of the polyvinyl alcohol as reducer for the formation of gold nanoparticles; Journal of Molecular Liquid; (accepted for Publication; scopus indexed impact factor-5); December 2020

12. Karthiya R and Khandelia P* (2020) m6A RNA methylation: Ramifications for gene expression and human health. Molecular Biotechnology, doi.org/10.1007/s12033-020-00269-5

13. Anuva R, Banerjee S, Sharma V* and Khandelia P* (2020) Circular RNAs: Emerging role in Cancer Diagnostics and Therapeutics. Frontiers in Molecular Biosciences, doi: 10.3389/fmolb.2020.577938)

14. Karthiya R, Wasil SM and Khandelia P* (2020) Emerging role of N4-acetylcytidine modification of RNA in gene regulation and cellular functions. Molecular Biology Reports, DOI: 10.1007/s11033-020-05963-w

15. Bodhankar S, Grover M*, Mallappa M, Reddy G, Ghosh D, Mohapatra S. 2020. The expression of selected drought responsive genes of maize is influenced by endophytic bacterial inoculation. Journal of Microbiology, Biotechnology and Food sciences. 10(2):267-72. * Corresponding author

16. Sunetra Sen, Sridev Mohapatra. 2020. Drought- mitigating Pseudomonas putida strain modulates polyamine catabolism in Arabidopsis thaliana. Journal of Plant Growth Regulation. Accepted for publication.

17. Structural features and oligomeric nature of human podocin domain. Mulukala SKN, Irukuvajjula SS, Kumar K, Garai K, Venkatesu P, Vadrevu R, Pasupulati AK (2020). Biochem Biophys Rep. 23:100774.

18. Maity S[#], Ghosh A, Chakraborty K[#] Integrating an ER stress reporter for monitoring genome wide UPR-ER in budding yeast. Methods in Molecular Biology(Springer), Dec 2020 (accepted for publication, (IF 10.71) [#]co-corresponding author

19. Sama Sanghamitra, Sandip Deshmukh, & Kumar Pranav Narayan. (2020). 'Effects of alternate nutrient medium on microalgae biomass and lipid production as a bioenergy source for fuel production'. Materials Today: Proceedings, 28: 659-664. DOI: https://doi.org/10.1016/j.matpr.2019.12.238

20. Stephen Paul Avvaru, Malleshappa N. Noolvi*, Uttam A More, Sudipta Chakraborty, Ashutosh Dash, Tejraj M Aminabhavi, Kumar P Narayan and Vishnu Sutariya, "Synthesis and Anticancer Activity of Thiadiazole Containing Thiourea, Benzothiazole and Imidazo[2,1-b][1,3,4]thiadiazole Scaffolds", Medicinal Chemistry (2020) 16: 1. https://doi.org/10.2174/1573406416666200519085626

21. Addepalli A, Kalyani S, Singh M, Bandyopadhyay D, Mohan KN*. CalPen (Calculator of Penetrance), a web-based tool to estimate penetrance in complex genetic disorders. CalPen (Calculator of Penetrance), a web-based tool to estimate penetrance in complex genetic disorders. PLoS One. 2020 Jan 29;15(1):e0228156.

22. Saxena S, Maroju PA, Choudhury S, Anne A, Mohan KN*. Analysis of transcript levels of a few schizophrenia candidate genes in neurons from a transgenic mouse embryonic stem cell model overexpressing DNMT1. Gene 2020.144934.

23. Saxena S, Choudhury S, Mohan KN*. Genome-wide methylation data from R1 (wild-type) and the transgenic Dnmt1 $^{Tet/Tet}$ mouse embryonic stem cells overexpressing DNA methyltransferase 1 (DNMT1). Data in Brief 2020 32:106242.

24. Saxena S, Choudhury S, Mohan KN*. Reproducible differentiation and characterization of neurons from mouse embryonic stem cells. MethodsX 2020 7: 101073

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

1. Ruchi Jain Dey; Keystone Symposia eSymposia meeting eSymposia | Tuberculosis: Science Aimed at Ending the Epidemic from December 2-4, 2020. (International, Attended)

2. Ruchi Jain Dey, Harnessing Mucosal Immunity towards Improved resistance against Tuberculosis "Ramalingaswami Re-entry Fellowship Programme Conclave-2020". 14-17th December, 2020 (Invited Speaker)

3. Ruchi Jain Dey, The Second Joint Workshop of BITS-Pilani and Hiroshima University will be held on Friday, 20th November 2020. (Attended)

4. Ruchi Jain Dey, Webinar "The tale of blind men and the elephant: Multiple modal approach to combat tuberculosis" Ruchi Jain Dey; Online Cross campus webinar symposia organized by BITS Pilani, Pilani, National Webinar, 17th July 2020, (Invited speaker)

5. Ruchi Jain Dey, National Webinar: "Challenges to combat the unseen enemy – COVID-19". Ruchi Jain Dey. Online webinar organized in association with Microbiology Department, Kasturba Gandhi Degree & PG College for Women, West Marredpally, Secunderabad-26. National Webinar, 30th, May 2020 (Invited speaker)

6. Ruchi Jain Dey, Seminars in Pediatric Immunology, IAP Kozhikode, Department of Pediatrics GMC Kozhikode, CSIR Institute of Genomics and Integrative Biology & Foundation for Primary Immunodeficiency Disease, November and December 2020, every Friday (Attended)

7. N Anand, P Sankar Ganesh, 2020. Physicochemical characterization of leachate emanating from young and legacy municipal solid waste landfills, International EConference on Frontiers in Industrial Biotechnology (ICFIBT2020), Tamil Nadu, p. 91.

8. Debkumar Chakraborty, N Anand, P. Sankar Ganesh, 2020. Enhanced anaerobic digestion of food waste employing grass clipping as buffering agent National conference on Bioprospecting and Biotechnology (HAPTEN 2020). Tamil Nadu.

9. N Anand, Srinjoy Roy, P. Sankar Ganesh, 2020. Studies on anaerobic co-digestion of landfill leachate with domestic septage and sewage sludge, National conference on Bioprospecting and Biotechnology (HAPTEN 2020). Tamil Nadu.

10. Gireesha Mohannath, Neha Priyadarshini, Gargi Prasad S. and Muralikrishna Ramgopal Bioinformatic analysis of 45S ribosomal RNA (rRNA) genes from plants to humans: Inbix-2020, International Conference on Bioinformatics, Dec. 4-5, 2020.

11. Gireesha Mohannath, Gargi Prasad S., Aveepsha Bera, Snigdha Ghosh, Raman M. Sundaram, C.N. Neeraja, and Channakeshava Chikkaputtaiah. Epigenomic manipulation of crop plants for trait improvement. Current Trends and Challenges in Plant Biochemistry and Biotechnology, Nov. 20-21, 2020.

12. Aveepsha Bera, Snigdha Ghosh, Gargi Prasad S., Muralikrishna Ramgopal and Gireesha Mohannath. Chromatin Assembly Factor-1 (CAF-1) plays a role in ribosomal RNA gene regulation and in maintaining genomic stability in Arabidopsis thaliana. Current Trends and Challenges in Plant Biochemistry and Biotechnology, Nov. 20-21, 2020.

13. Gargi Prasad S., Aveepsha Bera, T.S. Abirami and Gireesha Mohannath. Different mutant alleles of Histone Deacetylase 6 (hda6) have different effects on rRNA genome instability in Arabidopsis thaliana. Current Trends and Challenges in Plant Biochemistry and Biotechnology, Nov. 20-21, 2020.

14. Gireesha Mohannath. rDNA genomic instability-mediated dysregulation of rRNA genes in epigenetic mutants of Arabidopsis" in online conference BIO@BITS-2020, BITS Pilani, India, July 16-18, 2020

15. Almas Shamaila Mohammed, Aniket Balapure, Mahammed Nanne Khaja, Ramakrishnan Ganesan and Jayati Ray Dutta, Biosensing of Hepatitis C Viral RNA from Clinical specimens - National Virtual Conference on 'Current Trends and Challenges in Plant Biochemistry and Biotechnology', 20-21 Nov, 2020, BITS-Goa, India.

16. Narayana Penta & Jayati Ray Dutta, 'Production of Shigella flexneri polysaccharide and its conjugation with CRM197 protein as potential vaccine candidate' - National Virtual Conference on 'Current Trends and Challenges in Plant Biochemistry and Biotechnology', 20-21 Nov, 2020, BITS-Goa, India.

17. Almas Shamaila Mohammed, Aniket Balapure, Mahammed Nanne Khaja, Ramakrishnan Ganesan and Jayati Ray Dutta, Naked-eye detection of Hepatitis C viral RNA from clinical samples - Virtual conference in CCMB, HySci-2020, 17-18 Dec, 2020, India.

18. Narayana Penta & Jayati Ray Dutta, A potential vaccine candidate: Shigella flexneri polysaccharide and CRM197 protein conjugates - Virtual conference in CCMB, HySci-2020, 17-18 Dec, 2020, India.

19. Manjari SKV, Sanjana Srinivas, Sathwik P G and Komal P* (* Corresponding author, 2020) Abstract published as conference proceedings; Vitamin D intake enhances Vitamin D receptor expression in the striatum and rescues memory and motor dysfunction in mouse model Huntington's disease, 3rd Macquarie Neurodegeneration meeting, Macquarie University, Australia, poster.

20. Manjari SKV, Sanjana Srinivas, Sathwik P G and Komal P* (*Corresponding author, 2020); Abstract published as conference proceedings; Vitamin D intake enhances Vitamin D receptor expression in the striatum and rescues memory and motor dysfunction in mouse model Huntington's disease, 38th Annual Conference of Indian Academy of Neurosciences (IAN) October 5 – 7, University of Hyderabad, Abstr, Hyderabad, Telangana, India, poster.

21. Manjari SKV, Sanjana Srinivas, Sathwik P G and Pragya Komal* (Corresponding author); Abstract published as conference proceedings;" Vitamin D3 supplement rescues motor disability in 3-nitropropionic acid induced mouse model of Huntington's disease, "First Annual Meeting of Georgian Center for Neuroscience Research (GCNR-2020), Tbilisi, Georgia.

22. Manjari SKV and Pragya Komal* (Corresponding author); Abstract published as conference proceedings;" 34th annual meeting of society for neurochemistry India, (SNCI); University of Hyderabad; 12th December 2020; Therapeutic Effects of Vitamin D Supplementation in Mouse Model of Huntington's Disease.

23. Sridev Mohapatra. Oral presentation on "Conditional Pathogenesis: Understanding Why Potentially Beneficial Rhizobacteria turn Pathogenic under certain Environmental Conditions" at Current Trends and Challenges in Plant Biochemistry and Biotechnology organized by Indian Society for Plant Biochemistry and Biotechnology at BITS-Pilani Goa Campus on 20th and 21st November, 2020.

24. Shuvadeep Maity Attended 12th Annual Meeting of Proteomics Scoecity, India (PSI), International Virtual Symposium on "Integrated Omics Approach in Health & Agriculture", 22nd to 24th Nov 2020, CSIR-NCL, Pune, India.

25. Shuvadeep Maity, Disi an, Justin Rendleman, Dylan Iannitelli, Joseph Espiritu, Victoria Paradise, Kapil Ramachandran, Esteban Mazzoni, Christine Vogel. Poster presentation in NEURODEGENERATIVE DISEASES: BIOLOGY & THERAPEUTICS Virtual Meeting Wednesday, December 2 – Friday, December 4, 2020, CSHL, USA.

26. Shuvadeep Maity Attended "MoE – STARS Workshop on Grant Writing (December 7 – 12, 2020)" organized by Scheme for Transformational and Advanced Research in Sciences (STARS), managed by Indian Institute of Science (IISc), Bangalore, India.

27. Anuhya Anne, K. Naga Mohan. Somatic mutations associated with oral leukoplakia. Indo-US Workshop on Human diversity and disparities. CSIR-CCMB, Hyderabad. January 16-18, 2020.

28. Fairy Emmanuel Desai, K. Naga Mohan. Workshop on Evaluation of Male infertility HySci 2020. Lush fertility centre, Hyderabad, CSIR-CCMB, Hyderabad. March 15, 2020.

29. Sonal Saxena, DNMT1 overxpression results in dysregulation of multiple genes associated with neurological disorders and abnormal neurogenesis. European Conference of Human Genetics (ESHG 2020), Virtual, June 6-9, 2020

30. K. Naga Mohan, Sonal Saxena, Sumana Choudhury. Dysregulation of genes associated with neurodegenerative disoders in neurons overexpressing DNMT1. Cold Spring Harbor Symposium on Neurodegenerative Diseases, Virtual, December 2-4, 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Emerging Concepts in Bacterial Biofilms: Molecular Mechanisms and Control strategies. Naresh Patnaik, Neha R Ashtikar and Ruchi Jain Dey*(*Corresponding author) / Ed. Dr. Sabu Thomas/Chapter Title: Social Networking between Microbial frenemies: Therapeutic potential of targeting polymicrobial interactions within biofilms; 279-317. Cambridge Scholars Publishing Limited, England; Published Feb 2020

2. Anand N., Chinnumole V.V., Sankar Ganesh P. (2020) Effect of Inoculation on Anaerobic Digestion of Food Waste. In: Ghosh S., Sen R., Chanakya H., Pariatamby A. (eds) Bioresource Utilization and Bioprocess. Springer, https://doi.org/10.1007/978-981-15-1607-8_3.

3. S. K. Rahaman, Jayati Ray Dutta, Arkamitra Kar & Mohna Bandyopadhyay, Investigating the Growth of Microbial Colonies in Cement Paste to Aid in Concrete Repair, Kaustubh Dasgupta et al. (Eds): Proceedings of SECON'19, 978-3-030-26364-5, 481018_1_En, (24), vol. 46, pp. 247-256, 16th Jan, 2020,

https://doi.org/10.1007/978-3-030-26365-2_24, 2020, Springer Nature publisher. (https://www.springer.com/gp/book/9783030263645).

4. Yamini Rakesh Nikhariya & Jayati Ray Dutta*, Probiotic strains for biofilm associated infections, Emerging concepts in Bacterial Biofilms: Molecular mechanism and control strategies' published by the Cambridge Scholars Publishing Ltd, England, UK, 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. International Conference was organized on 'NMR and Biomolecules' in honor of late Prof. Atreya at BITS-Pilani, Hyd. on Nov 8th, 2020. It was organized by Kirtimaan Syal (BITS-Pilani, Hyd) and Prof. Suryaprakash (IISc, Bangalore). More than 500 participants from 15 countries registered for the event. Speakers from top universities such as Harvard Medical School, National Institute of Health, USA, Texas University, Univ. of Michigan, Monash University-Australia, St Jude Children's Research Hospital, USA, IISc, TIFR etc. presented their work.

2. The International Symposium was organized by Pragya Komal (BITS-Pilani, Hyd) under the Society of Neurochemistry India, (SNCI); on 12th December, 2020. The sy*mposium was entitled as "Different shades of Huntington's disease*". There were more than 100 participants and included speakers from the United states such as University of Florida and University of Washington; Canada such as McGill University and Europe (University of Coimbre); IICT, BHU etc, presented their work.

3. Hosted a South India level Quiz Competition for 10 th to 12 students with a Quiz master in Our campus with KV Rao Scientific Society on 1 st Feb, 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Ruchi Jain Dey, Harnessing Mucosal Immunity towards Improved resistance against Tuberculosis "Ramalingaswami Re-entry Fellowship Programme Conclave-2020". 14-17th December, 2020 (Invited Speaker)

2. Ruchi Jain Dey, Webinar "The tale of blind men and the elephant: Multiple modal approach to combat tuberculosis" Ruchi Jain Dey; Online Cross campus webinar symposia organized by BITS Pilani, Pilani, National Webinar, 17th July 2020, (Invited speaker)

3. Ruchi Jain Dey, National Webinar: "Challenges to combat the unseen enemy – COVID-19". Ruchi Jain Dey. Online webinar organized in association with Microbiology Department, Kasturba Gandhi Degree & PG College for Women, West Marredpally, Secunderabad-26. National Webinar, 30th, May 2020 (Invited speaker)

4. Gireesha Mohannath. Bioinformatic analysis of 45S ribosomal RNA (rRNA) genes from plants to humans: Inbix-2020, International Conference on Bioinformatics (December 2020). (Invited Speaker)

5. Gireesha Mohannath. Multimegabase-scale silencing of ribosomal RNA genes- dictated by chromosomal location, not by gene sequence: Refresher's course for faculty members, organized by University of Hyderabad (November 2020). (Invited speaker).

6. Kirtimaan Syal, Invited talk on Molecular basis of regulation of transcription by second messenger ppGpp. Organized by Molecular & Nanomedicine Research Unit, Center for Nano Science & Nanotechnology, Sathyabama Institute of Science and Technology, Chennai on Aug 5th, 2020.

7. Pragya Komal; 34th annual meeting of society for neurochemistry India, (SNCI); University of Hyderabad; 12th December 2020; Vitamin D intake enhances Vitamin D receptor expression in the striatum and rescues memory and motor dysfunction in mouse model Huntington's disease (Invited Talk).

8. Sridev Mohapatra. Invited talk on "Plant Growth Promoting Rhizobacteria: The unseen, unsung, underground friends of plants" at International Conference on Omics of Plant-Pathogen Interaction with their implication, organized by NIT Rourkela from 16th-18th November, 2020.

9. Shuvadeep Maity (Invited speaker) "A multiomics approach to understand ALS " BIO@BITS2020, Online Cross-campus Virtual Symposia organized by BITS Pilani, Pilani, National Webinar, July 16-18, 2020.

10. K. Naga Mohan "Understanding the role of DNMT1 overexpression in schizophrenia" BIO@BITS2020, Online Cross-campus Virtual Symposia organized by BITS Pilani, Pilani, National Webinar, July 16-18, 2020.

11. K. Naga Mohan "DNMT1 overexpression in neurons results in dysregulation of genes associated with Alzheimer's and Parkinson's disorders". Dementia Congress, Virtual. September 25, 2020.

12. K. Naga Mohan "Genomics with cell-based models for studying abnormal neurogenesis". Influence of Genomics and Proteomics in Health care. Virtual. August 20-21, 2020.

9.   INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Onkar Kulkarni, Department of Pharmacy, BITS Pilani Hyderabad Campus, "Development of new therapies for acute and chronic inflammation: identification and validation of therapeutic targets": (7th February 2020)

2. Dr. Rajakumara Eerappa, Associate Professor, Biotechnology Department, IIT Hyderabad, "UHRF1-SRA recognizes non-CG methylated DNAs. Who decides flip or not to flip 5-methyl cytosine?" (14th February 2020)

2. 3.Dr. R.M. Sundaram, Principal Scientist, ICAR-Indian Institute of Rice Research (ICAR-IIRR), Hyderabad, "Multi-trait improvement in rice through molecular breeding" (21st February 2020)

3. Dr. Manjari Kiran, Assistant Professor, Department of Systems and computational Biology, School of Life Sciences, University of Hyderabad, "Part I: Brief overview of Bioinformatic tools for Next-generation sequence analysis. Part II: Long non-coding RNAs are promising biomarker for diagnosis and prognosis in cancers' (12th March, 2020)

4. 5.Dr. Kirtimaan Syal, Assistant Professor, Department of Biological Sciences, BITS Pilani Hyderabad campus, "Second messenger (p)ppGpp- Magic of Magic Spot" (9th September, 2020)

5. Dr. Shuvadeep Maity, Assistant Professor, Department of Biological Sciences, BITS Pilani Hyderabad campus, "Understanding proteostasis and ER stress regulation – a special emphasis on motor neuron disease ALS" (7th October 2020)

6. Dr. Kaviraj Udupa, MBBS, MD, Ph.D. Additional Professor, Department of Neurophysiology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, "Introduction to Non-invasive brain stimulation: potential applications in research and clinics" (9th December, 2020).

7. Dr. Nishith Gupta, Professor, Department of Biological Sciences, BITS Pilani Hyderabad campus, "Fatal Love 101 – A parasite's way of dating, dining, ditching, and destroying the host cell" (15th December, 2020)

10. AWARDS AND RECOGNITIONS

1. Outstanding Potential for Excellence in Research & Academics (OPERA) Award, BITS, Pilani (Nishith Gupta)

2. Wellcome Trust - DBT (India Alliance) Senior Fellowship (Nishith Gupta)

3. Selected as permanent member of AMI, India (Kirtimaan Syal)

4. Recipient of Early Career Award; International Brain Research Organization (IBRO), September 2020 (Pragya Komal)

5. Outstanding Potential for Excellence in Research & Academics (OPERA) Award, BITS, Pilani (Shuvadeep Maity)

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. DBT-Indo-USA Vaccine Adjuvant grant; Development of an endogenous STING agonist adjuvanted Mycobacterium bovis BCG vaccine to enhance efficacy against tuberculosis. (International, Collaborative grant with Johns Hopkins, USA and NIAB, India) (As PI) (95.45 Lakhs; Approved/Awaiting Sanction).

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Ruchi Jain Dey; "Recombinant Multivalent Vaccine". Provisional Patent submitted to Indian Patent Office, patent application number- 202011030636; 18 July 2020. Applicant Institute: BITS Pilani. (Filed).

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES   - NIL-

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

Major maintenance, renovations or new construction reports:

1. Ruchi Jain Dey, Laboratory of Infectious Diseases (BSL2 Facility)
2. Gireesha Mohannath and Sridev Mohapatra, Plant Growth Rooms
3. Kumar Pranav Narayan, Vivek Sharma and Piyush Khandelia, Laboratory of Molecular Medicine

Major equipment acquired during the year: - NIL -

B3.10.2   Department of Chemical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**1**
Associate Professors	**5**
Assistant Professors	**9**
Lecturers	**0**
Visiting Professor	**1**

Head of the Department   :   Prof. Inkollu Sreedhar

Contact details	:	040 - 66303512
Number of Ph.D. Scholars	:	15
Full Time	:	12
Part Time	:	3
Aspirant Scheme	:	0

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	S. Aparna	2015PHXF0003H	Polymer blends and Composites.	Dr. D. Purnima	Dr. Ramesh Babu A

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned INR
1	Developmental Studies on Environmental Conditioning of QCE Composite Materials	Chem. Engg	Dr. A. Ramesh Babu	-	DRDO	-	24,09,000
2	Development of Endothermic Fuelfor Supersonic Vehicle Applications	Chem. Engg	Dr. Srikanta Dinda	-	DST-SERB	-	42,26,000

B. Industry Sanctioned Projects   - NIL -

C. International Sanctioned Projects   - NIL –

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned INR
1	Technoeconomic feasibility analyses of sustainable energy systems using simulation based optimization paradigm.	Chem. Engg	Dr. Arnab Dutta	-	BITS-Pilani	-	2,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Reactive transport modeling & simulation of CO_2 sequestration in deccan volcanic province	Chem.Engg	Dr. Vikranth K. Surasani	Dr, Balaji K	DST	-	21,74,000
2	Cracking of hydrocarbon fuel for a possible heat sink application	Chem.Engg	Dr. Srikanta Dinda	-	DRDL (DRDO)	-	40,65,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Development of superomniphobic surfaces for self cleaning and anti-microbial applications	Chem.Engg	Dr. Nandini Bhandaru	-	DST-Inspire	-	28,00,000
4	Modeling the capacity loss in lithium ion batteries during cycling	Chem.Engg	Dr. Balaji K.	Dr. Vikranth K.Surasani	CSIR	-	23,40,000
5	Waste Minimization and Carbon Capture with Coal Flyash Doped Sorbents- A Two Edged Sword	Chem.Engg	Dr. I. Sreedhar	-	CSIR	-	19,00,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of cost effective adsorbents for heavy metal removal from industrial effluent generated at HBL	Chem.Engg	Dr. I. Sreedhar	-	HBL Power Systems Ltd	-	5,04,000

C. Ongoing International Sanctioned Projects   - NIL -

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Synthesis of core-shell nanoparticles for photocatalytic reforming	Chem.Engg	Dr. Satyapaul A. Singh	-	BITS-Pilani	-	10,00,000
2	Underwater superoleophobic surfaces for oil/water separation	Chem.Engg	Dr. Nandini Bhandaru	-	BITS-Pilani	-	9,50,000

3. COMPLETED PROJECTS

A. Completed Government Projects   - NIL -

B. Completed Industry Projects   - NIL -

C. Completed International Projects   - NIL -

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Nanocomposites Synthesis and Stability Enhancement for Methane Combustion	Chem.Engg	Dr. Satyapaul A. Singh	-	BITS-Pilani	-	2,00,000
2	Soft lithographic fabrication of superhydrophobic surfaces and durability studies	Chem.Engg	Dr. Nandini Bhandaru	-	BITS-Pilani	-	2,00,000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. I.Sreedhar, Utkarsh Upadhyay, Pranav Roy, Sarmishta Madabusi Thodur, Chetan M Patel, " Carbon Capture and Utilization using Graphenes-Path Covered and Ahead", Journal of Cleaner Production, (Accepted-16th Oct 2020) Elsevier, I.F: 7.2

2. Satyapaul A Singh, Giridhar Madras, I.Sreedhar, " Transition metal (Ni, Cu and Fe) substituted Co_3O_4-ZrO_2 catalysts for lean methane combustion", Topics in Catalysis, DOI: 10.1007/s11244-020-01382-0, (2020,) Springer, I.F: 2.5

3. Utkarsh Upadhyay, I.Sreedhar1, Satyapaul A Singh, Chetan M Patel, K.L.Anitha, "Recent advances in heavy metal removal by chitosan based adsorbents", Carbohydrate Polymers, 251 (2021), 117000, Elsevier, I.F: 7.0

4. R. Aniruddha, I.Sreedhar, Benjaram M Reddy, "MOFs in Carbon Capture-Past, Present and Future", Journal of CO_2 Utilization, 42, (2020), 101297, Elsevier, I.F: 6.2

5. Ankita Agarwal, Utkarsh Upadhyay, I.Sreedhar, Satyapaul A Singh,, Chetan M Patel, "A review on valorization of biomass in heavy metal removal from waste water", Journal of Water Process Engineering, 38 (2020), 101602, Elsevier, I.F: 4.1

6. Yaddanapudi Varun, I.Sreedhar, Satyapaul A Singh, "Highly stable M/NiO-MgO (M = Co, Cu and Fe) catalysts towards CO_2 methanation", International Journal of Hydrogen Energy, DOI: 10.1016/j.ijhydene.2020.07.212, 2020 Elsevier I.F: 4.9

7. Sarthak Gupta, S.Sireesha, I.Sreedhar, Chetan M Patel, K. L. Anitha, "Latest trends in heavy metal removal from waste water by biochar based sorbents", Journal of Water Process Engineering, 38, (2020), 101561, Elsevier, I.F: 4.1

8. B. Venu, V.Shirisha, B. Vishali, G. Naresh, R. Kishore, I Sreedhar, A. Venugopal, "Cu-BTC metal-organic framework (MOF) as an efficient heterogeneous catalyst for aerobic oxidative synthesis of imines from primary amines under solvent free conditions", New Journal of Chemistry, (2020), DOI: 10.1039/C9NJ05997K, RSC, I.F: 3.1.

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13. Appala Naidu Uttaravalli, Srikanta Dinda, Self-Polymerization Reaction of Cyclohexanone: Kinetics and Thermodynamics, Materials today Proceedings, 2020, accepted.

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22. Modeling the effect of rib width and channel dimensions on the performance of high temperature fuel cells, V.Jha and B. Krishnamurthy, DOI: https://doi.org/10.5599/jese.907.

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34. Sharon Mariam Varughese and Nandini Bhandaru, Durability of Submerged Hydrophobic Surfaces, Soft Matter,16, 1692-1701, 2020.

35. Saumyadwip Bandyopadhyay, Shreshth Khare, Nandini Bhandaru, Rabibrata Mukherjee and Suman Chakraborty, High Temperature Durability of Oleoplaned Slippery Copper Surfaces, Langmuir, 36, 15, 4135-4143, 2020.

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37. Sudhakara Reddy Yenumala, Pankaj Kumar, Sunil K. Maity, Debaprasad Shee, Hydrodeoxygenation of karanja oil using ordered mesoporous nickel-alumina composite catalysts. Catalysis Today, 2020, 348, 45-54. DOI:10.1016/j.cattod.2019.08.040.

38. Mohan Varkolu, Alekhya Kunamalla, Srinivas Aswini Kumar Jinnala, Pankaj Kumar, Sunil K Maity, Debaprasad Shee, Role of CeO2/ZrO2 mole ratio and nickel loading for steam reforming of n-butanol using Ni-CeO2-ZrO2-SiO2 composite catalysts: A reaction mechanism. International Journal of Hydrogen Energy, 2020, DOI: 10.1016/j.ijhydene.2020.11.240.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED:

1. Arnab Dutta, Iftekhar A. Karimi and Shamsuzzaman Farooq. PROAD (Process Advisor): Health Monitoring Dashboard for Centrifugal Pumps. AIChE 2020 Annual Meeting, San Francisco, CA, USA, November 16 – 20, 2020.

2. Y. Varun, Premanath Murge, Satyapaul A. Singh, I.Sreedhar, " A study on the effect of magnesium on nickel catalyst for CO2 methanation studies", International Conference on Emerging Trends in Catalysis (ICETC-2020), Vellore Institute of Technology, Vellore, India.

3. Srikanta Dinda, Vuchuru Kalyan, Sheraj Z. Sayyed, and Sundaraiah Konda, Cracking of Hydrocarbon Fuel Under Supercritical Environment: A Feasibility Study, International Conference on Advances in Chemical Engineering (Adche-2020), Dehradun, Uttarakhand, India, February 05-07, 2020.

4. Sharon Mariam Varughese and Nandini Bhandaru, Underwater durability of patterned hydrophobic surfaces, 4th Indo-German Workshop in Materials, Reaction and Separation Processes 2020, Berlin, Germany, February 2020.

5. Yaddanapudi Varun, I. Sreedhar, Satyapaul A. Singh, " Highly stable M/NiO-MgO (M=Co, Cu and Fe) catalysts towards CO2 methanation", Virtual National Conference on Catalysis and Photocatalysis for Clean Energy (CPCE-2020), NIT Jamshedpur, Jharkhand, India.

6. Yaddanapudi Varun, I. Sreedhar, Satyapaul A. Singh, " Highly stable M/NiO-MgO (M=Co, Cu and Fe) catalysts towards CO2 methanation", Online Students Indian Chemical Engineering Congress (SCHEMCON-2020), Indian Institute of Chemical engineers, Jadavpur University campus, Kolkata, India.

7. Vedika, Kulkarni, Varun Yaddanapudi, Satyapaul A. Singh, " Synthesis of Cu/Co3O4 nanomaterials and its application for CO oxidation ", Students' Chemical Engineering Congress (SCHEMCON 2020), Indian Institute of Chemical Engineers.

8. S. Gochhayat, Y. Varun, S.A. Singh*, "Development of core shell NiO@Co3O4 for photoelectrocatalytic Oxygen Evolution Reaction",16th Annual Student Chemical Congress, (S-CHEMCON-2020), IIChE, Jadavpur University, Kolkata, India.

9. P Aryan, Satchit Nagpal, Satyapaul A. Singh, "Modelling and simulation in microfluidic channels", Students' Chemical Engineering Congress (SCHEMCON 2020), Indian Institute of Chemical Engineers.

10. Yaddanapudi Varun, Premanath Murge, Satyapaul A. Singh, Inkollu Sreedhar, " A study on the effect of magnesium on nickel catalyst for CO2 methanation studies", International Conference on Emerging Trends in Catalysis (ICETC-2020), Vellore Institute of Technology, Vellore, India.

11. Sharon Mariam Varughese and Nandini Bhandaru, Underwater durability of patterned hydrophobic surfaces, 4th Indo-German Workshop in Materials, Reaction and Separation Processes 2020, Berlin, Germany, February 2020.

12. Debashis Panda, Supriya B, V. K. Surasani, Lattice Boltzmann Simulations for micro-macro interactions during isothermal drying of porous media, Interpore-2020, Aug. 31 – Sep 4. 2020.

13. Supriya B, Debashis Panda, Nicole Vorhauer, V. K. Surasani, Study on Film effects during isothermal diffusion dominated evaporative drying of square capillary tube using Lattice Boltzmann model, Interpore-2020, Aug. 31 – Sep 4. 2020.

14. Pradeep Reddy Punnam, Shakti Raj Singh Bawal, V. K Surasani, Parametric study on the residual CO_2 trapping in Deccan Volcanic Basalt. Interpore-2020, Aug. 31 – Sep 4. 2020

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. S Mailaram, Pankaj Kumar, A Kunamalla, Palkesh Saklecha, SK Maity Chapter 3: Biomass, Biorefinery, and Biofuels, Sustainable Fuel Technologies Handbook. Editor: Suman dutta and Chaudhery Mustansar Hussain, Academic Press, Elsevier, 2021, 51-87. ISBN: 978-0-12-822989-7. DOI: 10.1016/B978-0-12-822989-7.00003-2.

2. Swarnalatha Mailaram, Pankaj Kumar, Sunil K. Maity, Biofuels from Triglycerides: A Review. Triglycerides: An Overview. Editor: Felix J.Juhl, Academic Press, Nova Science Publishers, Inc., New York 2020, 1-27. ISBN: 978-1-53618-134-0.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT - NIL –

8. INVITED TALKS GIVEN BY BITS FACULTY (Not in conference)

1. Dr. Sreedhar Inkollu: Keynote Lecture on CO2 Sequestration and Utilization, Five Day Faculty Development Programme, VIT University, Vellore, 7th-11th Dec 2020

2. Vikranth Kumar Surasani, "Reactive Transport Modeling and Simulation of CO 2 Sequestration in Geological Formation", in Global Meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives, Oct. 17 2020 Virtual meet , BITS Pilani.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT   - NIL -

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Dr. Satyapaul Singh "Telangana Academy of Sciences (TAS) - Young Scientist Award for the year 2019 in the field of "Engineering Sciences".

2. Dr. Satyapaul Singh Recognized Reviewer for Applied Catalysis A: General (Elsevier), Applied Surface Science (Elsevier), International Journal of Hydrogen Energy (Elsevier), Bulletin of Material Science (Indian Academy of Sciences), Advanced Powder Technology (Elsevier), Journal of Nanoscience and Nanotechnology (American Scientific Publishers), Journal of Materials Science: Materials in Electronics (Springer), Solid State Sciences (Elsevier).

3. Dr I Sreedhar, appointed as an Editorial Board Member in Fluid Dynamics and Materials Processing, a Scopus Indexed Journal, Tech Science Press, USA.

4. Dr Vikranth K Surasani for getting appointed as an Academic Editor in the International Journal of Chemical Engineering (Scopus Indexed) Hindawi Publishing, I.F: 1.8 since May 2020.

5. Dr. Arnab Dutta Recognized Reviewer for International Journal of Sustainable Energy (Taylor & Francis Group), Energy Conversion and Management (Elsevier), Journal of CO_2 Utilization (Elsevier), PLOS ONE (Public Library of Science).

b. Won by Students:

1. Prasanth Syamala, P. Aryan, Satchit Nagpal: Winners of the competition of "Model Making" at IIChE Inter-College competitions organized by Anurag group of Institutions, Hyderabad on 25th February, 2020.

2. Mr. Debashis Panda: "Padmasri B V Raju Best Student Award" by Indian Institute of Chemical Engineers, Hyderabad Regional Centre (IIChE-HRC).

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION:

- Dr. Vikranth Kumar Surasani with Prof. Evangelos Tsotsas (Chair of Thermal Process Engineering, Otto-von-Guerice University Magdeburg, Germany).

12. PATENTS FILED/PUBLISHED AND GRANTED   - NIL -

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

S.No.	Activity		Timeline (2020)
1.	Student Mentorship Program		January 7 - March 14
2.	ARENA - 2020	Pictionary	Feb 14
		Chem-O-Bid	Feb 15
3.	Student Mentorship Program		January 7 - March 14
4.	Talk with the juniors (part 1 & 2)		August 11 & August 28
5.	Alumni Talk		August 23
6.	IIChE Membership drive		Sept 20 – Oct 20
7.	Technical writing		Sept 20 - December 1

14. SIGNIFICANT (>3 lakhs) NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED:

1. Gas Chromatograph with autosampler, Mayura Analytical LLP, Bangalore. Cost: 7,61,250/- Facility added in January, 2020"

2. Brightness tester and Reflectometer.

3. Expanded Plasma Cleaner with Economy Dry Oxygen Service Pump, Harrick Plasma, USA (~ 8.5 Lakhs), added in July 2020.

B3.10.3   Department of Chemistry

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	05
Associate Professors	08
Assistant Professors	05
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department   :   **Prof. Sounak Roy**

Contact details   :   Sounak.roy@hyderabad.bits-pilani.ac.in

Number of Ph.D. Scholars   :   48

Full Time   :   34

Part Time   :   14

Aspirant Scheme   :

PH.D. THESIS SUBMITTED DURING THE YEAR 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Srinivasa Rao Singireddi	2014PHXF0002H	Design, Synthesis and Biological Activity of Novel Heterocyclic Compounds as Inhibitors of Bacterial Quorum Sensing and Tuberculosis	KVG Chandra Sekhar	-
2	N Srinivasa Rao	2012PHXF0501H	Novel Synthetic Strategy and Reagents for Synthesis of Gold Nanoparticles and Catalytically Active Fe_3O_4@M (M = Au, Ag, Pd) Core-Shell Nanostructures	Balaji Gopalan	-

1.   SPONSORED RESEARCH AND CONSULTANCY PROJECTS SANCTIONED

A. Government Sanctioned – NIL -

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collabo rater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collabora-ter (if any)	Amount Sanctioned (INR)
1	Synthesis and Development of Pharmaceuticals (Code: CXL-001)	Chemistry	Dr. Tanmay Chatterjee	-	Chanceux Labs LLP, Hyderabad	-	10,07,000

C. International Sanctioned Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collabora ter (if any)	Amount Sanctioned (INR)
1	MOFs As Breath Sensors For Sleep Apnea Diagnostics	Chemistry	Dr. Himanshu Aggarwal	NA	RSC	NA	4,00,000

D. Institute Sanctioned Projects – NIL -

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	AIG/ ACRG	Collabora ter (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Photocatalytic Reduction of CO2 to Biofuels	Chemistry	Sounak Roy	-	CSIR	-	4,00,000
2	Efficacy of appropriately tailored biopolymer and carbonaceous adsorbents for the separation and recovery of Europium (completed in Sept.2020)	Chemistry	Prof. N.Rajesh	Prof.Vidya Rajesh	SERB	-	29,00,000
3	Design and Synthesis of Diverse Pyrrole-Pyridine Based Molecules as Selective Sensors for Zn2+ and F-	Chemistry	Anupam Bhattacharya	-	CSIR	-	15,43,000
4	Sequence based design and characterization of peptide-amyloid nano material: Exploring functionality.	Chemistry/Biological Sciences	Ramakrishna Vadrevu	Krishnan Rangan	BRNS		29,68,650
5	DST INSPIRE Faculty Project	Chemistry	Dr. Chanchal Chakraborty	-	DST	-	35,00,000
6	Synthesis of highly stable Zr-based mixed-linker metal-organic frameworks (MOFs) for humidity control and gas separation.	Chemistry	Dr. Himanshu Aggarwal	NA	SERB	NA	21,98,183
7	"High potency of complex dietary p-glucan fibers as Cholesterol and Low-Density Lipoprotein lowering agents: A comprehensive mechanistic investigation through advanced dynamical simulations."	Chemistry	Dr. Durba Roy	-	SERB-CRG	-	36,70,000
8	Mechanofluorchromic aterials (2019)	-	Manab Chakravarty	NA	SERB	No	28,00,000

B. Ongoing Industry Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Zn Air Battery	Chemistry	Sounak Roy	Chanchal Chakraborty	HBL Limited	-	13,50,000

C. Ongoing International Sanctioned Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Develop of novel anti-leishmanial analogues loaded with novel nanoformulations			KVG Chandra Sekhar	DBT (Indo – Spain)	S Murugesan	13,00,000

D. Ongoing Institute Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Design of highly stable fluorescent metal-organic frameworks for iodine capture	Chemistry	Dr. Himanshu Aggarwal	NA	ACRG	NA	10,00,000
2	Synthesis of Highly Functionalized and Medicinally Potential Bioactive Heterocycles through Trifluoromethylative Cyclization Strategy	Chemistry	Dr. Tanmay Chatterjee	-	ACRG	-	8 Lakhs

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Investigation of magneto-optical effects in composite magneto-plasmonic nanostructures for sensing applications. Funding Agency: DST India. Duration: Jan, 2013 – Jan, 2016.	Chemistry/ Physics	Kannan Ramaswamy	Krishnan Rangan	DST		32,50,000
2	Naphthalene based Algens		Manab Chakravarty	Amit Nag	CSIR		16,00,000
3	Synthesis, Study of optical properties and Anticancer activity of unique di-substituted tetracyanoquinodimethane	Chemistry	Jayanty Subba-lakshmi	-	DST-SERB	-	25,74,605

B. Completed Industry Projects

S.No	Project Title	Dept	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Preparation and characterization of electrode material for Lithium ion Batteries	Chemistry	Sounak Roy	-	HBL Power Systems Limited	-	7,00,000

C. Completed International Projects:

D. Completed Institute Projects:

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

a) Papers Published by Faculty in Journals

1. Photocatalytic Materials for Reduction of Nitroarenes and Nitrates; Sounak Roy, The Journal of Physical Chemistry C Accepted (2020) DOI: 10.1021/acs.jpcc.0c07363

2. Tale of two layered semiconductor catalysts towards artificial photosynthesis; Sounak Roy, ACS Applied Materials and Interfaces 12, 34, (2020) 37811-37833

3. Synthesis of 2, 2, 4 trimethyl 1, 2-dihydroquinolines over heterogeneous metal modified 12-tungstophosphoric acid supported γ-Al$_2$O$_3$ catalyst; B. Krishna, Sounak Roy, Research on Chemical Intermediates 46 (2020) 4061–4077

4. Low-Temperature Propylene Epoxidation Activity of CuO-CeO$_2$ Catalyst with CO + O$_2$: Role of Metal-Support Interaction on the Reducibility and Catalytic Property of CuO$_x$ SpeciesT. Baidya, T. Mazumder, K. Y. Koltunov, P. R. Likhar, A. H. Clark, K. Tiwari, V. I. Sobolev, S. Payra, T. Murayama, M. Lin, P. Bera, Sounak Roy, K. Biswas, O. Safonova, B. S. Rao, M. Haruta, The Journal of Physical Chemistry C 124, 26, (2020) 14131-14146.

5. Structure Sensitive Electrocatalytic Reduction of CO$_2$ to Methanol over Carbon Supported Intermetallic PtZn Nano-Alloys S. Payra, S. Shenoy, C. Chakraborty, K. Tarafder, Sounak Roy, ACS Applied Materials and Interfaces, 12, 17 (2020) 19402-19414.

6. Polyaniline Supported g-C$_3$N$_4$ Quantum Dots Surpass Benchmark Pt/C: Development of morphologically engineered g-C$_3$N$_4$ catalysts towards "metal free" methanol electro-oxidation

7. P. C. Meenu, S. P. Datta, S. A. Singh, S. Dinda, C. Chakraborty, Sounak Roy, Journal of Power Sources, 461 (2020) 228150 - 228163.

8. Trade-off between Adsorption and Photocatalysis over ZIF-derived Composite S. Payra, K. L. Reddy, R. S. Sharma, S. Singh, Sounak Roy, Journal of Hazardous Materials, 393 (2020) 122491 – 122503.

9. Low temperature catalytic reduction of NO over porous Pt/ZIF-8 S. Challagulla, S. Payra, R. Rameshan, Sounak Roy, Journal of Environmental Chemical Engineering 8 (2020) 103815-103824.

10. Conversion of levulinic acid to ethyl levulinate using tin modified silicotungstic acid supported on Ta$_2$O$_5$ P. Ganji, Sounak Roy, Catalysis Communications, 134 (2020) 105864 – 105870.

11. A correlation story of syntheses of ZnO and their influence on photocatalysis S. Payra, S. Ganeshan, S. Challagulla, Sounak Roy, Advanced Powder Technology, 31 (2020) 510 – 520.

12. Making inorganic chemistry interesting - Analogy based pragmatic approach to learning".   N. Rajesh, Resonance-Journal of Science Education.2020, 25, 1241-1249.

13. Techniques Galore: How to select the best one to detoxify contaminants?"

14. Rajesh Nagarathnam, ACS EST Water, 2020.https://dx.doi.org/10.1021/acsestwater.0c00108

15. Refolding of protein unfolded by gemini surfactants using β-cyclodextrin and sodium dodecyl sulfate in aqueous medium: Study on role of spacer chain of surfactants, Sunita Kumari, Sayantan Halder, Rishika Aggrawal, Vinod Kumar Aswal, Ganapathisubramanian Sundar,* and Subit K. Saha*, J. Mol. Liq., 300, 112238 (2020).

16. Role of Different States of Solubilized Water on Solvation Dynamics and Rotational Relaxation of Coumarin 490 in Reverse Micelles of Gemini Surfactants, Water/12-s-12.2Br⁻(s = 5, 6, 8)/n-Propanol/Cyclohexane, Rishika Aggrawal, Sunita Kumari, Subhashis Gangopadhyay, Subit Kumar Saha*, ACS Omega, 5, 6738 (2020).

17. Study of Refolding of a Denatured Protein and Microenvironment Probed through FRET to a Twisted Intramolecular Charge Transfer Fluorescent Biosensor Molecule, Sayantan Halder, Rishika Aggrawal, Vinod K. Aswal, Debes Ray, and Subit K. Saha*,J. Mol. Liq., In Press, 2020, DOI: https://doi.org/10.1016/j.molliq.2020.114532

18. Adsorption and sensing of CO and NH_3 on chemically modified graphene surfaces, A. Sahithi and K. Sumithra, RSC Advances, 2020, 10, 42318–42326.

19. Comprehensive evaluation of the effect of various exchange correlation functionals on the optical properties of oligothiophenes, Computational and Theoretical Chemistry 1172, 112667, 2020; T. Vikramaditya, M. Sai Sudhakar and K. Sumithra,

20. Iodine assisted synthesis of CF_3 appended spirodihydrofuryl/cyclopropyl oxindoles by changing the active methylene sources Thirupathi Reddy Penjarla, Maheshwar Kundarapu, R. Krishnan, and Anupam Bhattacharya; Organic and Biomolecular Chemistry, 2020, 18, 9623-9631.

21. New gold standard: weakly capped infant Au nanoclusters with record high catalytic activity for 4-nitrophenol reduction and hydrogen generation from an ammonia borane–sodium borohydride mixture†, Dinabandhu Patra, Srinivasa Rao Nalluri, Hui Ru Tan, Mohammad S. M. Saifullah, Ramakrishnan Ganesan and Balaji Gopalan Nanoscale Advances 2020, 2, 5384–5395

22. Inhibitors of pantothenate synthetase of Mycobacterium tuberculosis – a medicinal chemist perspective; Suresh, A., Srinivasarao, S., Yogesh, M. K., Shashidhar, N., Murugesan, S., Chandra Sekhar, K.V.G. . RSC Adv., 2020, 10, 37098-37115.

23. Druggable targets of SARS-CoV-2 and treatment opportunities for COVID-19; Faheem, Karan Kumar, B., Chandra Sekhar, K.V.G., Selvaraj, K., Joazaizulfazli, J., Rafael, B. F., Babu, L.T., Murugesan, S. Bioorg. Chem., 2020, 104, 104269.

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30. Exploration of fluorescence behavior of an imidazolium-based chemosensor in solution and in the solid state and its turn-on response to Al^{3+} in pure aqueous medium, Vaishali Saini, Rangan Krishnan and Bharti Khungar, Photochem. Photobiol. Sci., 19, 931-942 (2020). (DOI: 10.1039/c9pp00477g) (April 17, 2020).

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32. Mononuclear Co(II), Ni(II) and Cu(II) complexes of the Schiff base, 2-(((4-trifluoromethoxy) phenylimino)methyl)-6-tert-butylphenol: Synthesis, spectroscopic characterization, X-ray study and biological evaluation, Aveli Rambabu, Nirmala Ganji, Sreenu Daravath, Kadtala Venkateswarlu, Krishnan Rangan, Shivaraj, Journal of Molecular Structure 1199, 127006, 1-10 (2020). (https://doi.org/ 10.1016/j.molstruc.2019.127006).

33. Mechanofluorochromic Anthryl Phosphonate/Benzoic Acid Cocrystals with a Large Blue Shift: The Role of P=O...H Interactions. ChemPlusChem, 2020, 85, 2652-2656; B. Prusti and M. Chakravarty

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42. "Quality by design approach to develop stability indicating method to quantify related substances and degradation products of sacubitril by high performance liquid chromatography," Sivaganesh. B, Subbalakshmi. J*, Satyanarayana Raju. T, & Sivasankar. B. J. Chrom. Sci, 2020, 58, 844-858.

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44. Disulfide-Containing Peptides in the Frame of Peptide Drug Market Editorial: Diana Imhof, Durba Roy and Fernando Albericio Frontiers in Chemistry, section Medicinal and Pharmaceutical Chemistry, 2020; DOI: 10.3389/fchem.2020.586377

45. Simulation of differential structure and dynamics of disulfide bond isoforms of conopeptide AuIB in presence of human $\alpha_3\beta_4$ nAChR; Karuna Anna Sajeevan and Durba Roy; Peptide Science, 2020, e24183; DOI: 10.1002/pep2.24183

46. Distinctive weak interactions underlie diverse nucleation and small angle scattering behavior of aqueous Cholesterol, Cholesteryl hemisuccinate and Glycocholic acid; Rituparna Hazra and Durba Roy; J. Phys. Chem. B (Accepted, 2020)

47.   "Interfacial Coordination Nanosheet Based on Nonconjugated Three-Arm Terpyridine: A Highly Color-Efficient Electrochromic Material to Converge Fast Switching with Long Optical Memory". Susmita Roy, Chanchal Chakraborty* ACS Appl. Mater. Interfaces 2020, 12, 35181-35192. https://doi.org/10.1021/acsami.0c06045

48.   "Green-to-Black Electrochromic Copper(I)-Based Metallo-Supramolecular Polymer with a Perpendicularly Twisted Structure". M. D. Hossain, Chanchal Chakraborty, U. Rana, S. Mondal, H.-J. Holdt, and M. Higuchi, ACS Appl. Polym. Mater. 2020, 2, 4449–4454. https://doi.org/10.1021/acsapm.0c00559

49.   "Helical Fe(II)-Based Metallo-supramolecular Polymers: Effect of Crown Ether Groups Located Outside the Helix on Hydrous Proton Channel Formation". Chanchal chakraborty, U. Rana, Y. S. L. V. Narayana, S. Moriyama, M. Higuchi, ACS Appl. Polym. Mater. 2020, 2, 4521-4530; https://doi.org/10.1021/acsapm.0c00611

50.   "One Pot Synthesis of Three-Dimensionally Hyperbranched Eu/Fe-Based Heterometallo-Supramolecular Polymers as Thermally Tough Proton Conducting Nano Particles". Y. S. L. V. Narayana, U. Rana, Chanchal Chakraborty, T. Yoshida, M. Higuchi, ACS Appl. Polym. Mater. 2020, 2, 4439-4448. https://doi.org/10.1021/ acsapm.0c00541

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52.   "Sub-second electrochromic switching and ultra-high coloration efficiency in halloysite nanoclay incorporated metallo-supramolecular polymer nano-hybrid based electrochromic device". Susmita Roy, Chanchal Chakraborty*, Sol. Energy Mater. Sol. Cells 2020, 208, 110392; https://doi.org/10.1016/j.solmat.2019.110392

53.   "MOF based Flexible, Low-Cost Chemiresistive Device as a Respiration Sensor for Sleep Apnea Diagnostics". T Leelasree, V. Selamneni, T. Akshaya, P. Sahatiya, H. Aggarwal*, J. Mat. Chem. B, 2020, 8, 10182.

54.   "Synthesis, study of antileishmanial and antitrypanosomal activity of imidazo pyridine fused triazole analogues". A. Nandikolla, S. Srinivasarao, B. K. Kumar, S. Murugesan, Himanshu Aggarwal, L. L Major, T. K Smith, K. V. G. C. Sekhar, RSC Advances, 2020, 10, 38328.

55.   "Seeking potent anti-tubercular agents: design and synthesis of substituted-N-(6-(4-(pyrazine-2-carbonyl) piperazine/homopiperazine-1-yl) pyridin-3-yl) benzamide derivatives as anti-tubercular agents". S. Srinivasarao, A. Nandikolla, A. Suresh, K. Van Calster, L. De Voogt, D. Cappoen, B. Ghosh, H. Aggarwal, S. Murugesan, K. V. G. C. Sekhar, RSC Advances, 2020, 10, 12272-12288.

56.   "Reversible tricolor mechanochromic luminescence for anthranyl π-conjugates by varying the number of methoxy substituents: A structure-property relationship study". B. Prusti, H. Aggarwal, M. Chakravarty, ChemPhotoChem, Accepted, doi.org/10.1002/cptc.201900299.

57.   "Green synthesis of Full-Color Fluorescent Carbon Nanoparticles from Eucalyptus Twigs for sensing the Synthetic Food Colorant and Bioimaging"ACS Omega 2020, 5, 19905.Damera, D. P.; Manimaran, R.; Venuganti, V. K. and Nag, A.*

58.   "A metal-enhanced fluorescence sensing platform for selective detection of picric acid in aqueous medium" Analytica Chimica Acta 2020, 1129, 12; Kaja, S., Damera, D. P. and Nag, A.*

59.   "Red-emitting carbon dots as dual sensor for In^{3+} and Pd^{2+} in water"ACS Omega 2020, 5, 8362; Pawar, S., Kaja, S. and Nag, A.*

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

NATIONAL:

1.   K Sumithra attended a Half-day virtual meeting on Theoretical Chemistry at condensed phases (28 September, 2020) organized by BARC and IIT Bombay, 28th September, 2020.

2.   Sahithi and K. Sumithra poster: Band gap engineering in intrinsically doped bilayer graphene. National Conference on Frontiers in Medicinal Chemistry and Nanochemistry, Directorate of Higher Education, Government of Goa, 14th and 15th February 2020. (Poster).

3.   K Sumithra attended Three Days Virtual lecture workshop on "Simulation and modeling in Chemistry" from 2nd to 4th December 2020 Sponsored by Indian Academy of Science, Bengaluru, organized by NIT Surathkal.

4.   K Sumithra attended Global Meet organized by BITS, October, 2020

5. N. Adinarayana, S. Srinivarao, N. Sridhar, S. Murugesan, and K. V. G. Chandra Sekhar. Design, synthesis and biological evaluation of 2-aminobenzimidazoles as Quorum Sensing inhibitors in Pseudomonas aeruginosa. 26th Indian Society for Chemists and Biologists Conference jointly organized with 5th Nirma Institute of Pharmacy International Conference, Ahmadabad, 22nd-24th January 2020.

6. Karankumar, Faheem, G. Surajpyarelal, S. Murugesan, and K. V. G. Chandra Sekhar. In-silico target identification study of novel anti-leishmanial β-carboline agents. 26th Indian Society for Chemists and Biologists Conference jointly organized with 5th Nirma Institute of Pharmacy International Conference, Ahmadabad, 22nd-24th January 2020.

7. Faheem, G. Surajpyarelal, B. Karankumar, S. Murugesan, and K. V. G. Chandra Sekhar. In-silico target identification study of novel anti-leishmanial agents. 26th Indian Society for Chemists and Biologists Conference jointly organized with 5th Nirma Institute of Pharmacy International Conference, Ahmadabad, 22nd-24th January 2020.

8. Almas Shamaila Mohammed, Aniket Balapure, Mahammed Nanne Khaja, Ramakrishnan Ganesan and Jayati Ray Dutta, Naked-eye detection of Hepatitis C viral RNA from clinical samples - Virtual conference in CCMB, HySci-2020, 17-18 Dec, 2020, India.

9. Almas Shamaila Mohammed, Aniket Balapure, Mahammed Nanne Khaja, Ramakrishnan Ganesan and Jayati Ray Dutta, Biosensing of Hepatitis C Viral RNA from Clinical specimens - National Virtual Conference on 'Current Trends and Challenges in Plant Biochemistry and Biotechnology', 20-21 Nov, 2020, BITS-Goa, India.

10. Dr. Chanchal chakraborty, presented at SAIS Sympossium 2020 (webinar), Organized by the School of Applied and Interdisciplinary Sciences, IACS, Kolkata India. 04-05 December, 2020

11. Single crystal XRD structural studies of nickel complexes of 1,10-phenanthroline and isophthalic acid, Sabitha D., Krishnan Rangan, National Symposium on Convergence of Chemistry & Materials (CCM 2019), December, 2019, BITS-Pilani Hyderabad Campus, Hyderabad.

12. Crystal structure and spectroscopic studies of phendione and its cobalt complex, Ravallika Aluri, Krishnan Rangan, National Symposium on Convergence of Chemistry & Materials (CCM 2019), December, 2019, BITS-Pilani Hyderabad Campus, Hyderabad.

13. Towards rational design of functional KLVFF based amyloid material for toxic metal binding, Aishwarya Natarajan, Ramakrishna Vadrevu, Krishnan Rangan, National Symposium on Convergence of Chemistry & Materials (CCM 2019), December, 2019, BITS-Pilani Hyderabad Campus, Hyderabad.

INTERNATIONAL:

1. S K Saha attended 57th Annual Convention of Chemists, 2020 & International Conference on Recent Trends in Chemical Sciences during 26th to 29th December, 2020 organized by Indian Chemical Society, Kolkata.

2. Anupam Bhattacharya virtually participated in "Recent Advances in Organic, Medicinal and Biological Chemistry", 8-9th July 2020, VIT- Chennai."

3. Anupam Bhattacharya presented an ePoster: Total synthesis of quinolineserrulatane alkaloid (±)-Microthecaline A: First example of a natural product bearing tricyclic quinoline-serrulatane scaffold.

4. Karankumar, Faheem, S. Murugesan, and K. V. G. Chandra Sekhar. Preliminary investigation of drug repurposing as a direction towards anti-Leishmanial drug discovery, International Conference on Drug Discovery (ICDD2020), BITS-Hyderabad, 29th February-2nd March 2020.

5. Jayanty Subbalakshmi participated in Wiley online seminar on "General Practices for Composing a High Impact Paper" July 30, 31, August 5. Received Certification of Completion

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED:

1. Sustainable Chemistry Series: Volume 5 Solution Combustion Synthesis of Nanostructured Solid Catalysts for Sustainable Chemistry; Chapter: Solution combustion synthesis related to photocatalytic reactions; Sounak Roy, S. Challagulla, World Scientific (2020)

2. DOI: https://doi.org/10.1142/q0257 ISBN: 978-1-78634-869-2 (Hard Cover)

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   NIL

8. INVITED TALKS GIVEN BY BITS FACULTY:

1. N. Rajesh, delivered an invited talk on "Realizing the significance of biopolymer composites and nano *carbon adsorbents for toxic metals"* at First International Online Conference on Blends, Composites, Bio-Composites and Nanocomposites (ICNC–2020), Organized by MG University Kerala and Siberian Federal University, Russia.

2. K. Sumithra delivered an invited talk: Computational study of adsorption of some pollutant gases on chemically modified graphene surfaces, National Conference on Frontiers in Medicinal Chemistry and Nanochemistry, Directorate of Higher Education, Government of Goa, 14th and 15th February 2020.

3. K. Sumithra delivered an invited talk "Adsorption and sensing of some pollutant gases on chemically modified graphene surfaces", BITS Pilani Global meet on Computational Modeling and Simulation: Recent innovations, challenges, and perspectives. October 30, 2020.

4. Dr. Chanchal Chakraborty delivered the invited lecture in SAIS Symposium 2020, at Indian Association for the Cultivation of Science, Kolkata on December 4, 2020.

5. Prof. Ramakrishnan Ganesan presented an invited talk on the topic of 'Solid State Synthesis of Functional Nanomaterials' in an international symposium on 'Recent Advances in Electrochemical Sciences for Energy and Environment' organized by Sathyamaba Institute of Science and Technology held on 15th June 2020.

6. Prof. Ramakrishnan Ganesan presented an invited talk on 'Solid State Synthesis of Photocatalytically Active Functional Nanocomposites' in the SPARC sponsored International Symposium organized by Defense Institute of Advanced Technology (DIAT), Pune on 17th September 2020.

7. Prof. Ramakrishnan Ganesan presented an invited lecture on the topic 'Colloids and Surfactants in Nanotechnology'in the refresher course conducted by the National Centre for Nanoscience and Nanotechnology, University of Madras on 9th October 2020.

8. Dr. Krishnan R; Green Chemistry, at the St. Francis College, Begumpet, Hyderabad.

9. Invited talk delivered by Jayanty S on 31st January, 2020 on "Polymers" at the Final Quiz Competition (South zone) organized by Dr. K.V. Rao Scientific Society for school students at our Campus.

10. Invited talk given by Jayanty S on "Career Development" for Intermediate College students on 09-02-2020 in F103 at our campus organized by Veda Scio Foundation.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. "Tweezers with a Twist: New Fluorescent Molecular Tweezers and the Surprizes Therein" by Professor Asheesh Srivastava from IISER, Bhopal on the topic on 5th Feb, 2020

2. "Chemistry of molecules in solid-state: mechanical effects" by Prof. C Malla Reddy from IISER, Kolkata on 30 June, 2020.

3. "Connecting the Dots: Bringing Ph back into the Ph.D" by Prof. Abijit Patra, IISER Bhopal, on July 24, 2020.

4. "JAGADISH CHANDRA BOSE: THE ROAD NOT TAKEN" by Professor Gautam Basu, Bose Institute Kolkata, on July 28, 2020

5. "Using Organic Chemistry to Generate a Smelly Gas", by Prof. Harinath Chakrapani, IISER Pune, on August 14, 2020

6. "Porous Molecular Solid for Separations"; by Dr. Tamoghna Mitra, School of Material and Chemical Engineering, Taizhou University, Taizhou, China, on September 26, 2020

7. "Green Chemistry and Engineering from a Societal Perspective" Dr. Ranjan Jana, Organic & Medicinal Chemistry Division, CSIR-Indian Institute of Chemical Biology, Kolkata, on October, 3, 2020

8. "Biomedical Applications and Biodegradability of Graphene Family Materials", Dr. Rajendra Kurapati, National University of Ireland, Galway, on October 31, 2020

10. AWARDS AND RECOGNITIONS

WON BY FACULTY:

1. **Subit K Saha**: Chairperson in a technical session under Physical Chemistry Section in online 57th Annual Convention of Chemists, 2020 & International Conference on Recent Trends in Chemical Sciences during 26th to 29th December, 2020 organized by Indian Chemical Society, Kolkata.

2. **Jayanti S:** Invited as Judge for "20th Annual Research awards" KVRSS 2019-2020, **on 13-06-2020.**

3. **Jayanty S:** Invited as a Panel of Judge for the "9th SPARK-Innovation awards" for school children of southern states held on **08-02-2020** at Hyderabad.

4. **Amit Nag**: Co-Principal Investigator of an ongoing CSIR project. Has been the Principal Investigator of a completed DST project.

WON BY STUDENTS:

1. Ms. Susmita Roy received the ACS Best Oral Presentation Award in SAIS Symposium 2020, at Indian Association for the Cultivation of Science, Kolkata.

2. Mr Thirupathi Reddu Penjarla has won best poster award in Recent Advances in Organic, Medicinal and Biological Chemistry", 8-9th July 2020, VIT- Chennai.

3. Ms. Susmita Roy received the ACS Best Oral Presentation Award in SAIS Symposium 2020, at Indian Association for the Cultivation of Science, Kolkata.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION - NIL -

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Patent Published on 24-07-2020 by Jayanty Subbalakshmi, Principal Inventor, Title: Compounds for use as anti-cancer agents and a process for synthesizing the same, Birla Institute of Technology and Science-Pilani, Hyderabad campus. Co-Inventors: Anwar Hussaiani SD, Balaram Ghosh, Yamini Bobde. Application number, 201941002679

2. Patent Published on 27-11-2020 by Jayanty Subbalakshmi, Principal Inventor, Title: Novel Xanthene amides and processes for preparing the same, Birla Institute of Technology and Science-Pilani, Hyderabad campus. Co-Inventors: Himabindu Battula, Balaram Ghosh, Yamini Bobde. Application number, 201911020063.

3. Patent Filed on 19-05-2020 by Jayanty Subbalakshmi, Principal Inventor, on Amide derivatives of Aminopentanoic acid. Birla Institute of Technology and Science-Pilani, Hyderabad campus.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Chemistry Association facilitated the following events:

Freshmen orientation for 2020 chemistry students: 4th December, 2020.The event was diligently organized by the members of Alchemy. It was held as a welcome party for the batch of 2019-2024 B2 students. The purpose of this event was to make every "fresher" feel welcome and an integral part of the BITS family and to give them the confidence they need to take on the challenges of their years ahead.

An interview session was held with Dr. Ruchi Jain Dey, Department of Biological Sciences on various virus related diseases, corona family and Covid-19.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: NIL

B3.10.4   Department of Civil Engineering

Number of faculty members

Senior Professors, Professors	3
Associate Professors	3
Assistant Professors	10
Lecturers	0
Visiting Faculty	0

Head of the Department : **Dr. Murari R. R. Varma**

Contact details : 040-66303584; Email: murari@hyderabad.bits-pilani.ac.in

Number of PhD Scholars : 29

    Full Time : 27

    Part Time : 2

    Aspirant Scheme : NA

Ph.D. Thesis Submitted/defended during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	Babu Sarat Kambham	2013PHXF0513H	Performance Related Aspects of Bitumen and Bituminous Concrete Subjected to Aging in Indian Conditions – An Experimental Investigation	Prof. V Vinayaka Ram	Prof. Sridhar Raju
2.	Challagulla Surya Prakash	2015PHXF0407H	Dynamic Behavior of Primary Structures attached with Flexibly Connected Secondary Systems	Dr. ChanduParimi	-
3.	VemulaSwathi	2012PH44029H	Analysing the linkages between urban floods, climate change and land use	Prof. K. S. Raju	-
4.	M. Jayatheja	2016PHXP0403H	Performance Evaluation of Retaining Walls with Backfill Soils Partially Replaced by Building Derived Materials	Dr. AnasuaGuhaRay	Dr. ArkamitraKar
5.	AthiraGopinath	2016PHXF0051H	Utilisation of Rice and Sugar Industry By-Products as Energy Feedstock and Supplementary Cementitious Materials"	Dr. Bahurudeen A.	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Mitigation strategy to counter top-down cracking due to non-uniform contact stresses in flexible Pavements	Civil Engineering	Prof. Sridhar Raju	Dr. ChanduParimi	National Highway Authority of India (NHAI)	-	26,50,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Assessment of damages to Highway Property at GMR Pochanpalli Expressways	Civil Engineering	Prof. Sridhar Raju, Dr. BB Majumdar, Dr. PrasantaSahu	-	Team Insurance	-	3,80,000
2.	Quality audit of Telangana state PWD roads	Civil Engineering	Prof. Sridhar Raju, Dr. PrasantaSahu, Dr. BB Majumdar	-	Telangana PWD	-	2,60,000

C. International Sanctioned Projects – NIL -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Nil	-	-	-	-	-	-

D. Institute Sanctioned Projects – NIL -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Nil	-	-	-	-	-	-

E. Travel/Resarch Visit Grants

S.No	Faculty Name	Department	Funding Agency	Amount Sanctioned (INR)
1	Dr. Bandhan Bandhu Majumdar	Civil Engineering	DST SERB	2,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Mitigation strategy to counter top-down cracking due to non-uniform contact stresses in flexible Pavements	Civil Engineering	Prof. Sridhar Raju	Dr. Chandu Parimi	National Highway Authority of India (NHAI)	-	26,50,000
2	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Civil Engineering	Dr. Mohan. S.C.	-	DST - SERB	-	43,20,000
3	Development of a comprehensive methodology to improve road traffic safety in Indian urban roadways based on advanced statistical techniques	Civil Engineering	Dr. BandhanMajumdar	-	DST-SERB	-	11,39,000
4	Economic Construction Practice Using Bacterial Inclusions in Concrete to Improve its Durability	Civil Engineering	Dr. A. Kar,	Prof. Jayati Ray Dutta (Biology)	CSIR	-	1,70,000
5	Development of Pedestrian Facility Assessment Tool for Improving Pedestrian Safety Condition in Hyderabad	Civil Engineering	Dr. BandhanMajumdar	Dr. Prasanta Kumar Sahu	Awareness in Action, Hyderabad	-	1,00,000
6	Coastal wetland Characterization using L and S bands of Polarimetric SAR data	Civil Engineering	Dr. Rajitha K.	-	ISRO	-	13,58,000
7	Examination of binder loss in bituminous mixture for In-Service pavements	Civil Engineering	Dr. Sridhar Raju	Dr. PrasantaSahu	Telangana Roads & Buildings	None	9,90,000
8	Rainfall-Runoff Modelling for Lower Godavari Basin in a Changing Climate	Civil Engineering	Prof. K.Srinivasa Raju & Prof D. Nagesh Kumar	-	CSIR	Indian Institute of Science, Bangalore	20,00,000
9	"Experimental and Computational studies of Surface Water Quality Parameters from Morphometry and Spectral Characteristics"	Civil Engineering	Dr. Jagadeesh Anmala	Dr. Murari R. R. Varma & Dr. K Rajitha	CSIR	-	41,98,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Evaluation of the efficiency of bacterial inclusions in concrete	Civil Engineering	Dr. A. Kar	Prof. Sridhar Raju, Dr. Chandu Parimi, Dr. Jayati Ray Dutta	ALIENS Developers Ltd.	-	11,40,000
2	Assessment of damages to Highway Property at GMR Pochanpalli Expressways	Civil Engineering	Prof. Sridhar Raju, Dr. BB Majumdar, Dr. Prasanta Sahu	-	Team Insurance	-	3,80,000
3	Quality audit of Telangana state PWD roads	Civil Engineering	Prof. Sridhar Raju, Dr. Prasanta Sahu, Dr. BB Majumdar	-	Telangana PWD	-	2,60,000

C. Ongoing International Sanctioned Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Implementation of plants and treated natural fibers to enhance the strength properties of soft soil and to decrease the rate of surface erosion (**Nat-Treat**)	Civil Engineering	Dr. Anasua GuhaRay & Dr. Wei Wu (University of Vienna, Austria)	Dr. A. Kar, and Dr. M. Acharya (University of Vienna, Austria)	Indo-Austria Scientific and Technological Cooperation between WTZ (Austria) and DST (India)	BOKU, University of Vienna, Austria	6,40,000
2.	Transport policy interventions to curb particulate matter emissions in Chandigarh	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Bandhu Majumdar and Prof. Ashoke Kumar Sarkar (Pilani Campus)	Global Challenge Research Fund - United Kingdom	Cardiff University	25,50,000
3.	Congestion Pricing: Planning for optimal strategies & commuters behavioral implications under different pricing schemes	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Majumdar and Prof. Asoke Kumar Sarkar (Pilani Campus)	SPARC - MHRD, Govt. of India	Cardiff University, New Castle University	42,00,000
4.	Prevention of hazardous field-firing of bagasse and its sustainable utilization as a raw material in an innovative industrial process	Civil Engineering	Dr. Bahurudeen A.	Dr. Prasanta Kumar Sahu	SPARC, MHRD	KYUSHU UNIVERSITY	28,79,000

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Shrinkage Properties of Concrete with Alkali - Activated Binder. (OPERA)	Civil Engineering	Dr. A. Kar,	-	OPERA	-	18,20,000
2	Performance assessment of agrowaste as supplementary cementitious materials (OPERA)	Civil Engineering	Dr. Bahurudeen	-	OPERA	-	18,20,000
3	Bicycle and Pedestrian Modelling in Hyderabad	Civil Engineering	Dr. Bandhan Majumdar	-	RIG	-	2,00,000
4	Road Safety Evaluation	Civil Engineering	Dr. Bandhan Majumdar	-	ACRG	-	8,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Performance Evaluation of Backfill Soils partially replaced with Building Derived Materials	Civil Engineering	Dr. AnasuaGuhaRay	Dr. A. Kar, and Dr. N. James (IIT Ropar)	DST - SERB	-	24,43,000
2.	Multiobjective Evolutionary Approach for Solving Water Distribution Network Design Optimization	Civil Engineering	Prof. Vasan A.	Dr. Murari R. R. Varma	CSIR	-	18,46,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Rehabilitation and Upgrading to 2-lanes/2-lane with paved shoulder configuration and strengtheninh of Birpur-Bihpur section of NH-106 in the state of Bihar under Phase 1 of NHIIP on EPC basis	Civil Engineering	Dr. Mohan S.C, Prof. Sridhar Raju Prof. P N Rao, Dr. Chandu. Parimi, Dr. Anasua GuhaRay	-	IL&FS Engineering and Construction Company Ltd	-	9,50,000

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Pre-feasibility study of battery electric buses in India	Civil Engineering	Dr. Bandhan Bandhu, Dr. Prasanta Sahu; Prof. Ashoke Sarkar	-	Global Challenge Research Fund, UK	Cardiff University, UK	13,00,000

D. Completed Institute Projects   - NIL -

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Mazhar Syed, Anasua GuhaRay and Divyam Goel (2020), "Strength Characterisation of Fiber Reinforced Expansive Subgrade Soil stabilised with Alkali Activated Binder", Road Materials and Pavement Design, Springer, https://doi.org/10.1080/14680629.2020.1869062 (accepted).

2. G. SachinChakravarthy, AnasuaGuhaRay and ArkamitraKar (2020), "Effect of Soil Burial Exposure on Durability of Alkali Activated Binder Treated Jute Geotextile", Innovative Infrastructure Solutions, Springer (accepted).

3. Mazhar Syed and AnasuaGuhaRay (2020), "Effect of Natural Fiber Reinforcement on Strength Response of Alkali Activated Binder Treated Expansive Soil: Experimental Investigation and Reliability Analysis", Construction and Building Materials, Elsevier, https://doi.org/10.1016/j.conbuildmat.2020.121743 (in press).

4. Mazhar Syed and AnasuaGuhaRay (2020), "Effect of Fiber Reinforcement on Mechanical Behaviour of Alkali Activated Binder treated Expansive Soil: A Reliability-based Approach", International Journal of Geomechanics, ASCE, doi: 10.1061/(ASCE)GM.1943-5622.0001871, 20(12): 04020225-1-14.

5. Mazhar Syed, AnasuaGuhaRay and ArkamitraKar (2020), "Stabilisation of Expansive Clayey Soil with Alkali Activated Binders", Geotechnical and Geological Engineering, Springer, 38(6), 6657-6677, doi: 10.1007/s10706-020-01461-9.

6. Mazhar Syed and AnasuaGuhaRay (2020), "Stabilization of Expansive Clay by Fiber-reinforced Alkali Activated Binder: An Experimental Investigation and Prediction Modeling", International Journal of Geotechnical Engineering, Taylor and Francis, doi: 10.1080/19386362.2020.1775358.

7. Mazhar Syed, AnasuaGuhaRay, DivyamGoel, KunalAsati, Lin Peng (2020), "Effect of Freeze-Thaw Cycles on Black Cotton Soil Reinforced with Coir and Hemp Fibres in Alkali Activated Binder", International Journal of Geosynthetics and Ground Engineering, Springer, 6(19), doi: 10.1007/s40891-020-00200-

8. S.P.Challagulla; C.Parimi; Jagadeesh Anmala.: Prediction of Spectral Acceleration of a Light Structure with a Flexible Secondary System Using Artificial Neural Networks.International Journal of Structural Engineering.2020 (In press).

9. S.P.Challagulla; C.Parimi; P.K.Thiruvikraman.: Effect of the Sliding of Stacked Live Loads on the Seismic Response of Structures.Engineering Journal.2020 (In press).

10. S.P.Challagulla; C.Parimi; S.Pradeep; Ehsan Noroozinejad Farsangi.: Estimation of Dynamic Design Parameters for Buildings with Multiple Sliding Non-Structural Elements Using Machine Learning.International Journal of Structural Engineering.2020 (In press).

11. S.P.Challagulla; C.Parimi; S.C.Mohan; E.Noroozinejad Farsangi.: Seismic Response of Building Structures with Sliding Non-Structural Elements.International Journal of Engineering.2020, 33(2), 205-212.

12. B.R.Kiranmaye; J.R.Dutta; A.Kar; C.Parimi; Sridhar Raju.: Optimization of Culture Parameters of Pseudomonas Alcaligenes for Crack Healing in Concrete.Materials Today: Proceedings.2020.

13. CH. B. V. Hareen, S. C. Mohan, Evaluation of seismic torsional response of ductile RC buildings with vertical stiffness irregularity, Earthquake and structures, submitted, STRUCTURES-D-20-01732, 2020.

14. Saiteja Sistla, S C Mohan, Parametric studies on the Seismic Performance of Unbonded Fibre Reinforced Elastomeric Isolator with Locally Available Fibres, submitted, submitted, ENGSTRUCT-D-20-00581, 2020.

15. Saiteja Sistla, S C Mohan, Numerical Modelling of Bonded and Unbonded Flax Fiber Reinforced Elastomeric Isolator and their Application to RC Building, Accepted, MATPR17983, 2020.

16. M. B. Patil, U. Ramakrishna, S. C. Mohan, Multi-objective optimisation of damper placement for improved seismic response in dynamically similar adjacent buildings. Sadhana, 45(1), 1-12, 2020.

17. U. Ramakrishna, S. C. Mohan, Vibration Control of Dynamically Similar Buildings Optimally Connected by Viscoelastic Dampers, Journal of The Institution of Engineers (India): Series A, 1-13, 2020.

18. U. Ramakrishna, S. C. Mohan, Experiments on Coupled Technique for Adjacent Similar Buildings, International Journal of Engineering 33 (9), 1703-1709, 2020

19. U. Ramakrishna, S. C. Mohan, Performance of low-cost viscoelastic damper for coupling adjacent structures subjected dynamic loads, Journal Materials Today: Proceedings, Vol 28, Part 2, 1024-1029, 2020.

20. Ramagiri, K. K., Patil, S., Mundra, H., and Kar, A., (2020), "Laboratory investigations on the effects of acid attack on concrete containing portland cement partially replaced with ambient-cured alkali-activated binders", Advances in Concrete Construction (Techno-Press), 10 (3), pp. 221-236.

21. Kameshwar P, Athira G, Bahurudeen A, Nanthagopalan P. (2020). Suitable pretreatment process for rice husk ash towards dosage optimization and its effect on properties of cementitious mortar. Structural Concrete Journal. Vol 22. pp1–13.

22. Athira G, Bahurudeen A, Vishnu, VS (2020). Quantification of geographical proximity of waste sources for sustainable waste management and recycling. Waste Management & Research, Vol 38.

23. Athira G, Bahurudeen A, Appari S (2020). Thermochemical Conversion: Composition, Reaction Kinetics, and Characterisation of By-Products. Springer-Sugar Tech Journal. Vol 22.

24. Athira G, Bahurudeen A, Vishnu, VS (2020). Availability and accessibility of sugar industry waste for its utilization: A network analysis. Springer- Sugar Tech Journal. Vol 22.

25. Murugesan T, Vidjeapriya R, Bahurudeen, A (2020). Sustainable use of industrial wastes in crusher sand based concrete. Structural Concrete Journal. Vol 22.

26. Jittin V, Bahurudeen A, Ajinkya SD (2020). Utilisation of rice husk ash for cleaner production of different construction products, Elsevier Journal of Cleaner Production (Impact factor: 6.352) Vol 263.

27. Murugesh T, Vidjeapriya R, Bahurudeen A. (2020). Development of sustainable alkali activated binder for construction using SCBA and MW, Springer- SugarTech Journal, Vol 22, 85-895.

28. Athira G, Bahurudeen A, Prasanta K. Sahu Manu Santhanam, Prakash N, Lalu S (2020). Effective utilization of sugar industry waste. Springer-Journal of Material Cycles and Waste Management, Vol 22.

29. Murugesh T, Vidjeapriya R, Bahurudeen A (2020). Resource Utilization Between Sugar and Construction Industries, Springer-SugarTech Journal, Vol 21.

30. Shekhar, S., Ghosh, J., Ghosh, S. (2020). "Impact of design code evolution on the failure mechanism and seismic fragility of highway bridge piers", ASCE Journal of Bridge Engineering, 25 (2), 04019140. https://doi.org/10.1061/ (ASCE) BE.1943-5592.0001518, Editor's Choice Article.

31. Shekhar, S., Ghosh, J. (2020). "A metamodeling based seismic life-cycle cost assessment framework for highway bridge structures", Reliability Engineering & System Safety, 195, March 2020. https://doi.org/10.1016/j.ress.2019.106724

32. V.Swathi, K. Srinivasa Raju, Murari R R Varma (2020) Addition of overland runoff and flow routing methods to SWMM – Model application to Hyderabad, India, Environmental Monitoring and Assessment, Springer, Vol. 192 (Article Number 643). DOI: 10.1007/s10661-020-08490-0. (Article available in journal web site)

33. V.Swathi, K. Srinivasa Raju, S. Sai Veena (2020) Modelling Impact of Future Climate and Land Use Land Cover on Flood Vulnerability for Policy Support-Hyderabad, India, Journal of Water Policy, IWA Publishing, Vol. 22(5), pp. 733-747. DOI: 10.2166/wp.2020.106 (Article available in journal web site)

34. K. Srinivasa Raju, D. Nagesh Kumar (2020) Review of Approaches for Selection and Ensembling of GCMs, Journal of Water and Climate Change, IWA Publishing, Vol. 11, No.3, pp. 577-599. DOI: 10.2166/wcc.2020.128. (Invited paper)(Article available in journal web site)

35. D.Nagesh Kumar, Apoorva R Shastry, K. Srinivasa Raju (2020) Delineation of Flood-Prone Areas using Modified Topographic Index for a River Basin, H2Open Journal, IWA Publishing, Vol. 3, No. 1, pp. 58-68. DOI: 10.2166/h2oj.2020.021. (Article available in journal web site)

36. Vikrant P. Katekara, Sandip S. Deshmukh, Vasan, A., Energy, Drinking Water and Health Nexus in India and its effects on Environment and Economy. Journal of Water and Climate Change, 2020. (Accepted)

37. Pankaj, B.S., Naidu, M.N., Vasan, A., Murari RR Varma, Self-Adaptive Cuckoo Search Algorithm for Optimal Design of Water Distribution Systems. Water Resources Management, 34, 3129–3146, 2020.

38. Turuganti Venkateswarlu., Jagadeesh Anmala, Mayank Dharwa 2020, PCA, CCA, and ANN Modeling of Climate and Land-Use Effects on Stream Water Quality of Karst Watershed in Upper Green River, Kentucky, USA, ASCE, Journal of Hydrologic Engineering, 25(6), 05020008-1 to 05020008-11, DOI: 10.1061/(ASCE)HE.1943-5584.0001921.

39. Prakash Mohan, M. M., K. Rajitha, and Murari RR Varma. "Integration of soil moisture as an auxiliary parameter for the anchor pixel selection process in SEBAL using Landsat 8 and Sentinel-1A images." International Journal of Remote Sensing 41(3) (2020): 1214-1231.

40. Prakash Mohan, M. M., Kanchirapuzha, R. & Murari R. R. Varma, (2020) "Review of approaches for the estimation of sensible heat flux in remote sensing-based evapotranspiration models," Journal of Applied Remote Sensing 14(4), 041501, doi: 10.1117/1.JRS.14.041501.

41. Swathi, V., Raju, K.S. & Varma, M.R.R. (2020) Addition of overland runoff and flow routing methods to SWMM - model application to Hyderabad, India. Environmental Monitoring and Assessment 192, 643. https://doi.org/10.1007/s10661-020-08490-0

42. Patil, M. B., Naidu, M. N., Vasan, A., Varma, M. R. R (2020). Water distribution system design using multi-objective particle swarm optimisation. Sadhana, 45(1), 21.DOI: https://doi.org/10.1007/s12046-019-1258-y

43. Sai Kubair, Waim Akshay Ravindra, Sridhar. R, Sham Ravindranath, "Laboratory evaluation of gap graded rubber modified warm mix asphalt", International Journal of Pavement Research and Technology, DOI-10.1007/s42947-020-0317-4.

44. Akanksha P, Sumit K. Singh, Sridhar. R, Sham Ravindranath, "Fundamental limitations of performance grade rutting and fatigue cracking criteria of bitumen" Indian Highways, Vol 48, No. 3, March 2020.

45. Chandra A., Pani A, Sahu P and Majumdar BB. (2020). Designing Freight Traffic Analysis Zones for Metropolitan Areas: Identification of Optimal Scale for Macro-level Freight Travel Analysis. Transportation Planning and Technology (In press)

46. Pani, A., Bhat, F., and Sahu, P. (2020), "Effects of Business Age and Size on Freight Demand: A Decomposition Analysis of Indian Establishments" Transportation Research Record, Vol. 2674 (2), pp. 112-126. DOI: 10.1177/0361198120902432 (AT015 Best Paper Award – TRB 2020)

47. Pani, A., Sahu, P and., Majumdar, B. (2020), "Expenditure-based Segmentation of Freight Travel Markets: Identifying the Determinants of Freight Transport Expenditure for Developing Marketing Strategies", Research in Transportation Business & Management. DOI: 10.1016/j.rtbm.2020.100437

48. Majumdar, B., Dissanayake, D., Rajput, A., Saw, Y., and Sahu, P. (2020), "Prioritizing Metro Service Quality Attributes to Facilitate Transit Agency Interventions Leading to Enhanced Commuter Experience- TOPSIS Ranking and Importance-Satisfaction Analysis methods", Transportation Research Record, Vol. 2674(6), pp. 124-139. DOI: 10.1080/03081060.2020.1780711

49. Gopinathm A., Bahurudeen A., Sahu, P., Santhanam, M., Nanthagopalan, P., and Saheb, L. (2020), "Effective Valorization of Sugar Industry Waste for Cleaner Production in Indian Construction Sector: A Geospatial Approach", Journal of Material Cycles and Waste Management. DOI: 10.1007/s10163-019-00963-w

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED:

1. Kruthi K. Ramagiri, Darshan Rajesh Chauhan, Shashank Gupta, RitikaSridharan, ArkamitraKar, AvinashUnnikrishna, and AnasuaGuharay (2021), "Predicting Durability Characteristics of Concrete with Alkali Activated Binders using Reliability Analysis", Earth and Space Conference, ASCE, Seattle, Washington, April 19-22, 2021 (paper accepted).

2. Mazhar, S., GuhaRay, A., Garg, A. (2021), "Performance Evaluation of fiber-reinforced expansive subgrade soil stabilised with lime, cement, and alkali-activated binder: A comparative study", 6th GeoChina International Conference: Civil and Transportation Infrastructures, Nanchang, China, 19-21 July 2021 (paper accepted).

3. Chakravarthy, G.S., GuhaRay, A. (2020), "Effect of Soil Burial on Durability of Alkali Activated Binder treated Jute Geotextile", Indian Geotechnical Conference (IGC), Andhra University, 17-19 December 2020.

4. Mazhar, S., Kasat, Y.V., Sarda, G.V., GuhaRay, A. (2020), "Effect of Fiber Reinforcement on Strength of Geopolymerised Soil: An Experimental Investigation and Numerical Modelling", Indian Geotechnical Conference (IGC), Andhra University, 17-19 December 2020.

5. Jayatheja M., GuhaRay, A. (2020), "Earth Pressures of Soils partially replaced with Building Derived Materials for Narrow Backfill Condition", Indian Geotechnical Conference (IGC), Andhra University, 17-19 December 2020.

6. Chakravarthy G.S., GuhaRay, A., Kar, A. (2020), "Strength Characterisation of Alkali Activated Binder treated Jute for Ground Improvement", 2nd ASCE India Conference on Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE 2020), Kolkata, 2-4 March.

7. Jayatheja, M., GuhaRay A., Kar, A. (2020), "Experimental Investigations on Earth Pressures of Sand partially replaced with Building Derived Material", 2nd ASCE India Conference on Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE 2020), Kolkata, 2-4 March.

8. Ansuman Panda, Manish Mehtha, Sammed Magdum and P. N. Rao (2020), "Sloshing Effect of Water in Elevated Water Tank on a G+2 Building", ISSC 2020, IIT, Hyderabad, India.

9. C.Parimi; S.P.Challagulla: Seismic Response of Structures with Stacked and Sliding Live Loads, 17th WCEE, 2020, Sendai, Japan, 2020.

10. S.C. Mohan, CH.B.V. Hareen, Pushover based Torsional Response of Infill Wall Buildings with Plan and Vertical Irregularities, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. Accepted.

11. U. Ramakrishna, S.C. Mohan, Multi-objective Particle Swarm Optimization for Seismic Response Reduction of Dynamically Similar Adjacent Buildings with Optimal VE Dampers, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. Accepted.

12. Saiteja Sistla, S C Mohan, Numerical Modelling of Bonded and Unbonded Flax Fiber Reinforced Elastomeric Isolator and their Application to RC Building, ICE3MT2020 Conference, 09th and 10th October, 2020.

13. S.C. Mohan, Nishant Panwar, Ajay C B Maniteja, Two Stage SEREP Method for Condensation of Space Frame Structure for Dynamic Analysis, Proceedings of 12th SEC2020 - Structural Engineering Convention-An International Event, 17-19 December 2020, MNIT, Jaipur, India.

14. R. Rithuparna, V. N. Varada, S. C. Mohan, Effective Peripheral Distribution of Base Isolators for Plan Asymmetric, Proceedings of 12th SEC2020 - Structural Engineering Convention-An International Event,17-19 December 2020, MNIT, jaipur, India.

15. Mansi Trivedi, Aayushi Doshi, Kshema Sara Koshy, S.C. Mohan, Comparative Study on Seismic Performance of Existing Building with and Without Retrofitting Using Lateral Load Resisting Systems, Proceedings of 12th SEC2020 - Structural Engineering Convention-An International Event,17-19 December 2020, MNIT, jaipur, India.

16. Ramagiri, K. K. and Kar, A., (2020), "Effect of high-temperature on the microstructure of alkali-activated binder", Materials Today: Proceedings (In Press, Corrected Proof)

17. Kiranmaye, B. R., Dutta, J. R., Kar, A., Parimi, C., Raju, S., (2020), "Optimization of culture parameters of Pseudomonas alcaligenes for crack healing in concrete", Materials Today: Proceedings (In Press, Corrected Proof)

18. Shekhar, S., Ghosh, J. *"*Metamodeling strategies towards seismic life-cycle cost assessment of highway bridges"*,* Accepted in 7th International Symposium on Life-Cycle Civil Engineering (IALCCE 2020), Shanghai, China, October 27-30, 2020.

19. Shekhar, S., Ghosh, J., and Ghosh, S. *"*Evolution of seismic fragility of multi-span simply supported highway bridges in India"*,* In Proceedings of 2nd ASCE Conference in India on Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies (CRSIDE 2020), Kolkata, March 02-04, 2020.

20. Venkateswarlu, T., Abdul Hannan, Maitreyee Talnikar, J. Anmala, Significance of classification and regression tree (CART) models in the prediction of river water quality, XXV HYDRO 2020 International Conference (Hydraulics, Water Resources & Coastal Engineering) to be held at N.I.T Rourkela, 16-18 December 2020 (Abstract accepted)

21. Sai Kubair, Bhanuprasad Katla, Waim Akshay Ravindra**,** Sridhar. R and Subhash T K. (2020), "Characterization of RAP Added SMA Mixtures", 99th Transportation Research Board Annual Meeting 2018, Transportation Research Board (TRB), Washington, D.C., 12-16 January 2020.

22. Majumdar B.B., Dissanayake D, Rajput AS, Saw Y and Sahu P.K. (2020) Prioritizing Metro Service Quality Attributes to Facilitate Transit Agency Interventions Leading to Enhanced Commuter Experience- TOPSIS Ranking and Importance-Satisfaction Analysis methods. Accepted for presented for 99TH Annual meeting of Transportation Research Board, Washington DC, USA

23. Majumdar B.B, Vendotti N, Patil M., and Sahu PK (2020). A Pedestrian Satisfaction Based Methodology for Prioritization of Critical Sidewalk and Crosswalk Elements influencing Safety and Walkability. Accepted for presented for 99TH, Washington DC, USA. Annual meeting of Transportation Research Board

24. Pani, A., Bhat, F., and Sahu, P. (2020), *"*Effects of Business Age and Size on Freight Demand: A Decomposition Analysis of Indian Establishments*",* 99th Annual Meeting, Transportation Research Board (TRB), Washington D.C., USA, 12th – 16th January. (AT015 Best Paper Award – AT 015: Freight Transportation Planning and Logistics, Transportation Research Board, National Academy of Science, Washington D.C., USA**).**

25. 2. Pani, A., Sahu, P and., Majumdar, B. (2020), "Expenditure-based Segmentation of Freight Travel Markets: Identifying the Determinants of Freight Transport Expenditure and Profiling the Target Markets", 99th Annual Meeting, Transportation Research Board (TRB), Washington D.C., USA, 12th – 16th January.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. GuhaRay A. and Jayatheja M. (2020), "Performance of Retaining Walls Backfilled with Blend of Sand and Building Derived Materials: A Laboratory Scale Study", published as book chapter in Proceedings of the 1st Indo-China Research Series in Geotechnical and Geoenvironmental Engineering, Lecture Notes in Civil Engineering, Springer.

2. Chakravarthy G.S., GuhaRay, A., Kar, A. (2020), "Strength Characterisation of Alkali Activated Binder treated Jute for Ground Improvement", 2nd ASCE India Conference on Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economics (CRSIDE 2020), Kolkata, 2-4 March (accepted as book chapter "Innovative Civil Engineering Materials", Cambridge Scholars publication).

3. Satya Sireesha, V. Padmavathi, V. Sai Venkata Harini, P. N. Rao (2020), "MASW Survey for Mapping Soil Profiles at Investigation Site", Springer Book Chapter, Advances in Geotechnical and Transportation Engineering, Vol.71, pp.249-256. https://doi.org/10.1007/978-981-15-3662-5_20

4. Jayatheja, M., Guharay, A., Kar, A., and Suluguru, A.*,* (2021), "Building Derived Materials—Sand Mixture as a Backfill Material", Sustainable Environment and Infrastructure, Lecture Notes in Civil Engineering - Proceedings of EGRWSE 2019, 90, pp. 437-446.

5. Bahurudeen A and Moorthy (2021). Testing of Construction Materials, ISBN 9780367644956, First International Edition (Boca Raton, London, New York). CRC Press, Taylor & Francis.

6. K.Srinivasa Raju and D.Nagesh Kumar (2020) Fluid Mechanics: Problem solving using MATLAB, Prentice Hall of India (PHI), New Delhi, ISBN-978-93-89347-63-0

7. Naveen Naidu M., Boindala P.S., Vasan A., Varma M.R.R, "Optimization of Water Distribution Networks Using Cuckoo Search Algorithm", In: Venkata Rao R., Taler J. (eds) Advanced Engineering Optimization Through Intelligent Techniques, Advances in Intelligent Systems and Computing, Springer, Singapore, Print ISBN978-981-13-8195-9, 67-74, 2020.

8. Nikitha V., Majumdar B.B., Ram. V and Raju. S. (2020). A User Perception Based Prioritization of Determinants Walkability of Pedestrian Infrastructure Based On Multi-Attribute Decision Making (MADM) Approach: An Indian Experience. Lecture notes in Civil Engineering (In press)

9. Panchal J., Majumdar B.B., Ram. V and Raju. S. (2020) Methodology to identify a key set of elements influencing bicycle-metro integration: A case study of Hyderabad, India. Lecture notes in Civil Engineering (In press)

10. Ingale, A., Sahu, P., Bajpai, R., Maji, A., and Sarkar, A. **(**2020**)** "Understanding Driver Behaviour at Intersection for Mixed Traffic Conditions using Questionnaire Survey" Lecture Notes in Civil Engineering, Vol. 45, Tom V. Mathew et al. (Eds): Transportation Research, Springer Nature Publication.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT:

1. **Workshops/ Seminars/ Symposiums conducted by the Department:**

SPARC – UKIERI WORKSHOP

Concept, Theory and Practice of Road Pricing: Lessons Learned and Way Forward

March 06 – 07, 2020

Project No. P 1075 - Planning for optimal strategies and commuters' behavioral implications under different pricing schemes

PI – **Prasanta Sahu**; Co-PI: **Bandhan Majumdar**

Sponsor – MHRD SPARC; UKIERI

Collaborating Universities: Cardiff University and New Castle University UK

Key Speaker Universities: New Castle University, IIT Bombay, IIT Kharagpur, IISc Bangalore, IIT Guwahati, IIT Hyderabad, IIT Jammu, NIT Srinagar, NIT Surat, Osmania University

Participants: Approximately 100 from 14 states across India - Faculty, PhD and M. Tech students, Industry, Telangana PWD, etc.

Brief Report

A two days International workshop on "Concept, Theory and Practice of Road Pricing: Lessons Learned and Way Forward" was organized by BITS Pilani Hyderabad campus on March 06-07, 2020. The workshop was a part of the Project P: 1075 and was conducted in collaboration with Cardiff and New Castle University UK. The investigators deeply acknowledge and appreciate the MHRD, Government of India and UK – India Education and Research Initiative (UKIERI) for awarding the Gant: P1075 and additional UKIERI Grant to carry forward this research and collaboration the partnering UK universities. The workshop was designed to engage participants in discussions on: Congestion pricing concepts and strategies; Specific implementation issues including-Government policy, Planning considerations, Design considerations, Operations & maintenance; Peer operational and implementation of case studies; Outreach and marketing. A Special Issue on this workshop theme is planned for publication during May 2021 in Research in Transportation Economics journal. The special issue is guest edited by Prasanta Sahu, Dimitris Potglou and Georgina Santos.

The workshop was started with a welcome address by Dr. Bandhan Majumar and followed by an inaugural address by Prof. G Sundar, Director, BITS Pilani – Hyderabad Campus. Chief guest Mr. Ravinder Rao – Engineering Chief Telangana PWD stressed upon the relevance of such a workshop for Indian city agencies to minimize congestion. PI Prasanta Sahu delivered the inaugural lecture on Congestion-Decongestion-Congestion (CDC) and outlined the importance of the project and its outcome. Prof. Sridhar Raju, HOD – Civil Engineering briefed about the usefulness of the project outcome in long term performance of the urban roads. About 12 lectures and 2 panel discussion were held on the workshop theme.

The eminent speakers were Prof. Dilum Disanayke – New Castle University, UK; Prof. K V Krishna Rao, Prof. Gopal Patil and Prof. Avijit Maji – IIT Bombay; Prof. Arkopal Goswami – IIT Kharagpur; Prof. Tarun Rambha – IISc Bangalore; Prof. Akhilesh Maurya – IIT Guwahati; Prof. Ashoke Sarkar and Prof. Ankit Kathuria – IIT Jammu; Prof. Digvijay Pawar – IIT Hyderabad; Prof. Sriniwas Arkatkar– NIT Surat; Prof. Mohammad Shafi Mir – NIT Srinagar; Prof. Kumar Molugaram – Osmania University. The workshop lectures opened a new set of opportunities for developing sustainable transportation systems influencing the choices of people towards travel modes and practices which will help government agencies in travel demand management. The panel discussions in the workshop were helpful in identifying the issues, challenges in implementing congestion pricing by city agencies.

8. INVITED TALKS GIVEN BY BITS FACULTY:

1. Dr. AnasuaGuhaRay delivered an invited talk on "Performance Evaluation of Backfill Soils Partially Replaced with Building Derived Materials" at Indo-China Research Webinar Series in Civil and Environmental Engineering on 8th May, 2020.

1. Dr. AnasuaGuhaRay delivered an invited talk (online) on "Soil Structure Interaction under Extreme Loading Conditions" at Faculty Development Program by Department of Civil Engineering, VignanaBharati Institute of Technology, Hyderabad on 13th June, 2020.

2. Dr. AnasuaGuhaRay delivered an invited talk (online) on "Introduction to Research on Utilisation of Waste Materials in Ground Improvement" at Jadavpur University Alumni Talk by Jadavpur University, Kolkata on 24th June, 2020.

3. Dr. P. N. K Rao delivered an invited talk at "Sustainable Concrete", One-week Faculty Development programme on "Sustainable Construction Materials" (SCM-2020),15th July - 21st July,2020, Org.by CMR College of Engineering &Technology, Hyderabad.

4. Dr. P. N. K Rao delivered an invited talk at "Wind Effects on Tall Structures", One-week Faculty Development Programme on " Design of Tall Building Structures", Org. by Vasavi College of Engineering, 27th - 31st January 2020, Hyderabad

5. Dr. Mohan S C delivered a invited lecture on "Structural Health Monitoring, Scope and Applications" 31th July, 2020, during Faculty Development Program by MIT Ujjain.

6. Dr. Mohan S C delivered a invited lecture on "Structural Health Monitoring" 16th June, 2020, during Faculty Development Program by BMSC, Bangalore.

7. Dr. Mohan S C delivered a invited lecture on "Structural Health Monitoring under Extreme Loads" 13th June, 2020, during Faculty Development Program by VBIT Hyderabad and TASK (Telangana Academy for Skills and Knowledge).

8. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Logic Applications in Water Resources Engineering, Short Term Course on IoT & Artificial Intelligence Applications in Civil Engineering (ICTO-235), National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, December 7-11, 2020 (Delivered lecture on December 9, 2020) (Webinar)

9. Dr. K Srinivasa Raju delivered invited talk on Cluster Analysis, Fuzzy Cluster Analysis and Cluster Validation Techniques, AICTE sponsored one week STTP (online) on Applications of Neuro Fuzzy Techniques in Engineering, MVSR Engineering College, Hyderabad, December 7-12, 2020 (Delivered lecture on December 8, 2020) (Webinar).

10. Dr. K Srinivasa Raju delivered invited talk on Linear Programming and Fuzzy Linear Programming and its Applications, AICTE sponsored one week STTP (online) on Applications of Neuro Fuzzy Techniques in Engineering, MVSR Engineering College, Hyderabad, December 7-12, 2020 (Delivered lecture on December 7, 2020) (Webinar).

11. Dr. K Srinivasa Raju delivered invited talk on Impact of Climate Change on Hydrology, Centre for Water Resources, Jawaharlal Nehru Technological University, Hyderabad (Delivered on December 7, 2020) (Webinar) (Invitation)

12. Dr. K Srinivasa Raju delivered invited talk on Role of Engineering Mechanics in Electronics and Communications Engineering, Interactive Session with First Year Electronics and Communication Engineering Students, Vasavi College of Engineering, Hyderabad (Delivered on December 5, 2020) (Webinar)

13. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Logic based Decision Making, one week online STTP on MADM methods for Mechanical Engineering Research, Sreenidhi Institute of Technology and Science, Hyderabad, November 23-28, 2020 (Delivered lecture on November 25, 2020) (Webinar)

14. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Logic based Decision Making in Irrigation Planning, AICTE sponsored one week STTP (online) on Applications of Neuro Fuzzy Techniques in Engineering, MVSR Engineering College, Hyderabad, November 9-14, 2020 (Delivered lecture on November 11, 2020) (Webinar)

15. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Optimization and Cluster Analysis in Irrigation Planning, AICTE sponsored one week STTP (online) on Applications of Neuro Fuzzy Techniques in Engineering, MVSR Engineering College, Hyderabad, November 9-14, 2020 (Delivered lecture on November 9, 2020) (Webinar).

16. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Logic and Applications, AICTE-ATAL sponsored online FDP on Application of Soft Computing Techniques in Engineering (ASCTE-2020), Dr. S. & S. S. Ghandhy Government Engineering College, Surat, Gujarat, November 2-6, 2020 (Delivered lecture on November 2, 2020) (Webinar)

17. Dr. K Srinivasa Raju delivered invited talk on Multiobjective Optimization and Decision Making: Application to Irrigation Planning, Global Meet on Computational Modelling and Simulation: Recent Innovations, Challenges & Perspectives, October 16-November 7, 2020 (delivered key note lecture on October 16, 2020), BITS Pilani (Webinar) (Global Meet Schedule)

18. Dr. K Srinivasa Raju delivered invited talk on Fuzzy Logic based Decision Making Algorithms for Water Resources Engineering, 2020 National Virtual Conference on Sustainable Construction Technologies & Advancements in Civil Engineering, October 9-10, 2020 (delivered lecture on October 9, 2020), Shri Vishnu Engineering College for Women, Bhimavaram, Andhra Pradesh, October 9-10, 2020 (Delivered lecture on October 9, 2020) (Webinar)

19. Dr. K Srinivasa Raju delivered invited talk on Classification Algorithms in Water Resources Engineering, Faculty Development Program on Research Prospects in Water Resources and Environmental Engineering, TKM College of Engineering, Kollam, Kerala, September 18, 2020 (Webinar)

20. Dr. K Srinivasa Raju delivered invited talk on Multicriterion Decision Making in Water Resources Engineering, AICTE sponsored online STTP, Phase III on Soft Computing Techniques in Civil Engineering: SWrGRsT Applications, Shri Vishnu Engineering College for Women, Bhimavaram, Andhra Pradesh, September 7, 2020 (Webinar)

21. Dr. K Srinivasa Raju delivered invited talk on K-Means and Fuzzy Cluster Analysis in Irrigation Planning, Faculty Development Programme on Recent Modelling Approaches in Water Resources Engineering, Osmania University College of Engineering, Hyderabad, August 21, 2020 (Webinar)

22. Dr. K Srinivasa Raju delivered invited talk on Data Mining in Water Resources Engineering, AICTE Sponsored one week online short term training program on Soft Computing Techniques in Civil Engineering, Shri Vishnu Engineering College for Women, Bhimavaram, Andhra Pradesh, August 18 & August 19, 2020 (Webinar)

23. Dr. K Srinivasa Raju delivered invited talk on Tools and Techniques of E-Learning, A Two day National Conference on Digital Technology and E-Learning Challenges-NCDTEC 2020, Global Institute of Engineering & Technology, Hyderabad, June 5, 2020 (Webinar)

24. Dr. K Srinivasa Raju delivered invited talk on Representative research areas in water resources engineering, One week online faculty development program on Civil Engineering Research-a Step Forward, Department of Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru, May 25, 2020 (Webinar)

25. Prof. A. Vasan delivered a Keynote Speech on "Promoting and Sustaining the Culture of Academic Honesty and Integrity" during the AICTE Sponsored One Week Short Term Training Programme on "Empowering the Moral Values, Ethics and Behavioral Attitude in Teaching Skills among Teachers (Phase-I)" organized by Dr. N.G.P Institute of Technology, Coimbatore on December 01, 2020.

26. Prof. A. Vasan delivered a Webinar on "Mathematical Modelling for Structural Engineering Applications Using Nature-Inspired Optimization Algorithms" organized by Department of Civil Engineering, Sri Sairam Engineering College, Chennai, November 06, 2020.

27. Prof. A. Vasan delivered a Lecture on "Art of Scientific Writing" during the Virtual Workshop on Scientific Article Writing organized by Department of Civil Engineering, Vignana Bharathi Institute of Technology (Autonomous), Hyderabad, May 12, 2020.

28. Dr. Murari R. R Varma delivered lecture on Environmental Impact Assessment as part of the AICTE sponsored Short Term Training Programme - I on "Industrial Pollution and Control Strategies (IPCS)", hosted at Department of Chemical Engineering, Anurag University, Hyderabad on 25th August 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT:

1) Guest/ Distinguished Lecture by: Dr. Vamsi Krishna Sridharan

Organization/ Affiliation: - Assistant Project Scientist at University of California, Santa Cruz

Title of the Talk: Numerical models to address key scientific and management challenges in complex and heavily human-impacted surface water systems.

Date **04th January 2020**

2) Guest/ Distinguished Lecture by: Mr. Hridyesh Tewani

Organization/ Affiliation: - Ex-BITSian, presently pursuing PhD at University of Wisconsin-Madison

Title of the Talk: Studies and uses of composite materials

Date **14th January 2020**

3) Guest/ Distinguished Lecture by: Mr. M Raghupathi, Deputy GM.

Organization/ Affiliation: L&T with expertise in steel structures

Title of the Talk: Work on Motera Cricket Stadium

Date **8th February 2020**

4) Guest/ Distinguished Lecture by: Sh. Satyendra Kumar, Ex-Scientist, CRRI New Delhi

Organization/ Affiliation: Freelancer for the infrastructure consultants & contractors & also as an advisor at the India Roads Congress

Title of the Talk:

Date **28-29th February 2020**

5) Guest/ Distinguished Lecture by: Dr. Balaji Rao,

Organization/ Affiliation: Chief Scientist, CSIR SERC

Title of the Talk: Reliability Applications in Structural Engineering

Date **20th and 21st April 2020**

6) Guest/ Distinguished Lecture by: Dr. Sham Ravindranath

Organization/ Affiliation: Assistant Professor, Polymer Science Department, IIT Roorkee

Title of the Talk: Rheology of Bitumen

Date **7th May 2020**

7) Guest/ Distinguished Lecture by: Mr. T K Shubhash

Organization/ Affiliation: Technical Head, Hindustan Colas Limited, Mumbai

Title of the Talk: Challenges in Design & Construction of World's Tallest Rail Bridge

 Date **23rd May 2020**

8) Guest/ Distinguished Lecture by: Er. Saibaba Ankala

Organization/ Affiliation: Chief Engineer, Indian Railways

Title of the Talk: Challenges in Design & Construction of World's Tallest Rail Bridge

Date **27th May 2020**

9) Guest/ Distinguished Lecture by: Mr. Sayandeep Biswas

Organization/ Affiliation: Project Executive, ITC Limited

Title of the Talk: EPC Contract management

Date **30th May 2020**

10) Guest/ Distinguished Lecture by: Mr. Subhadeep Ghosh

Organization/ Affiliation: USA

Title of the Talk: Computer Application in CE

Date **2nd June 2020**

11) Guest/ Distinguished Lecture by: Prof. A Veeraragavan

Organization/ Affiliation: Professor, IIT Madras

Title of the Talk: Introduction to Pavement Management System

Date **15th June 2020**

12) Guest/ Distinguished Lecture by: Prof. Rajib B Mallick

Organization/ Affiliation: Professor, Civil & Environmental Engineering

Title of the Talk: Utilization of Reclaimed Asphalt Pavement in Flexible Pavements

13) Guest/ Distinguished Lecture by: Dr. Jimmy Thomas

Organization/ Affiliation: Geotechnical Consultant

Title of the Talk: Earth Retaining Structures – An Overview and Case Studies

14) Guest/ Distinguished Lecture by: Prof. Pijush Samui

Organization/ Affiliation: Geotechnical Consultant

Title of the Talk: Artificial Intelligence in Geo-data Modeling

10. AWARDS AND RECOGNITIONS:

a. Won by Faculty:

1. Dr. Anasua GuhaRay was elected as an Executive Member of Indian Geotechnical Society, Hyderabad Chapter (2019-2021).

2. Prof. K. Srinivas Raju was appointed as editor, Journal of water and climate change, IWA with effect from July 1, 2020 for a period of three years (https://iwaponline.com/jwcc/pages/Editorial_Board).

3. Dr. Arkamitra Kar was selected as a member of the RILEM TC MPA. This committee is intended to develop working standards for determining the mechanical behavior of alkali activated concrete.

4. Dr Bandhan Majumdar was awarded International Travel Grant (ITS) from DST, Govt. of India for presenting paper in 99th annual meeting of the Transportation Research Board in Washington DC, USA in January, 2020.

b. Won by Students:

1. Agnivesh Pani - PhD Student received the Best Paper Award from AT015 - Freight Planning and Logistics Committee of Transportation Research Board (TRB), National Academies of Sciences, Engineering and Medicine, Washington DC, USA during the 99th Annual Meeting of TRB –January 2020 at Washington DC.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED   NIL

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: Some of the Activities (Guest Lectures) arranged through Civil Department Associations are as followed below:

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	BOD analyser 2.10 lac	**1**
2.	BOD Incubator 2.10 lac	**1**
3.	Rice Apparatus - 4,56,750	**1**
4.	GoPro camera - 40,200	**1**

B3.10.5   Department of Computer Science and Information Systems

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	1
Associate Professors	5
Assistant Professors	18
Lecturers	0
Visiting Faculty	1
Visiting Assistant Professors	0

Head of the Department   :   **Prof. G Geethakumari**

Contact details   :   040 66303560

Number of Ph.D. Scholars   :

    a)   Full Time   :   20

    b)   Part Time   :   7

Aspirant Scheme   :   1

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1.	SURENDER SINGH SAMANT	2013PHXF0200H	Identification, Categorization and Summarization of Real-World Events from Twitter	Prof. Aruna Malapati	
2.	GOKUL KANNAN SADASIVAM	2013PHXF0201H	Distributed Architecture for Security Threat Analysis of Network Traffic Traces	Prof. C. Hota	
3.	RAJESH KUMAR SHRIVASTAVA	2015PHXF0005H	Code Tamer-proofing using Return Oriented Programming on IoT Devices	Prof. C. Hota	
4.	SANKET MISHTA	2015PHXF0408H	Resilient and Cogniitive IoT Framework for Smart Buildings	Prof. C. Hota	
5.	RASHMI SAHAY	2016PHXF0009H	Securing the Internet of Things Environment against RPL Attacks	Prof. G Geethakumari	Dr Barsha Mitra
6.	Neha Singh	2012PHXF0514H	Quality Mesh Generation from Point Cloud Data	Prof. Tathagata Ray	

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Machine Vision based Adaptive Quality Assurance System for a Generic Assembly Unit of Armaments	CSIS	Sandip S. Deshmukh	Tathagata Ray and Chandu Parimi	DRDO (ARMREB))	-	39,07,000
2	Bio-CPS	CSIS	Chittaranjan Hota		DST		70, 00,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Testing of AI Application	CSIS	Dr. Lov Kumar	N L Bhanu Murthy	TestAIng Solutions Pvt. Ltd.	-	2,40,000

C. International Sanctioned Projects - NIL -

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Conversational Information Systems for low text-illiteracy contexts	CSIS	Dipanjan Chakraborty	-	RIG	-	2,00,000
2	Data enabled IoT system for Noise monitoring, analysis and mitigation (DIN)	CSIS	Manik Gupta	-	RIG	-	2,00,000
3	Data enabled Systems for TRacking and Evaluating Student Stress (DeSTRESS)	CSIS	Manik Gupta	-	ACRG	-	7,00,000
4	Marr on the Microprocessor: A prelude towards understanding Marr's bottom 2 levels in Brains & Machines	CSIS	Venkatakrishnan Ramaswamy	-	RIG	-	2,00,000
5	Towards understanding computational principles in deep networks and brains	CSIS	Venkatakrishnan Ramaswamy		ACRG		10,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	MUT-DROCO: Multipath networking test-bed for Drone Communications	CSIS	Dr. Paresh Saxena	-	DST-SERB	-	22,00,000
2	Interpretation of Tuberculin Reaction Using Medical Photography and Computer Aided Diagnosis.	CSIS	Dr. Jabez Christoper	-	DST-SERB	-	9,94,400

B.   Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Testing of AI Application	CSIS	Dr. Lov Kumar and Lalita Bhanu Murthy Neti	-	TestAIng Solutions Pvt. Ltd.	-	2,40,000

C.   Ongoing International Sanctioned Projects   - NIL -

D.   Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Conversational Information Systems for low text-illiteracy contexts	CSIS	Dipanjan Chakraborty	-	RIG	-	2,00,000
2	Data enabled IoT system for Noise monitoring, analysis and mitigation (DIN)	CSIS	Manik Gupta	-	RIG	-	2,00,000
3	Data enabled Systems for TRacking and Evaluating Student Stress (DeSTRESS)	CSIS	Manik Gupta	-	ACRG	-	7,00,000
4	Marr on the Microprocessor: A prelude towards understanding Marr's bottom 2 levels in Brains & Machines	CSIS	Venkatakrishnan Ramaswamy	-	RIG	-	2,00,000
5	Towards understanding computational principles in deep networks and brains	CSIS	Venkatakrishnan Ramaswamy		ACRG		10,00,000
6	ReSeThIoT: Building Research Framework for Investigating Security Threats for Internet of Things over WiFi.	CSIS	Dr. Rajib Ranjan Maiti	-	RIG	-	2,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects - NIL -

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Network Coding for Multipath Transport	CSIS	Dr. Paresh Saxena	-	AnsuR Tech, Oslo, Norway	-	5,50,000

C. Completed International Projects - NIL -

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Investigation of the Effectiveness of Meta-Heuristic Techniques in Software Testing	CSIS	Dr. Subhrakanta Panda	-	RIG	-	2,00,000
2.	Designing an Attribute Enhanced Spatially and Temporally Aware Role Based Access Control (AESTARBAC) Model for Electronic Healthcare Systems	CSIS	Dr. Barsha Mitra	-	RIG	-	2,00,000
3	How Should I Detect and Fix Code Smell? - Investigating Source Code, and Text Analytic Based Approaches to Find Structural Design Problems in Software Systems	CSIS	Dr. Lov Kumar	-	RIG	-	2,00,000
4	Performance Evaluation and Behavioral Study of Trajectory and Discontinuous Methods based Metaheuristics.	CSIS	Dr Jabez Christopher	-	RIG	-	2,00,000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Rashmi Sahay, G. Geethakumari and Barsha Mitra, "Blockchain based Framework to Secure IoT - LLNs against Routing Attacks", Springer Computing Journal, 2020, SCI Indexed, Impact Factor: 2.06, H-Index 51, SJR-0.42; Computing, 102(11), 2445-2470; DOI**:** 10.1007/s00607-020-00823-8.
2. D Radha Rani and G Geethakumari, "Secure Data Transmission and Detection of Anti-Forensic Attack in Cloud Environment using MECC and DLMNN", Elsevier Computer Communications Journal, SCI-E indexed, Impact Factor: 2.766, Elsevier, Vol (150), pp 799 - 810, January, 2020.
3. Lov Kumar, Sahithi Tummalapalli, and Lalita Bhanu Murthy, An Empirical Framework to Investigate the Impact of Bug Fixing on Internal Quality Attributes." Arabian Journal for Science and Engineering, 1-23, 2020.
4. Avinash Kumar, Vishnu Teja Narapareddy, Veerubhotla Aditya Srikanth, Aruna Malapati, and Lalita Bhanu Murthy Neti, Sarcasm Detection Using Multi-Head Attention Based Bidirectional LSTM, IEEE Access, 8, 6388-6397, Jan 2020.
5. A Kumar, VT Narapareddy, VA Srikanth, LBM Neti, and A Malapati, Aspect-Based Sentiment Classification Using Interactive Gated Convolutional Network, IEEE Access, 8, 22445 – 22453, Jan 2020.
6. B Rajita, Y Ranjan, CT Umesh, and S Panda., Spark-Based Parallel Method for Prediction of Events., Arabian Journal for Science and Engineering, 45(1), 3437–3453, Jan, 2020.
7. SK Gorla, S Velivelli, DK Satpathi, NLB Murthy, and A Malapati, Named Entity Recognition Using Part-of-Speech Rules for Telugu, Information 2020, 11, 82-104, Feb 2020.
8. Rashmi Sahay, G Geethakumari, and Barsha Mitra, A novel blockchain based framework to secure IoT-LLNs against routing attacks, Journal, Computing Journal, 102 (11), 2445-2470, May 2020.
9. G. Goudar and S. Batabyal, Point of Congestion in Large Buffer Mobile Opportunistic Networks, Journal, IEEE Communications Letter, 23(2), 989-1005, July 2020.

10. M. Gupta, and N. Phillips, Knowledge Discovery Using Topological Analysis for Building Sensor Data, MDPI Sensors, Aug 2020.

11. Rasmita Panigrahi, Sanjay K Kuanar, Lov Kumar, Neelamadhab Padhy, A systematic approach for Software refactoring Based on Class and Method Level for AI application, International Journal of Powertrains, 2020.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National and International:

1. Rashmi Sahay, G. Geethakumari and Barsha Mitra, "Partitioning Attacks against RPL in the Internet of Things Environment", Proceedings of the 26th (Virtual) Annual International Conference on Advanced Computing and Communications (ADCOM 2020), Dec 16-18, 2020, India. **CORE Ranking: B**

2. Rashmi Sahay, G Geethakumari, Barsha Mitra, A Feedforward Neural Network based Model to Predict Sub-optimal Path Attack in IoT-LLNs, 20th IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGRID) 2020, May 2020. **CORE Ranking: A**

3. Prajwal Ravishankar and G Geethakumari, "Classification of IoT Binaries in Resource Constrained Environments", Proceedings of the IEEE International Conference on Convergence to Digital World (IEEE ICCDW 2020), February 18 – 20, 2020, India.

4. B.S.A.S Rajita, Deepa Kumari, and S. Panda, A Comparative Analysis of Community Detection Methods in Massive Datasets, International Conference on Modeling, Simulation and Intelligent Computing (MoSICom), 29th – 31st January, 2020.

5. Sahithi Tummalapalli, Lov Kumar, and Lalita Bhanu Murthy Neti, Prediction of Web Service Antipatterns Using Aggregate Software Metrics and Machine Learning Techniques",13th Innovations in Software Engineering Conference (ISEC), India, Feb 2020.

6. Sivakumar Roshan, and Jabez Christopher, Fuzzy Resembler: An Approach for Evaluation of Fuzzy Sets, Innovations in Computer Science and Engineering, Feb 2020

7. Gupta, M., Topological Analysis for Knowledge Discovery from Building Sensor Data, 2020 IEEE/ACM Fifth International Conference on Internet-of-Things Design and Implementation (IoTDI), April 2020

8. Deepa Kumari, B. S. A. S Rajita, and S. Panda, Blockchain: A Survey on Healthcare Perspective and its Challenges, 4th International Conference on Information and Communication Technology for Intelligent Systems (ICTIS), 15th – 16th May, 2020

9. Aaditeshwar Seth, Akshay Gupta, Aparna Moitra, Deepak Kumar, Dipanjan Chakraborty, Lamuel Enoch, Orlanda Ruthven, Paramita Panjal, Rafi A. Siddiqi, Rohit Singh, Sayonee Chatterjee, Sangeeta Saini, Vijay S. Pratap, Reflections from Practical Experiences of Managing Participatory Media Platforms for Development, ICTD 2020, June, 2020. (CORE C)

10. Rohit Dwivedula and Narasimha Bolloju, Transitioning from Plan-driven Methods to Agile Methods - Preparation for a Systematic Literature Review, 5th International Conference on Communications and Electronic Systems (ICCES 2020), June 2020.

11. Suvadip Batabyal, Özgür Erçetin, Optimal Buffering for High Quality Video Streaming in D2D Underlay Networks, IEEE WCNC, June 2020. (CORE B)

12. Ekanshi and Jabez Christopher, Emotion Recognition from Periocular Features, International Conference on Machine Learning, Image Processing, Network Security and Data Sciences, (MIND 2020), June 2020

13. Suvadip Batabyal, Lovekush Sharma, A Quantum Pipeline for an Executable Quantum Instruction Set Architecture, IEEE ISVLSI, July 2020

14. Paresh Saxena, Thomas Dreibholz, Harald Skinnemoen, Özgü Alay, MA Vazquez-Castro, Simone Ferlin, Guray Acar, Resilient Hybrid SatCom and Terrestrial Networking for Unmanned Aerial Vehicles, 2020 IEEE International Conference on Computer Communications (IEEE INFOCOM), July 2020. (CORE A*)

15. Yedhu Tilak P, Vaibhav Yadav, Dhruv Shah and Narasimha Bolloju, A Platform for Enhancing Application Developer Productivity Using Microservices and Micro-Frontends, 2020 IEEE-HYDCON, September 2020

16. Anirudh Kasturi, Anish Reddy Ellore, Paresh Saxena, Chittaranjan Hota, Hybrid Fusion Learning: A Hierarchical Learning Model for Distributed Systems, Proceedings of the 4th International Workshop on Embedded and Mobile Deep Learning (EMDL), MOBICOM, 2020, September 2020, (CORE A*)

17. Mrunal Dhayude and Dipanjan Chakraborty, Rethinking Design of Digital Platforms for Emergent Users: Findings from a Study with Rural Indian Farmers, IndiaHCI 2020, November, 2020

18. Rashmi Sahay, G. Geethakumari and Barsha Mitra, Partitioning Attacks against RPL in the Internet of Things Environment, 26th (Virtual) Annual International Conference on Advanced Computing and Communications (ADCOM 2020), December 2020 (CORE B).

19. N. CHoudhury, A. Hazarika, Low-power DSME based Communication and On-board Processing in UAV for Smart Agriculture, Information and Communication Technology for Competitive Strategies (ICTCS-2020), December 2020

20. Paresh Saxena, Mandan Naresh, Manik Gupta, Anirudh Achanta, Sastri Kota, Smrati Gupta, NANCY: Neural Adaptive Network Coding methodologY for video distribution over wireless networks, 2020 IEEE Global Communications Conference (IEEE GLOBECOM), December 2020. (CORE B)

21. Shivaank Agarwal, Ravindra Gudi, Paresh Saxena, One-shot Learning based classification for segregation of plastic waste, International Conference on Digital Image Computing: Techniques and Applications (DICTA), Dec, 2020, December 2020

22. Thomas Dreibholz, Paresh Saxena, Harald Skinnemoen, Efficient network coding for satellite applications: a live demo of HENCSAT and NECTOR, IEEE Conference on Local Computer Networks (LCN), December 2020. (CORE A)

23. Kanika, Megha, Jabez, Vasan A., Fuzzy System for Facial Emotion Recognition, International Conference on Intelligent Systems Design and Applications, December 2020 (CORE C)

24. Himanshu Gupta, Sanjay Misra, Lov Kumar and N L Bhanu Murthy, An Empirical Study to Investigate Data Sampling Techniques for Improving Code-Smell Prediction using Imbalanced Data",3rd International Conference on Information and Communication Technology and Applications (ICTA 2020), Nigeria, December 2020.

25. Anand Tirkey, Ramesh Mohapatra and Lov Kumar, Sniffing Android Malware using Deep Learning, 26th Annual International Conference on Advanced Computing and Communications (ADCOM 2020), India, December 2020. (CORE B)

26. Sahithi Tummalapalli, Lov Kumar, Lalita Bhanu Murthy Neti, and Aneesh Krishna, An Empirical Analysis on the Role of WSDL Metrics in Web Service Anti-Pattern Prediction,22nd IEEE International Conference on High Performance Computing and Communications (IEEE HPCC-2020), Fiji, December 2020. (CORE B)

27. Anand Tirkey, Ramesh Mohapatra and Lov Kumar, Policing Android Malware using Object-Oriented Metrics and Machine Learning Techniques ,26th Annual International Conference on Advanced Computing and Communications (ADCOM 2020), India, December 2020. (CORE B)

28. Anand Tirkey, Ramesh Mohapatra and Lov Kumar, Discerning Android Malwares using Extreme Learning Machine", 26th Annual International Conference on Advanced Computing and Communications (ADCOM 2020), India, December 2020. (CORE B)

29. Sahithi Tummalapalli, Lov Kumar, Lalita Bhanu Murthy Neti, and Aneesh Krishna, Detection of Web Service Antipatterns Using Neural Networks with Multiple Layers,27th International Conference on Neural Information Processing (ICONIP 2020), Bangkok, December 2020. (CORE A)

30. Rasmita Panigrahi, Lov Kumar, and Sanjay Kumar kuanar, An Empirical Study to Investigate Different SMOTE Data Sampling Techniques for Improving Software Refactoring Prediction, 27thInternational Conference on Neural Information Processing (ICONIP 2020), Bangkok, December 2020. (CORE A)

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED –NIL--

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT –NIL--

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. Chittaranjan Hota delivered an invited talk titled "IoT Code Tamper-proofing: Challenges and Solutions", 25th Sept 2020 at UGC-HRDC, Jawaharlal Nehru University (JNU), New Delhi.

2. Venkatakrishnan Ramaswamy delivered an Invited Talk on "An Algorithmic Barrier to Neural Circuit" in Understanding Synapse Lecture Series, organized by IISER Tirupati, July 2020.

3. Venkatakrishnan Ramaswamy delivered an Invited Talk on "An Algorithmic Barrier to Neural Circuit Understanding" organized by the The Oxford Neurotheory Forum by Oxford University & IST Austria, October 2020.

4. Venkatakrishnan Ramaswamy delivered an Invited Talk on "Axiomatic theory for neural circuit", in the Computational Neuroscience Seminar, organized by the University of Bristol, UK. November 2020.

5. Dipanjan Chakraborty delivered an Invited Talk on "Experiences from a Mobile-Based Behaviour Change Campaign on Maternal and Child Nutrition in Rural India", in the Interaction Design for Development, organized by IIT Bombay February, 2020.

6. Dipanjan Chakraborty delivered an Invited Talk on "Experiences from a Mobile-Based Behaviour Change Campaign on Maternal and Child Nutrition in Rural India",10th Winter Institute in Global Health, organized by BITS Pilani January, 2020.

7. Paresh Saxena delivered an Invited Talk on "Machine Learning for 5G/B5G Non-Terrestrial Networks", in IEEE 5G World Forum, Bangalore, September, 2020.

8. Paresh Saxena delivered an Invited Talk on "Machine Learning for 5G/B5G Non-Terrestrial Networks" in IEEE International Network Generations Roadmap (INGR), July, 2020.

9. Paresh Saxena delivered an Invited Talk on "6G Mobile Communications - Agenda 2030 Leave no-one behind", organized by the Military College of Electronics and Mechanical Engineering (MCEME), Oct, 2020.

10. Paresh Saxena delivered an Invited Talk on "Machine Learning for 5G/B5G Non-Terrestrial Networks" organized by the IEEE Latin-American Conference on Communications (LATINCOM), 2020, Nov 2020.

11. Lov Kumar delivered an Invited Talk on "Ensemble Methods in AI", in Online AICTE Training and Learning (ATAL) Faculty Development Programme (FDP) on "Artificial Intelligence (AI)", organized by the National Institute of Technology, Warangal - 506004, Telangana, May 2020.

9. **INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT**

1. Prof. Hrushikesha Mohanty, Senior Professor in UOH, and Vice Chancellor of KIIT DU, Bhubaneswar delivered a talk on "Digital Society and Anthropomorphic Agents" on 12th March 2020 organized by the department of CSIS at BITS Pilani, Hyderabad Campus.

2. Dr. Bill Thies, Senior Principal Researcher Microsoft Research delivered a talk on "Frugal Technologies for Global Health" on 1st Oct 2020 organized by the department of CSIS at BITS Pilani, Hyderabad Campus.

3. Prof. Manoj Gopalkrishnan from Indian Institute of Technology Bombay delivered a talk on "Using compressed sensing for pooled testing of covid19 samples" on 3rd Oct 2020 organized by the department of CSIS at BITS Pilani, Hyderabad Campus.

4. Dr. C. S. R. Prabhu (Director General (Retd.) from National Informatics Centre (NIC), Ministry of Electronics and Information Technology, Government of India delivered a talk on "Fog Computing and Big Data Analysis" on 19th Oct 2020 organized by the department of CSIS at BITS Pilani, Hyderabad Campus.

10. **AWARDS AND RECOGNITIONS**

    a. **Won by Faculty:**

    1. Dr. Venkatakrishnan Ramaswamy received the 2020 Grass Fellowship Grass Foundation, USA.

    2. Dr. Dipanjan Chakraborty received the Young ICTD Fellow 2020 for United Nations University.

    b. Won by Students:

    Ms. Vijitha Gunta received the Prof. V S Rao Foundation Best All Rounder Award 2020 based on the assessment of all round performance.

11. **FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION – NIL -**

12. **PATENTS FILED/PUBLISHED AND GRANTED – NIL -**

13. **DEPARTMENTAL ASSOCIATION ACTIVITIES**

    Computer Science Association:

    The Computer Science Association organized several events, workshops and talks this year successfully. The following events were conducted:

    1. A student-faculty Interaction was organised on 4th February 2020. The session was open to all but was specifically aimed for the second and third yearites of CS&IS Department, with special emphasis on LORs, SOPs, higher education and research areas in computer science.

    2. A Cyber Security Talk was organised by CSA on 6th February 2020. It was conducted by Mr Rupesh Mittal, who is a renowned cybersecurity instructor and is the chairman of CJP (Cyber Jagrithi Programme) which educates citizens about the cyber-crimes going on all around us. The session tried to give detailed information using various case studies and encouraged safe cyber practices.

    3. Events organised by CSA in Tech-Week 2020 were as follows:

        i. COMPETITIVE CODING WORKSHOP – This event was organised in collaboration with CRUX-the programming and computing club. It was organised with an objective of facilitating the process of beginning competitive coding for any newbie. Many topics including binary search, prime sieve and greedy algorithms etc were covered from scratch in this workshop.

        ii. ALGOMANIAC- Prize Money 3000 – One of the most popular and successful competitions organised by CSA every year, it saw a huge turnout this year as well. There are no prerequisites and no knowledge of any programming language is required. You just need to keep your brain open and think logically.

    4. An interactive session by a 2008 A7 alumnus, Mr. Vamsikrishna Bhagi was organised by CSA on 20th February, 2020. He is currently working as Program Manager-2 in Microsoft. He has also done an MBA from IIM-Kozhikode after graduating from BITS. It was a very informative event, with the questions like should one do an MBA?; how is the role of an SDE different from a PM (Product Manager) and what are its future possibilities?; the role and importance of an MBA in one's career. It was attended by students across all disciplines and years, with very significant takeaways for one's career, making it a tremendous success.

    5. An Invited Talk by Mr Bill Thies, Principal Researcher at Microsoft Research was organised on 1st October 2020. Bill earned his B.S., M.Eng. and Ph.D. degrees from MIT. He has also been awarded various awards including a MacArthur Fellowship. This talk was a part of the course BITS F364 Human-Computer Interaction and was organised by Responsible Technologies Research Group and the CS&IS Department. The talk focused on frugal technologies for global health.

6. CS&IS Department Freshers' Student-Faculty Interaction was organised on 5th December 2020. The event aimed at familiarising the freshers with the activities of the department and how to go about their college life, solving all of their academic and career-oriented queries. The session was all the more beneficial this year as it being an online semester from the beginning, the freshers haven't had the chance to be on campus and interact with their batchmates, seniors and professors firsthand.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Logitech BCC950 Conference cam with USB 2.0	1
2.	8GB RAM 266MHz DDR4	5
3.	Digisol USB Wifi connectors	3
4.	Raspberry Pi 3B+ / 3B Plus	5
5.	Server (Model: Tyrone Camarero SS4COTR-14R; Serial Number: 1X20252011)	1
6.	HP Rack Server for Students/ Research scholars and backup for the anther major server.	1
7.	HP Server for students virtual labs with Ubuntu Server.	1
8.	open-source Xrdp server on Ubuntu 18.04 to remotely access the server for students.	1
9.	Matlab-2020b on Ubuntu server for project students.	1

B3.10.6   Department of Electrical and Electronics Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	01
Associate Professors	04
Assistant Professors	26+1 (Dr Souvik Kundu left on Nov 28th)
Lecturers	03
Visiting Faculty	0
Visiting Assistant Professors	01

Head of the Department   :   **Prof. Alivelu Manga Parimi**

Contact details   :   alivelu@hyderabad.bits-pilani.ac.in / 040 6630-3606

Number of Ph.D. Scholars   :   72

Full Time   :   49

Part Time   :   23

Aspirant Scheme   :   0

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Mr S. B. Puneeth	2016PHXF0016H	Development of Robust Electro-microfluidic Viscometer for bio chemical applications	Prof. Sanket Goel	
2	Himabindu T	2012PHXF0402H	Novel control stragies for multilevel inverter fad induction moto drives	Prof. Sanket Goel	Prof. G Bhubneswari and Prof. Bhim Singh, IIT Delhi
3	Mr Michael Pritam Raj	2016PHXF0017H	Design of Low-complex Memristive Circuits and Study the Effect of State Transitions for Emerging Electronic Applications	Dr Souvik Kundu	
4	Mr Sanjay Vidyadharan	2016PHXF0409H	"Novel Gate-overlap Tunnel FETs and their Circuits for Ultra-low power VLSI applications	Dr Surya Shankar Dan	
5	Mr Sandeep Kumar	2016PHXF0600H	Investigations on possible realization of wideband high efficiency compact metamaterial based Antenna for wireless applications	Dr Runa Kumari	

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Industrial-scale thermophilic biomethanation of food waste and sewage sludge for production of bioenergy and biofertilizer	EEE	Sankar Ganesh Palani	Ankur Bhattacharjee, K Supradeepan	DBT, Govt. of India	-	29.65 Lakh
2	Design of Phase Locked Loop Dielectric Resonator Oscillators for Frequency Synthesizers	EEE	Sourav Nandi	Harish V. Dixit	DLRL-DRDO	-	9.93
3	Design of miniaturised 5 GHz High Pass Filter (HPF) and study of interference due to multichip Packaging in TR module/Plank	EEE	Runa Kumari	Harish V. Dixit	DLRL-DRDO	-	9.97
4	Studies and Multiphysics simulation of High Power Microwave Antenna	EEE	Harish V. Dixit	Runa Kumari	RCI-DRDO	-	24.9

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
5	Developmental Studies on Environmental Conditioning of QCE Composite Materials	EEE/ Chemical	Ramesh Adusumalli	Mithun Mondal	ASL-DRDO	-	24.9
6	Development of a multipurpose diagnostic device based on swellable polymeric microneedle patch for minimally invasive sampling and electrochemical detection of glucose, uric acid and thyroid stimulating hormone from interstitial fluid	Pharmacy/EEE	Venkata Vamsi Krishna Venuganti	Karumbaiah C N	ICRM	-	55.5 lakhs
7	Development of mesoporous materials with enhanced hydrogen uptake for fuel cell vehicles	Mechanical/ EEE	Dr. Sujith R	Sudha Radhika	SERB-DST-CRG	-	34.8
8	Water Soluble and Flexible Quantum 2D material Devices for Personal Healthcare monitoring	EEE	Parikshit Sahatiya	-	SERB SRG		26.69
9	A Novel 2:1 Multiplexer based Approach to Implement Ternary Logic Circuits	EEE	Chetan Kumar Vudadha	-	SERB SRG	--	9
10	Investigation of Van der Waals Hetero-structures of Transition Metal Di-Chalcogenides (MX2) and Tin Di-Chalcogenides (SnX2) for Broad-band Photo-detector Design	EEE	Sayan Kanungo	-	SERB SRG	-	11.2

B. Industry Sanctioned Projects

S. No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	2D Nanomaterials based Flexible Resistive Memory (Memristors)	EEE	Parikshit Sahatiya		Redpine Signals		8.14 Lakhs

C. International Sanctioned Projects - NIL

D. Institute Sanctioned Projects: NIL

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Depart-ment	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Integrated Microfluidic Cardiac Platform for Drug Screening and Toxicity Detection	EEE	Prof. Sanket Goel	-	DST	-	43.76 lakhs
2	Digital 3D Printed Electronic Technology for Space Electronic Packaging Applications	EEE	Prof. Sanket Goel	-	ISRO RESPOND	-	26.36 lakhs
3	Fully Integrated Smartphone and IoT enabled Microfluidic Sensor for Real-time Quantification of Soil Macronutrients	EEE	-	Prof. Sanket Goel and R. N. Ponnalagu	DST (Agro Tech)	-	27.98 lakhs
4	Automated IoT based Microfluidic Electrochemiluminescence ECL Biosensing platform for various biomarker detection	EEE	Prasant Kumar Pattnaik	Prof. Sanket Goel	SERB (CRG)	-	51.42 lakhs

S.No	Project Title	Depart-ment	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
5	Micro-plasma transistor for high temperature application	EEE	Karumbaiah C N		SERB DST SRG	-	25.7
6	Design of High Power CW Magnetrons and investigations on strategies for their phase control	EEE	Joseph John (IIT B)	Harish V. Dixit	DST	-	52,00,000
7	Microfluidic Enzymatic Biofuel Cell for Energy Harvesting and Blood Parameters monitoring	EEE	Sanket Goel		DSIR	-	15,00,000
8	Design and development of an autonomus flow caliberation System for Fuel and Oxidizer injectors in Reaction Control System	ME	SS Deshmukh	Rajesh K Tripathy, Supradeepan K	DRDO	-	10,00,000
9	Organ on a chip for drug screening	EEE	Sanket Goel	Satish Dubey, Arshad Javed and Anasuya Ganguli (Goa)	DST	-	43,00,000
10	Management of Distributed Energy Resources in Smart Cities: Challenges and Advanced Control Strategies, Accepted	EEE	Hitesh Mathur	Bijoy Mukherjee, Alivelu M Parimi	MHRD SPARC	-	42,56,000
	MRI based non-invasive quantitative biomarker for Early diagnosis and prognosis of Brain Tumor	EEE	Venkateswaran R	BVVSN Prabhakara Rao, Prof. Yogeeswari, Dr. C.Kesavadas	DBT	-	23,99,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	2D Nanomaterials based Flexible Resistive Memory (Memristors)	EEE	Parikshit Sahatiya	-	Redpine Signals	-	8.14 Lakhs

C. Ongoing International Projects - NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development of Methodologies for Self-Aware Network-on-Chip Design (India-Austria)	EEE	Soumya J	Axel Jantch	DST-Austria	Austria	8,89,000
2	Indo-Norwegian collaboration in Autonomous Cyber-Physical Systems	EEE	Soumya J & Lingareddi C	Prof. M B Srinivas	Research Council of Norway	Prof. Lingareddi C	42,43,000

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Design and development of an optimized electrical interface for Smart Hybrid Microgrid and energy storage for peak load shaving, demand side management and energy security.	EEE	Ankur Bhattacharjee		BITS-RIG		2 Lakh
2	Cleanroom free, solution processed fabrication of flexible nanoelectronic devices for sensing applications	EEE	Parikshit Sahatiya		BITS RIG		2 lakhs
3	Direct growth of 2D materials by Chemical Vapor Deposition (CVD) on flexible substrates and its application in wearable electronics	EEE	Parikshit Sahatiya		BITS ACRG		10 lakhs

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
4	Energy Efficient Mechanisms and Algorithms for 4G and 5G Broadband Wireless Networks	EEE	Prashant Wali		BITS RIG		2 Lakhs
5	Lab on a chip-based point of care device for DNA amplification for TB diagnostics	EEE	Prof. Sanket Goel	-	Center for Human Diseases, BITS-Pilani,		≈12 lakh (no fixed amount)
6	Design and development of an instrumentation system to measure dynamic signals	EEE	R. N. Ponnalagu		BITS-RIG		2 Lakhs
7	Design and Synthesis methodologies for CNFET-based Multi-Valued Logic Circuits	EEE	Chetan Kumar V		BITS-RIG		2 Lakhs
8	RISC-V based Approximate Processor and its FPGA Prototype for Image processing Applications	EEE	Chetan Kumar V		BITS-ACRG		4.7 Lakhs
9	Development of a New Vegetable-Oil-Based Dielectric Fluid for Liquid-Filled Transformers	EEE	Mithun Mondal		BITS-ACRG		8 lakhs
10	Synthesis of nano-porous metal oxide composite materials for water splitting application	EEE	Karumbaiah C N		BITS-RIG		2 Lakhs
11	Black TiO2 nanotubes for detection and degradation of pollutants in drinking water	EEE	Karumbaiah C N		BITS-ACRG		10 LAKHS
12	Design and development of an AI based Remote Fault Signature Analyzer (ReFSA) for condition monitoring of rotor bar failures in an Industrial electrical machine	EEE	Sudha Radhika		BITS-ACRG		9.3 lakhs
13	TFET based Electrochemical Sensors Design				BITS-OPERA		12.6 Lakhs
14	Detection of sleep related disorders from various physiological signals using multiscale analysis and deep neural network	EEE	Rajesh Kumar Tripathy	-	BITS RIG	-	2,00,000
15	Miniaturization and Enhancement of port isolation of MIMO antennas	EEE	Sourav Nandi	-	BITS RIG	-	2,00,000
16	Studies on the design of High Power, low loss power driver and combiner	EEE	Harish V Dixit		BITS RIG		2,00,000
17	Design and Implementation of Hardware Architectures for Media Processing Applications	EEE	Syed E Ahmed		BITS RIG		2,00,000
18	Condition Monitoring and Diagnosis of High Voltage Transmission Line Insulators Under the Influence of Extreme Environmental Conditions	EEE	Mithun Mondal		BITS RIG		2,00,000
19	Nano-Scale Power Management Interface Circuits for IoT Node	EEE	Saroj Mondal		BITS RIG		2,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Strategies for Fault- Tolerant Network-on-Chip Design	EEE	Soumya J	-	SERB-ECT	-	25.93 lakhs
2	Underwater Characterization of Solar cells and its Optimization	EEE	Prof. Sanket Goel	Sudha Radhika	DMSRDE, DRDO	-	9.85 lakhs

B. Completed Industry Projects - NIL -

C. Completed International Projects - NIL -

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Wavelet based pattern recognition and motor current signature analysis of stator winding faults due to insulation failure in industrial machines	EEE	Sudha Radhika	-	RIG	-	2 lakhs
2	Simulation Design and Modelling of Vertical Heterostructure Transition Metal Dichalcogenides for Label-free Electrochemical Gas-sensing Applications	EEE	Sayan Kanungo		BITS RIG		2,00,000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Hiranmay Samanta, Ankur Bhattacharjee*, M Pramanik, A Das, K D Bhattacharya, H Saha, "Internet of Things based Smart Energy Management in a Vanadium Redox Flow Battery storage integrated Bio-Solar Microgrid", Journal of Energy Storage, Elsevier, 2020, Vol. 32, pp. 101967, 2020, 10.1016/j.est.2020.101967.

2. Nawin Ra, Ankur Bhattacharjee, "An extensive study and analysis of system modelling and interfacing of Vanadium Redox Flow Battery", Energy Technology, Wiley (Accepted, In press), 2020.

3. Ankur Bhattacharjee, Rakesh Kumar Mohanty, Aritra Ghosh, Design of an optimized thermal management system for Li-ion batteries under different discharging conditions, Energies, 2020, Vol. 13(21), 5695.

4. Sandeep Kumar and Runa Kumari, "Composite Right/Left-Handed Ultra-Wideband Metamaterial Antenna with Improved Gain", Microwave and Optical Technology Letters (MOTL), Vol. 63, No. 1, Jul. 30, 2020.

5. Ramakant Yadav, Surya Shankar Dan, Sanjay Vidhyadharan and Simhadri Hariprasad, 'Innovative multi-threshold gate-overlap tunnel FET (GOTFET) devices for superior ultra-low power digital, ternary and analog circuits at 45-nm technology node', Springer Journal of Computational Electronics, vol. 19, pp. 291–303, Jan 2020

6. Sanjay Vidhyadharan, Surya Shankar Dan, Ramakant Yadav and Simhadri Hariprasad, 'A novel ultra-low-power gate overlap tunnel FET (GOTFET) dynamic adder', Taylor and Francis International Journal of Electronics, pp. 1–19, Mar 2020

7. Sanjay Vidhyadharan, Surya Shankar Dan, Abhay S. V., Ramakant Yadav and Simhadri Hariprasad, 'Novel gate-overlap tunnel FET based innovative ultra-low-power ternary flash ADC', Elsevier Integration, the VLSI Journal, vol. 73, pp. 101-113, Jul 2020

8. Ramakant Yadav, Surya Shankar Dan, Sanjay Vidhyadharan and Simhadri Hariprasad, 'Suppression of Ambipolar Behavior and Simultaneous Improvement in RF Performance of Gate-Overlap Tunnel Field Effect Transistor (GOTFET) Devices', Springer Silicon Journal, Jul 2020

9. Sanjay Vidhyadharan, Surya Shankar Dan, Ramakant Yadav and Simhadri Hariprasad, 'An Innovative Ultra-Low Voltage GOTFET based Regenerative-Latch Schmitt Trigger', Elsevier Microelectronics Journal, vol. 104, 104879, Aug 2020

10. Chandrasekhar Reddy K, Sahatiya, P, Santos-Saucedaa, O. Cortazara, R. Ramírez Bon. One Step Fabrication of 1D p-NiO nanowire/Si heterojunction: Development of Self powered Ultraviolet Photodetector, Applied Surface Science, 2020, 513, 145804

11. Selamneni, V., Nerurkar, N., & Sahatiya, P*. Large area deposition of MoSe2 on paper as a flexible Near Infrared photodetector. IEEE Sensors Letters, 2020, 4(5), 1-4

12. Selamneni, V., B.S Amogh., & Sahatiya, P*. Highly Air Stabilized Black Phosphorous on disposable paper substrate as a tunnelling effect based highly sensitive piezoresistive strain sensor. Medical Devices and Sensors, 2020, 3(4), e10099

13. K G Sankalp Selamneni, V. & Sahatiya, P*. Water Dissolvable MoS2 Quantum Dots/PVA film as an Active Material for Destructible Memristor. New Journal of Chemistry, 2020, 44, 11941-11948 (Selected as Cover Article)

14. Selamneni. V, K G Sankalp, Sahatiya, P*. All MoS2 based 2D/0D Localized Unipolar Heterojunctions as a Flexible Broadband (UV-Vis-NIR) Photodetector. Journal of Materials Chemistry C, 2020, 8 (33), 11593-11602

15. Bharadwaj, R., Selamneni, V, Thakur, U, Sahatiya, P*., Hazra, A*. Detection and discrimination of volatile organic compounds by noble metals nanoparticle functionalized MoS2 coated biodegradable paper sensors. New Journal of Chemistry, 2020, 44 (38), 16613-16625

16. Selamneni, V., Gohel, K., Bokka, N., Sharma, S., Sahatiya, P*., MoS2 based Multifunctional Sensor for both Chemical and Physical Stimuli and their Classification using Machine Learning Algorithm. IEEE Sensors Journal, 2020, (Accepted Manuscript)

17. Bokka, N., Selamneni, V., Sahatiya, P*. Water Destructible SnS2 QDs/PVA Film Based Transient Multifunctional Sensor and Machine Learning Assisted Stimulus Identification for Non-Invasive Personal Care Diagnostics. Materials Advances, 2020 (Accepted Manuscript)

18. Leelasree., Selamneni. V., Akshaya T., Sahatiya, P*., Aggarwal., H. MOF Based Flexible, Low-Cost Chemiresistive Device as a Respiration Sensor for Sleep Apnea Diagnostics. Journal of Materials Chemistry B, 2020 (Accepted Manuscript)

19. Selamneni. V., Kunchur, A., Sahatiya P*. Large Area, Flexible SnS/Paper based Piezoresistive Pressure Sensor for Artificial Electronic Skin Application. IEEE Sensors Journal, 2020 (Accepted Manuscript)

20. Selamneni V., Dave, A., Mihailovic, P., Mondal, S., Sahatiya, P*., Large Area Pressure Sensor for Smart Floor Applications – An Occupancy Limiting Technology to Combat Social Distancing. IEEE Consumer Electronics Magazine, 2020 (Accepted Manuscript)

21. Selamneni. V., Sankalp K G., Nerurkar, N., Akshaya T., Sahatiya, P*. Facile Fabrication of MoSe2 on Paper as an Electromechanical Piezoresistive Pressure Strain Sensor. IEEE Transactions on Instrumentation and Measurements, 2020 (Accepted Manuscript)

22. Sravan K. Vittapu and Sumit K. Chatterjee, "Complexity reduction for HEVC encoder using one-dimensional filtering based constrained one-bit transform", Microsystem Technologies, Sept 2020.

23. Sumit K. Chatterjee, Sravan K. Vittapu and Souvik Kundu, "Prediction-biased Diamond Search Algorithm: A New Approach to Reduce Motion Estimation Complexity", Microsystem Technology, (Accepted for publication)

24. A. K. Panda, R. Palisetty and K. C. Ray, "High-Speed Area-Efficient VLSI Architecture of Three-Operand Binary Adder," in IEEE Transactions on Circuits and Systems I: Regular Papers, vol. 67, no. 11, pp. 3944-3953, Nov. 2020, doi: 10.1109/TCSI.2020.3016275.

25. R. Palisetty, A. K. Panda and K. C. Ray, "ASIC Implementation of Low PAPR Multi-Device Variable Rate Architecture for IEEE 802.11ah," in IEEE Transactions on Instrumentation and Measurement (Accepted for Publication)

26. STP Srinivas, K Shanti Swarup, "Optimal Protection Coordination of Non-Standard Overcurrent Relay Characteristics Using Hybrid QCQP Method", Electrical Power Components and Systems (Taylor&Francis), Accepted, August 2020. (doi: 10.1080/15325008.2020.1829187)

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5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Dr Amit Kumar Panda participated in TEQIP-III sponsored online Faculty Development Program (FDP) on "Signal Processing Application" held from 21st to 25th September 2020 organized by the Department of Instrumentation & Electronics Engineering, College of Engineering Technology (Autonomous), Bhubaneswar, Odisha.

ii) International:

1. Nawin Ra, Ankur Bhattacharjee*, "Optimized integration of VRFB storage with grid-tied solar PV power system to mitigate voltage instability due to high PV penetration", 37th European PV Solar Energy Conference and Exhibition (EU PVSEC), vol. 37, 2020.

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12. Samit Kumar Ghosh, Rajesh Kumar Tripathy, R N Ponnalagu, Evaluation of Performance Metrics and Denoising of PCG Signal using Wavelet Based Decomposition" in the proceedings of the 17th India Council International Conference, INDICON 2020, December 11-13, 2020, Delhi, India.

13. Prateek Grover, Yuvraj Singh Malhi, R N Ponnalagu, "A Comparative Study on Industrial Multiphase Flow Measurement Techniques" in the proceedings of the 8th International and 47th National Conference on Fluid Mechanics and Fluid Power (FMFP), Deecmber 9-11, 2020, IIT Guwahati, India.

14. Prakash Rewatkar and Sanket Goel, Microfluidic Enzymatic Glucose Biofuel Cell with MWCNT patterned Printed Circuit Board Electrodes, accepted with IEEE NEMS, 2020.

15. Lanka Tata Rao, Satish Kumar Dubey, Arshad Javed and Sanket Goel, Optimization and Characterizaton of Laser-Induced Graphene Electrodes for Chemical Fuel Cell to Realize a Microfluidic Platform, submitted to IEEE NEMS, 2020.

16. Madhusudan Kulkarni and Sanket Goel, Bluetooth Enabled Miniaturized Temperature Controller Platform for Point-of-Source Applications, submitted to ECS PRiME 2020, held during Oct 2020.

17. Avinash Kothuru and Sanket Goel, Electronic Nasal Pod: A 3D Printed Device to Filter and Electrochemically Detect pollutants, accepted for oral presentation, IEEE Sensors Conference, 2020.

18. Dipankar Nath, Prakash Rewatkar and Sanket Goel, Origami Microfluidic Microbial Fuel Cell for Powering IoT Node with IoT Cloud Platform, accepted for presentation at ECS PRiME 2020, held during Oct 2020.

19. Manish Bhaiyya, Prasant K Pattnaik and Sanket Goel, Miniaturized Portable Handheld Electrochemiluminescence Imaging, accepted for presentation at ECS PRiME 2020, held during Oct 2020.

20. Jayapiriya U S, Prakash Rewatkar and Sanket Goel, Completely Additive Manufactured and Reusable Microfluidic Device As Enzymatic Glucose Biofuel Cell, accepted for presentation at ECS PRiME 2020, held during Oct 2020.

21. Sangam Srikanth, Satish Kumar Dubey, Arshad Javed and Sanket Goel, Droplet Based Microfluidic Electrochemical Detection of Uric Acid, Ascorbic Acid and Dopamine, accepted for presentation at ECS PRiME 2020, to be held during Oct 2020.

22. M. Salve, K. Amreen, P. Rajurkar, P. K. Pattnaik, and S. Goel, Miniaturized Disposable Buckypaper-Polymer Substrate Based Electrochemical Purine Sensing Platform, accepted for presentation at ECS PRiME 2020, to be held during Oct 2020.

23. S. Dudala, S. Srikanth, S. K. Dubey, A. Javed, and S. Goel, Development of Miniaturized Interdigitated Electrode Sensors and Their Application in Taste Sensing, accepted for presentation at ECS PRiME 2020, to be held during Oct 2020.

24. Jayapiriya U S, Optimization of Carbon Cloth Bioelectrodes for Enzyme-based Biofuel cell for Wearable Bioelectronics, accepted for presentation with IEEE Nano 2020.

25. Prasanth K. Enaganti, Prabhat K. Dwivedi, Alok K. Srivastava and Sanket Goel "Studying the Impact of Infrared Spectrum on Submerged Amorphous, Mono-and Poly-crystalline Solar cells" for a Virtual Poster in EU PVSEC 2020, the 37th European Photovoltaic Solar Energy Conference and Exhibition September 2020 (Abstract Accepted)

26. Prasanth K. Enaganti, Prabhat K. Dwivedi, Alok K. Srivastava, and Sanket Goel "Underwater Analysis of Solar Photovoltaic Cells with Filtered Solar Spectrum" for a Virtual Poster including a 5-minute oral video presentation in 47th IEEE PVSC Conference June 2020.

27. Prasanth K. Enaganti, Prabhat K. Dwivedi, Alok K. Srivastava and Sanket Goel "Underwater Solar Irradiance and Performance Performance analysis of various Silicon Solar Cells with Change in Water

Conditions: A Comparative Study." 12th International Exergy, Energy and Environment Symposium (IEEES-12) December 2020 (Invited for the special issue in International Journal of Energy Research).

28. Jaligam Murali Mohan, Khairunnisa Amreen, Arshad Javed, Satish Kumar Dubey and Sanket Goel, Microscale Electrochemical Platform for Interference-Alleviated Sensing of Multiple Bio-Analytes, presented at 15th IEEE International Symposium on Medical Measurements and Applications, June 2020.

29. Jaligam Murali Mohan, Khairunnisa Amreen, Arshad Javed, Satish Kumar Dubey, Sanket Goel, Microfluidic Electrochemical Platform with Ink-jetted Electrodes for Multiple Chemicals / Biochemical Sensing, presented at International Conference on Electrochemistry (EIHE-2020), January 2020, BARC, Mumbai, India

30. Lanka Tata Rao, Saurabh Gurunath Kulkarni, Satish Kumar Dubey, Arshad Javed, and Sanket Goel, Development of Membraneless Paper-Pencil Microfluidic Hydrazine Fuel Cell for Energy Harvesting and Sensing, presented at International Conference on Electrochemistry (EIHE-2020), January 2020, BARC, Mumbai, India.

31. Prakash Rewatkar, Jayapiriya US, and Sanket Goel, Soft-lithographic Microfluidic Enzymatic Biofuel Cell with integrated Laser Pyrolyzed Bioelectrodes, presented at International Conference on Electrochemistry (EIHE-2020), January 2020, BARC, Mumbai, India.

32. P. V. Bhanu, C. Vudadha and J. Soumya, "FILA: Fault-Model for Interconnection Links in Application-Specific Network-on-Chip Design," 2020 IEEE International Symposium on Circuits and Systems (ISCAS), Sevilla, 2020, pp. 1-5,

33. H. Sirugudi, S. Gadgil and C. Vudadha, "A Novel Low Power Ternary Multiplier Design using CNFETs," 2020 33rd International Conference on VLSI Design and 2020 19th International Conference on Embedded Systems (VLSID), Bangalore, India, 2020, pp. 25-30,

34. P. P. Dutta, A. M. B and S. Mondal, "An 18 mV Offset, 193 ps Sensing Delay, and Low Static Current Sense Amplifier for SRAM," 2020 24th International Symposium on VLSI Design and Test (VDAT), Bhubaneswar, India, 2020, pp. 1-4,

35. Shambu Prasad P, Alivelu M. Parimi, "Harmonic Mitigation in Grid Connected and Islanded Microgrid Via Adaptive Virtual Impedance, Accepted in 2020 IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE), 2nd to 4th January, 2020

36. M.T.L. Gayatri, Vooturi Gayathri, Baddam Rithika, Alivelu M Parimi, "Wind Microgrid Power Quality Compensation using Self Supported DC Link", Feb 2020 IEEE International Conference on Inventive Computation Technologies (ICICT), Coimbatore, India, 2020, pp. 1-5, doi: 10.1109/ICICT48043.2020.9112585.

37. Alaukik Joshi, Mihir Ojha, Kanishka Harwani, Jay Karhade and Alivelu Manga Parimi, "Design and Analysis of Dynamics, Control and Simulation of Y-4 Quadrotor Structure for Hybrid Aerial Vehicle", IEEE International Conference for Emerging Technology INCET 2020, 5th and 7th June, Karnataka, India

38. Srinivasan M P and Alivelu Manga Parimi, "Solar Powered Permanent Magnet Synchronous Motor Drive for Water Pumping Applications", IEEE International Conference for Emerging Technology INCET 2020, 5th and 7th June, Karnataka, India

39. M.T.L. Gayatri, D. Dakshita Lakshmi, Nalla Saikumar, Nomula Saivaraprasad, Alivelu M. Parimi "Active Power Quality Enhancement of Wind Microgrid Supported by PV Generation" 2020 IEEE-HYDCON, 11th-12th Sept. 2020

40. Renuka Loka and Alivelu M. Parimi, "Impact of Microgrid Connected to A Conventional Power System on System Frequency and Control Strategy", 2020 IEEE-HYDCON, 11th - 12th Sept. 2020

41. M.T.L. Gayatri, D. Dakshita Lakshmi, Nalla Saikumar, Nomula Saivaraprasad, Alivelu M. Parimi, "WECS Based Microgrid Supported by PV generation for Interline Active Power Quality Conditioning", IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS'20), 10th and 11th of December 2020

42. Renuka Loka and Alivelu Manga Parimi, "Home Inverter Based Coordinated and Distributed Frequency Control in a Smart Hybrid Power System", 2020 IEEE 17th India Council International Conference (INDICON), 11-13 Dec.2020

43. Thippana Charan and Alivelu Manga Parimi, "Placement of IPFC for Power Loss Reduction in Transmission Lines Using Firefly Algorithm", 2020 IEEE 17th India Council International Conference (INDICON), 11-13 Dec.2020

44. Prathamesh Saraf, Manan Gupta and Alivelu Manga Parimi, "A Comparative Study Between a Classical and Optimal Controller for a Quadrotor", IEEE 17th India Council International Conference (INDICON), 11-13 Dec.2020

45. "Jayesh Ganji, Kapil Ram Gavali, Harish V. Dixit, P.K. Sharma "The Impact of the Resonator Shape of a Combline Travelling Wave Antenna on its RF and Thermal Performance", Asia Pacific Microwave Conference (APMC-2020) (Virtual), China, IEEE AP/MTT Hong Kong Chapter, 8-11 December, 2020

46. "Jayesh Ganji, P.K. Sharma, Harish V. Dixit "Modeling of Fast Wave Interaction with SST-1 tokamak like plasma using GENRAY code" International Conference on Plasma Sciences (ICOPS-2020) (Virtual), Singapore Plasma Science and Application Committee (PSAC) of the IEEE Nuclear & Plasma Sciences Society, 6 - 10 December 2020

47. Kapil Ram Gavali; Jayesh Ganji; Harish V. Dixit,"A Modified Sinusoidal SWS with Dominant TM01 Mode and Improved Interaction Impedance for Use in BWOs", IEEE International RF and Microwave Conference (RFM-2020), 14-16 December 2020.

48. "Shrey thakkar, Harish V. DIxit, "" Design and simulation of a novel TEM to TE11 mode converter at 3 GHz for HPM applications"", International Conference on Plasma Sciences (ICOPS-2020) (Virtual), Singapore Plasma Science and Application Committee (PSAC) of the IEEE Nuclear & Plasma Sciences Society, 6 - 10 December 2020

49. "Alla, Navteja, and Syed Ershad Ahmed. ""An Area and Delay Efficient Logarithmic Multiplier."" 2020 International Conference on Contemporary Computing and Applications (IC3A). IEEE, 2020."

50. "U. A. Kumar, M. H. Ahmed, Rakhee and S. E. Ahmed, ""An Evaluation of the Canny Edge Detection Algorithm using Hybrid Approximate Adder Architecture,"" 2020 IEEE-HYDCON, Hyderabad, India, 2020, pp. 1-5."

51. "Kumar, Uppugunduru Anil, Nishant Jain, Sumit K. Chatterjee, and Syed Ershad Ahmed. ""Evaluation of Multiplier-Less DCT Transform Using In-Exact Computing."" In International Conference on Machine Learning, Image Processing, Network Security and Data Sciences, pp. 11-23. Springer, Singapore, 2020."

52. "Reddy, C. Sai Revanth, U. Anil Kumar, and Syed Ershad Ahmed. ""Design of Efficient Approximate Multiplier for Image Processing Applications."" In International conference on Modelling, Simulation and Intelligent Computing, pp. 511-518. Springer, Singapore, 2020."

53. Sudha Radhika, Prabhmeet Singh, Archana S, Yukio Tamura, "Tornado Damage Estimation by Combining Wavelet and CNN Based Technology from UAV (Drone) Database", 54th CMOS Congress, Canadian Meteorological and Oceanographic Society (CMOS), Ottawa, Canada, 2020

54. Amar Kumar Verma, Aakruti Jain, S Radhika, "Neuro-Fuzzy Classifier for Identification of Stator Winding Inter-turn Fault for Industrial Machine", Mosicom2020: International Conference on Modelling Simulation & Intelligent Computing, DUBAI, UAE, 2020

55. C.Santhi Durganjali, Harini, Sudha Radhika, "Modelling and performance analysis of different types of Li-ion Battery", IMECE2020: International Mechanical Engineering Congress & Exposition, Oregon Convention Center, Portland, 2020

56. Amar Kumar Verma, Naren Surampudi, Sudha Radhika, "Web Based Application for Quick and Handy Health Condition Monitoring System for a Reliable Wind Power Generation", IMECE2020: International Mechanical Engineering Congress & Exposition, Oregon Convention Center, Portland, 2020

57. Ajitha.T, Sudha Radhika, "IoT based system for residential peak load management and monitoring of connected load", ETAEERE-2020: Emerging trends and advances in Electrical Engineering and Renewable Energy, Bhubaneswar, India, 2020

58. B. Malayappan, N. Krishnaswamy and P. K. Pattnaik, "Optical MEMS Accelerometer Based on Waveguide Bragg Grating Integrated with Crab-Leg Beam," 2020 IEEE Sensors, Rotterdam, Netherlands, 2020, pp. 1-4, doi: 10.1109/SENSORS47125.2020.9278931.

59. Santhi Durganjali.C, Sudha Radhika, Ponnalagu R.N., Sanket Goel "MODELLING OF 3D SOLAR CELL WITH FINITE VOLUME DISCRETIZATION" Poster presentation – PVSEC-30 & GPVC 2020 Hybrid Conference – Completed- November 8 (Sun) - 13 (Fri), 2020- Proceedings- P3-T1-101- Pg.No-769

60. Chaluvadi V Naga Bhaskar and Prasant Kumar Pattnaik, Spectral Characteristics of Cascaded Uniform FBGs of Varying Lengths, IEEE INDICON 2020, (online) December 2020.

61. Chaluvadi V Naga Bhaskar and Prasant Kumar Pattnaik, "Effect of Strain and Temperature in FBG", 6th International Conference on Electronics, Computing and Communication Technologies IEEE CONECCT 2020, 2-4 July 2020.

6.   LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1.   Sandeep Kumar and Runa Kumari, "Metamaterial Resonator Antennas" Chapter No. 8 in Multiscale Modelling of Advanced Materials, Springer Nature Singapore Pte. Ltd. 2020, ISBN 978-981-15-2267-3 (eBook).

2.   Nirabhra Mandal, Bijit Kumar Dey, Abhishek Paul, Ankur Bhattacharjee*. "A novel three phase 5-Level inverter control and its performance analysis for a grid connected solar PV power system", Advances in Energy Research, Springer Nature Singapore Pte Ltd., 2020, ISBN 978-981-15-2662-6 (Online)

3.   Bijit Kumar Dey, Nirabhra Mandal, Ankur Bhattacharjee*. "A novel ANN-SMC based maximum power point tracking for efficient DC stage conversion of a solar PV power plant", Advances in Energy Research, Springer Nature Singapore Pte Ltd, 2020, ISBN 978-981-15-2662-6 (Online)

4.   Sourish Ganguly, Subhrasish Pal, Ankur Bhattacharjee*, "Development of a dynamic battery model and estimation of equivalent electrical circuit parameters", Proceedings in Energy, Springer Nature Singapore Pte Ltd, 2020, 978-981-15-5955-6 (Online)

5.   "Md. Abu Fazal, Ridhi Lakhotia, Ajay Yadav, Ankur Bhattacharjee*, "Design and development of an economical and reliable Solar Powered Trash Compactor", Proceedings in Energy, Springer Nature Singapore Pte Ltd, 2020,978-981-15-5955-6 (Online)"

6.   "Samit Kumar Ghosh, R. N. Ponnalagu and R K Tripathy, ""Heart Sound data acquisition and preprocessing Techniques"", Chapter 14 in the ""Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering"", IGI Global, pp.244-264, DOI: 10.4018/978-1-7998-2120-5.ch014, ISBN13: 9781799821205"

7.   D. Som, A. Paul, Tanu, A. Mukhopadhyay, N. Thakur and S. Kanungo, "First Principle Calculation Based Investigation on the Two Dimensional Sandwiched Tri-layer Van der Waals Hetero-structures of MoSe2 and SnS2", N Goel et al. (eds.), Modelling, Simulation and Intelligent Computing, Lecture notes in Electrical Engineering (Springer), 659, pp. 40-47 (2020).

7.   SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1.   EEE department from BITS-Pilani Hyderabad Campus organized three days workshop on EMPRA 2020 from 2nd Jan to 4th Jan 2020.

2.   National workshop on Emerging Technologies of Electric Vehicles & Hybrid Electric Vehicles: Challenges in Design, Manufacturing and Control Systems (EV-2020) is jointly organized by the Departments of Mechanical Engineering & Electrical and Electronics Engineering, BITS Pilani, Hyderabad Campus from 19th-20th December 2020

3.   **Workshop on "Algorithms and Data Structures"; 21st and 22nd October 2020**

In today's world, having the basic knowledge of Data structures and Algorithms is very important irrespective of the stream in which you are working. Hence a 2-day workshop was organized with **Prof. Prosenjit Gupta** who holds 22 years of experience in teaching, research and industry at renowned institutions like Yahoo, IIIT Hyderabad and University of Minnesota. The students preparing for placements and summer internships were benefited from this initiative.

8.   INVITED TALKS GIVEN BY BITS FACULTY

1.   Invited talk on the topic "2-D Materials for Nano-Scale Tunnel Field Effect Transistor Design" by Dr. Sayan Kanungo in Dayalbagh Educational Institute, Agra on 9th August 2020.

2.   Invited talk on the topic "Electronic Property Calculation of Materials using Density Functional Theory (DFT) Simulation" by Dr. Sayan Kanungo organized by IEEE Education Chapter, New South Wales, Australia on 30th September 2020.

3.   "Invited webinar on ""Integrating Renewable Energy in the Power Grid"" by Dr. Pratyush Chakraborty at ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY AND SCIENCES, Visakhapatnam on 9th December, 2020"

4.   Invited talk on the topic "Microwave Filters" by Dr. Amit Ranjan Azad in the faculty development programme on "RF Technology for Energy Harvesting, Medical and Commercial Applications" organized by Sreyas Institute of Engineering and Technology, Hyderabad on 16th December, 2020.

5.   Invited Lecture "AI based controllers in Power Systems" by Prof. Alivelu Manga Parimi for "AICTE Sponsored Short Term Training Program (STTP) – Dept. of EEE, Sridevi Women's Engineering College (SWEC)", 10 Nov 2020

6.   Parikshit Sahatiya. Flexible Electronics in Personal Healthcare Monitoring, National Seminar on Bio-Signal Processing for Healthcare Applications, KL University Hyderabad, December 2019, Hyderabad (Invited Speaker)

7. Parikshit Sahatiya. Symposium on Carbon Nanomaterials Electronics (SCNE), November 2019, BITS Pilani, Pilani Campus (Invited Speaker)

8. "Prashant Wali -- Delivered a webinar talk on ""Trends in Wireless Communications: LTE and Beyond"", at SIT Tumkur, Karnataka, July 2020."

9. Runa Kumari, Invited speaker on " Design, Evolution and specifications of latest antenna including Active Array Antenna " in the seminar on RADAR and Missile Technology at MCEME (Military College of Electronics and Mechanical Engineering) Secunderabad, Jan 2020.

10. Prof. Sanket Goel, ECL Biosening Platform with Laser Induced Graphene based Electrodes, IEEE NANOMED 2020 (Invited talk) by IEEE Nano Council, 14 Dec 20.

11. Prof. Sanket Goel, Leveraging Nanomaterials for Miniaturized Sensing and Energy Harvesting Devices, 2nd International NanoBioEngineering Virtual Congress (CINBI 2020) by UANL, Mexico, 28 Oct 20.

12. Prof. Sanket Goel, rapidly prototyped flexible microfluidic devices for biochemical applications, International Conference on Microfluidics & Bio-MEMS by Conference Series (virtual), 19 Oct 20.

13. Prof. Sanket Goel, IEEE Transactions on NanoBioscience: Summary and Pointers, CINBI 2020 (Mexico) by UANl, Mexico, 15-Oct-20

14. Prof. Sanket Goel, Overview of MMNE Lab, Hiroshima University and BITS Pilani Workshop, online, 19-Aug-20.

15. Prof. Sanket Goel, Microfluidic Viscometer, Workshop on Next Gen Smart Sensors, BITS Pilani (funded project by Swechha for US Alumni, online), 31-Jul-20

16. Prof. Sanket Goel, Training Program on Miniaturized Sensors, BITS Pilani (funded project by Swechha for US Alumni, online), 23-Jul-20

17. Prof. Sanket Goel, MEMS / Microfluidic for Biomedical and Energy Applications, Invited Talk, GRIET, Hyderabad, 13-June-20

18. Prof. Sanket Goel, Nano-technology for Sensing Applications, Invited Talk, NMREC, Hyderabad, 6-June-20.

19. Prof. Sanket Goel, Introduction to MEMS, Invited Talk, Practice School, BITS-Pilani, 19-May-20

20. Dr. Syed Ershad, Invited Talk, Low Power VLSI Design, BV Raju institute of Technology, Hyderabad on 17th June, 2020

21. Dr. Syed Ershad, Invited Talk, Low Power and Error Resilient Design, SV college of Engineering, Bangalore on 15th September, 2020

22. "Dr. Saroj Mondal, Invited Talk on ""Powering the IoT node"" on Faculty Development Program (FDP) on VLSI & MEMS Design at IIIT Senapati, Manipur during 10 -14 February 2020"

23. "Dr. Saroj Mondal, Invited Talk on ""Powering the IoT node"" on Short Term Training Program (STTP) on Emerging Trends in VLSI Design at SVNIT Surat, Gujarat during 12 -16 September 2020"

24. M.B. Srinivas: 'Electric Vehicles, Climate Change and Covid 19', Workshop on 'Emerging Technologies of Electric and Hybrid Vehicles', BITS Pilani, Hyderabad Campus, December 19, 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. C P Ravikumar, Director of Talent Development at Texas Instrument India, and Adjunct Faculty at IIT Madras on " Verification, Testing, and Validation of VLSI Chips" on February 27, 2020.

2. Prof. Sri Parameswaran, Professor and Former Head of School of Computer Science, UNSW, Sydney, Australia gave talk titled "A Hardware Countermeasure against Side Channel Attacks on Block Ciphers", on January 2, 2020.

3. 2-day workshop by Prof. Prosenjit Gupta on "Algorithms and Data Structures" during 21-22 October, 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Golden Reviewer for IEEE Transactions on Electron Devices awarded to Dr. Sayan Kanungo by Institute of Electrical and Electronics Engineers in January 2020"

2. Trusted Reviewer for IOP awarded to Dr. Sayan Kanungo by Institute of Physics in September'2020"

3. Dr. Amit Ranjan Azad received "Young Scientist Award" in URSI Regional Conference on Radio Science 2020 held at IIT (BHU) Varanasi in February 2020.

4. Venkatarao Selamneni, Pranav Anand P, and Parikshit Sahatiya, WS2 QD (n) decorated on SnS (p) as Localized Heterojunctions for Highly Responsive Flexible Broadband Photodetector, ICEE, IIT Delhi (Virtual), Dec 2020 (Best Poster Award)

5. Best Project Award, Anveshan Fellowship 2020, Analog Devices (Parikshit Sahatiya)

6. Best B.Tech Project Award (Mr. Amogh) by INAE, Govt. of India, 2020 (Parikshit Sahatiya)

7. Associate Editor for Frontiers in Electronics (Flexible and Wearable Electronics Section) (Parikshit Sahatiya)

8. IOP Publishing Top Cited Paper Award (India) in "Materials" (Parikshit Sahatiya)

9. Associate Editor, Applied Nanoscience (Springer-Nature), September 2020 onwards. (Prof. Sanket Goel)

10. Associate Editor, IEEE Transactions on Nano Bioscience, February 2020 onwards. (Prof. Sanket Goel)

11. Dr Amit Kumar Panda moderated the session as a Session Chair in the IEEE International Symposium on Smart Electronic Systems (ISES 2020).

b. Won by Students:

1. K Pranath Reddy (2016B5A30572H) won Swift Student Challenge Award during Apple WWDC 2020.

2. Sankalp K G (2016B2A30683H) was part of team which was the finalist in Covid-19 Innovation challenge and received certificate of excellence for proposing herbal nanoformulation to combat against the virus. He also received Certificate of appreciation for top 300 ideas in India for developing prototype of UV embedded glove for sterilization of objects at Hack the crisis India Hackathon organized by Government of India and Garage 48.

3. Sankalp K G (2016B2A30683H) was honoured with Indo-Asian William Gilbert Best Scholar Award in Electrical and Electronics Engineering in the International Webinar on UN Goals – Quality Education – The Future & International Academic Excellence Awards 2020 organized by IMRF, Dec 15, 2020.

4. Aryan Singh Gill (2019A3PS0444H) won Silver Medal in Chess at ARENA 2020.

5. Digvijay Singh (2017AAPS0317H) reached Pre-Final round of FlipKart GRiD, Robotics track. Ishika Kumar (2017A3PS0320H) Participated in BNY Mellon (Bank of New York Mellon) Code Divas Challenge and secured a internship offer through it.

6. Rishabh Singh (2017B4A81602H), K Pranath Reddy (2016B5A30572H) and Manan Gupta (2017A3TS0488H) got selected for Google Summer of Code (GSoC) 2020

7. Sargunpreet Kohli (2018AAPS0395H) and Sanghita Chakraborty (2018A8PS0876H) were selected for Google STEP internship.

8. Many students of EEE department secured summer internships in various organizations. The details follow: Mehul Chandwani (2018AAPS0488H) - Walmart Labs Bangalore; M.V. Aaditya (2017AAPS0123H) - RISE Lab, IIT Madras; Balaji Adithya V (2017AAPS0429H)-Analog Devices, India; S Vignesh Bharadwaj (2018A3PS0310H) – Micron Technology, India; Tanay Gupta (2018AAPS0343H) – MathWorks; Nishant Aggarwal (2017AAPS0334H) - Micron Technology, India; Keshav Kabra (2018AAPS0527H) - Micron Technology, India; Anusha Agarwal (2018A3PS0032H) – JP Morgan Chase. Harini Raghavan (2017B5AA1719H) – Queen's University, Ontario, Canada (MITACS GRI 2021); Digvijay Singh (2017AAPS0317H) – SensorDrops Networks Pvt. Ltd; Prathamesh Saraf (2017A8TS1348H) – NUS Singapore.

9. Students from EEE department also secured six month internships/Thesis in various organizations. The details follow: Tarun Garg (206B3A30450H) – University of South Carolina; Digvijay Singh (2017AAPS0317H) – RISE Group, IIT Madras; Jasvith Raj Basani (2017A3TS0374H) – Massachusetts Institute of Technology; Aastha Dave (2017B3AA0959) – RWTH Aachen University; Manan Gupta (2017A3TS0488) – NUS, Singapore, Ishika Kumar (2017A3PS0320H) – Bank of New York Mellon; Sankalp K G (2016B2A30683H) - North Carolina State University; Prathamesh Saraf (2017A8TS1348H) – IISc Bangalore;

10. Nikhil Munigela (2017AAPS0418H), Pranav Anand P (2017AAPS0379H), Harini Raghavan (2017B5AA1719H), K Pranath Reddy (2016B5A30572H), Ashish Padhy (2019H1240539H), Jasvith Raj Basani (2017A3TS0374H), Aastha Dave (2017B3AA0959H), Sankalp K G (2016B2A30683H), Prathamesh Saraf (2017A8TS1348H), Manan Gupta (2017A3TS0488) published research papers in reputed international conferences and Journals.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Submitted Project with Prof. Shlomo Magdasi (The Hebrew University of Jerusalem). Isreal in DST Indo-Isreal Bilaterla Project (Parikshit Sahatiya)

2. Submitted project with Prof.Mihailović (The Belgrade University, Serbia) in DST Indo - Serbia Bilateral Project (Parikshit Sahatiya)

3. Collaborated with Ceremorphic Inc, San Jose, California, USA for one of the project works (Parikshit Sahatiya)

4. Submitted a project proposal with Prof. Yoshifumi Nishio (Tokushima University) under DST Indo-Japan Bilateral Call (Soumya J, M B Srinivas)

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Meghdut Bhattacharya, Ankur Bhattacharjee, Arijit Neogie, Riya Bhattacharjee, Pratyasha Das, "An automatic energy efficient hybrid defogging system for glasses used in Commercial Applications", Indian Patent, No. 202031031187, (Filed)

2. Electronic Nasal Filter, Sanket Goel and Avinash Kothuru, Indian Patent filed, 202011039995, Sept-20

3. A Device for Making Designs on a Substrate, Lanka Tata Rao, Arshad Javed, Satish Kumar Dubey and Sanket Goel, Indian Patent, filed, 202011020964, May-20

4. A Thermal Management System for a Microfluidic Device for Synthesizing Nanoparticles, Sanket Goel, Madhusudan B Kulkarni and Yashas, Indian Patent, filed, 202011017181, April-20

5. A method of transferring laser-induced graphene (LIG) from a polyimide, Sanket Goel and Avinash Kothuru, Indian Patent, filed, 202011000918, Jan-20.

6. Variable Length Fast Fourier Transform Processor", Subhendu Kumar Sahoo, Ganesh kumar Ganjikunta; Application No: 202011013788 (Filed on March 2020)

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1) WOLF OF SILICON VALLEY;13th February 2020
EEE Student association (PHoEnix) organized this event to help students pitch their idea to the judging panel and help them think and create innovative solutions that can be a change to all existing technology we know of. The event was received with great enthusiasm and saw the participation of 25 young entrepreneurs.
Number of Participants: 20+ Teams

2) Project Open House;15th February 2020
This interactive session organized by EEE student association (PHoEnix) motivated students to explore the diversified field of Electrical and Electronics. The professors talked about their research topics and the projects that they are currently working on. The event was very well received and around 120 people attended it and helped students to know about what Professors expect when we take any Project under them in 3-1 or 3-2. The session was also attended by our Head of Department- Prof. Sanket Goel.
Number of Attendees: 140+

3) RANDOM- BITS Quiz ;16th February 2020
Science and technology are now present in every corner of the world. Even in places you never thought they could. EEE Student Association (PHoEnix) probed all these random corners and presented RANDOM BITS, a unique quiz comprising lesser-known wacky facts from the world of tech for students to know more about technologies they never knew about.
Number of Participants: 25+ Teams

4) Robosoccer Workshop and competition ;16th February 2020
EEE Student Association (PHoEnix) organized this event in collaboration with Automation & Robotics Club (ARC). This event was organized to relate the field of robotics to the beloved game of Football. We helped students to innovate their Line follower Bot at the Workshop and then participate in the Competition. The winning team of our campus went on to take part at IIT Hyderabad technical fest in the same domain.
Number of Participants: 5+ Teams

5) Visit to IIT Hyderabad Tech fest; 17th February 2020
With the experiences gained at ATMOS and TECH-Week, the EEE association's students under the kind leadership of Rohan Verma, participated in Elan and Nvision 2020.Our team competed with one of finest teams from the country in Robosoccer and polished their robotic skills.

6) Talk by Dr. Parikshit Sahatiya;19th July 2020
The talk discussed more about Research and development is one of the most lucrative fields for any engineering graduate. It gave students a chance to be a pioneer in your field, the tip of the spear. It was organized in collaboration with IEEE BITS Pilani Hyderabad Student Branch. Dr Parikshit Sahatiya shared his own experience as a research scientist. And guided us on how one can also become an explorer in their field of choice.
Number of attendees: 140+

7) Research@BITS; 12th August 2020

This talk was Organized by EEE student association to motivate students aiming to pursue top class-research in premier institutes/tech-giants around the globe. As this career path is usually not much illuminated during one's college life, we presented a golden opportunity to listen first-hand experience of BITS alumni about R&D. The talk helped them learn more about careers in core electronics R&D, applying for MS and direct PhD.

Number of Attendees: 150+

8) Internal OpenCV workshop; 29th August 2020

As image/video processing continue to amuse many in fields of robotics, the EEE Student Association (PHoEnix) organized an internal workshop on image processing using OPENCV in python. Conducted by experienced students in association, the workshop dealt with some theoretical concepts and practical applications of image processing, giving students valuable exposure to the important tool.

9) Launching BITS Website; 9 th September 2020

EEE Student Association (PHoEnix) proudly launched a dedicated website with the help of SWD BITS Hyderabad. This initiative in future will help students update about the ongoing workshops, talks, competitions and events organized by the association throughout the year. Also, the website has all the articles along with previous editions of our annual magazine "LiveWire" published.

URL: swd.bits-hyderabad.ac.in/phoenix

10) Placement Talk; 24th October, 2020

As we all very well know Placements are the cornerstone of conversations in most of our college life. To understand the crucial aspects related to placements EEE Student Association (PHoEnix) organized this event wherein seniors from various sectors like IT, Core and Finance were invited to share their wisdom. The students raised their concerns about the selection process with the interviews being conducted virtually, up-downs in the demand in industry. Taking this opportunity our speakers shared their expertise and how they adapted to such changes.

11) Workshop on Intel FPGA and Quartus on 28th and 29th October

With ever increasing interests of students in Embedded systems and digital profiles, a 2-day workshop was organized with cooperation from Intel on FPGA and Quartus. The students learned basics of simulation, timing analysis and implementation on Devkits and NIOS II Hardware & Software. During the session Prof. M B Srinivas and Dr. Soumya J of BITS Hyderabad EEE Department shared valuable insights.

12) Talk on Future of Photovoltaic by Solarstudy.in; 31st October 2020

As we know that this world is changing and if we don't change our choice of energy source, our planet is going to be uninhabitable soon. So, EEE Student Association (PHoEnix) organised a very exciting webinar with one of leading education providers in "Solar Study" industry, named 'solarstudy.in' which is a registered training provider for NABCEP in Asia and one of the most trusted certification bodies in Renewable Energy across the globe. The Interested students were given a golden opportunity to access to one of the courses they offer, "Python in PV" for free.

Number of Attendees: 50+

13) Technical Association Orientation for Freshers; 7th November 2020

The 2020 batch were introduced to the PHoEnix association. They were informed about its functions and the criteria for inductions.

14) PHoEnix Student Faculty Interaction; 24th November 2020

The EEE Student Association (PHoEnix)o rganized an interaction between the faculty and the students. The students from 2020 batch were warmly welcomed by the department and association. They received guidance on how to navigate their academics and maintain a good balance between studies and other activities. They also received advice on how they could further some of their academic aspirations (like research, higher studies and placements) as well. The occasion was graced by the presence of Head of Department (HOD) of the association, Dr. Alivelu M. Parimi.

Number of Attendees: 300+

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Double Ridge Horn Antenna (1-18 GHz) [Microwave Engineering Lab]	2
2.	Chemical Vapor Deposition System (Electronic Materials and Devices Lab)	1
3.	SLA Printer (IC Fabrication Lab)	1
4.	Thermo Cycler (MEMS Lab)	1
5.	Mentorgraphics Hep - 2	40
6.	Muffle Furnace (Electronic Materials and Devices Lab)	1

B3.10.7   Department of Economics and Finance

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	1
Associate Professors	1
Assistant Professors	13
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department   :   Dr. Dushyant Kumar

Contact details   :   040-66303711

Number of Ph.D. Scholars:

Full Time   :   12

Part Time   :   12

Aspirant Scheme   :   05

Ph.D. Thesis Submitted during the year: 2020 – 03

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned - NIL -

B. Industry Sanctioned Projects - NIL -

C. International Sanctioned Projects - NIL -

D. Institute Sanctioned Projects

S.No.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Minority Investor protection and Business group ownership structure in India	Economics & Finance	Dr. Nivedita Sinha		Additional competitive research grant, BITS-Pilani	-	8,50,000
2.	Urban Low-Income Households' Savings: Understanding Issues and Challenges in Indian Context	Economics & Finance	Dr. Rishi Kumar	Dr. Archana Srivastava & Dr. sudatta Banerjee	Dvara Research, Household Finance Research Initiative	-	14,05,000
3.	Socio-Economic Impacts of Cyclones and the Coping Strategies of the Local Communities in Odisha, India with a Special Focus on Women	Economics & Finance	Dr. Archana Srivastava	Professor Dolagobinda Pradhan (Kwantlen Polytechnic University) and Dr. Rishi Kumar	Shastri Indo-Canadian Institute	-	10,00,000

2.   ONGOING PROJECTS

A.   Ongoing Government Projects

S.No.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Financial Inclusion through Urban Cooperative Banks: An Exploratory Study of Telangana State	Economics & Finance	Dr. Mini Thomas	-	IMPRESS-ICSSR	-	5,60,000

S.No.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
2.	Impact of Modern Organized Multi Brand Retail Trade (MOMBRT) on Street Vendors: Case Study of Two Capital Cities (Hyderabad and Bhubaneswar)	Economics & Finance	Dr. Archana Srivastava	-	ICSSR	-	4,50,000
3.	Women's Employment, Interstate Variations and Time-use: A Comparative Study of Bihar and Andhra Pradesh	HSS and Economics & Finance	Dr. Sunny Jose and Dr. Bheemeshwar Reddy A (Joint PI-s)	-	Azim Premji University	-	11,88,000

B. Ongoing Industry Projects - NIL -

C. Ongoing International Sanctioned Projects   - NIL -

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	Mobilizing Clean energy Finance	Economics & Finance	Dr. Nivedita Sinha	-	RIG, BITS-Pilani	-	2,00,000
2.	Regional Variations in Women's Employment in Rural India	Economics & Finance	Dr. Bheemeshwar Reddy A.	-	RIG, BITS-PIlani	-	2,00,000
3.	Social Conflicts: Role of Development in the presence of Electoral Concerns	Economics & Finance	Dr. Dushyant Kumar	-	RIG, BITS-Pilani	-	1,58,000
4.	Impact of Remittances, Financial Development and Institutional Structure on Poverty: An Empirical Evidence from Developing Countries	Economics & Finance	Dr. Sunny Kumar Singh	-	RIG, BITS-Pilani	-	1,67,000
5.	Women on Board and Corporate Policies	Economics & Finance	Dr. Shreya Biswas	-	RIG, BITS-Pilani	-	2,00,000
6.*	Assessing multi-dimensional poverty in India for Sustainabl-e Developme-nt Goals-ada-ptation and use of the Consensua-l Approach in South India	Economics & Finance	Dr. Bheemes-hwar Reddy A. (partner investigator)	-	-	Dr. Shailen Nandy (Lead investigato-r) Cardiff University, UK Dr. Marco Pomati (co-investigator) Cardiff University, UK Prof. Sunny Jose G (partner investigato-r) Council for Social Developme-nt, Hyderabad	£ 35, 700

*This project is hosted at Cardiff University, UK

3.   COMPLETED PROJECTS

A. Completed Government Projects

S.No.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Sustainability of Cashless Banking in Unorganized Retail Sector: A Comparative Study of Two Districts of Telangana	Economics & Finance	Dr. Archana Srivastava and Dr. Rishi Kumar	-	IIBF, Mumbai	-	2,50,000
2	Does Financial Awareness lead to Better Financial Inclusion Outcomes? An Investigation	Economics & Finance	Dr. Durgesh C Pathak	Dr. Rishi Kumar	IMPRESS-ICSSR	-	4,50,000

S.No.	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Impact of the ex-gratia for farmers' suicide on the surviving family member of the deceased farmers in Telangana	Economics & Finance	Dr. Thota Nagaraju	-	IMPRESS-ICSSR	-	4,00,000

B. Completed Industry Projects   - NIL -

C. Completed International Projects - NIL -

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1.	An investigation in to child nutrition in India	Economics & Finance	Dr. Rishi Kumar	-	RIG, BITS-Pilani	-	1,91,567
2.	Impact of the ex-gratia for farmers' suicide on the surviving family member of the deceased farmers in Telangana.	Economics & Finance	Dr. Thota Nagaraju	-	RIG, BITS-Pilani	-	2,00,000

4. LIST OF RESEARCH PUBLICATIONS IN INDEXED JOURNALS

Papers Published by Faculty in Journals

Scopus Indexed

1. Alok, S., Nessa, S., & Ahil, S. B. (2020). School training strategies for prevention and control of dengue. Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine, 45(1), 106.

2. Alok, Swati, Kumar, Rishi, & Singh, Swati (2020). Determinants of Conflict Style and its Variations across North and South India: Evidence from manufacturing sector. International journal of Development and Conflict, 10(1), 33-52.

3. Antil, S., Kumar, M., & Swain, N. (2020). Evaluating the efficiency of regional rural banks across the Indian states during different phases of structural development. Applied Economics, 52(41), 1-17.

4. Bheemeshwar Reddy, A., Jose, S., & Vaidehi, R. (2020) Of Access and Inclusivity: Digital Divide in Online Education. Economic and Political Weekly, 55(36), 23-26.

5. Kumar, D., & Chowdhury, P. R. (2020). Conflict and development. International Game Theory Review (IGTR), 22(02), 1-24.

6. Kumar, R., & Lakhtakia, S. (2020). Rising cesarean deliveries in India: medical compulsions or convenience of the affluent?. Health Care for Women International, 1-25.

7. Kumar, R., & Lakhtakia, S. (2020). Women's Empowerment and Child Stunting in India: An Investigation. Journal of Population and Social Studies [JPSS], 29, 47-66.

8. Kumar, R., & Sood, R. (2020). Alcohol and Tobacco Consumption among Indian Women. Asian Women, 36(2), 25-42.

9. Mallela, K., Singh, S. K., & Srivastava, A. (2020). Estimating Bilateral Remittances in a Macroeconomic Framework: Evidence from top Remittance-Receiving Countries. Studies in Microeconomics, 8(1), 95-118.

10. Ramachandran, M. T., & Das, A. (2020). Collective farming and women's livelihoods: a case study of Kudumbashree group cultivation. Canadian Journal of Development Studies/Revue canadienne d'études du développement, 41(4), 1-19.

11. Thota, N., & Subrahmanyam, A. C. V. (2020). Bank total factor productivity convergence: Evidence from India. Finance Research Letters, 37, 101357.

12. Bohini, K., C.H. Yaganti and M.P. Thomas. (2021). India's Demographic Dividend: The Millennials Savings Conundrum. Millennial Asia. (Accepted).

Non-Scopus

13. Chhabra, S., Raghunathan, R., & Rao, N. M. (2020). The antecedents of entrepreneurial intention among women entrepreneurs in India. Asia Pacific Journal of Innovation and Entrepreneurship.

14. Kumar, A. S., Nagaraju, T., & Ajaz, T. (2020). On the Informational Efficiency of the Cryptocurrency Market. IUP Journal of Applied Economics, 19(1), 47-56.

15. Mansabdar, S., & Yaganti, H. C. (2020). Heterogeneity of Cash Markets at Physical Delivery Points and the Hedging Effectiveness of Agricultural Commodity Futures in India–Lessons for Contract Optimization. Applied Finance Letters, 9(SI), 79-89.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

1. Dr. Swati Alok presented a paper Does A Country With Highest Facebook Users Behave Differently Online? -Finding the Effects of Personality Traits on Facebook Behaviour among Students in India, at the 1st Rajagiri Management Conference (RMC 2020), held in Kochi, October 2020.

2. Dr. Nivedita Sinha presented a paper Investor reaction to Bank consolidation in India at the 4th Annual Economics Conference organized by Sarla Anil Modi School of Economics, NMIMS, Mumbai in collaboration with The Indian Econometric Society (TIES), 7 th March 2020.

3. Dr. Nivedita Sinha presented a paper Investor reaction to Bank consolidation in India at the 38th Annual Conference of Indian Association for Research in National Income and Wealth, New Delhi ((Virtual platform), Jointly Organized by RBI and Ministry of Statistics & Program Implementation, Government of India, 26-27th September 2020.

4. Dr. Nivedita Sinha & Saandra Nandakumar presented a paper *Impact of RBI's COVID*-19 policy measures on Banks at the research seminar organized by National Institute of Securities Markets (NISM) in collaboration with The Indian Econometric Society (TIES), 26-27 th August 2020.

5. Dr. Nivedita Sinha & Saandra Nandakumar presented a paper *Borrower's response to Bank consolidation in* India at the 1st Rajagiri Management Conference, organized by Rajagiri Business School, Rajagiri College of Social Sciences in collaboration with Victoria University of Wellington, New Zealand, held at Kochi India (virtual platform), 15th -16 th October 2020.

6. Dr. Nivedita Sinha & Neil M. Shah presented a paper Venture Capital Investment in the Renewable energy sector in India presented at the 2nd Rajagiri Conference on Economics and Finance 2020, organized by Rajagiri Business School and Rajagiri College of Social Sciences (Autonomous), Kochi in association with The Indian Econometric Society (TIES) and the University of Economics, Ho Chi Minh City (UEH) on 5th and 6th November 2020.

7. Dr. Nivedita Sinha was invited to be the Session Chair, at the 1 st Rajagiri Management Conference, organized by Rajagiri Business School, Rajagiri College of Social Sciences in collaboration with Victoria University of Wellington, New Zealand, held at Kochi India (virtual platform), 15th -16th October 2020.

8. Dr Nivedita Sinha's co-authored paper with Prof. Ravi Anshuman and Srijith Mohanan titled "Investment Efficiency or Tunnelling: Evidence from Indian Business Groups" was presented at F&A Brown bag seminar 2020, organized by IIM Bangalore

9. Dr. Thota Nagaraju presented a paper The cyclical behavior of Indian banking sector capital buffers at the 56th Annual Conference of The Indian Econometric Society held at Madhurai Kamaraj University, Madurai, during 8th-10th January, 2020.

10. Dr. C H Yaganti delivered lecture on Simultaneous Equations and Vector Autoregression at 56th TIES Preconference workshop on Time series Econometrics", Madurai Kamraj University, 5-6th January 2020.

11. Sanjay M & Dr. C H Yaganti presented paper on the topic Heterogeneity of Cash Markets at Physical Delivery Points and the Hedging Effectiveness of Agricultural Commodity Futures in India – Lessons for Contract Optimization at SEBI-NISM Conference on Changing Landscape of Securities Market during January 22-24, 2020.

12. Karuna B, Dr. C H Yaganti & Dr. Mini Thomas presented a paper on the topic *India's Demographic Dividend* – The Working-age Youth Conundrum at 56th TIES Preconference workshop on Time series Econometrics", Madurai Kamraj University, 5-6th January 2020.

13. Dr. C H Yaganti served as Resource person for the topic on Multivariate Time series Econometric Models - Four days online workshop on Econometrics Models: Theory and Practice, organized by Department of International Business, Alagappa University, during 13th – 16th October,2020.

14. Karuna B, Dr. C H Yaganti & Dr. Mini Thomas presented a paper on the topic *Determinants of India's Youth* Unemployment in the Millennials Milieu 2nd RCEF jointly organized by Rajagiri Business School and Rajagiri College of Social Sciences (Autonomous), Kochi in association with The Indian Econometric Society (TIES) and the University of Economics, Ho Chi Minh City (UEH) on 5th and 6th November 2020.

15. Dr. Rishi Kumar presented a paper titled "Opportunities and challenges in urban low-income households' savings behavior" held during Dec 8-Dec 11, 2020 at the Household Finance Roundtable, Dvara Research held virtually.

16. Paper "Determinants of Impact of Natural Disaster in SAARC Countries" (Bincy George, Sudatta Banerjee & Rishi Kumar) presented by Ms. Bincy George in 2nd Rajagiri Conference on Economics and Finance

organized by Rajagiri Business School in association with The Indian Econometric Society (TIES) and the University of Economics, Ho Chi Minh City (UEH), November 05-06, 2020.

17. Paper "Determinants of Impact of Natural Disaster in SAARC Countries" (Bincy George, Sudatta Banerjee & Rishi Kumar) presented by Ms. Bincy George in 56th Annual Conference of the Indian Econometric Society (TIES), at Madurai Kamaraj University, Madurai, Tamil Nadu, January 8-10, 2020.

ii) International:

1. Dr. Shreya Biswas presented a paper titled Socio-economic determinants of household investment portfolio in India held during Dec 8-Dec 10, 2020 at the virtual Household Finance Roundtable, Dvara Research held virtually.

2. Dr. Shreya Biswas presented a paper on the titled Bank board diversity and bank outcomes in India held during Oct 5-Oct 6, 2020 at the 10th Virtual International Corporate Governance conference held at Institute of Public Enterprises, Hyderabad

3. Dr. Shreya Biswas presented a paper on the titled Internal governance structure and external audit quality- Are they complements or substitute in emerging market held during Jan 22- Jan 24, 2020 at the NISM SEBI Changing Landscape of Securities Market conference held at NISM, Navi Mumbai.

4. Dr. Shreya Biswas presented a paper on the titled Women inheritance and women empowerment: The impact of Hindu Succession Act in India held during April 22- April 25, 2020 at the Population Association of America Annual Conference, Washington DC, USA held virtually, virtually.

5. Dr. Swati Alok presented a paper Career Sustainability For Women Employees In Information Technology Sector: Role Of Career Identity, Gender Disadvantage, Work-Family Conflict & Psychological Capital in the 6th World Conference on Women's Studies 2020, organized by International Institute of Knowledge Management (TIIKM), Colombo, Sri Lanka , 29th – 31st May 2020.

6. Dr. Mini P. Thomas and Radhika Gupta presented a paper titled Role of Urban Cooperative Banks in Financial Inclusion: An Exploratory Study of Hyderabad and Rangareddy Districts at the XV International Conference on Public Policy and Management, held at Indian Institute of Management Bangalore. 24-26 August, 2020.

7. Dr. Mini P. Thomas and Radhika Gupta presented a paper titled Role of Urban Cooperative Banks in Financial inclusion: An Exploratory Study of Two Districts in India presented in the VIII International Conference on Applied Research in Economics, organised by Higher School of Economics Russia. 21 September, 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Banerjee, S., Alok, S., & George, B. (2020). Determinants of Women Empowerment as Measured by Domestic Decision-Making: Perspective from a Developing Economy. In Advanced Issues in the Economics of Emerging Markets. Emerald Publishing Limited.

2. Athary Janiso (2020). Employment Trends among Scheduled Tribe Women. In Women and Work in Rural India, Tulika Books, New Delhi.

3. Biswas,S. & Sinha, N. (2021). Business group affiliation and resilience to Covid-19 outbreak in India. In Financial Transformations beyond the Covid-19 Health Crisis. World Scientific Publishing. (Accepted)

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. 1st National Symposium organised on Issues in Indian Economy- 14th, 15th and 17th February 2020. In Collaboration with the Economics Association.

This symposium is focused on promoting the discussion related to the current Indian economy, particularly keeping recent annual central budget in mind. Eminent persons from various fields are invited to share their views. This is surely going to be an enriching experience for all. Main Speakers included Prof. Prabhat Patnaik (Former Faculty, University of Cambridge, UK and JNU, India; Former Vice Chairman of Kerala State Planning Board and UN Task Force), Prof. R Nagaraj (Professor, IGIDR Mumbai), Prof. Surajit Sinha Professor (IIT Kanpur), Prof. RK Mishra (Director, IPE Hyderabad), Prof. Saikat Sinha Roy Professor (Jadavpur University), Prof. Ramana Sonti (Professor, ISB Hyderabad), Prof. K Nageshwar (Professor, Osmania University & Former member of Telangana Legislative Council), Prof. Yerram Raju (Director, Telangana Industrial Health Clinic Ltd., Govt. of Telangana).

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Swati Alok was Invited to conduct "Team management workshop" in Professor Jayashankar

Telangana State Agriculture university, PJTSAU, Rajendra nagar, Hyderabad, Feb 2020.

2. Dr. Mini Thomas gave an invited talk on the topic Migration Dynamics of Covid-19 Pandemic: The Kerala Story Revisited at the International Webinar on Global Pandemic Challenges, organised by Dept. of Economics, Sree Narayana College for Women, Kollam, Kerala. 9 June, 2020

3. Dr. Sudatta Banerjee gave an invited Talk on Role of Women in Development in TSCHE- Sponsored two-days National Seminar on "India's Economic Health: Major Issues held in St. Ann's College for Women, Hyderabad, India, March, 12, 2020.

4. Dr. Dushyant Kumar gave an invited Talk on Impact of Conflicts on Economy- Policy Responses in TSCHE-Sponsored two-days National Seminar on "India's Economic Health: Major Issues held in St. Ann's College for Women, Hyderabad, India, March, 12, 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Prof Debasis Mishra (Indian Statistical Institute, Delhi Centre) gave a talk on 'Economics Nobel Memorial Prize 2020: Contributions of Paul R Milgrom and Robert Wilson to Auction Theory'.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Dr. Sunny Kumar Singh has joined as an Associate Editor to the journal titled 'SN Business & Economics', a springer journal.

b. Won by Students:

1. Ms. Shreeya Jain, M.Sc. (Eco) 2016-21 batch, secured an off-campus Thesis at the University of Arizona, USA in the field of Computer Vision and Socially intelligent AI.

2. Mr. Tarun Garg, M.Sc. (Eco) 2016-21 batch, secured a yearlong undergraduate thesis at Artificial Intelligence Institute, University of South Carolina.

3. Ms. Aastha Dave, M.Sc. (Eco) 2017-22 batch, published her research work in 2D Nanomaterial Applications in Electronics in IEEE Consumer Electronics Magazine for which she was granted second authorship. She was also amongst 57 students across India to be selected as a Future Research Talent Scholar to pursue a summer research internship at Australian National University.

4. Mr. Pratik Kamdar, M.Sc. (Eco) 2017-22 batch secured an internship at the Department of Economic Affairs, Ministry of Finance, Government of India

5. Mr. Pranay Khatwani, M.Sc. (Eco) 2017-22 batch got selected as a member of Harvard Business Review Ascend Select, an invite-only and an exclusive community of aspiring leaders, handpicked by HBR Ascend.

6. Mr. Vikas Sheoran, M.Sc. (Eco) 2018-23 batch, worked on the problem of age estimation and gender prediction and achieved state of the art results on UTKFace dataset using deep learning. These approaches were Published in the 5th IAPR International Conference on Computer Vision & Image Processing, IIIT Allahabad in collaboration with another student from BPGC.

7. Ms. Jui Pradhan, M.Sc. (Eco) 2018- completed 3 months of contributions to open source projects in the Google Summer of Code Programme (May-August). She was also selected as a student Delegate in the ECCV 2020 (August).

8. Ms. Vibha Narendra, Mr Sailesh Duddupudi, Ms Hitaishi Desai M.Sc. (Eco) 2019-24 batch, were awarded second place in the Goodera Global Student Challenge 2020, and were part of the only undergraduate team that reached the finals.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. Mini Thomas completed an online course titled "Advancing the Digital Economy for Sustainable Growth in Asia" on May 6, 2020, offered by Asian Development Bank Institute, Tokyo.

2. Dr. Mini Thomas participated in the online Training Programme on "Analysing Trade and Trade Policy with the Structural Gravity Model", organized by United Nations ESCAP and Asia Pacific Research and Training Network on Trade, from 14-29 December, 2020.

3. Dr. Archana Srivastava and Dr. Rishi Kumar got an Shastri Institutional Collaborative Research Grant (SICRG) 2020-21 by Shastri Indo-Canadian Institute on the topic, "Socio-Economic Impacts of Cyclones and the Coping Strategies of the Local Communities in Odisha, India with a Special Focus on Women" in collaboration with Professor Dolagobinda Pradhan, Kwantlen Polytechnic University, Canada with Dr. Archana Srivastava (Lead Applicant) & Dr. Rishi Kumar (Team Member).

4. Dr. Sunny Kumar Singh worked on a joint paper Corruption and Stock Price Volatility: Firm-Level Evidence (Last month, the paper was submitted to a journal), co-authors - Tapas Mishra (University of Southampton, UK); Chandan Kumar Jha (Madden School of Business, Le Moyne College, Syracuse, NY); Prateek Sharma (IIM Udaipur).

5. Dr. Swati Alok attended a Workshop on Research Method and Data Analysis on 13 and 14 October 2020, at the 1st Rajagiri Management Conference (RMC 2020), held in Kochi, India during 15 and 16 October 2020.

6. Dr. Archana Srivastava completed an online course Introductory Course on Non-Tariff Measures and COVID-19 conducted by UNCTAD, 05th October to 30th October, 2020.

12. PATENTS FILED/PUBLISHED AND GRANTED   - NIL -

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Economics Association:

1. Seminar for B3 Students

An interactive Career Guidance session was conducted by the Economics Association, in collaboration with the Economics and Finance Department, on 4th February 2020. The faculty and Seniors offered their guidance, experience and personal anecdotes in order to guide the newer batches towards a more fulfilling, enriching and career oriented college experience.

2. Arthashastra - The Business Quiz

The Economics Association conducted its Annual Business Quiz during the Tech Week (13th February 2020). The event was aimed to test the Finance and Business Knowledge acquired by the students in a unique quiz format. Participants were provided with Newspapers, and were asked to identify the answers to certain questions provided, having hints in the Newspaper. This encouraged the participants to correlate the Economic and Finance concepts taught in classrooms to the Current Affairs, and encouraged them to explore the relevance of these concepts in the Business World. Participating in the teams of 2-3 members each, this event reached a registration of over 30 teams, turning out to be a great success.

3. National Symposium on Economic Issues

The Economics Association, in collaboration with the Economics and Finance Department, organized the first ever National Symposium Conclave on Issues in the

Indian Economy. It was a 3 Day event, in which a panel of 11 distinguished Speakers from all over the Nation were invited to share their knowledge and insights in their field of expertise, on topics related to the Economic Issues faced by the Nation.

The Conclave commenced on 14th February 2020, with the inauguration by the esteemed director, Prof G Sundar; and went on to cover various aspects of the economy like the Misconceptions of Fiscal Policy (Prof Prabhat Patnaik), Relevance of Finance (Prof Ramana Sonti), Economic Slowdown (Prof R Nagaraj), Trade Reforms (Prof Saikat Sinha Roy), Wealth Management (Mr VVK Prasad) – amongst an umbrella of other related topics. The Conclave finally concluded with a panel discussion on the recently released Union Budget of 2020. The Panel, chaired by Prof Sunny Jose, consisted of 3 notable intellectuals of our Nation: Prof Amir Ullah Khan, Prof K Nageshwar, and Prof Yerram Raju.

The Symposium was an instant success, and it featured in the Hindu Newspaper on the second day of the Conclave itself. Students and faculty from all disciplines attended in large numbers to gain the experts' perspective on the various aspects of the machinery that runs the economy – and were introduced to the multi-dimensional intricacies of the Indian economy.

4. Talk On Careers in Finance

The Economics Association conducted a Webinar talk in collaboration with the Department of Economics and Finance on the topic, 'Careers in Finance: from Academia to the Corporate World', on 9th August 2020. The speaker, Dr Rajnish Kumar, addressed the students on how a suitable finance portfolio could be built right from college, in order to be competitive in the Corporate World. Students were also introduced to the wide array of professional fields that lie in the financial domain; and students left with some clarity on the current industry requirements.

5. Lecture on Auction Theory

The Economics Association, in collaboration with the Department of Economics and Finance, conducted a guest lecture on the topic, 'Economics Nobel Memorial Prize 2020: Contributions of Paul R Milgrom and Robert Wilson To Auction Theory'. The Speaker, Prof Debasis Mishra, explained the various Auction Models, and their evolution through time. He explained how the research in the field has moved from commodity goods to assets that determine government liquidity levels – and how the contributions made by the most recent Nobel Laureates from the Economics Field has had several implications on the Development of newer Auction models.

6. Monthly Newsletter Initiative

De-Economist, the Editorial Board of the Economics Association came up with an initiative of a monthly Newsletter, which is circulated to all the students. The Newsletter, which released its first copy in October, consists of closely knit self-written articles on a large array of multi-faceted current issues – ranging from recent macroeconomic policies to the socio-political climate.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED – NIL -

B3.10.8 Department of Humanities and Social Sciences

Number of faculty members

Senior Professors, Professors	0
Associate Professors	2
Assistant Professors	12
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	-

Head of the Department   :   Dr. Biswanath Dash

Contact details   :   Email: biswanath@hyderabad.bits-pilani.ac.in

Number of Ph.D. Scholars   :   21

     Full Time   :   16

     Part Time   :   5

     Aspirant Scheme   :   0

Ph.D. Thesis Submitted during the year: 2019 – NIL -

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Structured Dialogues for Sustainable Urban Water Management	HSS	Suchismita Satpathy	Biswanath Dash	DST	Prof. Rajiv Gupta BITS Pilani, Pilani, Prof. Prof Abdul Malik,Aligarh Muslim University	57,26,400

B. Industry Sanctioned Projects: Nil

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Institutional Changes for Rural Innovation: The Civic Space and the State in India, the 1980s through 2010s	HSS	Prof. Keshab Das (GIDR, Ahmedabad) and Prof. Rajeswari S. Raina (SNU, Gautam Buddha Nagar	CollaboratorDr. Lavanya Suresh (BITS-Pilani, Hyderabad Campus)	Ford Foundation	Dhruv Raina D. Raghunandan Major S. Chatterjee	US $ 95,000 Approx. 68,40,000 INR

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Bangla, Telugu and Oriya: Examining the feasibility of automatic identification of Indian accents in English	HSS	Pranesh Bhargava	None	RIG	None	2,00,000

2. ONGOING PROJECTS

A. Ongoing Government Projects: Nil

B. Ongoing Industry Projects –

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Understanding the commercialization of Breast Milk from Sociological Perspective	HSS	Suchismita Satpathy	None	AIA Hyderabad	None	1,87, 000

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Role of Environmental Entro Dysfunction in explaining heightened calorie intake of some population cohorts in India: Data analysis	HSS	Dr Zakaria Siddiqui	Dr Shreya Biswas	University of South Australia	Dr Ronald Donato, University of South Australia	INR 2,39, 256.60/-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Wilde and Manto: A Comparative Study of Writers on Trial	HSS	Dr. Anhiti Patnaik	-	RIG	-	2,00,000
2	Political Ecology	HSS	Dr. Lavanya Suresh	-	OPERA	-	3,60,000 (per year)
3	Disability in South India: A Cultural History of the Political Discourse	HSS	Shilpaa Anand	-	RIG	-	2,00,000
4	A study of contemporary epistemological and ethicopolitical challenges confronting genomics research in India	HSS	Dr Aswathy Raveendran	-	RIG	-	2,00,000
5	Nagarjuna and the Concept of Time	HSS	A K Jayesh	-	RIG	-	2,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1.	Mainstreaming DRR and CCA into Government Departments	HSS	Biswanath Dash		AP HRDI/ Govt. of AP	-	1,20,000
1.	Resistance to the Western Ghats Conservation and Undercurrents: A study of the people's protest and the role of the local bodies in Idukki, Kerala	HSS	Dr. Lavanya Suresh	M. Suchitra	Centre for Development Studies (CDS), Kerala	M. Suchitra	Rs. 3,15,000
2.	Alternative ways of understanding ecological conservation	HSS	Dr. Lavanya Suresh	None	NALSAR, Hyderabad	None	Rs. 2,95,000

B. Completed Industry Projects - NIL -

C. Completed International Projects –

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Assistant Coordinator for AARMS (Aptis Action Research Mentoring Scheme)	HSS	Dr Santosh Mahapatra	-	British Council	-	1,50,000

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1.	Alternative ecological ways of being	HSS	Dr. Lavanya Suresh	-	RIG, BITS	-	2,00,000
2.	Measuring Segregation in Hyderabad: Introspecting Multiple Indexes and Multiple Patterns	HSS	Dr. Suchismita Satpathy	-	RIG, BITS	-	2,00,000
3.	An Evaluative Study of ESP Programmes in India	HSS	Dr Santosh Mahapatra	-	RIG, BITS	-	1,70,000

4. LIST OF RESEARCH PUBLICATIONS

Papers Published by Faculty/PhD Students in SCOPUS/WOS Indexed Journals

1. Dash, B. (2020). 'Rain Enhancement Technology: Making Sense of the "Cloud Seeding" Program in India', Bulletin of Science Technology and society. https://doi.org/10.1177%2F0270467620963708

2. Dash, B. and Walia, A. (2020). "Role of multi-purpose cyclone shelters in India: Last mile or neighbourhood evacuation", Tropical Research and Review, Vol. 9(4): 206-217. https://doi.org/10.1016/j.tcrr.2020.11.002

3. Anhiti Patnaik. "The Queer Ecological Aesthetics of Wuthering Heights," Brontë Studies, Vol. 46, Issue 1, 30-42, https://doi.org/10.1080/14748932.2021.1835059

4. M.G. Prasuna. First Travel Narrative in Telugu: A Study of Yenugula Veeraswamaiyya's Kasi Yatra Charitra. Rupkatha Journal on Interdisciplinary Studies in Humanities. Vol.12, No.3, April,2020.32-40, http://rupkatha.com/v12n3.php

5. Jayesh, A. K., "A Madhyamaka Analysis of the Property View and the Essence View of Existence," Journal of Indian Council of Philosophical Research, https://doi.org/10.1007/s40961-020-00226-2.

6. Mahapatra, S. K. (2020). Impact of Digital Technology Training on English for Science and Technology Teachers in India, RELC Journal, 51(1), 117-133. https://doi:10.1177/0033688220907401

7. Siddiqui, M. Z. and Donato, R., (2020) "The dramatic rise in the prevalence of overweight and obesity in India: obesity transition and the looming health care crisis" World Development. 134: DOI: https://doi.org/10.1016/j.worlddev.2020.105050

8. Lolla A. (2020). "Impact of Bhagavad Gita Course on College Students: A Study Based on Students Feedback." Journal of Religion and Health, DOI: https://doi.org/10.1007/s10943-020-01073-w

9. Raveendran, A. (2020). Invoking the political in socioscientific issues: A study of Indian students' discussions on commercial surrogacy. Science Education, 105(1), 62-98. https://onlinelibrary.wiley.com/doi/10.1002/sce.21601

10. Sankar, V. (2020). Politics of Cultural Commons: A Case Study of Sacred Groves in Central Kerala. Space and Culture, India, 8(2), 129-139. https://doi.org/10.20896/saci.vi0.774

11. Sankar, V. (2020). The Commodification of Food, Farming and Farmers: A Critical Review of Farm Laws, 2020. Space and Culture, India, 8(3), 18-26. https://doi.org/10.20896/saci.v8i3.1117

12. Hemachandran, Revathy (2020) A book review on Jallianwala Bagh Literary Responses in Prose and Poetry by Rakshanda Jalil. Vol. 12, No. 1, 1-3 https://dx.doi.org/10.21659/rupkatha.v12n2.20

Conference Proceedings

1. Bhargava, P. Ahamad, A., and Anand, A. (2020). "AccentDB: A Database of Non-Native English Accents for Improved Neural Speech Recognition," Proceedings of 12th International Conference on Language Resources and Evaluation, European Language Resources Association (ELRA), Marseille, France. (Pgs. 5351-5358) https://arxiv.org/abs/2005.07973 (**Scopus Indexed**)

1. Raveendran, A. (2020). Building a technical culture: experiences of engineering students in a technical institute. In Mashood, K. K., Sengupta, T., Ursekar, C., Raval, H. & Dutta, S. (Ed.) Proceedings of

epiSTEME-8: International Conference to Review Research on Science, Technology and Mathematics Education. pp. 61-69, Gaurang Publishing Globalize Pvt. Ltd, Mumbai, India.

Papers Published by Faculty/PhD Students in (Non-SCOPUS) Journals

1. Suresh, Lavanya. (2020). 'Building Inclusive Frameworks: Review of Sharachchandra Lele, et al eds. 2018. Rethinking Environmentalism: Linking Justice, Sustainability, and Diversity, Cambridge: MIT Press'. Ecology, Economy and Society 3(2), 191-196. https://doi.org/10.37773/ees.v3i2.215

2. Hemachandran, Revathy and Maya Vinai (2020) "Locating 'Saguna': The Native Indian Convert in Postcolonial India & quot, Re-markings, Vol. XIX No. 2, September 2020

3. Dash, B. (2020). 'Science State and Meteorology in India', Dialogue, Indian Academy of Science. http://dialogue.ias.ac.in/article/21688/science-state-and-meteorology-in-india

4. Dash, B. & Akhther, M.S. (2020). 'Weather and Epidemics: A strange early summer in India', South Asia Journal (Commentary). http://southasiajournal.net/weather-and-epidemics-a-strange-early-summer-in-india/

5. Akhter, M. S.(2020). "The role of religious institutions to combat the outbreak of COVID-19 pandemic" South Asia Journal. http://southasiajournal.net/the-role-of-religious-institutions-to-combat-the-outbreak-of-covid-19-pandemic/

5.   CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i)   National:

1. Dr. Anhiti Patnaik, "How to Convert your Dissertation into a Book," Academic Workshop conducted by Yoda Press, Delhi, 19 June 2020

2. Dr. Lavanya Suresh, "A Search for Ecological Alternatives: A Case Study of the Politics of Water and Scarcity in Andhra Pradesh, India", Conference on Collective Action in The 21st Century: Reimagining The Public And The State organized by the Department of International Relations and Governance Studies, Shiv Nadar University from 21st to 23rd October 2020.

3. Dr. Lavanya Suresh, "Environmental Justice: A Political Ecology Perspective" at the The Environment & the Indian Constitution series organised by NALSAR, Hyderabad on 4th March, 2020

4. Shilpaa Anand, "Historicizing Disability in India: Conceptual and Methodological Concerns": presented on 23rd July 2020 at an international workshop titled Dilemmas of Difference: Research Perspectives on Gender, Body Politics and Ethics organized by Vasanta College for Women, affiliated to Benaras Hindu University (20-25 July 2020).

ii)   International:

1. Dr. Anhiti Patnaik, "Transgender Bodies in New Media Poetry," North Eastern Modern Language Association NeMLA Boston, 5-7 March 2020.

2. Dr. Anhiti Patnaik, "Trials of WIlde and Manto," The Institute for World Literature, IWL Harvard University, 24 July 2020

3. Dr. Anhiti Patnaik, Institute of World Literature, workshop conducted by Harvard University at University of Belgrade (virtual), 3-30 July 2020.

4. Dr. Lavanya Suresh, presented "Social Resilience: The Role of Local Institutions in Addressing Vulnerability in Times of Crisis in the Context of the COVID Pandemic", International Webinar on Rethinking the Role of Local Governments in a Post Covid-19 World organized by the Centre for Gandhian Studies, Central University of Kerala, Kasaragod, Kerala (India) & Centre for Rural Management (CRM), Kottayam, Kerala (India) from December 10th to 14th, 2020.

5. Dr. Lavanya Suresh, presented "The Search for Alternative Irrigation Practices and the Politics of Water and Scarcity", Third biennial conference of the Political Ecology Network (POLLEN) organized by the Institute of Development Studies, University of Sussex, UK from 22nd to 25th Sept, 2020.

6. Dr. Lavanya Suresh participated in the workshop on *"Workshop on Speculative Futurism"*, Department of Physics and Earth Science at Framingham State University in Massachusetts, USA on 3rd August, 2020

7. Dr. Lavanya Suresh participated in the 'De-growth Vienna 2020: Strategies for Social-Ecological Transformation', Institute for Social Ecology (SEC), Vienna from May 29th to June 1st 2020.

8. Dr. Santosh Mahapatra participated in BAAL Online Conference 2020, organized by British Association of Applied Linguistics, September 4, 2020.

9. Aswathy Raveendran presented a paper titled "Building a technical culture: Experiences of engineering students in a technical institute" at piSTEME-8: International Conference to Review Research on Science, Technology and Mathematics Education at Mumbai January 3-6 2020.

10. Dr. Pranesh Bhargava, presented in English Literature Summit - 2020, with the title, "Accuracy in Reporting Clinical Tests in Texts with Disability: Analyses of 'Flowers for Algernon' and 'My Name is Brain Brian'" (12th December, 2020).

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Dr. Anhiti Patnaik, "The Spectral Witness in Contemporary Indian Horror Cinema," Horror Fiction in the Global South: Cultures, Narratives, Representations, Ed. Ritwick Bhattacharjee and Saikat Ghosh, New Delhi: Bloomsbury Academic India, 2020 (pp. 103-113) https://www.bloomsbury.com/in/horror-fiction-in-the-global-south-9789390077267/

2. Shruti Chakraborti and M.G. Prasuna, 'Quest for Negotiation in a Postcolonial World - A Comparative Study of the Characterization of Antoinette and Bertha', Post Colonial Praxis: Ramifications and Intricacies - People, Paradigm and Practice, Chennai, Notion Press, October 2020. (pp.238-249)

3. Kopal Khare & Sunny Jose (2020). Closing Access Loop: Situating Post-Infrastructural Assurance Circumstances in Rural Sanitation. In Solid Waste Policies and Strategies: Issues, Challenges and Case Studies (pp. 73-83). Springer, Singapore. DOI : 10.1007/978-981-15-1543-9_7

4. Abdullah A.B.M., Md Zakaria Siddiqui, Md Wahid Murad (2020) Devising Socioeconomic Status–Based Policies for Poverty Alleviation. In: Leal Filho W., Azul A.M., Brandli L., Lange Salvia A., Özuyar P.G., Wall T. (eds) No Poverty. Encyclopedia of the UN Sustainable Development Goals. Springer, Cham.

5. Siddiqui M.Z., Abdullah A.B.M., Murad M.W. (2020). Reducing Fuel Poverty for Sustainable Future Development. In: Leal Filho W., Azul A., Brandli L., Özuyar P., Wall T. (eds) Affordable and Clean Energy. Encyclopedia of the UN Sustainable Development Goals. Springer, Cham https://doi.org/10.1007/978-3-319-71057-0_44-1

6. Anand, Shilpaa, 'Rethinking Monsters: Teaching Disability Studies Through History and the Humanities' in Disability Studies in India: Interdisciplinary Perspectives, ed. Nilika Mehrotra, Springer Nature 2020 https://link.springer.com/chapter/10.1007/978-981-15-2616-9_6

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Dr. Anhiti Patnaik, "The Spectral Witness in Contemporary Indian Horror Cinema," Faculty Seminar Series, 26th February, 2020

2. Public Policy Lecture Series, 6th February 2020, Prof. C. Ramachandraiah, Professor in Urban Studies, Centre for Economic and Social Studies (CESS) Hyderabad, Mobility in Hyderabad - Issues, Priorities and Challenges

3. Shilpaa Anand co-organized a national level online workshop titled 'Fostering Research in Disability', 19th-20th of December, 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Anhiti Patnaik, "Productivity to Precarity: Re-thinking Social Media Feminism in Covid Times," Delhi Comparatists in collaboration with Tokyo University of Foreign Studies, December 4, 2020 (Webinar)

2. Dr. Lavanya Suresh, "Political ecology and environmental law: Approaches for Teaching and Research" for the Strengthening Capacity for Environmental Law in the Asia-Pacific Developing Environmental Law Champions-Train-the-Trainers Program, India, hosted by the Centre for the Study of Law and Governance, Jawaharlal Nehru University (JNU), Delhi, India and GNLU Centre for Environment, Sustainable Development and Climate Change, Gujarat National Law University, Gujarat, from November 22 to 28, 2020

3. Dr. Lavanya Suresh, "The draft EIA Notification 2020" as part of the panel on EIA hosted by the Center for Development Studies (CDS), Kerala.

4. Dr. Lavanya Suresh, "Environmental Justice and Ecological Alternatives: A Case Study of Traditional Irrigation Practices in Andhra Pradesh, India" in the Grameen Talk Series organized by Rural Development & Governance MA program, School of Livelihoods and Development, TISS Hyderabad, October 1, 2020.

5. Dr. Lavanya Suresh, delivered a lecture series on 'Political Ecology' at NALSAR University of Law, January 21, 2020

6. Dr. Santosh Mahapatra, "Digital Literacy for English Language Teachers" - a session as part of A One Day webinar on Teaching, Learning and ICT, organized by Dayanand Arya Kanya Mahavidyalaya, Nagpur, and R. S. Mundle Dharampeth Arts & Commerce College, Nagpur, in collaboration with Edfly Learn & MKLM's B. L. Amlani College of Commerce & Economics, M. R. Narhwani College of Arts, Vile Parle Mumbai (May 21, 2020).

7. Dr. Santosh Mahapatra, "Transforming Yourself into a Teacher Researcher" - a talk as part of Covid19: Opportunities to Learn, Explore and Experiment ELTA Telangana Online Conference (June 21, 2020).

8. Dr. Santosh Mahapatra, National Webinar on 'From Conducting to Publishing Teacher Research: A Brisk Walk', a talk organized by Regional Institute of English (North India) (July 1, 2020).

9. Dr.Santosh Mahapatra, "Creating and Using Teacher Learning Communities for Professional Development" - a session in an event organized by Govt. DIET Rangareddy Teacher Education (July 9, 2020).

10. Dr. Santosh Mahapatra, "Writing the Methods Section" - a session in the A One-week Online Short-term Workshop on Academic Writing for Faculty, organised by UGC-HRDC, University of Hyderabad, Hyderabad, August 17- 22, 2020.

11. Dr. Santosh Mahapatra, "Learning to Create Good Assessments" - a session in the webinar Emerging Trends in ELT :Curriculum Design & Assessment, organized by Department of English ,St. Francis College for Women (Hyderabad, Telangana) in collaboration with The American Corner, Hyderabad. (November 7, 2020).

12. Dr. Santosh Mahapatra, "Assessing Grammar I: Choosing a suitable approach" & "Assessing Grammar II: Creating assessment activities"- two sessions in the Refresher Course in English Language, Thrust Area: Grammar and Language Teaching, organised by UGC-HRDC, University of Hyderabad, Hyderabad, (November 2-14, 2020).

13. Dr. Zakaria Siddiqui: Invited lecture on 'Reconciling Calorie Puzzle Debate and Its implications for Poverty measurement' in National Webinar "Changing facets of Human Development", organised by Central University of Tamil Nadu, Department of Economics, Neelakudi, Thiruvarur, Tamil Nadu, August 12, 2020

14. Dr. Md Zakaria Siddiqui invited lecture on "Rationalising regional disparity in India: Role of History and Institutions", in Grameen Talk Series (RDG, TISS, Hyderabad): September 24, 2020

15. Prof. Shilpaa Anand, presented in a panel on 'Constructing Disability' in a Symposium on Dissent, Christ (deemed to be university), Bengaluru. January 2020.

16. Prof. Shilpaa Anand, 'Disability in India: Recovering a Cultural History' Humanities Seminar Series, School of Arts and Sciences, Azim Premji University, Bengaluru, February 2020

17. Prof. Shilpaa Anand, 'Disability's Diversities', Seminar Series: "Where Are We? The Socio-Economic Trajectories of Post-Independent India", organized by Equal Opportunity Cell, TISS Hyderabad. February 2020.

18. Prof. Shilpaa Anand, 'History, Historiography and Genealogy' at the Research Methodology workshop for doctoral students in the NALSAR University of Law, Hyderabad. February 2020.

19. Prof. Shilpaa Anand, online lecture titled 'Literary and Cultural Expressions of Disability', Central University of Kashmir, July 4, 2020.

20. Prof. Shilpaa Anand, 'Cultural Expressions of Disability' at Refresher Course in Humanities organized by Osmania University's Human Resource Development Centre, December 5, 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Prof. Elana Gomel, Department of American and English Studies, Tel Aviv University, October 24, 2020

2. Prof. Margrit Shildrick, Department of Gender and Knowledge Production, Stockholms University, November 21, 2020

3. Prof. Pushpesh Kumar, Department of Sociology University of Hyderabad- Sexuality and development on February 10, 2020

4. Prof. A. Raghuramaraju, Department of Humanities and Social Sciences, IIT Tirupati, The relationship between science and religion: and over or, July 17, 2020

5. Professor Nanak Kakwani, Visiting Professor of Economics in China Institute for Income Distribution at Beijing Normal University, China, delivered a lecture on "Income inequality explained in Layman's language" on September 18, 2020.

10.   AWARDS AND RECOGNITIONS

a.   Won by Faculty:

Dr. Lavanya Suresh - Justice E S Venkataramiah Memorial Prize in Development Administration - PhD Thesis was adjudged as outstanding among the theses submitted during the 5-year period of 2014-19 and was awarded the Justice E S Venkataramiah Memorial Prize in Development Administration by the Institute for Social and Economic Change (ISEC), Bangalore on 20th Jan 2020

b. Won by Students: - NIL -

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION - NIL -

12. PATENTS FILED/PUBLISHED AND GRANTED - NIL -

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1. Bi-weekly Discussion Forum.

2. Work in progress seminars during last week of April and November 2020

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1	Anechoic room for research- Dr. Pranesh Bhargava	1

B3.10.9   Department of Mechanical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	3
Associate Professors	4
Assistant Professors	25
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department   :   Prof. N Suresh Kumar Reddy

Contact details   :   040-66303565, Email: nskreddy@hyderabad.bits-pilani.ac.in

Number of Ph.D. Scholars   :   70

    Full Time   :   57

    Part Time   :   10

    Aspirant Scheme   :   3

Ph.D. Thesis Submitted during the year: 2020:

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Sivakumar Ramalingam	2013PHXF705H	Modelling and Simulation of an electro-pneumatic gear shift system used on Automated Manual Transmission, for optimizing gear shift quality, fuel economy and	Prof. Srinivasa Prakash Regalla	⎯⎯
2	Shanmukhasundararam V.R	2011PH410035H	Number synthesis and structure based rating of multilink epicyclic gear trains satisfying grueblres degree of freedom equation.	Dr. Y. V. D. Rao	Prof. S. P. Regalla
3	Mohd Abdul Wahed	2015PHXF0411H	Experimental and numerical studies of spring back in Ti-6Al-4V alloy at elevated temperatures.	Prof. Amit Kumar Gupta	Dr.Nitin R Kotkunde
4	Chithajalu Kiran Sagar	2015PHXF0010H	Experimental Study and Finite Element Analysis of Machining Behaviour of Tungsten Heavy Alloys.	Dr. Amrita Priyadarshini	Prof. Amit Kumar Gupta
5	Inturi Vamsi	2016PHXF0025H	Developement of an Integrated and Adaptive Condition Monitoring Scheme for Fault diagnosis in different stages of a wind turbine gearbox.	Dr. Sabareesh G R	Dr. Pavan Kumar P
6	Pavandatta M Jadhav	2016PHXF0022H	Development of Multi-component nano composite coated cutting tool.	Prof. N Suresh Kumar Reddy	⎯⎯
7	K Limbadri	2016PHXP0118H	Experimental and finite element studies of Zirealog-4.	Dr Kurra Suresh	⎯⎯
8	Pawan Kumar Chauhan	2016PHXF0422H	Polymer Derived Mesoporous Silicon oxycarbide ceramics for hydrogen storage.	Dr. Sujith R.	Dr. Parameshawarn R
9	Sunil Dutta	2017PHXF0301H	"Development and Investigation on Surface Integrity of Turned Novel Mg-Al-Mn Series Alloy"	Prof. N Suresh Kumar Reddy	⎯⎯

1. SPONSORED RESEARCH AND CONSULTANCY:

PROJECTS SANCTIONED:

A. Government Sanctioned:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Theoretical and simulation based approaches to determine the forming limit diagrams of Ti-6AI-4V at elevated temperatures	Mechanical	Dr Kurra Suresh	Dr Sujith R	DRDO - ARDB	-	15,50,600
2	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Mechanical	Dr Sandip S Deshmukh	Dr Chandu Parimi	DRDO	-	39,07,830
3	Development of mesoporous materials with enhanced hydrogen uptake for fuel cell vehicles	Mechanical	Dr Sujith R	Dr. Radhika Sudha	DST-SERB Core Research Grant	-	30,00,000
4	Enhancement of Mechanical Properties and Forming Behavior of AZ31 Alloy usingShear Deformation Techniques for Automotive & Aerospace Applications	Mechanical	Prof. Swadesh Kumar Singh (GRIET, Hyderabad)	Dr. Nitin Kotkunde	DST-SERB Core Research Grant	-	28,00,000
5	Enhanced Strength-to-weight Ratio INCONEL-718 Alloy Structures Made by AdditiveManufacturing for Aerospace Applications	Mechanical	Prof. Srinivasa Prakash Regalla	Dr. Kurra Suresh	DST-SERB-Core-Research-Grant	-	24,76,800

B. Industry Sanctioned Projects - Nil -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects - Nil -

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Benchmark studies on tornado induced wind loads between different tornado simulators worldwide	Mechanical Engineering	Prof Masahiro Matsui, TPU Japan	Dr Sabareesh G R	Joint Usage Research Program, Tokyo Polytechnic University, Japan	Iowa State University, USA, Tongji University, China, Tokyo Polytechnic University, Japan	2500000JPY

D. Institute Sanctioned Projects: - Nil -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)

2. ONGOING PROJECTS:

A. Ongoing Government Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Mechanical Engineering	Dr. R. Parameshwaran	-	DST	-	27,76,340
2	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Mechanical Engineering	Dr. Arshad Javed	-	DST	-	29,43,600
3	Studies on wind resistant design for proposed LIGO India Observatory	Mechanical Engineering	Dr. Sabareesh G R	Dr. Rahul Nigam & Dr. K Ramachandra Murthy	LIGO India	-	44,81,800
4	Development of Image Processing based portable device to measure surface strains in sheet metal forming	Mechanical Engineering	Dr. Kurra Suresh	-	DST	-	15,85,700
5	"3D printing of graphene nanocomposites for energy storage applications	Mechanical Engineering	Dr. Pavan Kumar Penumakala,	-	DST	-	24,30,040
6	Design and Development of an Automated Flow Calibration Unit for Fuel and Oxidizer Injectors in a Pneumatic Control System	Mechanical Engineering	Dr. Sandip Deshmukh S	-	DRDO	-	10,00,000
7	Machinability assessment and material characterization of tungsten heavy alloys used in defense applications as KE penetrators	Mechanical Engineering	Dr. Amrita Priyadarshini	Dr. Phaneendra Kiran	DRDO ARB	-	14,78,900
8	Experimental Investigation on an Energy Efficient Regenerative Thermal Management Technique for Hybrid Electric Vehicles".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST	-	27,93,700
9	Benchmark studies of tornado induced wind loads between tornado simulators wordwide	Mechanical Engineering	Dr. Sabareesh G R	-	Research center of wind Engineering	-	9,00,000
10	Harvesting energy from underwater ocean currents through coupled vortex-induced vibration, flapping dynamics, electromagnetic inductin and piezoelectric effects	Mechanical Engineering	Dr. Pardhasaradhi G	-	DST	-	27,35,370
11	A solar assisted combined cooling, heating and energy source: An alternative energy source for rural India".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST	-	38,40,496
12	Interated smart phone and IOT enabled Microfluidic sensor for real time qualification of soil macronutrients conductivity and pH	Mechanical Engineering	Dr. Satish Kumar Dubey	-	DST	-	18,71,408
13	Modelling and Simulation of Highly Reliable Functionally Graded Steels	Mechanical Engineering	Prof N Suresh Kumar Reddy (as Supervisor to CSIR Project Fellow)	-	CSIR	-	15,62,400

B. Ongoing Industry Projects:

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Automation of sample preparation process for pharmaceutical Applications	Mechanical Engineering	Dr. Y V D Rao	Dr. Arshad Javed	Aizant Drug Research Solutions Pvt.Ltd	-	15,48,000
2	Financial sanction of research project on Li Ion Battery	Mechanical Engineering	Dr. Sujith R	-	HBL Power Systems Ltd	-	11,90,000

C. Ongoing International Sanctioned Projects: - Nil -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects:

S.No	Project Title	Depart-ment	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Simulation study of desiccant-wheels coated with desiccant-material having a non-conventional sorptionisotherm	Mechanical Engineering	Mrinal Ketan Jagirdar	-	BITS Pilani, Hyderabad Campus	-	2,00,000
2	Design and Indigenous Development of a Biaxial Tensile Test Setup on Uniaxial Machine for Sheet Metal Forming	Mechanical Engineering	Nitin Kotkunde	-	BITS Pilani, Hyderabad Campus	-	10,00,000
3	An Indigenous Energy Efficient Thermal Management Strategy of Buildings for all Climatic Conditions across India	Mechanical Engineering	Santanu Prasad Datta	-	BITS Pilani, Hyderabad Campus	-	10,00,000
4	Effect of inherent nonlinearities on operational failure of damaged structural elements	Mechanical Engineering	Brajesh Kumar Panigrahi	-	BITS Pilani, Hyderabad Campus	-	2,00,000
5	Development of a robust and crack detection technique for wind turbine rotor blades using nonlinear vibration response characteristics	Mechanical Engineering	Brajesh Kumar Panigrahi	-	BITS Pilani, Hyderabad Campus	-	10,00,000
6	High Speed Micromachining Process Development for Thin Beam Manufacturing	Mechanical Engineering	Kundan Kumar Singh	-	BITS Pilani, Hyderabad Campus		2,00,000
7	Chatter Identification & Control for Thin-walled Workpiece Machining	Mechanical Engineering	Kundan Kumar Singh	-	BITS Pilani, Hyderabad Campus		10,00,000
8	Polymer composites for water-lubricated hydropower bearing applications	Mechanical Engineering	Prabakaran Saravanan	-	BITS Pilani, Hyderabad Campus		2,00,000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Hydrogen storage in mesoporous polymer derived ceramics for automotive applications	Mechanical	Dr Sujith R	Dr Parameshwaran R	DST-SERB Early Career Research	-	42,00,000
2	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Mechanical	Dr. Nitin Kotkunde	-	DST-SERB Early Career Research	-	31,42,000
3	Novel casting approach to improve quality of aluminum alloy casting	Mechanical	Prof. N Suresh Kumar Reddy	-	DRDL	-	9,84,500
4	Cryogenically-conditioned micro and nanoencapsulated phase change material slurries for cool thermal energy storage applications	Mechanical	Dr. R. Parameshwaran	-	DST-SERB	-	27,76,000
5	Enjancement of mechanical properties of Ti-6Al-4V using constrained groove presssing and heat treatment	Mechanical	A K Gupta	-	DRDO-ARMREB	-	48,74,660
6	Development of meta-material base support	Mechanical	Sabareesh G R	Prof YVD Rao	DMDE-DRDO	-	13,80,000
7	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring techniques	Mechanical	Sabareesh G R	-	DST-SERB	-	26,04,000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Study of lubrication and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes	Mechanical	Dr. Varinder Singh	Prof. A K Gupta, Prof. S P Regalla, Dr. T C Bera	Tube Investment India Ltd.		27,43,500

C. Completed International Projects: - Nil -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)

D. Completed Institute Projects: - Nil -

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals:

1. R S Vidyarthy, R Bhattacharjee., S Mohapatra., B B Nayak; Effects of the Activating Fluxes on the Properties of the Tungsten Inert Gas Welded Structural Steel; Advances in Materials and Manufacturing Engineering. 2020 Lecture Notes in Mechanical Engineering. Springer.

2. C Anand Badrish., Ayush Morchhale., Nitin Kotkunde, Swadesh Kumar Singh; Experimental and finite element studies of springback using split-ring test for Inconel 625 alloy; 2020 Advances in Materials and Processing Technologies.

3. Reddy K S., S P Raj., B Sravya., Morapakala Srinivas; Design of tunnel drier for the non-centrifugal sugar industry; doi: 10.20944/preprints 202002.0172.v1.

4. Gauri Mahalle., Nitin Kotkunde, Amit Kumar Gupta, Swadesh Kumar Singh; Prediction of flow stress behaviour by materials modelling technique for Inconel 718 alloy at elevated temperature; 2020 Advances in Materials and Processing Technologies.

5. M A Wahed., A K Gupta, V S R Gadi., Supradeepan K., S K Singh., Nitin Kotkunde; Parameter optimisation in V-bending process at elevated temperatures to minimise spring back in Ti-6Al-4V alloy; 2020 Advances in Materials and Processing Technologies.

6. Jella Gangadhar., Shreyas Ramachandran., Sujith R; Study on effect of structure and surface/ physical characteristics of a silicon oxycarbide by hydrofluoric acid etching; 2020 Materials and Processing Technologies.

7. Sandeep Pandre., Prathamesh Takalkar., Ayush Morchhale., Nitin Kotkunde., Swadesh Kumar Singh; Prediction capability of anisotropic yielding behaviour for DP590 steel at elevated temperatures; 2020 Advances in Materials and Processing Technologies.

8. Pankaj Wankhede., Kurra Suresh; A review on the evaluation of formability in sheet metal forming; 2020 Advances in Materials and Processing Technologies.

9. Limbadri Kanthi., Kurra Suresh., Swadesh Kumar Singh; Flow stress prediction of zircaloy-4 at elevated temperatures using KHL constitutive model; 2020 Advances in Materials and Processing Technologies.

10. Naresh R., R Parameshwaran., Vijayapuri Vinayaka Ram; Chapter 12 - Bio-based phase-change materials, Bio-Based Materials and Biotechnologies for Eco-Efficient Construction 1st Edition, 2020 Woodhead Publishing.

11. Ruchik Mishra., C Vineel., Arshad Javed; Indoor Navigation of a Service Robot Platform Using Multiple Localization Techniques Using Sensor Fusion; 2020 6th International Conference on Control, Automation and Robotics (ICCAR).

12. Jaligam Murali Mohan., Khairunnisa Amreen., Arshad Javed., Satish Kumar Dubey., Sanket Goel; Miniaturized electrochemical platform with ink-jetted electrodes for multiplexed and interference mitigated biochemical sensing; 2020 Applied Nanoscience.

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14. V R Shanmukhasundaram., Yendluri Venkata Daseswara Rao., Srinivasa Prakash Regalla; Review of Structural Synthesis Algorithms for Epicyclic Gear Trains; 2020 Lecture Notes in Mechanical Engineering.

15. Gauri Mahalle, Nitin Kotkunde, Amit Kumar Gupta, Swadesh Kumar Singh; Efficacy of semi-empirical models for prediction of forming limit curve of IN718 alloy at elevated temperatures; 2020 Advances in Materials and Processing Technologies.

16. Sannidhi, A. K., Gupta, A. K., Varghese, G., Toshniwal, K., & Sharma, V.; Analytical and finite element modelling of hydraulic bulge test on extra deep drawing steel with fractography study; 2020 Advances in Materials and Processing Technologies.

17. G. Lakshmi Srinivas; Numerical Simulation and Experimental Study on Lightweight Mechanical Member; 2020 Advanced Engineering Optimization Through Intelligent Techniques.

18. Alaukik Joshi; Mihir Ojha; Kanishka Harwani; Jay Karhade; Alivelu Manga Parimi; Design and Analysis of Dynamics, Control and Simulation of Y-4 Quadrotor Structure for Hybrid Aerial Vehicle; 2020 International Conference for Emerging Technology (INCET).

19. M. Indra Reddy, M. Anil Kumar, Vamsi Inturi; Experimental Investigation on the Mechanical Properties of American Agave and Glass Fibre Reinforced Polypropylene Composites; 2020 Lecture Notes in Mechanical Engineering.

20. Pranjal Shukla, Konark Joshi, Utkarsh Rastogi, Nitin Kotkunde, Swadesh Kumar Singh, and Ambuj Saxena; Conceptualisation of biaxial tensile test setup for sheet metal forming application using fuzzy analytical network process; 2020 Advances in Materials and Processing Technologies.

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22. Supradeepan K, Ramayee.L Performance comparison of wind turbine with various duct geometries; The 2020 World Congress on Advances in Civil, Environmental, & Materials Research (ACEM20).

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24. Vikrant P Katekar, Sandip S Deshmukh; Thermoeconomic analysis of solar distillation system with stepped-corrugated absorber plate; 2020 Journal of Mechanical Engineering Science.

25. Ankit Sharma, Amrita Priyadarshini, Ravindran Sujith, M. V. Sankara Subrahmanyam, P. Alen Thomas, Amit Kumar Gupta; Effect of Graphene Nanoplatelets Incorporation on Microstructural and Tribological Properties of Aluminium Metal Matrix Composites; ASME 2019 International Mechanical Engineering Congress and Exposition.

26. Louis Francois Marie, Sunkara Prudhvi Raj, Policherla Venkata Sai, Tara MacLeod, Morapakala Srinivas, K. Srinivas Reddy, Tadhg Seán O'Donovan; Solar Thermal Heating and Freeze Concentration for Non-Centrifugal Sugar Production; 2020 Design and Performance; Energy Engineering.

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29. Sohan Dudala., Satish Kumar Dubey., Sanket Goel; Microfluidic Soil Nutrient Detection System: Integrating Nitrite, pH and Electrical Conductivity Detection; 2020 IEEE Sensors Journal.

30. Jaligam Murali Mohan, Khairunnisa Amreen, Arshad Javed, Satish Kumar Dubey, and Sanket Goel; Highly Selective Electrochemical Sensing of Dopamine, Xanthine, Ascorbic acid and Uric acid using a Carbon Fiber Paper; 2020 IEEE Sensors Journal.

31. Uday Kumar Alugoju., Satish Kumar Dubey., Arshad Javed; Optimization of converging and diverging microchannel heat sink for electronic chip cooling; 2020 IEEE Transactions on Components, Packaging and Manufacturing Technology.

32. Vikrant P. Katekar , Sandip S. Deshmukh, and Ammar H. Elsheikh; Assessment and Way Forward for Bangladesh on SDG-7: Affordable and Clean Energy; 2020 International Energy Journal.

33. N. Nasir Hussain, Srinivasa Prakash Regalla, and Yendluri V. Daseswara Rao; Techniques for correlation of drop weight impact testing and numerical simulation for composite GFRP crash boxes using Ls-Dyna; 2020 International Journal of Crashworthiness.

34. Lanka Tata Rao., Prakash Rewatkar., Satish Kumar Dubey., Arshad Javed., Sanket Goel; Performance optimization of microfluidic paper fuel-cell with varying cellulose fiber papers as absorbent pad; 2020 International Journal of Energy Research.

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37. Dipankar Nath, Sarala Kallepalli, Lanka Tata Rao, Satish Kumar Dubey, Arshad Javed, and Sanket Goel; Microfluidic paper microbial fuel cell powered by Shewanella putrefaciens in IoT cloud framework; 2020 International Journal of Hydrogen Energy.

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41. Anand Badrish., Ayush Morchhale., NitinKotkunde., Swadesh Kumar Singh; Influence of material modeling on warm forming behavior of nickel based super alloy; 2020 International Journal of Material Forming.

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45. Lin Y.C., Zhu X.-H., Dong W.-Y., Yang H., Xiao Y.-W., Kotkunde N.; Effects of deformation parameters and stress triaxiality on the fracture behaviors and microstructural evolution of an Al-Zn-Mg-Cu alloy; 2020 Journal of Alloys and Compounds.

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48. Gayatri Vineela Marrivada, Phaneendra Kiran Chaganti, and Ravindran Sujith; Fabrication and mechanical characterization of glass fibre reinforced triaxially braided composites; 2020 Journal of Composite Materials.

49. Deepak Nabapure, Ram Chandra Murthy; KDSMC Investigation of Rarefied Gas Flow in a Four-Sided Lid Driven Cavity: Effect of Rarefaction and Lid Velocities; 2020 Journal of Computational Science.

50. Khalid Anwar., Sandip Shridharrao Deshmukh., Saad Mustafa Rizvi; Feasibility and Sensitivity Analysis of a Hybrid Photovoltaic/Wind/Biogas/Fuel-Cell/Diesel/Battery System for Off-Grid Rural Electrification Using; 2020 Journal of Energy Resources Technology, Transactions of the ASME.

51. Vikrant P Katekar., Sandip Shridharrao Deshmukh; A review of the use of phase change materials on performance of solar stills; 2020 Journal of Energy Storage.

52. Sravya Beeram., Srinivas M., S P Raj., Reddy K S; Selection of sustainable juice extraction techniques for non-centrifugal sugar industry using multi-criteria decision-making methods; 2020 Journal of Food Process Engineering.

53. Mahalle G., Morchhale A., Kotkunde N., Gupta A.K., Singh S.K., Lin Y.C.; Forming and fracture limits of IN718 alloy at elevated temperatures: Experimental and theoretical investigation; 2020 Journal of Manufacturing Processes.

54. Chithajalu Kiran Sagar, Amrita Priyadarshini, Amit Kumar Gupta, Tarun Kumar, Shreya Saxena; An alternate approach to SHPB tests to compute Johnson-Cook material model constants for 97 WHA at high strain rates and elevated temperatures using machining tests; 2020 Journal of Manufacturing Science and Engineering, Transactions of the ASME.

55. Baloji Dharavath, Ayush Morchhale, Swadesh Kumar Singh, Nitin Kotkunde & M. T. Naik; Experimental Determination and Theoretical Prediction of Limiting Strains for ASS 316L at Hot Forming Conditions; 2020 Journal of Materials Engineering and Performance.

56. Sushil Raut., Idaku Ishii., Sangam Srikanth., Sohan Dudala., Satish Kumar Dubey., Arshad Javed., Sanket Goel; Optimization and Characterization of Direct UV Laser Writing System for Microscale Applications; 2020 Journal of Micromechanics and Microengineering.

57. C Santhi Durganjali., Sameer Bethanabhotla., Satwik Kasina., Sudha Radhika; Recent Developments and Future Advancements in Solar Panels Technology; 2020 Journal of Physics: Conference Series.

58. Preetha Chandrasekharan Meenu., Santanu Prasad Datta., Amarthaluri Satyapaul Singh., Srikanta Dinda., Chanchal Chakraborty., Sounak Roy; Polyaniline supported g-C3N4 quantum dots surpass benchmark Pt/C: Development of morphologically engineered g-C3N4 catalysts towards metal-free- methanol electro-oxidation; 2020 Journal of Power Sources.

59. Ashvin Vinodh., Supradeepan K; A numerical study on influence of the control cylinder on two side-by-side cylinders; 2020 Journal of the Brazilian Society of Mechanical Sciences and Engineering.

60. P. V. Sai Divya, P. K. Penumakala & A. K. Nallathambi; Influence of secondary cooling strategies on thermal gradients in the direct chill casting of magnesium alloys; 2020 Journal of Thermal Analysis and Calorimetry.

61. Sachchidanand Das., Kush Dwivedi., Sabareesh Geetha Rajasekharan., Yendluri Venkata Daseswara Rao; Vibration attenuation and bandgap characteristics in plates with periodic cavities; 2020 JVC/Journal of Vibration and Control.

62. Deepak Nabapure, Ram Chandra Murthy K.; DSMC investigation of rarefied gas flow over a 2D forward-facing step: Effect of Knudsen number; 2020 Acta Astronautica.

63. Vamsi Inturi, P. Ritik Sachin, G. R. Sabareesh; Supervised feature selection methods for fault diagnostics at different speed stages of a wind turbine gearbox; 2020 Lecture Notes in Electrical Engineering.

64. Sandeep Pandre., Ayush Morchhale., Nitin Kotkunde., Swadesh Kumar Singh; Influence of processing temperature on formability of thin-rolled DP590 steel sheet; 2020 Materials and Manufacturing Processes.

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69. Goutam Roy, Brajesh Panigrahi, and G. Pohit; Crack identification in beam-type structural elements using a piezoelectric sensor; 2020 Nondestructive Testing and Evaluation.

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71. V Venkateswara Rao., Santanu Prasad Datta; A feasibility assessment of single to multi/hybrid evaporative coolers for building air-conditioning across diverse climates in India; 2020 Applied Thermal Engineering.

72. Chithajalu Kiran Sagar, Amrita Priyadarshini, Amit Kumar Gupta, and Devanshi Mathur; Experimental investigation of tool wear characteristics and analytical prediction of tool life using a modified tool wear rate model while machining 90 tungsten heavy alloys; 2020 Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture.

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75. Badrish A., Morchhale A., Kotkunde N., Singh S.K.; Parameter Optimization in the Thermo-mechanical V-Bending Process to Minimize Springback of Inconel 625 Alloy; 2020 Arabian Journal for Science and Engineering.

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81. G. V. N. Trivedi & R. Parameshwaran; Cryogenic conditioning of microencapsulated phase change material for thermal energy storage; 2020 Scientific Reports.

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102. Gauri Mahalle, Omkar Salunke, Nitin Kotkunde, Amit Kumar Gupta and Swadesh Kumar Singh; Study of Khan-Huang-Liang (KHL) Anisotropic Deformation Model for Deep Drawing Behaviour of Inconel 718 Alloy; 2020 IOP Conference Series: Materials Science and Engineering.

103. Ayush Morchhale, Nitin Kotkunde and Swadesh Kumar Singh; Deep drawing behavior of IN625 alloy under the influence of different process parameters; 2020 IOP Conference Series: Materials Science and Engineering.

104. V.V.N. Satya Suresh, A. Suresh, S.P Regalla, P.V Ramana and O. Vamshikrishna; Sustainability aspects in the warm forming of tailor welded blanks; 2020 E3S Web of Conferences.

105. G. Lakshmi Srinivas and Arshad Javed; Multi-body dynamic optimization for upper arm of industrial manipulator; 2020 AIP Conference Proceedings.

106. Jella Gangadhar, Ankur Maheshwari, Rajendra K. Bordia, C. N. Shyam Kumar, Christian Kubel, Ravindran Sujith; Role of carbon on the thermal and electrical properties of graphene- enriched silicon oxycarbides; 2020 Ceramics International.

107. P. K. Chauhan, R. Parameshwaran, P. Kannan, R. Madhavaram, R. Sujith; Hydrogen storage in porous polymer derived SiliconOxycarbide ceramics: Outcomes and perspectives; 2020 Ceramics International.

108. G. Naveen Kumara, Bader Al-Aifan, R. Parameshwarana, V. Vinayaka Ram; Facile synthesis of microencapsulated 1-dodecanol/melamine-formaldehyde phase change material using in-situ polymerization for thermal energy storage; 2020 Colloids and Surfaces A: Physicochemical and Engineering Aspects.

109. Pavan Kumar Penumakala, JoseSanto, Alen Thomas; A critical review on the fused deposition modeling of thermoplastic polymer composites; 2020 Composites Part B: Engineering.

110. Reddy T.J., Narayanamurthy V., Rao Y.V.D.; Study on crush tube's geometric cross-sections and topology for axial crashworthiness; 2020 Defence Science Journal.

111. Jaligam Murali Mohan., Khairunnisa Amreen., Arshad Javed., Satish Kumar Dubey., Sanket Goel; Modified Graphite Paper Based Miniaturized Electrochemically Optimized Hydrazine Sensing Platform; 2020 ECS Journal of Solid State Science and Technology.

112. Lanka Tata Rao, Satish Kumar Dubey, Arshad Javed, Sanket Goel; Development of Membraneless Paper-•Pencil Microfluidic Hydrazine Fuel Cell; 2020 Electroanalysis.

113. YQ Jiang, YC Lin, GD Pang, DG He, N Kotkunde;Constitutive model and processing maps for a Ti-55511 alloy in β region; 2020 Advanced Engineering Materials.

114. CA Badrish, A Morchhale, N Kotkunde, SK Singh, Prediction of flow stress using integrated JC-ZA constitutive model for Inconel 625 alloy; 2020 Materials Today: Proceedings.

115. N Kotkunde, A Badrish, A Morchhale, P Takalkar, SK Singh;Warm deep drawing behavior of Inconel 625 alloy using constitutive modelling and anisotropic yield criteria; 2020 International Journal of Material Forming.

116. CA Badrish, A Morchhale, N Kotkunde, SK Singh, UMR Paturi; Influence of lubrication on forming limit diagram for Inconel 625 alloy at elevated temperatures; 2020 Materials Today: Proceedings.

117. UMR Paturi, H Devarasetti, NS Reddy, N Kotkunde, BK Patle, Modeling of surface roughness in wire electrical discharge machining of Inconel 718 using artificial neural network; 2020 Materials Today: Proceedings.

118. VH AmeyaI, VLN Parasuram, K Supradeepan, PS Gurugubelli. 2020. Effect of material property variation on the dynamic response of a flexible splitter plate attached behind a square cylinder due to flow induced loads; 2020 Materials Today:Proceedings 28, 480-485.

119. Jadhav, Pavandatta Manohar, and Suresh Kumar Reddy Narala. "Tribological analysis of electrostatically developed multi (YSZ, TiN, SiC) nanocomposite coated cutting tool material." 2020 Journal of Manufacturing Processes 51, 161-173.

120. Sunil Dutta, and Suresh Kumar Reddy Narala; Experimental investigation to study the effects of processing parameters on developed novel AM(Al-Mn) series alloy; 2020 Materials and Manufacturing Processes.

121. Rakesh Kumar Gunda., N Suresh Kumar Reddy; Analysis of electrostatic solid lubricant spray process parameters during turning Ti-6Al-4V alloy; 2020 Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture.

122. Sunil Dutta, Suresh Kumar Reddy Narala; Influence of process variables on machining characteristics in turning of novel AM alloy; 2020 Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture.

123. Sunil Dutta, Suresh Kumar Reddy Narala; Investigations on surface roughness and microhardness of turned AM alloy; 2020 Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science.

124. Sunil Dutta, Suresh Kumar Reddy Narala; Investigations on chip formation of turned novel AM alloy; 2020 Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering.

125. Ruslan Melentiev, Fengzhou Fang, Suresh Kumar Reddy Narala; Influence of different pretreatments on Ti-6Al-4V surface integrity and scratch-resistance of epoxy coating: Analysis of topography, microstructure, chemistry and wettability; 2020 Surface and Coatings Technology.

126. Jadhav, Pavandatta Manohar, and Narala Suresh Kumar Reddy. "Analysis of Novel Nano-composite Coating for Varied Combinations of YSZ1–x–y, TiN x, SiN y."; 2020 Tribology Transactions: 1-21.

127. Sunil Dutta, Suresh Kumar Reddy Narala; Alloying criteria and investigations on the properties of novel AM series alloy fabricated using stir casting; 2020 Materials Today: Proceedings.

128. Sunil Dutta, Suresh Kumar Reddy Narala; Effect of tool nose radius in turning of novel Mg alloy; 2020 Materials Today: Proceedings.

129. Jadhav, Pavandatta Manohar, and Suresh Kumar Reddy Narala. "Tribological characterization of electrostatically developed Al2O3 coated cutting tool material."; 2020 Materials Today: Proceedings.

130. Gunda, Rakesh Kumar, Suresh Kumar Reddy Narala, Venkata Kasi Viswanadham Kolipakula, and Sreenivasulu Reddy Goda. "Experimental investigation to study the performance of solid lubricant during turning EN31 steel and Ti-6Al-4V alloy." 2020 Materials Today: Proceedings.

131. Sheelwant, Amar, Suresh Kumar Reddy Narala, and Palaparty Shailesh. "Synthesis and tribological evaluation of aluminum-titanium diboride (Al-TiB2) metal matrix composite." 2020 Materials Today: Proceedings.

132. Pitchi, Chennakesava Sai, Amrita Priyadarshini, Ganesh Sana, and Suresh Kumar Reddy Narala. "A review on alloy composition and synthesis of β-Titanium alloys for biomedical applications." 2020 Materials Today: Proceedings.

133. Kumar, Gunda Rakesh, and Narala Suresh Kumar Reddy. "Tribological studies of EN31 steel and Ti-6Al-4V alloy materials using pin-on-disc tribometer." 2020 Materials Today: Proceedings.

134. Kolluru, Uday Kiran, Suresh Kumar Reddy Narala, and Sunil Dutta. "Optimization of cutting forces and surface roughness in dry turning of AM magnesium alloy using Taguchi method." 2020 Materials Today: Proceedings.

135. Dutta, Sunil, and Suresh Kumar Reddy Narala. "Optimizing turning parameters in the machining of AM alloy using Taguchi methodology." 2021 Measurement 169.

136. Anvesh Krishna Sannidhi, Amit Kumar Gupta, George Varghese, Krishna Toshniwal & Vaibhav Sharma; Analytical and finite element modelling of hydraulic bulge test on extra deep drawing steel with fractography study; 2020 Advances in Materials and Processing Technologies.

137. Akhil Bhardwaj, Naishadh Gohil, Amit Kumar Gupta, S.S. Satheesh Kumar, An experimental investigation on the influence of elevated-temperature constrained groove pressing on the microstructure, mechanical properties and hardening behaviour of Ti6Al4V alloy; 2021 Materials Science and Engineering: A, Volume 802.

138. Akhil Bhardwaj, Vishwesh Mudaliar, Naishadh Gohil, Amit Kumar Gupta, S.S. Satheesh Kumar, Evolution of microstructure and mechanical properties of Ti6Al4V alloy by multiple passes of constrained groove pressing at elevated temperature; 2021 Journal of Materials Processing Technology, Volume 288.

139. Srinivasa Rao Vutla, Srinivasa Prakash Regalla, Kannan Ramaswamy, "Life Cycle Assessment of Cleanroom for Micro-electro-mechanical Systems Fabrication with Insights on Sustainability", Journal of Cleaner Production, Accepted for publication (2nd Oct 2020) (Impact factor: 7.246). (SCI) https://doi.org/10.1016/j.jclepro.2020.124520

140. Mahesh Patil, Varinder Singh, Amit Kumar Gupta, Srinivasa Prakash Regalla, Tufan Chandra Bera, Bade Simhachalam, Krishna Srinivas, International Journal of Precision Engineering and Manufacturing-Green Technology (Accepted for publication in Dec 2020) (SCI)

141. N. Nasir Hussain, Srinivasa Prakash Regalla, Venkata Daseswara Rao Yendluri, "Techniques for Correlation of Drop Weight Impact Testing and Numerical Simulation for Composite GFRP Crash Boxes Using Ls-Dyna", International Journal of Crashworthiness (accepted on 13th Oct 2020). (SCI) https://doi.org/10.1080/13588265.2020.1837478

142. Hussain NN, Regalla SP, Rao YVD, Dirgantara T, Gunawan L, Jusuf A. Drop-weight impact testing for the study of energy absorption in automobile crash boxes made of composite material. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications. First Published in August 2020. https://doi.org/10.1177/1464420720952813 (SCI)

143. N. Nasir Hussain, Srinivasa Prakash Regalla, Yendluri V. Daseswara Rao, Study on influence of notch triggers on absorption of energy for composite automobile crash box under impact loads, Materials Today: Proceedings, (Available online from 2 November 2020). https://doi.org/10.1016/j.matpr.2020.09.715 (Scopus)

5.   CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i)   National:

S.No	Faculty Name	Name of the Conference/Workshos	Organized by	Date	
1	Sujith R	Workshop on Materials Characterization, ARCI Hyderabad (Online)	ARCI Hyderabad	27 November 2020	Attended
2	Dr. Nitin Kotkunde	SMF 2020 Conference on Sheet Metal Forming	SMFRA IIT Bombay	18-19 December 2020	Attended

ii) International:

S.No	Faculty Name	Name of the Conference/Workshos	Organized by	Date	
1	Sujith R	Faraday Discussions on Chemistry of 2D Materials (Online)	Royal Society of Chemistry	25-27 November 2020	Participated
2	Sujith R	International e-conference on Structural Materials for Nuclear and Aerospace Applications	Materials Division, BARC Mumbai	3-6 December 2020	Participated
3	Prabakaran Saravanan	International Tribology Research Symposium 2020	Tribology society of India (TSI)	5-7th December 2020	Presented

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED:

1. Modelling and Analysis of Functionally-Graded Cracked Beams Subjected to Static and Dynamic Loadings, B. Panigrahi and G. Pohit, Handbook of Research on Developments and Trends in Industrial and Materials Engineering, Vol , I , B 306-E 326

2. R. Naresh, R. Parameshwaran, V. Vinayaka Ram, 2020, 'Bio-based Phase Change Materials', Bio-based Materials and Biotechnologies for Eco-efficient Construction, 1st Edition, Imprint: Woodhead Publishing Limited, Elsevier, Paperback ISBN: 9780128194812.

3. Sustainable tribology: Processing and characterization of multiscale thermoplastic composites within hydropower applications, Prabakaran Saravanan and Nazanin Emami, Tribology of Polymer Composites: Characterization, Properties, and Applications, 1st Edition, Elsevier Science, 2020, ISBN: 0128197676, 9780128197677

4. V. R. Shanmukhasundaram, Y. V. D. Rao, S. P. Regalla, Review of Structural Synthesis Algorithms for Epicyclic Gear Trains. In: Sen D., Mohan S., Ananthasuresh G. (eds) Mechanism and Machine Science. Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 351-375, July 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

Name of Faculty	Conference/Workshop	Duration
Y V D Rao	1st International & 13th National conference on Industrial Problems on Machines and Mechanisms (IPRoMM-2020)	December 21-22, 2020
Prof. Srinivasa Prakash Regalla	National workshop on Emerging Technologies of Electric Vehicles & Hybrid Electric Vehicles:Challenges in Design, Manufacturing and Control Systems (EV-2020)	19th-20th December 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY:

Name of Faculty	Organization	Topic of the Guest Lecture / Talk	Duration
Sujith R	VNRJIET, Hyderabad	Materials Characterization	2 hours on 19th December 2020
Sujith R	Gayathri Vidya Parishad College of Engineering, Vizag	Materials for Energy Storage	2 hours on 11th September 2020
N. Jalaiah	AICTE sponsored STTP on "Innovative techniques for sustainable energy development through modeling of mechanical processes" from 19th to 24th October at K.L.N.C.E., Madurai, Tamilnadu	Introduction to Finite Volume Method	2 hours on October 19th, 2020
Sandip Deshmukh	Department of Mechanical Engineering, Prof. Ram Meghe Institute of Technology & Research, Badnera-Amravati, Maharashtra	Effects of Urban Development on Low Carbon Energy Supply	2 hours on June 15th, 2020
Sandip Deshmukh	S.B.Jain Institute of Technology, Management and Research, Nagpur. Maharashtra	Educational system challenges and opportunities aftermath of COVID 19 Pandemic	1 hour on June 18th, 2020

Name of Faculty	Organization	Topic of the Guest Lecture / Talk	Duration
N Suresh Kumar Reddy	Avanthi Institute Of Engineering & Technology	Tribology	Feb 20th, 2020
N Suresh Kumar Reddy	CVR College of Engineering	Tribological Characteristics of Coated Materials	Oct 9&10th, 2020
R. Parameshwaran	Lakireddy Balireddy College of Engineering (Autonomous), Kakinada, Andra Pradesh	Advancements in Phase Change Material based Thermal and Renewable Energy Technologies,	1-5 June (2020).
R. Parameshwaran	Rajiv Gandhi Proudyogiki Vishwavidyalaya Bhopal, IPS Academy, Institute of Engineering & Science, Indore	TEQIP-III, Faculty Development Program (FDP), Micro & NanoScale Heat Transfer & Its Application	27-28 August (2020)
Pavan Kumar P	ANITS, VIZAG	Mechanics of adhesive joints	2 hours on Jan 4 2020
Pavan Kumar P	MLRIT, Hyderabad	Additive manufacturing of composite materials	2 hours on Feb 27 2020
Prof. Srinivasa Prakash Regalla	NIT Jaipur, ATAL Academy Sponsored Online Faculty Development Programme (FDP) Design Thinking for Innovative Medical Devices	Leveraging Latest Engineering Design Technologies for Improved Medical Devices for Productive Rehabilitation of Patients	2 hours (23rd sept 2020)

9. INVITED TALKS/DISTINGUISHEDLECTURES ARRANGED BY THE DEPARTMENT:

Name of Guest	Organization	Topic of the Guest Lecture / Talk	Duration	Associated faculty
Prof. Roman Selyanchyn	I2CNER, Kyushu University, Japan	Biomaterials based membranes for hydrogen fuel cells	3rd November 2020 for 1 hour	Sujith R and Prabakaran Saravanan
Prof. Stephen M Lyth	Q-PIT, Kyushu University, Japan	Hydrogen energy in Japan	27th October 2020 for 1 hour	Sujith R and Prabakaran Saravanan

10. AWARDS AND RECOGNITIONS

a.   Won by Faculty:

A K Gupta Among the Top 2% scientists in the world as published by Stanford University Non-2020

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY VISITS: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED:

1. Sandip S. Deshmukh and Vikrant P. Katekar. 'Solar Distillation Apparatus'. Indian Patent (Filed)Application No: 20201102792

2. K. Prudviraj, Sandip S. Deshmukh, and Supradeepan K. 'Corrugated Tube Heat Exchanger'. Indian Patent (Filed)Application No: 202011034009.

3. Srinivasa Rao Vutla, Srinivasa Prakash Regalla, Kannan Ramaswamy, Hemair Systems Private Limited, "Sustainable Microelectromechanical Systems (MEMS) Cleanroom", Final Indian Patent filed, Ref/App.No.:201941041293, Dated: November 10, 2020.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Mechanical Engineering Association:

- NIL

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1	Analytical Balance	1
2	Programmable DC Power Supply and Electronic Load Cell	1
3	Flaw Detector	1
4	Mobile robot	1
5	Vaccum oven and Pump	1
6	SERVERS	2
7	Conveyer Belt	1
8	Knoop Indentor	1
9	Composite Printer	1
10	Ni-4472, Lab View	1
11	Microphone	1
12	Oscilloscope	1
13	Impulse Hammer	1
14	SCADA Automation Kit	1
15	Refrigerant Gear Pump	1

B3.10.10 Department of Mathematics

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	0
Associate Professors	4
Assistant Professors	23
Lecturers	0
Visiting Faculty	2
Visiting Assistant Professors	0

Head of the Department : **Prof. Pradyumn Kumar Sahoo**

Contact Details : 040 - 6630 3573

Email : pksahoo@hyderabad.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time : 33

Part Time : 4

Aspirant Scheme : 1

Ph.D. Thesis Submitted during the year: 2020

S.No.	Name	ID	Topic	Supervisor	Co-Supervisor
1	Rupinderjit Kaur	2016PHXF0117H	Study of Seismic Waves in Anisotropic Layered Medium Containing Inhomogeneity	Dr. Sumit Kumar Vishwakarma	--

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	True Relative of Suslin's normality theorem for elementary groups and transvection groups	Mathematics	Dr. Pratyusha Chattopadhyay	-	SERB-DST	-	6 Lakhs
2	Fine selmer groups and class number divisibility of ideal class groups: A look into rank-computation of elliptic curves	Mathematics	Dr. Debopam Chakraborty	-	SERB-DST	-	14.22 Lakhs
3	Development and application of a mesh free adjoint approach for aerodynamics shape optimization	Mathematics	Dr. Anil Nemili	-	Aeronautical Research & Development Board (ARDB)	-	17.82 Lakhs
4	Security Analysis of stream cipher Salsa, ChaCha and some lightweight ciphers	Mathematics	Dr. Sabyasachi Dey	-	SERB-DST	-	12.46 Lakhs

B. Industry Sanctioned Projects   **- NIL -**

C. International Sanctioned Projects   **- NIL -**

D. Institute Sanctioned Projects: **-NIL-**

2. **ONGOING PROJECTS**

A. **Ongoing Government Projects**

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Characterizing the sets of periodic points of automorphisms on a solenoid	Mathematics	Dr. Sharan Gopal	-	SERB-DST	-	19.98 Lakhs
2	Modeling the hydrodynamics of various wave energy converter devices in real sea conditions	Mathematics	Dr. Santanu Koley	-	DST-INSPIRE	-	35 lakhs
3	Cosmic acceleration with observational constraints of the universe in modified gravity	Mathematics	Prof. P. K. Sahoo	-	CSIR	-	20.41 lakhs
4	Adaptive and efficient method of fundamental solutions for the numerical reconstruction of boundary data in two-phase inverse Stefan problems	Mathematics	Dr. G. Murali Mohan Reddy	-	SERB-DST	-	10.45 Lakhs
5	True Relative of Suslin's normality theorem for elementary groups and transvection groups	Mathematics	Dr. Pratyusha Chattopadhyay	-	SERB-DST	-	6 Lakhs
6	Fine selmer groups and class number divisibility of ideal class groups: A look into rank-computation of elliptic curves	Mathematics	Dr. Debopam Chakraborty	-	SERB-DST	-	14.22 Lakhs
7	Development and application of a mesh free adjoint approach for aerodynamics shape optimization	Mathematics	Dr. Anil Nemili	-	Aeronautical Research & Development Board (ARDB)	-	17.82 Lakhs
8	Security Analysis of stream cipher Salsa, ChaCha and some lightweight ciphers	Mathematics	Dr. Sabyasachi Dey	-	SERB-DST	-	12.46 Lakhs

B. **Ongoing Industry Projects**   **- NIL -**

C. **Ongoing International Sanctioned Projects**   **- NIL -**

D. **Ongoing Institute Projects**   **- NIL -**

3. **COMPLETED PROJECTS**

A. **Completed Government Projects**

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Comparison of phase velocities of Rayleigh waves, Love waves and Torsional waves in various anisotropic geo-media	Mathematics	Dr. Sumit Kumar Vishwakarma	-	SERB-DST	-	16.25 lakhs
2	Development of an unstructured grid-based adjoint solver for compressible turbulent flows	Mathematics	Dr. Anil Nemili	-	SERB-DST	-	15.906 lakhs

B. **Completed Industry Projects**   **- NIL -**

C. **Completed International Projects**   **- NIL -**

D. **Completed Institute Projects**   **- NIL -**

4. **LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS**

Papers Published by Faculty in Journals

1. B.Mishra, S.K. Tripathy, Sankarsan Tarai: Accelerating model with a hybrid scale factor in extended gravity, Journal of Astrophysics and Astronomy, Accepted.

2. B. Mishra, Fakhereh MD. Esmaeili, S. Ray: Cosmological model with variable anisotropic parameter in f(R,T) gravity, Indian Journal of Physics, doi: 10.1007/s12648-020-01877-2.

3. A.Y. Shaikh, B.Mishra: Bouncing scenario of general relativistic hydrodynamics in extended gravity, Communication in Theoretical Physics, Accepted (2020).

4. S.K. Tripathy, S. Pradhan, P. Parida, D. Behera, R. Khuntia, B. Mishra: Cosmic transit models in an extended gravity theory, Physica Scripta, 95, 115001, 2020.

5. S.K. Tripathy, S.K. Pradhan, Z. Naik, D. Behera, B.Mishra: Unified dark fluid and Cosmic Transit Models in Brans-Dicke Theory, Physics of the Dark Universe, 95, 095004, 2020

6. B.Mishra, S.K. Tripathy, S. Ray: Cosmological models with squared trace in modified gravity, International Journal of Modern Physics D, 2020.

7. B.Mishra, S.K. Tripathy: Investigating the physical and geometrical parameters of the cosmological models with anisotropic background, Physica Scripta, 95, 095004, 2020.

8. Sankarsan Tarai, Fakhereh Md. Esmaeili, B.Mishra, S.K. Tripathy: Magnetized cosmological model with variable deceleration parameter, "International Journal of Modern Physics D", 2050091, 2020.

9. A.Y. Shaikh, B. Mishra: Analysis of Observational Parameters and Stability in Extended Teleparallel Gravity, "International Journal of Geometric Methods in Modern Physics, 17, 2050158 (2020).

10. G.K. Goswami, A.K. Yadav, B.Mishra: Probing kinematics and fate of Bianchi V Universe, Modern Physics Letter A, 35, 2025224, 2020.

11. R. Sengupta, S. Ghosh, S. Ray, B.Mishra, S.K. Tripathy: Gravastar under the framework of Braneworld Gravity, Physical Review D, 102, 024037, 2020.

12. S.K. Tripathy, B.Mishra: Phantom Cosmology in an extended theory of gravity, Chinese Journal of Physics, 63, 448, 2020.

13. V. Selva Kumar, Dipak Kumar Satpathi, P. T. V. Praveen Kumar, and V. V. Haragopal " Forecasting motor insurance claim amount using ARIMA model " International Conference on Mathematical Sciences and Applications (ICMSA-2019) ,Cite as :AIP Conf. Proc. 2246, 020005-1–020005-8; https://doi.org/10.1063/5.0014449,Published online :28 July 2020.

14. V SelvaKumar , Dipak Kumar Satpathi, P. T. V. Praveen Kumar, V.V. Haragopal ," Modeling and Predicting of Motor Insurance Claim Amount using Artificial Neural Network" , International Journal of Recent Technology and Engineering (IJRTE) ,ISSN: 2277-3878, Volume-8 Issue-6, March 2020

15. V Selvakumar, Dipak Kumar Satpathi, P T V Praveen Kumar,V V Haragopal , " Modeling and prediction of third-party claim using a Machine learning approach ,Indian Journalof Science and Technology13(21): 2071-2079. 20-06-2020 , https://doi.org/10.17485/IJST/v13i21.465

16. Sanjay Mandal, Deng Wang, P.K. Sahoo, Cosmography in f (Q) gravity, Physical Review D, 102(12) (2020) 124029, (Impact Factor 4.833) APS arXiv: 2011.00420

17. Simran Arora1, Xin-He Meng, S. K. J. Pacif, P.K. Sahoo, Effective equation of state in modified gravity and observational constraints, Classical and Quantum Gravity, 37(20) (2020) 205022, (Impact factor 3.071) IOP, arXiv:2007.07717

18. Simran Arora, P.K. Sahoo, Energy conditions in f(Q,T) Gravity, Physica Scripta, 95(9) (2020) 095003, (Impact factor 1.985) IOP, arXiv:2010.00281

19. Sanjay Mandal, P.K. Sahoo, A Complete Cosmological Scenario in Teleparallel Gravity, Eur. Phys. J. Plus, 135(9) (2020) 706, (Impact Factor 3.228) Springer, arXiv: 2005.07043

20. Sanjay Mandal, P.K. Sahoo, J.R.L. Santos, Energy conditions in f(Q) gravity, Physical Review D, 102(2) (2020) 024057, (Impact Factor 4.833) APS, arXiv:2008.01563

21. S. Bhattacharjee, J.R.L. Santos, P.H.R.S. Moraes, P.K. Sahoo, Inflation in f(R,T) gravity, Eur. Phys. J. Plus, 135(7) (2020) 576, (Impact Factor 3.228) Springer, arXiv:2006.04336

22. Simran Arora, S. K. J. Pacif, S. Bhattacharjee, P.K. Sahoo, f(Q,T) gravity models with observational constants, Physics of the Dark Universe, 30 (2020) 100664, (Impact factor 5.66) Elsevier, arXiv: 2007.01703

23. S. Bhattacharjee, P.K. Sahoo, Constraining f(R,T) Gravity From The Dark Energy Density Parameter Ω_Λ, Gravitation and Cosmology, 26(3) (2020) 281-284, (Impact factor 0.880) Springer, arXiv:1908.06759

24. I. Radinschi, P. K. Sahoo, Th. Grammenos, S. Chattopadhyay, M. M. Cazacu, Localization of Energy and Momentum in an Asymptotically Reissner-Nordström Non-singular Black Hole Space-time Geometry, Universe, 6(5) (2020) 69, (Impact factor 2.165) MDPI, arXiv:2002.06573

25. S. H. Shekh, V. R. Chirde, P.K. Sahoo, Energy conditions of f(T,B) gravity dark energy model with the validity of thermodynamics, Communications in Theoretical Physics, 72(8) (2020) 085402, (Impact factor 1.322) IOP

26. Snehasish Bhattacharjee, P.K. Sahoo, Redshift Drift in f(R,T) Gravity, New Astronomy, 81 (2020) 101425, (Impact factor 1.162) Elsevier, arXiv: 2005.11163

27. Parbati Sahoo, Sanjay Mandal, P.K. Sahoo, Wormhole model with hybrid shape function in f(R,T) gravity, New Astronomy, 80 (2020) 101421, (Impact factor 1.162) Elsevier, arXiv:1911.13247

28. Sanjay Mandal, Snehasish Bhattacharjee, S.K.J. Pacif , P.K. Sahoo, Accelerating universe in hybrid and logarithmic teleparallel gravity, Physics of the Dark Universe 28, (2020), 100551 (Impact factor 5.66) Elsevier, arXiv:2004.08211

29. P.H.R.S. Moraes, P.K. Sahoo, S.K.J. Pacif, "Viability of the R+eT cosmology", General Relativity and Gravitation, 52(4) (2020) 32, (Impact Factor 1.515) Springer, arXiv: 1905.00417

30. Snehasish Bhattacharjee, P.K. Sahoo, Big Bang Nucleosynthesis and Entropy Evolution in f(R,T) Gravitation, Eur. Phys. J. Plus, 135(4) (2020) 350, (Impact Factor 2.612) Springer, arXiv:2004.04684

31. Snehasish Bhattacharjee, P.K. Sahoo, Comprehensive analysis of a non-singular bounce in f(R,T) gravitation, Physics of the Dark Universe 28, (2020), 100537 (Impact factor 5.66) Elsevier, arXiv:2003.14211

32. Snehasish Bhattacharjee, P.K. Sahoo, Baryogenesis in f(Q,T) Gravity, European Physical Journal C 80(3), (2020) 289, (Impact factor 4.843) Springer, arXiv: 2002.11483

33. Anil Kumar Yadav, Lokesh Kumar Sharma, B. K. Sing, P.K. Sahoo: "Existence of bulk viscous universe in f(R,T) gravity and confrontation with observational data", New Astronomy, 78 (2020) 101382, (Impact factor 1.162) Elsevier, arXiv:2002.12763

34. P.K. Sahoo, Snehasish Bhattacharjee, Gravitational Baryogenesis in non-minimal coupled f(R,T) gravity, International Journal of Theoretical Physics, 59(5), (2020) 1451-1459, (Impact factor 1.121) Springer, arXiv:1907.13460

35. S. H. Shekh, Simran Arora, V. R. Chirde, P.K. Sahoo, Thermodynamical aspects of relativistic hydrodynamics in f(R,G) gravity models, International Journal of geometric methods in modern physics, 17(3) (2020) 2050048 (Impact factor 1.062) World Scientific arXiv:1911.13260

36. Koijam Manihar Singh, Sanjay Mandal, Longjam Parbati Devi, P.K. Sahoo, Dark Energy and Modified Scale Covariant Theory of Gravitation, New Astronomy, 77 (2020) 101353, (Impact factor 1.162) Elsevier, arXiv:2001.00011

37. Parbati Sahoo, Snehasish Bhattacharjee, S. K. Tripathy, P.K. Sahoo, Bouncing scenarios in f(R,T) gravity models, Modern Physics Letters A 35(13) (2020) 2050095, (Impact factor 1.367) World Scientific arXiv:1907.08682

38. S. Bhattacharjee, P.K. Sahoo, Temporally Varying Universal Gravitational "Constant" and Speed of Light in Energy Momentum Squared Gravity, Eur. Phys. J. Plus, 135(1) (2020) 86, (Impact Factor 2.612) Springer, arXiv:2001.06569

39. P.K. Sahoo, S. Bhattacharjee, Revisiting The Coincidence Problem in f(R) Gravitation, New Astronomy, 77 (2020) 101351, (Impact factor 1.162) Elsevier, arXiv: 1908.10688

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41. Karthik Alasakani, Sai Lakshmi Radhika Tantravahi, Praveen Kumar " An Approach to Identify Significant Parameters in Blood Flow Through Human Arteries " Science &Technology Asia ,Vol 25 No1 Jan-Mar 2020[95-105]

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43. Rachid Ait Maalem Lahcen, Bruce Caulkins, Ram Mohapatra & Manish Kumar, Review and insight on the behavioral aspects of cybersecurity, Cybersecurity, Vol 3, issue 10, 2020 (Springer).

44. Manish Kumar, A new class of pseudo-differential operators involving linear canonical transform, International Journal of Applied and Computational Mathematics, Vol. 6, issue 6, 2020 (Springer).

45. Manish Kumar and Prateek Gupta, A new medical image encryption algorithm based on the 1D logistic map associated with pseudo-random numbers, accepted for publication on Dec 21, 2020 in Multimedia Tools and Applications, 2020 (Springer).

46. Jagan Mohan Jonnalagadda and Paul Webster Eloe, Quasilinearization Applied to Boundary Value Problems at Resonance for Riemann - Liouville Fractional Differential Equations, Discrete and Continuous Dynamical Systems Series S, Volume 13, Number 10, 2719 – 2734, 2020.

47. Jagan Mohan Jonnalagadda, On a Nabla Fractional Boundary Value Problem with General Boundary Conditions, AIMS Mathematics, Volume 5, Number 1, 204 – 215, 2020.

48. Jagan Mohan Jonnalagadda, Existence Results for Solutions of Nabla Fractional Boundary Value Problems with General Boundary Conditions, Advances in the Theory of Nonlinear Analysis and its Applications, Volume 4, Number 1, 29 – 42, 2020.

49. Jagan Mohan Jonnalagadda and Debananda Basua, Lyapunov-type Inequalities for Hadamard Type Fractional Boundary Value Problems, AIMS Mathematics, Volume 5, Number 2, 1127 – 1146, 2020.

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52. Jagan Mohan Jonnalagadda, Discrete Fractional Lyapunov-Type Inequalities in Nabla Sense, Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis, Volume 27, 397 – 419, 2020.

53. Rabia Ilyas Butt, Jehad Alzabut, Mujeeb Ur Rehman and Jagan Mohan Jonnalagadda, On Fractional Difference Langevin Equations Involving Non Local Boundary Conditions, Dynamic Systems and Applications, Volume 29, Number 2, 305 - 326, 2020.

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56. Rupinderjit Kaur, Sumit Kumar Vishwakarma, Tapas Ranjan Panigrahi, Influence of irregular geologies and inhomogeneity on SH-wave propagation, Acta Mechanica, Springer, 231, 1821-1836 (2020) (Impact factor: 2.66)

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61. Koley, S. and Kshma T., 2020. Mathematical modeling of oscillating water column wave energy converter devices over the undulated sea bed, Engineering Analysis with Boundary Elements, 117, 26-40, 2020

62. Koley, S., 2020. Water wave scattering by floating flexible porous plate over variable bathymetry regions, Ocean Engineering, 214, 107686.

63. Koley, S., Panduranga, K., Almashan, N., Neelamani, S., Al-Ragum, A., 2020. Numerical and experimental modeling of water wave interaction with rubble mound offshore porous breakwaters, Ocean Engineering, 218, 108218.

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66. Koley, S., Panduranga, K., Satpathi, D., 2020. Wave Interaction with Caisson Breakwater Placed on Porous Bottom Foundation, AIP Proceedings, 2277, 210009 (2020)

67. Trivedi, K., Koley, S., 2020. Irregular water wave interaction with oscillating water column wave energy converter devices placed over undulated sea bed, AIP Proceedings (Accepted for publication)

68. Panduranga, K., Koley, S., 2020. Attenuation of oblique waves by vertical slatted porous screens, AIP Proceedings (Accepted for publication)

69. Koley, S., Panduranga, K., 2020. Energy balance Relations for Flow Through thick Porous Structure, International Journal of Computational Methods and Experimental Measurements (Accepted for publication)

70. Das. S, Chakraborty. D, Saikia. A, On the Period of the continued fraction of √ pq; Acta Arithmetica; 196 (2020), 291-302.

71. Reddy, G. M. M., Seitenfuss, A. B., Medeiros, D. D. O., Meacci, L., Assunção, M., & Vynnycky, M. (2020). A Compact FEM Implementation for Parabolic Integro-Differential Equations in 2D. Algorithms, 13(10), 242.

72. Sabyasachi Dey, Santanu Sarkar Proving the biases of Salsa and ChaCha in differential attack, Designs, Codes, Cryptography (Vol: 2020, page: 1-30)

73. Sanjay Mandal, P.K. Sahoo, On The Temporal Evolution of Particle Production in f(T) Gravity, Modern Physics Letters A, 35(40) (2020), 2050328, (Impact factor 1.370) World Scientific, arXiv:2101.01550

5.   CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i)   National:

1.   Dr. Praveen has participated in an FDP on Advanced Multivariate Data Analytics from 17-08-2020 to 21-08-2020, organized by IIM Visakhapatnam.

2.   Dr. Praveen has participated in the workshop on "SPSS Applications in Data Analysis from 28-07-2020 to 06-08-2020 organized by Education Committee of PHD Chamber of Commerce and Industry, New Delhi.

3.   Panduranga, K., Koley, S., 2020. Wave Interaction with Inverse T-Shaped porous Floating Breakwater, The 3rd International Conference on Frontiers in Industrial and Applied Mathematics, NIT Jamshedpur, 21-22 December, 2020.

4.   Dr. Pratyusha has attended a seminar, "On n-Dimensional Voyage" on National Mathematics Day 22nd Dec, 2020.

5.   Dr. Pratyusha has attended Summer School of Math on Lie Groups and Lie Algebras in July, 2020.

ii)   International:

1.   Dr. Manish has presented a paper on "A secure RGB image encryption algorithm in optimized virtual planet domain" in Indo-French Seminar on Optimization, Variational Analysis, and Applications during February 2-4, 2020, sponsored by the IFCPAR/CEFIPRA, at the Department of Mathematics, Institute of Science, Banaras Hindu University, Varanasi, India.

2.   Dr. Manish has presented a paper through Microsoft team on "A review on medical encryption techniques" in the 2nd International Conference on Machine Learning and Intelligent Systems (MLIS 2020) during October 25-28, 2020, Organized in Seoul, Korea.

3.   Dr. Manish has attended online through google meet "International Workshop on Sampling and Approximation Theory" (IWSAT-2020) during December 10-11, 2020, Organized by Department of Mathematics, SSN College of Engineering, Chennai, India.

4.   Rupanshu Soi, Nischay Ram Mamidi, Elliott Slaughter, Kumar Prasun, Anil Nemili and SM Deshpande, An implicitly parallel meshfree solver in Regent. In: 2020 IEEE/ACM 3rd Annual Parallel Applications Workshop: Alternatives to MPI+X (PAW-ATM), Virtual Event, November 09-19, 2020.

5.   Koley, S., Trivedi, K., Water waves interaction with poroelastic plate floating over undulated bottom topography, Mathematics of Sea Ice and Ice Sheets 2020, The University of Newcastle, Australia, 09-12 November, 2020.

6.   Koley, S., Panduranga, K., Energy balance relations for flow through thick porous structures, 43rd International Conference on Boundary Elements and other Mesh Reduction Methods, Embry-Riddle Aeronautical University, Daytona, USA, 07-09 December, 2020.

7.   Dr. Pratyusha is attending an ongoing seminar on Commutative Algebra. This is a biweekly online seminar series by researchers from across the world. It is held every Tuesday and Friday since April, 2020.

6.   LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1.   Karthik, K. Sashank, T S L Radhika, A Study on the Effect of Various Fluid,

     Flow and Mechanical Parameters on the Flow of Newtonian Fluid in an Expanding and Contracting Pipe, Chapter-8, Springer Proceedings in Mathematics & Statistics, Somnath Bhattacharya et al: MATHEMATICAL MODELING AND COMPUTATIONAL TOOLS, ICACM- 2018 (Kharagpur, India, November 23–25), 2020. DOI: 10.1007/978-981-15-3615-1.

2.   Book Title: Multimedia Security Using Chaotic Maps: Principles and Methodologies

Chapter Title: <u>A Survey on Chaos Based Image Encryption Techniques</u>

Authors: Manish Kumar, Amogh Saxena, and Sai Satvik Vuppala

Copyright Holder Name: Springer Nature Switzerland AG

Editors: Hosny, Khalid M. (Ed.)

Copyright Year: 2020

3. Book Title: Harmonic Analysis and Applications

   Chapter Title: Degree of convergence of some operators associated with Hardy Littlewood series for functions of class Lip(a,p), p>1

   Authors: Manish Kumar, Benjamin A. Landon, R. N. Mohapatra, and

   Tusharakanta Pradhan

   Copyright Holder Name: Springer Nature Switzerland AG

   Editors: Michael Rassias (Ed.)

   Status: Accepted on June 02, 2020.

4. Book Title: Springer Proceedings in Mathematics & Statistics

   Chapter Title: A secure RGB image encryption algorithm in optimized virtual planet domain

   Authors: Manish Kumar

   Copyright Holder Name: Springer Nature Singapore Pte Ltd.

   Editors: Vivek Laha, Pierre Marechal and S. K. Mishra

   Status: Accepted on October 30, 2020

5. Trivedi, K., Koley, S., 2020. Annual-averaged performance of oscillating water

   energy converter devices in real sea conditions, LNME (Accepted for publication)

6. Trivedi, K., Koley, S., 2020. Performance of a L-shaped Duct Oscillating Water

   Column Wave Energy Converter Device Under Irregular Incident Waves, LNME

   (Accepted for publication)

7. Panduranga, K., Koley, S., 2020. Water Wave Interaction with Very Large Floating

   Structures, LNME (Accepted for publication)

8. Debopam Chakraborty. "On class number divisibility of number fields and points on elliptic curves"; A book chapter in "Class groups of number fields and related topics"; Published by Springer; (2020).

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT - NIL -

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. B Mishra delivered an invited talk titled, "Possible reason for expansion of Universe; the mathematical background", at National workshop to celebrate the Birthday of Srinivasa Ramanujan, Vikrama Simhapuri University, India on 22nd December, 2020.

2. Prof. B Mishra delivered an invited talk titled, "Cosmological models with squared trace in modified gravity", at International conference on International Academy of Physical Sciences (CONIAPS XXVI), Sant Longwal Institute of Engineering & Technology, India during 18th-20th December, 2020.

3. Prof. B Mishra delivered an invited talk titled, "Anisotropic cosmological models under f(R,T) theory of gravity", at Progress on Old and New Themes in Cosmology(PONT-2020), Avignon, France during 7th-11th December, 2020.

4. Prof. B Mishra delivered an invited talk titled, "Approaches to study the Accelerating Universe and its mathematical background", at National Conference on Advanced Mathematical & Applied Sciences, Bodoland University, Kokrajhar, Assam during 1st-2nd July, 2020.

5. Prof. B Mishra delivered an invited talk titled, "Einstein's GR & Accelerating Universe", at Two-Day National Webinar on Mathematics & its Applications, University College of Engineering, Osmania University, Telangana during 19th-20th May,2020.

6. Prof. B Mishra delivered an invited talk titled, "Accelerating Universe", at National Workshop on Cosmology, Relativity and Astrophysics, held at Department of Physics, IGIT, Sarang, Odisha during 27th-31st January, 2020.

7. Prof. P K Sahoo attended The International Symposium on Physics (ISP 2020) at Federal University of Campina Grande, Brazil from 15th – 18th Dec. 2020 and gave an invited talk on "Wormholes in f(R,T) gravity and general relativity".

8. Prof. P K Sahoo attended The 16th IMT-GT International Conference on Mathematics, Statistics and Their Applications (ICMSA 2020) at Centre for Mathematical Sciences, Universiti Tunku Abdul Rahman, Malaysia from 23rd – 24th Nov. 2020 and gave an invited talk on "Wormholes in exponential f(R,T) Gravity".

9. Prof. P K Sahoo attended the IWARA 2020 Video Conference- 9th International workshop on Astronomy and Relativistic Astrophysics at Mexico from 6th – 12th Sept. 2020 and gave an invited talk on "Energy Conditions in Non-minimally Coupled f(R,T) Gravity".

10. Prof. P K Sahoo attended The 14th International Conference on Gravitation, Astrophysics and Cosmology (ICGAC14) at National Central University, Jhongli, Taiwan from 17th -21st Aug. 2020 and gave an invited talk through webinar on "A non-singular bounce in f(R,T) gravitation".

11. Prof. P K Sahoo attended National Conference on emerging trends in advanced mathematical sciences & its interdisciplinary areas (NCETAMSII2020) at Department of Mathematical Sciences, Bodoland University, India from 21st -22nd Feb. 2020 and gave an invited talk on "Modified gravity wormholes without exotic matter".

12. Prof. P K Sahoo attended International Conference on Advances in Physical, Chemical & Mathematical Sciences (ICAPCM-2020) at Department of Mathematics, RTM Nagpur University, India from 13th -16th Feb. 2020 and gave an invited talk on "Bouncing cosmology in modified gravity".

13. Dr. T S L Radhika delivered a guest lecture on "Application of Numerical Techniques in Various Engineering Fields " on 29th January 2020 at Geethanjali College of Engineering and Technology, Cheeryala, Hyderabad.

14. Dr. Kishore Kumar delivered 5 Lectures online on Numerical Methods, for FIP conducted by SRR Arts and Science College, Karimnagar during August 7 to 13th August 2020.

15. Dr. Kishore Kuimar delivered lectures on June 25th, 2020 in the Webinar on Tensor Decompositions, for FDP on Importance of Mathematics in Science and Technology, 25th-29th June , GMR Institute of Technology, Rajam.

16. Dr. Sharan Gopal gave an invited talk, titled "Infinity – A Tribute to Ramanujan" at CMR Engineering College (online presentation) on 22nd Dec 2020.

17. Dr. Sharan Gopal gave a series of 7 lectures on "Real Analysis" for Faculty Improvement Program (online) conducted by SRR Arts and Science College, Karimnagar, Telangana during 7-13 August 2020.

18. Dr. Anil Nemili was an invited speaker at the Korean Society for Computational Fluids Engineering 25th Conference, October 18-20, 2020, Jeju, Korea.

19. Dr. Santanu Koley was an invited speaker in ICMTA 2020 (International Conference on Mathematical Techniques and Applications), Department of Mathematics, SRM University, Chennai, 2020 (February)

20. Dr. Santanu Koley was an invited speaker in International Conference on Advances in Differential Equations and Numerical Analysis (ADENA2020), Department of Mathematics, Indian Institute of Technology Guwahati, 2020 (October)

21. Dr. Santanu Koley chaired a session in Minisymposium on "Mathematical Aspects of Water Waves and Applications" as a part of the International Conference on Advances in Differential Equations and Numerical Analysis (ADENA2020), Department of Mathematics, Indian Institute of Technology Guwahati, 2020 (October)

22. Dr. Pratyusha Chatopadhyay delivered an invited talk at the conference on Group Theory held at IISER Pune between 13th to 15th Feb, 2020

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Prof. Srinivas Kotyada, IMSc Chennai delivered a talk on " Number theory and secure communication " on January 09, 2020.

2. Prof. Ashis SenGupta, ISI Kolkata, delivered a talk on 'Statistical Learning for Big Manifold' on January 20, 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Prof. B. Mishra has been selected as a fellow of Royal Astronomical Society, London.

2. Prof. B. Mishra has been selected as a fellow of Institute of Mathematics and Applications, United Kingdom.

3. Prof. P.K. Sahoo has been selected as a Fellow of Institute of Mathematics & its Applications (FIMA), London.

4. Prof. P.K. Sahoo has received Reviewer excellence award 2019 by Indian Academy of Sciences, India.

5. Dr. Manish Kumar has received Young Scientist Award in the 9th International Scientist Awards on Engineering, Science, and Medicine, which was held on September 12-13, 2020 in Trichy, India, by VDGOOD Professional Association, India.

6. Dr. S. Koley's article, "Wave interaction with a submerged semicircular porous breakwater placed on a porous seabed. Volume 80, July 2017, Pages 18-37" is one of the Most Cited Articles 2020 in "Engineering Analysis with Boundary Elements" from Elsevier.

b. Won by Students:

1. Kottala Panduranga, Research Scholar, received the best poster presentation award from NCASM-2020, a conference organized by Chitkara University, Punjab during September 24-25, 2020.

2. Sukriti Chakraverti (2020B4PS2327H) got selected for "Pariksha pe Charcha, 2020' conducted by MHRD, Govt. of India, presided by the Hon'ble Prime minister.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. T.S.L. Radhika has attended a FIVE DAYS HANDS-ON ONLINE WORKSHOP ON SPSS APPLICATION IN DATA ANALYSIS, July-Aug, 2020, conducted by the Education Committee of PHD Chamber of Commerce and Industry (PHDCCI).

2. Dr. Manish Kumar has been appointed as Editor, Mathematical Modelling of Engineering Problems, Scopus Index Journal, Publishing from Canada, IIETA with effect from July 28, 2020.

3. Dr. Sumit is working in collaboration with Prof. Xu Runzhang, Harbin Engineering University, Harbin, China

4. Dr. N. Anil has collaborated with Dr. Elliott Slaughter from the SLAC – National Accelerator Laboratory, Menlo Park, USA.

5. Dr. N. Anil has collaboration with NVIDIA under the NVIDIA's AI Technology Centre (NVAITC) program.

6. Dr. Shantanu Koley has collaborated with Dr. Nourah Almashan (Department of Civil Engineering, College of Engineering and Petroleum, Kuwait University, Kuwait), Prof. SubramaniamNeelamani and Dr. Alanoud Al-Ragum (Coastal Management Program, Environment and Life Sciences Research Center, Kuwait Institute for Scientific Research, P.O. Box 24885, Safat 13109, Kuwait)

7. Dr. Gujji Murali Mohan Reddy has published a MATLAB software in collaboration with Prof. Michael Vynnycky, KTH Royal Institute of Technology, Sweden & University of Limerick, Ireland, and Dr. A.B. Seitenfuss, Dr. D. D. O. Medeiros, Dr. L. Meacci, Dr. M. L., Assunção University of São Paulo, Brazil and is available at https://github.com/LucaMeacci/efficient-PIDE-2D

12. PATENTS FILED/PUBLISHED AND GRANTED: **-NIL-**

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: **-NIL-**

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED   –NIL-

B3.10.11 Department of Pharmacy

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	02
Associate Professors	06
Assistant Professors	03
Lecturers	--
Visiting Faculty	--
Visiting Assistant Professors	--

Head of the Department : **Prof. A. Sajeli Begum**

Contact details : 040-66303578

Number of Ph.D. Scholars : 58

Full Time : 46

Part Time : 11

Aspirant Scheme : 1

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Rimpi Diwan	2015PHXF0014H	Design, Pharmacokinetic and Pharmacodynamic Evaluation of Nanocarriers for Delivery of an Antihypertensive Drug.	Punna Rao Ravi	-
2	Bhatt HImanshu Narendrakumar	2015PHXF0013H	Dendrimers for the Targeted Delivery of Chemotherapeutic Agents in Cancer	Swati Biswas	Balaram Ghosh
3	Kirti	2016PHXF0030H	Discovery of Pro-Inflammatory Cytokine Inhibitors from Bacterial Strain for the Treatment of Renal Inflammation	A Sajeli Begum	Onkar Prakash Kulkarni
4	Jaspreet Kaur K	2016PHXF0027H	Role of Double Stranded RNA Dependent Protein Kinase R (PKR) in Hypertension: Mechanism and Prevention	Arti Dhar	-
5	Sridhar Jogula	2013PHXF0120H	Design and Synthesis of Pseudomonas aeruginosa DNA Gyrase Inhibitors	D Sriram	-
6	Kiran Kumar	2013PHXF0119H	Synthesis and Antimycobacterial Evaluation of Novel Spiro/Fused Compounds	D Sriram	-
7	Parameshwar Reddy A	2013PHXF0121H	Protypical Leads Useful for the Treatment of Neurological and OtherDisorders: Synthesis and Structure–Activity Relationship Studies	P Yogeeswari	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned /Approved

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Therapeutic Potential of Novel Dual Receptor Acting Designer Peptide NPA7 in Hypertension and associated renal complications	Pharmacy	Dr. Arti Dhar	-	DST	-	30,00,000
2	Synthesis of novel coumarin-based lignans targeting pro-inflammatory cytokines for the treatment of chronic kidney diseases	Pharmacy	Dr. A Sajeli Begum	-	DST	-	33,44,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Development and characterisation of TLS polymerase zeta subunit MAD2B/Rev7 targeted inhibitors as potential anticancer therapeutic agents using In-vitro and In-vivo approach.	Pharmacy	Dr. Arti Dhar	-	ICMR	-	8,00,000
4	Investigation of functional role and therapeutic potential of nesfatin-1 in Chronic Kidney Disease	Pharmacy	Dr. Arti Dhar	Dr. Onkar Kulkarni	ICMR	-	29,00,000
5	Therapeutic potential of spironolactone loaded light-responsive sustained-release gel depot in treating diabetic retinopathy	Pharmacy	Dr. Nirmal J	-	ICMR	-	27,77,318
6	Development of a multipurpose diagnostic device based on microporous microneedle patch for minimally invasive sampling and electrochemical detection of glucose, uric acid and thyroid stimulating hormone from interstitial fluid	Pharmacy	Dr. Vamsi Krishna Venuganti	-	ICMR	-	54,51,560
7	Pre-Clinical efficacy evaluation of three synthetic peptides For the treatement of inflammatory bowel diseases & sepsis	Pharmacy	Dr. D Sriram	Dr. Arti Dhar	ISSAR	-	29,80,000

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Development and Characterisation of novel oral formulation for bioavailability enhancement of anti cancer drug	Pharmacy	Dr. Akash Chaurasiya	-	Slayback Pharma	-	20,68,540
2	Development and optimization of stable anti-leukemic drug loaded long circulating lipsomes	Pharmacy	Dr. Akash Chaurasiya	-	Parenteral Drug Association (PDA)	-	30,00,000
3	Topical nanomicelles eyedrop for delivering antifungal drug to treat corneal infection	Pharmacy	Dr. Nirmal J	-	Parenteral Drug Association (PDA)	-	20,00,000
4	Evaluation of Novel Transdermal Device for Controlled Delivery of a Drug	Pharmacy	Dr. Punna Rao Ravi	-	Medicen Devise Technologies Pvt. Ltd., Hyderabad	-	18,70,890
5	Design and Evaluation of Novel Transdermal Drug Delivery Systems	Pharmacy	Dr. Punna Rao Ravi	-	Transform SciTech Pvt. Ltd., Hyderabad	-	12,97,853

C. International Sanctioned Projects: NIL

D. Institute Sanctioned Projects: NIL

ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Pharmacy	Dr. D.Sriram	-	DBT	-	67,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
2	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Pharmacy	Dr. D.Sriram	-	DBT TATA INNOVATION FELLOWSHIP	-	45,00,000
3	Agro-homoeopathy: Potential of Homoeopathy as a tool to manage phytopathogen / nematode complex for a sustainable agriculture	Pharmacy	Dr. Viday Sagar	Dr. Sajeli Begum	CCRH-AYUSH	-	5,00,000
4	Near-Infrared Light Degradable Nanomicellar ChemoPhotodynamic	Pharmacy	Dr. Swati Biswas	-	DST-SERB-CRG	-	30,72,000
5	Bifunctional Gene-Expression Modulating Chemotherapeutic Agents as Improved Treatment Strategy for Cancer	Pharmacy	Dr. Balaram Ghosh	Dr. Swati Biswas	CSIR	-	29,00,000
6	Determination of wound healing (Pro-angiogenic) properties of peptide conjugate	Pharmacy	Dr. Onkar Kulkarni		DRDO-INMAS	-	8,00,000
7	Functional role of histone deacetylase 6(HDAC6) in the progression of oral squanous cell carcinoma: regulation of II beta expression /autophagy and epithelial mesenchymal trasition	Pharmacy	Dr. Onkar Kulkarni	Dr. Balaram Ghosh	ICMR	-	35,00,000
8	Pre-Clinical efficacy evaluation of three synthetic peptides For the treatement of inflammatory bowel diseases & sepsis	Pharmacy	Dr. D Sriram	Dr. Arti Dhar	ISSAR	-	29,80,000
9	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	Pharmacy	Dr. Prashant Garg (LVPEI)	Dr. Vamsi Krishna Venuganti	DBT-MRC	-	35,00,000
10	Preparations and Characterization of a topical gel formulation of topical gel formulation of IS107	Pharmacy	Dr. Vamsi Krishna Venuganti	-	ISSAR	-	5,63,500
11	Development and characterization of a topical formulations	Pharmacy	Dr. Vamsi Krishna Venuganti	-	ISSAR-2	-	9,79,400
12	DBT-RA Fellowship	Pharmacy	Dr. Nirmal J	-	DBT-RA	-	12,28,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Pharmacokinetic and pharmacodynamic evaluation of new chemical entities for ocular diseases	Pharmacy	Dr. Nirmal J	-	Incilia Therapeutics Pvt Ltd	-	8,14,000
2	Development and Characterisation of novel oral formulation for bioavailability enhancement of anti cancer drug	Pharmacy	Dr. Akash Chaurasiya	-	Slayback Pharma	-	20,68,540

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
3	Identification of UGT-isoform specific substrates and inhibitors and their contribution in drug metabolism and systemic levels of bile secretions	Pharmacy	Dr. Punna Rao Ravi	-	Acubiosys Private Limited	-	11,75,000
4	Development and optimization of stable anti-leukemic drug loaded long circulating lipsomes	Pharmacy	Dr. Akash Chaurasiya	-	Parenteral Drug Association (PDA)	-	30,00,000
5	Topical nanomicelles eyedrop for delivering antifungal drug to treat corneal infection	Pharmacy	Dr. Nirmal J	-	Parenteral Drug Association (PDA)	-	20,00,000
6	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Pharmacy	Dr. Balaram Ghosh	Dr. Swati Biswas	Reddy's Lab	-	9,00,000
7	Development and characterization of emulsion based drug product for the management of emetogenic cancer chemotherapy	Pharmacy	Dr. Akash Chaurasiya	-	Slayback Pharma	-	7,02,100
8	Pharmacokinetic Evaluation of Ocular In-Situ Gelling Systems Loaded with treatement of posterior uveitis	Pharmacy	Dr. Punna Rao Ravi	-	BMS	-	3,40,000
9	Transcutaneous delivery of liraglutide using zein microneedle array	Pharmacy	Dr. Vamsi Krishna Venuganti	-	NACTO Pharma	-	22,42,500
10	Development and characterization of a topical gel formulation of a candidate drug	Pharmacy	Dr. Vamsi Krishna Venuganti	-	Sarudbhava Formulations Pvt. Ltd.	-	6,00,000
11	In-vivo experiments pertaining to pharmacokinetic studies on new conjugates	Pharmacy	Dr. A. Sajeli Begum	-	WIPRO	-	50,000
12	Evaluation of Novel Transdermal Device for Controlled delivery of drug	Pharmacy	Dr. Punna Rao Ravi	-	Medicen Devise Technologies Pvt Ltd	-	18,70,890
13	Design and Evaluation of Novel Transdermal Drug Delivery Systems	Pharmacy	Dr. Punna Rao Ravi	-	Transform SciTech Pvt. Ltd.,	-	12,97,853
14	Evaluation of Novel Transdermal Device for Controlled Delivery of a Drug	Pharmacy	Dr. Punna Rao Ravi	-	Medicen Devise Technologies Pvt. Ltd., Hyderabad	-	18,70,890
15	Design and Evaluation of Novel Transdermal Drug Delivery Systems	Pharmacy	Dr. Punna Rao Ravi	-	Transform SciTech Pvt. Ltd., Hyderabad	-	12,97,853

C. Ongoing International Sanctioned Projects: **NIL**

D. Ongoing Institute Projects: **NIL**

COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Investigations on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS -36 for the treatement of renal injury	Pharmacy	Dr. A Sajeli Begum	Dr. Onkar Kulkarni	DST	-	24,37,000
2	Development of a Non-invasive giodegradable polymeric mciroprojection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Pharmacy	Dr. Vamsi Krishna Venuganti	Dr. Karumbaiah Chappanda Nanaiah	ICMR	-	42,25,150
3	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Pharmacy	Dr. Vamsi Krishna Venuganti	-	DST	-	55,54,225
4	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Pharmacy	Dr. Balaram Ghosh	Dr. Swati Biswas	DBT	-	29,87,800

B.   Completed Industry Projects - NIL -

C.   Completed International Projects - NIL -

D.   Completed Institute Projects - NIL -

4.   LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1.   Praveen Kumar Reddy Nagireddy., Vamsi Krishna Kommalapati., Vagolu Siva Krishna., D Sriram., Anjana Devi Tangutur., Srinivas Kantevari (2020), "Anticancer Potential of N‒ Sulfonyl Noscapinoids: Synthesis and Evaluation", Chemistry Select, Vol. 5, no. 10, pp.2972-2980

2.   Sachin Dubey., Ridahunlang Nongkhlaw., Parameswar Patra., Akash Chaurasiya., Nirmal Jayabalan (2020), " Biologics: Delivery options and formulation strategies", Drug Delivery Aspects, Vol., no., pp.115-155

3.   Himanshu Bhatt., Balaram Ghosh., Swati Biswas (2020), "Cell-Penetrating Peptide and Î±-Tocopherol-Conjugated Poly(amidoamine) Dendrimers for Improved Delivery and Anticancer Activity of Loaded Paclitaxel", ACS Applied Bio Materials, Vol., no., pp.-

4.   Mediesse KF, Matharasala G, Boudjeko T, Yogeeswari P. Preliminary Study on the in vivo Anti-neuroinflammatory Effects of Khaya grandifoliola and Cymbopogon citratus Polysaccharide Fractions. Journal of Advances in Biology & Biotechnology. 2020 Jul 28:23-32.

5.   Keerthana P, Chitra P, Puneeth SB, Janardhanam LL. In Vivo Comparison of Ultimate Tensile Strength of Nickel-Titanium Aligning Archwires Exposed to Fluoridated Mouthwash. Orthodontic Journal of Nepal. 2020 Sep 4;10(1):21-6.

6.   Ekinci A.S., Moncol J., Krishna V.S., Sriram D., Özadali-Sari K. (2020), "5-methyl-4-thiazolidinones: Synthesis and evaluation as antitubercular agents", Journal of Research in Pharmacy, Vol. 24, no. 1, pp.30-37

7.   Sirim M.M., Krishna V.S., Sriram D., Unsal Tan O. (2020), "Novel benzimidazole-acrylonitrile hybrids and their derivatives: Design, synthesis and antimycobacterial activity", European Journal of Medicinal Chemistry, Vol. 188, no. -, pp.---

8.   DoÄŸan H., DoÄŸan Åž.D., Gündüz M.G., Krishna V.S., Lherbet C., Sriram D., Åžahin O., SarÄ±pÄ±nar E. (2020), "Discovery of hydrazone containing thiadiazoles as Mycobacterium tuberculosis growth and enoyl acyl carrier protein reductase (InhA) inhibitors", European Journal of Medicinal Chemistry, Vol. 188, no., pp.-

9.   Krishna V.S., Zheng S., Rekha E.M., Nallangi R., Sai Prasad D.V., George S.E., Guddat L.W., Sriram D. (2020), "Design and development of ((4-methoxyphenyl)carbamoyl) (5-(5-nitrothiophen-2-yl)-1,3,4-

thiadiazol-2-yl)amide analogues as Mycobacterium tuberculosis ketol-acid reductoisomerase inhibitors", European Journal of Medicinal Chemistry, Vol. 193, no. , pp.-

10. DoÄŸan Åž.D., Gündüz M.G., DoÄŸan H., Krishna V.S., Lherbet C., Sriram D. (2020), "Design and synthesis of thiourea-based derivatives as Mycobacterium tuberculosis growth and enoyl acyl carrier protein reductase (InhA) inhibitors", European Journal of Medicinal Chemistry, Vol. 199, no., pp.-

11. Swati Alok., Samrun Nessa., A Sajeli Begum (2020), "School training strategies for prevention and control of dengue", Indian Journal of Community Medicine, Vol. 45, no. 1, pp.106-107

12. Santhosh S Kumar., Kirti Hira., A Sajeli Begum., Onkar P Kulkarni., Hiroshi Araya., Yoshinori Fujimoto (2020), "New synthetic coumarinolignans as attenuators of pro-inflammatory cytokines in LPS-induced sepsis and carrageenan-induced paw oedema models", Inflammopharmacology, Vol., no., pp.-

13. Begum SA, Hira K, Pal PP, Nessa S, Kulkarni OP, Danaraj J, Shaik AB, Araya H, Fujimoto Y. Halodule pinifolia (Seagrass) attenuated lipopolysaccharide-, carrageenan-, and crystal-induced secretion of pro-inflammatory cytokines: mechanism and chemistry. Inflammopharmacology. 2020 Sep 12:1-5.

14. Ariel Angel., Rotem Volkman., Daniel Offen., Tabitha Grace Royal (2020), "Caspase-6 Knockout in the 5xFAD Model of Alzheimerâ€™s Disease Reveals Favorable Outcome on Memory and Neurological Hallmarks", International Journal of Molecular Sciences, Vol. 21, no. 3, pp.1-18

15. Begum SA, Hira K, Pal PP, Nessa S, Kulkarni OP, Danaraj J, Shaik AB, Araya H, Fujimoto Y. Halodule pinifolia (Seagrass) attenuated lipopolysaccharide-, carrageenan-, and crystal-induced secretion of pro-inflammatory cytokines: mechanism and chemistry. Inflammopharmacology. 2020 Sep 12:1-5.

16. Gade SK, Nirmal J, Garg P, Venuganti VV. Corneal delivery of moxifloxacin and dexamethasone combination using drug-eluting mucoadhesive contact lens to treat ocular infections. International Journal of Pharmaceutics. 2020 Dec 15;591:120023.

17. Rawat P.S., Ravi P.R., Kaswan L., Raghuvanshi R.S. (2020), "Development and validation of a bio-analytical method for simultaneous quantification of nebivolol and labetalol in aqueous humor and plasma using LC-MS/MS and its application to ocular pharmacokinetic studies", Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, Vol. 1136, no. -, pp.---

18. Bisht R, Nirmal S, Agrawal R, Jain GK, Nirmal J. Injectable in-situ gel depot system for targeted delivery of biologics to the retina. Journal of Drug Targeting. 2021 Jan 2;29(1):46-59.

19. Rayam P., Polkam N., Kuntala N., Banothu V., Anantaraju H.S., Perumal Y., Balasubramanian S., Anireddy J.S. (2020), "Design and synthesis of oxaprozin-1,3,4-oxadiazole hybrids as potential anticancer and antibacterial agents", Journal of Heterocyclic Chemistry, Vol. , no. , pp.-

20. Adinath D Badar., Shubham M Sulakhe., Mahesh B Muluk., Naziya N M A Rehman., Prashant P Dixit., Prafulla B Choudhari., Estharla Madhu Rekha., D Sriram., Kishan P Haval (2020), "Synthesis of isoniazidâ€• 1,2,3â€• triazole conjugates: Antitubercular, antimicrobial evaluation and molecular docking study", Journal of Heterocyclic Chemistry, Vol. , no. , pp.-

21. Sousa Â., Faria R., Albuquerque T., Bhatt H., Biswas S., Queiroz J.A., Costa D. (2020), "Design of experiments to select triphenylphosphonium-polyplexes with suitable physicochemical properties for mitochondrial gene therapy", Journal of Molecular Liquids, Vol. 302, no. , pp.-

22. Kumbham S, Paul M, Bhatt H, Ghosh B, Biswas S. Oleanolic acid-conjugated poly (D, l-lactide)-based micelles for effective delivery of doxorubicin and combination chemotherapy in oral cancer. Journal of Molecular Liquids. 2020 Dec 15;320:114389.

23. Sony Priyanka Bandi., Yashada Sanjay Kum bhar., Venkata Vamsi Krishna Venuganti (2020), "Effect of particle size and surface charge of nanoparticles in penetration through intestinal mucus barrier", Journal of Nanoparticle Research, Vol. 22, no. 3, pp.1-11

24. alra J, Dasari D, Bhat A, Mangali S, Goyal SG, Jadhav KB, Dhar A. PKR inhibitor imoxin prevents hypertension, endothelial dysfunction and cardiac and vascular remodelling in L-NAME-treated rats. Life Sciences. 2020 Dec 1;262:118436.

25. Leela Sai Lokesh Janardhanam., Vikram Varma Indukuri., Pratishtha Verma., Apurva Chandrashekhar Dusane., Venkata Vamsi Krishna Venuganti (2020), "Functionalized layer-by-layer assembled film with directional 5-fluorouracil release to target colon cancer", Materials Science and Engineering C, Vol. , no. , pp.-

26. Ashok Dogamanti., Pamula Chiranjeevi., Vikas Kumar Aamate., Madderla Sarasija., Siva Krishna Vagolu., D Sriram., Sridhar Balasubramanian (2020), "Indole-fused spirochromenes as potential anti-tubercular agents: design, synthesis and in vitro evaluation", Molecular Diversity, Vol. , no. , pp.-

27. Sandeep Kumar Marvadi., Devendra Nagineni., Syeda Safoora., Vagolu Siva Krishna., D Sriram., Srinivas Kantevari (2020), "Synthesis of novel 5-chloro-2-(thiophen-2-yl)-7,8-dihydroquinoline-6-carboxamides as potent inhibitors of Mycobacterium tuberculosis", Monatshefte für Chemie, Vol. , no. , pp.1-11

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31. Diwan R, Ravi PR, Agarwal SI, Aggarwal V. Cilnidipine loaded poly (ε-caprolactone) nanoparticles for enhanced oral delivery: Optimization using DoE, physical characterization, pharmacokinetic and pharmacodynamic evaluation. Pharmaceutical Development and Technology. 2020 Dec 15:1-43.

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34. Pulya S, Amin SA, Adhikari N, Biswas S, Jha T, Ghosh B. HDAC6 as privileged target in drug discovery: A perspective. Pharmacological Research. 2020 Nov 7:105274.

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36. Pragya Paramita Pal., Ameer Basha Shaik., A Sajeli Begum (2020), "Prospective Leads from Endophytic Fungi for Anti-Inflammatory Drug Discovery", Planta Medica, Vol. , no. , pp.-

37. Yamini Bobde., Swati Biswas., Balaram Ghosh (2020), "PEGylated N-(2 hydroxypropyl) methacrylamide-doxorubicin conjugate as pH-responsive polymeric nanoparticles for cancer therapy", Reactive and Functional Polymers, Vol. 151, no. , pp.-

38. Gautam Kumar., Vagolu Siva Krishna., D Sriram., Sanjay M Jachak (2020), "Pyrazoleâ€"coumarin and pyrazoleâ€"quinoline chalcones as potential antitubercular agents", Archiv der Pharmazie, Vol. , no. , pp.-

39. Makane VB, Vamshi Krishna E, Karale UB, Babar DA, Kalari S, Rekha EM, Shukla M, Kaul G, Sriram D, Chopra S, Misra S. Synthesis of novel 4, 5-dihydropyrrolo [1, 2-a] quinoxalines, pyrrolo [1, 2-a] quinoxalin]-2-ones and their antituberculosis and anticancer activity. Archiv der Pharmazie. 2020 Dec;353(12):2000192.

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42. Linda De Voogt., Kevin Van Calster., Davie Cappoen., Singireddi Srinivasarao., Adinarayana Nandikolla., Amaroju Suresh., Balaram Ghosh., Himanshu Aggarwal., S Murugesan., Kondapalli Venkata Gowri Chandra Sekhar (2020), "Seeking potent anti-tubercular agents: design and synthesis of substituted-N-(6-(4-(pyrazine-2-carbonyl)piperazine/homopiperazine-1-yl)pyridin-3-yl)benzamide derivatives as anti-tubercular agents", RSC Advances, Vol. 10, no. , pp.12272-12288

43. Singireddi Srinivasarao., Adinarayana Nandikolla., Amaroju Suresh., Kevin Van Calster., Linda De Vooght., Davie Cappoen., Balaram Ghosh., Himanshu Aggarwal., S Murugesan., Kondapalli Venkata Gowri Chandra Sekhar (2020), "Correction: Seeking potent anti-tubercular agents: design and synthesis of substituted-N-(6-(4-(pyrazine-2-carbonyl)piperazine/homopiperazine-1-yl)pyridin-3-yl)benzamide derivatives as anti-tubercular agents", RSC Advances, Vol. 10, no. 32, pp.18907-18907

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45. Singireddi Srinivasarao., Adinarayana Nandikolla., Amaroju Suresh., Kevin Van Calster., Linda De Vooght., Davie Cappoen., Balaram Ghosh., Himanshu Aggarwal., Sankaranarayanan Murugesan.,

Kondapalli Venkata Gowri Chandra Sekhar (2020), "Erratum: Seeking potent anti-tubercular agents: design and synthesis of substituted-N-(6-(4-(pyrazine-2-carbonyl)piperazine/homopiperazine-1-yl)pyridin-3-yl)benzamide derivatives as anti-tubercular agents (RSC Adv. (2020) 10 (12272â€"12288) DOI: 10.1039/D0RA01348J)", RSC Advances, Vol. 10, no. 32, pp.19807-

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64. Rimpy Diwan., Shareef Khan., Punna Rao Ravi (2020), "Comparative study of cilnidipine loaded PLGA nanoparticles: process optimization by DoE, physico-chemical characterization and in vivo evaluation", Drug Delivery and Translational Research, Vol. , no. , pp.-

65. Chandra Teja Uppuluri., Punna Rao Ravi., Avantika V Dalvi., Shafik Shakil Shaikh., Suvarna R Kale (2020), "Piribedil loaded thermo-responsive nasal in situ gelling system for enhanced delivery to the brain: formulation optimization, physical characterization, and in vitro and in vivo evaluation", Drug Delivery and Translational Research, Vol. , no. , pp.-

66. Prashant Garg., Girdhari Roy., Rohini Devi Galigama., Veda Suresh Thorat., Venkata Vamsi Krishna Venuganti (2020), "Microneedle ocular patch: fabrication, characterization and ex-vivo evaluation using pilocarpine as model drug", Drug Development and Industrial Pharmacy, Vol. , no. , pp.1-23.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

1. Nirmal J. Biomaterials role in achieving optimum therapeutics for the back of the eye diseases. Hiroshima University, Japan and BITS Pilani, Hyderabad Campus, 2nd Joint Workshop, 20th November 2020.

2. Akash Chaurasiya attended International Conference On Drug Discovery 2020 (ICDD 2020), BITS-Hyderabad, 29 Feb - 2 Mar 2020.

3. Yogeeswari P.,Organizing Committee member and speaker on the topic Discovery of Drug Candidates for Brain Cancer: Challenges and Target Based Strategy at the Pharmaceutical Education and Research Challenges for Emerging Prospects and Trends' PERCEPT-2020 during 13-14 March, 2014 at Osmania University, Hyderabad.

4. Jaspreet Kalra, Deepika Dasari, Audesh Bhat and Arti Dhar on "Selective Inhibition of PKR ameliorates hypertensive nephropathy and aortic remodeling in L-NAME treated rats" at ISN World Congress of Nephrology 2020, Abu Dhabi, UAE on March 26-29th March, 2020.

5. Vandana K, Bollareddy Srivarsha Reddy, Jaspreet Kalra, Gurdhari Roy, Deepika Dasari, Vamsi Krishna Venuganti and Arti Dhar on "5 Flurouracil and Etodolac Co-Encapsulated Liposomes for Targeted Drug Delivery: A Novel Strategy into Nanomedicine Based Combinational Chemotherapy for Breast and Ovarian Cancers" at International Conference on Drug Discovery (ICDD) 2020, BITS Pilani Hyderabad on February 19-20, 2020.

6. Jaspreet Kalra, Mangali Suresh Babu, Audesh Bhat, Kirtikumar Jadhav and Arti Dhar on "Selective Inhibition of PKR Improves Vascular Inflammation and Remodelling in High Fructose Treated Primary Vascular Smooth Muscle Cells" at Global Health Summit, ICONICA 2020, Punjab University, Chandigarh, India on March 16-17 at Panjab University, Chandigarh, India.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED:

1. Sajeli Begum A., Kirti Hira, Methods Molecular Biology, 2020 Vol. 2248, Jagadeesh Bayry (Eds): The TNF Superfamily, 978-1-0716-1129-6, 481779_2_En, (Chapter 21: Methods for Evaluation of TNF-α Inhibition Effect), Springer Nature.

2. Akash Chaurasiya, Amruta Gorajiya & Jayabalan Nirmal. Stability Testing Parameters of Nano scaled Product Development. In Multifunctional Drug Nanodelivery Systems, Elsevier Pvt Ltd Publication, 2020 (In press). Book chapter.

3. "Rohit Bisht, Pinto Raveena, Sonali Nirmal, Shovanlal Gayen, Gaurav K Jain, Jayabalan Nirmal*. Biopolymeric hydrogels prepared via click chemistry as carriers of therapeutic modalities. In: Tailor-made and Functionalized Biopolymer Systems, Elsevier, 2020 (In-Press). Book chapter. *Corresponding author

4. Ridahunlang Nongkhlaw, Parameswar Patra, Akash Chavrasiya, Nirmal Jayabalan, Sachin Dubey. Biologics: Delivery options and formulation strategies. In Drug Delivery Aspects, Volume 4: Expectations and Realities of Multifunctional Drug Delivery Systems, Elsiever Publications, 2020, Pages 115-155. Book chapter.

5. Akash Chaurasiya, Parameswar Patra, Pranathi Thathireddy, Amruta Gorajiya. "PLGA based drug delivery system: from lab to market". In Micro- and Nano-technologies: Concept, advancement and applications, CRC- Taylor & Francis (in press). Book chapter.

6. Jaspreet Kalra, Vandana Krishna, BollaReddy S.V. Reddy, Arti Dhar, Venkata V.K. Venuganti and Audesh Bhat. Nanoparticles in medical imaging. Elsevier Publisher (08/2020).

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT:

The "Seventh meeting of NPDF-ECRA Expert Committee on Life Sciences" for ECRA Group Monitoring Workshop (GMW) of Department of Science and Technology (SERB) was conducted during 13-15 February 2020 at Birla Institute of Technology & Science (BITS), Pilani, Hyderabad Campus, coordinated by Department of Pharmacy.

Department of Pharmacy and Chemistry, BITS Pilani Hyderabad campus in association with Schrodinger, LLC, USA conducted "International Conference on Drug Discovery 2020" on 29 Feb-02 March 2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Sajeli Begum delivered a talk on "Advanced Techniques in the Purification and Structure Elucidation of Natural Compounds", in AICTE Sponsored QIP Short Term Course (Online) on Natural Products in Holistic Healthcare – Recent Trends & Future Prospects (NPH2)", 21- 26 December 2020

2. Sajeli Begum delivered a talk on "Knowledge dissemination on Covid-19 and Dengue" in Fit India Programme organized by Professor Jayashankar Telangana State Agricultural University, Sep 7, 2020.

3. Venkata Vamsi Krishna Venuganti, Microneedle Devices for Topical, Transdermal, and Ophthalmic Drug Delivery: The Importance of Design Features, and Materials of Construction, AAPS Western India/Mumbai Discussion Group, June 29, 2020, Mumbai, India.

4. Yogeeswari P., Speaker on Protein Structure Modeling and Case Studies on Drug Discovery at the National Workshop on "Recent trends in Bioinformatics for Exploratory analysis and Visualisation of Biological Data", 16th to 18th Jan, 2020., Hyderabad.

5. Yogeeswari P., Guest Speaker RA Annual Meet on 5th March 2020 by Pfizer Chennai to speak on Transforming Millennials as Future Leaders

6. Yogeeswari P., Speaker at the E-conference on Hacks to Convince your Parents for your Dream Career hosted by REMARKABLE EDUCATION. The event was held on the 18th of April 2020

7. Yogeeswari P., Guest Speaker at the APC ONLINE CONVENTION 2020 on 15th May 2020 on Drug Discovery tools and strategies for Pharmacy students across the country and panelist on 20th May 2020.

8. Yogeeswari P., Panel member and Speaker at Facebook LIVE scheduled on 10th Nov 2020, Tuesday on the topic of "Women Entrepreneurship

9. Yogeeswari P., Speaker at the VIMARSH 2.0. held virtually on November 07, 2020 (11 AM to 1 PM) at AIRMEET on Managing Work Life Balance: Story of A Woman Entrepreneur's Life

10. Yogeeswari P., Speaker on Drug discovery using Ligand and Target-based Combination: Lead Discovery and Optimization at Drug Discovery Hackathon-2020 Training program held virtually on 17 to 21st August 2020

11. Arti Dhar, Presented a talk on " Novel peptide based strategy for cardiometabolic syndrome" at Hiroshima University (November, 2020). Yogeeswari.P Speaker on "Drug Design Strategies using Target based and Ligand based Modeling" at the National Conference on Computational Approaches in drug discovery and development for immune disorders, 8-9 March 2019, AIMS, Cochin, Kerala, India.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT: NIL

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Yogeeswari P., Jury for the Global Student Entrepreneurship Award 2020, one of the biggest student startup competitions across the globe.

2. Yogeeswari P., Ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

3. Sriram D., Ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

4. Swati Biswas., Ranked among 2% Top Scientists from India in the area of Pharmacy and Pharmacology as reported by Stanford University.

5. Yogeeswari P., Jury member for for SITARE - GYTI 2021, a national award given to student innovators across the country by the honourable President of India, on Managing Work Life Balance: Story of A Woman Entrepreneur's Life.Prof. Yogeeswari was awarded Shri B. K. Birla and Shrimati Sarala Birla Chair Professorship in 2019.

b. Won by Students:

1. Sri Harshini Goli -BITSAA International Travel award, Autumn Immunology Conference (AIC-2019) [presented reseach paper]

2. Jahnavi Dharwadkar- Special Mention, Human Rights Council, Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad.

3. Royal Tabitha Grace- Khorana Program for Scholars, WINstep Forward (WSF), Indo-U.S. Science Technology Forum (IUSSTF) and The Department of Biotechnology (DBT) of the Government of India

4. Samhitha Sai Veda Koduganti- Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust.

5. Sneha Das- Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust

6. Sneha Das- Merit Scholarship, BITS Pilani, Hyderabad Campus

7. MSK Srujana- Tata Trusts Medical and Healthcare Scholarship, Tata Education and Development Trust

8. Rohit Bisht (Postdoc Fellow), Emerging Researcher Award (Toxicology and Pharmaceutical Sciences) 2020 6Th Annual Millennium Impact Award-2020, Shri Param Hans Education and Research Foundation Trust, New Delhi, India.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Sushant Omprakash Dube, Ajay Kumar Singh, Akash Chaurasiya, Chiranjeev Singh, Suprit DilipSaoji, Pharmaceutical Combinations of Ibrutinib, Application No. IN202041053973, Application Submission Date: 11 Dec 2020. Patent filed.

2. Yogeeswari, P., Sriram, D., Madhubabu, B., Brahmam, M., Indian Patent Application No. 2945/DEL/2014 (15/10/2014): A Compound for treating inflammatory neuropathic pain and cancer. Patent Evaluation completed in Novemnber, 2020.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

This year was a year of low productivity for everyone due to pandemic and home quarantining. However, Panacea tried its best to keep the students engaged and activities going.

- The year started with the Tech Week in the month of February. The tech week had two events from panacea- (1) Advertiser's Rx   (2) Drug Connect

Both the events were a success, having more than 60 participants in teams of 2/3. The prize money for both the events was 2500 rupees.

- In the month of July and beginning of August Panacea organized a series of webinars on career guidance in collaboration with the BITS Pharmacy Society of Pilani campus. These webinars had a number of alumni from both campuses talking and interacting with students regarding career options and opportunities in the core and non core field. The speakers were as follows:

  · Mr. Gajraj Rathore (Hyderabad campus alumnus)

  · Ms. Prachi Mehta (Hyderabad campus alumnus)

  · Mr. Mohit Muskan (Hyderabad campus alumnus)

  · Ms. Nivya Sharma (Pilani campus alumnus)

  · Mr. Shreyansh Jain (Pilani campus alumnus)

  · Ms. Shreya Sharma (Pilani campus alumnus)

  · Mr. Keshav Singh (Pilani campus alumnus)

We also connected with an alumnus of Pilani campus from the pharma batch of 1990- Mr. Chandra Ramanathan who is currently the global head of pharma R&D open innovation at Bayer (USA). He spoke to the students of the prospects in foreign countries and shared his journey with the students.

We also held a talk on Drug Master Files in collaboration with Alchemy (chemistry association of Hyderabad campus) which was presided upon by the distinguished speaker- Ms. Mairin Susmegutner who is currently an analytical chemist at Selectchemie, Switzerland. She spoke to the students about regulatory affairs and quality control regulations in various countries and the process of applying for approval of a new drug.

- After the webinars (and during) we published a number of articles and also collaborated with many other association across all three campuses to contribute to the BITS Feed website.

- Recently we also held a small interaction with the fresher's 2020 batch to help them through the online set and to get them to know the seniors and pharmacy branch properly.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED:

In-vivo Imaging System (IVIS Lumina III) costing 1 crore was procured.

B3.10.12   Department of Physics

Number of faculty members (as on 31st December 2019)

Senior Professors, Professors	**3**
Associate Professors	**6**
Assistant Professors	**8**
Lecturers	**0**
Visiting Faculty	**0**
Visiting Assistant Professors	**0**

Head of the Department	:	**Aranya B Bhattacherjee**
Contact details	:	**aranyabhuti@hyderabad.bits-pilani.ac.in, Ph: 9910069581**
Number of Ph.D. Scholars	:	**22**
Full Time	:	**17**
Part Time	:	**5**
Aspirant Scheme	:	**0**
Post-doctoral Research Fellow	:	**1**

Ph.D. Thesis Submitted during the year: 2019

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Krishna Prakash Nunna	2015PHXF0015H	Thermal Effects on the Rotating Neutron Stars	Sarmistha Banik	NA
2	Subba Rao Y V	2012PHXF0540H	Controlling Advection and Transport of Vortices Using Obstacles in Passive Micro-mixers: Numerical Simulation and Experiments	Prof. V. Meenakshi	Prof. Aravinda N Raghavan
3.	V. Srinivasa Rao	2012PHXF0704H	Sustainable Design of Clean Room for Micro-electro-mechanical Systems Fabrication and Micro-Manufacturing Applications	Prof. S. P. Regalla	Prof. Kannan Ramaswamy

1.   SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A.   Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	"Exceptional polynomials and their applications to Wigner Function"	Physics	KVS Shiv Chaitanya	-	SERB-DST	-	6,60,000
2.	Investigating the Equation of State of Neutron Stars via emitted Gravitational Waves.	Physics	Swastik Bhattacharya	Sarmistha Banik	DST-SERB	NA	Final budget to be announced

B.   Industry Sanctioned Projects   - NIL -

C.   International Sanctioned Projects

Project title:

Biological treatment of industrial effluents using novel biofilm-membranes

Principal Investigator:

Dr. Asma Ahmed, Natural and Applied Sciences, Canterbury Christ Church University (UK)

Co-Ivestigator: Prof. Aravinda N. Raghavan

Agency: The Leverhulme Trust (UK)

Amount sanctioned: £263,547.00 converted to INR 2,59,77,739.39 (at the rate of 1 £ = 98.57 INR)

D. Institute Sanctioned Projects   - NIL -

*Funding sanctioned to S. Banik by International Center for Theoretical Sciences, TIFR, Bangalore to organise an International workshop on "COMPACT STARS IN THE QCD PHASE DIAGRAM VIII: THE ERA OF MULTI-MESSENGER ASTRONOMY", 25th May-5th June, 2020 at ICTS, Bangalore, https://www.icts.res.in/program/csqcd2020

2.   ONGOING PROJECTS

A.   Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Fundamental Physics in strong gravitational field of neutron stars	Physics	Prof. Sarmistha Banik	Dr. Asrarul Haque	DAE-BRNS	-	24,39,650
2	Quantum Gravity in Rindler space	Physics	Dr. Prasant Samantray	-	CSIR	-	15,46,000
3	Wind Noise mitigation in LIGO India	Mech	Dr. Sabareesh Geeta Rajasekharan	Dr. Rahul Nigam	IUCAA	-	45,00,000
4	Investigations of the effects of photon up conversion materials on the electrical performance of ferroelectric/ semiconductor heterojunction photovoltaic devices	EEE	Dr. Souvik Kundu	Prof B. Harihara Venkataraman	DST – SERB	-	35,00,000
5.	Investigating the Equation of State of a Neutron star via emitted Gravitational Waves	Physics	Swastik Bhattacharya	Sarmistha Banik	DST-SERB		Rs. 3368449/-
6.	Quantum back-action noise suppression through reservoir engineering and hybrid quantum systems	Physics	Subrahmanya Bhima Sankar Davuluri	NA	Science and Engineering Research Board (SERB)	NA	1333816.00

B.   Ongoing Industry Projects - NIL –

C.   Ongoing International Sanctioned Projects – NIL –

D.   Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Quantum theory of Black holes and Quasinormal nodes	Physics	Dr. Swastik Bhattacharya	-	BITS Pilani (RIG)	-	1,48,000

3.   COMPLETED PROJECTS

A.   Completed Government Projects - NIL -

B.   Completed Industry Projects - NIL -

C.   Completed International Projects - NIL -

D.   Completed Institute Projects - NIL -

4.   LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. "Metamaterials and Cesaro convergence", Yuganand Nellambakam and K. V. S. Shiv Chaitanya, AIP Advances 10, 045127 (2020).

2. "Relativistic potentials with rational extensions" K Haritha and K V S Shiv Chaitanya, Pramana J Phys 94: 102 (2020).

3. T. Malik, S. Banik & D. Bandyopadhyay, "New equation of state involving Bose-Einstein condensate of antikaon for supernova and neutron star merger simulations" accepted for publication in The European Physical Journal Special Topics, 2020 (Springer Publications).

4. K. P. Nunna, S. Banik, D. Chatterjee, "Signatures of strangeness in neutron star merger remnants," The Astrophysical Journal, 896:109, (2020). https://iopscience.iop.org/article/10.3847/1538-4357/ab8f2c/meta

5. S. Mukhopadhyay & S. Banik, "Gravitational waves from r-mode instability of massive young sub- and super- Chandrasekhar white dwarfs", The European Journal Plus, (2020) 135:1-17 DOI 10.1140/epjp/s13360-020-00279-x

6. R. Nandi, S. Mukhopadhyay & S. Banik, "Effect of quantizing magnetic field on the inner crusts of hot Neutron Stars" arXiv:2011.00296 (To be published in Phy Rev C)

7. S. S. Lenka, S. Banik and P. Char, "Role of antikaon condensation on the universality relations of hot and rapidly rotating neutron stars", Journal of Physics: Conference Series, Volume 1643, 012052 (2000), 27th International Nuclear Physics Conference (INPC2019) 29 July - 2 August 2019, Glasgow, UK

8. Influence of carbon source complexity on porosity, water retention and extracellular matrix composition of Neurospora discreta biofilms, A. Ahmed, R. Aravinda Narayanan, A. Veni, Journal of Applied Microbiology, 128, 1099-1108 (2020).

9. Srinivasa Rao Vutla, Srinivasa Prakash Regalla, Kannan Ramaswamy "Life Cycle Assessment of Cleanroom for Micro-electro-mechanical Systems Fabrication with Insights on Sustainability", Elsevier, Journal of Cleaner Production (2020). IF: 7.2

10. Renuka H, P. Joshna, W. A. Wani, B. H. Venkataraman, K. Ramaswamy and Kundu. S., "Plasmonic gold nanorods mediated p-BFCrO/n-rGO heterojunction in realizing efficient ferroelectric photovoltaic devices", Materials Science in Semiconductor Processing, 109, 104937 (2020). IF: 3.1

11. Waseem Ahmad Wani, Souvik Kundu, K. Ramaswamy, and B. Harihara Venkataraman "Structural, morphological, optical and dielectric investigations in Cobalt doped Bismuth Ferrite nanoceramics prepared using the sol-gel citrate precursor method" Journal of Alloys and Compounds, 846, 156334, (2020), (https://doi.org/10.1016/j.jallcom.2020.156334). IF: 4.7

12. Renuka H, P. Joshna, B. H. Venkataraman, K. Ramaswamy and Kundu. S., "Investigation of the combined effects of electron transport and hole transport layers and suppressing recombination through surface engineering to realize efficient chromium doped BiFeO3 ferroelectric photovoltaic devices" Solar Energy, 207, 767-776 (2020) https://doi.org/10.1016/j.solener.2020.07.032 IF: 4.6

13. Influence of Thermal Treatment on the Physical Properties of Bismuth Ferrite Nanoceramics for Promising Multifarious Device Applications, Waseem Ahmad, Souvik Kundu, Kannan Ramaswamy and B. Harihara Venkataraman, International Conference on Multifunctional Materials, Geethanjali College of Engineering and Technology, India, December 19-21, 2019., AIP conference proceedings, 2269, 030013 (2020); https://doi.org/10.1063/5.0019651

14. Influence of transition metal ion doping on structural and dielectric properties of sol - gel synthesized bismuth ferrite nanoceramics, Waseem Ahmad, Souvik Kundu, Kannan Ramaswamy and B. HariharaVenkataraman, IEEE International Symposium on Applications of Ferroelectrics, Lausanne, Switzerland, July 14 - 19, 2019. IEEE explore.

15. Aspects of marginally trapped and antitrapped surfaces in D-dimensional evolving dust model, Konka Raviteja, Sashideep Gutti, Physical Review D 102, 024072, 2020.

16. Bhumireddi Sattibabu, T. Durga Rao, A. K. Bhatnagar, V. Satya Narayana Murthy, S. Rayaprol, and V. Siruguri (2020) Neutron diffraction study and magnetic properties of NiFe2-xScxO4, Mater. Lett. 277, 128325.

17. N. V. S. S. Seshagiri Rao and V. Satya Narayana Murthy (2020) Multivortex formation during magnetization reversal process in rectangular and square CoFe nanostructures, J. Supercond. Nov. Magn., 33, 2699.

18. Bhumireddi Sattibabu, T. Durga Rao, A.K. Bhatnagar V. Satya Narayana Murthy, J. Arout Chelvane and S. Rayprol (2020) Structural and magnetic properties of Bi substituted nickel ferrite, Mater. Today, https://doi.org/10.1016/j.matpr.2020.05.371.

19. S.P. Challagulla; C. Parimi; P.K. Thiruvikraman.: Effect of the Sliding of Stacked Live Loads on the Seismic Response of Structures Engineering Journal, Vol 24, I 4, B 97-E 110

20. Rahul Kumar Thakur, Rahul Nigam, Sashikant Gupta, P.K. Thiruvikraman, Measurement of Hubble Constant: Were Differences in Secondary Distance Indicators Apparent as early as the HST Key Project? Research in Astronomy and Astrophysics, Vol, I, B 1-E 14.

21. Quantum optical response of a hybrid optomechanical device embedded with a qubit, S. A. Barbhuiya, Aranya B. Bhattacherjee, Journal of Optics, 22 115401 (2020).

22. Controllable bistable optical switch and normal mode splitting in hybrid optomechanical semi-conductor microcavity containing single quantum dot driven by amplitude modulated field, V Bhatt, S. A. Barbhuiya, P.K Jha, Aranya B. Bhattacherjee, Journal of Physics B: Atomic, Molecular and Optical Physics, 53 155402 (2020).

23. Optical switching and normal mode splitting in hybrid semiconductor microcavity containing quantum well and Kerr medium driven by amplitude-modulated field, M Kumar Singh, P Kumar Jha, Aranya B. Bhattacherjee, Journal of Modern Optics, 67, 692 (2020).

24. Fano profile in a novel double cavity optomechanical system with harmonically bound mirrors, V N Prakash, Aranya B. Bhattacherjee, Communications in Theoretical Physics, 72, 095501(2020).

5.   CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i)   National:

1. Swastik Bhattacharya: 31st IAGRG Meet, IIT Gandhinagar, December, Presented my paper in a talk.

2. Prof. Meenakshi attended discussion meeting on Experimental program of PTTS (Physics Training and Talent Search) at IISER, Pune on 4 - 5 November, 2020.

ii)   International:

1. S. Banik: Invited talk in Advances in Astroparticle Physics and Cosmology (AAPCOS)-2020 at Saha Institute of Nuclear Physics, Kolkata, January 2020.

2. Longitudinal and transverse surface plasmon resonance enhanced upconversion in nanopillar shaped geometries, Avi Mathur, Abhishek, Jasvith Basani, and Kannan Ramaswamy, META 2021 (Abstract accepted).

3. Engineering plasmon enhanced up-conversion via Transformation Optics, Abhishek, Avi Mathur, Jasvith Basani, and Kannan Ramaswamy, META 2021 (Abstract accepted).

4. Infinite chain model for a quantitative understanding of Faraday rotation in superparamagnetic Magnetite based ferrofluids, Hemanth K Narsetti, Nikhil Navaratna, Waseem Ahmad Wani, Dinabandhu Patra, Balaji Gopalan, Kannan Ramaswamy, ICONN 21 (Abstract accepted).

5. Prof. Aranya bhuti Bhattacherjee attended Quantum 2020 held virtually from 19–22 October 2020.

6.   LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Aranya B. Bhattacherjee and Suman Dudeja, "Self-Organization", New Frontiers in Nano-chemistry: Concepts, Theories, and Trends. Apple Academic Press, 493-495 (2020).

2. Aranya B. Bhattacherjee and Suman Dudeja "Spin Transport Electronics", New Frontiers in Nanochemistry: Concepts, Theories, and Trends. Apple Academic Press, 505-507 (2020).

3. Aranya B. Bhattacherjee and Suman Dudeja "Quantum Dots" New Frontiers in Nanochemistry: Concepts, Theories, and Trends. Apple Academic Press, 471-473 (2020).

4. Aranya B. Bhattacherjee "Bose-Einstein Condensate" New Frontiers in Nanochemistry: Concepts, Theories, and Trends. Apple Academic Press, 45-48 (2020).

7.   SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

S. Banik: Organised a virtual workshop "COMPACT STARS IN THE QCD PHASE DIAGRAM VIII: THE ERA OF MULTI-MESSENGER ASTRONOMY", 17 August 2020 to 21 August 2020 hosted by International Centre for Theoretical Studies, TIFR, Bangalore. The proposal originally approved for a 2-week workshop, ended up in a one-week virtual international workshop.https://www.icts.res.in/program/csqcd2020.

8.   INVITED TALKS GIVEN BY BITS FACULTY

1. S. Banik: Invited talk "Stability analysis and universality relations of a differentially rotating, hot, hypermassive neutron star " in Advances in Astroparticle Physics and Cosmology (AAPCOS)-2020 at Saha Institute of Nuclear Physics, Kolkata, January 2020.

2. Talk by Swastik Bhattacharya titled 'Microscopic Model building for Black Hole Membranes from constraints of symmetry" given at Chennai Mathematical Institute, January 2020.

3. Dr. V. Satya Narayana Murthy has given an invited talk on "Nanoscience in Nature" in a five-day faculty development programme organized by Department of Physics, Dayananda Sagar Academy of Technology and Management, Bangalore during 2 - 6 November 2020.

4. Prof. Meenakshi: Invited Distinguished Speaker in the "International conference on Physics and Allied Sciences' organized by Karnataka Science and Technology Academy, Department of Science and Technology, Government of Karnataka, 11-13 March, 2020

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

- "Optimization of Nb μ-SQUIDs for single particle nano-magnetism" by Prof. Anjan Kumar Gupta, IIT Kanpur on 31-1-2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: Prof. Kannan Ramaswamy Nominated for INSA best science teacher award

b. Won by Students: - NIL -

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. S. Banik: Collaboration established with Monash University Australia, a paper is submitted in December, 2020.

2. S. Banik: Served as Expert Examiner for post-thesis-submission-fellow position in Aryabhatta Research Institute of Observational Sciences (ARIES) Nainital, Uttarakhand, August, 2020.

3. S. Banik: Served as Thesis examiner for National Centre for Radio Astrophysics - Tata Institute of Fundamental Research (NCRA-TIFR), Pune PhD student, March 2020.

12. PATENTS FILED/PUBLISHED AND GRANTED

Srinivasa Rao Vutla, Srinivasa Prakash Regalla, Kannan Ramaswamy, Hemair Systems Private Limited, "Sustainable Microelectromechanical Systems (MEMS) Cleanroom", Provisional Indian Patent filed, Ref/App.No.: 201941041293/TEMP/E-1/43749/2019-CHE, Dated:11/OCT/2019. (Final filing: 10/11/2020)

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES   - NIL -

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

Dr. V. Satya Narayana Murthy added computational facility to the department for running the micromagnetic simulatuins.

B3.11 DIVISON/UNIT/CENTER-WISE ACTIVITY HIGHLIGHTS

RESEARCH AND DEVELOPMENT (SRCD)

The education system offers several opportunities to members of faculty to pursue research and involve students at all different levels through specialized projects, in the chosen research area. Research is promoted in the institution through the faculty development scheme and by encouraging faculty members to obtain funding from national and international agencies for sponsored research projects and to provide consultancy services. Presently, there are 4 faculty members and 484 research scholars, pursuing Ph. D. programs in identified thrust areas.

Ph.D. Qualifying Examination

Ph.D. qualifying examination was conducted at Hyderabad campus during the two semesters of 2020. 112 candidates were declared successful in this examination.

There are 39 research projects funded by various National and International funding agencies for about Rs. 6,91,60,574/-. Details of approved research projects are enclosed in **Annexure 6** (Part B3**). – SRCD**

Central Facilities Report:

The Library at BITS Pilani – Hyderabad Campus is a gateway to knowledge resources. The Library is one of the central support services of BITS Pilani - Hyderabad Campus. It provides information services and access to textual and bibliographic digital and print resources to the BITS Community—Institute's state-of-the-art Library with two floors spread over 45000sq.ft. is fully air-conditioned, with modern and comfortable furniture for the users. The Library has a seating capacity of 575 readers. It remains open from 0900 to 2300 hrs. on all working days, except National Holidays. During the weekends and other holidays, the library work from 0900 to 1700 hrs. During the examination, the Library is open till 1 am (midnight).

The Library is using KOHA Library Management Software for all its housekeeping activities. The library internet site has got the Web OPAC (Web-enabled Online Public Access Catalogue). A facility on KOHA Web OPAC includes advance search options for books, journals, theses, CDs etc. The library site has linked with the institute home page for external access. Students can access the library catalogue and the e-resources from their hostel rooms through LAN.

Shibboleth: Now, our campus is part of INFED (INFLIBNET(UGC) Access Management Federation. Shibboleth offers a mechanism for users to access multiple resources within a federated **single sign-on** framework. The goal of the INFED is to allow users to access internal and external resources seamlessly using a single, institutionally controlled identity. This would not only allow authorized users to access e-resources **from anywhere, anytime** but would also circumvent the requirement of maintaining multiple passwords for multiple resources in various domains. During this COVID 19 period, Shibboleth was very useful to our students and faculty to remotely access all the library e-resources.

RFID Technology: The Radio Frequency Identification (RFID) Technology for the books and self-check-in / check-out facility is available. The key benefits of RFID Technology are:

- Quick & Efficient Circulation Operations
- Enhanced Security for Library Items
- Seamless Inventory Management
- Emerging Technology Experience for Library users

The Library renders standard services like issuing books; attending to reference queries, providing photocopies, interlibrary loans, etc. for the institute's faculty and students. The following are the highlights.

The Library Committee: The Library committee is appointed by the senate comprising faculty representatives from each department. There are 12 members in the committee. The committee meets periodically and works very closely with the Library to select and coordinate the department's requirements. The Librarian is the chairman of the committee.

Acquisition Section

The Library has a collection of 41790 volumes and 7279 Springer engineering ebooks. During this year 3240 new books were added to the existing book collection in different disciplines. These include emerging areas like Lean Technology, Leadership, Digital Libraries, Earthquake Engineering, Wireless Communication, Signal Processing, Robotics, Nano-technology, Micro-electromechanical Systems (MEMS), Bio-informatics, Biotechnology, Geographical Information Systems, Network Security, Embedded Systems, Grid Computing, Pervasive Computing, Software Testing, Data Warehousing/ Mining and the Library also added books related to the placement.

E-resources

Access to over 9885 e-journals and other essential websites have been provided on the library site. E-journals of the following publishers were made available:

- American Chemical Society
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- American Journal of Physics
- IEEE Explore
- Science Direct
- ACM
- SciFinder
- Scopus
- JSTORE
- IOP (Institute of Physics) & Ebooks
- Nature
- JoVe
- RSC

Journals: Presently, the Library subscribes to 81 printed journals/magazines, including foreign journals. Useful articles, newspaper clippings are displayed on the notice board for the readers' information. Besides, articles authored by institute faculty are displayed in a prominent place in the Library.

Other Services

1. The Library keeps the readers informed every week through the regular display of all the books added to the Library. A list of weekly/monthly additions is also made available to readers on the library site and through e-mail to the entire faculty. Impressive topical displays are also organized periodically.

2. The Library had organized a Special Book Display in association with our campus book store in December 2020 for the library selection by the faculty members and research scholars.

3. Free wireless internet (WIFI) access is available in the Library

4. During the examinations, the Library working hours have been extended till 1 am (midnight)

5. Discussions rooms are available for the faculty and students.

Library Statistics

The Library collection is growing steadily. The following table shows some of the significant statistical data:

1	Current library holdings	41790
2	The average number of books issued per day **	25
3	The average number of readers visiting the Library per day **	105
4	Books added during the year	3240
6	Number of print Journals subscribed	81
7	E-journals made available on library site	9885
8	CD-ROM Collection	1340
9	Educational Video/DVD Collection	102
10	Total number of reading seats in the Library	575
11	Library membership	5250

** Due to the COVID 19 pandemic the Library was closed from March 2020.

WORKSHOP

The Central Workshop provides training to students and caters the maintenance & fabrication needs of the Institute. Through the course "Workshop Practice", all first degree students are trained to acquire the necessary skills related to various manufacturing processes like machining, fitting, carpentry, smithy, foundry, sheet metal, electroplating, welding, etc. and two computer oriented exercises, a CNC Simulation software (by CIMCO) and MASTER CAM, and a Manufacturing Simulation software called FlexSim. Further, students of B.E. (Mechanical Engineering) and B.E. (Manufacturing Engineering) are given in-depth training in various courses such as "Production Techniques – I" and "Production Techniques - II", "Manufacturing Processes" and "Computer Aided Manufacturing". Apart from routine maintenance and training, the workshop also provides fabrication services pertaining to the project works of students and also offers technical support for TBI works.

The workshop comprises of various sections namely Machine shop, Welding, Electroplating, Fitting, Smithy, Sheet Metal, Carpentry, Foundry and Metrology. Major equipment include 1 Vertical Machining Center (Bridgeport VMC GX600), 1 EDM Wire cut facility (Model: SPRINT CUT), 1 CNC Lathe (Model PTC- 200), 1 Hydraulic press with computer control (40T), 9 Lathes, 2 Shapers, 1 Radial Drilling Machine, 1 Universal Milling Machine (Batlibai make) with indexing attachment, 1 Cylindrical Grinding Machine with internal grinding attachment, 1 Surface Grinding Machine, 1 Tool and Cutter Grinder, 1 Pedestal Grinder, 1 Slotting Machine, 1 Power Shearing Machine (Vivek Brand), 1 Portable Drilling Machine, 1 Injection Moulding Machine, 1 TIG Welding Machine, 1 MIG Welding Machine, 1 Spot Welding Machine, 1 Universal Milling Machine (BFW make), 1 Shaper (Sagar make), 1 Surface Roughness Tester (Mitutoyo make) and 1 Hydraulic Bulge Test Rig, 1 Electro Chemical Machining (ECM) setup, 1 Lathe Tool Dynamometer, and 1 Rotational Moulding Machine, 1 M TAB CNC Lathe Trainer, 1 3-D Coordinate Measuring Machine (CMM) "Spectra", 1 HMT PRAGA Universal Tool & Cutter Grinding Machine, 1 FRITSCH Vibratory Sieve Shaker, Magnesium metal stir casting Furnace, 1 Milling tool dynamometer, 1 Drilling tool dynamometer, 1 Lathe tool dynamometer, 1 200TON capacity Compression testing machine, Mold Testing Equipment, 1 Open-hearth furnace for smithy, 1 Gas-fired furnace for foundry, 5 Wood-working Lathes, 2 Arc-welding equipments, 1 Oxy-Acetylene gas welding equipment, 1 Gauge planner for wood works, Electroplating equipment (zinc coating), 1 Power Hacksaw and 1 Sand Muller (Capacity-75kg), 2 Panther make lathe machines, 1 HMT make High Speed Precision Machine, two 3D Printers, 1 Plasma arc cutting machine, 3 AC Welding Transformers, 1 Powder mixing unit, 13 Lenovo make desktops, a CNC Simulation software by CIMCO (20 Licenses), NC programming software called MASTER CAM (15 Licenses), 1 Planetary ball Mill and 1 Micro milling machine.

COMMUNITY WELFARE UNIT

The community welfare unit (CWU) coordinates the welfare and recreational activities of the faculty and staff members of the institute and also the functioning of medical center. The medical center runs on 24 x 7 to attend to patients. A pediatrician, dentist visits once a week and a gynecologist visits twice a week to the medical center.

The community celebrated the new year 2020 with cultural events by faculty and staff children. The celebrations ended with cultural performance by Dr. Yashoda Thakore and group. The community also celebrated International Women's Day.

The community recently expanded the sports space for Children's Park paly area and new Children's Park in front of H5 and H6 buildings. The community also expanded the medical center facilities by providing new advanced ambulance and BSL training programmes for medical doctors and staff nurses.

B3.12 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS

No. of Honours and Awards to Students

Institute & Other Scholarships

AY	MERIT	MERIT cum NEED	INSPIRE	KVPY	NTSE	PM Scholarship	BSNL	RAILWAY	BITSAA	FIITJEE	OTHERS
2012-13	154	1337	-	-	-	-	-	-	-	-	-
2013-14	159	1247	-	-	-	-	-	-	2	-	-
2014-15	159	1123	-	-	-	-	-	-	2	-	-
2015-16	237	1463	20	1	20	2		2	2	-	16
2016-17	226	1421	33	4	35	5	3	6	2	1	18
2017-18	245	1672	9	1	9	3	2	4	6	3	11
2018-19	276	1911	33	3	49	8	4	4	10	2	19
201-20	117 (2nd Sem Yet to be declared)	1170 (2nd Sem Yet to be declared)	23	4	24	3	2	11		0	20

HONOURS

AWARD:

S.No	Roll Number	Name	Award/Scholarship	Prize
1	2017A7PS0037H	Venkata Nikhil Madam	-	Rs. 24000
2	2017B5A41696H	Sanika Sameer Khadkikar	CALTECH SURF SCHOLARSHIP	5 lakh rupees
3	2016A7PS0003H	V. Charitha Reddy	AYLTLC 2020 (Asian Youth Leaders Travel and Learning Camp)	NA
4	2016A8PS0397H	Amogh B S	INAE Innovative Student Projects Award	Rs. 5000
5	2019A4PS0963H	Sidharth Enagala	SLS PARLIAMENTARY DEBATE	Broke Novice category
6	2018A4PS0615H	Aarushi Guptaa	GFEF hackathon	Rs. 3000
7	2017B2A41421H	S Abhishek	Independence Cube Open, Raipur. Rubik's cube competition	Worth INR 10,000 in both cash and prizes
8	2017B2A41421H	S Abhishek	Independence Cube Open, Raipur. Rubik's cube competition	Worth INR 10,000 in both cash and prizes
9	2018A4PS0340H	Om Gandhi	SAE Baja 2020 Preliminary Round (Virtually)	Secured #1 Rank among New Teams in the Preliminary Round. Secure #10 Overall Presentation Rank among 170 teams.
10	2017B2A41421H	S Abhishek	Independence Cube Open, Raipur. Rubik's cube competition	Worth INR 10,000 in both cash and prizes
11	2017PHXF0021H	R. NARESH	PM Scholarship	
12	2017B2A41421H	S Abhishek	Independence Cube Open 2019, Raipur. Rubik's cube competition	Worth INR 10,000 in cash and prizes
13	2018B5A70601H	Harshit Bansal		60,000 p.a
14	2019B4PS0850H	KHUSHI KHANNA	NTSE	INR 36,000 (from Haryana government)
15	2016B5A30572H	K Pranath Reddy	Apple WWDC20 Swift Student Challenge	Apple WWDC20 Swift Student Challenge Award Winner
16	2018H1430050H	Sistla Saiteja	International Conference & Exposition on Mechanical, Material and Manufacturing Technology	3000
17	2018B3A70984H	Jui Pradhan	1. GSoC (Google Summer of Code) 2. ECCV 2020(European conference on computer Vision)	1. Stipend: $3000 2.Free Student delegate pass by Google Research, India
18	2016A4PS0920H	V. VIDHUKIRAN	NTU-India connect research fellowship	300 SGD
19	2016A4PS0920H	V. VIDHUKIRAN	CeNSE summer research fellowship program	12000 INR
20	2017A8PS0799H	Abhimanyu Gulia	Arena	Gold. 25k winning.
21	2017A8PS0799H	Abhimanyu Gulia	Arena	Gold. 25k winning.
22	2019A3PS1339H	S S V M S Yaji Suravarapu	BITS Goa Waves (Hear Me Out)	Yet to receive around 2K rupees
23	2019B2PS1530H	Yash Saravgi	Flipkart GRiD 2.0 - Robotics Challenge	Semifinalist
24	2017A7PS0200H	Surya Sidhartha Sornapudi	IEEE Xplore Challenge for Researchers in India 2020	Amazon Kindle (1st prize)
25	2017A1PS1106H	P Aryan	Model making competition by IIChe	Third place and awarded a cash

S.No	Roll Number	Name	Award/Scholarship	Prize
				prize of ?500
26	2017A1PS1136H	Harish S	SBI Numero Yono Quiz	Runner Up - Hyderabad Zonal; BITS Hyderabad team won Rs.1,44,000 scholarship, can attach required details if necessary.
27	2018A4PS1023H	Tanmay Srivastava	Upraised APM Internship Program	Among the Top 2% of 7500 total participants
28	2017A5TS1174H	Royal Tabitha Grace	Khorana Program for Scholars 2020	Airfare, a stipend of $2500 for the duration of the internship and up to $500 for health insurance.
29	2019A4PS1283H	Satish Kumar Bairiganjan	Defence scholarship	50000/-
30	2016B4PS0483H	Kothwal Shaikh Khalid Riyaz	Google Summer of Code & Mentor for Google Code-In	3000 USD
31	2019H1460580H	KANAN PANCHAL	Novartis Biotechnology Leadership Camp (BioCamp) 2020	Selection in the BioCamp
32	2019H1460587H	Aishwarya Mohan Shinde	TATA Trusts medical and healthcare Scholarship (merit based)	Rs. 82700
33	2017ABPS1399H	JOEL KUNDU	FILMFARE FIESTA (ELAN AND NVISION 2020 IIT HYD)	BEST FILM (RS. 11000)
34	2018B2A70739H	Aditi Kukreti	Project Road To Shine (T-Hub x Hiroshima Prefecture, Japan)	Won Excellence in Innovation Award out of 700 teams that participated all over Hyderabad
35	2017A1PS1037H	Ishita Kukreti	Project Road to Shine: T-Hub x Hiroshima Prefecture	Won Excellence in Innovation Award out of 700 teams that participated all over Hyderabad
36	2018A3PS0033H	PRIYESH MOHTA	BASKETBALL TEAM ARENA 2020	
37	2017A3PS0532H	Nimmagadda Bhagavath Chowdary	Arena	Prize money and medal
38	2017A1PS0834H	Sistla Shashank	InnoHack 7.0	2nd place/ 50000
39	2019A4PS0742H	Sanchit Tiwari	National MedTech open challenge by government of UP, Ministry of Electronics and IT, STPI (Software technology park of India)	MedTech open challenge Awardee
40	2019A4PS0742H	Sanchit Tiwari	MANTRA AWARD by BITSAA	ENTREPRENEUR OF THE YEAR/?7350
41	2019A3PS1315H	Mehul Jain	NTSE stage 1 State Rank 14	2000 per year for 2 years from Karnataka Government
42	2017A2PS0984	Yogit Agarwal	Squash	None
43	2019H1230037H	PARVADHA K	ANVESHAN-2020 -ANALOG DEVICES	Rs.50000(Winner)
44	2019H1230523H	AKASH K	ANVESHAN 2020-ANALOG DEVICES	Rs.50000
45	2017A7PS0233H	Ekanshi Agrawal	Grace Hopper Celebration India, 2020	
46	2018AAPS0353H	Kotamreddy Ganesh Reddy	29th IETE-National Technical Paper Contest-2021 (IETE-NTPC-2021)	2nd Place with Cash Prize - INR 5000
47	2017A1PS0801H	Satchit Nagpal	IIChE Model Making	500
48	2018A2PS0832H	Shubh Madhavan	SYMINARET (Symbiosis Hyderabad Football Tournament)	1st Place Trophy
49	2018A4PS0577H	Shubham Singh	PS1	10000

S.No	Roll Number	Name	Award/Scholarship	Prize
50	2017B2AA1494H	Anmol Kalantri	ILDP Start+ 2020, an internship at Hiroshima University, Japan.	
52	2016B2A30683H	Sankalp K G	1. NanoScientific Symposium Applications for a Changing World, Oct 14-15, 2020 2. International Webinar on UN Goals - Quality Education - The Future & International Academic Excellence Awards 2020 organized by IMRF, Dec 15, 2020 3. COVID-19 Innovation Challenge Demo Day Finalist, T-Hub 4. Hack the Crisis in India Online Hackathon, April 2020. 5. Student innovation project, BPHC 6. Tech Expo, ATMOS 2019	1. Received 100 dollars poster acceptance award at NanoScientific Symposium Applications for a Changing World, Oct 14-15, 2020 2. Honored with Indo-Asian William Gilbert Best Scholar Award in Electrical and Electronics Engineering in the International Webinar on UN Goals - Quality Education - The Future & International Academic Excellence Awards 2020 organized by IMRF, Dec 15, 2020.3. Finalists of the COVID-19 Innovation Challenge Demo Day and were awarded a certificate of excellence and AWS free student membership. 4. Certificate of Appreciation, Hack the Crisis in India Online Hackathon 5. Received a SIP project funding of INR 45k 6. Got the 1st prize worth 45k and a certificate of excellence in Tech Expo, ATMOS 2019
53	2019B3PS0602H	Hitaishi Desai	Goodera Global Student Challenge 2020	Rs. 30000
54	2019B3PS1302H	Vibha Narendra	Goodera Global Student Challenge 2020	Rs 30,000
55	2019B3PS0632H	Sailesh Duddupudi	Goodera Global Student Challenge 2020	Rs. 30000
56	2017A1PS0682H	Surabhi Sharma	Pearl Jam-inter college band competition	Rs. 7000

Details of extension services/activities, societal engagements, continuing education programmes, sports and games, cultural activities etc. undertaken by the Institution.

As part of Institutional Social Responsibility, the Institute has been taking part in the following activities under the aegis of NSS & Nirmaan. Summary of such activities in the year 2019-20 is as follows:

National Service Scheme (NSS):

NSS BITS Pilani Hyderabad Campus has 340 dedicated volunteers with the common motto of 'Not me but You'. Dr. N Kishore Kumar is the Programme Coordinator.

Last year we started Computer Literacy Program(CLP) in which everyday volunteers from our campus visit Thumkunta High School and teaches Computer Basic, MS Word and Excel for students to match with the pace of modern era. We celebrated Independence day by organising a Sports Day in the same school with great spirit. We organised mass collection drive for Kerala Flood relief and donated several things. 150 plants were planted at 5 nearby location in the Tree Adoption Programme. On the occasion of Gandhi Jayanti we visited nerby govt hospital and cleaned the premises as a part of Swach Bharat Abhiyaan. Throughout the year we ran Beat Plastic Program and were successfully able to eradicate use of plastic in food outlets and campus premises. Anemia screening session and Blood Donation Camp were also held. Self defense workshop for girls was held. We celebrated the spirit of diwali and holi in an ecofriendly manner. To respect and celebrate the Heritage of India we conducted 2 sessions of SPIC MACAY event which featured Carnatic Sangeeth and Bharatanatyam. We started a new initiative share your birthday where students from our campus can celebrate their birthday with orphanages. In the end we conducted Collection drive for Odisha Cyclone relief and sent the donations to Goonj foundation. We also collected paper waste and donated to Wellbeing Out of Waste foundation.

Three units of National Service Scheme are functional in BITS-Pilani, Hyderabad Campus (BPHC). Currently there are 290 volunteers consisting of 170 male and 120 female students. The Chairman of NSS team is the Director, Prof. G Sundar and Dr. N Kishore Kumar served as the Programme Coordinator.

▪ NSS BPHC has adopted the government school at Thumkunta. It teaches their academics for both English medium and Telugu medium students. In addition to this NSS volunteers are teaching English & personality development for classes 8th and 9th students. The units conduct a continuous year round teach-and-inspire

program in the school. This semester we even introduced CLP programme (Computer Learning programme) through which student were exposed to the digital education. In addition to this a series of programmes have been held to keep the students engaged in socially useful work.

- "Swacch Bharat Abhiyan", to inculcate cleanliness among students. NSS has conducted Campus cleaning drive. In which all the volunteers helped to clean some parts of campus.

- In order to involve more students in engaging with social and environmental issues.

- NSS bi-annual Blood donation drive was conducted with over 200 units of blood donated by student, faculty members and other staff of BITS Pilani Hyderabad campus. As part of this event NSS has collaborated with Lions Club India who helped us a lot in organizing this grand event.

- As a part of NSS DAY celebrations went to 'Home for Disabled'. We had movie screening, Followed, donations distributions to all the physically challenged people over there. It was a day well spent with amazing enthusiasm of volunteers and the satisfaction of work we did.

- As part of Independence Day celebrations A street play promoting sanitation and clean living was performed at Thumkunta High school by NSS volunteers and well received. Also many games etc. were conducted to the students of ZP and MP schools of Thumkunta village and the winners were awarded prices.

NIRMAAN ORGANISATION:

Nirmaan is an NGO, the Hyderabad based chapter of which was started in 2005. Nirmaan has been actively involved in nurturing social innovations, promoting a sense of volunteerism on campus and instilling valuable qualities like social leadership among the youth. Today it stands proud as an organization with close to 200 active members operating in all spheres of the society. Not only has it been successful in enriching the lives of its members but has also shaped a culture of "giving" on this campus.

Among many of Nirmaan's miscellaneous activities, a few are: Setting up Joy-of-giving-week stalls on campus, promoting use of eco-friendly colors during Holi, paper presentations at various events, The "Come be my Teacher" program and the "Wish Tree" project, where children put up their long-term goals and wishes on a tree (put up during our fests) for the world to view and realize the extent of their dreams.

Ignite'20:

The annual social fest of BITS Pilani Hyderabad Campus, an endeavour to ignite the spark of learning and imagination in young minds and provide them an opportunity to expand their horizons and explore the world. The 9th edition of Ignite was organised from 7th-9th February'20, around 305 kids from various homes in and around Hyderabad. Nearly 150 volunteers put in over 1500 hours of work to make this fest happen. This year's Ignite was loaded with fun and educational workshops such as sports, self-defence, life skills, public speaking, poster making, science fair and many more which were meticulously planned by the volunteers to give a tint of true education and help them realise their full potential. To introduce the high school kids to various career paths available and guide them to find their passion, a career guidance talk was organised where Dr. TSL Radhika and Prof. Jayati Subbalakshmi, professors of BITS Hyderabad, spoke about self-development and inspired the kids. Along with these, a health checkup and personal hygiene talk was conducted for the teenage girls where the health problems associated with low blood levels and anemia were discussed. Few other headliner events of the fest included Magic show, puppet show, origami workshop and best out of waste by the student volunteers. The fest ended on a high note with 'Kid's Got Talent', a talent shows organised to encourage the budding artists in the tiny tots. Filled with singing, dancing, beat-boxing and rap singing, it was an event which both kids and volunteers enjoyed the most.

Annual Day Celebrations in SAP's:

Aiming to reduce the gap between corporate and government schools, Nirmaan organized annual day/school day celebrations in the government schools in and around Thumkunta.

One Rupee per Day:

The one rupee per day scheme took a step towards involving people of the campus in social activities. There were a number of people in the campus, who are willing to participate in such activities, but unaware of the way to achieve them. The One Rupee per day scheme was successful in gathering around 200 students and a number of faculty and staff on the campus to become part of its activities.

Donation Drive:

While we leave the campus we take many memories and also make a mark of us. With marks and memories all the things which the outgoing students wished to donate were collected at the end of the year and will be distributed to different orphanages in the coming year.

ARENA 2020

ARENA, the annual sports festival of BITS-Pilani Hyderabad campus was formally inaugurated on 22nd to the 26th of January, 2020 by the chief guest, Mr. Chaitanya Vellhal, the Guest of Honour Mr. Mahantesh G K.

Director Prof. G Sundar, presided over the function and welcomed them onto the stage, along with Prof. Sandeep S Deshmukh, Associate Dean, Student Welfare Division. The President, the general secretary and the sports secretaries of the student union, as well as the team captains and the fest organizing body, graced the stage with their presence.

The fest saw teams from all over the nation competing to clinch triumphs in their respective sports. Right from football, cricket and basketball, to kabaddi and kho kho, Arena saw every imaginable sporting event represented in its hallowed grounds.

Athletes spent 4 gruelling days, pushing the boundaries of their strength and endurance to achieve victory and bring glory to the teams they were representing.

Apart from all the sports competitions, Arena also had an EDM night featuring the international duo, Kevu, who gave all the crowds the perfect opportunity to relax and celebrate amidst the fierce clashes on the arena. On Republic Day, an exhibition run was held as a way to pay tribute to the nation and the undying spirit of competition.

The campus was high on adrenaline and drowning in sounds of celebration as this Arena saw some of the most intense matches in the fest's history. Heroes were made, dreams were realized, glory was seized, legends were born.

ATMOS 2019

The annual technical fest of BITS Pilani Hyderabad Campus, ATMoS took place from the 18th to the 20th of October.

The eighth edition of the fest saw participation from all over the nation owing to its wide variety of workshops, events, and proshows. ATMoS offered 3 days of immense challenge, innovation and competition, and 3 nights of absolute fun and entertainment.

The three-day technical extravaganza saw talks by eminent personalities such as the former RBI Governor and retired IAS officer, Dr. Y. Venugopal Reddy, the CEO of Flipkart, Mr. Kalyan Krishnamurthy, ex-CBI Joint Director V. V. Lakshmi Narayana, and Padma Shri awardee Dr. Jitendra Nath Goswami.

The headliner events such as RoboWars, MiniGP, Enigma and Wall Street Business Challenge saw attendees participating in throngs. The comedy night featuring Rahul Dua and Azeem Banatwalla sent the audience into peals of laughter, and the Anand Bhaskar Collective and DJ Bonka had the crowds grooving to their music.

The campus was bustling with energy and life as it was one of the highest footfalls obtained, making this one of the most successful editions of ATMoS.

Verba Maximus 2020

Verbs Maximus, one of India's largest college literary fests, saw another successful edition in the year 2020. Themed around grimdark fairy tales, this year's VM 2020 drew participants from schools and colleges all over Hyderabad and India.

Hordes of literary enthusiasts were met with exciting writing and speaking events like Sherlocked, Devil's Advocate and Just a Minute among others. Our headliner Slam Poetry event was a huge hit, being judged by famous slam poets Megha Rao and Drishti Nagda. The festivities were topped off by a stand up comedy night featuring Varun Thakur. VM 2020 was a tremendous success, setting a benchmark for future literary endeavours.

B3.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS

1. New Construction:

S.No	Description of Activity
1	Construction of Car parking shed at H1,H2,H3 & H4 towers and at E type quarters
2	Construction of covered parking for Ambulance at Medical Centre
3	Development of Support Staff Dining facility
4	Construction of Concrete topped badminton court at all Hostels
5	Mesh Fencing alround 3 hostels (converted from Boys hostels to Girls hostels)
6	Modification works for Civil engg. Dept. laboratory for installing new work stations and Meeting hall
7	Construction of canopy for New Highway engineering lab. for Civil engg. Dept.
8	Construction for expansion of Sructural engineering lab. for Civil engg. Dept.
9	Installation of In-built RO units with coolers in Acadmic block
10	Construction of lab facility for HPC lab.
11	Interior works for Placement office unit

S.No	Description of Activity
12	Construction work for IIOT lab facility for WILP
13	Upgradation of 450 KLD STP plant from existing ASP model to MBBR technology
14	Conversion of existing Girls hostel to & Boys Hostel
15	Work stations at GAD office & at Maintenance office
16	Construction of Machine lab for EEE department expected to complete by b30 Jan 2021
17	Construction of New laboratory for Chemical engineering department expected to complete by 30 Jan 2021
18	Construction of Psycho Acoustic Lab for HSS department
19	Construction of Rain water recharge pit at Viswakarma Bhavn hostel
20	Providing Work Island units for Biological Sciences department
21	BSL2 lab facility for Biological Sciences department
22	Providing RO plant unit for Valmiki Bhavan
23	Civil structure works completed and Finishing works in progress for M power facility
24	Electrifcation for WILP ILOT & B 304G Labs
25	Commissioning & Provision of 5 MVA standby Transformer at 33 KV swicthyard
26	Modification of Central AC ODU's/IDU's with new Tosibha units at A, E,F Blocks.
27	Provision of inhouse Diwali LED Serial sets for J & K blocks
28	Installation & Commissioning of Mess-1 Kitchen fire suppression system
29	Obtained Statutory Approval for the newly Installed DG sets and 5 MVA standby transformer by CEIG (Electricity Board)
30	Construction of dedicated earth pits for HPC lab.

2. Renovation and Maintenance

S.No	Description of Activity
1	Painting for chambers , Labs & common areas in A block of Academic block
2	Water proofing works in Quarters , Academic block in rest room areas
3	F type quarters internal painting works
4	Providing painting to Central work shop
5	Restoration of part of Compound wall
6	Providing Access road at Dining-2 rear side area
7	Providing additional drain at Meera Bhavan area to enhance existing storm water drain system
8	Modification works at old Virology lab to facilitate FSM lab. for Biological Sciences department
9	Modification works in Autoclaving laboratory for Biological Sciences department
10	Auto Synchornism of 2 X 250 KVA DG Sets in substation-4
11	PVC trap doors for AC units in corridors
12	Shelf work for storage facility at Substation 1
11	Replacing of Trap doors for Central AC ducts at Academic corridors
12	Painting for fire hydrant pipe line
13	Replacement of fused Off CFL into LED lights at LTC, Academic corridors and Washrooms
14	Replacement of fused Off CFL into LED lights at staff quarters and common areas in the Campus
15	Electrical modifications for pharmacy Labs B 212,213.
16	Transformers Oil filtration & testing and earth pits meggering
17	HT & LT electrical breakers servicing and overhauling for optimum operation.
18	Annual Electrical Inspection of the campus by the Inspectorate Of Electrical Board
19	Replacement of VRF AC copper piping installations at A, B & D blocks of Academic block
20	Replacement of hot storage tanks in 4 Hostels

B3.14   MAJOR EQUIPMENT'S ACQUIRED DURING THE YEAR:

During 2020 a lot of new equipment has been added to support academics, research and development. Details as per **Annexure 7** (Part B3).

LIST OF ANNEXURES

ADMINISTRATIVE BODIES

The names and designations of Senior Officers

Director		
1.	Prof. G Sundar	Director

Dean(s)		
1.	Prof. Niranjan Swain	Dean, Administration
2.	Prof. Suman Kapur	Dean, International Programmes and Collaborations Division (University-wide)
3.	Prof. Souri Banerjee	Dean, Faculty Affairs Division (University-wide)
4.	Prof. Srinivasa Prakash Regalla	Dean, Practice School (PSD)
5.	Prof. MB Srinivas	Graduate Studies & Research

Associate Dean(s)		
1.	Prof. Vidya Rajesh	Faculty Affairs
2.	Prof. Anupam Bhattacharya	Sponsored Research and Consultancy
3.	Prof. Bivudatta Mishra	International Programmes and Collaboration
4.	Prof. Sankar Ganesh	Practice School
5.	Prof. Punna Rao	Work Integrated Learning Programmes
6.	Prof. Sandip Shridharrao Deshmukh	Student Welfare
7.	Prof. Meenakshi Viswanathan	Alumni Relations
8.	Prof. A Vasan	Academic – Undergraduate Studies
9.	Prof. Venkata Vamsi Krishna Venuganti	Academic – Graduate Studies and Research
10.	Prof. Sridhar Raju	Work Integrated Learning Programmes, Pilani Campus

Head of Departments		
1.	Chemical Engineering	Prof. I Sreedhar
2.	Civil Engineering	Dr. Murari Raja Raja Varma
3.	EEE	Prof. Alivelu Manga Parimi
4.	Mechanical Engineering	Prof. N Suresh Kumar Reddy
5.	Pharmacy	Prof. Sajeli Begum
6.	C S & I S	Prof. G Geethakumari
7.	Biological Sciences	Prof. Jayati Ray Dutta
8.	Chemistry	Prof. Sounak Roy
9.	Humanities & Social Sciences	Dr. Biswanath Dash
10.	Economics & Finance	Dr. Dushyant Kumar
11.	Mathematics	Prof. Pradyumn Kumar Sahoo
12.	Physics	Prof. Aranya Bhuti Bhattacharjee

Faculty-in-Charges

1.	Computer Centre	Prof. R Gururaj
2.	Centralized Purchase	Prof. Ramesh Babu Adusumalli
3.	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	Prof. Aruna Malapati
4.	Placement	Dr. Kurra Suresh & Dr. Soumya J
5.	Community Welfare	Prof. Arti Dhar
6.	Teaching Learning Centre (TLC)	Dr. Rahul Nigam
7.	Admissions	Prof. Amit Nag
8.	Time Table/Exams	Dr. Sashideep Gutti
9.	Strategy Planning	Prof. R Raghunathan

Other In-charges

1.	Central Analytical Laboratory	Prof. Ramakrishnan Ganesan
2.	Central Computing Laboratory	Dr. Vikranth Kumar Surasani
3.	Publications & Media Relations	Dr. Maya Vinai
4.	Workshop	Prof. N. Suresh Kumar Reddy
5.	Student Activity Center	Dr. Raja Varma Murari
6.	Website	Prof. G Geethakumari
7.	SPICMACAY (Society for the Promotion of Indian Classical Music and Culture amongst Youth)	Dr. N Kishore Kumar

Professor(s) In-Charge:

1.	Prof. Chittaranjan Hota	BITS Entrance Examinations
2.	Prof. P Yogeeswari	Centre for Innovation, Incubation & Entrepreneurship

Coordinators

1.	Dr. N Kishore Kumar	National Service Scheme
2.	Prof. K Srinivasa Raju	Centre of Excellence in Water Resources Management

Hostel Resident Wardens

1.	Dr. Bahurudeen A	Buddh Bhavan
2.	Dr. Phaneendra Kiran C	Chief Warden & Warden : Valmiki Bhawan
3.	Dr. Sabareesh Geetha Rajasekharan	Gandhi Bhawan
4.	Dr. Arkamitra Kar	Gautam Bhawan
5.	Dr. Jagan Mohan Jonnalagadda	Krishna Bhawan
6.	Dr. D Purnima	Malaviya Bhawan
7.	Dr. Santosh Kumar Mahapatra	Married Research Scholar Tower (H-7)
8.	Dr. Swati Biswas	Meera Bhawan
9.	Dr. Syed Ershad Ahmed	Ram Bhawan
10.	Prof. Onkar P Kulkarni	Shankar Bhawan

11.	Dr. Thota Nagaraju	Vishwakarma Bhawan
12.	Dr. Mohan S C	Vishwakarma Bhawan
13.	Dr. Mithun Mondal	Vyas Bhawan
Hostel Non-Resident Wardens		
1.	Dr. Pranesh Bhargava	Buddh Bhawan
2.	Vacant	Gandhi Bhawan
3.	Dr. Prasanth Kumar Samanta Ray	Gautam Bhawan
4.	Dr. Manish Kumar	Krishna Bhawan
5.	Dr. Alivelu Manga Parimi	Malaviya Bhawan
6.	Dr. T S L Radhika	Meera Bhawan
7.	Dr. Satish Kumar Dubey	Ram Bhawan
8.	Dr. Vivek Sharma	Shankar Bhawan
9.	Dr. Nitin Kotkunde	Valmiki Bhawan
10.	Dr. Piyush Khandelia	Vishwakarma Bhawan 1
11.	Dr. Lov Kumar	Vishwakarma Bhawan 2
12.	Dr. Subhrakanta Panda	Vyas Bhawan
Hostel Superintendent		
1.	Mr. Haridas A	Krishna, Ram & Shankar Bhawan
Asst. Hostel Superintendents		
1.	Mr. Santosh R	Vishwakarma Bhawan & H7
2.	Mr. Khaja Mohinuddin	Gandhi, Gautham & Buddh Bhawan
3.	Mr. Shaik Zakeer Vali	Valmiki & Vyas Bhawan
4.	Ms. M Anitha	Malaviya Bhawan
5.	Ms. Vijitha L	Meera Bhawan

DETAILS OF ADMISSIONS MADE DURING THE YEAR 2020

(A) Integrated First Degree Programmes

First degree – 2020-21	Total	Male	Female
B.E.: Chemical (A1)	54	37	17
B.E.: Civil (A2)	51	44	7
B.E.: Electrical and Electronics (A3)	107	96	11
B.E.: Mechanical (A4)	153	134	19
B. Pharm. (A5)	55	23	32
B.E.: Computer Science (A7)	189	173	16
B.E.: Electronics & Instrumentation (A8)	63	57	6
B.E.: Electronics and Communications (AA)	123	104	19
M.Sc.: Biological Sciences (B1)	52	34	18
M.Sc.: Chemistry (B2)	57	43	14
M.Sc.: Economics (B3)	84	66	18
M.Sc.: Mathematics (B4)	88	62	26
M.Sc.: Physics (B5)	88	81	7
Totals	**1164**	**954**	**210**
This list includes; 46 International Students, 1 Board Topper (A7 - 1) & 6 Staff Children (B1-1, B2-1, B3-2, B4-1 & B5-1)			

(B) Higher Degree Programmes:

Higher Degree Programmes - 2020-21	Total	Male	Female
M.E Biotechnology	15	1	14
M.E Chemical	7	5	2
M.E Civil with specialization in Structural Engineering	30	24	6
M.E Civil with specialization in Transportation Engineering	12	10	2
M.E Communication Engineering	20	12	8
M.E Computer Science	59	43	16
M.E Design Engineering	29	28	1
M.E Embedded Systems	34	26	8
M.E Mechanical	27	25	2
M.E Mechanical with specialization in Thermal Engineering	17	14	3
M.E. Microelectronics	34	25	9
M.E Sanitation Science, Technology and Management	3	2	1
M.Pharm with specialization in Pharmaceutics	23	8	15
Totals	**310**	**223**	**87**

(C) Higher Degree (3 Year Integrated) Programme:

	Total	Male	Female
M.E. in Computer Science (with specialization in Information Security)	0	0	0

(D)   Ph.D. Programmes:

Ph.D. Admissions: II Semester - 2019-20	Full Time			Part Time			Aspirants		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Biological Sciences	6	2	4						
Chemical Engg.	3	2	1						
Chemistry	5	1	4						
Civil	5	4	1						
Computer Science	4	3	1	4	2	2			
EEE	7	2	5	2	2				
Humanities & S Sci.	2		2						
Eco., & Fin, Mgmt	3		3	1	1		1	1	
Mathematics	5	2	3	1		1			
Mechanical	11	9	2	2	2				
Pharmacy	7	4	3	2	1	1			
Physics	4	1	3						
Totals	**62**	**30**	**32**	**12**	**8**	**4**	**1**	**1**	

Ph.D. Admissions: I Semester 2020-21	Full Time			Part Time			Faculty Input			Aspirants		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Biological Sciences	10	2	8	3	2	1						
Chemical Engg.	1		1									
Chemistry	4		4									
Civil	3	3										
Computer Science	3	1	2									
EEE	6	5	1	2	2							
Humanities & S Sci.	1		1									
Eco., & Fin, Mgmt	2	1	1	1	1							
Mathematics	10	7	3	1		1						
Mechanical	8	7	1	2	2							
Pharmacy	5	2	3	1	1							
Physics	2	1	1									
Totals	**55**	**29**	**26**	**10**	**8**	**2**						

DUAL DEGREEs:

FIRST PRIORITY
(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AA	Total
B1	3	2	11	11	0	6	4	3	40
B2	7	4	8	13	0	5	9	4	50
B3	0	6	16	12	0	33	5	13	85
B4	2	7	8	14	0	14	6	15	66
B5	2	4	4	11	0	22	6	17	66
Total	14	23	47	61	0	80	30	52	307

OTHER PRIORITIES

	B3	Total
A5	2	2
Total	2	2

Transfer within same tier:

Programmes* From ↓ To →	AA	A8	A7	Total
A3	04	00	00	04
A4	00	01	00	01
A8	01	00	00	01
AA	00	00	04	04
B4	00	00	01	01
Total	**05**	**01**	**05**	**11**

Transfer within B to B

Programmes* From ↓ To →	B3	Total
B1	02	02
B5	01	01
Total	03	03

Vertical Transfers

From	To	No. of Students
B.E. EEE	M.E. Embedded Systems	01
M.E. Biotechnology	Ph.D	01
M.E. Pharm	Ph.D	**03**
Total		**05**

VERTICAL TRNASFERS:

During the year 2020, Four students were permitted to transfer from Higher Degree to Ph.D. Programme and One student was permitted to transfer from First Degree to Higher Degree at Hyderabad Campus.

B3: A-6

LIST OF NEW COURSES INTRODUCED THE YEAR 2020

**Second Semester 2019-2020**		
S.No.	**COURSE NO.**	**COURSE NAME**
1	BITS F446	Pattern Recognition
2	PHY F431	Geometrical Methods in Physics
3	BIO F216	Water, Sanitation and Solid Waste Management
4	CHE F498	Colloids and Interface Engineering
5	EEE F411	Internet of Things
6	GS F223	Intro to Mass Communication
7	HSS F242	Introduction to Phonology
8	HSS F243	Introduction to Critical Pedagogy
9	HSS F246	Philosophy of Nagarjuna
10	MATH F481	Commutative Algebra
11	MATH F423	Introduction to Algebraic Topology
First Semester 2020-2021		
S.No.	**COURSE NO.**	**Course Name**
1	ME F112	Workshop Practice
2	ME F217	Applied Thermodynamics
3	CHE G558	Chemical Process Optimization
4	ME F216	Materials Science and Engineer
5	PHA G540	Modern Pharmaceutical Analytical Techniques
6	PHA G535	Biomaterials
7	PHA G537	Parenteral Product development

ACADEMIC REGISTRATION AND COUNSELLING DURING THE YEAR 2020)

SECOND SEMESTER 2019 – 2020

DISCIPLINE	2012	2014	2015	2016	2017	2018	2019	Total
A1 - B.E. (Hons.) Chemical	-	-	1	39	64	54	55	**213**
A2 - B.E. (Hons) Civil	-	1	2	45	57	60	58	**223**
A3 - B.E. (Hons.) Electrical & Electronics	-	-	1	68	97	106	103	**375**
A4 - B.E. (Hons.) Mechanical	-	-	-	57	113	141	146	**457**
A5 - B. Pharm (Hons.)	-	-	-	16	29	48	44	**137**
A7 - B.E. (Hons.) Computer Science	-	-	1	122	225	188	179	**715**
A8 - B.E. (Hons.) Electronics & Instrumentation	-	-	-	38	53	54	72	**217**
AA - B.E. (Hons.) Electronics & Communication	-	-	3	75	111	120	116	**425**
AB - B.E. (Hons.) Manufacturing	-	-	1	22	34	-	-	**57**
B1 - M.Sc. (Hons.) Biology	1	-	20	22	21	38	41	**143**
B2 - M.Sc. (Hons.) Chemistry	-	-	24	22	40	42	51	**179**
B3 - M.Sc. (Hons.) Economics	-	2	34	38	83	82	87	**326**
B4 - M.Sc. (Hons.) Mathematics	-	1	32	33	70	78	71	**285**
B5 - M.Sc. (Hons.) Physics	-	1	27	30	58	53	68	**237**
Total	**1**	**5**	**146**	**627**	**1055**	**1064**	**1091**	**3989**

SECOND SEMESTER 2019 – 2020

DISCIPLINE	2011	2012	2013	2014	2015	2016	2017	2018	2019	Grand Total
PhD	3	8	21	4	25	66	82	102	135	**446**
H 101 - M.E. (Chemical Engg.)	-	-	-	-	-	-	-	7	6	**13**
H 103 - M.E. (Computer Science)	-	-	-	-	-	-	-	31	40	**71**
H 106 - M.E. (Mechanical)	-	-	-	-	-	-	-	21	24	**45**
H 123 - M.E. (Microelectronics)	-	-	-	-	-	-	-	27	29	**56**
H 124 - M.E. (Commun.Engg.)	-	-	-	-	-	-	-	19	23	**42**
H 129 - M.E. (Biotechnology)	-	-	-	-	-	-	-	20	13	**33**
H 130 - M.E. (Transportation)	-	-	-	-	-	-	-	14	12	**26**
H 140 - M.E. (Embedded Systems)	-	-	-	-	-	-	-	-	26	**26**
H 141 - M.E. (Design)	-	-	-	-	-	-	-	23	26	**49**
H 143 - M.E. (Structural)	-	-	-	-	-	-	-	22	25	**47**
H 146 - M.Pharm (Pharmaceutics)	-	-	-	-	1	-	-	21	25	**47**
H 148 - M.E. (Thermal)	-	-	-	-	-	-	-	19	18	**37**
Sub-total (HD)	-	-	-	-	-	-	-	**224**	**268**	**492**
Total (HD + PhD)					**938**					

SUMMER TERM 2019 – 2020

DISCIPLINE	2015	2016	2017	2018	Total
A1 - BE (Hons.) Chemical	-	-	2	54	56
A2 - BE (Hons) Civil	-	-	2	60	62
A3 - BE (Hons.) EEE	-	-	3	106	109
A4 - BE (Hons.) Mechanical	-	-	6	141	147
A5 - B. Pharm (Hons.)	-	-	1	47	48
A7 - BE (Hons.) Computer Science	1		8	189	198
A8 - BE (Hons.) Electronics & Instrumentation	-	1	2	54	57
AA - BE (Hons.) ECE	1	1	3	118	123
AB - BE (Hons.) Manufacturing	-	-	3	-	3
B1 - M.Sc. (Hons.) Biology	-	1	9	38	48
B2 - M.Sc. (Hons.) Chemistry	-	-	13	41	54
B3 - M.Sc. (Hons.) Economics	-	1	29	81	111
B4 - M.Sc. (Hons.) Mathematics	-	2	13	78	93
B5 - M.Sc. (Hons.) Physics	-	1	21	49	71
GRAND TOTAL	2	7	115	1056	1180

First Semester 2020 – 2021

DISCIPLINE	2015	2016	2017	2018	2019	2020	Total
A1 - B.E. (Hons.) Chemical	1	2	65	54	55	54	**231**
A2 - B.E. (Hons) Civil	1	2	57	60	58	46	**224**
A3 - B.E. (Hons.) Electrical & Electronics	-	-	98	106	103	107	**414**
A4 - B.E. (Hons.) Mechanical	-	-	113	141	146	147	**547**
A5 - B. Pharm (Hons.)	-	3	29	48	44	52	**176**
A7 - B.E. (Hons.) Computer Science	-	2	225	188	184	188	**787**
A8 - B.E. (Hons.) Electronics & Instrumentation	-		53	55	72	62	**242**
AA - B.E. (Hons.) Electronics & Communication	1	1	110	120	112	122	**466**
AB - B.E. (Hons.) Manufacturing	1	-	34	-	-	-	**35**
B1 - M.Sc. (Hons.) Biology	-	21	21	38	41	51	**172**
B2 - M.Sc. (Hons.) Chemistry	1	21	40	42	51	56	**211**
B3 - M.Sc. (Hons.) Economics	-	37	83	82	86	83	**371**
B4 - M.Sc. (Hons.) Mathematics	-	31	70	78	70	86	**335**
B5 - M.Sc. (Hons.) Physics	1	29	58	53	68	88	**297**
Total	6	149	1056	1065	1090	1142	**4508**

DISCIPLINE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Grand Total
PhD	1	2	4	18	4	19	56	78	106	134	59	**481**
H 101 - M.E. (Chemical Engineering)	-	-	-	-	-	-	-	-	-	6	7	**13**
H 103 - M.E. (Computer Science)	-	-	-	-	-	-	-	-	-	39	59	**98**
H 106 - M.E. (Mechanical)	-	-	-	-	-	-	-	-	-	24	27	**51**
H 123 - M.E. (Microelectronics)	-	-	-	-	-	-	-	-	-	29	34	**63**
H 124 - M.E. (Communication Engineering)	-	-	-	-	-	-	-	-	-	23	20	**43**
H 129 - M.E. (Biotechnology)	-	-	-	-	-	-	-	-	-	12	15	**27**
H 130 - M.E. (Transportation)	-	-	-	-	-	-	-	-	-	12	12	**24**
H 140 - M.E. (Embedded Systems)	-	-	-	-	-	-	-	-	-	26	34	**60**
H 141 - M.E. (Design)	-	-	-	-	-	-	-	-	-	26	29	**55**
H 143 - M.E. (Structural)	-	-	-	-	-	-	-	-	-	25	30	**55**
H 146 - M.Pharm (Pharmaceutics)	-	-	-	-	-	1	-	-	-	25	22	**48**
H 148 - M.E. (Thermal)	-	-	-	-	-	-	-	-	-	18	17	**35**
H 151 - M.E. (Sanitation)	-	-	-	-	-	-	-	-	-		2	**2**
Sub-total (HD)	-	-	-	-	-	-	-	-	-	266	308	**574**
Total (HD + PhD)					1055							

LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS

S.No	Company	Total Number of Offers Made	CTC in INR	Number of Interviews
1	AB InBev	0	12,00,000	46
2	Accelerize 360	3	6,00,000	13
3	Accolite	0	8,00,000	25
4	Aequs	5	4,50,000	49
5	Aerchain	2	10,45,650	2
6	Aizant Global Analytics	3	4,50,000	45
7	Aizant Pharma	6	4,00,000	30
8	Altair	1	2,58,000	1
9	Amara Raja	1	9,00,000	17
10	Amazon	32	17,50,000	235
11	AMD	2	12,70,000	35
12	American Express	4	17,67,000	4
13	Analog Devices	1	21,00,000	55
14	Anarock	7	14,00,000	227
15	Applied Data Finance	3	6,17,000	25
16	Arcesium	2	32,50,000	140
17	ARM Embedded Technologies	1	9,00,000	1
18	Arup	5	7,00,000	70
19	Atkins	3	5,40,000	15
20	Atlassian	5	23,50,688	58
21	Audree InfoTech	1	5,00,000	1
22	Aurigene	3	4,50,000	10
23	Aurigo	14	10,00,000	53
24	Axxela Advisory Services LLP	1	11,00,000	36
25	Ayesa India Private Limited	1	5,40,000	1
26	Balaxi Ventures	4	4,20,000	8
27	Baldor Tech(IDFY)	1	12,00,000	1
28	Benefit align Technologies	0	10,00,000	28
29	Blend Colors	2	4,00,000	11
30	BNY Mellon	0	17,34,000	53
31	Bounce	1	26,50,000	1
32	Bridge i2i Analytics	0	5,50,000	22
33	Burohappold Engineering	1	4,00,000	10
34	Byju's	14	8,00,000	80
35	Call Health	3	6,50,000	19
36	Capillary	1	13,42,470	1

S.No	Company	Total Number of Offers Made	CTC in INR	Number of Interviews
37	CBRE	6	6,00,000	44
38	CDM Smith	2	5,50,000	35
39	Celigo	2	17,00,000	87
40	Cipher Cloud	2	10,00,000	22
41	Cipla	2	4,00,000	12
42	Cisco	1	31,65,100	15
43	Clumio	0	23,00,000	58
44	Codenation	2	31,00,000	125
45	Cohesity	4	31,00,000	110
46	Colortokens	3	6,00,000	23
47	Commscope	1	4,50,000	27
48	Complete Instrumentation Solutions	1	6,00,000	5
49	CRED	1	18,00,000	1
50	Credit Suisse	8	11,50,000	8
51	CrowdChat	1	11,00,000	34
52	Cypress Semiconductors	0	12,99,400	40
53	Daikin	0	5,00,000	21
54	Dalberg Advisors	0	12,33,080	120
55	Darwinbox	8	7,20,000	37
56	Delhivery	1	8,00,000	23
57	Dell	1	14,00,000	48
58	Deloitte	8	12,00,000	111
59	Deutsche Bank	8	12,00,000	59
60	Direct-i (Digital & Site Mobility)	6	29,78,214	75
61	Dunzo	1	11,00,000	130
62	EA Games	3	24,13,341	77
63	Energy Exemplar	6	11,50,000	25
64	Epsilon	7	10,00,000	48
65	Ernst & Young	0	13,65,000	59
66	Evalueserve	1	7,00,000	15
67	EXL Service	3	6,00,000	37
68	ExxonMobil	3	10,72,000	48
69	F5 Networks	13	23,84,857	111
70	Fanatics	3	16,00,000	62
71	Fiorano	2	9,00,000	46
72	Flipkart	8	26,57,000	210
73	Flow Traders (Hong Kong)	0	74,43,683 (HKD 781,056)	180
74	Forbes Marshall	1	7,20,000	13
75	Fractal Analytics	16	10,50,000	83
76	Fresh prints	1	6,60,000	32

S.No	Company	Total Number of Offers Made	CTC in INR	Number of Interviews
77	Futures First	4	12,40,000	107
78	Gamooga	2	7,00,000	40
79	GE India Technology Centre	2	16,35,197	78
80	Genpact	1	8,50,000	1
81	Geny Medium	2	4,50,000	9
82	GEP	1	11,00,000	1
83	Goldman Sachs-(Operations)	6	9,50,000	6
84	Google	2	30,77,100	202
85	Happay	1	12,00,000	1
86	Hourglass	1	5,50,000	19
87	HSBC	4	8,50,000	101
88	ICICI Lombard	3	8,00,000	19
89	IFB Industries	1	6,50,000	1
90	IMI Mobile	1	11,00,000	1
91	Impact Analytics	2	8,00,000	16
92	Indus Insights	2	13,50,000	140
93	Inmobi	1	8,00,000	1
94	Intel	8	11,50,000	13
95	Ion Energy	1	8,00,000	25
96	IQVIA	2	7,00,000	6
97	JDA Software	3	6,75,000	3
98	JP Morgan & Chase	6	14,00,000	6
99	JP Morgan & Chase-Quant	3	30,00,000	159
100	JP Morgan Services	7	13,00,000	7
101	Just Dial	0	10,00,000	34
102	Kfintech	6	10,00,000	56
103	L&T Const.	3	6,00,000	12
104	L&T Limited	2	6,25,000	49
105	Lens kart	1	10,00,000	1
106	LG	1	7,28,000	1
107	Login Radius	7	10,50,000	40
108	Lupin	1	3,62,000	1
109	Mathworks	6	15,45,000	83
110	Maxim Integrated	1	11,00,000	24
111	Media.net(Digital)	0	12,00,000	105
112	Mediatek	0	12,00,000	14
113	Medium Healthcare	1	5,00,000	4
114	MedPlus	6	8,00,000	27
115	Merilytics	11	7,50,000	80
116	Microchip	3	8,50,000	4

S.No	Company	Total Number of Offers Made	CTC in INR	Number of Interviews
117	Micron	9	17,14,000	103
118	Microsoft IDC	35	43,31,133	113
119	Morning Star	1	10,00,000	1
120	Mtandt	2	5,50,000	11
121	Nalsoft	0	8,00,000	29
122	National Instruments	1	12,50,000	1
123	NetApp	0	18,72,708	16
124	Nference Labs	2	10,50,000	45
125	Ninja cart	1	12,00,000	67
126	Nomura	7	13,00,000	7
127	Novartis	5	8,36,000	13
128	Numerator	0	7,00,000	9
129	Nutanix	9	39,48,600	79
130	NVidia Corporation	3	10,00,000	3
131	O9 Solutions	3	11,73,000	50
132	OnePlus	0	6,00,000	25
133	Oppo	14	25,00,000	48
134	Oracle	18	22,50,000	156
135	Orbees	6	13,50,000	76
136	OYO Rooms	16	15,00,000	45
137	PayPal	7	27,65,000	94
138	Pfizer	2	4,20,000	11
139	Phenom People	5	10,56,000	41
140	PhonePe	5	12,00,000	106
141	Piramal Group	2	15,81,000	2
142	Pokarna	4	6,00,000	6
143	Polybee (Singapore)	1	38,68,318 (Singapore $ 70,000)	143
144	Postman	1	16,00,000	111
145	Publicis Sapient	4	14,70,000	92
146	Qualcomm	20	15,60,000	90
147	Quantiphi	3	8,50,000	97
148	Quest Global	9	5,03,000	29
149	Raam Group	3	6,00,000	22
150	Ramboll	5	5,50,000	20
151	RBL Bank	3	9,00,000	74
152	Reflexis Systems	3	6,00,000	12
153	Reliance Industries Limited	3	8,88,000	23
154	Reliance Jio	7	17,00,000	62
155	Samsung Semiconductor India Research(SSIR)	2	22,00,000	2

S.No	Company	Total Number of Offers Made	CTC in INR	Number of Interviews
156	Sanofi	1	3,63,000	5
157	Saras Analytics	1	6,50,000	1
158	Service Now	16	26,08,964	78
159	Siemens	1	12,00,000	1
160	Signalchip Innovations	2	11,00,000	67
161	Singh Plasticizers & Resins Pvt Limited	2	5,80,000	21
162	Skyroot Aerospace	2	4,00,000	9
163	Spandana Spoorthy	4	22,00,000	95
164	Standard Chartered GBS	2	11,00,000	124
165	Strand Life Sciences	2	16,00,000	97
166	Symphony AI	4	16,00,000	102
167	Symphony Fintech Solutions	1	12,43,600	1
168	Synchrony Financial	1	11,00,000	51
169	Synopsys	1	15,00,000	7
170	Tata AIG	1	7,00,000	15
171	Tata Health	1	10,00,000	1
172	Techolution	2	8,00,000	31
173	Temperate Technologies	0	4,50,000	22
174	Tesco Analytics	2	9,00,000	2
175	Thornton Tomasetti	1	6,00,000	12
176	Thorogood Associates	0	10,00,000	58
177	Tiger Analytics	0	8,50,000	52
178	Toshiba	3	12,00,000	31
179	Tyfone	3	11,00,000	52
180	Uber	1	36,00,039	121
181	UBS	9	10,00,000	9
182	Udaan	5	12,00,000	139
183	United Lex	1	11,00,000	37
184	UST Global	1	7,50,000	1
185	Visteon	2	8,50,000	12
186	VM Ware	1	24,50,000	1
187	VMS Consultants	3	4,50,000	7
188	Western Digital (WDC)- SanDisk	5	18,57,900	87
189	Wipro	1	11,00,000	12
190	WSP	2	5,25,000	9
191	Xilinx	5	17,00,000	48
192	ZF-Wabco	2	7,00,000	34
193	Zinnov Management Consulting	2	6,91,465	2
194	ZS Associates	9	8,93,000	107
	Total Offers	**707**		**8736**

Discipline Wise Break Up:-

The ACADEMIC YEAR 2019-20		HYDERABAD			
Code	Department / Program	Registered	Placed	Unplaced	% Placed
A1	B.E CHEMICAL	39	38	1	97.44
A2	B.E CIVIL	47	43	4	91.49
A3	B.E ELECTRICAL & ELECTRONICS	80	77	3	96.25
A4	B.E MECHANICAL	58	55	3	94.83
A5	B.PHARMACY	8	7	1	87.50
A7	B.E COMPUTER SCIENCE	147	147	0	100.00
A8	B.E ELECTRONICS AND INSTRUMENTATION	40	37	3	92.50
AA	B.E ELECTRONICS & COMMUNICATION	84	82	2	97.62
AB	B.E MANUFACTURING	27	25	2	92.59
B1	M.Sc. BIOLOGY	1	1	0	100.00
B2	M.SC. CHEMISTRY	NA	NA	NA	NA
B3	M.SC. ECONOMICS	1	1	0	100.00
B4	M.Sc. MATHEMATICS	1	1	0	100.00
B5	M.SC. PHYSICS	NA	NA	NA	NA
H101	M.E CHEMICAL ENGINEERING	6	5	1	83.33
H103	M.E. COMPUTER SCIENCE	29	25	4	86.21
H106	M.E. MECHANICAL	21	15	6	71.43
H108	M. PHARM	NA	NA	NA	NA
H112	M.E. SOFTWARE SYSTEMS	NA	NA	NA	NA
H123	M.E. MICROELECTRONICS	25	23	2	92.00
H124	M.E COMMUNICATION ENGINEERING	19	9	10	47.37
H129	M.E. BIOTECHNOLOGY	17	7	10	41.18
H130	M.E. TRANSPORTATION	10	6	4	60.00
H140	M.E. EMBEDDED SYSTEMS	NA	NA	NA	NA
H141	M.E. DESIGN	23	16	7	69.57
H142	M.E. MANUFACTURING	NA	NA	NA	NA
H143	M.E. CIVIL STRUCTURAL	18	13	5	72.22
H144	M.E. CIVIL INFRASTRUCTURE	NA	NA	NA	NA
H146	M. PHARM (PHARMACEUTICS)	20	17	3	85.00
H147	M. PHARM (PHARMACEUTICAL CHEMISTRY)	NA	NA	NA	NA
H148	M.E. THERMAL	19	6	13	31.58
H149	MBA	NA	NA	NA	NA
	Total	**740**	**656**	**84**	**88.65**

RESEARCH PROJECT GRANTS

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
1	Development of a Standard method for identification of dope dyed and exhaust dyed polyester fibres/fabrics	Biological Sciences	Dr. Ruchi Jain Dey	Dr. Trinath Jamma	DRDO-LSRB	39,82,000
2	Efficient prediction strategy of covid 19based on pandemic data and immunoinformatics, integrated on artificial intelligence (AI) platform	Biological Sciences	Dr Debashree Bandopadhyay	-	DST -Matrix	5,50,000
3	Efficient prediction strategy of covid 19based onpandemic data and immunoinformatics, integrated on artificial intelligence (AI) platform	Biological Sciences	Dr Debashree Bandopadhyay	-	CSIR	8,88,000
4	Molecular genetic analysis of schizophrenia patients	Biological Sciences	Dr. Naga Mohan K	-	DST	60,42,360
5	Role of m6AReversible RNA Methylation in Oral Cancer	Biological Sciences	Dr. Piyush Khandelia	-	CSIR	22,50,000
6	Developmental studies on Environmental conditioning of QCE composite materials	Chemical Engineering	Dr.Ramesh Babu A	-	DRDO	24,89,999
7	Mitigation strategy to counter top-down cracking due to non-uniform contact stresses in Flexible Pavements-	Civil Engineering	Dr. Sridhar Raju	-	NHAI	26,52,000
8	MUT-DROCO:MUltipathnetworking Test-bed for Drone Communications·	CSIS	Dr.Paresh Saxena	-	DST	16,6,0600
9	"Socio-Economic Impacts of Cyclones and the Coping Strategies of the Local Communities in Odisha, India with a Special Focus on Women"	Economics and Finance	Dr. Archana Srivastava	-	Shastri Institutional Collaborative Research Grant	10,00,000
10	28S Ribosomal RNA capture Assay for the Sensitive Detection of Plasmodium vivax	EEE	Dr Sanket Goel	-	ICMR	11,41,280
11	Design of miniaturized 5GHZ high pass filter (HPF) and study of interference due to multi chip packing in TR module/plank	EEE	Dr. Runa Kumari	Dr. Harish Dixit	DRDO	9,97,395
12	Design of phase locked loop dielectric resonator oscillators for frequency synthesizers	EEE	Dr. Sourav Nandi	Dr. Harish Dixit	DRDO	9,93,324
13	Swechha	EEE	Dr Sanket Goel		Swechha	64,494
14	Automated IoT based microfluidic electrochemiluminescence ECL bio sensing platform for various biomarker detection	EEE	Dr. Prasant Kumar Pattnaik	Dr Sanket Goel	DST	51,42,307
15	MRI based onon-invasive quantitative biomarker for early diagnosis and prognosis of brain tumour	EEE	Dr. Venkateshwaran Rajagopalan	Dr. Prabhakar rao & Prof. Yogeeswari	DBT	17,48,360
16	Magnetoplasmonic studies on cobalt nickel based nanostructures	EEE	Ms Priya latha	Dr. Runa Kumari	WOS-DST	25,34,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
17	Integrated smart phone and IOT enabled Microfluidic sensor for real time qualification of soil macronutrients conductivity and pH	Mechanical Engineering	Dr. Satish Kumar Dubey	-	DST	18,71,408
18	Development and application of a mesh free adjoint approach for aerodynamics shape optimization	Mathematics	Dr. Anil N	Dr. Kishore Kumar	DRDO-ARDB	17,81,934
19	True relative of suslin normality theorem for elementary groups and transvection groups	Mathematics	Dr. Pratyusha Chattopadhyay	-	DST-Inspire	6,60,000
20	Adaptive and efficient method of fundamental solutions for the numerical reconstruction of boundary data in two-phase inverse stefan problems	Mathematics	Dr. Gujji MohanMurali Reddy	-	DST	10,45,000
21	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Mechanical Engineering	Dr. Sandip Deshmukh S	Dr. Chandu Parimi	DRDO	15,50,600
22	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Mechanical Engineering	Dr. Kurra Suesh	Dr. Sujith R	DRDO	39,07,830

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1	A formulation to prevent transmission of SARS-CoV-2 virus	Biological Sciences	Dr. Suman Kapur		CSR-1	30,00,000
2	Testing for Covid-19 using an available Platform	Biological Sciences	Dr. Suman Kapur		CSR-2	31,50,000
3	Development of cost effective bio-sorbents to remove heavy metals form the effluent generated at HBL	Chemical Engineering	Dr. I. Sreedhar		HBL	5,04,000
4	Developmental studies on Environmental conditioning of QCE composite materials	Chemistry	Dr. Tanmay Chatterjee		Chancuex Labs	10,07,000
5	2D Nanomaterials based Flexible Resistive Memory (Memristor)	EEE	Dr. Parikshit Sahatiya		Redpine Signals, India Pvt Ltd	8,14,400
6	Testing artificial intelligence system	CSIS	Dr. Lov Kumar	Dr. BhamuMurthy	TestAIng Solutions Pvt. Ltd.	2,40,000
7	Topical Nano micelles eye drop for delivering antifungal drug to treat corneal infection	Pharmacy	Dr Nirmal J		Parenteral Drug Association (PDA)	20,00,000
8	Development and optimization of stable anti-leukemic drug loaded long circulating liposomes	Pharmacy	Dr. Akash Chaurasiya		Parenteral Drug Association (PDA)	30,00,000
9	In-vivo experiments pertaining to pharmacokinetic studies on new conjugates)	Pharmacy	Dr. Sajeli Begum		WIPRO	50,000
10	Evaluation of Novel Transdermal Device for Controlled delivery of drug	Pharmacy	Dr. Punna Rao Ravi		Medicen Devise Technologies Pvt Ltd	18,70,890
11	Design and Evaluation of Novel Transdermal Drug Delivery Systems	Pharmacy	Dr. Punna Rao Ravi		Transform SciTech Pvt. Ltd.,	12,97,853

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
12	Pre-Clinical efficacy evaluation of three synthetic peptides For the treatement of inflammatory bowel diseases & sepsis	Pharmacy	Dr. D Sriram	Dr. Arti Dhar	ISSAR	298000

D. Consultancy Sanctioned Projects

S.No	aaProject Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1	Damages to Highway Property at GMR Pochanpalli	Civil Engineering	Dr. Sridhar Raju		Team Insurance	3,10,000
2	Socio-economic determinants of household investment portfolio in India	Economics and Finance	Dr. Priya Rampal	Dr Shreya Biswas	Dvara Research	2,70,000
3	Urban Low-Income Households' Savings: Understanding Issues and Challenges in Indian Context	Economics and Finance	Dr.. Rishi Kumar	Dr. Archana Srivastava	Dvara Research	14,0,5000
4	Novel Formulation for oral biovailability enhancement of anticancer drug	Pharamcy	Dr. Akash C	-	Slayback Pharma	2068540

E. Internationsl Sanctioned Projects

1	Role of Environmental Entro Dysfunction in explaining intestate variation calorie intake	HSS	Dr Zakaria Siddiqui	-	University of South Australia	-	2,40,000

F. Institute Sanctioned Projects (Research Initiative Grant)

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1.	Gpp mediated inter-cell communication and biofilm formation	Biological Sciences	Dr. Kirtimaan Syal	-	BITS-RIG	-	200000
2.	Opera	Biological Sciences	Dr. Nishit Gupta	-	Opera		420000
3	Opera	Biological Sciences	Dr. Shuvadeep Maity	-	Opera	-	420000
4	Techno economic feasibility analyses of sustainable energy systems using simulation based optimization paradigm	Chemical Engineering	Dr. Arnab Dutta	-	BITS-RIG	-	2,00,000
5	Next Generation Seismic Vulnerability and Loss Assessment Models for Highway Bridges	Civil Engineering	Dr. Shivang Shekhar	-	BITS-RIG	-	2,00,000
1	Data enabled lot system for Noise monitoring, analysis and mitigation (DIN)	CSIS	Dr. Manik Gupta	-	BITS-RIG	-	2,00,000
	Data enabled Systems for Tracking and Evaluating Student Stress (DeSTRESS)	CSIS	Dr. Manik Gupta	-	BITS-ACRG	-	700000
2	Conversational Information Systems for low text-illiteracy contexts	CSIS	Dr. Dipanjan Chakraborty	-	BITS-RIG	-	2,00,000
3	Real – time performance analysis of network coding implementation	CSIS	Dr. Paresh Saxena	-	BITS-RIG	-	198520

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
4	Marr on the Microprocessor: A prelude towards understanding Marr's bottom 2-levels in Brains and Machines	CSIS	Dr. Venkatakrishnan Ramaswamy	-	BITS-RIG	-	2,00,000
	Towards understanding Computational Principles in Deep Networks & Brains	CSIS	Dr. Venkatakrishnan Ramaswamy	-	BITS-ACRG	-	1000000
1	Permutation polynomials over finite fields	Mathematics	Dr. Rohit Gupta	-	BITS-RIG	-	2,00,000
1	Banla, Telugu and Oriya: Examining the feasibility of automatic identification of Indian accents in English	HSS	Dr. Pranesh Bhargava	-	BITS-RIG	-	2,00,000
2	Minority Investor Protection and Business group ownership structure in India	HSS	Dr Nivedita Sinha	-	BITS-ACRG	-	8,50,000
1	Effect of filler on the mechanical performance of adhesively bonded joints	Mechanical Engineering	Dr. Amol Vuppuluri	-	BITS-RIG	-	2,00,000
2	Polymer composites for water-lubricated hydropower bearing applications	Mechanical Engineering	Dr. Prabakaran Saravanan	-	BITS-RIG	-	2,00,000
3	Simulation study of desiccant-wheels coated with desiccant-material having a non-conventional sorption-isotherm	Mechanical Engineering	Dr. Mrinal Ketan Jagirdar	-	BITS-RIG	-	2,00,000
4	Aerodynamic Shape Optimization using Feature-Based CAD systems and Adjoint Methods	Mechanical Engineering	Dr. Dheeraj Agarwal	-	BITS-RIG	-	2,00,000
7	Development of a robust and efficient crack detection technique for wind turbine rotor blades using nonlinear vibration response characteristics	Mechanical Engineering	Dr Brajesh Kumar Panigrahi	-	BITS-ACRG	-	1000000
	Chatter Identification & Control for Thin walled Work piece Machining	Mechanical Engineering	Dr Kundan Kumar Singh	-	BITS-ACRG	-	1000000
1	Design of Commercially Viable Compact and Efficient Planar Multi-Port Antennas for WLAN amd 5G Applications	EEE	Dr Sourav Nandi	-	BITS-ACRG	-	1000000

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
1	Probing the functional and regulatory role of m6A reversible RNA methylation in skeletal myogenesis and muscle wasting	Biological Sciences	Dr. Piyush Khandelia	-	DST	55,58,360
2	Deciphering the role of host-microbiota derived bile acids in programing immune cell function during intestinal inflammation	Biological Sciences	Dr. Trinath Jamma	-	CSIR	24,94,000
3	Sequence based designs and characterization of peptide-	Biological Sciences	Dr. Ramakrishna Vadrevu	Dr. R. Krishnan	DAE-BRNS	29,68,650

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
	amyloidnano materials exploring functionality					
4	Ramanujam Fellowship	Biological Sciences	Dr. Gireesha Thipperudrappa	-	Ramanujam Fellowship	38,00,000
5	Harnessing mucosal immunity towards improved resistance against tuberculosis	Biological Sciences	Dr. Ruchi Jain Dey	-	DBT Ramalingaswamy	32,50,000
6	Identification and characterization of long non-coding RNA's involved in Genome stability	Biological Sciences	Dr. Vivek Sharma	-	DBT Ramalingaswamy	32,50,000
7	Conditional pathogenesis: understanding why potentially beneficial rhizobacteria turn pathogenic under certain environmental conditions	Biological Sciences	Dr. Sridev Mohapatra	Prof. Naga Mohan K	DBT	45,16,800
8	Novel approach to develop computational pipeline to predict functions of cysteines in Proteins of Unknown Function (PUFs) and Domains of Unknown Function (DUFs), based on protein microenvironments	Biological Sciences	Dr. Debashree Bandyopadhyay	-	DST	19,42,800
9	Understanding the role of long non coding RNA's (Inc RNA's) I transforming growth factor - beta (TGF-B) pathway in Glioblastoma.	Biological Sciences	Dr. Vivek Sharma	-	DST	47,26,480
10	Identification of the regulatory mechanisms executed by bile acids during inflammation induced colon cancer	Biological Sciences	Dr. Trinath Jammma	-	DST	43,82,650
11	Elucidating the role of long non coding RNAs (incRNAs) in neuronal cell death during japanese encephalitis (JE)	Biological Sciences	Dr. Vivek Sharma	Prof. Naga Mohan K	DBT	68,76,800
12	Reactive Transport Modelling and Simulation of Carbon Dioxide Sequestration in Deccan Volcanic Province	Chemical Engineering	Dr. Vikranth Kumar Surasani	Dr.Balajikrishna Murthy	DST	21,73,600
13	Cracking of hydrocarbon fuel for a possible heat sink applications	Chemical Engineering	Dr. Srikanta Dinda	-	DRDO	40,65,000
14	Development of superomniphobic surface for self-celaning and anti-microbial applications	Chemical Engineering	Dr. Nandini Bhandaru	-	DST INSPIRE	28,00,000
15	Designing of potential adsorbents via molecular modelling and simulations for the high temperature carbon dioxide capture	Chemical Engineering	Dr. Angan Sengupta	-	DST	21,95,220
16	Modelling the capacity loss in lithium ion batteries during cycling	Chemical Engineering	Dr. Balaji Krishna Murthy	Dr. Vikranth Kumar S	CSIR	18,00,000
17	Waste Minimization and Carbon Capture with Coal Flyash Doped Sorbents- A Two-Edged Sword	Chemical Engineering	Dr. I Sreedhar	-	CSIR	18,85,000
18	DESIGN AND SYNTHESIS OF DIVERSE PYRROLE-PYRIDINE BASD MOLECULES AS SELECTIVE SENSORS FOR Zn2+AND F-	Chemistry	Dr. Anupam Bhattacharya	-	CSIR	16,52,940
19	High potency of complex dietary β-glucan fibers as Cholesterol and Low-Density Lipoprotein lowering agents: A comprehensive mechanistic investigation through advanced dynamical simulations.	Chemistry	Dr. Durba Roy	-	DST	36,66,520
20	Investigations on naphthalene and anthracene based phosphosates/phosphates: important sources for alkene	Chemistry	Dr. Manab Chakravarty	Dr. Amit Nag	CSIR	16,20,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
	based new alegers and polyarylalkanes					
21	Photocatalytic reduction of CO2 to biofuels	Chemistry	Dr. Sounak Roy	-	CSIR	4,00,000
22	DST INSPIRE Fellowship	Chemistry	Dr. Chanchal Chakraborty	-	DST INSPIRE Fellowship	35,00,000
23	Women Scientist (Dr. Atasi Mukherjee Under Prof. Manab Chakravarty	Chemistry	Dr. Atasi Mukherjee Under Prof. Manab Chakravarty	-	WOS-DST	31,55,000
24	Synthesis of highly stable Zr-based mixed -linker metal organic frameworks (MOFs) for humidity control and gas separation	Chemistry	Dr. Himanshu Aggarwal	-	DST	21,98,183
25	Costal wetlands characterization using L and S bands of polarimetric SAR data	Civil Engineering	Dr. Rajitha	-	ISRO	13,58,000
26	Economic construction practice using bacterial inclusions in concrete in improve its durability	Civil Engineering	Dr. Arkamitra Kar	Dr. Jayati Ray Dutta & Dr. Mohna Bandyopadhyay	CSIR	17,00,000
27	Development of a comprehensive methodology to improve traffic safety in Indian urban roadways based on advanced statistical techniques	Civil engineering	Dr. Bandhan Bandhu M	-	DST	11,39,880
28	Experimental and computational studies of surface water quality parameters from morphometry and spectral characteristics	Civil engineering	Dr. Jagdeesh Anmala	Dr. Murari R R Varma & Dr. Rajitha K	CSIR	41,9,8080
29	Rainfall-Runoff modelling for lower Godavari basin in changing climate	Civil engineering	Dr. K S Raju	Dr. Nagesh Kumar	CSIR	16,00,000
30	Quality Control in road works	Civil engineering	Dr. Sridhar Raju	Dr. Prasanta Kumar Sahu	Govt of Telangana	9,90,000
31	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Civil Engineering	Dr. S C Mohan	-	DST	43,14,540
32	Interpretation of tuberculin reaction using medical photography and computer aided diagnosis	CSIS	Dr. Jabez Christopher	-	DST	9,83,400
33	Impact of modern organized multi brand retail trade on street vendors case study of two capital cities	Economics and Finance	Dr. Archana Srivastava	-	ICSSR	4,50,000
34	Does Financial Awareness lead to Better Financial Inclusion Outcomes? An Investigation	Economics and Finance	Dr. Durgesh Ch Pathak (PI)	Dr. Rishi Kumar	IMPRESS-ICSSR	4,50,000
35	Financial Inclusion through Urban Cooperative Banks: An Exploratory Study of Telangana State	Economics and Finance	Dr. Mini Thomas	-	IMPRESS-ICSSR	5,60,000
36	Impact of the ex-gratia for farmers' suicide on the surviving family member of the deceased farmers in Telangana	Economics and Finance	Dr. Thota Nagaraju	-	IMPRESS-ICSSR	4,20,000
37	Triamcinonlone Acetonide Nanoparticles for Non-Invasive Delivery in the Effective	EEE	Dr. Sanket Goel	-	DST	15,00,000
38	Cardiac-Organ -On-Chip: Integrated microfluidic cardiac C18:K18platform for drug screening and toxicity detection	EEE	Prof. Sanket Goel	-	DST	43,75,800

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
39	Micro-plasma transistor for high temperature applications	EEE	Dr. Karumbaiah C		DST	2563070
40	Investigations of the effects of Photon Up-Conversion materials on the Electrical performance of Ferroelectric /Semiconductor Heterojunction Photovoltaic Devices	EEE	Dr. Souvik Kundu	Prof. Kannan Ramaswamy and Dr. HariharaVenka traman	DST	35,63,997
41	Digital 3D printed electronic technology for space electronic packaging applications	EEE	Prof. Sanket Goel	-	ISRO	26,36,000
42	National Post-Doctoral Fellowship	EEE	Prof. Sanket Goel /Ms. Khairunnisa	-	National Post-Doctoral Fellowship	19,20,000
43	Structured dialogues for sustainable urban water management	Humnities and Social Sciences	Dr. Suchismita Satpathy	-	DST	57,26,400
44	Comparison of phase velocities of Rayleigh waves, love waves and Torsional waves in various anisotropic geo-media	Mathematics	Dr. Sumith Kumar Vishwakarma	-	DST	13,66,800
45	Characterizing the sets of periodic points of automorphisms on a solenoid	Mathematics	Dr. Sharan Gopal	-	DST	19,98,480
46	Cosmic acceleration with observation constrints of the universe in modified gravity	Mathematics	Dr. Pradyumn Kumar Sahoo	-	CSIR	20,40,528
47	DST Inspire Faculty	Mathematics	Dr. Santanu Koley	-	DST Inspire	35,00,000
48	3D printing of graphene nanocomposites for energy storage applications	Mechanical Engineering	Dr. Pavan Kumar Penumakala,	-	DST	24,30,040
49	Machinability assessment and material characterization of tungsten heavy alloys used in defense applications as KE penetrators	Mechanical Engineering	Dr. Amrita Priyadarshini	-	DRDO ARB	14,78,900
50	Development of Image Processing based portable device to measure surface strains in sheet metal forming	Mechanical Engineering	Dr. Kurra Suresh	-	DST	15,85,700
51	Harvesting energy from underwater ocean currents through coupled vortex-induced vibration, flapping dynamics, electromagnetic inductin and piezoelectric effects	Mechanical Engineering	Dr. Pardhasaradhi G	-	DST	27,35,370
52	Experimental Investigation on an Energy Efficient Regenerative Thermal Management Technique for Hybrid Electric Vehicles".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST	27,93,700
53	A solar assisted combined cooling, heating and energy source: An alternative energy source for rural India".	Mechanical Engineering	Dr. Santanu Prasad Datta	-	DST	38,40,496
54	Modelling and Simulation of quartz Accelerometer for navigation system	Mechanical Engineering	Dr. Satish Kumar Dubey	Dr. Arshad Javed, Sanket Goel, AK Gupta	DRDO-cars	5,38,000
55	Studies on wind resistant design for proposed Ligo India Observatory	Mechanical	Dr. Sabareesh GR	Dr. KRC Murthy & Dr. Rahul Nigam	IUCAA-LIGO	45,02,000
56	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Mechanical Engineering	Dr. Nitin R. Kotkunde	-	DST	31,43,250

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
57	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Pharmacy	Dr. D. Sriram	-	DBT-Tata Innovation	27,00,000
58	Understanding the Role of Antimicrobial S100A12 (Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis and Developing Nano-tools for Efficient Delivery of S100A12	Pharmacy	Dr. Sanhita Roy	Dr. Swati Biswas	DST LVPEI, Hyderabad	16,37,800
59	Bifunctional Gene-Expression Modulating Chemotherapeutic Agents as Improved Treatment Strategy for Cancer	Pharmacy	Balaram Ghosh	Prof. Swati Biswas	CSIR	29,00,000
60	Determination of wound healing (Pro-angiogenic) properties of peptide conjugate	Pharmacy	Onkar Kulkarni		DRDO-INMAS	8,00,000
61	Role of HDAC6 in pathogenesis of oral sqamous cell carcinoma: regulation of IL-1beta, EMT and autophagy	Pharmacy	Onkar Kulkarni	Balaram Ghosh	ICMR	35,00,000
62	Agro-homeopathy: Potential of homeopathy as a tool to manage phytopathogen / nematode complex for a sustainable agriculture	Pharmacy	Dr. Vidya sagar	Dr. A.Sajeli Begum	CCRH-AYUSH	30,32,000
63	Understanding the role of animicrobial peptide S100A12 (Cangranulin C) mediated host defense in Pseudomonas keratitis and developing nano-tools for efficient delivery of S100A12	Pharmacy	Sanhita Roy	Swati Biswas	DST-SERB-CRG	16,37,800
64	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Pharmacy	Dr. V Vamsi Krishna Venuganti	-	DST	55,54,225
65	Fundamental physics in strong gravitational field of neutron stars	Physics	Dr. Sarmistha Banik	Dr.Asrarul Haque	DAE-BRNS	24,39,650
66	Quantum Gravity in Rindler Space	Physics	Dr. Prasant Kumar Samantray	-	CSIR	15,46,000
67	Exceptional polynomials and their applications to Wigner Function"	Physics	Dr. K V S Shiva Chaitanya		DST-SERB	6,60,000

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
1	Zn Air Battery	Chemistry	Dr. Sounak Roy	Dr. Chanchal Chakraborty	HBL	1350000
2	Identification of UGT-isoform specific substrates and inhibitors and their contribution in drug metabolism and systemic levels of bile secretions.	Pharmacy	Dr. Punna Rao Ravi	-	Consultancy Project (Acubiosys Pvt. Ltd.,	11,75,000
3	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Pharmacy	Dr. Balaram Ghosh	Dr. Swati biswas	Reddy's Lab	9,00,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
4	Development and characterization of emulsion based drug product for the management of emetogenic cancer chemotherapy	Pharmacy	Dr. Akash Chaurasiya	-	Slayback Pahrma	702100
5	Evaluation of the efficiency of bacterial inclusions in concrete	Civil Engineering	Dr. Arkamitra Kar	Prof. Jayti Ray Dutta Prof. sridhar Raju and Dr. Chandu Parimi	Aliens Group Pvt. Ltd	11,00,000
6	Development of Pedestrian Facility Assessment Tool for Improving Pedestrian's safety condition in Hyderabad	Civil Engineering	Dr. Bandhan Bandhu	-	AIA	1,00,000
7	Seismic Certification for our range of racks based on certificate of 3septs 2tier rack	Civil Engineering	Dr. Mohan SC	-	HBL	1,18,000
8	using a Geo-composite drainage layer (GDL	Civil Engineering	Dr. Sridhar Raju		R& D Project	4,00,000
9	Financial sanction of research project on Li Ion Battery	Mechanical Engineering	Dr. Sujith R	-	HBL	11,90,000
10	Pharmacokinetic and pharmacodynamic evaluation of new chemical entities for ocular diseases	Pharmacy	Dr. Nirmal J	-	Incilia Therapeutics Pvt.Ltd	8,14,200
11	Pharmacokinetic Evaluation of Ocular In-Situ Gelling Systems Loaded with treatment of posterior uveitis	Pharmacy	Dr. Punna Rao	-	BMS	3,40,000
12	Study of lubrication method for enhanced surface finish and reduced draw load on cold draw steel tubes	Mechanical	Dr Varinder Singh	Prof. A. K. Gupta & Prof. S. P. Regalla	Tubes Investment India Ltd.	27,50,000-
13	Understanding the commercialization of brease milk from sociological perspective	Humanities and Social Sciences	Dr. Suchismita Satpathy	-	AIA	187000

C. Ongoing Consultancy Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned
1	AP HRDI - Entrustment of Studies - Cyclone Titli	Humanities and Social Sciences	Dr. Biswanath Dash	-	Cyclone Titli	125000
2	Automation of sample preparation process for pharmaceutical Applications	Mechanical Engineering	Dr. Y V D Rao	Dr. Arshad Javed	Aizant Drug Research Solutions Pvt.Ltd	1548000

D. Ongoing International Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned
1	Sustainable technology solutions for energy efficiency in the jageery industry	Mechanica Engineering	Dr. M. Srinivas	1. Dr. K Srinivas Reddy & 2. Dr. V Srinivas	Royal Academy	48,00,000
2	Develop of novel anti-leishmanial analogues loaded with novel nano- formulations	Chemistry	Dr. S.Murugesan	Dr. K V G Chandra Sekhar	DBT	13,00,000
3	Development of methodologies for self -Aware network-on-chip design	EEE	Dr. Soumya J	Dr. Jantsch Axel,Institute of Computer technology, Austria	DST-India - Austria International Bilateral Project	8,89,000
4	Implementation of plants and treated natural fibers ton enhance the strength of soft soil and to decreased the rate iof surface erosion (Nat-treat)	Civil Engineering	Dr.Anusua Guharay	Prof. Dr. Wei WU-	Indo-Austria	6,39,500

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned
5	Prevention of Hazardous field - firing of bagasse amd its sustainable utilization as a raw material in an innovation industrial process	Civil Engineering	Dr. Srinivas Appari	Dr. Bahurudeen & Dr. Prassanta Kumar Sahoo	Sparc	28,79,650
6	"Indo-Norwegian collaboration in Autonomous Cyber-Physical Systems"	EEE	Dr. Soumya J	Norweign Collaborator: Prof. Lingareddi C (Associate Professor, University of Agder)	The Research Council of Norway	-
7	Management of distributed energy resource in smart cities: challenges and advanced control strategies	EEE	Dr. Hitesh Datt Mathur	Dr. Alivelu Manga Parimi	Sparc	42,55,900
8	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	Pharmacy	PI - Dr. Prashant Garg (LVPEI),	Dr. V Vamsi Krishna Venuganti	DBT-MRC	35,00,000
9	Congestion Pricing: Planning for optimal strategies and commuters behavioral implications under different pricing schemes	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Bandhu Majumdar (Birla Institute of Technology & Science), Dr.Ashoke Kumar Sarkar (Birla Institute of Technology & Science)	Sparc	29,39,493
10	Transport policy interventions to curb particulate matter emissions in Chandigarh	Civil Engineering	Dr. Prasanta Kumar Sahu	Dr. Bandhan Bandhu Majumda	Global Challenges Research Fund, UK	2562000
11	Sweden-Volvo Educational Research Foundation	Civil Engineering	Dr. Prasanta Kumar Sahu	-	Sweden-Volvo Educational Research Foundation	223881
12	Network Coding for Multipath Transport	CSIS	Dr. Paresh Saxena	-	AnsuR Technologies AS , Oslo Norway	547200
13	Benchmark studies of tornado induced wind loads between tornado simulators wordwide	Mechanical Engineering	Dr. Sabareesh G R	-	Research center of wind Engineering	1400000

E. Ongoing Other Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned
1	Women employment , Interstate variation and time use: A comparative study of Bihar and Andhra Pradesh	Humanities and Social Sicences	Dr. Bhemeeshwar Reddy	-	Azim Premji University	11,88,000

On Going Institute Projects

S.No	Project Title	Department	Principal Investigator	RIG/ACRG	Sanctioned Amount
1	Performance Evaluation and Behavioral Study of Trajectory and Discontinuous Methods Based Metaheuristics	CSIS	Dr. Jabez Christopher	BITS-RIG	1,99,877
2	Detection of sleep related disorders from various physuikigucal signals using Multiscale analysis and Deep Neural Network	EEE	Dr. Rajesh Kumar Tripathy	BITS-RIG	2,00,000
3	Design and Development of an instrumentation system to measure dynamic signals	EEE	Dr. RN Ponnalagu	BITS-RIG	2,00,000
4	Synthesis of nano-porous metal oxide composite materials for water splitting application	EEE	Dr . Karumbaiah Chappanda Nanaiah	BITS-RIG	2,00,000
5	Cleanroom free, solution processed fabrication of flexible nanoelectronic devices for sensing applications	EEE	Dr . Parikshit Parshuram Sahatiya	BITS-RIG	2,00,000

S.No	Project Title	Department	Principal Investigator	RIG/ACRG	Sanctioned Amount
6	The Notion of Time in the Philosophy of Nagarjuna	Humanities and Social Sciences	Dr. A K Jayesh	BITS-RIG	2,00,000
7	Design and Synthesis methodologies for CNFET-based Multi-Valued Logic Circuits.	EEE	Dr. Chetan Kumar Vudadha	BITS-RIG	2,00,000
8	Energy Efficient Mechanisms and Algorithms for 4G and 5G Broadband Wireless Networks	EEE	Dr Prashant K.Wali	BITS-RIG	2,00,000
9	Wilde and Manto: A Comparative Study of Writers on Trial	Humanities and Social Sciences	Dr Anhiti Patnaik	BITS-RIG	2,00,000
10	Investigation of the weldability of the mild steel during A-TIG welding.	Mechanical Engineering	Dr Ravi Shanker Vidyarthy	BITS-RIG	2,00,000
11	Synthesis of highly stable Zr based mixed-linker metal organic frameworks (MOFs) with fcu and hex topology for gas separation and sensing	Chemistry	Dr Himanshu Aggarwal	BITS-RIG	2,00,000
12	Flow induced vibration/flapping dynamics of multi-layered flexible foil in a uniform flow	Mechanical Engineering	Dr Pardha Saradhi Gurubelli Venkata	BITS-RIG	2,00,000
13	Hypersingular Integral Equation Techniques for Wave-structure Interaction Problem	Mathematics	Dr Santanu Koley	BITS-RIG	2,00,000
14	Impact of Remittances, Financial Development and Institutional Structure on Poverty: An Empirical Evidence from Developing countries.	Economics and Finance	Dr Sunny Kumar Singh	BITS-RIG	1,67,000
15	Adaptive Discretization of Parabolic Integro-differential Equations by Finite Element Methods.	Mathematics	Dr Gujji Murali Mohan Reddy	BITS-RIG	2,00,000
16	DPG method for parabolic problems	Mathematics	Dr Jhuma Sen Gupta	BITS-RIG	2,00,000
17	Holomorphic Characterizations of the Approximation Property and Its Variants	Mathematics	Dr Deepika	BITS-RIG	2,00,000
18	On generating some new families of congruent and non-congruent numbers	Mathematics	Dr Debopam Chakraborty	BITS-RIG	1,50,000
19	Regional Variation in Women's Employment in Rural India: Evidence from Bihar and Andhra Pradesh.	Economics and Finance	Dr Bheemeshwar Reddy. A	BITS-RIG	2,00,000
20	Conditional von Neumann entropy and its implications in quantum information processing tasks	Mathematics	Dr Nirman Ganguly	BITS-RIG	1,96,000
21	Social Conflicts: Role of Development in the Presence of Electoral Concerns	Economics and Finance	Dr Dushyant Kumar	BITS-RIG	1,58,000
23	A study of contemporary epistemological and ethicopolitical challenges confronting genomics research in India	Humanities and Social Sciences	Dr Aswathy Raveendran	BITS-RIG	2,00,000
24	Miniaturization and Enhancement of Port Isolation of Multiple – Input –Multiple – Output (MIMO) Antennas for Future Generation Higher Data Rate Communications	EEE	Dr Sourav Nandi	BITS-RIG	2,00,000
25	Friction and Wear Investigation of Ceramic Coated Commercial Rotor	Mechanical Engineering	Dr Piyush Chandra Verma	BITS-RIG	2,00,000
26	ReSeThIoT: Building Research Framework for Investigating Security Threats for Internet of Things over WiFi	CSIS	Dr Rajib Ranjan Maiti	BITS-RIG	2,00,000
27	Women on Board and Corporate Policies in India.	Economics and Finance	Dr Shreya Biswas	BITS-RIG	2,00,000
28	Design and development of an optimized electrical interface for Smart Hybrid Microgrid and energy storage for peak load shaving, demand side management and energy security	EEE	Dr Ankur Bhattacharjee	BITS-RIG	2,00,000
29	Design and development of an optimized electrical interface for Smart Hybrid Microgrid and energy storage for peak load shaving, demand side management and energy security	EEE	Dr K Bhargav Kumar	BITS-RIG	2,00,000
30	Mobilizing Clean Energy Finance	Economics and Finance	Dr Nivedita Sinha	BITS-RIG	2,00,000
31	Cryptanalysis of some Symmetric Key Ciphers	Mathematics	Dr Sabyasasachi Dey	BITS-RIG	2,00,000
32	Effect of inherent nonlinearities on operational failure of damaged structural elements	Mechanical Engineering	Dr Brajesh Kumar Panigrahi	BITS-RIG	2,00,000
33	Sustainable High Speed Micromachining Process Development for Thin Beam Manufacturing	Mechanical Engineering	Dr Kundan Kumar Singh	BITS-RIG	2,00,000

S.No	Project Title	Department	Principal Investigator	RIG/ACRG	Sanctioned Amount
34	Liquid Jet in Crossflow- Effect of Injector Geometry	Mechanical Engineering	Dr Anubhav Sinha	BITS-RIG	2,00,000
35	Opera	Humanities and Social Sciences	Dr. Lavanya Suresh	Opera	420000
36	Opera	Physics	Dr. Prashant Kumar Samantry	Opera	420000
37	Opera	Chemical Engineering	Nandini B	Opera	420000
38	Opera	EEE	Dr. Rajesh Kumar Tripathy	Opera	420000
39	Opera	EEE	Sanyan Kanungo	Opera	420000
40	Design of highly stable fluorescent metal-organic frameworks for iodine capture.	Chemistry	Dr. Himanshu Agarwal	BITS-CRG	1000000
41	Blockchain Enabled Solutions for Integration of MHR with Access Control and Personally Identifiable Information	CSIS	Dr. Subhrakanta Panda	BITS-CRG	800000
42	Direct growth of 2D materials by Chemical Vapor Deposition (CVD) on flexible substrates and its application in wearable electronics	EEE	Parikshit Sahatiya	BITS-CRG	10,00,000
43	RISC-V based Approximate Processor and its FPGA Prototype for Image processing Applications	EEE	Chetan Kumar V	BITS-CRG	4,70,000
44	Design and development of an AI-based Remote Fault Signature Analyzer (ReFSA) for condition monitoring of rotor bar failures in an Industrial electrical machine	EEE	Sudha Radhika	BITS-CRG	9,80,000
45	Black TiO2 nanotubes for detection and degradation of pollutants in drinking water	EEE	Karumbaiah C N	BITS-ACRG	10,00,000
46	An Indigenous Energy Efficient Thermal Management Strategy of Buildings for all Climatic Conditions across India	Mechanical	Dr.Santanu Datta P	BITS-ACRG	10,00,000
47	Design and Indigenous Development of a Biaxial Tensile Test Setup on Uniaxial Machine for Sheet Metal Forming	Mechanical	Dr.Nitin Kotkunde	BITS-ACRG	10,00,000
48	Fate of Drug Encapsulated Ultradeformable Lipid Vesicles after Subconjunctival Delivery	Pharmacy	Nirmal J	BITS-ACRG	10,00,000
49	Surface Modified Nanoparticulate Carrier System for the Effective Delivery of Antileukemic Drug	Pharmacy	Dr. Akash Chaurasiya	BITS-ACRG	10,00,000
50	Differential expression and ruglation of GluN2A/GluN2B subnit containing NMDA receptor by Src kinase in MAM -induced cell based model of schizophrenia	Biological Science	Dr. Pragya Komal	BITS-ACRG	700000
51	Numerical and Experimental Investigation of Insect/Bird Flight Inspired Flexible Flapping Wing Propulsion	Mechanical Engineering	Dr Pardha Saradhi G V	BITS-ACRG	950000
52	Investigation of the mechanical properties of ATIG welded mild steel and Ti6Al4V alloy	Mechanical Engineering	Dr Ravi Sankar Vidyarthy	BITS-ACRG	950000
53	Efficient reconstruction of boundary data using the method of fundamental solutions for the two phase inverse Stefan problem	Mathematics	Dr Gujji Murali Mohan Reddy	BITS-ACRG	700000
54	Modeling the hydrodynamics of porous breakwaters in ports and harbors under irregular and multidirectional incident waves.	Mathematic	Dr Santanu Koley	BITS-ACRG	700000
55	Urban road safety management through evaluation of operating speed and geometric consistency	Civil Engineering	Dr Bandhan Bandu Majumdar	BITS-ACRG	800000
56	Deciphering the role of gut microbiota-derived secondary bile acids in metabolic rewiring of macrophages: implications in colon cancer	Biological Sciences	Trinath Jamma	BITS-ACRG	985000
57	To elucidate novel mechanisms of Sn RK1-AMPK family kinases in plant antiviral defense and human metabolism regulations	Biological Sciences	Gireesha T M	BITS-ACRG	995000
58	Design and development of 3D printer for carbon fiber reinforced composites	Mechanical Engineering	Kurra Suresh	BITS-ACRG	1000000

S.No	Project Title	Department	Principal Investigator	RIG/ACRG	Sanctioned Amount
59	Development of a new Vegetable-Oil-Based Direlectric fluid for liquid-filled transformers	EEE	Mithun Mondal	BITS-ACRG	800000
60	Development of a new Vegetable-Oil-Based Direlectric fluid for liquid-filled transformers	Chemical engineering	Dr. Nandini	BITS-ACRG	950000
61	Nanocomposites synthesis and stability enhancement for methane combustion	Chemical Engineering	Dr. Satyapaul Singh Amarthaluri	BITS-RIG	200000
62	Synthesis of Highly Functionalized and Medicinally Potential Bioactive Heterocycles through Trifluoromethylative Cyclization Strategy	Chemistry	Dr .Tanmay Chatterjee	BITS-ACRG	800000

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
1	Protein structure and stability modulation due to In-Cell and In-Vitro Crowding: Molecular insights on the origin of the effects of crowding	Biological Sciences	Dr. Ramakrishna Vadrevu	-	DST	54,36,000
2	Polymorphism studies and moleuclar characterization of plasmodial Rhoptry neck protein 2 (RON-2) from Indian fields isolates	Biological Sciences	Prof. Vidya Rajesh	-	DST	34,92,000
3	Mechanistic basis of abnormal neurogenesis due to HSSN1E-assicuated DNA Methyltransferase 1 (Dnmt1)mutation and pharmacological intervention for phenotypic correction	Biological Sciences	Dr. K Naga Mohan	Prof. Yogeeswari	DBT-2	68,45,800
4	Synthesis, study of optical properties and Anticancer ativity of unique di-substituted tetracyanoquinodimethanes	Chemistry	Dr. Jayanti Subbalakshmi	-	DST	24,74,605
5	Design and Development of an Automated Flow Calibration Unit for Fuel and Oxidizer Injectors in a Pneumatic Control System	Mechanical Engineering	Dr. Sandip Deshmukh S	Dr. Supardeepan K	DRDO	10,00,000
6	Efficacy of Appropriately Tailored Biopolymer and Carbonaceous Adsorbents for the separation and Recovery of Europium	Chemistry	Dr. N. Rajesh	Prof. Vidya Rajesh	DST	29,59,370
7	Performance evaluation of backfill soils partially replaced with building derived materials	Civil Engineering	Dr. Anasuya Guhary	Dr. Naveen James Dr. Arkamitra Kar	DST	24,43,710
8	Multiobjective evolutionary approach for solving water distribution network design optimization	Civil Engineering	Dr. A Vasan	Dr. Murari Varma	CSIR	22,35,400
9	STRATEGIES FOR FAULT-TOLERANT NETWORK-ON-CHIP DESIGN "	EEE	Dr. Soumya J	-	DST	25,93,140
10	Metal-Oxide and nano composite based low-power non-volatile switching device : a novel approach	EEE	Dr. Souvik Kundu	Prof. Souri Banerjee	DAE-BRNS	34,90,650
11	Underwater Characterization of solar cells and their optimization	EEE	Prof. Sanket Goel	Dr. Sudha Radhika	DRDO-cars	9,85,000
12	Resistance to the Western Ghats Conservation and Undercurrents: A study of the people's protest and the role of the local bodies in Iduuki, Kerela	Humnities and Social Sciences	Dr. Lavanya Suresh	M Suchitra	CDS	3,15,000
13	Enhancement of mechanical properties of Ti-6AI-4V using constrained groove pressing and heat treatment	Mechanical Engineering	Dr. Amit Kumar Gupta	-	DRDO	45,60,000

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned
14	Hydrogen storage in mesoporous polymer drived ceremics for automotive applications	Mechanical Engineering	Dr. Sujith R	1.Dr. R. Rarameshwaran 2. Prof. N. V. Ravi Kumar (IIT Madras)	DST-SERB	42,38,240
15	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Mechanical Engineering	Dr. R. Parameshwaran	-	DST	27,76,340
16	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Mechanical Engineering	Dr. Arshad Javed	-	DST	29,43,600
17	Investigations on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS -36 for the treatement of renal injury	Pharmacy	Prof. Sajeli Begum	Dr. Onkar Prakash Kulkarni	DST	24,37,000
18	Development of a Non-invasive giodegradable polymeric mciroprojection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Pharmacy	Dr. V Vamsi Krishna Venuganti	-	ICMR	42,25,150
19	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Pharmacy	Dr. Balaram Ghosh	Dr. Swati Biswas	DST	29,87,800
20	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Mathematics	Dr. Anil N	-	DST	15,90,600

B. Completed Industry Projects

S. No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1	Study to be conducted in collaboration with Telangana State Pollution Control Board	Biological Sciences	Dr. Suman Kapur	-	CPCB	9,50,000

C. Completed Consultancy Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Amount Sanctioned (INR)
1	AP HRDI - Entrustment of Studies - Cyclone Titli	Humanities and Social Sciences	Dr.Biswanath Dash	-	Cyclone TItle	1,00,000
2	Sustainability of Cashless Banking in Unorganized Retail Sector: Issues and Challenges ahead	Economics and Finance	Dr. Archana Srivastav		IIBF (Indian Institute of Banking and Finance)	2,50,000

D. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Amount Sanctioned (INR)
1	Parallax Lighttweight code self-verification for IoT Devices	CSIS	Dr. C. Hota	Prof.Herbert Bos , VU University Amsterdam, Nethrlands	Nwo-Deit(Indo-Dutch)	38,30,000
2	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Pharmacy	Dr. D Sriram	Dr. P Yogeeswari	Indo-Sweden-3	67,00,068

E. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Sanction Amount	Sanction Amount
1	Differential expression and function of nicotinic acetylcholine receptors(nAChRS) in excitatory versus inhibitory neurons due to impairment of Src family-tyrosine kinase pathway in schizophrenia	Biological Scieces	Dr. Pragya Komal	BITS-RIG	200000
2	Developmnet of a visco-hyper elastic constitutive model for polyuria using experiments	Mechanical Engineering	Dr. A V S Siva Prasad	BITS-RIG	200000
3	Wavelet based pattern recognition and motor current signature analysis of stator winding faults due to insulation failure in industrial machines	EEE	Dr. Sudha Radhika	BITS-RIG	200000
4	Development of new synthetic methodologies for fluoroalkylation reactions by visible - light-photoctalysis : Access tp mew classes of potent molecules	Chemistry	Dr. Tanmay Chatterjee	BITS-RIG	200000
5	Impact of the ex-gratia for farmers suicide on the surviving family member of the deceased farmers in Telangana	Economics and Finance	Dr. Thota Nagaraju	BITS-RIG	200000
6	Nano-scale power management interface circuits for IoT Node	EEE	Dr. Saroj Mondal	BITS-RIG	200000
7	Development of new synthetic methodologies for fluoroalkylation reactions by visible - light-photoctalysis : Access tp mew classes of potent molecules	Chemistry	Dr. Tanmay Chatterjee	BITS-RIG	200000
8	Design and implementation of Hardware Architectures for Media Processing Applications	EEE	Dr.Syed Ershad Ahmed	BITS-RIG	200000
9	Studies on the design of high power, low loss power divider and combiner	EEE	Dr. Harish V Dixit	BITS-RIG	200000
10	Development optimization and characterization of nanostructured carrier systems for effective delivery of anticancer therapeutics	Pharmacy	Dr. Akash Chaurasiya	BITS-RIG	200000
11	Optimization and characterization of deformable vesicle Nano carriers for ocular therapeutics	Pharmacy	Dr. Nirmal	BITS-RIG	200000
12	An investigation on Factors influencing Bicycling and Walking in Indian Urban Context: A Case Study of Hyderabad, India	Civil Engineering	Dr. Bandhan Bandhu M	BITS-RIG	200000
13	An investigation in to child nutrition in India	Economics and Finance	Dr. Rishi Kumar	BITS-RIG	200000
14	Alternative ways of understanding ecological conservation practices to enable justice for all	Humanities and Social Sciences	Dr. Lavanya Suresh	BITS-RIG	200000
15	Investigation and improving the performance of next generation cellular networks	CSIS	Dr. Sudeepta Mishra	BITS-RIG	200000
16	Soft lithographic fabrication of super hydrophobic surfaces and durability studies	Chemical Engineering	Dr. Nandini Bhandaru	BITS-RIG	200000
17	How should I detect and fix code smell? Investigation source code, text analytic and social network based approaches to find structural design problems in software systems	CSIS	Dr. Lov Kumar	BITS-RIG	200000

S.No	Project Title	Department	Principal Investigator	Sanction Amount	Sanction Amount
18	Quantum theory of black holes and quasinormal nodes	Physics	Dr. Swastik Bhattacharya	BITS-RIG	148000
19	Simulation, Design and Modelling of vertical Heterostructure transition metal dichalcogenides for lab free electrochemical gas sensing applications	EEE	Dr. Sayan Kanungo	BITS-RIG	200000
21	Opera	Civil Engineering	Dr. Arkamitra Kar	OPERA	1820000
22	Opera	Civil Engineering	Dr. Bahurudeen A	OPER	1820000
23	Analysis and design modifications to the exsisting form of laparascopic forceps	Mechanical Engineering	Dr. Ramachandra Murthy K		200000

List of Equipment procured in the year 2020

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
1	Small Angle X-Ray Scattering (SAXS/WAXS) System, Nano inXider, 10^7 Photon flux, Temperature range (-150 $^{\circ}$C- 1000 $^{\circ}$C), Flow cell, Sample holder for powders and gels, GISAXS, Tensile stage system.	24,756,165	Central Analytical Laboratory	Equipment
2	Bench Top BD FACS Aria III High Speed Cell Sorter, 16 Parameters, 4-way sorting, 70000 events/sec, Temperature range (-20°C-120°C)	14,457,853	Central Analytical Laboratory	Equipment
3	In-Vivo Imaging System (Perkin Elmer). IVIS Lumina III with RAS-4 Anaesthesis system. 7 Emission filters, 19 excitation filters. Fluorescent and Bioluminiscent imaging. It can facilitate non-invasive longitudinal monitoring of disease progression, cell trafficking and gene expression patterns in living animals.	10,473,853	Pharmacy	Equipment
4	HPC - High Performance Computing Facility based on AMD-6; Masternode Tyrone Camarero- DA700TR-212R4-01 no, Twin Server Tyrone Camarero- DA700TR-224R-02 no, Independent Server Tyrone Camarero- DA700TR-212R4-02 no, Accelerator Node Tyrone Camarero- DA700TR-212R4-01 no, Primary Interconnect Mellanox MSB7790-ES2F- 01 nos, Secondery Interconnect " 02 Nos, Parallel File System with I/O Node- 2 Nos.	9,928,154	CS & IS	Equipment
5	Microscope Axio Observer 7 (Zeiss) with Optical sectioning module "Apotome 2", solid state light source, Epifluorescence attachment, Imaging software.	8,126,505	Biological Sciences	Equipment
6	TG-DTA/DSC 1600 Degree centrigrate (Labsys EVO) Analyzer with auto sampler and Mass flow controllers	5,226,618	Central Analytical Laboratory	Equipment
7	Mask Aligner (Desktop) with step down transformer (Model:EMA 400); Alignment Scope: 10X objectives with separation of 15-75 mm, Total magnification: 100X, exposure area: 100 mm	4,912,308	Clean Room	Equipment
8	Spectra Max iD5 Multi-Mode Microplate Reader	2,984,388	Biological Sciences	Equipment
9	PeopleSoft Upgradation (ERP)	2,980,881	ERP Division	Software
10	Precision Micro Machining center with High Speed Spindle. Micro-milling, Micro-drilling and Micro-turning operations. Speed: 80000 RPM, Accuracy: 2 microns.	2,920,000	Central Workshop	Equipment
11	Server, Networks Racks with Accessories and PDU Numeric 20KVA Online UPS	2,459,228	CS & IS	Equipment
12	Bloomberg Software	2,308,755	HSS Department	Software
13	RF Magnetron Sputtering Unit and water chiller	2,236,500	Clean Room	Equipment
14	Phantom VEO 440L, Basic, Color 36 GB memory, 12-BIT, Lens F-=Mount 100mm, LED high power 24 LED lamp head, 84 Watt, 7700 Lumens, Tripod	2,135,196	Mechanical Engg	Equipment
15	Contact Profilometer (Surface Profile measuring system), DektakXT Entry System (DXT-E), low inertia sensor with 1 to 15mg of force, 2D STRESS MEASUREMT CAPABILITY, 2µm RADIUS- Type B Stylus,	2,117,000	Clean Room	Equipment
16	Contact Angle and Surface Tension Measurement System	1,996,397	Central Analytical Laboratory	Equipment
17	CO2 Incubator	1,905,152	Biological Sciences	Equipment
18	Renovation of New VRF AC systems	1,900,000	Electrical Maintenance	Equipment
19	HPLC system (Shimadzu)	1,700,000	Dr. Akash Chaurasiya, Pharmacy	Equipment
20	ED WDM series with add-ons	1,515,352	EEE	Equipment
21	High Performance Server, Make: Tyrone	1,449,500	Dr Durba Roy, Chemistry	Equipment
22	Bio-Safety Cabinet	1,412,000	Biological Sciences	Equipment
23	PSMS Implementation and support	1,393,501	PS Division	Software

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
24	High Temperature Inversion Cage (for existing UTM 100KN), temperature till 1200°C, connector: thread M20x1.5, made of corrosion resistant MAR246, pressure plates made of SiC; Pair of pull rods: Fmax 100 kN	1,378,088	Mechanical Engg	Equipment
25	Software Radio kit	1,312,500	EEE Department	Software
26	Dell Optiplex 3070 SFFXCTO Workstation (Intel Core i5/8GB DDR4/1TB SATA/Ubuntu Linex/24" Monitor-E2420H/3YW - 25 nos	1,227,975	Computer Center	Equipment
27	SS 316 Reactor fabrication & Assembly	1,203,930	Chemical Engg	Equipment
28	Digital Storage Oscilloscope	1,197,848	EEE Department	Equipment
29	Servers	1,187,256	Mechanical Engg	Equipment
30	DELL Precision 7920 Tower XCTO Base (Intel Xeon Gold 6150 2.7Ghz, 3.7Ghz Turbo/ (HT 165VU)64GB SXBGB DDR4/3TB/4TB/DVD-RW/Ubuntu Linux/ 3YW/Dell Ultra sharp 24" monitor.	1,101,954	Dr. Radhika Sudha, EEE	Equipment
31	COMSOLE Multiphysics Software	1,052,560	Central Computing Laboratory	Software
32	LCD Projectors, Make: Sony, Model: VPL PHZ11 (5 No's)	1,050,000	GAD	Equipment
33	JoVE Journals Subscription	960,317	Library	Journals
34	Servers	952,945	Mechanical Engg	Equipment
35	Electrochemical Workstation with Multi Potentiostat	950,427	Dr. P.K Pattnaik , EEE	Equipment
36	Plasma Cleaner	924,000	Dr. Satish Kumar Dubey, Mechanical Engg	Equipment
37	Confocal Laser Raman Spectrometer, Model: HO-SP-CRM215C (Upright Infinity Research Grade, Revolving objective nosepiece, 5X, 20X and 40X, Tube Length: 200mm, Laser wavelength: 532nm, Focal Length: 200nm, Focal Ratio: f/4, Range: 4000-100cm-1(Raman), Spectral resolution: 0.95 cm-1	868,875	EEE	Equipment
38	Programmable AC Three Phase Load	864,990	EEE	Equipment
39	Trinocular Microscope for Microfluidic (Infinity Corrected Optical System, Bright Field Observation Method, 100x - 600x Magnification, Intensity adjustable High Bright 3W white LED, 10x wide Field (FN20), 10x, 20x, 40x, 60x, 1/2..5" CMOS Color Camera, Analysis Software with abjective counting & Single Syringe Pump (Model: HO-SPLF)-02 nos.	860,973	EEE	Equipment
40	Quanser Controls	842,701	EEE	Equipment
41	Raman Spectrometer (SR193i)	840,000	Chemistry	Equipment
42	Pellet Press	822,707	Central Workshop	Equipment
43	Expanded Plasma Cleaner, Maximum RF Power of 30 W (Model: PDC-002); Economy dry oxygen service pump (PDC-OPE-2)	808,934	Dr Nandini Bhandaru, Chemical Engg	Equipment
44	Neware Lithium Battery Tester	798,000	Mechanical Engg	Equipment
45	Lipids Extruder, 10ml SS Thermo Barrel Extruder with high preasure Line, pack of 100 nm Pore size Filters & Accessories (25mm Dia & 80nm pore size filters); Jeiotech Heating Batch Circulator 150 C, Shaking Incubator with 50ml Clamps- 29 nos	795,000	Dr. Nirmal J, Pharmacy	Equipment
46	Computer Workstation Server Model:Tyrone Camarero	793,593	Dr Subhrakanta Panda, CS & IS	Equipment
47	Gas Chromatograph with Auto Sampler (Model: 2100); Large oven for capillary column fixing, Compact oven for two packed column fixing, Flame ionization detector (FID), Thermal conductivity detector (TCD); Methanator for conversion of trace levels of CO and CO2 to methane; Packed Column: 200 degree centigrade, Capillary column: 400 degree centigrade.	756,000	Dr. Satyapaul Singh, Chemical Engg	Equipment
48	Inverted Trinocular Fluorescence Microscope, Olympus (Model: CKX53); LED transmitted illumination, iPC Phase Contrast Optics, 100 Watt Fluorescence; HD Resolution CCD Camera; Objectives: 4X, 10X, 20X, 40 X	755,000	Dr. Trinath Jamma, Biological Science	Equipment
49	Artificial Sun Characteristics System	731,563	EEE	Equipment
50	Compact Temperature and Climatic Chamber (-70 OC to +180 OC, RH: 10-95 %, 126 Litres)	729,750	Prof. Ramesh Adusumalli, Chemical Engg	Equipment

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
51	Split Type Three zone Thermal CVD set up 1200 $^{\circ}$C	698,250	Dr Parkshit sahatiya, EEE	Equipment
52	Digital Storage Oscilloscope (100MHz-2GS/s sample Rate,2channel 2.5k Recording Length)- 05 nos; Arbitary function generator(2Channel, 25MHz-125MS/s, 14bits-3.9 color LCD with 2U Rack)- 05 nos; Manual Triple channel DC power Supply(Make: Keithley)- 05nos	679,455	EEE	Equipment
53	Dell Precision 7820 Tower Workstation (Intel Xeon Gold 6238 2.1Ghz 3.7Ghz Turbo/HT(130W) DDR4-2933/1TB SATA/4*16GB DDR4/8xDVD-ROM/Nvidia Quadro TRX 4000, 8GB/Win 10 Pro/3YW	671,979	Prof. Balaji Krishnamurthy, Chemical Engg	Equipment
54	NI System accessories and software	644,086	Mechanical Engg.	Equipment
55	Water Tunnel	630,000	Dr. Pardha Saradhi, Mechanical Engg	Equipment
56	Microscope standard Axiolab 5, TL/RL	628,543	Physics	Equipment
57	0-80 kv Automatic oil Test kit with printer, Measurement of Tan Delta of oils, Dielectric constant & DC Resistivity	614,250	Dr Mithun Mondal, EEE	Equipment
58	Funmat HD 3D Printer (Functional Material Printer)	610,000	Dr. Kurra Suresh, Mechanical Engg	Equipment
59	Automatic Color Colony counter Scan	583,030	Biological Sciences	Equipment
60	Upreadation of Integrated Automative Engineering Lab (Dell Vostro 3471SFF Intel Core i5-9400/8GB/1TB, Intel Core i7-9700/2*8GB/1TB, Dell Vostro 3471SFF Intel Core i7-9700/8GB/1TB/, 32" VU LCD Television, Logitech IP Camera	567,975	WILP	Equipment
61	Electrospinning Unit	549,780	EEE	Equipment
62	Intelligent Pressure scanner, 9216-0105011300; Universal Scanner Module Power and Communications Cable, 9082-0000600000; Single scanner interface, 9IFC-0301000000; Nylon tubing, 27-02-0062	547,237	Mechanical Engg	Equipment
63	SLA Printer (Formlabs forms 3)	520,119	EEE Department	Equipment
64	Multisim Software	510,817	EEE Department	Software
65	VM Ware Academic Product & Support	501,500	WILP	Software
66	Microwave Office University Software	500,000	EEE Department	Software
67	Composite Material Fabrication Equipment 700 degree centigrade (Premium); furnace shell size: 600 mm X 650 mm; furnace hot zone volume: 200 mm X 400 mm; Vacuum: 0.01 mbar, 100 litre capacity; Mold: SS 316 having 50 mm diameter/150 mm height	490,003	Central Workshop	Equipment
68	Solar Simulator- Xenon Lamp (Model: HO-SC-SS300), Ozone free, 300 W, 13-16 A, 174 mm length, Cathode/Anode Base: 0.5, Luminous Flux: 7000, Forced Air based cooling.	489,804	Dr Karumbaiah CN, EEE	Equipment
69	LS DYNA 2 Core-Perpetual(Software),LS DYNA 2 Core-Perpetuals DYNA(Software) With System	489,747	Mechanical Engg	Software
70	Tissue Culture Rack & Accessories	489,720	Biological Sciences	Equipment
71	Solar Dryer Test Rig, Solar water heater (Temp: 65 C to 85 C, Tank Volume: 100Ltr) ; Energy Storage Test Rig -01 Each	459,758	Mechanical Engg	Equipment
72	Vaccum Pycnometer	456,750	Civil Engg	Equipment
73	Setup for Biosafety Laboratory	451,404	Maintenance	Equipment
74	Consistency Determination and Birghtness Apparatus	450,000	Chemial Engg	Equipment
75	Robotic Training cell with belt conveyor set up	450,000	Mechanical Engg	Equipment
76	PDA Detector	431,500	Dr. Akash Chaurasiya, Pharmacy	Equipment
77	Emona Instruments	427,240	EEE Department	Equipment
78	Contact Angle Measuring System (Model: Acam-NSC with Standard Accessories), Dispensing Module, DCA Measurement Module, Surface Tension, Interfacial Tension measurement Module, Interface Control & Stage Heating Module)	426,117	Chemical Engg	Equipment
79	Supply and integration of Fronius GTAW-DC PowerSource; Model: Fronius Transtig 3000 (300amps) ith pulse control & machine mounted torch + earth cable with consumables; suitable for Linear welding SPM;	425,250	Dr. Ravi Shanker Vidyarthy, Mechanical Engg	Equipment

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
80	Data Logger	401,927	Dr. Pardha Saradhi, Mechanical Engg	Equipment
81	Spring riders for toddlers- 01 nos ; Elliptical-01 nos; Arm wheel-01 nos; Rock climber, box ladder & chain climber rock climber-01 nos; Shoulder wheel-01 nos; Sitting standing twister-01 nos.	400,176	Community Welfre Unit	Equipment
82	LiDAR Steering Smart Car	398,840	Mechanical Engg	Equipment
83	Auto Transformers	395,000	EEE Department	Equipment
84	Portable Electrochemical System	389,374	Dr. P K Pattnaik, EEE	Equipment
85	Lenovo P 920 Workstation C621 ES TW R (Intel Xeon Silver 4116/2*16GB DDR4/4TB SATA/2*NVIDIA Gforce RTX 2080 8GB/Integrated 9 in 1 multimedia Card/Win 10 Pro/3YW	388,479	Mathematics, Dr. Gujji Murali Mohan Reddy	Equipment
86	Lenovo P 920 Workstation C621 ES TW R (Intel Xeon Silver 4116/2*16GB DDR4/4TB SATA/2*NVIDIA Gforce RTX 2080 8GB/Integrated 9 in 1 multimedia Card/Win 10 Pro/3YW	388,479	Mathematics, Dr. Santanu Koley	Equipment
87	Function Generator	385,618	EEE Department	Equipment
88	Dell Optiplex 7070MT (Intel Core i7-9700/16GB/ 1TB SSD+ 1TB HDD - 02 nos; Optiplex 7070MT (Intel Core i7-9700/8GB/ 1TB SSD+ 1TB HDD, Optiplex 7070MT (Intel Core i7-9700/16GB/ 1TB SSD+ 1TB HDD	375,153	WILP	Equipment
89	Classic RRBS Full Service Bioinformatics Analysis	368,991	CHDR	Equipment
90	Refrigerated/Heating Circulator (Dyneo DD-600F); Pump capacity: 22l /min, 0.6 bar pressure, -35 °C to + 200°C. It is capable of heating and cooling fluids for heat transfer applications including Nanofluids, Phase change materials, refrigeration and other heat exchanging.	357,000	Mechanical Engg	Equipment
91	Ultrasonic Flaw Detector	350,102	Mechanical Engg	Equipment
92	Galaxy 48R CO2 Incubator (230 v/50-60Hz, NPN-CR CO2 Regulator, NPN2 9KG CO2 Cylinder)	350,000	Dr. Pragya Komal, Biological Science	Equipment
93	Dell optiplex 3070 SFF XCTO Intel Core i5-8500/8GB DDR4/1TB SATA/Ubuntu Linex/Dell 24"Monitor/3YW - 07 nos	343,833	Computer Center	Equipment
94	CO2 Laser Engraving & Cutting machine	342,200	Physics	Equipment
95	Vacuum Pump	338,225	Pharmacy	Equipment
96	Electro Chemical Workstation (Origalys)	331,581	Chemistry	Equipment
97	Indenter Shaft Unit	328,650	Mechanical Engg	Equipment
98	Filaments	326,178	Dr. P.K Pattnaik , EEE	Equipment
99	Upgrade profilm acquisition system	321,320	EEE	Equipment
100	ERP Ticketing System Services	316,240	ERP Division	Software
101	Thermo Cycler	315,000	EEE Department	Equipment
102	Thermo mixer C bundle with smar block Accessories for Thermo mixer Centrifuge minispinplus with rotor	314,250	Dr.Vivek Sharma, Biological Science	Equipment
103	Three-stop Tygon E-LFL pump	311,786	EEE	Equipment
104	Heidolph Rotavac Valve 2-Gear diaphram Vacuum Pump with Chiller (Suction Cap: 0.75 m3/h, Vacuum of 12mbar, Chiller Range: -100 to +300 C, Temp: 140 to 860 C	305,910	Dr. Himanshu Aggarwal, Chemistry	Equipment
105	CMIE Subscription	304,341	Economics & Finance	Software
106	HP Omen x 15 -DG0018TX, Intel Core i7-9750H/16GB	302,080	Prof. Chittaranjan Hota, CS & IS	Equipment
107	Ultra Water Purification System	300,000	Chemistry	Equipment
108	MinimateTM Tangential Flow Filtration Systems, Capsules OAPM220	299,775	Dr Akash Chaurasiya, Pharmacy	Equipment
109	Computer Server (Intel Xenon E5 Processor, 64 GB RAM)	299,624	Mrs. Priyalatha (Dr. Runa Kumari), EEE	Equipment
110	Trinocular Stereo Zoom Microscope, Make: Metavis, Model: Prime 100; 8.3 MP Camera; Articulating stand 360 degree; LED light, Magnification: 3.5 X to 180X; 32 inch Monitor	297,985	Central Animal Facility	Equipment
111	Fume Hood (SS Body, Model: Bact-pp-422d)	294,882	Mechanical Engg	Equipment

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
112	USB-6000 Set-up	294,000	EEE Department	Equipment
113	Double Ridge Horn Antenna	294,000	EEE Department	Equipment
114	Electric Bicycle, Retrofited Electric Tricycle with Assembling charges	287,448	EEE	Equipment
115	Drying Oven with LCD Programable Microprocessor Controller	269,325	Chemistry	Equipment
116	High Shear mixer, Homo Model T25 Digital S 22 ULTRA-TURRAX (IKA), dispersing tool, plate stand, Boss head, Dispersing Element, Saw-tooth, dia of 10 mm (S25 N-10G-ST)	267,339	Dr. Akash Chaurasiya, Pharmacy	Equipment
117	Diffused Light Research Polariscope-Motorized (ESA-01)	262,500	Mechanical Engg	Equipment
118	Bench Top Data Acquisition System, 3 slots with USB & LAN; 20 Channel solid state Multiplexer Module; 20 channel Multiplexer (2/4-wire) Module.	258,268	Dr. Santanu P. Datta, Mechanical Engg	Equipment
119	Photo Multiplier Tube with Housing and Power Supply	254,625	Dr. P K Pattnaik, EEE	Equipment
120	Avaya IP Phones with power adapter - 20 nos	254,408	Computer Center	Equipment
121	Lab Furniture	249,747	Biological Sciences	Equipment
122	Impedence Analyzer Channel	249,255	Dr. P K Pattnaik, EEE	Equipment
123	Orbital Shaking Incubator with clamps	245,727	Pharmacy	Equipment
124	Universal CPLD Trainer kit with Accessories	243,430	EEE	Equipment
125	DAQ system and Amplifier	237,282	Dr. Pardha Saradhi, Mechanical Engg	Equipment
126	Programmable 2 Channel Microfluid Syringe Pump with PC RS232 primary network cable and RS232 to USB converter.	228,690	Physics	Equipment
127	Computer Server	225,878	Dr. Pardha Saradhi, Mechanical Engg	Equipment
128	Chronos 1.4 High Speed Camers (8GB/Colour Camera)	225,324	Dr. Kurra Suresh, Mechanical Engg	Equipment
129	Musical Instruments & Accessories like Bluetooth Receiver, Wall Mount for Mixer and sockets, switches.	224,200	SWD SAC	Equipment
130	Oribital Shaking Incubators	223,040	Biological Sciences	Equipment
131	Temperature Test Chamber	220,290	Dr. S P Datta, Mechanical Engg	Equipment
132	Hot Air Oven with Gravity Convection; Thermo Scientific heratherm Heating & Drying, Model: OGS100 (Oven Cap: 105 Ltr, Temp Range: 50-250 C)	220,000	Dr. Himanshu Aggarwal, Chemistry	Equipment
133	Light Source	215,355	Dr. P K Pattnaik, EEE	Equipment
134	Heidolph Magnetic Stirrer with Heating	214,904	Chemistry	Equipment
135	BOD Analyser	210,000	Civil Engg.	Equipment
136	BOD Incubator	210,000	Civil Engg.	Equipment
137	Renewal of Simulia Software	209,706	Central Computing Lab	Software
138	Rotary Evaporator	208,667	Dr Himanshu Aggarwal, Chemistry	Equipment
139	Dell Inspiron 3471 Desktop; Mitsubishi 10" Touch Screen based colour HMI; Design of Mitsubishi components, Program & Hardware;	203,700	Prof. Y.V.D Rao, Mechanical Engg	Equipment
140	Studio Teleprompter PRSO 17 FORTINGE Prompter Along with Desk Control	203,550	WILP	Equipment
141	Digital Gel Documentation system	200,550	Dr. P.K Pattnaik , EEE	Equipment
142	BioRad Western Blot System	199,999	Pharmacy	Equipment
143	Laptops	199,501	ERP Division	Equipment
144	Hot air oven with gravity convection	194,180	Dr.Himanshu Aggarwal	Equipment
145	Camera Equipment (EF 16-35 MM f2.8L III USM, EDELKRONE FLEXTILT HEAD 2, RECORDING INDICATOR LIGHT SET, etc.)	192,366	WILP	Equipment

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
146	Biaxial Tensile Strength Tester	188,800	Dr. Nitin R. Kotkunde, Mechanical Engg	Equipment
147	Rotor & Adapter for Centrifuge	183,662	Biological Sciences	Equipment
148	Development kit with XDS110 Emulator	179,393	EEE	Equipment
149	HP Work Station hpZ4 (Xeon W-2123/2*8GB DDR4/2TB with 1TB SSD/GFX Nve Qdr 4GB	177,844	Dr. Jabez J Christopher, CS & IS	Equipment
150	Accesory for DSC set-up	170,829	Central Analytical Laboratory	Equipment
151	4-Channel 4425 Starter Kit, Secondary Ignition Pickup (Automotive test lead)	168,740	WILP	Equipment
152	Karl Fisher Titration (Hamco 123B) for determination of moisture content and Pensky Marten Flash Point (Hamco 30 C) (semiautomatic)	161,700	Dr. Mithun Mondal, EEE	Equipment
153	NI DAQ Hardware	160,910	Dr. Brajesh Kumar P, Mechanical Engg	Equipment
154	Load cell S type, Tension and compression (Model FP 2000)	160,650	Dr. Pardha Saradhi, Mechanical Engg	Equipment
155	Biosafety Cabinet	160,132	Dr. Pragya Komal, PI, Biological Sciences	Equipment
156	Portable Multi Gas Analyzer for CO2 (0-100% & CH4 0-100% with inbuilt pump, rechargeable batteries, data logging & USB output, DREF; Model: SR 2017.	154,580	Prof. I.Sreedhar, Chemical Engg	Equipment
157	3D Printer - Flash Forge Guider IIS; build volume: 280X250X300 mm; includes 1 Kg PLA filaments	153,400	Mechanical Engg	Equipment
158	SMD Soldering & Desoldering station	152,586	EEE Department	Equipment
159	Electrophoresis & blotting system, 10-Well, 1.0mm, 4Gel System (MTET,4GEL,1.0mm,TBT,PPBC10%FC)	150,573	Dr. Pragya Komal, Biological Science	Equipment
160	Portable(Movable) Fume Extractor (Model: BACT 222 M)	149,011	Chemical Engg	Equipment
161	LCD Projector (Make: Espson, Model: EB-2247U) with cables and accessories	148,310	Central Computing Lab	Equipment
162	Trinocular Microscope (Make: Metavis, Model: B-100) Eye Piece 20x pair, 8.3MP Camera with 2D Measurement	147,000	Dr. Akash Chaurasiya, Pharmacy	Equipment
163	UV Cross Linker	144,121	Dr. Vivek Sharma, PI, Biological Sciences	Equipment
164	Workstation Z2 G4T (Intel Xeon E2104G 4C/64GB DDR4/2TB SATA	142,800	Prof. Jagadeesh Anmala, Civil Engg	Equipment
165	Weighing Balance	141,750	Mechanical Engg	Equipment
166	7" Human Machine Interface Fatek PLC Trainer	140,788	Mechanical Engg	Institute
167	Vacuum Oven with Microprocessor Controller	139,650	Pharmacy	Equipment
168	Heating Block	138,108	Biological Sciences	Equipment
169	Lenovo M720 Tower (Intel Core i7-8700/16GB DDR4/1TB SATA/D); V520 Tower(i3 7th gen B25/8GB DDR4/1TB SATA	135,597	EEE	Equipment
170	Supply and commisioning of Impellar including both rotating & stationary Components	135,450	Prof. Y.V.D Rao, Mechanical Engg	Equipment
171	Multi Parameter Kit	133,350	Biological Sciences	Equipment
172	Stirrer, Vacuum Pump, etc,	132,525	Physics	Equipment
173	Solar Module Analyzer Model:9009	128,625	EEE	Equipment
174	Precision Balance (Make: Sartorius, Model: Quintix 6102-101N) Weighing Bowl for 5kg, Steel Plate	125,002	Central Workshop	Equipment
175	Deep Freezer (Make: Haier, Model:DW-40L262), Temp: -10 to -40 degree centigrade, Capacity: 262 Ltr)	124,950	Biological Science, Dr. Vivek Sharma	Equipment
176	Brush cutter machine (Make: Honda, Model: UMK-450T); Electrical lawn Mower Machine, Make: Proton, Cap: 5HP	124,700	Maintenance	Equipment

S.No.	Item Description	Amount (INR)	Department / Division	Ledger Folder
177	Auto-rickshaw, Eride Verde Cargo- Loader (Model - Electrical Vehicle)	120,750	Maintenance	Vehicle
178	Dino Lite Digital Microscope	116,655	Dr. Kundan Kumar singh, Mechanical Engg	Equipment
179	Centrifuge - Heigh speed Research Centrifuge. Make: Elektrocraft, Model: TC4100 D with Rotors (Fixed Angle rotor, Model: TC 4109 & TC 4111)	116,206	Dr. Himanshu Aggarwal, Chemistry	Equipment
180	Vertical Laminar Air Flow Hood Level-1 (BACT-LAF-VI200, working area: 4'x2'x2')	113,280	Dr. Nandini Bhandaru, Chemical Engg	Equipment
181	Modules for Sophos XG 550 Firewall	110,292	CCIT	Equipment
182	Humidity cum temperature Test Chamber	109,740	Dr. Chanchal Chakraborty, Chemistry	Equipment
183	Air Velocity Control System	109,740	Prof. Ramesh Adusumalli, Chemical Engg	Equipment
184	Heidolph Magnetic Stirrer with Heating; Model: MR Hei-standard; Heating: 800W, Range: 20 to 300 C, Speed: 100 to 400 RPM, Plat Dia: 145mm, Max Load: 25Kg - 3nos	109,601	Prof. Manab Chakravarty, Chemistry	Equipment
185	Spin Coating System with Accessories	107,380	Dr. Souvik Kundu, EEE	Equipment
186	Dell Poweredge R240 Server (Intel Xeon E-2124 3.3Ghz/16 GB UDIMM 4 DIMMS/1TB SATA/DVD-RW/Dual 1Gbps LOM)	106,200	CCIT	Equipment
187	Band Power Meter (8.2 GHz - 12.4 GHz)	105,000	EEE	Equipment
188	Microphone	103,320	Mechanical Engg	Equipment
189	Magnetic Stirror with Heating	102,737	Prof. Anupam Bhattacharya, Chemistry	Equipment
190	Flow / Level / Piezoelectric set-ups	101,651	EEE	Equipment
191	Photometer	101,220	Biological Sciences	Equipment

LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2020

Second Semester 2019-20

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
1	2015A2A40618H	Pritish Dey Sarkar	Optimal 3-D printing using delivery based techniques for finite element analysis	Dr. Pavan Kumar P/ Dr. Chandu Parimi	Mechanical Engineering
2	2015A3B30281H	Arunasri Vyshnavi Challa	Home, Commercial and Industrial Automation using the Internet of things	Mr. Sandeep Kumar	EEE
3	2015B1A10828H	Piyush Soni	Lean manufacturing practice in operations of production unit	Mr. Vedant Kakarania/ Prof. Balaji Krishnamurthy	Chemical Engineering
4	2015B1A20810H	Krishna Sairam G	Mesh Segmentation generation (Computational Geometry)	Dr. Chandu Parimi/ Prof. Tathagata Ray	Civil Engineering
5	2015B1A20815H	M Vamsi Krishna	Self-healing concrete, obtaining optimum environmental parameter for microorganisms & testing healing strength of microorganisms by developing cracks	Prof. Jayati Ray Dutta/ Dr. Arkamitra Kar	Biological Sciences
6	2015B1A20825H	Pradeep Reddy Sagili	Bacteria enabled self-healing concrete	Prof. Kumar Pranav N/ Prof. V Vinayaka Ram	Biological Sciences
7	2015B1A30829H	Gande Vishal	Health informatics-Filtering of different artefacts from EEG signal using machine learning techniques	Dr. Rajesh Kumar Tripathy	EEE
8	2015B1A30832H	Prajjval Gupta	Develop low cost instrument for cancer detection	Prof. Kumar Pranav N	Biological Sciences
9	2015B1AA0827H	Aakash Pillai	Image processing techniques for brain tumour segmentation	Prof. BVVSN Prabhakar Rao	EEE
10	2015B2A10806H	Shikhar Sharma	Design, synthesis, characterization and application of polyazine and metal complexes	Prof. R. Krishnan	Chemistry
11	2015B2A10808H	Ameen T. Shaikh	Development of core-shell particles through novel route and property relation	Dr. Balaji Gopalan	Chemistry
12	2015B2A20793H	Tulluri Sai Kiran	Road Safety Database Development for Hyderabad City Data on Geometric & Traffic Characteristics will be collected from Vulnerable locations & Statistical analysis will be done.	Dr. Bandhan Bandhu M	Civil Engineering
13	2015B2A30909H	Priyadarshi	Experiments and simulations of plasmon enhanced spectroscopy	Prof. Amit Nag	Chemistry
14	2015B2A40772H	Shubham Sawant	Data driven approach towards app inventory optimization and revenue generation / increment	Mr. Rishabh Kumar/Dr. Kundan Kumar Singh	Mechanical Engineering
15	2015B2A40797H	Apurav Gupta	Probing the strength and surface of solid materials towards heterogeneous catalysis	Prof. Sounak Roy	Chemistry
16	2015B2AA0813H	Suyash Gupta	Novel metallosupramolecular polymers for electrochromic devices	Dr. Chanchal Chakraborty	Chemistry
17	2015B2AB0708H	Undru Sri Guna Kaushik	Synthesis and performance evaluation of heterogeneous catalysts towards energy and environmental applications	Prof. Sounak Roy	Chemistry
18	2015B3A40570H	Shankar Anand Veggalam	Business and Product Management	Mr. Akshay Aedula/ Dr. Sunny Kr. Singh	Economics & Finance
19	2015B3A70531H	R. Shivani Reddy	Image Reconstruction and Deep Learning	Dr. Phaneendra Yalavarthy/ Dr. Rishi Kumar	Economics & Finance
20	2015B3A70647H	Tanmay Girish Kulkarni	Developing methods to understand the impact of interventions and building algorithms to optimize the causal effect	Mr. Amit Sharma/ Dr. Jabez Christopher	Computer Science and Information system

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
21	2015B3AB0582H	Pranjul Purohit	Welding of a structural components	Dr. Ravi Shanker V	Mechanical Engineering
22	2015B4A30634H	Nadeem Ahmed	Applications of algebraic graph theory using the concept of given values and laplacian matrix to solve network calculations	Prof. Michael Alphonse	Mathematics
23	2015B4A40541H	Abhilash Verma	Exploring the usage of dynamic programming to address the np-completeness of dominating set problem	Prof. Michael Alphonse	Mathematics
24	2015B4A40635H	Devyesh Shrivastava	Multi stage gear box subjected to non-stationery roads	Dr. Sabareesh GR	Mechanical Engineering
25	2015B4A70529H	Piyush R. Kalantri	Efficient algorithms that addresses the NP complete nature of dominating set problems in graphs	Prof. Michael Alphonse	Mathematics
26	2015B4A70845H	Kumar Prasun	Machine learning based optimal control of limiter functions in higher-order mesh free methods	Dr. Anil Nemali	Mathematics
27	2015B4A80656H	P. Lakshmi Suvarna	Boundary value problems for differential/difference equations	Dr. Jangan Mohan J	Mathematics
28	2015B5A20658H	Shakti Singh	Pavement engineering & Materials	Prof. Sridhar Raju	Civil Engineering
29	2015B5A40499H	Mayank Agarwal	Structure formation in universe; Using existing models and optimizing the parameters	Dr. Rahul Nigam	Physics
30	2015B5A70674H	Abhinav Kumar	Casual Inference	Dr. Gaurav Sinha/ Dr. Lov Kumar	Computer Science and Information system
31	2015B5A70675H	Yashdeep Thorat	Implementation of ROS(Robot Operating System) for smart marine vehicles and providing cloud support along with a browser-based mission control	Mr. Koay Teong Beng/ Dr. Subhrakanta Panda	Computer Science and Information system
32	2015B5A80648H	Shraman Saha	Efficiency enforcement in Fe-Electric based photovoltaic devices using ideas from photonic emission.	Prof. Kannan Ramaswamy/ Prof. Hari Hara V	Physics
33	2015B5AA0488H	Nikhil Navaratna	Hot electron generation from mesoscopic particles and their applications	Dr. M Krishnamurthy/ Dr. Rahul Nigam	Physics
34	2015B5AA0600H	A V S Dheeraj	Using VR devices to get bio mechanical parameter of neck	Prof. Tathagata Ray/ Dr. R Venkateswaran	EEE
35	2015B5AA0625H	Barshanabin Roy	Analysis of music using deep learning	Prof. Aruna Malapati/ Prof. P.K. Thiruvikraman	Physics
36	2015B5AB0692H	Naveen Hegde	Using Augmented Reality in Physics Laboratory	Prof. P.K. Thiruvikraman	Physics
37	2016A1TS0505H	Shreya Singh	Functional MOF based materials	Prof. Tapas Kumar M/ Dr. Satyapaul Singh A	Chemical Engineering
38	2016A1TS0665H	Kummetha Likhitha Reddy	Flexible nanostructured Surfaces	Dr. Prosenjit Sen/ Prof. Jaideep Chatterjee	Chemical Engineering
39	2016A1TS0929H	S. Rohit Sharma	Synthesis of precursor-derived ceramics for functional properties	Prof. Ravi Kumar N. V/ Prof. Karthik Chetan V	Chemical Engineering
40	2016A2TS0584H	Deshmukh Prasad Pradeeprao	Geometric consistency evaluation of urban streets	Dr. Bandhan Bandhu M	Civil Engineering
41	2016A3TS0173H	V Srinivas	Machine learning for health care	Dr. Rajesh Kumar Tripathy	EEE
42	2016A3TS0243H	Aryan Ritwajeet Jha	Coordination strategies of distributed energy resources in load frequency control scheme of hybrid isolated microgrid	Dr. Alivelu Manga Parimi	EEE
43	2016A3TS0247H	Abhinav Anand	Design, Analysis and Optimization of the Physical layer in 5G Communications	Dr. Chandra R Murthy/ Dr. Prashant K Wali	EEE
44	2016A3TS0248H	Aditya Kunchur	Mechanisms of Memsistors	Dr. Parikshit Sahatiya	EEE
45	2016A3TS0258H	Harshavardhan Takawale	Lightweight Anomaly Detection of Malware for Embedded Systems	Prof. Siew- kei lam/ Dr. Soumya J	EEE

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
46	2016A3TS0265H	Suresh Nambi	Implementation of Energy efficient DNN's for edge computation	Prof. Akash Kumar/ Dr. Syed Ershed Ahmed	EEE
47	2016A3TS0283H	Srinivasan M P	Design and Development of a low cast protection circuit module	Mr. Puneet Arora/ Dr. Alivelu Manga Parimi	EEE
48	2016A4TS0264H	Indraganti VLN Parasuram	Analysis of flow between rotating and stationery discs	Prof. Jaywant H Arakeni/ Dr. Santanu Prasad Datta	Mechanical Engineering
49	2016A4TS0279H	Ameya V Haldipurkar	Numerical simulations of multi-phase flows	Dr. Gaurav Tomar/ Dr. KRC Murthy	Mechanical Engineering
50	2016A4TS0322H	Ashutosh Garudapalli	Enhancement of shape memory alloy mechanical/shape memory properties by severe plastic deformation	Prof Amit Kumar Gupta	Mechanical Engineering
51	2016A4TS0354H	Akash Menon	Synthesis of precursor-derived ceramics for functional properties	Prof. Ravikumar N.V./ Dr. Sujith R	Mechanical Engineering
52	2016A4TS0376H	Craig Michael Rocha	Non-Centrifugal Sugar	Prof. M Srinivas	Mechanical Engineering
53	2016A4TS0844H	Kanishka Ganesh	Mitigations of wind loads on low rise buildings using corner modifications and wind breaks	Dr. KRC Murthy/ Dr. Sabareesh GR	Mechanical Engineering
54	2016A5TS0735H	Nikhil Baheti	Operations and management of Pharmaceutical Products	Dr. M.Venkateswar Rao/ Dr. Balaram Ghosh	Pharmacy
55	2016A5TS0747H	Vinith Kumar Bhandari	Dopamine homeostasis and topamine receptos functionality contribution of serotonin transporter	Prof. Thomas Hummel/ Dr. Onkar Kulkarni	Pharmacy
56	2016A7TS0006H	R. Monith Sourya	Approximation Algorithms	Dr. B. Manjanna	Computer Science and Information system
57	2016A7TS0015H	Akella S V S Sai Kartheek	SPADE: Sandbox Perturbation Analysis pf Malware	Dr. Sai Praveen Kadiyala/ Prof. N.L. Bhanu Murthy	Computer Science and Information system
58	2016A7TS0020H	Chilakala Naga Venkata Akhil	Optimized Solutions for Analysing Trade data using M L Algorithms	Mr. Rohit Maheshwari/ Prof. G. Geetha Kumari	Computer Science and Information system
59	2016A7TS0040H	Mahir Shah	Automatic Tuning of Learning Rate for Optimisation of deep neural networks	Dr. Nipun Kwatra/ Prof. Chittaranjan Hota	Computer Science and Information system
60	2016A7TS0048H	Aditya Y. Lohana	Machine learning, Internet of Things, Distributed Systems	Prof.Akash K/Mr.S Rai/ Dr. Rajib Ranjan M	Computer Science and Information system
61	2016A7TS0053H	Suraj Loungani	(High performance computing) Algorithms Differentiation of Mesh free Solution	Prof. Tathagata Ray/Dr. Anil Nemili	Computer Science and Information system
62	2016A7TS0079H	U. Sai Surya	Empirical Software Engineering and AI assisted Devops	Mr.Chandra Sekhar M/ Prof. Chittaranjan Hota	Computer Science and Information system
63	2016A7TS0091H	V. Aditya Srikanth	Conversational Query Generation	Mr. Niranjan Nayak/ Prof. Aruna Malapati	Computer Science and Information system
64	2016A7TS0095H	Kaustubh Welankar	Big Data Analytics, databases, Compilers	Dr. Bhargav Gulavani/ Dr. Paresh Saxena	Computer Science and Information system
65	2016A7TS0104H	Ellore Anish Reddy	Distributed Machine Learning	Prof. Chittaranjan Hota	Computer Science and Information system
66	2016A7TS0121H	Ashish Gupta	Software Fault Prediction Using Machine Learning	Dr. Lov Kumar/ Prof. N.L. Bhanu Murthy	Computer Science and Information system

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
67	2016A7TS0136H	Basu Dubey	Software Engineering, Data Science, Networking	Mr. Somjit Chatterjee/ Dr. Paresh Saxena	Computer Science and Information system
68	2016A7TS0139H	Athilesh Arputham	Control in robotics using reinforcement learning	Dr. Manik Gupta	Computer Science and Information system
69	2016A8TS0342H	Puneet Singh	Wearable electronics for biomedical applications	Dr. Saroj Mondal	EEE
70	2016A8TS0372H	Akhil Raj Baranwal	Exploiting FPGAs for reinforced deep Learning based systems	Dr. Siva Satyendra Sahoo/ Prof. Sanket Goel	EEE
71	2016A8TS0382H	Aishik Nandy	IOT based microgrid for residential application	Dr. Sudha Radhika	EEE
72	2016A8TS0833H	Kesiharjun Lokireddy	Microfluidic platforms for cell sorting into biomechanical phenotypes	Dr. Todd Sulchek/ Prof. Sanket Goel	EEE
73	2016AATS0145H	Priyash Barya	IR/Microwave plasmonics	Prof. Ambarish Ghosh/ Dr. Parishit Sahatiya	EEE
74	2016AATS0158H	Sohail Rajdev	Issues and solutions to enhance the browsing experience on the internet	Mr. Amit Kundlia/ Dr. Harish V Dixit	EEE
75	2016AATS0188H	Chamakoora Satcheel Reddy	Deep reinforcement learning for biomedical applications	Dr. Rajesh Kumar Tripathy	EEE
76	2016AATS0189H	Saristh	Viewing parameters of video processing, by using adelers to get the desired result	Dr. Syed Ershed Ahmed	EEE
77	2016AATS0192H	Aishwarya B Rebelly	Policy framework for technology choices	Prof. G Ramesh/ Prof. Sanket Goel	EEE
78	2016AATS0227H	Deepak Dahiya	Improvements in field of cloud computers (Azure)	Mr. Bishal Prasad/ Dr. Runa Kumari	EEE
79	2016AATS0818H	Dyuti Chakravarthy	Development & Optimizing of libraries for pipeline development in computer generated imagery	Mr. Gaurav Mathur/ Dr. Harish V Dixit	EEE
80	2016ABTS0504H	Pratijay Guha	Using neural networks to solve the increase flow problem	Dr. KRC Murthy/ Dr. Pardha Saradhi	Mechanical Engineering
81	2016B2TS0692H	Akshata R. Iyer	Organic functional materials. Finding solid state fluorescent materials for various applications	Prof. Manab Chakravarty	Chemistry
82	2016B5TS0863H	Sachin P	Question of locality in quantum gravity	Dr. Chethan Krishnan/ Dr. Prasant Samantray	Physics

First Semester 2020-21

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
1	2016B1A40619H	Mayank Gupta	Digital approach to health awareness.	Prof. Suman Kapur	Biological Sciences
2	2016A1B10664H	Kritika Kasliwal	Dissecting epigenetic mechanisms of X-chromosome inactivation	Dr. Sandeep Kalantry/ Prof. Kumar Pranav N	Biological Sciences
3	2016B4A20522H	Gautam Mishra	Structural Dynamics of Non Structural Elements	Dr. Chandu Parimi	Civil Engineering
4	2017A2PS0529H	VVNS Shashank	Numerical Analysis of phase change material incorporated roof sealing compound for passive cooling in buildings	Prof. V Vinayaka Ram/ Dr. Parameshwaran R	Civil Engineering
5	2017A2PS0929H	T Devi Sreya	Application of Micro-modelling for Seismic behaviour of masonry structures	Dr. Mohan S C/ Prof. Sridhar Raju	Civil Engineering
6	2017A2TS0947H	KN Vaishnavi	Microplastics in Wastewater Treatment Plants	Dr. Murari R R Varma/ Prof. P Sankar Ganesh	Civil Engineering
7	2017A2TS0987H	P Swetha	Simulation of Tyre – Pavement Interaction using FEM software	Dr. Chandu Parimi/ Prof. Sridhar Raju	Civil Engineering

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
8	2017A2TS1023H	N Siva Nagendra Babu	Development of simulation models for laboratory setup of cement and concrete specimens using COSMOL to find correlations between degree of hydration and strength characteristics	Dr. Arkamitra Kar	Civil Engineering
9	2017A2TS1137H	G Varun	Seismic Torsional Response of plan asymmetric infill wall buildings	Dr. Mohan S C	Civil Engineering
10	2016B1A20945H	Haritya Shah	Developing Analysis Tools for evaluating traditional structural systems	Dr. Sanjay Chikermane/ Dr. Arkamitra Kar	Civil Engineering
11	2017A2TS0958H	Gaurav Sarda	Studies on Developing Equivalent Top-down Load-Settlement Response of Pile Foundations using Bi-directional Load Testing Results	Prof. S Murty Dasaka/ Dr. Anasua Guharay	Civil Engineering
12	2017A2TS1009H	Shantanu Chandan	Influence of Non Commercial Vehicular traffic proportion on Lane Distribution Factors on highways through video based field observations	Prof. V. Vinayaka Ram	Civil Engineering
13	2017A2TS1046H	Aryan Singh Chandel	Simulation of crack propagation and healing in bacterial concrete	Dr. Arkamitra Kar	Civil Engineering
14	2016B1A10671H	Navinchandra Venkatarama Puppala	To study the application of Nanocellulose and modified forms of Nanocellulose.	Dr. D Purnima/ Dr. Gireesha T M	Chemical Engineering
15	2017A1TS1400H	Shubhani Paliwal	Lattice Boltzmann modelling to study the effect of Gas-Liquid distributions in Anodic Porous Transport Layer to the performance of PEM electrolysers	Dr. Vikranth Kumar S	Chemical Engineering
16	2017A1TS0964H	Karan Grover	Business Development, Product Analytics, Customer Acquisition & Partnership.	Mr. Kush Jain/ Dr. Ved Prakash M	Chemical Engineering
17	2017A1TS1138H	Bale Ashwin Anand	Predicting phase behaviour of polymer using molecular simulation and machine Learning	Mr. Tarak Patra/ Dr. Satyapaul Singh A	Chemical Engineering
18	2017A1TS1382H	Patel Omeet Nileshbhai	Molecular Simulations of CO2/N2 Separation in nanoporous material.	Mr. Peng Bai/ Dr. Vikranth Kumar S	Chemical Engineering
19	2016B2A70688H	Shristy Kapoor	Applying rigorous machine learning frame works to improve VLSI design processes	Dr. Mysore Sriram/ Prof. Manab Chakravarty	Chemistry
20	2016B4A70675H	Shivaank Agarwal	Using Computer Vision Techniques for Waste Classification	Prof. Ravindra Gudi/ Dr. Paresh Saxena	Computer Science and Information system
21	2017A7TS0184H	Krut Patel	Enabling Analytics Queries on Petabyte-Scale Data	Dr. Bhargav Gulavani/ Dr. Paresh Saxena	Computer Science and Information system
22	2016B3A70237H	Shreeya Jain	Facial Emotion Detection using Computer Vision	Dr. Adarsh Pyarelal/ Dr. Jabez Christopher	Computer Science and Information system
23	2016B3A30415H	Gubba Abhishek	Inequality in health indicators of India	Dr. Rishi Kumar	Economics & Finance
24	2016B3A40453H	Tanishk Milind Deoghare	What motivates banks to use derivatives: Evidence from India	Dr. Thota Nagaraju	Economics & Finance
25	2016B3A30385H	Khyati Agarwal	Engineering and Market of Virtual Board Games	Dr. Manish Kaushal/ Dr. Rishi Kumar	Economics & Finance
26	2016B3A70491H	Srividya A	The thesis will revolve around the different aspects of Economic development of India. Empirical evidence based research will be conducted with an aim of publication	Dr. Soham Sahoo/ Dr. Rishi Kumar	Economics & Finance
27	2017AATS0307H	M. Saisaranya	Flexible antennas for wireless sensor applications.	Dr. Sourav Nandi/ Dr. Parikshit Sahatiya	EEE

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
28	2017A8TS1348H	Prathamesh Saraf	Robotic Manipulator: Modelling, Simulation, and Control	Dr. R N Ponnalagu	EEE
29	2016B2A30683H	K G Sankalp	Fabrication of 2D materials based flexible nanoelectronic devices and their applications	Dr. Parikshit Sahatiya	EEE
30	2017A3TS0602H	Shreyansh Jain	Emotion Recognition from Multi-Channel EEG Signal using CRNN	Dr. Rajesh K Tripaty	EEE
31	2017A3TS0565H	Neil Shah	Venture Capital Research in Clean Energy Startups	Dr. Nivedita Sinha/ Dr. Sudha Radhika	EEE
32	2017AATS0448H	Joel Varughese	Application of learning theory in Cyber physical systems	Dr. Gopal Krishna K M	EEE
33	2017A3TS0374H	Jasvith Raj Basani	Quantum Nonlinear Optics of Machine Learning Accelerators	Prof. Dirk Englund & Dr. Stefan Krastanov/ Prof. Sanket Goel	EEE
34	2017A3TS0487H	Rohan Panda	Transfer learning based illness classification using deep learning and rf MRI data	Dr. Russell Greiner/ Dr. Rajesh K Tripathy	EEE
35	2017A3TS0488H	Manan Gupta	Explore the possibilities of using ROS2 and uROS for underwater and surface vehicles	Mr. Koay Teong Beng/ Dr. Alivelu Manga P	EEE
36	2017A3TS0587H	Nirmit Deshpande	Review of in situ and operando methods for energy storage and conversion, with a focus on materials for batteries	Prof. Yuzhang Li/ Dr. Parikshit Sahatiya	EEE
37	2016B3A30450H	Tarun Garg	Developing and using knowledge graphs along with Deep Learning Algorithms to improve the information extraction process from clinical or health-related text	Dr. Amit Sheth/ Dr Surya Shankar Dan	EEE
38	2016B4A70519H	Harivallabha Rangarajan	GPU Parallelizable Automatic Differentiation of a in-house Meshfree Solver, in Julia	Dr. Anil Nemili	Mathematics
39	2016B4AA0515H	Harshit Agarwal	Machine Learning	Dr. Lov Kumar/ Dr. Debopam Chakraborty	Mathematics
40	2016B4A10513H	T Rahul Raju	I would like to pursue my thesis work in the field of cosmology relating to the mathematical models of Einstein's theory of general relativity and modified gravity.	Prof. P.K. Sahoo	Mathematics
41	2016B4AA0498H	Vaibhav Bhasin	Working on Recurrent Neural Networks and NLP. Taking a large dataset of text streams belonging to a certain topic and analysing the patterns	Prof. V. Haragopal	Mathematics
42	2016B4A80535H	Archana S	3D reconstruction of humans from 2D image supervision.	Prof. Aljosa Smolic/ Dr. Manish Kumar	Mathematics
43	2017A4TS0375H	Urjit Lad	Thermal Coolant System Design and Energy Management of Li-ion Battery Pack using a Phase-change Material	Prof. Jeevan Jaidi	Mechanical Engineering
44	2017A4TS0707H	Arjun Singh	Quantum kinetic modelling of reacting rarefied hypersonic flow over backward facing step	Dr. KRC Murthy	Mechanical Engineering
45	2017A4TS0674H	Mohammed Azizur Rehman	Optimization based approach for motion planning from UAV imagery	Dr. Arshad Javed/ Prof. YVD Rao	Mechanical Engineering
46	2017A4TS0216H	S Aditya Karthik	Modelling and Simulation of Computational Thermo-Fluid Dynamics related to Rarefied Gas Flows	Dr. Manuel Torrilhon/ Dr. KRC Murthy	Mechanical Engineering
47	2017A4TS0480H	Amrith K	Design and assembly of mini excavator and conceptualisation of E.V. based mini excavator	Mr. Bharat Anantha/Dr. Kurra Suresh	Mechanical Engineering
48	2017ABTS1332H	Shardul Tamane	Operations management strategy for streamlining of operational process along with study of	Mr. Ramakrishna Yeeramalli/ Dr. Ravi Shankar V	Mechanical Engineering

S.No	Student ID	Student Name	Title of Thesis	Supervisor	Department Name
			operations research papers and innovative supply chain papers		
49	2016A5TS0728H	Chaiti Chatterjee	Value creation in mergers & acquisitions deals involving pharmaceutical industries in India and the subsequent response of the consumers.	Dr. Balaram Ghosh/ Dr. Nivedita Sinha	Pharmacy
50	2016B5A10604H	Himanshu Achra	Nanoplasmonics	Prof. Amit Nag/ Prof. Kannan Ramaswamy	Physics
51	2016B5A30468H	Nikhil Gupta	Mathematical Physics	Dr. Shashideep Gutti	Physics
52	2016B5A70579H	Vishwangi Shah	Astronomy	Prof. Sarmistha Banik	Physics
53	2016B5A80570H	Amit Mishra	Cosmology	Dr. Rahul Nigam	Physics

LIST OF HIGHER DEGREE DISSERTATION COMPLETED DURING THE YEAR 2020

Second Semester 2019-2020

S.No	ID Number	Name	Supervisor	Title	Monitoring Department
1	2018H1290001H	SANCHEZ PREETHI E	Dr. Trinath Jamma	Study the impact of PRR triggered ER stress signaling pathway-associated inflammation	Biological Sciences
2	2018H1290002H	RAHUL KUMAR	Dr. Gireesha T M	Bioencapsulation of Cholera Toxin B (CTB) - fused Musculus IL-22 in Nicotiana benthamiana using TRBO vector system for oral delivery	Biological Sciences
3	2018H1290003H	POOJA V CHANDRAN	Dr. Ruchi Jain Dey	Development of a rapid diagnostic method for detection of pathogens in wound infection	Biological Sciences
4	2018H1290004H	SOURAV DEBSARMA BISWAS	Dr. P Sankar Ganesh	Design and fabrication of Lab scale MBBR and its performance evaluation using GPS-X 8.0	Biological Sciences
5	2018H1290005H	MURALI KRISHNA RAMGOPAL	Dr. Vidya Rajesh	Cloning, expression and purification of Plasmodium vivax Rhoptry neck protein 2 using different heterologous expression systems.	Biological Sciences
6	2018H1290006H	SUDHIRA CHAMARTY	Dr. Ramakrishna Vadrevu	Identifying potential inhibitors for amyloid formation by a β peptide (1-42) implicated in Alzheimer's Disease	Biological Sciences
7	2018H1290007H	SRINJOY ROY	Dr. P Sankar Ganesh	Studies on source, occurrence, and toxicity of microplastics in landfill leachate	Biological Sciences
8	2018H1290008H	AKASH ARORA	Dr. Jayati Ray Dutta	Cloning and characterization of thermophilic lipase derived from Bacillus licheniformis	Biological Sciences
9	2018H1290009H	SAKHARE KALYANI RAJESH	Dr. Kumar Pranav Narayan	Synthesis of plant based nanoparticles for antimicrobial and anticancer activity of the oral cavity	Biological Sciences
10	2018H1290010H	SHREYA SINGH	Dr. Naga Mohan Kommu	Expression, Purification and characterization of Mouse LIF protein	Biological Sciences
11	2018H1290011H	SNEHASRI MOTAMARRY	Dr. Gireesha T M	Cloning rice 45S ribosomal DNA using pBeloBAC-Kan: pUC57 vectors and literature review on expression of non-plant proteins in plant systems.sss	Biological Sciences
12	2018H1290012H	NAGA SAI SRITEJA BOPPUDI	Dr. Jayati Ray Dutta	Exploratory studies of microbial derived Nitroreductase from Escherichia coli k-12 for potential biological activities	Biological Sciences
13	2018H1290013H	SUCHARITA BANERJEE	Dr. Piyush Khandelia	Generation and characterization of an oral cancer cell line for recombination based rapid transgenesis	Biological Sciences
14	2018H1290014H	ANUVA R	Dr. Vivek Sharma	Screening for hypoxia induced circular RNAs expression in solid tumours	Biological Sciences
15	2018H1290015H	ANUSHKA GUPTA	Dr. Vidya Rajesh	Cloning , expression and purification of plasmodium vivax rhoptry neck protein using different heterologous expression systems	Biological Sciences
16	2018H1290016H	AKSHAYA V P	Dr. Kumar Pranav Narayan	Liposome mediated gene delivery system	Biological Sciences
17	2018H1290017H	HARIPRIYAA T	Dr. Ruchi Jain Dey	Development of rapid diagnostic method for the detection of pathogen in neonatal sepsis	Biological Sciences

S.No	ID Number	Name	Supervisor	Title	Monitoring Department
18	2018H1290018H	KAVAL REDDY PRASASVI	Dr. Naga Mohan Kommu	Cellular Localization Studies DMAP wild type and mutant proteins	Biological Sciences
19	2018H1290019H	TABINA MUSTAFA	Dr. Vivek Sharma	Cloning and characterization of novel long-non coding RNAs in brain tumor	Biological Sciences
20	2018H1290020H	JAGNASENI BARMAN	Dr. Sridev Mohapatra	To study the interaction between A.thaliana and P,putida AKMP7, in rhizobacterial strain known to cause conditional pathogenesis	Biological Sciences
21	2018H1010021H	SUPRIYA B	Dr. Vikranth Kumar Surasani	lattice boltzmann simulation to study film effects duringisothermal drying of square capillary tube	Chemical Engineering
22	2018H1010022H	MEGHANA KOTLA	Dr. Nandini Bhandaru	PATTERN DIRECTED ORDERING OF DEWETTING IN ULTRA THIN POLYMER FILMS	Chemical Engineering
23	2018H1010024H	PAKALA HIMAVARSHA	Dr. Vikranth Kumar Surasani	Geological sequestration of CO_2 using reactive transport modelling	Chemical Engineering
24	2018H1010025H	SHRADHA RAMESH	Dr. D. Purnima	Preparation of nanocellulose using biological routes and its application	Chemical Engineering
25	2018H1010026H	NILANJANA PANDA	Dr. Satyapaul Singh	Morphologically tuned nanoparticles synthesis for environmental and energy applications	Chemical Engineering
26	2018H1010028H	IPSITA SAHOO	Dr. Ramesh Babu A	Synthesis and characterization of nanocellulose from wood pulp	Chemical Engineering
27	2018H1010029H	SUNETRA VENKAT CHITURU	Dr. Angan Sen Gupta	Two Dimensional Modelling of Rising Thermal Jet Plume	Chemical Engineering
28	2018H1300054H	MALAVIKA JAYAKUMAR	Dr. Prasanta Kumar Sahu	Investigation of Trip satisfaction determinants: A case study of New Delhi, India	Civil Engineering
29	2018H1300057H	RAHUL REDDY B	Dr. Bandhan Bandhu Majumdar	Crumb Rubber Modified Bitumen for Sustainable Cold Transportation	Civil Engineering
30	2018H1300058H	LOMTE APARNA BHIMRAO	Dr. V Vinayaka Ram	Establishment of Lane Distribution Factor for Divided Highways	Civil Engineering
31	2018H1300059H	MULLAGIRI HEMANTH	Dr. Bandhan Bandhu Majumdar	Developing Congestion Pricing Schemes for Hyderabad City	Civil Engineering
32	2018H1300063H	ADARSH RAJ SRIVASTAVA	Dr. Sridhar Raju	Evaluation of Performance of Thin layer SMA using Waste Plastic as an Overlay Layer	Civil Engineering
33	2018H1300066H	DANAM VENKATA AKHILESH	Dr. Sridhar Raju	Analysis of Characterstics of Reclaimed Asphalt Pavement With Styrene-Butadiene-Styrene Polymer Modified Bitumen	Civil Engineering
34	2018H1430030H	GAVIN FRANCIS	Dr. Anasua GuhaRay	Mathematical Modelling of slopes using Chemically Treated Jute and Bermuda Grass	Civil Engineering
35	2018H1430039H	PUSAPATI S S JAGANNADHA VARMA	Dr. Arkamitra Kar	Determination of The Mechanical Efficiency of Building Derived Materials as Coarse Aggregates in Concrete	Civil Engineering
36	2018H1430042H	VISHNU V SUKUMAR	Dr. Bahurudeen A	Service Life Prediction of Concrete Structures Containing Sugar Industry Secondary By-Product	Civil Engineering
37	2018H1430047H	KOKKONDA SAI KIRAN	Mr. K Ravi Kumar Dr. Arkamitra Kar	Research and Analysis of Latest Construction Practices in the Soil Stabilization for Excavation of High Rise Structure Projects	Civil Engineering
38	2018H1430050H	SISTLA SAITEJA	Dr. Mohan S C	Finite Element Modelling of Fibre Reinforced Elastomeric Isolators Using Locally Available Material	Civil Engineering
39	2018H1430051H	ANSUMAN PANDA	Dr. Bahurudeen A	Rheological Study of concrete for high rise building pumping operation	Civil Engineering
40	2018H1030094H	KEVIN JUDE CONCESSAO	Dr. Chittaranjan Hota	Defeating return oriented programming using Uprobes	CS&IS

S.No	ID Number	Name	Supervisor	Title	Monitoring Department
41	2018H1230204H	SAPPATI ROHIT	Dr. Parikshit Sahatiya	SnS-WS2 Quantum Dot Hybrid based large area flexible UV Photo Detector	Electrical and Electronics Engineering
42	2018H1230211H	AYUSHI DUBE	Dr. Soumya J	RISC-V Based Network-on-Chip Architecture	Electrical and Electronics Engineering
43	2018H1060164H	SHAH DIVYA RAJENDRA	Mr. Gnana Gandhi Vasudevan Dr. N. Suresh Kumar Reddy	Regenerative Cooling Analysis for LOX/Methane Liquid Rocket Engine (LRE)	Mechanical Engineering
44	2018H1060169H	SHANBHAG RAHUL GOVINDRAY	Dr. Y.V.D. Rao	Design and analysis of automated degasser for pharmaceutical application	Mechanical Engineering
45	2018H1060174H	MANSI SAINI	Dr. S.S. Deshmukh	Study on Nanoparticles Embedded PCM for heating application of buildings	Mechanical Engineering
46	2018H1060175H	RAMANATHAN P	Dr. Y.V.D. Rao	Design and analysis of automated pill weight checking device	Mechanical Engineering
47	2018H1060176H	KRISHNA DUTT PANDEY	Dr. C.P. Kiran	Heat transfer modelling of cold water mist of the cutting zone using FSI model for AISI 4340 steel	Mechanical Engineering
48	2018H1410127H	SANA GANESH	Dr. Amrita Priyadarshini	Multi objective optimization of titanium alloy composition for Bio-Medical Application	Mechanical Engineering
49	2018H1410128H	T SAI AKHIL	Dr. Brajesh Kumar Panigrahi	Dynamic analysis of single point cutting tool.	Mechanical Engineering
50	2018H1410129H	VIPUL AGRAWAL	Dr. N Suresh Kumar Reddy	To study dynamic response of aluminium honeycomb sandwich panel subjected to air blast.	Mechanical Engineering
51	2018H1410135H	AYUSH MORCHHALE	Dr. Nitin Kotkunde	Warm forming behaviour of IN625 alloy: Experimental investigation, theoretical and numerical prediction.	Mechanical Engineering
52	2018H1410136H	AYUSH KUMAR	Dr. G. R. Sabaresh	Effectiveness of periodicity in a frame and isolation of VEM in periodic holes for vibration attenuation	Mechanical Engineering
53	2018H1410137H	REVANTH GORRIPATI	Dr. Brajesh Kumar Panigrahi	Active Vibration control of beams using Piezoelectric patches.	Mechanical Engineering
54	2018H1410140H	PIYUSH DHANDE	Mr. Amardeep Srivatsavya Dr N. Suresh Kumar Reddy	Design and structural analysis of solid rocket motor component	Mechanical Engineering
55	2018H1410146H	SHREYAS N	Dr. K. R.C. Murthy	Development of fluid-structure Interaction Program for 2d Shell Elements	Mechanical Engineering
56	2018H1480184H	LAGAN PATHAK	Dr. R. Parameshwaran Dr. S S Deshmukh	Experimental Study of MPCM Slurry for Cooling Application	Mechanical Engineering
57	2018H1480187H	BONU PRANEETH	Dr. K. Supradeepan	CFD Analysis of lobed mixed wind turbine.	Mechanical Engineering
58	2018H1480195H	ABHISHEK BARUN SWAIN	Dr. Santanu Prasad Datta	Increasing the energy efficiency of the bricks by addition various waste organic materials like sawdust and palm fiber	Mechanical Engineering
59	2018H1460231H	GADEELA PRADEEPTHA REDDY	Dr. Akash Chaurasiya	Design and development for liposomal carrier system bearing anticancer drug	Pharmacy
60	2018H1460236H	BOLLAREDDY SRIVARSHA REDDY	Dr. Arti Dhar	5 Fluorouracil and Etodolac co-encapsulated liposomes for targeted drug delivery: A novel Nanomedicine based combinational cancer chemotherapy for Ovarian cancer"	Pharmacy

S.No	ID Number	Name	Supervisor	Title	Monitoring Department
61	2018H1460244H	K VANDANA	Dr. Arti Dhar	5 Fluorouracil and Etodolac co-encapsulated liposomes for targeted drug delivery: A novel Nanomedicine based combinational cancer chemotherapy for Ovarian cancer"	Pharmacy
62	2018H1460250H	T PRANATHI	Dr. Akash Chaurasiya	Design and development of anticancer Drug loaded nanoparticles	Pharmacy

First Semester 2020-2021

S.No	ID Number	Name	Supervisor	Title	Monitoring Dept
1	2019H1010001H	VIPIN KB	Dr. Srikanta Dinda	Cracking of Hydrocarbon fuel and estimation of thermodynamic properties under supercritical conditions	Chemical Engineering
2	2019H1010002H	CHILLA SAI SRI VASTAV	Dr. D Purnima Dr. Nandini Bhandaru	Superhydrophobic coatings and surfaces based on nanocellulose: Fabrication, Properties and Durability Studies	Chemical Engineering
3	2019H1010004H	ANKITA AGARWAL	Dr. I Sreedhar	Simulated biosorption of Cu(II) by Olive Stone in Continuous process	Chemical Engineering
4	2019H1010005H	ERRIKIPALLY MALLIKARJUN	Dr. Ved Prakash Mishra	Hydrocyclone: Design and Flow Characteristics	Chemical Engineering
5	2019H1010006H	LAKSHMI DEVI VOLETI	Dr. Vikranth Kumar Surasani	Influences of different subsurface stratigraphic folds on the residual trapping and structural integrity during Co_2 geological sequestration	Chemical Engineering
6	2019H1010007H	SOPHIA PATEL	Dr. Nandini Bhandaru	Theoretical study of Instability and Dewetting in Polymer thin films	Chemical Engineering
7	2019H1300067H	GREENA MARIA SUNNY	Dr. Sridhar Raju	Assessment of Thermal Degradation of Polymer in Bio-Based Agar Coated SBS Modified Binder	Civil Engineering
8	2019H1300068H	REVELLI VENKATSUSHANTH	Dr. Sridhar Raju	Mitigation of Top down Cracking in Flexible Pavements due to non unform contact Stresses	Civil Engineering
9	2019H1300551H	APARNA JOSHI	Dr. Prasanta Kumar Sahu Dr. Bandhan Bandhu Majumdar	Last Mile Delivery in Freight Transportation	Civil Engineering
10	2019H1430169H	ANKITA BARMAN	Dr. Chandu Parimi Dr. Sridhar Raju	Mitigation of Stress-strain in Tire Pavement Interaction Using Finite Element Method	Civil Engineering
11	2019H1430569H	RITHUPARNA R	Dr. Bahurudeen A	Cleaner Production of Agro-waste Residual Ashes Blended Cement	Civil Engineering
12	2019H1430571H	MANSI TRIVEDI	Dr. Chandu Parimi Dr. Vasan Arunachalam	Topology Optimization of Shell Structures Using Machine Learning	Civil Engineering

BITS Pilani

annual
report 2020

Part B4: Dubai Campus

CONTENTS

BITS PILANI, DUBAI CAMPUS

B4. HIGHLIGHTS FOR THE YEAR 2020

Dubai Campus

1. In Feb 2020, BPDC participated in the largest experiential tech festival which was held to gather tech startups, investors, entrepreneurs, and influential speakers across tech, finance, digital, health and a wide range of industries.

2. BPDC jointly emerged as overall champions along with the Gulf Medical University – Ajman at their 19th annual inter-university sports festival in Feb 2020.

3. BPDC participated in a Research Challenge conducted by The UAE's Federal Competitiveness and Statistics Authority (FCSA), in collaboration with the Ministry of Education and the Ministry of Economy from Jan to May 2020.

4. BPDC welcomes back students with 4 Awards in 4 different countries at the Techstars Startup Weekend Covid Edition 2020 held in April 2020.

5. BPDC wins the Excellence Award for Outstanding Chapter Activities.

6. BPDC wins at the Techstars Online Startup Weekend Dubai, COVID Edition 2020, held in April 2020.

7. BPDC stood at the 1st place at the Startup Incubation Program 2020, organized by STARTAD.

8. BPDC secures the 3rd place at the NYUAD 2020 Hackathon conducted in April 2020.

9. At Schneider Electric Go Green 2020 - the World's Biggest Global Student Competitions for Sustainability Startups, BPDC has won the UAE, the MEA Finals.

10. BPDC participates in the TiE Young Entrepreneur University Pitch 2020 held in June 2020.

11. BPDC won the ThoughtWorks Social Hackathon 2020, conducted by LetsEndorse, eKonnect and Social Alpha in June 2020.

12. BPDC secured the 1st Prize at the event and have been recognized as 'Spotlight 2020 Star of Tech-Zest' conducted by University of Stirling, UAE in June,2020.

13. BPDC took the second place at the INSEAD UAE- Crack the Crisis Challenge held in July,2020.

14. BPDC Student secured Silver Honour in the Middle East (Gulf region) and was ranked among Top 7% globally in 2020's edition of "International Astronomy and Astrophysics Competition", IAAC 2020.

15. BPDC holds the 3rd Place at the Confederation of Global Innovators' Hack-A-Health Hackthon 2020, concerning the impact of COVID-19 and proposing solutions for the same.

16. BPDC takes the 1st Place and 2nd Place at the 10th International Science Conference, organized by the World Science Congress by their excellent performance in the Extempore Speech Competition in the Group E (College/University) held on 30th August 2020.

17. In Aug 2020, BPDC signed MOU with VEGGITECH, UAE to foster research collaborations in the areas of smart agriculture, photobioreactor, and artificial intelligence applied to agriculture.

18. Adithya Praveen (IV year CSE) have secured the bronze position at the Jina X Virtual Hackathon 2020 held from 18th to 20th September 2020 presented by AngelHack, among 700 participants competing worldwide along with a monetary award of $500 for the same. Jina Ai is a neural search company. This means that anyone can use their tools to build a search engine like Google, but you can search using videos, gifs, audio, and not limited to using just text. He presented "CovFeFake", a Covid fake news detector built using the Jina API. Github Project Page: Github Repository

19. BPDC won the James Dyson Award UAE 2020, an international design award that celebrates, encourages and inspires the next generation of design engineers

20. BPDC won the "Covid-19 Challenge presented by Google Cloud" at HackNC 2020, conducted by the University of North Carolina, USA.

21. BPDC participated in the Future Entrepreneur Awards organised by the Abu Dhabi Chamber of Commerce and Industry (ADCCI) in October 2020 and emerged as winner under the Best Technical Project Category.

22. BPDC wins the First Prize at the Maintenance 4.0 Hackathon, which was organised by the Thales Group and Hub71 in October 2020.

23. Research by BPDC was selected for Students Innovations for Translation & Advancement of Research Explorations (SITARE) - Gandhian Young Technological Innovation (GYTI) Award 2020.

24. BPDC wins the first prize at the Marketing Pitch and Poster Competition organized by University of Bolton, Ras Al Khaimah, UAE in Nov,2020.

25. In 2020, at MANTRA, BPDC brought in awards for various categories.

B4.1 SENIOR OFFICERS

<div align="center">

DIRECTOR

Prof. Dr. R. N. Saha

</div>

1. Prof. KUMAR KARUPPUSAMY, Associate Dean - Academic – Undergraduate Studies

2. Prof. RAMANUJAM KARTHIKEYAN, Associate Dean - Academic - Graduate Studies and Research

3. Prof. SOMASUNDARAM ARUMUGAM, Associate Dean - Practice School

4. Prof. PRITI BAJPAI – Associate Dean – Student Welfare

5. Prof. KRISHNA KUMAR SINGH – General Manager BITS Pilani FZ LLC

6. Mr. AKSHAY CHUTANI, Assistant Registrar.

　 (Details are given in Annexure B4-1)

B4.2 ADMISSIONS

Admissions were made twice during the year 2020, in January 2020 for the second semester 2019-2020 and in September 2020 for the first semester 2020-2021 (Details are given in Annexure B4-2). The admission summary is given below:

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (Ph.D.)	Total
Second Semester 2019-2020	3(0)	9(4)	8(3)	20(07)
First Semester 2020-2021	241(72)	23(6)	10(7)	274(85)

Number of female students is given in brackets.

B4.3 DUAL DEGREES AND TRANSFER

(a)　Dual Degree

During the academic year 2019-2020, no student registered for two first degrees under Dual degree Scheme. (See Annexure B4-3).

(b)　　Transfer

During the academic year 2019-2020, 10 students were permitted to transfer within First degree. (Details are given in Annexure B4-3).

B4.4 ACADEMIC CALENDAR

During the Calendar year 2020, the Second Semester 2019-2020 started on 19.01.2020 and ended on 09.06.2020. The First Semester 2020-2021 started on 14.09.2020 and will end on 07.01.2021. The Second Semester 2019-2020, PS II started on 19.01.2020 and ended on 02.07.2020. The Summer Term 2019-20 started on 10.06.2020 and ended on 05.08.2020. Also PS I started on 10.06.2020 and ended on 05.08.2020. The First Semester 2020-2021, PS II started on 20.07.2020 and will end on 07.01.2021.

	Starting Date	Ending Date	Number of Instruction days
Second Semester 2019-2020	19/01/2020	09/06/2020	81
Summer term 2019-2020	10/06/2020	05/08/2020	40
First Semester 2020-2021	14/09/2020	07/01/2020	74

B4.5 REGISTRATION OF STUDENTS

The registration for the second semester 2019-20 was held on 19th January 2020 and that of the first semester 2020-21 was held on 14th September 2020. In on-campus programmes, 1206(420) students were registered in the first semester 2020-2021. Details of registration for the first semester 2020-2021 are given in Annexure B4-4.

	Number of students registered
Second Semester 2019-2020	1260(461)
Summer Term 2019-2020	203(79)
First Semester 2020-2021	1206(420)

B4.6 ACADEMIC COUNSELING BOARD (ACB)

During the year 2020, the Academic Counseling Board estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

		I Semester 2019- 2020	II Semester 2019- 2020
1.	Total number of students under the purview of ACB at the beginning of the semester	**77**	**87**
2.	No. of students declared out of its purview at the end of the semester	19	40
3.	No. of students who left the institute during the semester	04	04
4.	No. of students who came under the purview of ACB at the end of the semester	54	43
5.	No. of students new students referred to ACB at the end of the semester	33	14
6.	Total No. of students under the purview of ACB during the next semester	87	57

B4.6.1 Academic Counseling Cell (ACC)

Academic Counseling Cell (ACC) consisting of faculty and Student Counselors facilitates counseling services for students' who need counseling with prior appointment with a counselor. Counseling services are confidential services to the students. Also if necessary, a Professional Counselor (PC) is arranged.

B4.7 AWARD OF DEGREES AND MEDALS

B4.7.1 Award of Degrees

During the year 2020, 357 degrees were awarded as given below: Statistical details of these degrees are given in Annexure B4-5, B4-6 and B4-7.

	Number of Degrees Awarded
86th Award (vide Board of Governors meeting – 10th Feb 2020)	**44(16)**
87th Award (vide Board of Governors meeting – 13th Aug 2020)	**313(125)**
Total	**357(141)**

B4. 7.2 Award of Medals

(i)   Institute Medals for Academic Year 2019-2020

List of students for award of medals from amongst the students graduated at the end of first semester, second semester 2019-2020 and summer term 2019- 2020.

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 317)						
1.	2016A7TS0006U	KELVIN PIETY DECOSTA	M	9.98	FIRST	GOLD
2.	2016A7TS0005U	LALITHA NATRAJ	F	9.95	SECOND	SILVER
3.	2016A9PS0155U	MYMUNA ASHNA	F	9.92	THIRD	BRONZE

(ii)   Director's Medals for the Best All Round Achievement

In addition to the Institute Medals, at Dubai Campus Director's medals are awarded to one male and one female student for the best all-round achievement, in every graduating batch. This medal is purely based on the year round performance of the graduating batch students. Due to the global pandemic & COVID 19 lockdown, the year round achievement could not be evaluated for the 2020 graduating batch hence the Director's medals were called off.

B4.8 CAMPUS INTERVIEWS AND PLACEMENT

Efforts were made this year to have more and more industries visit the campus for placement interviews. Despite Covid situation and economic slowdown in Dubai, 105 organizations conducted campus interview and made offers to students (Details are given in Annexure B4-8).

Number of companies which conducted campus interviews	105
No. of students interviewed	240
No. of offers made	105

Employed / Higher Studies of Graduates during the Year 2020

Programme	Number Graduated	Students Registered	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
On-Campus Programme					
B.E. (Hons.)					
Chemical	35	18	13	5	17
Electrical & Electronics	22	10	6	4	12
Mechanical	69	36	28	8	33
Computer Science	127	61	33	28	66
Civil	17	7	3	4	10
Biotechnology	18	9	6	3	9
Electronics & Communication	29	15	9	6	14
M.E Software Systems	8	5	3	2	3
M.E Design	7	4	2	2	3
MBA	15	4	2	2	11
M.E Electrical	4	1	0	1	3
Total	**351**	**170**	**105**	**65**	**181**

B4.9 COURSES OFFERED

The number of courses offered during the year 2020 is as follows:

	Number of courses offered
Second Semester 2019- 2020	223
Summer Term 2019 – 2020	07
First Semester 2020 – 2021	222

B4.9.1 Project-oriented Courses

During this year 2020, many students worked on time-bound projects of various types. The information about the projects done and the names of the students who worked on the projects and the names of the instructors are given in Annexure B4-9. A statistical summary is given below:

S.No.	Course No.	Course Title	No. of Students	
			II SEM 2019-20	I SEM 2020-21
1	BIOT F266	STUDY PROJECT	11	5
2	BIOT F366	LABORATORY PROJECT	8	8
3	BIOT F367	LABORATORY PROJECT	9	6
4	BIOT F376	DESIGN PROJECT	2	4
5	BIOT F377	DESIGN PROJECT	-	1
6	BIOT F491	SPECIAL PROJECT	-	3
7	CE F266	STUDY PROJECT	6	2
8	CE F366	LABORATORY PROJECT	1	2

S.No.	Course No.	Course Title	No. of Students	
			II SEM 2019-20	I SEM 2020-21
9	CE F367	LABORATORY PROJECT	1	-
10	CE F376	DESIGN PROJECT	6	2
11	CE F377	DESIGN PROJECT	1	-
12	CHE F266	STUDY PROJECT	-	3
13	CHE F366	LABORATORY PROJECT	9	2
14	CHE F376	DESIGN PROJECT	-	1
15	CHE F377	DESIGN PROJECT	1	-
16	CHEM F266	STUDY PROJECT	2	1
17	CHEM F366	LABORATORY PROJECT	1	-
18	CHEM F367	LABORATORY PROJECT	1	-
19	CHEM F376	DESIGN PROJECT	1	-
20	CS F266	STUDY PROJECT	24	10
21	CS F366	LABORATORY PROJECT	2	5
22	CS F367	LABORATORY PROJECT	-	1
23	CS F376	DESIGN PROJECT	26	42
24	CS F377	DESIGN PROJECT	14	7
25	CS F491	SPECIAL PROJECT	1	2
26	ECE F266	STUDY PROJECT	2	1
27	ECE F366	LABORATORY PROJECT	2	1
28	ECE F367	LABORATORY PROJECT	-	1
29	ECE F376	DESIGN PROJECT	9	8
30	ECE F377	DESIGN PROJECT	2	1
31	EEE F266	STUDY PROJECT	3	1
32	EEE F366	LABORATORY PROJECT	-	2
33	EEE F376	DESIGN PROJECT	2	2
34	EEE F377	DESIGN PROJECT	3	2
35	HSS F266	STUDY PROJECT	16	19
36	INSTR F376	DESIGN PROJECT	2	2
37	MATH F266	STUDY PROJECT	7	6
38	MATH F376	DESIGN PROJECT	4	-
39	MATH F491	SPECIAL PROJECT	1	-
40	ME F266	STUDY PROJECT	7	10
41	ME F366	LABORATORY PROJECT	3	6
42	ME F367	LABORATORY PROJECT	5	-
43	ME F376	DESIGN PROJECT	13	13
44	ME F377	DESIGN PROJECT	6	6
45	PHY F266	STUDY PROJECT	1	3
46	PHY F377	DESIGN PROJECT	1	1

B4.9.2 New courses

During the year 2020, the following new courses were offered.

S.No.	Course No.	Course Name	Enrolled
1	AN F312	AIRCRAFT PROPULSION	18
2	BITS G539	RESEARCH PROJECT II	1
3	HSS F235	INTRODUCTORY PHILOSOPHY	54
4	HSS F371	INTRO. TO SOCIAL PSYCHOLOGY	23
5	MBA G546	BUSINESS STATISTICS	9
6	MBA G547	ACCOUNTING FOR MANAGERS	8
7	MBA G548	STRATEGIC MARKETING	8
8	MBA G549	INTRO. TO SYS. & SUSTAINABILIT	8
9	MBA G557	ECON. ENVIRONMENT OF BUS.	8
10	MBA G558	OPS. & SUPPLY CHAIN MGMT	8
11	MBA G564	DECISION MAKING	1
12	MF F418	LEAN MANUFACTURING	1

B4.10 INSTITUTIONAL ACTIVITIES

B4.10.1 Convocation 2020

In line with the directives of Knowledge and Human Development Authority, Government of Dubai, to prevent the spread of Covid-19, the Convocation event for the year 2020 was not held at BITS Pilani, Dubai Campus. Degrees of the Graduating bach were dispatched on the request of the respective students.

B4.10.2 Workshops and Conference

Following workshops were conducted by various departments during the Academic Year 2019-2020

1. Online International Workshop on Data Science and Machine Learning for Academicians and Researchers jointly organized by Knowledge Consortium of Gujarat (KCG) and Research and Publication Divison, Rashtriya Raksha University, Gandhinagar (Gujarat, India).Date: 7th November 2020. Topic: Current Advances in ML,AI and IoT.

2. Keynote address in 8th International Conference on Innovations in Computer Science and Engineering (ICICSE-2020), an online virtual conference, Guru Nanak University, in collaboration with Guru Nanak Institute of Technical Campus and Guru Nanak Institute of Technology. Keynote Speech on "Advancements in the field of Artificial Intelligence

3. Keynote address in International Webinar on "Impact of Digital Threats and Cyber Risks during Covid-19. Organized by Department of Computer Science, Sophia Girls' College (Autonomous), Ajmer, Rajasthan.Date: "A talk on Digital Threats and Cybercrimes during Covid-19.

4. Invited speaker in Global Lecture Series conducted by S.S.L.N.T. Mahila Vidyalaya, Dhanbad held on 29th July 2020. Topic: Impact of Artificial Intelligence on Business

5. Invited lecture on topic "Simulation of water balance under climate change" at Indian Institute of Technology Indore. 3 Weeks Online Training Programme on "Hydrometeorological and Extreme Events Disaster Risk Management" by IIT Indore and National Institute of Disaster Management (NDMI), New Delhi.

6. Invited speaker at Exploring molecular interactions: from sorption in (non-)porous media to surface effects symposium held as a part of CMD2020 organized by European Physical Society in Sept 2020

7. Invited speaker on topic Computational Biology and Chemistry at BITS Pilani Global meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives

8. Invited lecture on "Research in Economics: An Overview" to Masters and PhD students of Sarla Anil Modi School of Economics, NMIMS, Mumbai, India

9. AICTE AQIS sponsored STTP on "Advances in Additive Manufacturing" Organized by Siemens Centre of Excellence for Digital Manufacturing and Robotics, Department of Mechanical Engineering YCCE, Nagpur, 22 July 2020. (Invited Speaker)

10. S. Vincent, "Bulk Metallic Glasses and its Applications", FDP on Recent Trends in Materials Science, 12-16th Oct 2020, GMRIT , India (Invited Speaker)

11. Naveen Shrivastava, "Introduction to Fuel Cells", Three Days Online Faculty Development Programme (FDP) on Renewable Energy – A Future Prospectus, Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik, India, September 4, 2020. (Invited Speaker)

12. Asia-Pacific Space Generation Online Workshop, held Virtually, during 5th-6th December 2020.

13. Virtual Inertia Support in the microgrid, its research challenges and its technology potentials in recent years." as part of One Week International Faculty Development Program organized by GMR Institute of Technology, INDIA

14. International Webinar on future trends in mobile communications on 03 July 2020 at Mohamed Sathak Ploytecnic College,Kilakkarai,Tamil Nadu,India.

15. "Temporal Pattern matching using ANN," in One Week short term AICTE sponsored training programmee, on 21th - 26th Sep, 2020, organized by Department of ECE, Mahatma Gandhi Institute of Technology, Hyderabad, India.

16. "New Challenges and issues of Indian Electricity market for upcoming decade 2030," in One Week Faculty Development Programme (FDP), on 11th - 15th May, 2020, organised by MSEDCL, Nashik, Maharashtra and Sandeep Institute of Technology and Research Center, Nasik, Maharashtra, India.s

Following Conferences were conducted by various departments during the Academic Year 2019-2020

1. An Efficient Replica Management Based Disaster Recover Using Elephant Herding Optimization Algorithm

2. Blind Feature-Based Steganalysis with and Without Cross Validation on Calibrated JPEG Images Using Support Vector Machine

3. Android App Success Prediction based on Reviews

4. 2-way Arabic Sign Language Translator using CNNLSTM Architecture and NLP

5. Multi-Angle Parking Detection System using Mask R-CNN

6. Early Detection of Locust Swarms Using Deep Learning

7. Image Captioning Using Gated Recurrent Units

8. Sentiment Analysis and Prediction of Point of Interest-Based Visitors' Review

9. Design and Implementation of Night Time Data Acquisition and Control System for Day and Night Glow Photometer

10. Small Embed Cross-validated JPEG Steganalysis in Spatial and Transform Domain Using SVM

11. Use of Artificial Intelligence for Health Insurance Claims Automation

12. Prediction of Stock Market Prices of Using Recurrent Neural Network—Long Short-Term Memory

13. Sales Prediction Using Linear and KNN Regression

14. Enhancing Image Caption Quality with Pre-post Image Injections

15. Identifying Exoplanets Using Deep Learning and Predicting Their Likelihood of Habitability

16. Bequest of RETE Algorithm for Rule Assessment in Context Database

17. Using Bootstrap Aggregating Equipped with SVM and T-SNE Classifiers for Cryptography

18. An Empirical Comparison of Generative Adversarial Network (GAN) Measures

19. Optimum Design of Flexible Pavements in the Presence of Uncertainty Using Subset Simulation

20. Cryptocurrency: Threat or Opportunity

21. The Role of Blockchain Technology in Financial Engineering

22. The Role of Technologies on Banking and Insurance Sectors in the Digitalization and Globalization Era—A Select Study

23. Tungsten as an Interconnect Material for NextGeneration IC Design

24. Novel Multi-logic gates using Quantum Dot Cellular Automata with energy dissipation analysis

25. Improved Brain Tumor Segmentation and Diagnosis Using an SVM-Based Classifier

26. Novel role of TBK1 in breast cancer EMT

27. Automated Grading of Diabetic Macular Edema Using Deep Learning Techniques

28. An Efficient Design of Multi-logic Gates Using Quantum Cellular Automata Architecture

29. Negotiating Deals Using Artificial Intelligence Models

30. FPGA Implementation of Random Feature Mapping in ELM Algorithm for Binary Classification

31. Investigating the Impact of BTI and HCI on Log-Domain Based Mihalas–Niebur Neuron Circuit

32. Analyzing the Impact of NBTI and Process Variability on Dynamic SRAM Metrics Under Temperature Variations

33. Real-Time Fog Removal Using Google Maps Aided Computer Vision Techniques

34. Time Series Prediction of Weld Seam Coordinates for 5 DOF Robotic Manipulator Using NARX Neural Network

35. Converter Efficiency Improvement of Islanded DC Microgrid with Converter Array

36. Star Schema-Based Data Warehouse Model for Education System Using Mondrian and Pentaho

37. Using Sentiment Analysis to Obtain Plant-Based Ingredient Combinations that Mimic Dairy Cheese

38. Performance and Emission Characteristics of Biodiesel from Rapeseed and Soybean in CI Engine

39. Application of Convolutional Neural Network for Classification and Tracking of Weld Seam Shapes for TAL Brabo Manipulator

40. Frustum CAM (FC) mechanism: Achieving differentiating feed in continuous production machines of non-similar parts

41. A numerical study on the influence of different tunnel lining insulation materials in a road tunnel fire

42. Development of novel formulation for high performance fire retardant cementitious mortars

43. Optimization of cooling time for polyethylene fusion joints

44. Torrefied materials derived from waste vegetable biomass

45. Finite element simulation on effect of bevel angle and filler material on tensile strength of 316L stainless steel/Monel 400 dissimilar metal welded joints

46. Optimization of tensile properties of 316L stainless steel and Monel 400weld joints using genetic algorithm

47. A micromechanical model to predict the viscoelastic response of syntactic foams

48. Processing, microstructure and mechanical characterization of a new magnesium based multicomponent alloy

49. Effect of hard facing processes on Mild steel A-36 by arc welding

50. Development and characterization of sisal and jute cellulose reinforced polymer composite

51. Thermodynamic modelling to optimize glass forming composition in multicomponent Zr-Cu-Co-Al system

52. Corrosion characterization zinc coated SS304 stainless steel

53. Molecular dynamics simulation of dehydration of salt hydrates ($MgSO_4 \cdot 7H_2O$ and $ZnSO_4 \cdot 7H_2O$)

54. Neural network for mechanical property estimation of multilayered laminate composite

55. Carcinoma Classification from Breast Histopathology Images Using a Multi Level Spatial Fusion Mechanism of Deep Convolutional Features from Differently Stain Normalized Patches

56. Comparative evaluation of the performance of rice bran and cotton seed biodiesel blends in VCR diesel engine

57. Modelling and simulation of hybrid technology in vehicles

B4.11 FACULTY PROFILE

There are 95 Faculty/ Academic staffs in BITS Pilani, Dubai Campus at the end of the first semester 2019-2020. Out of these, 75 are Lecturer and above, and 20 are Lab Instructors and Technical Assistants. Out of these 75 teaching faculty, 72 are Ph.D. holders with several years of teaching experience and 3 have appropriate Master's Degrees with several years of teaching experience. There are 1 Senior Professor, 13 Professors, 12 Associate Professors, 44 Assistant Professors, 3 Lecturers and 2 Visiting Faculty. There is a constant endeavor to add to the strength of the faculty appropriate to the requirements.

During the year, the teacher – student ratio was 1:13. The faculty has been intensely involved in all the facets of BITS, namely, teaching, research, Practice School, educational administration and institutional development.

Some Faculty Statistics

(i)	Percent of teaching staff (Lecturer & above) possessing Ph. D / made good progress towards Ph.D.	**96**
(ii)	Percent of teaching staff working for Ph.D (only lecturers).	**4**
(iii)	Percent of teaching staff who participated in Practice School Programme in the year	**35**

Faculty Development Programme

Technical contributions from faculty and students

There were a total of 57 contributions which include 28 international Journals, 29 in various Conferences and 7 Book Chapters Publications. The complete list of research contributions made by the faculty, staff and students is given in Annexures B4-11 and B4-12.

B4.12 SPECIAL LECTURES, INVITED LECTURES

Number of eminent scholars and distinguished alumni visited the campus and delivered lectures. Details are given in Annexure B4-10

B4.13 INTERNATIONAL / NATIONAL CONFERENCES / WORKSHOPS

Details are given above in **B4.10.2**.

B4.13.1 Invited Lectures/Workshop/Talks by Faculty:

The following faculty participated in Invited Lectures / Workshop /Talks / Panel Discussions / Chairing the session in International Conferences held during the year:

Date	Faculty	Topic	Timings
7th November 2020	Dr. Sujala D. Shetty	Online International Workshop on Data Science and Machine Learning for Academicians and Researchers jointly organized by Knowledge Consortium of Gujarat (KCG) and Research and Publication Divison, Rashtriya Raksha University, Gandhinagar (Gujarat, India).Date: 7th November 2020. Topic: Current Advances in ML,AI and IoT.	10:30AM-12:00PM (IST)
28th August 2020	Dr. Sujala D. Shetty	Keynote address in 8th International Conference on Innovations in Computer Science and Engineering (ICICSE-2020), an online virtual conference, Guru Nanak University, in collaboration with Guru Nanak Institute of Technical Campus and Guru Nanak Institute of Technology. Keynote Speech on "Advancements in the field of Artificial Intelligence	11:30AM-12:15PM (IST)
24th July 2020.	Dr. Sujala D. Shetty	Keynote address in International Webinar on "Impact of Digital Threats and Cyber Risks during Covid-19. Organized by Department of Computer Science, Sophia Girls' College (Autonomous), Ajmer, Rajasthan.Date: "A talk on Digital Threats and Cybercrimes during Covid-19.	4:15PM-4:45PM (IST)
29th July 2020	Dr. Sujala D. Shetty	Invited speaker in Global Lecture Series conducted by S.S.L.N.T. Mahila Vidyalaya, Dhanbad held on 29th July 2020. Topic: Impact of Artificial Intelligence on Business	2:40PM-3:00PM (IST)
Presented on 19 June 2020	Dr. Brij Kishor Pandey	Invited lecture on topic "Simulation of water balance under climate change" at Indian Institute of Technology Indore. 3 Weeks Online Training Programme on "Hydrometeorological and Extreme Events Disaster Risk Management" by IIT Indore and National Institute of Disaster Management (NDMI), New Delhi.	-
31st Aug 2020	Dr. Eldhose Iype	Invited speaker at Exploring molecular interactions: from sorption in (non-)porous media to surface effects symposium held as a part of CMD2020 organized by European Physical Society in Sept 2020	-

Date	Faculty	Topic	Timings
24th Oct 2020	Dr. Eldhose Iype	Invited speaker on topic Computational Biology and Chemistry at BITS Pilani Global meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives	-
21 September 2020.	Dr. Sartaj Rasool Rather	Invited lecture on "Research in Economics: An Overview" to Masters and PhD students of Sarla Anil Modi School of Economics, NMIMS, Mumbai, India	-
22 July 2020	Dr. Priyank Upadhyaya	AICTE AQIS sponsored STTP on "Advances in Additive Manufacturing" Organized by Siemens Centre of Excellence for Digital Manufacturing and Robotics, Department of Mechanical Engineering YCCE, Nagpur, 22 July 2020. (Invited Speaker)	12:30pm-2:00PM GST
16th Oct 2020	Dr. S. Vincent	S. Vincent, "Bulk Metallic Glasses and its Applications", FDP on Recent Trends in Materials Science, 12-16th Oct 2020, GMRIT , India (Invited Speaker)	11:00 AM-12.30 PM, IST
4 Sep 2020	Dr. Naveen Shrivastava	Naveen Shrivastava, "Introduction to Fuel Cells", Three Days Online Faculty Development Programme (FDP) on Renewable Energy – A Future Prospectus, Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik, India, September 4, 2020. (Invited Speaker)	-
5-6th December 2020	Dr. Shashank Khurana	Asia-Pacific Space Generation Online Workshop, held Virtually, during 5th-6th December 2020.	12:00PM-02:00PM GST
13-17th July 2020	Dr. Shazia Hasan	Virtual Inertia Support in the microgrid, its research challenges and its technology potentials in recent years." as part of One Week International Faculty Development Program organized by GMR Institute of Technology, INDIA	-
03 July 2020	Dr Abdul Raza	International Webinar on future trends in mobile communications on 03 July 2020 at Mohamed Sathak Ploytecnic College,Kilakkarai,Tamil Nadu,India.	-
21th - 26th Sep, 2020	Dr Vilas Gaidhane	"Temporal Pattern matching using ANN," in One Week short term AICTE sponsored training programmee, on 21th - 26th Sep, 2020, organized by Department of ECE, Mahatma Gandhi Institute of Technology, Hyderabad, India.	-
11th - 15th May, 2020	Dr Vilas Gaidhane	"New Challenges and issues of Indian Electricity market for upcoming decade 2030," in One Week Faculty Development Programme (FDP), on 11th - 15th May, 2020, organised by MSEDCL, Nashik, Maharashtra and Sandeep Institute of Technology and Research Center, Nasik, Maharashtra, India.	-
May 6-11, 2020	Dr Vilas Gaidhane	" Challenges in Online Learning and its Solutions," at One Week Online Faculty Development Program on "Overcoming the Challenges in Adapting Online Technology in Teaching Learning" organized by Department of Applied Sciences & Humanities, Jhulelal Institute of Technology in association with Indian Society for Technical Education (ISTE), Society for Technologically Advanced Materials of India (STAMI), upGrad and Edusaksham (an e-learning Company) held in RTM Nagpur University, Nagpur, Maharashtra, India.	-
24-29 August 2020	Dr Jagadish Nayak	Medical Image Processing using Machine Learning and Deep Learning" for AICTE Sponsored One-Week Online Short-Term Training Programme (Phase-1) on 'Research Avenues in Machine Learning Approaches for Pattern Recognition', organized by Mahatma Gandhi Institute of Technology (MGIT), Hyderabad, during 24-29 August 2020.	-
08, October, 2020	Dr. Nilesh Goel	Origin-pro Software in research	3.45-5.30 pm [GST]
4th November 2020	Dr. Vivek B	Introduction to LaTeX - A document typesetting system"	3.45-5.30 pm [GST]

A consolidated list of BPDC faculty who participated in International and National Workshops, along with the details is given in Annexure B4-11 and B4-12.

B4.14 DEPARTMENT-WISE REPORTS

B4.14.1 Department: Chemical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	-
Associate Professors	1
Assistant Professors	3
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department: Dr. Nishant Pandya

Contact details: nishant@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 02

Full Time   **:** 01

Part Time   **:** 01

Aspirant Scheme   **:** -

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-					

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Investigation of salt hydrates for thermal energy storage (extended due to COVID-19)	Chemical Engineering	Prof. Udo Scheingenschloegl	Dr. Eldhose Iype	KAUST super computing lab	No	300,000 cpu hours

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1	Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications Using Saline and Recycled Wastewater	Chemical Engineering	Dr. S. Ramachandran	Dr. Shoaib Ismail, ICBA, Dr. Neeru Sood, BPDC, Dr. Trupti Gokhale, BPDC, Dr. B.G. Prakash Kumar, BPDC, Dr. C. Babu, TNAU, Mr. Khalil Ur Rahman, ICBA	BPDC and ICBA, Dubai		AED 245,000
2	Development of Photocatalyst embedded Graphene based membranes for Treatment of Dye containing waste water under sunlight light irradiation	Chemical Engineering	Dr. Narendra Nath Ghosh (Dept of Chemistry, Goa Campus)	Dr. Amrita Chatterjee, Dr. Mainak Bannerjee, Dr. Anirban Roy, Dr. Sharad Sontakke, Dr. Srinivas Krishnaswamy, Dr. B. G. Prakash Kumar, Dr. Eldhose Iype,	ABSTCL		52.2 Lac

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. B.G. Prakash Kumar, Rusal Raj Francis, Aisha Raouf, Ramachandran Subramanian, Suresh Gupta, Geetha Kannan, K. Thirumavalavan, "Torrefied materials derived from waste vegetable biomass", Materials Today: Proceedings, 2020, https://doi.org/10.1016/j.matpr.2019.12.311

2. Choudhary, S., Yadav, J., Pawar, A., Singh, A., Mir, N., Iype, E., Sharma, D., Kant, R., Kumar, I. Sequential multicomponent site-selective synthesis of 4-iodo and 5-iodopyrrole-3-carboxaldehydes from common set of starting materials by tuning the conditions. Organic & Biomolecular Chemistry. 18(6). 1155-1164. 2020.

3. Iype, E., Gulati, S. Understanding the asymmetric spread and case fatality rate (CFR) for COVID-19 among countries. medRxiv. doi:10.1101/2020.04.21.20073791. 2020.

4. Gulati, S., Tabassum, Z., Schwingenschlogl, U., Iype, E. Molecular dynamics simulation of dehydration of salt hydrates (MgSO4· 7H2O and ZnSO4· 7H2O). Materials Today: Proceedings. 28(2). 013-1017. 2020.

5. Barbosa, A., Upadhyaya, P., Iype, E. Neural network for mechanical property estimation of multilayered laminate composite. Materials Today: Proceedings. 28(2). 982-985. 2020.

6. Yadav, J., Pawar, A. P., Nagare, Y. K., Iype, E., Rangan, K., Ohshita, J., Kumar, D., Kumar, I. Direct Amine-Catalyzed Enantioselective Synthesis of Pentacyclic Dibenzo[b,f][1,4]oxazepine/Thiazepine-Fused Isoquinuclidines along with DFT Calculations. The Journal of Organic Chemistry. 85(21). 14094–14108. 2020.

7. Pawar, A. P., Yadav, J., Mir, N. A., Iype, E., Rangan, K., Anthal, S., Kant, R., Kumar I. Direct Catalytic Synthesis of β-(C3)-Substituted Pyrroles: A Complementary Addition to the Paal-Knorr Reaction. Chemical Communications. Accepted. doi:10.1039/D0CC06357F. 2020.

8. Ashok Kumar, Akshai & Abdul Raouf, Aisha & Ghosh Chaudhuri, Rajib. (2020). Importance of interfacial and rheological properties in the suppression of uniform deposition to coffee ring pattern of zinc oxide nanofluids in the presence of anionic surfactants. Colloid and Polymer Science. 298. 10.1007/s00396-020-04646-z.

9. Pankaj Vyas, Rajib Ghosh Chaudhuri, Gopu Gopalakrishnan, Muralidharan Baladhandapani,, Development of novel formulation for high performance fire retardant cementitious mortars, Materials Today: Proceedings, Volume 28, Part 2,2020, https://doi.org/10.1016/j.matpr.2020.03.207.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: **NA**

ii) International: **NA**

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Wasee, A., Ghosh, R., Kumar, P., Iype, E., A study on distance based representation of molecules for statistical learning". Lecture Notes in Computational Science and Engineering. IWA Publishing. 13(4). 859--870. 2020

2. Satwani U., Singh J., Pandya N. Using Sentiment Analysis to Obtain Plant-Based Ingredient Combinations that Mimic Dairy Cheese. In: Goel N., Hasan S., Kalaichelvi V. (eds) Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer, Singapore. https://doi.org/10.1007/978-981-15-4775-1_61. 2020.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. 20th and 21st of November from 2:30 to 5:30 PM – Excel for Beginners Workshop, organized by AIChE BITS Pilani Dubai Student Chapter. Resource person: Dr. Nishant Pandya. Total 70 participants.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Eldhose Iype. Invited speaker at Exploring molecular interactions: from sorption in (non-)porous media to surface effects symposium held as a part of CMD2020 organized by European Physical Society in 31st Aug-4th Sept 2020.

2. Eldhose Iype. Invited speaker on topic Computational Biology and Chemistry at BITS Pilani Global meet on Computational Modeling and Simulation: Recent Innovations, Challenges & Perspectives on 24th Oct 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. 18th February 2020, Interactive talk on Career Prospects in Paint Industry, by Mr. Santosh Jose, Managing Director, Ms. Shilpa Sreekumar, HR Executive, Mr. Savaranan Natarajan, Technical Manager, Becker Industrial Coatings LLC, Ras Al-Khaimah, organized by AIChE BITS Pilani Dubai student chapter. Total 20 participants

2. 21st October 2020, Interactive talk on Spirit of Entrepreneurship by by Mr. S. Kumaravel, Director Operations Water, Transcrescent Water FZE, Dubai, organized by AIChE BITS Pilani Dubai Student Chapter. Total 35 participants

3. 19th November 2020, Interactive talk on Negotiating with Strangers by alumni Mr. Varun Sharma, Co-Founder of Laumière Gourmet Fruits, organized by AIChE BITS Pilani Dubai Student Chapter. Total 35 participants.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: **NA**

b. Won by Students: **NA**

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

12. PATENTS FILED/PUBLISHED AND GRANTED

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

AIChE – BPDC Student Chapter:

1. 11th of February 2020, Enginuity, a technical event. Our event was called 'Marvel Mania' organized by AIChE BITS Pilani Dubai student chapter. Total 20 participants.

2. April-May 2020, ChemE nights: AIChE BITS student chapter hosted ChemE nights on Thursdays, of April and May 2020. Every Thursday a new game was played like Housie, treasure hunts along with discussions. It was a way to keep in touch during quarantine and have fun. Total 20 participants.

3. 15th May 2020, Chemical Department Farewell: a virtual farewell for the graduating batch of 2020 was organized by the juniors from the chemical engineering department. Games were played and anecdotes were shared of their journey in college. Total 35 participants.

4. 31st October 2020, Fresher's Orientation 'Chemfluence' organized by AIChE BITS Pilani Dubai Student Chapter. An introduction of the club and chemical engineering was provided to the freshers. Total 15 participants.

5. 7th November 2020, Collaboration event called 'Ch'Evanscence' with Biotechnology engineering club 'Chimera' organized by AIChE BITS Pilani Dubai Student Chapter. Event filled event with technical and fun games. Total 27 participants.

6. Mentorship Program started in September and ongoing, all details of student were collected about their areas of interests, prospective jobs and locations of interest, or interest in pursuing higher education. Each student is being matched with a respective mentor and being guided one-on-one.

7. AIChE Conclave was formed in November, where the first interview was conducted with alumni Allan Barbosa about prospects of master's programs in Europe. The second interview was conducted with Jasiya Harris and Anna Joy, where they explained in detail about Practice School II: what it entailed, the kind of work they were assigned, and future job prospects after graduating. Recorded videos of these interviews were shared with all chemical engineering students.

8. AIChE Educational Videos: Tutorials and informative videos on different lab equipment and topics were prepared and uploaded on AIChE-BPDC YouTube channel. Till now videos of laboratory experiments of 'Flow Measurement Devices' and 'Discharge over Notches' are posted.

9. Job Postings Group: A special group related to job, research and internship opportunities was created. General queries regarding employment is discussed there separately. A spreadsheet is continuously updated with job listings exclusive to all batches of chemical engineering students.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Minitab 19	3
2.	aspenOne for Universities (license for 3 years)	150
3.	Steam Generator	1
4.	Chemical Storage cabinet	1
5.	Automatic water still with prefilter	1
6.	Hydrogen Fuel cell for education	1
7.	Turbidity meter, pH meter and conductivity meter	1

B4.14.2 Department: Civil Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	0
Associate Professors	0
Assistant Professors	**4**
Lecturers	**1**
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department: Vivek B.

Contact details: vivekb@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 4

Full Time   : 3

Part Time   : 1

Aspirant Scheme   : 0

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1. Sponsored Research And Consultancy

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-
2	Nil						

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-
2	Nil						

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-
2	Nil						

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Condition Assessment of Coal Mill Foundation	Civil Engineering	Dr. Vivek B.	Dr. Brij Kishor Pandey Dr. Baharudeen A	Star Cements, Dubai	-	4,63,346 INR

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Vivek B. and Raychowdhury, P. (2020). "Soil–Structure Interaction Study on 3D SMRFs of Indo-Gangetic Plain Using Resonant Vibration Tests", Journal of Earthquake Engineering, pp. 1-23. doi: 10.1080/13632469.2020.182222

2. Saif Eddin Jabari, Nikolaos Freris and Deepthi Mary Dilip (2020), Sparse Travel Time Estimation from Streaming Data, Transportation Science, 54(1), 1-20.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: Nil

ii) International:

1. Deepthi Mary Dilip (2020), Optimum design of flexible pavements in the presence of uncertainty using Subset Simulation, International Conference on Transportation and Development 2020: Highway and Airfield Pavements, pp 237-247.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED :   Nil

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   NIL

8. INVITED TALKS GIVEN BY BITS FACULTY

1.   Dr. Brij Kishor Pandey provided an Invited lecture on "Simulation of water balance under climate change" at Indian Institute of Technology Indore on 19 June 2020 in a 03 Weeks Online Training Programme on "Hydrometeorological and Extreme Events Disaster Risk Management" from 01-21 June 2020, jointly organised by IIT Indore and National Institute of Disaster Management (NDMI), New Delhi.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1.   Mr. Nasser Zuhair Al-Yazji, Al Badawi Road Contracting Ltd, UAE gave a talk on "Effect of a Pandemic Crisis in the Construction Industry" on June 19, 2020.

2.   Mr. Nirajuthan Selvarajah (Techno/Commercial Project Manager) and Mr. Vesa Miettinen (R&D and Technical manager) at PEIKKO Gulf delivered a lecture on "Introduction to Peikko Designer" as a part of Industry Expert Lecture series on November 21, 2020.

3.   Mr. Raj Tilak, Principal Geotechnical Engineer, Worley Parsons, Dubai delivered a lecture on "Geotechniques - Key foundation for Civil Engineers" as a part of Industry Expert Lecture series on December 12, 2020

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: Nil

b. Won by Students: Nil

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: Nil

12. PATENTS FILED/PUBLISHED AND GRANTED

1.   Deepthi Mary Dilip, Nikolaos M. Freris and Saif Eddin Jabari, Systems and Methods for Sparse Travel Time Estimation, US Patent-pending Invention (U.S. Patent Application No. 15/893,524), 2019-20.

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

1.   Department of Civil Engineering Students association SKYLINE conducts an 'Industry Expert Lecture' series Online.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Ground Penetrating Radar - GSSI Structure scan mini LT	1
2.	Ultrasonic Pulse Velocity Equipment - Pundit PL-200PE	1
3.	Surface Resistivity Meter - PROCEQ Resipod	1
4.	Half Cell Potential Equipment - CORMAP 1	1

B4.14.3 Department: Electrical & Electronics Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**01**
Associate Professors	02
Assistant Professors	**07**
Lecturers	00
Visiting Faculty	00
Visiting Assistant Professors	00

Head of the Department   :   Dr Jagadish Nayak

Contact details: Department of Electrical and Electronics Engineering, BITS Pilani Dubai Campus.

Number of Ph.D. Scholars: 12

Full Time   : 09

Part Time   : 03

Aspirant Scheme   : 00

Ph.D. Thesis Submitted during the year: 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	JULIA T. J	2014PHXF0003U	Modelling and Stability Analysis of Doubly Fed Induction Generator for Renewable Energy	A.B. Chattopadhyay	----
2	SREEJA RAJENDRAN	2014PHXP0902U	Investigations on Testability Analysis and its Applications in Secure IC Design	Dr..MARY LOURDE. R.	---

1. Sponsored Research and Consultancy

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
1	Harnessing and Management of energy through innovative mobility services	EEE	EEE Students	-	Expo Live		AED 50000
2	Zirpot	EEE	EEE Students	-	Expo Live		AED 50000

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Design and Development of Closed Loop Control System to improve the Process Capability of Incremental Sheet Metal Forming	ME+EEE	Prof R Karthikeyan	Dr Kalaichelvi Dr Vilas Gaidhane	-	-	AED 90000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. A. R. Abdul Rajak, Shazia Hasan, Bushra Mahmood, "Automatic Waste Detection by Deep Learning and Disposal System Design", Journal of Environmental Engineering and Science, (Vol. 15, Issue 1,

   pp. 38-44, March 2020).

2. Abhilasha Singh,V.Kalaichelvi & R.Karthikeyan. Application of Convolutional Neural Network for Classification and Tracking of Weld Seam Shapes for TAL Brabo Manipulator.,Materials Today: Proceedings., Volume 28.,Part 2,2020,pp 491-497, https://doi.org/10.1016/j.matpr.2019.12.149

3. Mattara Chalill Subin, Abhilasha Singh, Venkatesan Kalaichelvi, Ramanujam Karthikeyan & chinnapalaniandi Periasamy. Design and Robustness Analysis of Intelligent Controllers for Commercial Green House. Mech Sci.,11.pp.299-316.,2020. https://doi.org/10.5194/ms-11-299-2020

4. Raja Muthalagu,Anudeepsekhar Bolimera,& V.Kalaichelvi. Lane detection technique based on perspective transformation and histogram analysis for self-driving cars. Computers and Electrical Engg. Volume 85 July 2020. https://doi.org/10.1016/j.compeleceng.2020.106653.

5. Abdul Rajak Vilas Ghaidane, Aaron D'costa,"Design and Implementation of a Network Security Chip with Improved Compression Approach", Recent Advances in Electrical and Electronic Engineering,Volume 13 , Issue 4 , 2020 DOI : 10.2174/2352096512666190423111018

6. Rafsa Koyadeen, Tharammal, A Kumar, AR Rajak, VH Gaidhane," Theoretical Investigation of Design Methodology, Optimized Molecular Geometries, and Electronic Properties of Benzene-Based Single Molecular Switch with Metal Nanoelectrodes", Journal of Nanomaterials, Volume 202, 2020-09-01 ,DOI:10.1155/2020/6260735.

7. Neeraja Padman, R Swarnalatha , Varsha Venkatesh, Neelesh Kumar, "Telediagnosis of Parkinson's Disease Symptom Severity using H&Y scale", Journal of Engineering Science and Technology. Vol 15, No 3, June 2020. pp 1466-1480.(ESCI & Scopus.).

8. Abhishek Anil Mungekar, Yashraj Kalpesh Solanki, R Swarnalatha, "Augmentation of a SCADA based Firewall against Foreign hacking devices" International Journal of Electrical and Computer Engineering. Vol 10, No 2, April 2020. pp 1359-1366.(Scopus)

9. Dev Gupta, Akanksha Parikh, R. Swarnalatha." Integrated Healthcare Monitoring Device for Obese Adults Using Internet of Things (IoT)" International Journal of Electrical and Computer Engineering, Vol 10, No 1, Feb 2020. pp 1239-1247(Scopus).

10. R Swarnalatha, Neelesh Kumar , Amrin Jameel Shanaz "Design of an Insole using Force Sensing Resistors for Gait Analysis and Validation using Zebris FDM System" Journal of Engineering and Applied Sciences. Vol. 15, No. 2, pp. 430-436, 2020 (Scopus).

11. J. Rajevenceltha and Vilas H. Gaidhane, "A novel approach for image focus measure," Signal, Image and Video Processing (Springer), DOIhttps://doi.org/10.1007/s11760-020-01775-4

12. Nand Kumar, Vilas H Gaidhane, Ravi Kant Mittal, "Cloud-based electricity consumption analysis using neural network" International Journal of Computer Applications in Technology, vol. 62, no.1, pp. 45-56. 2020. (Scopus)

13. Syed F Faisal ,Abdul R Beig,Sunil Thomas(2020)," Time Domain Particle Swarm Optimization of PI Controllers for Bidirectional VSC HVDC Light System", Energies 2020, 13, 866; doi:10.3390/en13040866

14. Nithiyananthan Kannan, Sunil Thomas, Youssef Mobarak, Fahd Alharbi(2020), "Enhanced data communication models for real-time power system monitoring in a distributed platform", Transactions on Emerging Telecommunications Technologies, e3864, https://doi.org/10.1002/ett.3864.

15. Murugan, C.A.,Sureshkumar, G.,Kannan, N.,Thomas, S.(2020)," Bacterial foraging optimization based adaptive neuro fuzzy inference system, International Journal of Electrical and Computer Engineering,pp 3568-3575; DOI: http://doi.org/10.11591/ijece.v10i4.pp3568-3575

16. Jani Babu Shaik, Sonal Singhal, Nilesh Goel, "Analysis of SRAM metrics for data dependent BTI degradation and process variability", in Integration, The VLSI Journal vol. 72, May 2020, pp. 148-162. doi: https://doi.org/10.1016/j.vlsi.2020.01.006

Conference Publications:

1. S K Rai, H D Mathur and Shazia Hasan, "Converter Efficiency Improvement of Islanded DC Microgrid with Converter Array", 2020 International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020), January 29-31, 2020 p.p 64-73.

2. Ranjit Singh and Shazia Hasan, "Comparative Study on Load Frequency Control of a Single Microgrid Coupled with Thermal Power Plant Using Fuzzy and PID Controllers", 2020 International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020), January 29-31, 2020, p.p 19-29.

3. Singh A,Kalaichelvi V and Karthikeyan R.Time Series Prediction of Weld Seam Coordinates for 5 DOF Robotic Manipulator Using NARX Neural Network.Proceddings of Modelling,Simulation and Intelligent Computing (MoSiCom 2020).Lecture Notes in Electrical Engineering,vol.659,pp.537-545,2020,Springer,Singapore. https://doi.org/10.1007/978-981-15-4775-1_58

4. DSouza A.S, Mohamed R, Mishika,& Kalaichelvi V. Real-Time Fog Removal Using Google Maps Aided Computer Vision Techniques. Proceedings of Modelling, Simulation and Intelligent Computing. (MoSICom 2020). Lecture Notes in Electrical Engineering, vol 659.pp.571-579. 2020.Springer, Singapore. https://doi.org/10.1007/978-981-15-4775-1_62.

5. Aashna Kapoor ,Abdul Rajak, "Design of Electrical Power Systems for Satellites", International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020) , Department of Electrical and Electronic Engineering, BITS Pilani Dubai Campus, Dubai, UAE, JANUARY 29-31, 2020

6. Aparna Raghunath, Abdul Rajak ," Application of Data Mining in Predicting Stock Values", Fourth International Conference on ICT for Intelligent Systems (ICTIS – 2020) held at Ahmedabad India ,April 24th – 25th, 2020

7. Abaan Ahamed and Abdul Rajak, "Scope of tidal Energy in UAE", Fourth International Conference on ICT for Intelligent Systems (ICTIS – 2020) held at Ahmedabad India ,April 24th – 25th, 2020

8. Varshini Rajesh , A R Abdul Rajak "Channel estimation for image restoration using OFDM with various digital modulation schemes" The First International Conference on Advances in Physical Sciences and Materials 2020 (ICAPSM 2020), Department of Mechatronics, SNS College of Technology, Coimbatore, Tamil Nadu, India, during 13 – 14, August 2020.

9. Shwetha Sreejith ,Abdul Rajak," Study on optimization of handoff process using fuzzy logic for mobile communication", The First International Conference on Advances in Physical Sciences and Materials 2020 (ICAPSM 2020), Department of Mechatronics, SNS College of Technology, Coimbatore, Tamil Nadu, India, during 13 – 14, August 2020.

10. Syed F Faisal, Abdul R Beig, Sunil Thomas,(2020)," Comparative Study for Robust STATCOM Control Designs Based on Loop-Shaping and Simultaneous Tuning Using Particle Swarm Optimization" International conference on Modelling, Simulation and Intelligent Computing, pp. 419-429

11. Avinash kumar M, Anuj Borkute, Nilesh Goel, "Novel Multilogic gates using Quantum Dot Cellular Automata with energy dissipation analysis", 2020 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), Vancouver, BC, Canada, 2020, pp. 1-7, doi: 10.1109/IEMTRONICS51293.2020.9216348.

12. Shaik Jani Babu, Anish Vipperla, Haarica Vinayaga Murthy, Chintakindi Sandhya, Siona Menezes Picardo, Sonal Singhal and Nilesh Goel, "Investigating the impact of BTI and HCI on log-domain based Mihalas-Niebur Neuron circuit", In: Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer Singapore. https://doi.org/10.1007/978-981-15-4775-1_57

13. Prabhleen Kaur Gill, Shaik Jani Babu, SonalSinghal and Nilesh Goel, "FPGA Implementation of Random Feature Mapping in ELM Algorithm for Binary Classification", In: Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer Singapore. https://doi.org/10.1007/978-981-15-4775-1_54

14. Siona Menezes Picardo, Jani Babu Shaik, Sakshi Sahni, Nilesh Goel and Sonal Singhal, "Analyzing the Impact of NBTI and Process Variability on Dynamic SRAM Metrics under Temperature Variations", In: Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer Singapore. https://doi.org/10.1007/978-981-15-4775-1_66.

15. Avinash kumar, Anuj Borkute and Nilesh Goel, "An Efficient Design of Multi-Logic Gates Using Quantum Cellular Automata Architecture", In: Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer Singapore. https://doi.org/10.1007/978-981-15-4775-1_67

16. Sujith Sizon, Somil Mathur and Nilesh Goel, "Negotiating Deals Using Artificial Intelligence Models", In: Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer Singapore. https://doi.org/10.1007/978-981-15-4775-1_41

17. Shwetha Sreejith, Jagadish Nayak,"Study of hybrid median filter for the removal of various noises in digital image",First International Conference on Advances in Physical Sciences and Materials (ICAPSM 2020) ,Coimbatore, Tamil Nadu, India ,13 -14, August 2020

18. Smitha Bhat Kaje, Jagadish Nayak," Design and FPGA Implementation of an efficient 8 X 8 Multiplier using the principle of Vedic Mathematics", 5th International Conference on Advanced Computing and Intelligent Engineering (ICACIE 2020) organised by Université des Mascareignes, Mauritius, 25th – 27th June 2020

19. Jagadish Nayak, Yatharth Kher, Sarthak Sethi, "Image Captioning Using Gated Recurrent Units" Proceedings of the International Conference on   Modelling, Simulation & Intelligent Computing , BITS Pilani Dubai Campus, Dubai, UAE , 29-31 JANUARY 2020.

20. Krishna Ganesh, R Swarnalatha," Improved Brain Tumor Segmentation and Diagnosis using an SVM-based Classifier" Lecture Notes in Electrical Engineering - Medical Imaging and Computer-Aided Diagnosis, Springer. pg 35-45. July 2020. ISSN: 1876-1100. (ESCI, Scopus & Web of Science)

21. Karan Gupta and Vilas H Gaidhane, "Smart IOT enabled battery management system for electric vehicle," International Conference on Communication and Artificial Intelligence (ICCAI-2020), 17-18 Sep-2020.

22. Krishna G and Vilas H Gaidhane, Karan Gupta , "Tungsten as an interconnect material for next generation IC design," IEEE International conference on IOT, Electronics and Mechatronics (IEMTRONICS-2020), 9-12 Sep-2020.

23. Tirth Lakhani and Vilas H Gaidhane, "An efficient thermoelectric energy harvesting system," International conference on Modelling, Simulation and Intelligent Computing, pp. 590-597, Jan-2020 (Book Chapter)

24. Rajevenceltha, Vilas H Gaidhane, V Anjana, "A novel approach for drowsiness detection using local binary patterns and histogram of gradients," In IEEE Proceeding 2019 International Conference on Electrical and Computing Technologies and Applications (ICECTA), American University of Sharjah, UAE, pp. 1-6, 2020. .

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: NIL

ii) International:

1. Dr Shazia Hasan attended International Webinar on, "Physics Does Digital Optimization – for Machine Learning, Control Theory, Back Propagation", Jointly organized by MHRD-Institution Innovation Council, DDUC Chapter, Deen Dayal Upadhyaya College, University of Delh, July 28 2020.

2. Dr Shazia attended Faculty Development Program on, "Advances in Signal Processing and Machine Learning", Jointly organized by MHRD-Institution Innovation Council, DDUC Chapter, Deen Dayal Upadhyaya College,University of Delh, July 20–26, 2020.

3. Dr Shazia Hasan attended an International Webinar on "SMART CITY: Beyond the Pandemics", at BITS Pilani, July 10-11, 2020.

4. Dr.V.Kalaichelvi has participated on Faculty Development Program On Artificial Intelligence & Machine Learning Using Python held during July 13-24 2020 organized by Finland Labs in association with National Social Summit,IIT Roorkee.

5. .Dr.V.Kalaichelvi has participated on the Faculty Development Program on TELE 2.0 - Teaching Learning Digitally Redefined On 6th & 7th August 2020

6. Dr.V.Kalaichelvi attended webinars on Artificial Intelligence and Machine Learning on July 6,2020 ,How to use Microsoft teams effectively for Education organized by LLAGT, Wellness for Women during COVID-19 Pandemic on 22nd july 2020 organized by Annamalai Univeristy, Live Training on Data Science using Python on 8th August 2020 organized by Finland Labs.

7. Abdul Rajak presented paper on " Design and Analysis of High-Speed Phase Locked Loop in 180nm Technology", Industrial Electronics Mechatronics Electrical & Mechanical Power (IEMPOWER – 2019) organized by Institute of Engineering & Management, , at S.N Bose National Centre for Basic Sciences Kolkata, India, Kolkata 21st -23rd November 2019.

8. Dr R Swarnalatha has attended "IoT Boot Camp" organized by Turnip Innovations with YUPS Tech solutions, Mumbai, India, from 11 to 12th Sep 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. "Modelling, Simulation and Intelligent Computing" Proceedings of International Conference on Modelling, Simulation & Intelligent Computing, (MoSICom) 2020, Springer, Dubai, January 29-31, 2020, Editors Nilesh Goel, Shazia HasanV. Kalaichelvi, Lecture Notes in Electrical Engineering book series (LNEE, volume 659)

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. EEE Department has conducted an International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020), Springer, Dubai, from January 29-31, 2020. Program Chairs: Dr. Nilesh Goel, Dr. Shazia Hasan and Dr. V. Kalaichelvi. Guest of Honor His Excellency Dr. Thani Bin Ahmed Al-Zeyoudi, Member of the Cabinet of the UAE and Minister of Climate Change and Environment delivered a talk on "Young minds and Future of Dubai". The Chief Guest, Dr. Eesa Mohammed Bastaki, President of the University of Dubai, delivered a talk focused on "Role of Business in Research".

2. EEE department has organized workshop series for the benefit of ECE and EEE students on 31.10.2020 and 7.11.2020. Dr Sunil Thomas has given hands on training for "Circuit simulations using PSICE" on 31.10.2020. The topics covered in that workshop includes getting started with PSPICE and students were given for Hands on training on circuit simulations using PSPICE. Another workshop was on "Getting Started with MATLAB" on 7.11.2020 handled by Dr V Kalaichelvi, for first year and second year EEE and ECE students. Firstly, the introduction of MATLAB commands was covered and later hands on training sessions were conducted for all the students using OCTAVE online.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Shazia Hasan delivered a talk on"Virtual Inertia Support in the microgrid, its research challenges and its technology potentials in recent years." as part of One Week International Faculty Development Program organized by GMR Institute of Technology, INDIA.13-17th July 2020.

2. Dr Abdul Razak has given an invited Talk given at International Webinar on future trends in mobile communications on 03 July 2020 at Mohamed Sathak Ploytecnic College,Kilakkarai,Tamil Nadu,India.

3. Dr Vilas Gaidhane delivered Keynote on the topic "Temporal Pattern matching using ANN," in One Week short term AICTE sponsored training programmee, on 21th - 26th Sep, 2020, organized by Department of ECE, Mahatma Gandhi Institute of Technology, Hyderabad, India.

4. Dr Vilas Gaidhane delivered Keynote on the topic "New Challenges and issues of Indian Electricity market for upcoming decade 2030," in One Week Faculty Development Programme (FDP), on 11th - 15th May, 2020, organised by MSEDCL, Nashik, Maharashtra and Sandeep Institute of Technology and Research Center, Nasik, Maharashtra, India.

5. Dr Vilas Gaidhane delivered Keynote on the topic " Challenges in Online Learning and its Solutions," at One Week Online Faculty Development Program on "Overcoming the Challenges in Adapting Online Technology in Teaching Learning" organized by Department of Applied Sciences & Humanities, Jhulelal Institute of Technology in association with Indian Society for Technical Education (ISTE), Society for Technologically Advanced Materials of India (STAMI), upGrad and Edusaksham (an e-learning Company) held during May 6-11, 2020, RTM Nagpur University, Nagpur, Maharashtra, India.

6. Dr Jagadish Nayak delivered an online invited talk on "Medical Image Processing using Machine Learning and Deep Learning" for AICTE Sponsored One-Week Online Short-Term Training Programme (Phase-1) on 'Research Avenues in Machine Learning Approaches for Pattern Recognition' organized by Mahatma Gandhi Institute of Technology (MGIT), Hyderabad, during 24-29 August 2020.

7. Dr. Nilesh Goel delivered the talk with hands-on session on the use of Origin-pro Software in research on 08, October, 2020 at BITS Pilani Dubai Campus. This talk was aimed to provide PhD Scholars the introduction, capabilities and usefulness of Origin-Pro. The talk was attended by 40+ PhD scholars and several faculty members of BPDC.

8. Dr Jagadish Nayak was a resource person for four weeks course on "Introduction to IoT" which was scheduled from 26-07-2020 for freshers in BITS Pilani Dubai Campus.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Madan M. Gupta, Professor of Engineering at the University of Saskatchewan and Director of the Intelligent Systems Research Laboratory, delivered talk on, "Design of a Robust Neuro-Controller for Complex Dynamic Systems (An Innovative Dynamic Pole Motion Approach)" during MoSICom 2020, 29-31 JANUARY 2020

2. Dr. Lotfi Romdhane, Professor, Associate Dean of Engineering and Director of the Mechatronics Engineering Graduate Program at American university of Sharjah (AUS), delivered talk on "Robotics being applied to several fields ranging from construction to health care and several on-going applications of robotic projects applied to the rehabilitation of the human body" during MoSICom 2020, 29-31 JANUARY 2020

3. Dr. Sukumar Mishra, Professor, Indian Institute of Technology Delhi, New Delhi, India, delivered talk on "Shift towards Net-Zero demand distributions system using distributed PV and EV charging stations" during MoSICom 2020, 29-31 JANUARY 2020

4. Dr. Navneet Gupta, Principal Engineer in Minima Processor, Finland. delivered talk on "Emerging memory technologies and Architectures" during MoSICom 2020, 29-31 JANUARY 2020

5. Dr. Hussam Amrouch, Research Group Leader at the Chair for Embedded Systems (CES), Karlsruhe Institute of Technology(KIT), Germany, delivered talk on " Negative Capacitance Transistor to Rescue Technology scaling from physics to the system level" , during MoSICom 2020, 29-31 JANUARY 2020

6. An alumni talk was arranged by Dr Kalaichelvi, on December 6,2020 from 5.30P.M to 7P.M . Aaditya Saraiya.,Computer Vision and Machine Learning Engineer at Outrider.ai.a self driving start up aimed at the logistics and supply chain industry has delivered a talk on Robot Perception :understanding what we see . He has covered topics like Robot navigation, decision making and controls. He has also covered some of the the critical problem statements in Modern Computer vision and some open and unsolved problems in the computer Vision.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Dr. Shazia Hasan won "Academic Achievement for University Professor/Researcher Award, LEWAS 2020" as runners up.

2. Dr. Shazia Hasan is Associate Editor, Journal of Mechanics of Continua and Mathematical Sciences

3. Dr. Shazia Hasan is Editor in Chief, International Journal of Instrumentation Control and Automation

4. Dr.V.Kalaichelvi reviewed article on Real-Time Implementation of Adaptive PID and Adaptive Fuzzy Controller for a Level Station for the journal Advances in Technology innovation.

5. Dr.V.Kalaichelvi reviewed papers on EEG based Hand Movement Recognition :Feature Domain and Level of Decomposition, An analysis of industrial CAD/CAM systems with product data management and integration of mechatronics, Investigation of different knowledge patterns in Diabetic Retinal images using Data Mining Techniques,An analytical approach towards object Motion detection and tracking form video for IPRoMM 2020(1st International & 13th National Conference on INDUSTRIAL PROBLEMS ON MACHINES & MECHANISMS under the aegis of AMM) organized by Department of Mechanical Engineering, BITS, Pilani Hyderabad campus and Association of Machines and Mechanisms,

6. Dr Vilas Gaidhane has received an IP certificate from Ministry of Economics, UAE, on the research titled "Lithium-Ion Battery Life Prediction Based on Initial Stage-Cycles Using Machine Learning".

7. Dr Sunil Thomas is an Associate Editor for "Journal of Mechanics of Continua and Mathematical Sciences

8. Dr Jagadish Nayak is an Review Editor for The Networks section of Frontiers in Communications and Networks Journal.

b. Won by Students:

Student Sarthak Sethi won following awards

- Thales Maintenance 4.0 Hackathon - 1st Prize

  Awarded 1st prize at Thales Maintenance 4.0 Hackathon for my project DigIoT, which is a smart IoT-based micro-sensor-capsule that monitors the health of mechanical machinery.

- James Dyson Award 2020 UAE - 2nd Runner Up

  Awarded 2nd Prize at James Dyson Award 2018 UAE . My project was declared as national runner up in the international edition.

- TiE Dubai Student Entrepreneur Pitch 2020 - Top 4 Finalists

  IoLetics Solutions was declared one of the 4 finalists in the TiE Dubai Student Entrepreneur Pitch competition

- Involve Inter University CSR Pitch competition - 3rd Prize

  Awarded 3rd prize at Involve university pitch competition for my project Obilizer UV-C Sterilizer.

- Jaguar Think Tank – Inter University Entrepreneurial Pitch competition - 1st Prize

  Awarded 1st prize at Involve university pitch competition for my project Obilizer UV-C Sterilizer.

- COVID-19 Innovation Challenge by T-Hub - 1st Prize

  Awarded 1st prize at COVID-19 innovation challenge organized by T-Hub for my project Obilizer UV-C Sterilizer.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Dr. Shazia Hasan jointly submitted a Project Proposal in collaboration with Tel Aviv University under the scheme of MERC of US$ 497,950.

2. Dr Shazia Hasan has Research collaboration with IIT Delhi and published a paper in International Journal Michael, Shazia Hasan,S. Mishra "Virtual Inertia provision through Data Center and Electric Vehicle for ancillary services support in microgrid", IET Renewable Power Generation (status:Accepted).

3. Dr Shazia Hasan was a Conference Co-Chair "The 2020 IEEE Conference on Telecommunications, Optics and Computer Science"(TOCS2020), China, 11-13th December 2020.

4. Dr Abdul Razak has attended FDP,"ONLINE TEACHING-LEARNING TOOLS AND PEDAGOGIES", , 2020 conducted by FICCI India from 6th July-10th July 2020.

5. Dr Abdul Razak has attended a FDP on AI, ML & Deep Learning by s, conducted by Eduxlab 12th Aug- 21th Aug, 2020.

6. Dr R Swarnalatha, Dr Abdul Razak, Dr Jagadish Nayak, Dr T G Thomas have attended Professional Development Program on " ONLINE TEACHING-LEARNING TOOLS AND PEDAGOGIES by FICCI Future X from 6th to 10th July 2020. (Online)

7. Dr Jagadish Nayak and Dr Nilesh Goel participated in two weeks training program by IBM Skills Academy on Virtual Faculty enablement session of "Artificial Intelligence Analyst" track. Both of them achieved Mastery certification on Artificial Intelligence Analyst.

12. PATENTS FILED/PUBLISHED AND GRANTED :   NIL

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

IEEE Student Chapter:

Hands-On Workshop on Arduino: Introduction to Microcontroller, Circuits and Programming on 11th November, 2020

IFOR Association:

The IFOR Team of BITS Pilani Dubai Campus is a student based organisation in which students from different departments come together to design and build autonomous and aerial robotic systems. With the start of a new semester, there was a fresh introduction of student researchers in the IFOR Team headed by team leader, Parth Ganeriwala along with Faculty in charge Dr.V.kalaichelvi. The research team was divided into the following subsections with each group having their own leader to organize the entire structure:

- Computer Vision – Gunjan Uppal

- Control Systems – Meshak Nath Goshal

- Public Relations – Farhan Ahmad

- Hardware Subsystems – Preeti Prasad

- AI and Navigation – Ajinkya Agshikar

Given below are the activities that took place in the course of the 1st Semester of 2020-21. Due to the current situation of Covid-19, there was a lack of participation in competitions and showcasing events.

Activity 1

Building and testing autonomous feature on Quadcopter

A manual and autonomous testing was conducted on the Hex copter and successful results were achieved. Further testing and research are to take place to use the drone in future projects. Team IFOR worked on building a quadcopter from scratch and successfully testing it with all the systems working optimally. The Computer Vision and AI and Navigation teams have started working on the autonomous feature and a early build of the code was tested out on the quadcopter and with further adjustments, the quadcopter will have a streamlined version of autonomousity feature which shall be used for future projects and research.

Activity 2:

Dr Kalaichelvi has arranged one interactive session with Dr.Dan Yamin,Head,Laboratory for Epidemic Modelling and Analysis, Department of Industrial Engineering at Tel Aviv University to meet Team IFOR students on Dec 13,2020. Dr. Yamin visited the IFOR Lab and current research with respect to social distancing using mobile robots and drones were displayed and the functionality of the IFOR Team was explained with necessary demonstration from members of the team

AOEE Association:

AOEE (Association of Electronic Engineers) has conducted the below events under the guidance of Dr R Swarnalatha

1. An ICE breakers session were organised for fresher's

2. An orientation session for freshers were organised .

3. Organised the technical cum fun event "Electrorun" on 13.02.20 for ENGINUITY.

IEEE-WIE has conducted the below events under the guidance of Dr R Swarnalatha

1. Organised a Guest Lecture for IEEE - WIE , by Eng. Balqees Al-Daghar , Chair of Women in Engg (WIE) UAE Section & E Mobility Solution Specialist -ABB Industries on 20th Feb 2020

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
5.	DSK 6748T DSP Hardware kits.	15
6.	TERRASIC – P0466_OH-DE-10-LITE BOARD	10
7.	Cadence EDA Tools	35
8.	Arduino UNO	20
9.	Arduino Mega	15
10.	Raspberry Pi Kits	5
11.	LCD Smart display screen module	5

B4.14.4 Department: Mechanical Engineering

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**2**
Associate Professors	0
Assistant Professors	**6**
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department: Dr. Priyank Upadhyaya

Contact details: priyank@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars:

Full Time   : 1

Part Time   : 9

Aspirant Scheme   : 1

Ph.D. Thesis Submitted during the year 2020

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned :   NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects NIL

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
1	Design and Development of Direct Methanol Fuel Cell with Effective Species Management Technique	Mechanical Engineering	Dr. Naveen Shrivastava	Nil	RIG	Nil	20,000 AED
2	Incremental sheet forming	Mechanical Engineering	Dr R Karthikeyan	Dr. Kalaichelvi & Dr Vilas (EEE)	Seed Grant	NIL	90,000 AED
3	Bio tribological corrosion	Mechanical Engineering	Dr Vincent	Dr R Karthikeyan	Seed Grant	NIL	90,000 AED

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. Upadhyaya P., Kumar S., Reddy J.N., Lacy T.E., Jr. (2020), "Multiscale modeling of strength and failure behavior of carbon nanostructure reinforced epoxy composite adhesives in bonded systems", European Journal of Mechanics, A/Solids, Vol. 80, no. -, pp.---

2. Kesar M Kothari., Udayakumar Rajamanickam., Ram Karthikeyan., Vishweshwar S., Nikitha Raj (2020), "Modeling of the Manifold Configuration for Maximum Efficiency in a Hydraulic Machine", International Journal of Fluid Machinery and Systems, Vol. 13, no. 1, pp.136-149

3. "A Review On Austenitic Stainless Steel-Based Dissimilar Metal Welding Using Gas Tungsten Arc Welding", Journal of Manufacturing Technology Research, Vol. 12, no. 1-2, pp.65-82. (2020)

4. "Sustainable Green Venture", International Journal of Engineering Applied Sciences and Technology, Vol. 5, no. 3, pp.277-279 (2020)

5. "Machining of novel AA7075 foams containing thin-walled ceramic bubbles", Materials and Manufacturing Processes, Vol. , no. , pp.1-10 (2020)

6. "In-Vitro Degradation of Hollow Silica Reinforced Magnesium Syntactic Foams in Different Simulated Body Fluids for Biomedical Applications", Metals, Vol. 10, no. 12, pp.1-13 (2020)

7. Udayakumar R., Shah V.J., Venkatesh S.V. (2020), "Performance and Emission Characteristics of Biodiesel from Rapeseed and Soybean in CI Engine", Smart Innovation, Systems and Technologies, Vol. 169, no. , pp.209-219

8. "Design and Robustness Analysis of Intelligent Controllers for Commercial Greenhouse", Mechanical Sciences, Vol. 11, no. , pp.299-316 (2020)

9. Upgradation of Conventional Commercial Greenhouse Using Climate Control Module to Reduce Energy Consumption ", International Journal of Engineering Research and Technology, Vol. 13, no. 7, pp.1709-1723

10. Udayakumar Rajamanickam., Yasho Vinay Pipada (2020), "Impact of Mixed Flow Turbines on the Efficiency of Automotive Turbocharger Applications", International Journal of Mechanical Engineering and Robotics Research, Vol. 9, no. 6, pp.791-796

11. "Cu-Zr-Ti-Al Metallic Glass: Thermodynamic prediction, Synthesis, and Biocorrosion Studies", SSRN Electronic Journal, Vol. , no. , pp.1-3

12. "Estimating Pyrolysis Kinetics Parameters of Wooden Pallets Commonly Used in Goods Transport Vehicles", Chemical Data Collections, Vol. 30, no. , pp.100539-

13. K. S., Udayakumar R. (2020), "Comparative evaluation of the performance of rice bran and cotton seed biodiesel blends in VCR diesel engine", Energy Reports, Vol. 6, no. , pp.795-801

14. Ahmed A., Yelamali P., Udayakumar R. (2020), "Modelling and simulation of hybrid technology in vehicles", Energy Reports, Vol. 6, no. , pp.589-594

15. Mukesh Tomar and Shashank Khurana, "Kinetics Properties Estimation for Common Plastic Pallets used in Goods Transportation", Chemical Data Collections Journal, Vol. 31, 100601

16. Mukesh Tomar and Shashank Khurana, "Estimating Pyrolysis Kinetics Parameters of Wooden Pallets Commonly Used in Goods Transport Vehicles", Chemical Data Collections Journal, Vol. 30, 2020, 100539.

17. A. Phillips, M. Ulsh, J. Mackay, T. Harris, N. Shrivastava, A. Chatterjee, J. Porter, G. Bender. The Effect of Membrane Casting Irregularities on Initial Fuel Cell Performance. Fuel Cells 20 (2020) 60-69.

18. Naveen K. Shrivastava, Abheek Chatterjee, Tequila A. L. Harris. Effect of Cell Compression on the Performance of a Non-hot Pressed MEA for PEMFC. International Journal of Energy Research 44 (2020) 370-387

19. Electrochemical Impedance Analysis on Cryogenically Treated Dissimilar Metal Welding of 316L Stainless Steel and Monel 400 Alloy Using GTAW, Metals, Vol 9, I 10, B –E

5. Conferences/Workshops/Seminar Attended/Papers Presented

i) National:

1. Prem Dakshin and Shashank Khurana, "Novel CAM Mechanism based Life-Support Ventilators in Animal Healthcare", 1st International & 13th National conference on Industrial Problems on Machines and Mechanisms (IPRoMM-2020), 21st-22nd December, 2020, Hyderabad, India.

ii) International:

1. BITS., Sreekrishnan Venkateswaran., Santonu Sarkar (2019), "Time-Sensitive Provisioning of Bare Metal Compute as a Cloud Service", 2019 IEEE 12th International Conference on Cloud Computing (CLOUD), Vol. , no. , pp.447-451

2. "Time Series Prediction of Weld Seam Coordinates for 5 DOF Robotic Manipulator Using NARX Neural Network", Lecture Notes in Electrical Engineering, Vol. 659, no. , pp.537-545 (2020)

3. Abhilasha Singh., Kalaichelvi Venkatesan., Ramanujam Karthikeyan (2020), "Application of Convolutional Neural Network for Classification and Tracking of Weld Seam Shapes for TAL Brabo Manipulator", Materials Today: Proceedings, Vol. , no. , pp.-

4. Prem Dakshin., Shashank Khurana (2020), "Frustum CAM (FC) mechanism: Achieving differentiating feed in continuous production machines of non-similar parts", Materials Today: Proceedings, Vol. , no. , pp.-

5. Mukesh Singh Tomar., Shashank Khurana (2020), "A numerical study on the influence of different tunnel lining insulation materials in a road tunnel fire", Materials Today: Proceedings, Vol. , no. , pp.-

6. Mohommad Shapheek., Naveen Kumar Shrivastava (2020), "Optimization of cooling time for polyethylene fusion joints", Materials Today: Proceedings, Vol. , no. , pp.-

7. "Finite element simulation on effect of bevel angle and filler material on tensile strength of 316L stainless steel/Monel 400 dissimilar metal welded joints", Materials Today: Proceedings, Vol. 28, no. 2, pp.1048-1053

8. "Optimization of tensile properties of 316L stainless steel and Monel 400weld joints using genetic algorithm", Materials Today: Proceedings, Vol. 27, no. 3, pp.2846-2851

9. "A micromechanical model to predict the viscoelastic response of syntactic foams", Materials Today: Proceedings, Vol. 28, no. 2, pp.1200-1204

10. "Processing, microstructure and mechanical characterization of a new magnesium based multicomponent alloy", Materials Today: Proceedings, Vol. 28, no. 2, pp.1044-1047

11. "Effect of hard facing processes on Mild steel A-36 by arc welding", Materials Today: Proceedings, Vol. 28, no. 2, pp.526-531

12. "Development and characterization of sisal and jute cellulose reinforced polymer composite", Materials Today: Proceedings, Vol. 28, no. 2, pp.556-561

13. "Thermodynamic modelling to optimize glass forming composition in multicomponent Zr-Cu-Co-Al system", Materials Today: Proceedings, Vol. 28, no. 2, pp.1239-1244

14. "Corrosion characterization zinc coated SS304 stainless steel", Materials Today: Proceedings, Vol. 28, no. 2, pp.1210-1215

15. "Turbocharging in ceramic coated engines using Rankine cycle for automotive use: An inceptive study", Materials Today: Proceedings, Vol. 28, no. 2, pp.991-997

16. "Neural network for mechanical property estimation of multilayered laminate composite", Materials Today: Proceedings, Vol. 28, no. 2, pp.982-985

17. Ashish Vashishtha* and Shashank Khurana*, "On Unsteady Flow Analysis of a Round Spike Blunt-Nose Afterbody in Mach 6 Flow", 10th EASN Virtual International Conference on Innovation in Aviation & Space to the Satisfaction of the European Citizens, 2nd-4th September, 2020

18. Prajit Rawte and Priyank Upadhyaya, "Numerical Modelling of Bilayer Tetra Periodic Metamaterials to Predict the Elastic Response", ICONMEAS 2020, Malaysia. Materials Today: Proceedings

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. Kaustubh P. Kothekar, Naveen K. Shrivastava, Shashikant B. Thombre. Gas Diffusion Layers for Direct Methanol Fuel Cells. Direct Methanol Fuel Cell Technology (2020), 317-339, Elsevier. eBook ISBN: 9780128191590

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

i) National: Nil

ii) International:

8. INVITED TALKS GIVEN BY BITS FACULTY

1. P. Upadhyaya, AICTE AQIS sponsored STTP on "Advances in Additive Manufacturing" Organized by Siemens Centre of Excellence for Digital Manufacturing and Robotics, Department of Mechanical Engineering YCCE, Nagpur, 22 July 2020.

2. S. Vincent, "Bulk Metallic Glasses and its Applications", FDP on Recent Trends in Materials Science, 12-16th Oct 2020, GMRIT , India (Invited Speaker)

3. Naveen Shrivastava, "Introduction to Fuel Cells", Three Days Online Faculty Development Programme (FDP) on Renewable Energy – A Future Prospectus, Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering, Nashik, India, September 4, 2020.

4. Shashank Khurana, Asia-Pacific Space Generation Online Workshop, held Virtually, during 5th-6th December 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Nitin Labhsetwar (Chief Scientist & Head Energy & Resource Management Division CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), July 14, 2020. Through Google Meet)

2. Dr.S.NAGESH (Scientist E, Aircraft Projects Division, CVRDE, DRDO, Ministry of Defense, Chennai, India) Application of Advanced Composites for High Speed Rotor Application. (Sun Aug 9, 2020 through Google Meet).

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: NIL

b. Won by Students:

1. SITARE-GYTI Award 2020 (15 lac Research Grant for 2 Years) Student: Prem Dakshin Research Guide: - Dr. Shashank Khurana

11. Faculty Development, International Collaboration & Industry Immersion

12. PATENTS FILED/PUBLISHED AND GRANTED: NIL

13. Departmental Associations Activities

ASME

1. Guest talk on "Quality Control and Assurance" by Deepan Govindasamy on 30th November 2020

2. Guest talk on "Steam Engineering" By N. Monikandan on 23rd November 2020.

MEA

1. Webinar on "Job experiences in UAE" by Alumni from Mechanical Engineering Department featuring, Mukarram, Gauri Khanna, Panay Adepalli, Shehab on 25th July 2020

2. Webinar on "Higher studies in North America" by Alumni from Mechanical Engineering Department featuring, G. Swaminathan, Vaishak, Samreen Khan on 12th July 2020

IEI

1. Arduino Hands-On Workshop conducted on Engineers Day.

14. Significant New Equipment/Experimental Facility Added

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	High Speed Camera	1
2.	Turtle Bot Robot Kit	1
3.	Vacuum Bag Molding Kit	1
4.	Laser Cutter	1
5.	Simufact Welding Simulation Software	1 Research 2 Teaching

B4.14.5. Department: Computer Science

B4.14.5. Department: Computer Science

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	2
Associate Professors	0
Assistant Professors	9
Lecturers	2
Visiting Faculty	0
Visiting Assistant Professors	1

Head of the Department: Dr. Raja Muthalagu

Contact details: raja.m@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 14

Full Time   **:** 11

Part Time   **:** 3

Aspirant Scheme   **:** Nil

Ph.D. Thesis Submitted during the year: 2020 (viva conducted)

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Milu Mary Philip (submitted during summer term 2019)	2012PHXF0003U	Software Architectural Design for Interactive and Data Stream Oriented Systems with Changing Requirements	Prof. Vijayakumar B.	Nil.
2	Lekha R. Nair	2013PHXF0008U	Implementing Optimized Static and Streaming Analytics, Visualization and Secure Storage of Big Data on Cloud	Dr Sujala D. Shetty	Nil

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Raja Muthalagu, Anudeepsekhar Bolimera and V. Kalaichelvi " Lane detection technique based on perspective transformation and histogram analysis for self-driving cars" Computers & Electrical Engineering, Elseiver, Vol. 85, July 2020, 106653. https://doi.org/10.1016/j.compeleceng.2020.106653

2. Raja Muthalagu, Anudeepsekhar Bolimera and V. Kalaichelvi "Vehicle Lane Markings Segmentation and Keypoint Determination Using Deep Convolutional Neural Networks" Multimedia Tools and Applications, Springer (In Press– Dec. 2020).

3. Samyuktha, Raja Muthalagu "Customer Segmentation Using Various Machine Learning Techniques" Int. J. of Business Intelligence and Data Mining, Inderscience (In Press– Dec. 2020).

4. K Sasikumar B.Vijaykumar, An Efficient Multi-Objective Model for Data Replication in Cloud Computing Environment, International Journal of Enterprise Information Systems (IJEIS), DOI: 10.4018/IJEIS.2020010104, Volume : 16,Issue : 1.Article :4,Pages :69-91, December 2019.

5. K. Nithya, Amartya Das Sharma, B. Vijayakumar, A Framework for Storage and Retrieval based on Content and Metadata for Distributed Vector Graphical Objects, International Journal of Advanced Science and Technology, Vol. 29, No. 1, (2020), pp. 681 – 695.

6. Milu Mary Philip, Nishank Singhal, Raagasree R, Vijayakumar B, A Quantitative Approach to Analyze Modifiability in Software Architectural Design of Agile Application Systems, Information Technology and Control Journal Vol. 49, Iss. 2, 2020, pp. 249-259, indexed in Scopus, Science Citation Index Expanded.

7. Milu Mary Philip, Amrutha Sheshadri, Vijayakumar B, "Micro-services Centric Architectural Model for handling Data Stream Applications, Cybernetics and Information Technologies Journal, indexed in Scopus, Science Citation Index Expanded, Sep. 2020, Vol. 20, Issue 3, pp. 32-44, DOI: 10.2478/cait-2020-0026.

8. K. Nithya, P. Vidyadhari, P. Padmanabham, B. Vijayakumar, 2020, Design Considerations for Storage and Content-Based Retrieval of Distributed Music Audio Objects, International Journal of Advanced Science and Technology, Vol. 29, No. 3, pp. 11195 – 11204.

9.   Movie Rating Prediction using Ensemble Learning Algorithms, Zahabiya Mhowwala , A. Razia Sulthana , Sujala D. Shetty, International Journal of Advanced Computer Science and Applications (IJACSA) ,Vol. 11, No. 8, September 2020 (DOI) : 10.14569/IJACSA.2020.0110849 (Scopus)

10. Sulthana, A. Razia, Maulika Gupta, Shruthi Subramanian, and Sakina Mirza. "Improvising the performance of image-based recommendation system using convolution neural networks and deep learning." Soft Computing, Mar 2020, Impact factor: 1.58.

11. Jovith, A.A., Raja, S.K. and Sulthana, A.R., 2019. Interference mitigation and optimal hop distance measurement in distributed homogenous nodes over wireless sensor network. Peer-to-Peer Networking and Applications, pp.1-11. Impact factor: 2.397

12. Arokiaraj Jovith, A., Kasmir Raja, S.V. and Razia Sulthana, A., Interference mitigation in point to point wireless sensor networks using LSP protocol and time division multiplexing approach. Journal of Intelligent & Fuzzy Systems, (Preprint), (Accepted: May 2020) pp.1-10.

13. Zahabiya Mhowwala, A. Razia Sulthana and Sujala D. Shetty, "Movie Rating Prediction using Ensemble Learning Algorithms" International Journal of Advanced Computer Science and Applications (IJACSA), 11(8), 2020. http://dx.doi.org/10.14569/IJACSA.2020.0110849

14. Vijaya Gajanan Buddhavarapu and J. Angel Arul Jothi, "An Experimental Study on Classification of Thyroid Histopathology Images Using Transfer Learning", Pattern Recognition Letters, Elsevier, 2020. DOI: https://doi.org/10.1016/j.patrec.2020.09.020

15. Shaleen Bengani, J. Angel Arul Jothi and S. Vadivel, "Automatic segmentation of optic disc in retinal fundus images using semi-supervised deep learning", Multimedia Tools and Applications, Springer, 2020. DOI: https://doi.org/10.1007/s11042-020-09778-6

16. Anubhav Gupta,vadivel and S.Bhattacharya,"Can Model Checking Assure Distributed Autonomous Systems Agree? An Urban Air Mobility Case Study"-Has been accepted for publication in the International Journal of Advanced Computer Science and Applications (IJACSA) - Volume 11 No 12 December 2020(both (scopus indexed and web of science indexed)

17. Shivakumar C and Siddhaling Urolagin, "The Contrivance of Prism Rule-Based Algorithm using ADLs Dataset in Context Database Design", in Journal of Engineering Science and Technology Review, 13(2), 206 - 214, Scopus, Mar, 2020.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: NIL

ii) International:

1. Adithya Thachappully Praveen, Raja Muthalagu, Sapna Sadhwani, "Genesis Net: Fine Tuned Dense Net Configuration using Reinforcement Learning" presented in 4th International Conference on Artificial Intelligence and Virtual Reality (AIVR2020), Japan, Will be published in ACM International Conference Proceedings Series, 2020.

2. Sruthi Janardhanan, Raja Muthalagu "Market segmentation for profit maximization using machinelearning algorithms' presented in International Conference on Advances in Physical Sciences and Materials, India, Published in IOP Science : J. Phys.: Conf. Ser. 1706 012160, 2020.

3. Raghav venkadesh, Raja Muthalagu "Network security prediction model using neural networks" presented in International Conference on Advances in Physical Sciences and Materials, India, Published in IOP Science : J. Phys.: Conf. Ser. 1706 012167, 2020.

4. Mohammed Afaounodden Ahmed, Raja Muthalagu "Descriptive Analysis on Products/Services demand and Market conspectus: A quantitative approach" Presented International Conference on Electrical Energy and Power Engineering, Malaysia, Will be published in IOP Science: Materials Science and Engineering (MSE), 2020.

5.   S. Jeyalatha, B. Vijayakumar, Web Usage Mining Algorithm for an Academic Search Application, International Conference on Computational Intelligence and Knowledge Economy, ICCIKE 2019, PaperID: ICCIKE-100, 11-12 Dec. 2019, AMITY University, Dubai, UAE.

6.   Sasikumar K, Vijayakumar B, "An Efficient Replica Management Based Disaster Recover Using Elephant Herding Optimization Algorithm", Proceedings of the International Conference on Computer Networks and Inventive Communication Technologies- ICCNCT 2019, LNDECT 44.PP 392-399, 2020. Indexed in Scopus and Published in Springer Nature Journal as a special issue - Springer Nature Switzerland AG 2020, https://doi.org/10.1007/978-3-030-37051-0_45.

7.   "Sentiment Analysis, Tweet Analysis and Visualization on Big Data using Apache Spark and Hadoop", Sujala D. Shetty, International Conference on Applied Scientific Computational Intelligence ASCI-2020,December 22-23 2020. To be published in IOP Conference series (Scopus Indexed) and Visualization on Big Data Using ache Spark

8.   "Cybersecurity During COVID-19", Sheeba Uruj Ahmad, Sunidhi Kashyap, Dr. Sujala D. Shetty, Dr. Neeru Sood, Fifth International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2020) 11-12 December 2020.Paper will be published in in Springer Lecture Notes in Networks and Systems series.(Scopus Indexed)

9.   Razia Sulthana A, Aakansha Mathur, "A State-Of-Art Of Machine Learning Algorithms Applied Over language Identification And Speech Recognition Models", International Virtual Conference on Cyber Physical systems July, 2020. to be published in Lecture Notes in Electrical Engineering

10. Razia Sulthana A, Aakansha Mathur, "A Study of Machine Learning Algorithms in Speech Recognition and Language Identification System", International Conference on Innovations in Computer Science & Engineering (ICICSE-2020). To be published in LNNS Springer Series

11. Tanzeeha Sulaiman, Angel Arul Jothi J., Bengani S., "Automated Grading of Diabetic Macular Edema Using Deep Learning Techniques", pp 264-272, 2020. In: Goel N., Hasan S., Kalaichelvi V. (eds) Modelling, Simulation and Intelligent Computing. MoSICom 2020. Lecture Notes in Electrical Engineering, vol 659. Springer, Singapore.

12. Tushar Agrawal and Siddhaling Urolagin, "2-way Arabic Sign Language translator using CNNLSTM architecture and NLP", Accepted in ACM, Ei Compendex and Scopus, ISI Web of Science, International Conference on Big Data Engineering and Technology BDET-20, Jan 2020 in Singapore.

13. Tushar Agrawal and Siddhaling Urolagin, "Multi-Angle Parking Detection System using Mask R-CNN", Accepted in ACM, Ei Compendex and Scopus, ISI Web of Science, International Conference on Big Data Engineering and Technology BDET-20, Jan 2020 in Singapore.

14. Keerthana Pramudi Suresh and Siddhaling Urolagin, "Android App Success Prediction Based On Reviews", Accepted in IEEE International Conference on Computation, Automation and Knowledge Management (ICCAKM - 2020), Jan 2020, Amity University, Dubai.

15. Sweta Suman and Siddhaling Urolagin, "Star Schema Based Data Warehouse Model for Education System using Mondrian and Pentaho", Accepted in Springer, Scopus and Web of Science indexed International Conference on Modelling, Simulation & Intelligent Computing,Jan 2020, BITS-Pilani, Dubai.

16.   Jeel Patel and Siddhaling Urolagin, "Sentiment Analysis and Prediction of Point of Interest based Visitors' Review", Accepted in Springer, Scopus and Web of Science indexed International Conference on Modelling, Simulation & Intelligent Computing,Jan 2020, BITS-Pilani, Dubai.

17. Haritha Harikrishnan and Siddhaling Urolagin, "Prediction of Stock Market Prices using Recurrent Neural Network - Long Short Term Memory", Accepted in Springer, Scopus and Web of Science indexed International Conference on Modelling, Simulation & Intelligent Computing,Jan 2020, BITS-Pilani, Dubai.

18. Shiva Kumar and Siddhaling Urolagin, "Bequest of RETE Algorithm for Rule Assessment in Con-text Database", Accepted in Springer, Scopus and Web of Science indexed International Conference on Modelling, Simulation & Intelligent Computing,Jan 2020, BITS-Pilani, Dubai.

19. Kokate P., Tamizharasan P.S. An Empirical Comparison of Generative Adversarial Network (GAN) Measures. International Conference on Advances in Communication and Computational Technology, Springer, Kurukshetra, India, pp. 1383-1396, August 2020.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED :   **NIL**

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT

1. Conducted 4- week workshop on "Introduction to IoT" CISCO networking academy certified course offered to the prospective students from 26-07-2020 to 20-08-2020.

2. Conducted a 2- week workshop on "LINUX Concepts and Applications" to the school students from 12-07-2020 to 26-07-2020.

3. Conducted a 2- week workshop on "Foundation of Machine Learning and Secure Interaction" to the school students from 16-08-2020 to 27-08-2020.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Sujala D. Shetty delivered a talk in the "Online International Workshop on Data Science and Machine Learning for Academicians and Researchers (5th – 7th November 2020)", jointly organized by Knowledge Consortium of Gujarat (KCG) and Research and Publication Divison, Rashtriya Raksha University, Gandhinagar (Gujarat, India).Date: 7th November 2020. Topic: Current Advances in ML,AI and IoT.

2. Dr. Sujala D. Shetty delivered keynote address in "8th International Conference on Innovations in Computer Science and Engineering (ICICSE-2020), an online virtual conference" held on 28th & 29th August, 2020, under the flagship of Guru Nanak University, in collaboration with Guru Nanak Institute of Technical Campus and Guru Nanak Institute of Technology. Keynote Speech on "Advancements in the field of Artificial Intelligence" in the keynote session scheduled on 28th August, 2020 .

3. Dr. Sujala D. Shetty was invited to be Keynote speaker in International Webinar on "Impact of Digital Threats and Cyber Risks during Covid-19. Organized by Department of Computer Science, Sophia Girls' College (Autonomous), Ajmer, Rajasthan.Date: 24th July 2020. Topic of Talk : "A talk on Digital Threats and Cybercrimes during Covid-19.

4. Dr. Sujala D. Shetty delivered a Talk as Invited speaker in Global Lecture Series conducted by S.S.L.N.T. Mahila Vidyalaya, Dhanbad held on 29th July 2020. Topic: Impact of Artificial Intelligence on Business.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

10. AWARDS AND RECOGNITIONS

a. Won by Faculty: NIL

b. Won by Students:

1. Team Offyce were awarded the "Best Technical Project" amongst 200+ participants. Offyce, with the team consisting of Sidhant Sharma (4th year Mech), Hardik Bhatia (4th year CS), Khushdeep Singh (4th Year CS) and Vyome Pathak (4th Year Mech), provides a virtual office space to ultimately replace the existence of physical offices wherever applicable. Prizes: A monetary award of AED 20,000.

2. Adithya Praveen (IV year CS) have secured the bronze position at the Jina X Virtual Hackathon 2020 presented by AngelHack, among 700 participants competing worldwide along with a monetary award of $500 for the same.

3. Adithya Praveen (IV year CS) & Dhruv Duseja (IV year CS) has won the "Covid-19 Challenge presented by Google Cloud" at HackNC 2020, conducted by the University of North Carolina, USA, among 81 teams competing globally.

4. Team deGerm from BITS Pilani Dubai Campus has returned with flying colours with an Award for 3rd Place at the recently held Confederation of Global Innovators' Hack-A-Health Hackthon 2020, concerning the impact of COVID-19 and proposing solutions for the same. Team deGerm: Karan Sharma (3rd Year CSE), Kavya Parthasarathy (3rd Year CSE)

5. Mujahid Salim (3rd Year CS) along with Zius Cooper(2nd Year ECE) has won second place at the INSEAD UAE- Crack the Crisis Challenge.

6. Team SolarGridX team members Hardik Bhatia, Devansh Shah and Prashanth Konda features in The National for tokenising - the process of converting an asset into a digital token through blockchain technology - solar power.

7. Aditya Saxena (1st year- Dept. of Computer science) and Yatharth Kher (3rd year - Dept. of Computer science) representing BPDC have secured the 1st Prize in the event and have been affiliated as 'Spotlight 2020 Star of Tech-Zest' conducted by University of Stirling, UAE on the 27th of June, 2020.

8. Karan Sharma and Kavya Parthasarathy from 2nd Year Computer Science Department students have brought home laurels by winning the ThoughtWorks Social Hackathon 2020, conducted by LetsEndorse, eKonnect and Social Alpha, by representing Team 'deGerm' under the agenda of: "Developing an efficient

prediction and response system to map, track, prevent, and treat communicable disease outbreaks in real-time"

9. Team PowerErn: Jaskaran Singh Sethi(Team Lead)(2nd Year ECE), Karan Sharma(2nd Year CS) & Shaikh Firdous Banu(2nd Year ECE) have brought home laurels by winning at the UAE Finals as well as the Middle East & Africa finals of Schneider Electric Go Green 2020- the World's Biggest Global Student Competitions for Sustainability Startups. Schneider Electric Go Green aims to be on the lookout for bold ideas that can shape the future of Digital Transformation of Energy Management, Access and Automation.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED

1. Razia Sulthana, Machine learning enriched Plug in and play book ontology app for online e-stores, Application no: 2020102542, Patent Office Journal Nov, 2020

2. Razia Sulthana, An IOT based smart and efficient wireless power transmission system, Application no: 2020101733, Aust pat: 34/34, Sep, 2020

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

13.1 ACM

ACM is a vibrant community of highly motivated students with a strength of 100+ members. The association offers a number of technical events throughout the year on a number of upcoming and state of the art technologies. A number of workshops as well as events and hackathons are conducted throughout the year.   The chapter was nominated as a distinguished chapter for student activities by ACM-NY Headquarters on April 24th 2020 and a cash prize of $500 was awarded. The List of activities conducted in 2020 is as follows:

Date	Name	Description
02/11/2020	Project: Sierra	A criminal investigation game played by a pair: Control: Oversees the progress from a workstation [Computer] at the facility [Room 108 / TBA]. Solves clues to help further the investigation. Patrol: Sleuths around the scene of the crime [Campus]. Gathers clues to aid the investigation. The two must combine their resources to solve the investigation.
02/12/2020	CTF	Capture the flag is an event where teams attempt to exploit some security flaw in a system/file/network to find a 'flag' that allows them to gain points and proceed to new challenges in the game. Teams need not know programming to participate but having a coder on your team is always a plus. ACM's CTF is a Jeopardy-style Capture the Flag competition. There will be multiple categories of cybersecurity fields, each of which will contain a variety of questions of different point values and difficulties.
02/13/2020	The Big Oh	A Science and Technology quiz held during "Enginuity". The quiz consisted of a preliminary round and a final round with 6 teams. The winners walked away with cash prizes worth AED 200.
02/20/2020	Google Hashcode	BPDC ACM organized a hub for Google Hash Code 2019 where students could work on the programming challenge together. We also provided the participants with food, drinks, tech tattoos and ACM merchandise.
03/06/2020	Career Launchpad	Placement Division in collaboration with BPDC ACM Chapter will bring a set of intensive workshops to sharpen skill sets for students from all years and disciplines spanning the month of March 2020. The series will involve student mentors, professionals from the industry and researchers to prime students with the skills necessary to ace interviews and applications in corporate and graduate environments. The workshops and training are catered towards students from all years and especially for Junior and Senior Year students who are due for graduation and Practice School respectively.
09/17/2020	Orientation	Orientation is an annual event held at college campus to introduce freshmen to the ACM. We talk about the contribution of ACM in advancement in computing and how ACM has helped people develop their careers. We introduce them to the local student chapter and its SIGs. It provides a networking opportunity to connect with ACM Council members and become a part of this developer community.

Date	Name	Description
09/21/2020	SIG Introduction (AI & CP)	This is the first event in a series of events to introduce students to local SIGs at the student chapter. The first section of the event focused on the rise of Artificial Intelligence in the last decade, job opportunities, and getting started on the topic. The second half of the event focused on the importance of programming, especially competitive programming, and how it is the backbone of the entire computer science industry.
09/30/2020	SIG Introduction (Dev & Hex)	This is the second event in a series of events to introduce students to local SIGs at the student chapter. The first section of the event focused on the importance of web, game, and app development, its job opportunities, and getting students started on the topic. The second half of the event focused on one of the most requested topics - cybersecurity. We showcased the CTF event's held on campus, and talked about how to get started covering the basics of penetration testing.
10/14/2020	Q Challenge	Q Challenge is a quiz event that tests the logical, analytical, and programming skills of the participants. The quiz is divided into two sections with multiple choice, and descriptive answers to test every aspect. The questions are divided into various difficulty levels so that each participant can deliver his best. The winner is awarded with a cash prize.
10/20/2020	Computer Science Essentials	Computer Science Essentials was an event conducted to introduce students to the frequently used tools, softwares, frameworks, packages, etc. in different subfields of computer science. We also covered the fundamentals of computing, using version control systems like GitHub, and introduction to the Linux operating system.
10/29/2020 - 12/17/2020	Coding Bootcamp	The Coding Bootcamp was a 7-week series of workshops focused on freshman students to introduce them to programming. The weekly events covered topics ranging from basics of Linux, GitHub to intermediate data structures and algorithms in Python. The 2-hour sessions included lectures as well as practical development sessions conducted online through remote desktop/screen share.
12/24/2020	Code Champ	The Code Champ was an online competitive programming contest conducted to spread knowledge and awareness among the students. The competition comprised of 3 problems of varying difficulty to be solved in 2 hours. The evaluation was done using standard test cases against the submitted code.

13.2 ACM-W

This year we started the first student chapter for Women in UAE, ACM-W. This chapter gives a platform for girls and women to conduct sessions and motivate more women to join technical communities. A number of events were conducted as listed below:

Semester Kickoff and Introduction Session

The ACM-W introduction session for the new academic year was held on 9th February, 2020. The attendees interacted with the team to learn more about the sessions and future events and bagged the opportunity to earn free Udemy courses and ACM Swag.

Azure Fundamentals Workshop

The Azure workshop for Data Science co-organized by ACM-W and Microsoft Club was held on 29th February 2020. The guest speaker was Mr. Pradheepan Raghavan, a Data Scientist Graduate who has working experience in the company Petrofac, Sharjah and is also a Microsoft Student Partner. The workshop was held online mode and explored various aspects of Data Science such as Data Science Life cycle, Basics of Azure Data Factory, Azure Data Lake and Power BI.

ACM- W Online Webinar

Before the next semester of the year, we conducted an exclusive webinar session collaborating with ACM during the pandemic for the incoming freshers informing them about the clubs activities and membership details. We also held a virtual registration drive for 1-2 weeks after the introduction session.

ACM-W New Members Election

The new members of the ACM-W council for the academic year 2020-2021 were appointed. The members were introduced to the new team and about their personal interests in the field of computer science.

Weekly Quiz

A computing quiz was held during the month of September. The quiz was based on general facts about computer science and the winners got a special shoutout on Instagram and Facebook. The winner of the quiz was Dhakshina and Gokul both from the third year of Computer Science.

Latest Newsletter Edition

The 8th Bi- Monthly Issue of ACM- W BPDC Student Chapter was introduced in this new academic year with a newer and innovative design. The newsletter provided students with various opportunities such as hackathons, internships, web resources and so much more.

13. 3 Microsoft Tech Club Activities

Microsoft Tech club has commenced its activities at BITS pilani Dubai campus from 2005 onwards. The main motivation of the club has been to educate undergraduate students in computer science to get hands-on training on Microsoft tools on emerging technologies like azure cloud, Microsoft BI tools, latest operating systems and Database servers, cross platform mobile development tools and visual studio. Also, through Microsoft tech club we had established MSDN academic alliance with Microsoft and made available various software tools from Microsoft free of cost for education purpose. Recently the club has also expanded it activities like conducting various hackathons and technical quizzes etc; As most of the PS-2 industries in Gulf makes use of Microsoft tools, the training imparted by the club for its members have been very useful.

S.No	Name of the event	No. of Participants	Outcome of the event
1	Frynapse 1.0	45	Event was a great hit and was liked and relished by everyone
2	Kahoot Quiz 1.0	50	The event was in collaboration with the Flummoxed Quiz Club at BPDC, and the event was very well received and highly appreciated by all the paritcipants
3	Typing Contest 1.0	50	The event was highly successful and helped the participants gain better insights as to how to increase their typing speed and gave them an opportunity to compete against one another in a knock-out type series.
4	Skribbl Contest 1.0	45	The event was in collaboration with the Flummoxed Quiz Club at BPDC, where the event hosted a server for friends and peers to join in and have fun, together, in multiple rounds of the world famous online game: Skribbl.io
5	Learn from Experience Online Series	316	This Online Series dealt with introducing people from BPDC to ex-BPDC Students, who are currently studying at World Famous Higher Educational Institutions and also people working at various Prestigious Companies. This has given the members of the Microsoft Tech Club a very good opportunity to understand what it takes to be at their dream-places of work or study.
6	Tech Hacks Online Series	316	This Online Series is dealing with spreading knowledge about various technical topics and skills, in the vast domain of Computer Science
7	Cyberseurity Workshop by Divya Singh	30	In this Workshop by Ms. Divya Singh, who is a Cybersecurity Expert and works at a very prestigious institution, she explained to the members of the Microsoft Tech Club, as to why is it necessary to indulge yourself in the field of Cybersecurity? Also, she further discussed about her role in her institution, and how she combats cyber threats for them.

13. 4 LINUX USERS GROUP

The Linux Users group was started in Oct. 2005. The registrations are free and open to all BPDC students. The group also provided resource material on UNIX Commands and Editor for first year students and Installation related assistance for UBUNTU OS for interested Project students. The group conducted a short term course on LINUX Concepts and Applications during 12th July 2020 – 25th July 2020, for ten school students of grade 12 in UAE.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
12.	Procured Netsim standard edition (Research edition).	3
13.	Procured Netsim standard academic edition (version 12).	70
14.	Latest versions Altova XML spy editor2020, Altova Umodel 2020 have been procured to do XML,software design etc.	1
15.	Adobe creative cloud	5
16.	Enterprise Architect Academic License renewed for one year	20
17.	Arduino UNO R3 Starter Kit with RFID and Bluetooth module	5
18.	Google Coral Development Board DEV-15318	5
19.	Coral Camera DEV-15883	5
20.	Sensor Kit for Raspberry Pi Kit Includes: 1 x PIR Motion Sensor 1 x HC-SR04 Ultrasonic Sensor 1 x Digital LDR Module 1 x Analog and Digital Soil Moisture Sensor Module 1 x Capacitive Touch Module with "Toggle and On/OFF Mode" 1 x DHT22 Sensor Module 1 x Digital IR Sensor Module 1 x (Honeywell SS49E) Hall Effect Sensor Module 1 x Resistor 5.6k 1 x Resistor 10K	5

B4.14.6 Department: Biotechnology

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**03**
Associate Professors	**02**
Assistant Professors	**03**
Lecturers	-
Visiting Faculty	-
Visiting Assistant Professors	-

Head of the Department : Dr. S. Ramachandran

Contact details   : sramachandran@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 08

Full Time   : 05

Part Time   : 03

Aspirant Scheme   : -

Ph.D. Thesis Submitted during the year: 2019

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
1	Ms. Rajeshwari S	2013PHXF0018U	Physiological and Genetic Basis of Response to Salinity in Cereal Crops	Dr Neeru Sood	-

1. SPONSORED RESEARCH AND CONSULTANCY

PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
2-	-	-	-	-	-	-	-

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1	Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications Using Saline and Recycled Wastewater	BIOT	Dr. S. Ramachandran	Dr. Khalil Ammar, Dr. Dionysia Angeliki Lyra, (ICBA); Dr. C. Babu, (TNAU); Dr. Neeru Sood, Dr. Trupti Gokhale, Dr. B.G. Prakash Kumar, (BPDC).	-	International Center for Biosaline Agriculture (ICBA), Dubai	46 Lakhs (BPDC: AED: 120,000; ICBA: AED: 125,000)
2	A metabolomics approach to explore the health benefits of Salicornia bigelovii exposed to different degrees of salinity stress	BIOT	Dr Mainak Dutta	-	RIG	-	AED 20,000

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals

1. S. Rajeswari, A. Somasundaram, Nishrin Abdul Gafoor, Trupti Gokhale Swarup, Neeru Sood & S. Arumugam.A(2020).Computational approach to identify the role of potassium transporter in barley.AKCE International Journal of Graphs and Combinatorics Volume 17, Issue 1Pages 550-559

2. S. Rajeswari, A. Somasundaram & Neeru Sood (2020) Salt Stress-Responsive Protein Interaction in Hordeum vulgare Walailak Journal of Science and Technology (WJST), 17(3), 285-292

3. Nanda, A., Thangapandi, K., Banerjee, P., Dutta, M., Wangdi, T., Sharma, P., Chaudhury, K., Jana, S.K, Cytokines, Angiogenesis, and Extracellular Matrix Degradation are Augmented by Oxidative Stress in Endometriosis. Annals of Laboratory Medicine, Korean Society for Laboratory Medicine, 40(5):390-397, 2020

4. B.G. Prakash Kumar, Rusal Raj Francis, Aisha Raouf, Ramachandran Subramanian, Suresh Gupta, Geetha Kannan, K. Thirumavalavan (2020) Torrefied materials derived from waste vegetable biomass. Materials Today: Proceedings, 28(2) 852-855

5. A. P Bidkar, P. Sanpui and S.S. Ghosh. Transferrin-Conjugated Red Blood Cell Membrane-Coated Poly(lactic-coglycolic acid) Nanoparticles for the Delivery of Doxorubicin and Methylene Blue. ACS Applied Nano Materials (2020)

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National:

ii) International:

1. Neeharika Senthilkumar, Neeru Sood, Trupti Gokhale and Mrutuyanjaya Sahu (2020) Bioethics and Biosafety Policies and Practices in UAE: A Critical Review .Fifth International Conference on Emerging Research Paradigms in Business and Social Sciences (ERPBSS 2020) Jan14-16 . Middle Sex University Dubai

2. Ramachandran Subramanian, Neeru Sood, Dionyssia Angeliki Lyra, Trupti Gokhale, Khalil Ammar, Prakash Kumar B G; Pennisetum purpureum (Napier grass) varieties for Animal Fodder Production; Gulf Forum on Innovations in Marginal Environments. Nov. 20-21, 2019, Al Habtoor Polo Resort, Dubai, UAE.

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED: **NA**

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   **NA**

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Trupti Gokhale delivered an invited talk on "Role of metal nanoparticles in enhancing Agricultural Produce" at the International Conference on Innovative Practices in Agricultural Biotechnology 2020 during 29 August 2020 held at Shri Vyankatesh Arts, Commerce and Science College, Deulgao Raja, India.

2. Dr. Trupti Gokhale delivered an invited talk on "Biosynthesis of metal nanoparticles and their potential use as Biofertilizer and Biopesticide" at the International Conference on Microbes for Better Tomorrow 2020 during 22-23 February 2020 held at The Maldives National University, Male, Maldives.

3. N Khanna, Strain Development for Waste to Energy Generation. One Week e-FDP cum Workshop entitled ''Waste-to-Bioenergy'' webinar series organized by Sharda University, NCR, India and Maharashtra Institute of Technology, Aurangabad, India, on 1 July 2020 (invited talk)

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT:NA

10. AWARDS AND RECOGNITIONS

    a. Won by Faculty: **NA**

    b. Won by Students: **NA**

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NA

12. PATENTS FILED/PUBLISHED AND GRANTED :   **NA**

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Chimera Association:

1. Chimera organized a talk by Ms. Safiya Aafreen, a 2020 graduate who is currently doing her MSE Biomedical Engineering, in Johns Hopkins University, US on 5th November 2020.

2. A talk by Dr. Zubair Ahmed, a postdoctoral researcher at University of Nottingham, UK was organized by Chimera on 12th November 2020.

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Real Time PCR	1
2.	Chemidoc with Westren Blot transfer apparatus	1
3.	Lab centrifuge	1
4	Bead Beater	1
5	Plant Growth chamber	1

B4.14.7 Department: General Sciences

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	**5**
Associate Professors	7
Assistant Professors	**4**
Lecturers	0
Visiting Faculty	0
Visiting Assistant Professors	0

Head of the Department: Dr.Geetha Kannan

Contact details: vilango@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 1

Full Time   **:** 1

Part Time   **:** 0

Aspirant Scheme   **:** 0

Ph.D. Thesis Submitted during the year: 2020 NIL

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1.PROJECTS SANCTIONED

A. Government Sanctioned

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1							

B. Completed Industry Projects

S.No	Project Title	Department	Principal Investigator	Co- Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1							

C. Completed International Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborator (if any)	Amount Sanctioned (INR)
1							

D. Completed Institute Projects

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborator (if any)	Amount Sanctioned (INR)
1							

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty In Journals:

1. Adrijit Goswami, Snigdha Karmakar, Sujit Kumar De and Tapan Kumar Datta (2020): An integrated production policy with defective items and stock-out based substitution under triangular dense fuzzy lock set environment. RAIRO Operations Research (Accepted for publication on 17 September 2020)

2. Tapan Kumar Datta, Prasanta Nath and Karabi Dutta Choudhury (2020): A hybrid carbon policy inventory model with emission source-based green investments. OPSEARCH, vol 57(1), 202-220.

3. Suhel Ahmad Khan, KR Kazmi, W Cholamjiak, H Dutta, Convergence analysis for combination of equilibrium problems and k-nonspreading set-valued mappings, Proyecciones (2020) 39 (3), 599-619 (S

4. W. Cholamjiak, Suhel Ahmad Khan, D. Yambangwai and KR Kazmi, Strong convergence analysis of common variational inclusion problems involving an inertial parallel monotone hybrid method for a novel application to image restoration, Revista de la Real Academia de Ciencias Exactas, 114 (2020) Article number: 99 Springer Publication

5. Suhel Ahmad Khan, KR Kazmi, D Yambangwai, W Cholamjiak, A hybrid projective method for solving system of equilibrium problems with demicontractive mappings applicable in image restoration problems, Math. Methods Appl. Sciences (2020) 43 (6), 3413-3431 Wiley Online Library 5.

5 .CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED :   NIL

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED :   NIL

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   NIL

8. INVITED TALKS GIVEN BY BITS FACULTY: NIL

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT :   NIL

10. AWARDS AND RECOGNITIONS :   NIL

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION: NIL

12. PATENTS FILED/PUBLISHED AND GRANTED :   NIL

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES: NIL

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	Mechanics virtual lab	25

B4.14.8. Department: Humanities & Social Sciences

Number of faculty members (as on 31st December 2020)

Senior Professors, Professors	01
Associate Professors	00
Assistant Professors	08
Lecturers	00
Visiting Faculty	07
Visiting Assistant Professors/Professors	01

Head of the Department: Shazi Shah Jabeen

Contact details: shazi@dubai.bits-pilani.ac.in

Number of Ph.D. Scholars: 12

Full Time   : 03

Part Time   : 09

Aspirant Scheme   : Nil

Ph.D. Thesis Submitted during the year: 2020 : Nil

S.No	Name	ID	Topic	Supervisor	Co-Supervisor
-	-	-	-	-	-

1. Sponsored Research and Consultancy

PROJECTS SANCTIONED

A. Government Sanctioned - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Industry Sanctioned Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. International Sanctioned Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Institute Sanctioned Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

2. ONGOING PROJECTS

A. Ongoing Government Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Ongoing Industry Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Ongoing International Sanctioned Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

D. Ongoing Institute Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	AIG/ACRG	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

3. COMPLETED PROJECTS

A. Completed Government Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

B. Completed Industry Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

C. Completed International Projects - Nil

S.No	Project Title	Department	Principal Investigator	Co-Investigator	Agency	Collaborater (if any)	Amount Sanctioned (INR)
-	-	-	-	-	-	-	-

4. LIST OF RESEARCH PUBLICATIONS IN SCOPUS INDEXED JOURNALS

Papers Published by Faculty in Journals

1. Raina, M., Ollier-Malaterre, A., & Singh, K. (2020). Happily Exhausted: Work Family Dynamics in India. Occupational Health Sciences. DOI: 10.1007/s41542-020- 00059-0

2. Sartaj Rasool Rather. (2020). In search of optimal inflation – evidence from CPI data. Economic and Political Weekly, 55 (42), 21-24.

3. Raavee Kadam, A.S. Rao, Waheed Kareem Abdul, & Shazi Shah Jabeen. (2020). Diversity climate perceptions and its impact on multicultural team innovation and performance, Measuring Business Excellence, vol. 24 no. 3, pp. 301-318. https://doi.org/10.1108/MBE-04-2019-0037.

5. CONFERENCES/WORKSHOPS/SEMINAR ATTENDED/PAPERS PRESENTED

i) National: Nil.

ii) International:

Conference:

1. Mahima Raina presented a poster on Rethinking Gender in Work Family Management in India in the Division of Occupational Health Psychology Annual Conference of the British Psychological Society held at Stratford-upon-Avon, Warwickshire, United Kingdom during 8-10 January 2020.

2. Mrutuyanjay Sahu, Neeharika Senthilkumar, Neeru Sood, and Trupti Gokhale presented a paper on Bioethics and Biosafety Policies and Practices in UAE: A Critical Review in the Fifth International Conference on Emerging Research Paradigms in Business and Social Sciences (ERPBSS 2020) held at Middlesex University Dubai, during 14-16 January 2020.

3. Mrutuyanjaya Sahu, Aditya Singh Rathaur and Siddhartha Mahendra presented a paer on The Amazons of the Business World: Research Review and Further Directions in the Fifth International Conference on Emerging Research Paradigms in Business and Social Sciences (ERPBSS 2020) held at Middlesex University Dubai during 14-16 January 2020.

4. Shazi Shah Jabeen and Zakia Sadique presented a paper on Factors Influencing the Adoption of E-Learning in Educational and Corporate Sectors in the 12th annual International Conference on Education and New Learning Technologies (EDULEARN20) held at Palma de Mallorca, Spain. during 6-7 July 2020. (Virtual)

5. Prakash R., Vihari, N.S., & Jabeen S.S. presented a paper on Supply Planning & Inventory Management Transformation Journey of a Leading Fashion Apparel Business - Landmark Group in MENA Region: An Analytical Case in the Jaipuria International Management Conference-Envisioning Business 2030 held at Indore, India, during July 17-18, 2020.

6. Muzammil, M., & Vihari, N.S. presented a paper on Determinants for the Adoption of RegTech services by the Companies in UAE: An MCDM Approach in the Collaborative European Research Conference (CERC 2020) held at Belfast, Northern-Ireland during September 10-11, 2020.

7. Prince R., Vihari, N.S., & Rao, M.K. presented a paper on Examining the Effects of Sustainable HRM on Employee Work Wellbeing: The Role of Voice Behavior and Trust in Management in the 12th International Conference on Competitiveness and Stability in the Knowledge-Based Economy held at University of Craiova, Craiova, Romania, during October 30-31, 2020.

8. Mrutuyanjaya Sahu and Aarthi. S.V presented a paper on Migration Policy and Governance in the GCC States in the International Conference on Migration, Diasporas and Sustainable Development: Perspectives, Policies, Opportunities and Challenges organized by Migration Forum Asia held at New Delhi during 2-5 November 2020.

9. Shamshad Ahmad Khan presented a paper in the 18th Asia Pacific Conference organized by Ristsumeikan Asia-Pacific University, Japan, on November 15, 2020 (virtual mode).

10. Veena, Jabeen. S.S., & Vihari N.S. presented a paper on Does Sustainable HRM Impact Employee Work Wellbeing? - Empirical Evidence from UAE in the 4th International Conference on Advances in Business and Law held at University of Dubai, Dubai, UAE, during November 21-22, 2020.

11. Mrutuyanjaya Sahu and Aarthi. S.V presented a paper on Practices of Corporate Social Responsibility in the UAE Banking Sector: A Critical Assessment in the 4th International Conference on Advances in Business and Law in Dubai held at University of Dubai during 21- 22 November 2020.

12. Mrutuyanjaya Sahu, Yatharth Kher and Kartikey Ray presented a paper on Entrepreneurship and Economic Development in UAE: Challenges and Opportunities in the 4th International Conference on Advances in Business and Law in Dubai held at University of Dubai during 21- 22 November 2020.

Workshop

1. Shazi Shah Jabeen attended an online workshop on Social Media and Podcasting Lab conducted by Edulearn20 on 6 July 2020.

2. Shazi Shah Jabeen attended an online workshop on Distance Learning Design with Google Masterclass conducted by Edulearn20 on 6 July 2020.

3. Shazi Shah Jabeen attended an online workshop on Hand-Made Maths Games for Creative Thinking conducted by Edulearn20 on 7 July 2020.

4. Shazi Shah Jabeen attended an online workshop on Digital Storytelling for Education - The State of the Art conducted by Edulearn20 on 7 July 2020.

5. Shazi Shah Jabeen attended an online workshop on Distance Learning Facilitator Masterclass conducted by Edulearn20 on 7 July 2020.

6. Shazi Shah Jabeen attended an online workshop on Distance Learning Design with Google Masterclass conducted by Edulearn20 on 6 July 2020.

Seminar: Nil

6. LIST OF BOOKS/ BOOK CHAPTERS PUBLISHED

1. V. Aruldoss. (2020). Children's Rights, Critiques of. In Cook, D. T. (Ed.) The SAGE Encyclopedia of Children and Childhood Studies. Thousand Oaks: SAGE. ISBN: 9781473942929.

2. V. Aruldoss. (2020). Participation, Protection, and Provision Rights (Three Ps), UNCRC. In Cook, D. T. (Ed.) The SAGE Encyclopedia of Children and Childhood Studies. Thousand Oaks: SAGE. ISBN: 9781473942929.

3. V. Aruldoss. (2020). Human Development Index (HDI). In Cook, D. T. (Ed.) The SAGE Encyclopedia of Children and Childhood Studies. Thousand Oaks: SAGE. ISBN: 9781473942929.

4. Mrutuyanjaya Sahu. (March 2020). Restoring Governance in Conflict Areas, in Making Development Happen: Transformational Change in Rural India, Volume-1, K.Seeta Prabhu & S.Parasuraman,(Eds.) Orient Blackswan Publication, New Delhi.

7. SEMINAR/ WORKSHOP/CONFERENCE CONDUCTED IN THE DEPARTMENT :   Nil.

8. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. Sartaj Rasool Rather delivered an Invited lecture on "Research in Economics: An Overview" to Masters and PhD students of Sarla Anil Modi School of Economics, NMIMS, Mumbai, India on 21 September 2020.

9. INVITED TALKS/DISTINGUISHED LECTURES ARRANGED BY THE DEPARTMENT

1. Dr. Praveen Goyal, Assistant Professor, BITS Pilani, Pilani Campus delivered a lecture on Corporate Sustainability on 03 November 2020.

10. AWARDS AND RECOGNITIONS

a. Won by Faculty:

1. Shamshad Ahmad Khan was invited to participate in a Study Group on Indo-Pacific organized by Kajima Research Institute, Tokyo. The researchers from Japan and India meet through Google Meet once in two months and discuss security and economic issues facing the Indo-Pacific region. The researchers will be asked to submit their papers and it will be published in the form of a compendium.

2. Mahima Raina received Early Career Fellowship (2020) from Work Family Research Network (WFRN).

   This is a prestigious international fellowship received by 15 early career professionals working in the Work-Family research domain every year across the world. This fellowship included an award of $500 to cover expenses to attend the WFRN Annual Conference in New York in June 2020, and conference registration fee waiver. The yearlong engagement offers mentorship in academic career building and opportunities for possible international research collaborations.

3. Shazi Shah Jabeen reviewed a research paper entitled 'Cultural congruence for manufacturing capability and supply chain relationship: A comparison between the Anglo and Eastern European Clusters'; for International Journal of Cross-Cultural Management, Sage Journals Publication. Received 60 days complimentary online access to all journals published by SAGE

4. Shazi Shah Jabeen reviewed a research paper entitled 'Diversity-Development Nexus: Why determine development without diversity? Evidence from Developed and Developing Countries' for the journal Society and Business Review published by Emerald Publishing.

5. Shazi Shah Jabeen was appointed a member of Technical Committee of the 6th International Conference on Culture, Languages and Literature (ICCLL 2020), organized by IEDRC and co-organized by the Institute of General Education of Ming Chuan University held in Ming Chuan University, Taiwan during 15-17 August 2020.

6. Shazi Shah Jabeen examined a PhD thesis entitled "Kannauji Urdu: A Socio-Descriptive Study" of Aligarh Muslim University in July 2020.

b. Won by Students:

1. Prem Dakshin, an MBA student's research work was selected for Students Innovations for Translation & Advancement of Research Explorations (SITARE)-Gandhian Young Technological Innovation (GYTI) Award 2020. Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI), in collaboration with Biotechnology Industry Research Assistance Council (BIRAC) - Department of Biotechnology, India, selected 14 proposals for SITARE-GYTI Awards after multiple rounds of review, for Life Sciences-related applications having high translational potential, from 250 entries of 96 colleges/universities from 23 states, with eleven others receiving appreciation.

11. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Mahima Raina is working on a project on a cross-cultural comparison research study titled, "Lock-down policies and couples' negotiations" under an international research collaboration with Dr. Alina Hernandez Bark, Goethe University of Frankfurt, Germany and Dr. Ameeta Jaga, University of Cape Town, South Africa, Wakil A. Asekun, University of Lagos, Africa for a period of one year. The study is aimed for a research publication in an international journal. No external funding is involved.

2. Mrutuyanjaya Sahu participated in an Online Faculty Development Programme on Research Proposal Development held at VAMINICOM Institute, Pune, India during 7 November 2020.

3. Mrutuyanjaya Sahu participated in an Online Training Programme on Strategies for the Development of Particularly Vulnerable Tribal Groups (PVTGs) in Scheduled Areas held at National Institute of Rural Development (NIRD), Hyderabad, India during 14-18 December 2020.

4. Mrutuyanjaya Sahu participated in an Online Training Programme on Corporate Social Responsibility in Rural Development held at National Institute of Rural Development (NIRD), Hyderabad, India during 21-23 December 2020.

12. PATENTS FILED/PUBLISHED AND GRANTED :   Nil

13. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

Departmental Association/Club activities:

1.   In-house publications:

Two issues of the in-house publications of Dubai Campus were released during the year:

i.   @bitsdubai (Institute's newsletter) - Volume 17 Issue 1 (2019-2020)

ii.   @bitsdubai (Institute's newsletter) - Volume 17 Issue 2 (2019-2020)

2.   Association: **Nil**

14. SIGNIFICANT NEW EQUIPMENT/EXPERIMENTAL FACILITY ADDED: **Nil**

B4.15 DIVISION/ UNIT/ CENTERWISE ACTIVITY HIGHLIGHTS

B4.15.1 Academic Research Division

Award of Ph.D. Degree (viva conducted) Dubai Campus

S. No.	Name	Title
1	P. VELMURUGAN	Detection of High Impedance Fault and Sensitivity Analysis of Distribution Power System in Desert Region
2	Milu Mary Philip	Software Architectural Design for Interactive and Data Stream Oriented Systems with Changing Requirements
3	Lekha R. Nair	Implementing Optimized Static and Streaming Analytics, Visualization and Secure Storage of Big Data on Cloud
4	RAJESWARI	Evaluation of Salinity Stress Responses in Different Accessions of Barley (Hordeum vulgare L.) and Pearl Millet (Pennisetum glaucum (L.) R. Br.)
5	RAAVEE KADAM	Impact of Cultural Intelligence on Organizational Citizenship Behaviour: An Empirical Study of Employees in the Multicultural Workplace

Ph.D. Qualifying examination : 13 Ph.D candidates under full time/ part time, faculty development scheme were permitted to appear in the Ph.D qualifying examination in the year 2020

Sponsored Research Projects

Research projects sponsored by the Institute, are in operation. A list of ongoing research projects is given below:

Ongoing Projects:

S. No.	Projects Title	Principal / Co – Principal Investigator	Sponsored by	Amount Sanctioned(AED)
1	Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications Using Saline and Recycled Wastewater	Dr. S. Ramachandran (PI) Dr. Shoaib Ismail, ICBA, Dr. Neeru Sood, BPDC, Dr. Trupti Gokhale, BPDC, Dr. B.G. Prakash Kumar, BPDC, Dr. C. Babu, TNAU, Mr. Khalil Ur Rahman, ICBA	BPDC SEED GRANT and ICBA, Dubai	AED 245,000
2	Design and Development of closed loop control system to improve the process capability of Incremental Sheet Metal Forming	Dr R Karthikeyan (PI) Dr V Kalaichelvi, Dr Vilas Gaidhane	BPDC SEED GRANT	AED 90,000
3	Bio-Tribo-Corrosion Evaluation of Ti/Zr based Bulk Metallic Glass / Hydroxyapitite Composites for Bio-Implant Applications	Dr Vincent (PI) & Dr R Karthikeyan	BPDC SEED GRANT	AED 90,000

Research Contributions through Higher Degree Dissertations:

A total of 31 M.E. and M.B.A. Dissertation Projects were carried out over a period from January 2020 to December 2020. The list is given in Annexure B4-13

Research Contributions through First Degree Theses:

A total of 40 students completed their first-degree theses during the calendar year 2020. Besides faculty members of the Institute, scientists from R & D labs and other professionals also supervised the thesis work. The complete list is given in Annexure B4-14.

Research Publications by Faculty, Staff and Students:

There were a total of 139 contributions which include 75 in various international Journals and 57 in various Conferences and 7 publications in book chapters. The complete list of research contributions made by the faculty, staff and students is given in Annexures B4-11 and B4-12.

Some Noteworthy Achievements:

1. Two final year students, Urvashi Satwani and Amaan Fathima under the faculty supervisor Dr. Nishant Pandya have secured prestigious 1st place in Environmental Science section at 7th Undergraduate Research Competition (URC) conducted by Abu Dhabi University. The competition started in January 2019 with approximately 900 entries and out of which 300 entries were selected for the final round of presentation on 29th April 2019.

During the year 2020, 2 students underwent FD Thesis & Dissertation at off-campus locations:

1. ANUBHAV GUPTA, University of Florida, USA

2. SATWICK, IISC, Bangalore

Following faculty members delivered invited talks, reviewed proposals, reviewed papers for prestigious journals, served as International Advisory members chaired conference sessions during 2020.

1. Dr. Meghana Charde was invited as an External Jury Member for Architecture Design Studio 9 at College of Architecture and Design, Al Ghurair University, Dubai on December 5, 2019.

Consultancy

Faculty members from of BITS Pilani Dubai Campus completed the following consultancy projects successfully.

S.No	Principal Investigator	Department	Funding agency	Total sanctioned	Project Title
1	Dr. Vivek B.	Civil Engineering	Star Cement Co. LLC, Dubai	24,750 AED	Condition Assessment of Raw Mill Foundation- Field And Laboratory Investigation
2	PI: Dr. Narendra Nath Ghosh (Dept of Chemistry, Goa Campus) Dr. Amrita Chatterjee, Dr. Mainak Bannerjee, Dr. Anirban Roy, Dr. Sharad Sontakke, Dr. Srinivas Krishnaswamy, Dr. B. G. Prakash Kumar, Dr. Eldhose Iype,	Dept of Chemistry, Goa Campus, Department of Chemical Engineering, Goa Campus and Department of Chemical Engineering, Dubai Campus	ABSTCL, India	INR 52.2 Lac	Development of Photocatalyst embedded Graphene based membranes for Treatment of Dye containing waste water under sunlight light irradiation

B4.15.2 Professional Body Activities

Skyline

1.   On 19th June 2020, Skyline Association, Civil Engineering Department, BPDC organized a webinar session on "Effect of a Pandemic Crisis in the Construction Industry" by Mr.Nasser Al Yazji, the Chairman of Al Bawadi Road Contracting LLC.

2. On 21st November 2020, Skyline Association, Civil Engineering Department, BPDC as Industrial Experts' Lecture Series organized a webinar session on "Introduction to Peikko Designer- Design Software" by Mr. Nirajuthan Selvarajah, Project Manager and Senior Structural Engineer, PEIKKO Gulf LC and by Mr. Vesa Miettinen, R&D and Technical Manager, PEIKKO Gulf LC.

ASME (American Society of Mechanical Engineers) Student Branch

1. On 23rd November 2020, American Society of Mechanical Engineers, BPDC as Industrial Expert Lecture Series organized a webinar session on "Steam Engineering: Industry Standards for Product Design and Development" by Mr. Monikandan, Manager, Quality Assurance, Armstrong International

2. On 30th November 2020, American Society of Mechanical Engineers, BPDC as Industrial Expert Lecture Series organized a webinar session on "Quality Control and Assurance" by Mr. Deepan Govindasamy, Manager, Quality Assurance, Armstrong International.

BPDC ACM Student Chapter:

1. ACM Student Chapter of BITS Pilani Dubai Campus has won the Excellence Award for Outstanding Chapter Activities. The icon can now be proudly displayed on our web page along with a cash prize of $500. The student chapter also features on the ACM Website and in ACM MemberNet. The exemplary work put in by all the members of the ACM student council, BPDC for their total involvement and innovation in conducting a plethora of activities and events. Earlier the ACM-W chapter was started last year which is first student ACM-W chapter in UAE. The ACM-W students have also immensely contributed to this award.

2. Project: Sierra,A   criminal investigation game played by a pair: Control: Oversees the progress from a workstation [Computer] at the facility [Room 108 / TBA]. Solves clues to help further the investigation. Patrol: Sleuths around the scene of the crime [Campus]. Gathers clues to aid the investigation. The two must combine their resources to solve the investigation. Dt: 02/11/2020

3. CTF: Capture the flag is an event where teams attempt to exploit some security flaw in a system/file/network to find a 'flag' that allows them to gain points and proceed to new challenges in the game. Teams need not know programming to participate but having a coder on your team is always a plus. ACM's CTF is a Jeopardy-style Capture the Flag competition. There will be multiple categories of cybersecurity fields, each of which will contain a variety of questions of different point values and difficulties. Dt: 02/12/2020

4. The Big Oh : A Science and Technology quiz held during "Enginuity". The quiz consisted of a preliminary round and a final round with 6 teams. The winners walked away with cash prizes worth AED 200. Dt: 02/13/2020

5. Google Hashcode: BPDC ACM organized a hub for Google Hash Code 2019 where students could work on the programming challenge together. We also provided the participants with food, drinks, tech tattoos and ACM merchandise. Dt: 02/20/2020

6. Career Launchpad: Placement Division in collaboration with BPDC ACM Chapter will bring a set of intensive workshops to sharpen skill sets for students from all years and disciplines spanning the month of March 2020. The series will involve student mentors, professionals from the industry and researchers to prime students with the skills necessary to ace interviews and applications in corporate and graduate environments. The workshops and training are catered towards students from all years and especially for Junior and Senior Year students who are due for graduation and Practice School respectively. Dt: 03/06/2020

7. Orientation : Orientation is an annual event held at college campus to introduce freshmen to the ACM. We talk about the contribution of ACM in advancement in computing and how ACM has helped people develop their careers. We introduce them to the local student chapter and its SIGs. It provides a networking opportunity to connect with ACM Council members and become a part of this developer community. Dt: 09/17/2020

8. SIG Introduction (AI & CP) : This is the first event in a series of events to introduce students to local SIGs at the student chapter. The first section of the event focused on the rise of Artificial Intelligence in the last decade, job opportunities, and getting started on the topic. The second half of the event focused on the importance of programming, especially competitive programming, and how it is the backbone of the entire computer science industry. Dt: 09/21/2020

9. SIG Introduction (Dev & Hex) : This is the second event in a series of events to introduce students to local SIGs at the student chapter. The first section of the event focused on the importance of web, game, and app development, its job opportunities, and getting students started on the topic. The second half of the event focused on one of the most requested topics - cybersecurity. We showcased the CTF event's held on campus, and talked about how to get started covering the basics of penetration testing. Dt: 09/30/2020

10. Q Challenge : Q Challenge is a quiz event that tests the logical, analytical, and programming skills of the participants. The quiz is divided into two sections with multiple choice, and descriptive answers to test every aspect. The questions are divided into various difficulty levels so that each participant can deliver his best. The winner is awarded with a cash prize. Dt: 10/14/2020

11. Computer Science Essentials: Computer Science Essentials was an event conducted to introduce students to the frequently used tools, softwares, frameworks, packages, etc. in different subfields of computer science. We also covered the fundamentals of computing, using version control systems like GitHub, and introduction to the Linux operating system. Dt: 10/20/2020

12. Coding Bootcamp : The Coding Bootcamp was a 7-week series of workshops focused on freshman students to introduce them to programming. The weekly events covered topics ranging from basics of Linux, GitHub to intermediate data structures and algorithms in Python. The 2-hour sessions included lectures as well as practical development sessions conducted online through remote desktop/screen share. Dt: 10/29/2020 - 12/17/2020

13. Code Champ : The Code Champ was an online competitive programming contest conducted to spread knowledge and awareness among the students. The competition comprised of 3 problems of varying difficulty to be solved in 2 hours. The evaluation was done using standard test cases against the submitted code. Dt: 12/24/2020

BPDC ACM-W Student Chapter:

This year we started the first student chapter for Women in UAE, ACM-W. This chapter gives a platform for girls and women to conduct sessions and motivate more women to join technical communities. A number of events were conducted as listed below:

Semester Kickoff and Introduction Session

The ACM-W introduction session for the new academic year was held on 9th February, 2020. The attendees interacted with the team to learn more about the sessions and future events and bagged the opportunity to earn free Udemy courses and ACM Swag.

Azure Fundamentals Workshop

The Azure workshop for Data Science co-organized by ACM-W and Microsoft Club was held on 29th February 2020. The guest speaker was Mr. Pradheepan Raghavan, a Data Scientist Graduate who has working experience in the company Petrofac, Sharjah and is also a Microsoft Student Partner. The workshop was held online mode and explored various aspects of Data Science such as Data Science Life cycle, Basics of Azure Data Factory, Azure Data Lake and Power BI.

ACM- W Online Webinar

Before the next semester of the year, we conducted an exclusive webinar session collaborating with ACM during the pandemic for the incoming freshers informing them about the clubs activities and membership details. We also held a virtual registration drive for 1-2 weeks after the introduction session.

ACM-W New Members Election

The new members of the ACM-W council for the academic year 2020-2021 were appointed. The members were introduced to the new team and about their personal interests in the field of computer science.

Weekly Quiz

A computing quiz was held during the month of September. The quiz was based on general facts about computer science and the winners got a special shoutout on Instagram and Facebook. The winner of the quiz was Dhakshina and Gokul both from the third year of Computer Science.

Latest Newsletter Edition

The 8th Bi- Monthly Issue of ACM- W BPDC Student Chapter was introduced in this new academic year with a newer and innovative design. The newsletter provided students with various opportunities such as hackathons, internships, web resources and so much more.

Microsoft Tech Club

Frynapse 1.0, Kahoot Quiz 1.0, Typing Contest 1.0, Skribbl Contest 1.0, Learn from Experience Online Series, Tech Hacks Online Series, Cyberseurity Workshop by Divya Singh

LINUX USERS GROUP:

The Linux Users group was started in Oct. 2005. The registrations are free and open to all BPDC students. The group also provided resource material on UNIX Commands and Editor for first year students and Installation related assistance for UBUNTU OS for interested Project students. The group conducted a short term course on LINUX Concepts and Applications during 12th July 2020 – 25th July 2020, for ten school students of grade 12 in UAE.

AIChE – BPDC Student Chapter:

1. 11th of February 2020, Enginuity, a technical event. Our event was called 'Marvel Mania' organized by AIChE BITS Pilani Dubai student chapter. Total 20 participants.

2. April-May 2020, ChemE nights: AIChE BITS student chapter hosted ChemE nights on Thursdays, of April and May 2020. Every Thursday a new game was played like Housie, treasure hunts along with discussions. It was a way to keep in touch during quarantine and have fun. Total 20 participants.

3. 15th May 2020, Chemical Department Farewell: a virtual farewell for the graduating batch of 2020 was organized by the juniors from the chemical engineering department. Games were played and anecdotes were shared of their journey in college. Total 35 participants.

4. 31st October 2020, Fresher's Orientation 'Chemfluence' organized by AIChE BITS Pilani Dubai Student Chapter. An introduction of the club and chemical engineering was provided to the freshers. Total 15 participants

5. 7th November 2020, Collaboration event called 'Ch'Evanscence' with Biotechnology engineering club 'Chimera' organized by AIChE BITS Pilani Dubai Student Chapter. Event filled event with technical and fun games. Total 27 participants

6. 20th and 21st of November from 2:30 to 5:30 PM – Excel for Beginners Workshop, organized by AIChE BITS Pilani Dubai Student Chapter. Resource person: Dr. Nishant Pandya. Total 70 participants

7. AIChE Conclave was formed in November, where the first interview was conducted with alumni Allan Barbosa about prospects of master's programs in Europe. The second interview was conducted with Jasiya Harris and Anna Joy, where they explained in detail about Practice School II: what it entailed, the kind of work they were assigned, and future job prospects after graduating. Recorded videos of these interviews were shared with all chemical engineering students.

8. AIChE Educational Videos: Tutorials and informative videos on different lab equipment and topics were prepared and uploaded on AIChE-BPDC YouTube channel. Till now videos of laboratory experiments of 'Flow Measurement Devices' and 'Discharge Over Notches' are posted.

9. .Mentorship Program started in September and ongoing, all details of student were collected about their areas of interests, prospective jobs and locations of interest, or interest in pursuing higher education. Each student is being matched with a respective mentor and being guided one-on-one.

10. Job Postings Group: A special group related to job, research and internship opportunities was created. General queries regarding employment is discussed there separately. A spreadsheet is continuously updated with job listings exclusive to all batches of chemical engineering students.

IEEE Student Chapter:

1. On 20th February 2020, IEEE Women in Engineering, BPDC presented a talk on "Electric Vehicles and the Power Grid" by Balqees A. Al-Daghar, Chair, WIE – UAE Section, E-Mobility Solutions Specialist, ABB Industries LLC, UAE.

2. Hands-On Workshop on Arduino: Introduction to Microcontroller, Circuits and Programming on 11th November, 2020.

IFOR Association:

The IFOR Team of BITS Pilani Dubai Campus is a student based organisation in which students from different departments come together to design and build autonomous and aerial robotic systems. With the start of a new semester, there was a fresh introduction of student researchers in the IFOR Team headed by team leader, Parth Ganeriwala along with Faculty in charge Dr.V.kalaichelvi.

Activity 1

Building and testing autonomous feature on Quadcopter-A manual and autonomous testing was conducted on the Hex copter and successful results were achieved. Further testing and research are to take place to use the drone in future projects. Team IFOR worked on building a quadcopter from scratch and successfully testing it with all the systems working optimally. The Computer Vision and AI and Navigation teams have started working on the autonomous feature and a early build of the code was tested out on the quadcopter and with further adjustments, the quadcopter will have a streamlined version of autonomousity feature which shall be used for future projects and research.

Activity 2:

Dr Kalaichelvi has arranged one interactive session with Dr.Dan Yamin, Head ,Laboratory for Epidemic Modelling and Analysis, Department of Industrial Engineering at Tel Aviv University to meet Team IFOR students on Dec 13,2020. Dr. Yamin visited the IFOR Lab and current research with respect to social distancing using mobile robots and drones were displayed and the functionality of the IFOR Team was explained with necessary demonstration from members of the team

AOEE Association:

AOEE (Association of Electronic Engineers) has conducted the below events under the guidance of Dr R Swarnalatha

1. An ICE breakers session were organised for fresher's

2. An orientation session for freshers were organised

3. Organised the technical cum fun event "Electrorun" on 13.02.20 for ENGINUITY.

Centre for Innovation, Incubation & Entrepreneurship:

1. On 1st and 2nd March 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized a workshop by Omnibulls on "How to Create Wealth in Stock Market" by Mr. Hardeep Malik, IITian, Founder Omnibulls, NISM Certified Research Analyst. The workshop covered the topics are: Introduction to the Stock Market, Technical Analysis of Stock Market, Fundamental Analysis of Stock Market and Behaviour Analysis of Stock Market.

2. On 29th November 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized an informative session on "Legal Guidance on registration of Student Startup" by Rohit Ghai, Founder, 10 Leaves (Niche consultancy with a focus on regulatory authorization in the DIFC and ADGM).

3. On 9th December 2020, Centre for Innovation, Incubation and Entrepreneurship (CIIE), BPDC organized a live Q & A session on Sales, Marketing and Entrepreneurship with Mr. Shubhojit Mahanalobis, General Manager, Danube Homes and Danube Hospitality Solutions on the title "It's all in the Mind".

Engnuity:

BPDC hosted ENGINuity '2020, the inter-college competition from 11th to 13th February 2020. ENGINuity, the annual inter-university techno-managerial and innovation festival held in and by BITS Pilani-Dubai Campus, is one of the most prestigious platforms to showcase one's technical affinity. The Director Prof. R. N. Saha inaugurated the event by lighting the lamp. The various events include Marvel Mania, Kick-off, Back to the Future, Codeblitz, Project Sierra, El Salvador, IEEE Pitch 2.0, Neuron Rush, Capture the Flag, Electro Run, The Big Oh, Frynapse and Mathemagicians.

B4.15.3: Center for Innovation, Incubation and Entrepreneurship, Dubai (CIIED)

Report for the year 2020 is appended below

New Venture Creation course was offered to the students 1st Sem 2020-21

Twenty-one students (six teams) from Dubai campus enrolled for the NVC course. It was heartening to see an increase in the participation from Dubai Campus. All teams scored well and developed their prototypes during the course.

Orientation (1st October 2020)

CIIED conducted its recruitment in the last week of September and the orientation of the team was held on 1st October 2020. The formal assigning of responsibilities also took place on this occasion and team members were formally inducted into the team.

Workshop on Analysis of Stock Market (1st and 2nd March 2020)

CIIED hosted a workshop on How to Create Wealth in Stock market by Hardeep Mallik, founder Omnibulls on 1st and 2nd March 2020. The workshop covered all the aspects of stock investment, with caution and care. More than 30 participants registered and attended the workshop on both days. The workshop introduced the participants to the Stock Market, detailed on how to do a technical Analysis of Stock Market, Fundamental Analysis of Stock Market and Behaviour Analysis of Stock Market. Free Demat accounts were created for the interested participants.

Talk on Legal Guidance by Mr. Rohit Ghai (29thNovember 2020)

CIIED hosted an interactive session with Mr. Rohit Ghai. He is the founder of 10 Leaves, A Niche consultancy with focus on regulatory authorization in DIFC and ADGM. Mr. Rohit helped the students understand the legal aspects a start-up needs to know before registration. Bank accounts, name of the founder, age limitations, visa formalities, free zone requirements and many more details were shared. A complete insight on legal understandings for start-ups.

Talk on Its all in the mind by Mr. Shubhojit Mahalanobis (9thDecember 2020)

CIIED hosted an interactive session with Mr. Shubhojit, General manager, Danube Home and Hospitality Services on 9th December 2020. Mr. Shubhojit is a motivational speaker with focus on team building. He nurtured the students on importance of team building and how setting a common goal is important in a team. Each individual progress only when the team progresses. A wonderful discussion with Mr. Shubhojit, which saw a great participation from students.

MANTRA AWARDS 2019-20:

Mantra Awards selection process was coordinated and completed on **12th November 2020** by a six member panel comprising of Dr. Trupti Gokhale - Faculty In-charge, CIIE, Dubai Campus, Dr. Nitin Vihari- Assistant Professor, Humanities and Social Sciences Department, Dr. R. Karthikeyan- Professor, Mechanical Department, Dr. Sunil Thomas- Assistant Professor, EEE Engineering, Dr. M. Raja, Assistant Professor, CS Engineering, Mr. Devansh Shah- Member CIIE. The Mantra awardees were:

Outstanding Leadership- Male	- Abaan Ahamad Altaf	2016A3PS0181U
Outstanding Leadership- Female	- Smrithi Malavalli Nagesh	2016AAPS0201U
Social Leadership	- Tushar Agrawal	2016A7PS0080U
Entrepreneur Of The Year	- Sarthak Sethi	2017AAPS0151U
Innovator Of The Year	- Sarthak Sethi	2017AAPS0151U

B4.15.4 PRACTICE SCHOOL

Practice School Programme

All first degree students have the option of Practice School. The past statistics show that almost all the students opt for this programme. PS-II was conducted at 58 stations with 169 students and 26 faculty during January 2020 – July 2020 and at 32 stations with 80 students and 11 faculty during July 2020 -January 2021. PS-I was conducted at 47 stations with 182 students and 14 faculty during June - August 2020.

Categorization of PS stations is given below:

S. No.	Category of Organizations	No. of Organizations	
		PS-II	**PS-I**
1.	Banks & other Financial Institutions	05	04
2.	Design, Development, Consultancy and Software Organization.	21	16
3.	Trading	15	02
4.	Production, Manufacturing and Maintenance	25	16
5.	Other	04	09
	Total	70	47

With the present annual PS intake of 431 students, the PS programme covers almost entire eligible student population of the Institute. It is worthy to note that the Practice School operation at the Dubai Campus has been conducted successfully since 2002. The statistical details of the distribution of students and faculty at PS-I stations are given in Annexure B4-15 followed by the details of the Statistics of PS-II are given in Annexure B4-16. The Growth statistics of PS-I, PS-II are given in Annexure B4-17, while facilities available at various PS-II stations are given in Annexure B4-18. The growth of PS stations is depicted in the graph 1.

Following is the breakup of students who were registered in PS-I, PS-II.

PS-I	Summer Term 2020	182
PS-II	II Semester 2019-2020	169
PS-II	I Semester 2020-2021	80
	Total	**431**

PS-II Assignments: Institute's Contribution to Industrial Development

Apart from developing skills in Professional judgement, data-handling, documentation, decision making ability etc. in students, the PS-II assignments also relate to real life problems of the host organisation. PS-II assignments listed in Annexure B4-19 were completed by the students at their respective PS-II stations during the year 2020.

These assignments have been implemented to fulfil the ongoing production, modernization, design, development and research needs of the participating industries; thus, directly contributing to the requirements of industrial R & D.

Stipend

In appreciation of the contribution made by our students towards the professional wellbeing of the organization, a stipend / out of pocket allowance is paid to the students by the organizations. In addition, other facilities like accommodation, subsidized lunch, transportation, insurance, TA & DA, foreign travel expenses are also provided by some of the organizations.

During the year under review, the PS activities grew further with the some new PS II stations (Table1).

Graph
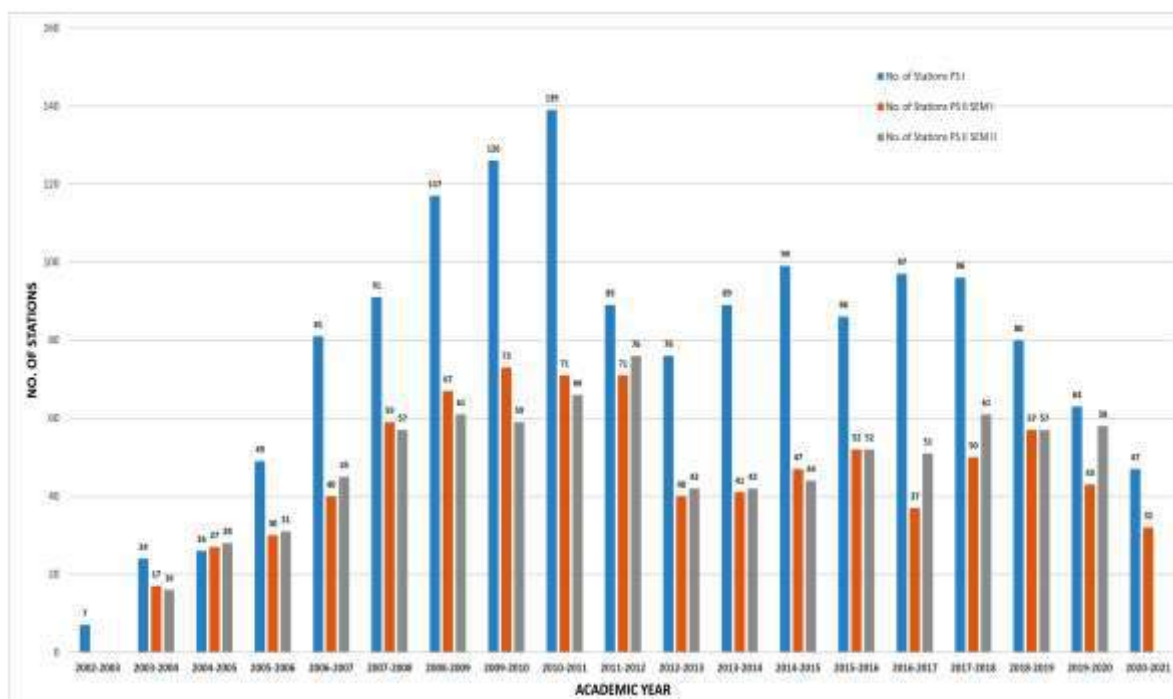
Table1   PS-II Stations Added during the year 2020

S. No.	Name of the PSII Station	Out of pocket allowance in AED & Others Facilities
1	Aroma Tierra, Dubai	2000
2	Aseseal Middle East FZE, Dubai	-
3	Green Oasis Gen. Cont. Co. LLC, Dubai	-
4	IoLetics, Dubai	-
5	KPTAC, Dubai	500
6	Master Systems, Ajman	-
7	Spotii DMCC, Dubai	1500
9	Subzero Motorsport, Dubai	-

B4.16 CENTRAL FACILITIES

B4.16.1 Central Library

BITS Pilani, Dubai Campus Library, a gateway to knowledge resources, is located in a separate building spread over two floors and area of about 29,680 sq. ft. It has a contemporary design with reading halls, reference section, stacking area, faculty lounge and digital library with 20 computers, internet browsing centre with 22 computers. The Library operations are fully automated and all the resources are secured with RFID security system. Library catalog (OPAC) can be accessed through exclusive 8 computers. Library has a seating capacity of more than 350 and 70 individual study carrels.

Library hours are: Sunday to Wednesday from 7.30 AM to 10.00 PM, Thursday from 7.30 AM to 7.00 PM, Friday from 2.00 PM to 4.00 PM and Saturday from 2.00 PM to 6.00 PM. The Library hours are extended till midnight 12 AM during all the evaluation components including comprehensive examinations. The Library remains closed on national and Institute holidays.

The mission of the Library is: to collect, organize, preserve and provide access to the information necessary for the institute, to achieve its educational, research and service goals; to improve and enhance access to information in all forms, using innovative technology thereby having a broad based collection, to assist in meeting the needs of students, research scholars, faculty and staff. The Library renders standard services such as borrowing / lending, reference, referral services, etc.

Acquisition Section

At present, the library has a collection of 23082 Print Books and 1751 e-books. The collection of the library is growing continuously on a regular basis. 230 print books and 1020 e-books were added to the existing collection during the year in major disciplines of engineering and sciences. The Library procured a good collection of fiction and general aptitude books on TOEFL, GMAT, GRE, IELTS, GATE. Books on Arabic language have also been added.

E-resources

1. The Library caters to the users' needs with the collection of abundant e-journals from the following e-databases: IEL Online through IEEE Xplore Digital Library, American Society of Mechanical Engineers (ASME) online journals, ACM Digital Library, JSTOR e-journals and EBSCO Engineering Source. The e-databases have full text of e-journals with back issues, conference proceedings, e-books and reports.

2. The Library has 731 MIT Press e-books and 990 Wiley-IEEE e-books with Perpetual Access which are accessible through IEEE Xplore Digital Library.

3. The library has a total of 30 e-books of BPDC course Text and Reference books has been procured and integrated into BPDC e-Library portal.

4. The library subscribes to PressReader, it has the largest collection of e-newspapers and e-magazines of over 7000 titles from 120+ countries in 60+ languages.

5. The latest and previous year question papers have been digitized and made available through the library WEB enabled online catalogue (WEBOPAC) which can be accessed from anywhere at any time.

Library Resources and Services during Covid-19

1. The weblinks to open sources e-journals from leading publishers like ScienceDirect, Springer, Oxford University Press, Taylor and Francis, etc., are made available to the students and faculty of BPDC during the Covid-19 lockdown.

2. The weblinks to resources on coronavirus disease (COVID-19) from various publishers are made available to the students and faculty.

3. Library Staff sourced the openly available BPDC course text and Reference e-books and made available to the faculty and students during the Covid -19 lockdown for their effective teaching, learning and evaluation components.

4. Renewed online and extended the due dates for the books borrowed by the students who got stuck at the home during the Covid -19 lockdown.

5. To ensure the safety precautions of library users from Covid-19 and renewed the confidence in library access, an Ultra-Violet (UV) Book sterilization machine has been procured for the Library and sterilized the returned and used books before replacing the books on the shelves.

6. To assure the safety of library users, "New Guidelines to use the Library, Resources and Services" has been followed and arranged the safety signages and reorganized the seating with reference to social distancing as per the Protocols given by Knowledge and Human Development Authority, Government of Dubai, Dubai.

7. Free Trial access to the following online resources has been arranged for students and faculty.

    a. LOGIN ACCESS to Britannica Academic, http://academic.eb.com/

    b. Access to e-books Platform PERLEGO https://www.perlego.com/ which has over 300,000 e-books from leading publishers on various subject areas.

    c. Access to the https://www.pressreader.com. PressReader has the largest collection of newspapers and magazines and has access to over 7000 titles from 120+ countries in 60+ languages.

    d. Access to Passport Database (Market Intelligence Databases) provided by Euromonitor International https://www.portal.euromonitor.com/portal/account/login (world's leading provider of strategic market research)

Library Webinars and Training Sessions

1. An online training webinar session was organized for BPDC students and faculty on "EBSCO Engineering Source" by Mr. Seoud Bemath, Training Specialist from EBSCO, MENA Region, located in London, held on Wednesday, 28th October 2020 at 10 AM.

2. Two online webinar sessions were conducted by BPDC library staff for FD students before the starting of TEST 1 on "Access procedures to download the previous year question papers from BPDC library portal" on Thursday, 10th October 2020 and Saturday, 17th October 2020.

3. BPDC Library in association with IEEE Xplore Digital Library organized an online live webinar on "How to Publish a Quality Technical Paper" by Prof. Dr. Bhim Singh, Department of Electrical Engineering, IIT Delhi, India. He is the top author in IEEE Xplore from India with more than 1200 journal research papers and conference papers, executed more than eighty sponsored and consultancy projects, filed 60 patents, guided 88 Ph.D. dissertations and recipient of many Research Awards. The webinar was held on Saturday, 10rd October 2020 at 10 AM. Faculty, research scholars and FD students from BPDC and few research scholars from other campuses of BITS attended the webinar and interacted with Professor.

4. Two exclusive online training for BPDC students and faculty on "Effective Utilization of BPDC e-Library" which is powered by knimbus.com was organized on Saturday, 3rd October 2020 and on Saturday, 26th September 2020. Mr. Venkatesh, Manager, knimbus.com presented lively about the access procedures and features of BPDC e-library (https://bpdc.new.knimbus.com/) with brief introduction to the BPDC e-library by Dr. R. Sivakumar, Librarian, BPDC.

5. A Virtual Library Orientation "KNOW YOUR LIBRARY" on Saturday, 26th September 2020 was conducted by BPDC library staff for 2020 Batch Students.

6. An Author Talk on the book titled "Digital Nation – How the United Arab Emirates is building a future based on Tech Innovation" live webinar from the co-author of the book Mr. Rajit Rajan, Vice President & Head of Research, MiddleEast, Turkey & Africa, International Data Corporation held on Thursday, 3rd September 2020 at 10 AM. Prof. Dr. R. N. Saha, Director, BPDC addressed before the starting of the webinar and interacted with the author. The faculty and research scholars also interacted with the author.

Electronic and Digital Services

1. Federated Search for Online databases (e-journals), E-books and WEBOPAC through e-library portal which enables the users to do one-point search and access from anywhere at any time.

2. Library Digital Repository which contains the digital contents of practice school reports, project peports, research publications of BPDC faculty, Thesis / Dissertations, BPDC magazine and BPDC news.

3. RFID enabled security system and self service kiosk for issue and return of books which enables quick and easy service to the user community.

4. Web enabled Online Public Access Catalogue (Web OPAC) wherein the users can access the catalogue remotely to search the resources and check their account.

5. The Library has Wi-Fi facility within the library which enables the users to use their personal devices for browsing internet and e-resources.

Reference Section

1. The Library has latest editions of Encyclopedias, Dictionaries and Hand books on core disciplines of Engineering, Technology, General Sciences and General Knowledge.

2. The Library subscribed to print version of 37 international journals, 52 magazines and 4 UAE based newspapers and has 862 back volumes of journals.

3. Library has more than 1607 CD-ROMs on engineering courses and there are 5 computer terminals exclusively meant for the accessing these.

4. Library has print copy of 475 thesis reports, 868 project reports and 2369 practice school reports submitted by students are available for reference.

5. The Library has an MOU with the Al Ain University of Science and Technology in UAE for the mutual benefit of both the institutions to facilitate the users to avail Inter Library Loan (ILL) of resources.

Other Services

1. The Library provides Selective Dissemination of Information (SDI), Conference Alert Service, Competition for students alert service and Latest arrival alert service to the faculty and students.

2. Library provides network-based printing, scanning, photocopy and binding facilities to the library users.

3. Library has separate discussion rooms for students and a faculty reading room. A separate 2 closed cabins are also made available.

Facts about the Library

The library collection has grown steadily. Some of the significant statistical data about the library are as follows:

SNo.	Items	Total
1	Number of print books	23,082
2	Print Books added during the year 2020	230
3	E-Books added during the year 2020	1020
4	Number of print periodicals subscribed	93
5	Online Databases made available on library site	6
6	The IEEE - MIT Press eBooks with Perpetual Access	731
7	The IEEE - Wiley Press eBooks with Perpetual Access	990
8	E-books of BPDC Course Text and Reference books	30
9	E-newspapers and e-magazines	7000
10	CD-ROM collection	1607
11	Total no of back volumes of journals	862
12	Total no. of print copy of Reports (Thesis, Dissertations and Project Reports)	1343

Library Staff Participations

1. Dr. R. Sivakumar, Librarian acted as Chair for a Plenary Session 2 in the International Virtual Conference on "Challenges and Opportunities to Libraries and LIS Professionals in the Changing Global Scenario" organized by SALIS on 29th December 2020 and discussed about the current trends on Library open access and Library and information Science Education along with 2 international expert speakers Dr. Mantra Roy, San Jose State University, USA and Prof. Susmita Chakraborty, Prof. & Head, DLIS, University of Calcutta, Kolkata, West Bengal.

2. Dr. R. Sivakumar, Librarian and Mr. Asif Masood, Library staff, visited the GITEX technology week on 9th December 2020 held at Dubai World Trade Centre, Dubai. and explored the technologies for BPDC Library

3. Library Staff and Library Committee Members visited Sharjah International Book Fair held at Expo Centre, Sharjah, UAE on 11th November 2020 and purchased books for Library.

4. Dr. R. Sivakumar, Librarian has delivered an invited talk on "Career Opportunities in Library and Information Science" and Inaugurated the Library and Information Association (LISA) of PG Department of Library and Information Science, Bishop Heber College (Autonomous), Tamilnadu, India on 23rd October 2020.

5. Mr. K. Jayachandran, Assistant Librarian, attended few national and international webinars and Sharjah Virtual International Library Forum, November 10-12, 2020 organized by the Sharjah International Library Book Fair, the American Library Association.

6. Dr. R. Sivakumar, Librarian has served as resource person in the international webinar on "Career Competencies for Jobs in Library and Information Science" organized by PG Department of Library and Information Science, Vellalar College for Women (Autonomous), Tamilnadu, India on 4th April 2020.

7. Mr. Lewish Yacub, Library staff attended few national and international webinars.

B4.16.2 Infrastructure and Facilities

1. The campus has world-class, state-of-the-art facilities with well-equipped labs and workshops, separate Library block, Academic Block, Sports Complex, Canteen, Clinic, Gymnasium, etc. The Campus has hostel facility for both boys and girl student with single occupancy, central air-conditioned furnished rooms and a full-fledged mess which serves both vegetarian and non-vegetarian food.

2. In addition with the above to improve the infrastructure further, we are working on the refurbishment of the campus. Part of that in 2017 we have added the Tennis Court in the campus facility and in 2018 a 6-lane running track and 4no's turf pitch is been added.

3. Added to the above all the 3 practicing turf pitches are partitioned with nylon nets in the year 2020.

4. As a part of green initiative BITS Pilani has signed a contract with Etihad energy services for 500kWp Rooftop Solar BOT in 2019. The job has started and completed in the year of 2020 and the Rooftop solar production has successfully started from 9th December 2020 .

B4.16.3 Laboratories

The Institution's laboratories are of international standards and they have grown from 2 to 50 in the last 17 years, each well-equipped with the latest equipment and machines. The following table gives the discipline wise details of various laboratories:

S.No	Discipline	Laboratory
1.	Biotechnology	Biology Laboratory
2.		Instrumental Methods of Analysis Laboratory
3.		Genetic Engineering Laboratory
4.		Microbiology Laboratory
5.		Industrial Microbiology Laboratory
6.		Research Laboratory
7.		Microscopy and Imaging facility
8.	Chemical Engineering	Chemical Engineering I Laboratory
9.		Chemical Engineering II Laboratory
10.		Petroleum Laboratory
11.	Chemistry	Chemistry Laboratory
12.	Computer Science	Computer Programming Laboratory
13.		Object Oriented Programming Laboratory
14.		Microprocessors Programming & Interfacing Laboratory
15.		Data Structures and Algorithms
16.		Computer Architecture Laboratory
17.		Database Systems Laboratory
18.		Compilers Laboratory
19.		Computer Networks Laboratory
20.		Web Services Laboratory
21.		Software Systems Laboratory
22.	Electrical and Electronics	Electrical Machinery Laboratory
23.		Introduction to MEMS Laboratory
24.		Power System and Simulation Laboratory
25.		Power Electronics Laboratory

S.No	Discipline	Laboratory
26.	Electronics and Communication	Digital Signal Processing Laboratory
27.		Simulation Laboratory
28.		Communication Systems Laboratory
29.		VLSI Design and CAD Laboratory
30.		Analog Electronics Laboratory
31.		Digital Design Laboratory
32.	Electronics and Instrumentation	Process Control Laboratory
33.		Electronic Instruments & Instrumentation Technology Laboratory
34.	Mechanical	Workshop Practice
35.		Prime Movers And Fluid Machines Laboratory
36.		Composite Manufacturing Laboratory
37.		Robotics Laboratory
38.		Engineering Graphics
39.		Production Techniques Laboratory
40.		Computer Aided Design Laboratory
41.		Heat Transfer Laboratory
42.		Material Science Laboratory
43.		Mechatronics Laboratory
44.		Fluid Mechanics Laboratory
45.	Physics	Physics Laboratory
46.	Civil	Soil Mechanics Laboratory
47.		Surveying Laboratory
48.		Transportation Engineering Laboratory
49.		Concrete Technology
50.		Environmental Engineering

B4.16.4 Engineering Services

1. Communication and allied facilities

The following facilities are available for the benefit of students and staff:

   i. **IT Infrastructure Facilities and Support Services**

   a) The Campus and the hostels are covered with the latest Cisco network Infrastructure of both wired and wireless hotspot environment which provides the internal and external connectivity to fulfill the computing needs of the students.

   b) We have Cisco sponsored networking research lab equipped with the required network components such as routers, switches, firewall, wireless controllers and access points to build the network from the base level to high level of networking. The Cisco lab has all the paper and soft copy material to help the students to learn and start the practical training on Cisco. This Cisco lab will lead the students to achieve the Cisco certifications and software defined Network projects.

   c) The data centre equipped with the following servers and Network components.

   ii. **Servers**

   a) HP DL 380 series new generation

   b) HP Storage serve (SAN)

   c) QNAP NAS for Backup

   d) Dell M1000 Blade Enclosure with Three Blade servers

   e) Dell Power Edge R740XD GPU server

   iii. **Network Components**

   a) Cisco Core switches Nexus series

   b) Cisco Edge switches

   c) Cisco Firewall

   d) Cisco Prime system

   e) Cisco Wireless controller

   f) Cisco Network admission control and access control system

   g) Cisco IP Telephony system

   h) Ucopia Internet access control

   i) Panasonic IP camera setup

   j) Most of our key critical applications are configured in Virtualized environment with load balancing and cluster mode. We have Business continuity and disaster recovery plan in place and we have a disaster recovery site is configured in different location to continue our operation in case of any unforeseen scenario. Periodic backup is scheduled by disk to disk method to backup the data as snapshots.

   k) We have Cisco Telepresense system (under BITS Connect 2.0 project) is implemented in our campus which is interconnected to all our campus in India. The Cisco Telepresense classroom, capacity of 160 seating will help the students to participate the online classroom sessions.

   l) The software tools like AUTOCAD, MATLAB, CATIA, SYNOPSYS, ANSYS, SPSS and ASPEN are available to the students along with a variety of compilers and operating systems.

   m) Smart print solution is implemented as a part of the E-campus solution project.

   n) **Online Learning and evaluation platform:**Institute has adopted online platforms such as Impartus, Webex, googleMeet, Zoom, Google classroom and Microsoft Teams to continue the education and make the learning uninterrupted to the students during the pandemic situation. Online evaluation platforms such as CodeTantra, Socrative, googleclassroom, WebEx and googleMeet are being used for conducting examination. Lab and lab comprehensive examination are conducted by using the virtual labs Platify,Webex virtual lab and physical labs by remote lab component.

S.No.	Hardware	QTY	SOFTWARE
	Equipment		
1	HP ProLiant DL380 Gen9 Intel Xeon E5-2620v3 6-Core (2.40GHz 15MB) ,16GB (1 x 16GB) PC4-17000P-R 2133MHz RDIMM ,3 x 300GB (10k rpm) Hot Plug 2.5in Small Form Factor Smart Carrier ,SAS Smart Array P440ar/2G HP Embedded 1Gb Ethernet 4-port 331i Adapter ,HP 2U SFF - Easy Install Rail Kit w/CMA, DVD-RW 2 x 500W ,3/3/3	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2- Enterprise x64 edition,CentOS,REDHAT Linux Enterprise, Domain Controller, Web Server
2	HP DL 380 G7 Single Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives & 600 GB x 6 Hard Drives	1	ESXI 5.5 update 2,Hypervisor,VMware,Replication server
3	HP DL 380 G7 Dual Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives	1	ESXI 5.5 update 2,Hypervisor, Windows Server 2003/2012 R2- Enterprise x64 edition/Linux,Vcenter
4	HP MSA 2040 FC 6x900 SAS SFF Bndl/TVlite, HP MSA 900GB 6G SAS 10K 2.5in DP ENT HDD,	1	HP Storage server
5	12-Bay TurboNAS, Xeon E3-1200 v3 family, 4GB ECC RAM(max. 32GB RAM), 4-LAN, 10G-ready, iSCSI, RAID 0,1, 5, 6, 10, 5+spare, 6+spare, 10+spare, global hot spare, max 8-LAN, PCIe expansion slot x2, redundant power supply, Seagate NAS 4TBx12	1	NAS Backup Server
6	DELL PE M1000e Blade Enclosure Chasis (includes 1xCMC and 9x12V High Efficiency Fans) + 3 x 300W redundant Power supply and Fans + 3 x C19 / C20 power cords, Front Media Tray DVD + SD card for CMC + Integrated Analog KVM Switch, Select Brocade M5424 FC8 Switch Redundant (FI) 12 Ports with 2x 8Gb SFPs,	1	
7	PowerEdge M630 Blade Server for M 1000 with 2 x Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz (135W) Max Mem 2133MHz, 128GB RAM \(8 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive. QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2- Enterprise x64 edition,CentOS, Ubuntu,Debian
8	PowerEdge M630 Blade Server for M1000, 2 x Intel Xeon E5-2698 v3 2.3GHz,40M Cache,9.60GT/s QPI,Turbo,HT,16C/32T (135W) Max Mem 2133MHz, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive, 64GB RAM (4 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	1	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2- Enterprise x64 edition, CentOS
9	Dell Power Edge R740XD GPU Server,2X,Intel Xeon Gold 2.1G,16C,480GB SSD,2.4TB SAS,32GB RAM,2XNVIDIA Tesla V100 GPU	1	Ubuntu 16.0
10	Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS
11	Cisco Core Switch Cisco Nexus 9300 Series- N9K-C9372PX, 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps fixed QSFP+ ports,	2	Cisco IOS
12	Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
13	Sonicwall NSA 5600 Series	1	Wan optimization
14	Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
15	Cisco Unified Communication System,UCS-BE-6000	1	Vcenter
16	Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS

B4.17 PROCUREMENT AND MAINTENANCE

Facility Management Department is in charge of Maintenance and modification of the infrastructure and facilities in the campus. Any modifications to the infrastructure are taken up by FM Department as per the approval of the Director, BITS Pilani, Dubai Campus. Procurement actions are initiated after the approval by the Purchase Committee, with respect to new equipment, spares, consumables, repairs and modifications of the existing equipment.

During the year 2020, the following jobs of up-gradation / repairs of the existing facilities were done.

1. Painting all common area for institute and hostel.

2. Procurement of furniture for the smart classroom

3. Purchased and fixed new carpet for the VIP lounge.

4. Procurement of furniture for new computer lab.

5. Purchased and fixed one 3 ton FCU unit for new computer lab ''335''

6. Replaced some of the old fluorescent lights to LED's.

7. Procured and replaced 16no's of Hot and Cold-water dispensers in hostel.

8. Procured and replaced 5 no's of Booster & Water pumps in Hostel & Academic block.

9. Procurement of bed, mattress and pillow for the hostel rooms.

10. Purchased 120no's of study table & chair for new hostel students.

11. Carried out cleaning of drainage system and kitchen hood system.

12. Purchased 3 no's of washer for hostel laundry.

13. Carried out Water testing and elevator safety testing as per municipality requirements.

14. Procured and installed 2 no's of stand alone Thermal scanner and 1 no hand held thermal scanner in Academic block.

15. Carried out complete sanitization of campus and hostel 2 times by external team.

16. Procured UV book sterilization machine for library.

17. Purchased Veg. Cutting machine for hostel kitchen.

B4.18 EQUIPMENTS AND ACCESSORIES

A large number of equipment's and accessories were purchased for BITS Pilani, Dubai Campus. The list of major equipment's is included in the Annexure B4-21.

B4.19 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS

B4.19.1 Student Council

President	Hrishikesh Sabnis
Vice President	Raj Mukeshbhai Patel
General Secretary	Shivakumar Vinod Pillai
Ex OfficioMember	Chaitanya Bhaargava

B4.19.2 Day Scholar Representatives

1st Year	Mohammed Zaid Noor
2nd Year	Abshar Mohamed Aslam
3rd Year	Shobal Philip Roy
4th Year	Abhishek Nair

B4.19.3 Hostel Committee

Block A	Abir Sharma
Block B	Sai Krishna Ponnekanti
Block C	Samay Kalpesh Patel
Block G	Vijayasree Garapati

B4.19.3 Clubs

Dance (GROOVE)	Sreerekha Rajendran
Art (SHADES)	Shreya Padmesh Prajapat
Social & Environment (MAKE A DIFFERENCE)	Arushi Kansal

Drama (PARIBHASHA)	Saifali Gulamabbas Patel
Public Speaking & Literary Club (EXPRESSIONS)	Gourisha Sethi
Photography (REFLEXIONS)	Venkateshwar Govindraj
Music (TREBLE)	Suriya Badrinath
Sports	Mohammed Gani
Design (Oh, Crop!)	Hasan Khan
Fashion Club (Allure)	Divya Gera
Quiz Club (Flummoxed)	Adwait Kasar
Wall Street Club	Swarup Krishna

B4.19.4 Student Activities

BITS Pilani, Dubai Campus encourages student to participate in different extracurricular activities to build team spirit. Professional/scientific activities such as intra-university technical festival, Technofest and interuniversity technical festival, Enginuity are organized every year. Students also participate in scientific and professional bodies of international repute such as Student Branch of IEEE, SAE, ASME, ACM, ASHRAE as well as local associations such as MEA, CHEMERA, Linux Users Group, Microsoft Tech. Club etc. Students are equally encouraged to be involved in Sports, cultural and social activities. There are 12 clubs namely Dance Club, Arts Club, Public Speaking & Literary Club, Music Club, Drama Club, Social & Environment's Club, Photography Club, Sports Club, Design Club, Fashion Club, Quiz club and Wall Street Club. The following were some of the important activities held during the academic year 2019-20:

B4.19.5 The Social and Environment Club

Social and Environment club organized many activities during the academic year 2019-20,the activities are given below:

Pink Day 2020:- The annual event of the Breast Cancer Awareness Day, or as BPDC calls it- Pink Day was organized by The Social and the Environmental Club on 28th October 2020. In adherence to the precautions due to COVID-19, a lot of activities could not be conducted. However, over sixty volunteers sent in their photographs wearing pink/white to show their support for the cause. They were featured on the Instagram page of the Club. Also, all the students and teachers wore Pink/white to the university that day.

JOY OF GIVING WEEK:-

The Social and Environment Club of Bits Pilani Dubai Campus, MAD, conducted the 'Joy of Giving Week' on 11 th Oct 2020. Students were asked to send in their messages of gratitude to their friend, family member or any person they wished to convey to. These messages were posted in the Club's official Instagram Handle (@mad.bpdc).

TEACHERS DAY 2020:-

'You have been our role models, our inspiration, and parent-figures outside of our home who taught us many lessons about life. At times you may be tough on us but, in hindsight, it was only to mould and shape our talents, to make us fight our fears and to work on our weaknesses.' On behalf of all the students of Bits Pilani Dubai campus, MAD BPDC wished all the teachers a very happy teachers day on 5th September by the means of a video.

Organic Farming - Organic Farming is held weekly in the organic farm and ladyfingers, cucumbers, potatoes, chilies, tomatoes, beans, bottle gourds, etc, were grown near the tennis court. The students are educated about the benefits of growing food organically. The produce is distributed among the volunteers and the faculty members. Every week, new seeds are planted or maintained, and the current crops are harvested.

Valentine's Day- On 13th February20, the Social and Environment Club held a bake sale on the occasion of Valentine's Day, in an effort to raise funds for its upcoming events, Spectrum 2020. The stall sold cards, cupcakes, chocolates, cheesecake jars, roses, candy jars, and a wide variety of different items. It was a grand success and all items of the stall were sold out by 2 pm. The club extends its gratitude to all the volunteers who helped out during this event.

B4.19.6 The Public Speaking and Literary Club

The Public Speaking and Literary Club had a Discussion Forum on 7th October20. On 14th October20 a Newsletter was launched by the club. The Global voices Model UN opening Ceremony was held on 21st Nov20. Global Voice Model UN Simulation– UNOOSA was held on 4th December20

B4.19.7 Dance Club

During the academic year 2019-20, groove proved it's passion for dance by winning many laurels at intra and inter university level. Activities kicked off in style during the clubs introduction during Icebreakers followed by auditions for interested students for both, the eastern and western teams. Dance club activities during different months is as follows:

Icebreakers 2020 :- This was their first performance of the first semester and was the highly anticipated ICEBREAKERS where members of the Eastern & Western teams performed solos. It was an online event due to the current pandemic situation. The event was held on 4th Oct 2020.Performances received praise from both teachers and students. In the month of February20 students gave an entertaining performance at the Global Millennium Annual Meet held at BPDC. Shortly after, the auditions were announced and club gave a warm welcome to all the new members.

Groove Auditions 2020:-

Club conducted online auditions to take in new members into Groove. The students were instructed to send a one-minute performance video.

B4.19.8 Art Club

The Art Club "Shades" had been active in every major event of BITS Pilani Dubai campus in academic year 2019-2020. The major events and activities by the Art club are as follows:

Gandhi Jayanti Celebrations (2nd Oct, 2020) :-

The SHADES Club celebrated the 151st Gandhi Jayanti on 2nd October 2020 via a Poster making Virtual Exhibition. Posters were made by the students on the topic of "Gandhi Ji and his ideologies which made a difference" which were then featured on the official Instagram account of the SHADES Club. About six students participated in the event and submitted beautiful hand-designed, digitally created posters which depicted Gandhiji's ideologies such as self-reliance, ahimsa and cleanliness. Participation certificates were distributed to all the students.

Diwali Contest 2020:-

On the occasion of Diwali, the SHADES Club organized a 'Diwali Contest' to enlighten and brighten up the festival of lights. The competition consisted of the following three categories:

1. Rangoli making

2. Diya decoration

3. Painting/Drawing

The submissions were then posted on 14 th November 2020 (day of Diwali) on the Instagram page of SHADES and the winners were announced on the following day. A total of thirteen students participated in the competition (Rangoli making – 4, Drawing and Painting – 9, Diya decoration – 1). Three winners were announced in each category. Since only one student participated

in Diya decoration, no winner was announced for the same. Participation certificates were given to the rest of the students.

B4.19.9 Music Club

Following were the activities of the Music Club Trebel of BITS Pilani Dubai campus during the year 2020.

Trebel organized the Musical Events of Virtual JASHN 2020 featured on the Instagram page of the student council, the likes of which included Eastern Singing (Solo and Duet), Western Singing (Solo and Duet), and Instrumental Performances.

Trebel organized a series of musical performances for the Ice Breakers 2020. With the commencement of a new academic session this September 2020, The Club's first activity / performance of the year was on Ice-Breakers '20, where the club gave its formal introduction to all the Students, most importantly, the first-year students. The Introduction was followed by an enthralling performance by the existing members of the club. The end of Icebreakers marked the beginning of the Registrations Process for the new academic year. Newly admitted students from the fresher's batch were given an opportunity to showcase their talent in singing, beatboxing or playing an instrument, both live and through online videos which were submitted.

The Ice Breaker's event led to the discovery of a multitude of talents amongst our fresher's and other batches, and hence auditions were conducted online in mid-October 2020 for interested students and selected students were announced and featured on the club's official Instagram page.

B4.19.10 Design Club

The club designed the year book for the outgoing batch and send a digital copy to all the graduating students in May20. The club has been contributing in many ways such as: Graphic Design & Illustration done for various events organized by ACM - BITS Pilani, Dubai Campus, Team IFOR, ASME, Sports Club, Drama club,Quiz Club,

Fashion club and the Editorial Board - BITS Pilani, Dubai Campus. The club is also involved in designing bulletin, brochures pamhletsetc for various events like Jashn, Sparks BSF etc.

B4.19.11 Fashion Club

Amid the pandemic and limited cultural activities, virtual networking has become the new norm. Members allure tried to make the most out of this by indulging themselves in the following photoshoots:

ICEBREAKERS:- As an attempt to keep members occupied during the lockdown, most of the students were drawn to gaming. Consequently club came up with the theme 'ARCADE' for the first photoshoot for the academic year 2020-2021.

AUDITIONS:- Club is constantly looking for new talent, to welcome freshers with open arms and the club conducted virtual auditions through audition, tapes and encouraged not just budding models but also makeup artists and fashion Designers. They received an overwhelming response of 8-10 students.

MAU CLOTHING:- In October20 club was approached by a start-up initiated by students of BPDC universities. Club members were more than enthusiastic to be a part of the venture and did a shoot for their new march campaign.

B4.19.12 Photography Club

During the year academic year2019-20 the club covered many events like Enginuity, Technofest, and also covered various Talks and workshops held by all the disciplines.A photography competition that was held during ENGINuity and prizes were sponsored.

Oppo Photography Workshop

On 30 January20, Oppo Mobile telecommunications team in collaboration with the photography club, Reflexions, hosted several workshops for aspiring photographers at the institute. A contest was conducted where the participants had to shoot images within the campus using smartphones provided by Oppo. It ran for a week and 29 students took part in it. At the end, Vignesh Nair (First year CS) was selected as the winner of the contest and qualified for the final. He received a Wireless Bluetooth Headset from Oppo for his efforts.

Reflexions had conducted an **Open Theme Mobile Photography Competition (09/12/2020 to 24/12/2020)** as a part of the monthly competitions starting from this month. The enthusiasm and spirit shown by the students including the freshers was excellent. And for the first time we are receiving **252 photos** as entries for a competition. This competition was judged by our BPDC Alumni and Ex Reflexions President and Vice President i.e. Atul Vijay and Ethan Antonio respectively. the winners of this competition as follows

1. Akshit Kacholiya 2. Afrah Taskeen 3. Padmaktshini Suryanarayanan

B4.19.13 Sports Club

The Sports Club at BITS Pilani, Dubai Campus has always tried to promote, develop and improve the quality of sports as well as the facilities involving these sports. In 2020, the sports club participated in the following sports activities:-

1) Inter-University Tournaments:

a) Gulf Medical University Sports Meet -

BITS Pilani, Dubai Campus participated in GMU Sports Festival organized by GMU from 16th to 20th February 2020. Our Throwball (Girls), Badminton (Girls), Chess (Girls and Boys) have won first place and Tennis (Boys), Cricket (Girls), Table Tennis (Girls and Boys) and Basketball (Boys) have won 2nd place. Our Swimming team (Girls and Boys) have won the overall trophy. For the first time by winning medals in more than 10 different categories, BPDC has shared the overall trophy with GMU.

b) Heriot-Watt University Dubai Sports Fest – Students of BPDC have participated in the Heriot-Watt Sports Fest which took place from 9th to 12th February 2020. Basketball (girls) and Tennis (boys) have won first place and Table Tennis (Girls and Boys) secured second place.

c) Rochester Institute of Technology – BPDC participated in the RIT Sports cup held on 15th February 2020 and the girls' basketball team has won 2nd place.

d) IMT - Our students participated in the Sports cup held at IMT-Dubai on 18th February 2020 which took place over a period of 2 days. BPDC Football team won first place and the TT boys achieved second place.

e) Yoga Session- Following the directions from the Ministry of AYUSH, Govt. of India regarding the celebration of International Day of Yoga on 21st June20, the BITS Pilani Dubai campus Sports Club organized an Online Yoga Workout by yoga expert Ms. Shikara Baddam on 21st June20, for a duration of 45 mins. Unlike the previous years, this International Yoga Day was done virtually in the confines of the attendees' homes. The attendees were encouraged to involve their family members in the day's proceedings and the yoga workshop. It was a great show.

f) Annual Sports Day- Sports Club conducted the Annual Sports Day which was held on 6th September, to celebrate and acknowledge the contributions of sportspersons of BITS, Dubai. Former Indian badminton Player and Present Chief National Coach for the Indian badminton team, Mr. Pullela Gopichand (Padma Shri, Padma Bhushan and Rajiv Gandhi Khel Ratna Awardee) was invited as the Chief Guest, gracing us with his presence. The event was held in the presence of Dr. R.N Saha (Director, Bits Pilani Dubai Campus), Dr. Priti Bajpai (Professor, Dean Student Welfare, Bits Pilani Dubai Campus), Dr. M.Rafiuddin (Sr. Manager Student Services , Bits Pilani Dubai campus).

The event started with the host introducing the Chief Guest, followed by Individual awards given to outstanding sportsperson in each individual sport. The event included with a message from our director along with few words of encouragement from our chief guest and the vote of thanks by the outgoing president of the sports club.

g) U.A.E National Day and Martyr's Day: To promote cleanliness and safety, the sports club, in association with Lifebuoy and Care Direct, distributed sanitizers to students and faculty. The event was graced by the Director, Deans and our Faculty-in-charge,

B4.19.14 The Wall Street Club

 The Wall Street Club is a newly formed club in Academic Year 2020-21 especially for the students who are very eager and enthusiastic in financial market fields. In this year they have conducted various online events.

Personal Finance Webinar:-

An online webinar event called "Personal Finance for Gen-Z "was conducted on 2nd November 2020 in the august presence of the distinguished Faculty-in-charge Dr. Sartaj Rather and Dr. Nitin Vihari. The session was to create an awareness among students on the need to invest money for the future and also to serve as a guide to their interests and queries regarding the concepts. The 45 minute webinar covered various investment options available and also

provided a brief introduction to stock markets and trading. It was widely accepted by students and the event received around 55 participants. Post the webinar, In order to further cater to the best interests of the students in these fields of studies and also to provide them a platform where they can showcase their talents, The Wall Street Club was officially launched on Dec 14th 2020.

B4.19.15 JASHN 2020

Jashn, the Institute's most awaited inter-university cultural festival of the year, was held between 13 and 16 April20. The fanfare for Jashn began much in advance with a 150 days countdown released on 15 November19. Jashn 2020 was the first-ever virtual Jashn, with the theme 'Lost City of Atlantis'. All major events were held on virtual platforms such as Zoom and Instagram, starting from 10 am to 10 pm during the four days of the event on non-competition formats **unlike the previous years**. The major events included instrumental music, eastern and western singing, fashion show, group and duo dances, photography, art exhibition and band performances. Overall, it was a remarkable experience.

B4.19.16 Enginuity 2020

Enginuity, an annual fest for all things technological and innovative was held from 11 to 13 February20. The event saw participation from many enthusiastic students. Each department hosted a variety of events centered on a specific theme.

The first day kicked off with the following events:

i.   Marvel Mania was organized by the AIChE:

ii.   iBooths were set up with games based on both chemistry and Marvel characters. This proved to be an appealing event for students from all four years.

iii.   Kick-off was organized by The Guild: It was an online FIFA gaming tournament that spanned over two days. Over 40 students from five universities participated.

iv.   Sci-Pher It was organized by Paribhasha: Participants were put in a Sci-Fi themed escape room that they had to get out of within a time limit.

v.   Codeblitz was organized by the Microsoft Tech Club: Participants were given codes in which they had to crack the errors and fix the code.

vi.   Project S.I.E.R.R.A organized by ACM: It was a cybercrime scene investigation scene that many cybersecurity enthusiasts participated in.

Events conducted on Day 2:

i.   IEEE Pitch 2.0 was organized by IEEE: A pitching competition to present a start-up idea or business plan to the organizers and potential investors.

ii.   Capture the Flag was organized by ACM:

iii.   Teams attempted to exploit a security fault in the competitor's system to acquire a flag.

iv.   Neuron Rush was organized by Chimera: It was a fast-paced quizzing game on various topics including general knowledge, science, and technology, riddles and puzzles.

v.   The final day wrapped up this greatly successful event with a number of exciting and new challenges.

vi.   Big Oh! was organized jointly by Flummoxed and ACM: It was a live challenging quizzing event.

vii. Frynapse was organized by the Microsoft Tech Club: It was a virtual scavenger hunt based on encryption.

viii. Mathematicians was a new initiative by a first-year student named Himanshu: It was an analytical math-based game that tested critical thinking skills of its participants.

ix.   Speed-cubing, Sudoku and Riddles were also conducted and winners were given prizes for their excellent performance.

B4.19.17 Farewell Party 2020

The Director's e-Party for the graduating class of 2020 was conducted on 2 July,2020. The event was held in honor of the four-year journey of a student at BITS Pilani, Dubai Campus and marks the end of their undergraduate years and beginning of life as an engineer. The customary evening party held in the institute's auditorium every year, was shifted to an online platform - Cisco WebEx Meeting this time.

The online session commenced with the Director's speech for the batch followed by more professors expressing their best wishes for the students' future, reflecting on memories the batch left behind and celebrating the accomplishments, successes, and resiliency of the Class of 2020. The president of the Student Council, Gajjala Reddy and President of Sports Club, Yasasvi Malka were some of the students who gave heartfelt speeches expressing their gratitude to their faculty, mentors and the institute for the numerous opportunities the campus provided them with. Faculty members also played musical instruments and sang for students creating sweet final memories for all.

B4.19.18 Welcome Party:

The Student Welfare Division conducted Virtual 'IceBreakers 2020' for the new batch of students on 4 October20, at 06:30 PM GMT, over a Zoom meeting. The program commenced with welcoming the audience and a literal breaking of ice. These annual traditions symbolize creating new roots and breaking the social tension between freshmen, seniors and faculty.

The event provided a platform for first year students to showcase their talents. The freshmen were introduced to various clubs and associations present in the campus and were invited to join them based on their interests. It allowed them to gain insight into the various clubs, committees, boards and other activities that bring together people with common interests at BITS Pilani, Dubai Campus.

B4.19.19 Scholarships

Financial Assistance to Students- 618 students received financial assistance of AED: **4,551,061**/- under different categories for the Academic Year 2019-20, the details of which are given below:

S. No	Particulars	Students Nos.	Amount in AED
1	Institute Merit Scholarship	547	3,958,985
2	Higher Degree and Doctoral Scholarship	38	174,350
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	7	94,288
4	Others (Staff, Siblings, Sports, Special Concessions)	26	323,438
	Total	**618**	**4,551,061**

LIST OF ANNEXURES

Annexure B4-1
(1 page)

SENIOR OFFICERS OF THE INSTITUTE
DIRECTOR
Senior Prof. Dr. R. N. Saha

ASOCIATE DEANS

1. Academic – Undergraduate Studies	Prof. KUMAR KARUPPUSAMY
2. Academic - Graduate Studies and Research	Prof. RAMANUJAM KARTHIKEYAN
3. Practice School	Prof. SOMASUNDARAM ARUMUGAM
4. Student Welfare	Prof. PRITI BAJPAI

GENERAL MANAGER
Prof. Krishna Kumar Singh

ASSISTANT REGISTRAR
Mr. Akshay Chutani

HEAD OF THE DEPARTMENTS

DEPARTMENT	NAME
1. Chemical	Dr. NISHANT HARISHBHAI PANDYA
2. Civil	Dr. VIVEK BALACHANDRA KARTHA
3. Electrical and Electronics	Prof. JAGADISH NAYAK
4. Mechanical	Dr. PRIYANK UPADHYAYA
5. Computer Science	Dr. RAJA MUTHALAGU
6. Biotechnology	Prof. RAMCHANDRAN SUBRAMANIAN
7. General Sciences	Prof. GEETHA KANNAN
8. Humanities and Social Sciences	Prof. SHAZI SHAH JABEEN

HOSTEL WARDENS

	NAME
Chief Warden	Dr. NAVEEN KUMAR SHRIVASTAVA

BLOCK	
A	Dr. NAVEEN KUMAR SHRIVASTAVA
B	Mr. HAROLD FRANKLIN
C	
D	Dr. GULSHAN KUMAR
G	Dr. GEETHA KANNAN (Non-Resident)
	Ms. SHEEBA URUJ (Assistant Warden)

B4: A1

DETAILS OF THE ADMISSIONS MADE DURING THE YEAR 2020

I. First Semester 2020-2021
Admission to Integrated First Degree Programmes

B. E.

Biotechnology	: 18(13)
Chemical Engineering	: 08(03)
Civil	: 07(02)
Electrical and Electronics Engineering	: 13(03)
Mechanical Engineering	: 22 (01)
Electronics and Instrumentation Engineering	: 00 (00)
Computer Science	: 164(48)
Electronics and Communication Engineering	: 09(02)

Admission to Higher Degree Programmes

M. E.

Microelectronics	: 00(00)
Electrical PED	: 03 (01)
Design Engineering	: 05 (00)
Software Systems	: 06(02)
Biotechnology	: 00 (00)
M.B.A	: 09(03)
Ph.D	: 10(07)
TOTAL	: 274(85)

II. Second Semester 2019-2020
Admission to Integrated First Degree Programmes

B. E.

Biotechnology	: 00(00)
Chemical Engineering	: 00(00)
Electrical and Electronics Engineering	: 00(00)
Mechanical Engineering	: 00(00)
Electronics and Instrumentation Engineering	: 00(00)
Computer Science	: 03(00)
Electronics and Communication Engineering	: 00 (00)
Civil Engineering	: 00(00)

Admission to Higher Degree Programmes

M. E.

Microelectronics	: 00 (00)
Design Engineering	: 00(00)
Software Systems	: 03 (02)
Biotechnology	: 00 (00)
Electrical PED	: 00(00)
M.B.A	: 06(02)
Ph.D	: 08 (03)
TOTAL	**: 20(07)**

SUMMARY

	II Semester 2019-2020	I Semester 2020-2021
Integrated First Degree Programmes	03(00)	241(72)
Higher Degree Programmes	09(04)	23(06)
Ph.D	08 (03)	10 (07)
Total	**20(07)**	**274(85)**

STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2019-2020 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES

-------------- NIL ----------

LIST OF CANDIDATES WHO HAVE BEEN PERMITTED TO TRANSFER WITHIN THE FIRST DEGREE IN I SEMESTER 2020-2021

S.NO.	ID NO	NAME	PERMITTED TO TRANSFER	
			FROM	TO
1	2019A7PS0198U	YASSER MUSTAFA ANSARI	CS	BIOT
2	2019A3PS0264U	SHEIKH SHAH SABEEL	EEE	CS
3	2019A4PS0128U	RAUNAK MALHOTRA	MECH	BIOT
4	2019A4PS0065U	PREMSAI PEDDI	MECH	ECE
5	2019A4PS0191U	MOHD ARHAM KHAN	MECH	CIVIL
6	2019AAPS0051U	GAURAV DHANUKA	ECE	CS
7	2019A4PS0220U	FAWZAN VAKKEPARAMBIL SHAJAHAN	MECH	CS
8	2019AAPS0260U	DHRUV JAIN	ECE	CS
9	2019A7PS0035U	DEVANG MEHTA	CS	MECH
10	2019A7PS0238U	ADDALA KASYAPI	CS	CIVIL

NUMBER OF STUDENTS REGISTERED IN SECOND SEMESTER 2019-2020

PROGRAMME	Year of Admission									Total
	2011 and earlier	2012	2013	2014	2015	2016	2017	2018	2019	
A. Integrated First Degree Programmes										
B.E. (Hons.) / B.E										
CHE					3(2)	28(15)	16(8)	10(3)	14(8)	**71(36)**
CIVIL						17(5)	11(3)	10(3)	10(2)	**48(13)**
EEE				1(0)	2(0)	16(7)	23(8)	16(4)	8(1)	**66(20)**
MECH				1(0)	2(0)	67(8)	60(5)	55(4)	28(2)	**213(19)**
CS			2(0)		1(1)	119(53)	122(52)	150(58)	149(48)	**543(212)**
EIE						1(0)	5(3)	4(1)		**10(4)**
BIO					1(0)	15(13)	30(21)	19(14)	23(20)	**88(68)**
ECE					1(1)	29(13)	26(13)	24(9)	18(4)	**98(40)**
Sub Total			**2(0)**	**2(0)**	**10(4)**	**292(114)**	**293(113)**	**288(96)**	**250(85)**	**1137(412)**
B. Higher Degree Programmes										
M.E.										
Software Systems								14(6)	5(2)	**19(8)**
Microelectronics									8(3)	**8(3)**
Power Ele. & Drives								6(0)	2(0)	**8(0)**
Design Engineering								5(2)	4(1)	**9(3)**
Master of Business Administration								14(3)	7(2)	**21(5)**
Ph.D.			5(2)	5(2)	4(0)	1(0)	6(1)	17(13)	20(12)	**58(30)**
Sub Total			**5(2)**	**5(2)**	**4(0)**	**1(0)**	**6(1)**	**56(24)**	**46(20)**	**123(49)**
Total (On Campus)			**7(2)**	**7(2)**	**14(4)**	**293(114)**	**299(114)**	**344(120)**	**296(105)**	**1260(461)**

Number of female students is given in brackets.

NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2020-2021

PROGRAMME	Year of Admission								Total
	2013	2014	2015	2016	2017	2018	2019	2020	
A. Integrated First Degree Programmes									
B.E. (Hons.) / B.E.									
CHE			1(1)	1(1)	15(7)	10(3)	13(7)	8(3)	**48(22)**
CIVIL					11(3)	10(3)	11(3)	7(2)	**39(11)**
EEE		1(0)		1(0)	21(8)	16(4)	7(1)	14(3)	**60(16)**
MECH			2(0)	5(0)	59(5)	55(4)	25(2)	22(1)	**168(12)**
CS			1(1)	9(2)	119(52)	150(58)	146(45)	164(49)	**589(207)**
EIE				1(0)	5(3)	4(1)			**10(4)**
BIO					29(21)	19(14)	24(19)	18(13)	**90(67)**
ECE				5(2)	25(12)	24(9)	17(4)	9(2)	**80(29)**
Sub Total		**1(0)**	**4(2)**	**22(5)**	**284(111)**	**288(96)**	**243(81)**	**242(73)**	**1084(368)**
B. Higher Degree Programmes									
M.E.									
Software Systems						6(3)	5(2)	6(2)	**17(7)**
Microelectronics							8(3)		**8(3)**
Power Ele. & Drives						2(0)	2(0)	3(1)	**7(1)**
Design Engineering						1(0)	4(1)	5(0)	**10(1)**
Master of Business Administration						5(1)	6(2)	8(3)	**19(6)**
Ph.D.	3(1)	3(0)	4(0)	1(0)	6(2)	16(13)	18(11)	10(7)	**61(34)**
Sub Total	**3(1)**	**3(0)**	**4(0)**	**1(0)**	**6(2)**	**30(17)**	**43(19)**	**32(13)**	**122(52)**
Total (On Campus)	**3(1)**	**4(0)**	**8(2)**	**23(5)**	**290(113)**	**318(113)**	**286(100)**	**274(86)**	**1206(420)**

Number of female students is given in brackets.

Annexure B4-5
(2 Page)

STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	
	86th Award (10th Feb 2020)	87th Award (13th Aug 2020)
B.E. (Hons.)		
Chemical (with PS)	5(2)	2(1)
Electrical & Electronics	0	1(0)
Electrical & Electronics (with PS)	4(0)	1(0)
Computer Science	1(0)	2(0)
Computer Science (with PS)	9(5)	0
Mechanical	1(0)	0
Mechanical (with PS)	3(0)	2(1)
Biotechnology (with PS)	1(1)	1(0)
Electronics & Communication (with PS)	2(1)	1(1)
B.E.		
Chemical	0	1(1)
Chemical (with PS)	0	27(14)
Civil	0	2(0)
Civil (with PS)	0	15(5)
Electrical & Electronics	1(1)	0
Electrical & Electronics (with PS)	0	15(7)
Mechanical	0	8(0)
Mechanical (with PS)	2(0)	53(8)
Computer Science	2(2)	11(4)
Computer Science (with PS)	0	102(49)
Electronics & Instrumentation (with PS)	0	1(0)
Biotechnology	0	7(5)
Biotechnology (with PS)	0	9(8)
Electronics & Communication	0	2(1)
Electronics & Communication (with PS)	2(2)	22(10)
Sub Total	**33(14)**	**285(115)**
Higher Degree		
M.E. (Software Systems)	0	5(3)
M.E. (Software Systems) (with PS)	0	3(0)
M.E.(Electrical with specialization in Power Electronics & Drives)	0	3(0)
M.E.(Electrical with specialization in Power Electronics & Drives) (with PS)	0	1(0)
M.E. (Design Engineering)	3(0)	4(2)
Master of Business Administration	5(1)	9(2)
Master of Business Administration (with PS)	1(0)	0
Sub Total	**9(1)**	**25(7)**
Ph. D.	**2(1)**	**3(3)**
Total	**44(16)**	**313(125)**

SUMMARY

	86th Award (10th Feb 2020)	87th Award (13th Aug 2020)	Total
Integrated First Degrees	33(14)	285(115)	318(129)
Higher Degree	9(1)	25(7)	34(8)
Ph. D.	2(1)	3(3)	5(4)
Total	**44(16)**	**313(125)**	**357(141)**

Annexure B4-6
(1 Page)

86thAWARD OF DEGREES APPROVED BY THE 187thMEETING OF THE BOARD OF GOVERNORS

Programme	Dist.	I	II	Total
B.E. (Hons.)Chemical (with PS)	0	1	4	5
B.E. (Hons.)Electrical & Electronics (with PS)	0	0	4	4
B.E. (Hons.)Computer Science	0	0	1	1
B.E. (Hons.)Computer Science (with PS)	2	2	5	9
B.E. (Hons.)Mechanical	0	0	1	1
B.E. (Hons.)Mechanical (with PS)	0	1	2	3
B.E. (Hons.)Biotechnology (with PS)	0	0	1	1
B.E. (Hons.)Electronics & Communication (with PS)	0	0	2	2
B.E. Electrical & Electronics	1	0	0	1
B.E. Mechanical (with PS)	0	1	1	2
B.E. Computer Science	1	1	0	2
B.E. Electronics & Communication (with PS)	1	1	0	2
Sub Total	**5**	**7**	**21**	**33**
M.E. (Design Engineering)	-	-	-	3
Master of Business Administration	-	-	-	5
Master of Business Administration (with Practice School)	-	-	-	1
Sub Total	-	-	-	**9**
Ph.D. Degree	-	-	-	2
Total	-	-	-	**44**

Annexure B4-7
(2 Page)

87th AWARD OF DEGREES APPROVED BY THE 188th MEETING OF THE BOARD OF GOVERNORS

Programme	Dist.	I	II	Total
B.E. (Hons.) Chemical (with PS)	0	1	1	2
B.E. (Hons.) Electrical & Electronics	0	0	1	1
B.E. (Hons.) Electrical & Electronics (with PS)	0	0	1	1
B.E. (Hons.) Computer Science	0	0	2	2
B.E. (Hons.) Mechanical (with PS)	0	1	1	2
B.E. (Hons.) Biotechnology (with PS)	0	0	1	1
B.E. (Hons.) Electronics & Communication (with PS)	0	0	1	1
B.E. Chemical	0	0	1	1
B.E. Chemical (with PS)	6	13	8	27
B.E. Civil	1	1	0	2
B.E. Civil (with PS)	1	6	8	15
B.E. Electrical & Electronics (with PS)	0	12	3	15
B.E. Mechanical	5	1	2	8
B.E. Mechanical (with PS)	6	28	19	53
B.E. Computer Science	5	4	2	11
B.E. Computer Science (with PS)	17	56	29	102
B.E. Electronics & Instrumentation (with PS)	0	1	0	1
B.E. Biotechnology	2	3	2	7
B.E. Biotechnology (with PS)	2	5	2	9
B.E. Electronics & Communication	1	1	0	2
B.E. Electronics & Communication (with PS)	4	7	11	22
Sub Total	**50**	**140**	**95**	**285**
M.E. (Software Systems)	-	-	-	5
M.E. (Software Systems) (with PS)	-	-	-	3
M.E.(Electrical with specialization in Power Electronics & Drives)	-	-	-	3
M.E.(Electrical with specialization in Power Electronics & Drives) (with PS)	-	-	-	1
M.E. (Design Engineering)	-	-	-	4
Master of Business Administration	-	-	-	9
Sub Total	-	-	-	**25**
Ph.D. Degree	-	-	-	**3**
Total	-	-	-	**313**

LIST OF ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS AT

BITS PILANI, DUBAI CAMPUS

S.NO	Name of the Company	Number of Students Interviewed	Number of Offers	Streams
1	28 Lightbulbs Dubai	0	0	CS, ECE, EEE
2	6th Street	0	0	All Streams
3	Abdullah Bin Zayed	0	0	All Streams
4	AL Ghandi General Trading	3	1	MECH
5	Al Shirawi Equipment Company LLC	7	1	CH, ME, EEE
6	Al Shirawi UAE	0	0	All Streams
7	Al Wafaa Group	5	2	CS
8	Alucor	20	13	All Streams
9	Alucor Solutions Pvt. Ltd	1	1	CS
10	Amvin Group UAE	4	1	ECE
11	Asteco Property Management	3	1	All Streams
12	Axiom Telecom	0	0	CS
13	Bayzaat	0	0	All Streams
14	Beckers Group	11	1	CH
15	Beinex Consulting	0	0	All Streams
16	BioScience GmbH	0	0	CS
17	BNC Networks	5	2	CS, CHEM
18	Britannia	0	0	CS, MECH, ECE, EEE
19	Bruce Clay	2	1	CS
20	Captain & Company	5	3	All Streams
21	Choithrams	5	0	CS
22	CKR IT Consulting	5	1	CS
23	CMS Dubai	0	0	MECH
24	Crowe MAK	3	1	CS
25	CX Unicorn LLC	0	0	CS
26	Dabur	2	1	BIOTECH
27	Deloitte Touche Tohmatsu India LLP	1	1	CS
28	Delphi Consulting	2	1	All Streams
29	DERIV Dubai	5	2	CS
30	DoctorDoctor	0	0	CS
31	Eagle View Group	2	1	CS
32	EBM Group	0	0	All Streams
33	EFS Facilities Services	6	3	CS, MECH, ECE, EEE
34	Environmental International Consultants, Dubai	3	1	ECE, EEE, Higher
35	ELCA Systems	5	2	All Streams
36	Elitser Technologies	2	1	CS
37	Emerson FZE	1	1	MECH
38	Emirates Refining Company	1	1	MECH, CIVIL
39	Emvees Waste Water	0	0	All Streams

S.NO	Name of the Company	Number of Students Interviewed	Number of Offers	Streams
40	ESRI Middle East	2	1	CS
41	Evanssion	0	0	All Streams
42	Eventstan	0	0	All Streams
43	Exalogic Consulting	0	0	All Streams
44	Fasiculus Dubai	2	1	CS
45	Fence International	1	1	MECH, ECE, EEE
46	Ferco Shutters	0	0	All Streams
47	GalaxKey Limited	4	1	All Streams
48	Gargash Insurance	2	1	CS
49	GPMC Dubai	1	1	MECH, CIVIL
50	Hewlett Packard Enterprise	1	1	CS
51	Hira Industries	3	1	All Streams
52	Hira Walreven	0	0	MECH, CIVIL
53	IGI- DMCC	3	1	All Streams
54	Inceptio Systems	0	0	CS
55	Ingram Micro	0	0	All Streams
56	Integra Technologies	4	2	CS
57	Interel	3	1	CS
58	Intertek	0	0	CS
59	IQ Fulfillment	0	0	All Streams
60	ISYX Technologies UAE	0	0	All Streams
61	Johnson Controls	3	1	AI Streams
62	KG International	5	3	All Streams
63	Kimoha Entrepreneurs Limited	0	0	All Streams
64	Lamprell PLC	4	2	MECH, Higher
65	Landmark Group	0	0	All Streams
66	Lauren Technologies	2	0	All Streams
67	Mashreq Bank	1	1	All Streams
68	Maximus Technologies	3	1	All Streams
69	Metadata Technologies FZ LLC	0	0	CS
70	Michelin India Private Limited	1	1	CS
71	Microsoft MENA	0	0	All Streams
72	Mohammed Bin Abdullah Trading & Transport	1	1	All Streams
73	Naffco FZCO	1	1	MECH, Higher
74	New Vision Metal Construction Industry	1	1	MECH
75	Noon.com	10	7	All Streams
76	OMA Emirates Group	5	3	CS
77	Omnitech Group	2	0	All Streams
78	Option 1 Events Services LLC	0	0	MECH, ECE, EEE
79	PolariseME FZE	4	1	CS
80	Polymer Plus General Trading LLC	1	1	CH
81	Prognica Labs Tech	0	0	CS
82	PwC Digital Services, UAE	11	8	CS, MECH, CHEM, EEE, ECE
83	RheinBrücke IT Consulting	0	0	All Streams

S.NO	Name of the Company	Number of Students Interviewed	Number of Offers	Streams
84	RNS Technologies	2	1	CS
85	Rove Group	4	1	All Streams
86	Safinat Group	0	0	All Streams
87	SBL International UAE	2	0	All Streams
88	Schindler	2	1	ME
89	Scientechnic	4	0	All Streams
90	Sharjah Electricity & Water Authority	1	1	MECH, CIVIL
91	Sobha Group	6	2	CIVIL
92	Square Yards	4	0	All Streams
93	Sudo Technologies	1	1	CS
94	Takaful	3	1	CS
95	Tanfeeth/Emirates NBD	2	0	All Streams
96	Taurani Holdings	0	0	MECH, EEE
97	Torrecid Middle East	0	0	All Streams
98	Transcresent Water Equipment Trading LLC	1	1	All Streams
99	Tricom LLC	3	1	All Streams
100	Tripworld	1	1	CS
101	TUV Nord Middle East	0	0	MECH
102	Urban Clap	2	2	All Streams
103	UTP Pipes	2	1	MECH
104	Versatech Automation FZE	7	2	MECH
105	WAFA Biological Laboratory	3	1	BIO
	Total	**240**	**105**	

Summary

Total No. of Companies:	105
Total No. of students interviewed:	240
Total No. of appointments offered:	105
Total No. of PPO Companies:	12
Total No. of PPO:	20

*Legend

CHEM: Chemical, CS/IT: Computer Science, EEE: Electrical & Electronics, CIVIL: CIVIL, MECH: Mechanical, BIOT: Biotechnology, ECE: Electronics & Communication, PPO: Pre-Placement Offer

List of First Degree Projects
Second Semester 2019-2020 (January 2020 to June 2020)

S.No	Name	Topic	Instructor	Type
1	SAQLIN FEBY ASHRAF	Design and develop a business services center website	Santhosh Kumar Vasudevan	DP
2	BIDHAN RAJESH JAIN	Design an Environmental Impact Assessment report for a new constructing building	Ms. SREELAKSHMI BABU	DP
3	MOHAMMED SAMEER MOHAMMED	Design & Simulation of an Energy Efficient Villa in Dubai using ETABS & Energy Plus	MEGHANA CHARDE	DP
4	ASJAD AHMAD	Multi-Story Building Structural Analysis & Design	Vivek B	DP
5	CHANCHAL PYARE LAL JAT	MEP in Green Buildings	Periasamy .C	DP
6	AYESHA MOHAMMED YUSUF K	Optimized design and finite element modelling of an electric car chassis	Udayakumar	DP
7	ADITYA MOUDGIL	Bendable Tools using Compliant Mechanism	VINCENT SHANTHA KUMAR	DP
8	REUBEN MATHEW THOMAS	Research on improvement of electric and hybrid cars	Udayakumar	DP
9	SYED ALI RAZA ZAIDI	Effect of methanol concentration on the performance of passive DMFC	NAVEEN KUMAR SHRIVATSAVA	DP
10	PALAKSH PRADEEP YELAMALI	Aerodynamic Technology in Race/Super Hybrid cars	SHASHANK KHURANA	DP
11	KHAN AADIL SAYEED	Metamaterials	PRIYANK UPADHYAYA	DP
12	MAHMOUD NY ABUSULTAN	MEP in green buildings	Periasamy .C	DP
13	PREETIKA LAKSHMANAN	Web Application Penetration Testing	RAJA MUTHALAGU	DP
14	ASHISH GHOSHAL	Analysis and Comparison of Network Topologies through Simulation	RAJA MUTHALAGU	DP
15	ANANDHU KARATTUPARAMBIL RAJU	Network Intrusion Detection System using Deep Learning	Vadivel .S	DP
16	ANAGA SUDHEER	Nature inspired artificial intelligence and optimization	GAURAV SAXENA	DP
17	SHREYA SINHA	Predicting Closure of Accounts using Artificial Neural Networks	Sujala Deepak Shetty	DP
18	AMEER KHAN ASHRAF	Application of Steganography in secure communication	Baskaran .S	DP
19	FARHAN SUBAIR	Secure and transparent information security system	Baskaran .S	DP
20	KALAKUNTLA VIHAGENDRA	Smart Home System using IOT Device with Voice Recognition	Vadivel .S	DP
21	ESHWARAN V	Detection of Malicious Programs using Machine Learning	Vijayakumar .B	DP
22	ARDRA MOHANDAS	Nature inspired artificial intelligence and optimization	GAURAV SAXENA	DP
23	KEERTHANA PRAMUDI SURESH	Text Recognition on static images.	RAJA MUTHALAGU	DP
24	RACHEL ARPANA	Design & Simulation of an Energy Efficient Villa in Dubai using ETABS & ENERGYPLUS	MEGHANA CHARDE	DP
25	NILANCHAL NILAMADHAB	Text Prediction and Text Correction Keyboard Model	Santhosh Kumar Vasudevan	DP
26	KARYN ANSELM D SOUZA	Identification of Human Expressions using Deep Artificial Neural Networks	SHILPEE SRIVASTAVA	DP

S.No	Name	Topic	Instructor	Type
			SAXENA	
27	PRANAV KAUL	Real time object detection using deep learning	Kavita Sunil Jerath	DP
28	VENKATA PRASANTH SAI KONDA	Application of IoT in betterment of human life	Baskaran .S	DP
29	VENKATA PRASANTH SAI KONDA	Network Intrusion Detection & Prediction Systems: The Security Approach	Vadivel .S	DP
30	AISHNI CHATTERJEE	Smart Homes : Using Image Processing and IoT	Sujala Deepak Shetty	DP
31	AAKANSHA MATHUR	Sentimental Analysis of Reviews	ANGEL JOTHI	DP
32	MOKSHA CHETAN MEHTA	Robotics and its Application in Biomedical Engineering	Ramachandran .S	DP
33	SAFIYA AAFREEN	Protein structure analysis using bioinformatic tools	Ramachandran .S	DP
34	SHWETHA SREEJITH	Comparison between soft and hard Hand-off Algorithms	Abdul Razak .A.R	DP
35	ZAINAB TABASSUM	Study of dehydration kinetics of Salt hydrates.	ELDHOSE IYPE	DP
36	NEERAJ JOY NATESAN	Wireless Power Transmission using Renewable Energy	Sunil Thomas	DP
37	ESTHER NATARAJAN	Tool conditioning monitoring and Prediction analysis using Neuro-fuzzy approach	Kalaichelvi	DP
38	KEVIN RODRIGUES	Design of an Advanced Driver-Assistance System (ADAS) in MATLAB	VILAS HARIDAS GAIDHANE	DP
39	KARAN GUPTA	Intelligent Battery Monitoring System for last mile E-vehicles	VILAS HARIDAS GAIDHANE	DP
40	SRAJAN GUPTA	VISION BASED NAVIGATION OF MOBILE ROBOT WITH OBSTACLE AVOIDANCE BY USING STEREOSCOPIC VISION	Karthikeyan .R	DP
41	MOHAMMED SIYAAM	Analysis of supersonic flow around a conical body	SNEHAUNSHU CHOWDHURY	DP
42	ABEL BIJU JOSEPH	Finite element analysis simulation of Welding	Gulshan Kumar	DP
43	RAHUL ASHOK SHARMA	Optimum design of hydrogen container and design of roll cage of car	NAVEEN KUMAR SHRIVATSAVA	DP
44	SHARON SHAJI	Finite Element Method Simulation of Stress Variation in Notches	Gulshan Kumar	DP
45	ADWAIT SWANAND KASAR	Analysis of shocks with variation in cone angle of object	SNEHAUNSHU CHOWDHURY	DP
46	DEODA DHANESH SUNIL	VISION BASED NAVIGATION OF MOBILE ROBOT WITH OBSTACLE AVOIDANCE BY USING STEREOSCOPIC VISION	Karthikeyan .R	DP
47	ARUN BHASKAR KARANAYIL ANIL	Water generation using Peltier module	NAVEEN KUMAR SHRIVATSAVA	DP
48	K VAIKUNTH KESHAV	FEM Simulation for various machining processes	Gulshan Kumar	DP
49	TARUN RAGHURAM TIRCHANAPALLY	Divergence section of a supersonic nozzle	SNEHAUNSHU CHOWDHURY	DP
50	FAIZ ABDUL SALAM	Design and manufacture of mobile manipulator with serial manipulator	Karthikeyan .R	DP
51	JERRIN THOMAS	Variable Volume Engine	Udayakumar	DP
52	SIMRAN MORE	iOS App Development	Abdul Razak .A.R	DP
53	SRUTHI JANARDHANAN	Market segmentation using consumer behaviour	RAJA MUTHALAGU	DP
54	AKSHAYA RAMACHANDRAN K	Image classifcation using Deep Learning Techniques	ANGEL JOTHI	DP

S.No	Name	Topic	Instructor	Type
55	AMENA QADRI SYED	Application of Artificial Intelligence Techniques in Medical Diagnosis	ANGEL JOTHI	DP
56	STP SATWIK	Medical image processing using deep and machine learning	Vadivel .S	DP
57	LAVINA PRAMOD KUNDER	Machine Learning in Gamification	SIDDHALING UROLAGIN	DP
58	DEVANSH SHAH	Nature inspired Computing	GAURAV SAXENA	DP
59	TANYA CHAWLA	Applications of Text Mining in Employ ability	SIDDHALING UROLAGIN	DP
60	TIPPARAJU VENKATA SAI ANUJ	Study and implementation of location aware recommendation system	ANGEL JOTHI	DP
61	NIMRA TANEEM	Administrator Fingerprint Authenticated Active Chat Monitoring and Suspicious Chat Detection Over Internet	Sapna Sadhwani	DP
62	ASHWIN S NEOGI	Facial Recognition Model using FaceNet and OpenFace	Rahul Chegot Sankaramenon	DP
63	KHUSHDEEP SINGH	Nature inspired Computing	GAURAV SAXENA	DP
64	HARYANI KUNAL RAM	Partially Automatic Data Labeling using Reinforcement Learning	SIDDHALING UROLAGIN	DP
65	SHIVAM BANSAL	Study and implementation of Applications of Computer Vision	ANGEL JOTHI	DP
66	RISHIKA BANSAL	k-mean Clustering Method applied for Manufacturing Industrial Process	Kalaichelvi	DP
67	SAMAR KULSOOM NADEEM	Administrator Fingerprint Authenticated Active Chat Monitoring and Suspicious Chat Detection Over Internet	Sapna Sadhwani	DP
68	YATHARTH KHER	Intelligent Integration of Blockchain and Deep Learning for Polling System	Tamizharasan Periyasamy	DP
69	JAYESH JAIN	Sentiment analysis for Airline services using deep learning.	SIDDHALING UROLAGIN	DP
70	NIKSHITA SARANGI	Application of Deep Learning for Robotics Autonomous Navigation.	Kalaichelvi	DP
71	SAGAR HEGDE	Nature inspired computation	GAURAV SAXENA	DP
72	JEEL PATEL	Develop a voice-based application for virtual-assistantance on Cloud Service Platforms.	Sapna Sadhwani	DP
73	MOHAMMED AFAOUNODDEN AHMED	Descriptive Analysis on Products/Services demand and Market conspectus: A quantitative approach	RAJA MUTHALAGU	DP
74	ADITHYA T P	Reinforcement learning algorithms in gaming environments	Sapna Sadhwani	DP
75	RACHEL AUSTIN	Vital sign monitoring system measuring heart rate, respiration rate using Arduino Uno	Swarnalatha .R	DP
76	POOJA KARTHIK	Condition Monitoring of CNC Machining Using Adaptive Control	Kalaichelvi	DP
77	PADMAKTSHNI SURYANARAYANAN	Development of Microbial Fuel Cell using Agricultural Run-offs	Geetha	DP
78	SWARUP KRISHNA	12V Battery and Float Charger	Sunil Thomas	DP
79	VENKATESHWAR GOVINDARAJ	Computer vision-based system for CNC control	Kalaichelvi	DP
80	LAKAVARAPUKOTA SAI VANDANA	Food quality monitoring in a Refrigerator	Jagadish Nayak	DP
81	SAMYUKTHA SENTHIL ATHIBAN	Sensor less Virtual Talking system for Differently abled	SAZIA HASAN	DP
82	CLAYTON PEREIRA	Target Detection Using Active Acoustics and Computer Vision by Submarines.	SAZIA HASAN	DP

S.No	Name	Topic	Instructor	Type
83	GAYATHRI RAGHU MENON	Crack detection using digital image processing	Deepthi	DP
84	HARISMITA RAMKUMAR	Eyeball Sensor for Automatic Wheel Chair Movement for Paralyzed Patients	Swarnalatha .R	DP
85	FIONA ALEXANDRA LOBO	Vital sign monitoring system measuring blood pressure, body temperature using Arduino	Swarnalatha .R	DP
86	TIRTH KETAN LAKHANI	A sustainable way towards wrist watches	VILAS HARIDAS GAIDHANE	DP
87	ANAMIKA KRISHNAKUMAR NAIR	Crack Detection using Digital Image Processing	Deepthi	DP
88	VARSHINI RAJESH	Design and study the performance of Cognitive Radio.	Abdul Razak .A.R	DP
89	SHIVANI KRISHNA KOMPELLA	Optimum Design of a Microstrip Patch Antenna and Study of its Characteristics.	Abdul Razak .A.R	DP
90	SATYANEHA GANGA	Crack Detection using Digital Image Processing	Deepthi	DP
91	SAHIL SHASHIKAR SHETTY	Nature Inspired Computation	GAURAV SAXENA	DP
92	VISHAL KRISHNAN MADHAVDAS	Traffic Control System with GPS	Rahul Chegot Sankaramenon	DP
93	KESHAV YADAV	Traffic control System	Rahul Chegot Sankaramenon	DP
94	ROHAN SAMUEL MANOGARAN	Investigation of Mechanical Properties of Nano-materials	Karthiyayini .S	LP
95	BABURAJ SONU DAKSHIN	Applications of Lignin	Nishant Pandya	LP
96	SNEHA VAIDYANATHAN	SYNTHESIS AND COMPARISON OF BIOPLASTICS	Geetha	LP
97	SIMRAN SAJNANI	Extraction and Characterization of Lignin from Non-wood biomass	Nishant Pandya	LP
98	JASIYA HARRIS	Development of Microbial Fuel cell using Agricultural Run-off	Geetha	LP
99	BIDHAN RAJESH JAIN	Waste and Recycled Materials in Concrete Technology	Vivek B	LP
100	MOHAMMED SAMEER MOHAMMED	Waste and Recycled Materials in Concrete Technology	Vivek B	LP
101	ARSALAAN BILAL SAIYED	Designing A Solenoid Boxer Engine	Karthikeyan .R	LP
102	RISHABH KAUSHIK	Smart Homes : Using Image Processing and IoT	Sujala Deepak Shetty	LP
103	MOKSHA CHETAN MEHTA	Purification and Characterization of anti-oxidant molecules extracted from Salicornia bigelovii irrigated with fish tank water.	MAINAK DUTTA	LP
104	CHANDRASEN MOHITE	Development of knockout vector for PHB in Synechocystis	PALLAB SANPUI	LP
105	RAMCHARAN TEJ VUTPALA KESAVA R	Synthesis of pectin based surfactant	Bharat Bhushan Gulyani	LP
106	VINIITH SARAWATE	Characterization And Optimization Of Inorganic PCMs For Micro And Nano Encapsulation Of Themal Energy.	Nishant Pandya	LP
107	BODDAPATI KARTIK	Biogas production from vegetable waste	Bharat Bhushan Gulyani	LP
108	AGHIL SHAJU	Preparation of waste sludge-supported photo catalyst	Prakash Kumar .B.G	LP
109	MALAY KIRIT MEHTA	Biogas production from kitchen waste	Bharat Bhushan Gulyani	LP
110	SHABIL SHAJI	Preparation of biochar- supported photo catalyst	Prakash Kumar .B.G	LP

S.No	Name	Topic	Instructor	Type
111	RIGVEDA SACHIN JANAI	Encapsulating Organic Phase Change Materials in different polymers and improving it as a thermal energy storage medium	Nishant Pandya	LP
112	JAGANNATHAN UMAPATHY	Incremental Sheet Forming	Karthikeyan .R	LP
113	VYOME PATHAK	Design Manufacturing and testing of composites	PRIYANK UPADHYAYA	LP
114	HARISH MAHESH	Concept evaluation and prototyping of low energy aquaponics system	SHASHANK KHURANA	LP
115	SAMEER AHMED MAZUMDAR	Analysis and Simulation of NOx Production and Reduction in CI Engines	Udayakumar	LP
116	GOPIKRISHNAN JAYAHARAN NAIR	Incremental Sheet Forming	Karthikeyan .R	LP
117	ANCHAL NAHATA	corrosion testing on magnesium alloys	VINCENT SHANTHA KUMAR	LP
118	ADRESYA SURESH AZHAKATH	Isolation and cloning of GFP in PUC18 vector	NAMITA KHANNA	LP
119	SAMYUKTHA PALANGAD OTHAYOTH	Customer Segmentation using Machine Learning Techniques	RAJA MUTHALAGU	LP
120	MELISSAVIYANEE ANTONY VENANCIU	Bio-cementation using microbial induced carbonate precipitation (MICP).	NAMITA KHANNA	LP
121	SANJANA VENKATESH	Vector Design for hydrogen production in Synechocystis	NAMITA KHANNA	LP
122	NEEHARIKA SENTHILKUMAR	Cloning and Expression of Human Gene in E.coli	PALLAB SANPUI	LP
123	SRIVATSAV GOPIKRISHNAN	Preparation and evaluation of New substrates for yeast biomass production.	Ramachandran .S	LP
124	ELIZABETH JACOB POOTHICOT	Effect of substrate optimization of process parameters for Yeast Biomass production.	Dawood Jalaluddin Shariff .D	LP
125	MUHAMMED SALAH AL DIN AYOUBI	Purification and characterization of molecules with xanthine oxidase activity extracted from salicornia irrigated with fish tank water	MAINAK DUTTA	LP
126	RIYA NAIR	Development of vector for optimized hydrogen production using algae	NAMITA KHANNA	LP
127	SANDRA INNESENT	Modification and Development of constructs for hydrogen production	Dawood Jalaluddin Shariff .D	LP
128	KARANVEER SINGH	HPLC method development for separation of anti-oxidant molecules	MAINAK DUTTA	LP
129	KAUSHIK PAVULURI	To study the anti fungal properties of metal nanoparticles.	Gokhale Trupti Swarup	LP
130	SANMUGAPRIYA COIMBATORE BHOOPA	Biocement	PALLAB SANPUI	LP
131	SMRIDHI MATHUR	Metal nanoparticles	Gokhale Trupti Swarup	LP
132	NIKITA KUMAR KULKARNI	GENE KNOCKOUT	NAMITA KHANNA	LP
133	PRANAV PRAKASH SHEDGE	Liposome Preparation for Drug Entrapment	Neeru Sood	LP
134	SARTHAK SETHI	Imaging and Weight Based Item Recognition	Jagadish Nayak	LP
135	AAMER ABDUL RAHMAN	Application of deep learning to classify environmental sounds	SAZIA HASAN	LP
136	ROHAN SAMUEL MANOGARAN	Advancements in renewable Energy	Periasamy .C	SP
137	TIMOTHY THOMAS MATHEW	Circular Economy in Construction and how it can tackle Pollution	Vivek B	SP
138	MINNAH SHEHZAD ANSARI	Artificial Intelligence Related To Electrical Power Engineering	Abdul Razak .A.R	SP

S.No	Name	Topic	Instructor	Type
139	ADITYA MOUDGIL	Autonomous Path Planning using AI in a Modified RC Car	Razia Sulthana	SP
140	JEEVAN VIJI MANDOKKARA	Analysis of different Transmission Systems for Hybrid and Electric Vehicles	Udayakumar	SP
141	SAAD SHEIKH MOHAMMAD SHAMIM	Business Model Creation and Competition Assessment for Professional MeetUP Application	NITIN SIMHA VIHARI POLURU	SP
142	HARSH KUMAR KRISHNANI	Study on space x falcon 9	SHASHANK KHURANA	SP
143	VYSHNAVI RAI	Knowledge Management and Innovation in UAE	MRUTUYANJAYA SAHU	SP
144	AAMIR EBRAHIM SHAKIR	Disruptions in traditional Fintech methods in UAE through the introduction of the Fintech Hive	NITIN SIMHA VIHARI POLURU	SP
145	TANVIR SINGH AHUJA	Innovation in the Fintech Ecosystem in MENA region for applications including Big Data and Predictive Analysis.	NITIN SIMHA VIHARI POLURU	SP
146	ANANDHU KARATTUPARAMBIL RAJU	Use of IoT for the advancement of society	Baskaran .S	SP
147	LAURA EVELYN ANESLY	Smart canes to aid visually impaired people	Santhosh Kumar Vasudevan	SP
148	HIMANI BALI	A Study on Consumer Awareness Analysis	MRUTUYANJAYA SAHU	SP
149	BONTHAPALLY RUTHVIK	Predicting Student's Academic performance using Regression analysis	SARTAJ RASOOL RATHER	SP
150	RACHEL ARPANA	Exploratory Data Analysis	SIDDHALING UROLAGIN	SP
151	CHIRAG JAIN	The Integration of Technology with Financial Services Companies: The Case of ICC Loyalty	NITIN SIMHA VIHARI POLURU	SP
152	SHREYA SUNIL MANJAREKAR	The role of Biomaterials in Central Nervous System Injury	PALLAB SANPUI	SP
153	MIR ANSAF MAQSOOD	HIGHWAY SAFETY	Deepthi	SP
154	EMIL SAJIV MATHEW	BIO-CONCRETE	Vivek B	SP
155	MOHAMED MUZAMMIL MOHAMED ANWAR	Innovations in RegTech Ecosystem: Few case studies in the MENA region	NITIN SIMHA VIHARI POLURU	SP
156	YAGNESH BAPODRA	Recent Advancements in Automotive Technologies	Udayakumar	SP
157	HRISHIKESH NEELESH SABNIS	FEM simulation of forging process	Gulshan Kumar	SP
158	SIDHANT SHARMA	Rise of the Political Right: The Reasons for its Rise and What it Means for the World.	DEVIKA SHARMA	SP
159	DUNGORE NAVAZ PARIZAD	comprehensive review on use of novelty materials for aerospace applications	SHASHANK KHURANA	SP
160	MOHAMMED KASSIM N	Caste system in India	VINNARASAN ARULDOSS	SP
161	ABHISHEK BALAGOPALAN NAIR	Digitization and Democracy in the 21st century	MRUTUYANJAYA SAHU	SP
162	SONALI SUBBU RATHINAM	Analysis of Public Policies using Big Data	MRUTUYANJAYA SAHU	SP
163	SAIFALI GULAMABBAS PATEL	Aesthetic visual analysis and its application in automated selection of best title image(Artwork) in online streaming services like Netflix.	ANGEL JOTHI	SP
164	TUSHAR CHAUDHARY	TERRORISM IN PAKISTAN	SHAMSHAD AHMAD KHAN	SP
165	ROSHNI DODHI	CRYPTOJACKING - cryptocurrency mining	Sapna Sadhwani	SP

S.No	Name	Topic	Instructor	Type
		and its defense		
166	SURIYA RAGAVAN BADRINATH	A Cryptographic approach on Credit Card Fraud Detection System	Sapna Sadhwani	SP
167	GOURISHA SETHI	Big Data and Policing: Law Enforcement Requirements of UK in comparison with UAE	Abdul Razak .A.R	SP
168	ANISH KUMAR PATRA	Education in India	SHAMSHAD AHMAD KHAN	SP
169	ARUSHI KANSAL	A comprehensive study on recent advances of metaheuristic optimization techniques	Tapan Kumar Datta	SP
170	MARY WINNI SHERYL	Project on Data Science	Santhosh Kumar Vasudevan	SP
171	SAURAV THALIYAKATTIL	Methods in Food Analysis	Gokhale Trupti Swarup	SP
172	MALAVIKA SUDHEER	Forensic psychology	Ramachandran .S	SP
173	ALEENA JOY	Study on Environmental Impact Assessment on Demolition of Buildings	Ms. SREELAKSHMI BABU	SP
174	PATEL RAJ MUKESHBHAI	3-D Printed Buildings	Vivek B	SP
175	ANAMIKA VENU	Study on Urban Heat Island Effect	Rusal Raj Francis	SP
176	RANDA NZALYAZJI	Rural Road Development	Deepthi	SP
177	SAKSHI SINGH	CARBON NANOTUBES BASED GAS SENSOR	Krishna Kumar Singh	SP
178	PARTHI PIRTA	Autonomous Cars and their effects on Environment	Gomathi Bhavani .R	SP
179	BADDULA PREETI PRASAD	Study on Cavitation, its applications and scope.	SHASHANK KHURANA	SP
180	SAYANTAN DATTA	Real life applications of Graph Theory	Somasundaram Arumugam	SP
181	YASHIKA JAMWAL	Study on influence of Deep Learning in sensitive applications	Tamizharasan Periyasamy	SP
182	PRANAV RAMESH	Integrating density distribution and Non-Linear SVM to predict the behavioral trend of import and export of products across the world countries.	Razia Sulthana	SP
183	RITIK PANDA	Data Analysis Techniques and Its real world Applications	Somasundaram Arumugam	SP
184	SEERAT PARVAIZ	Learning 'Machine Intelligence'	Rahul Chegot Sankaramenon	SP
185	PARTH GANERIWALA	Intrusion Detection and Prevention Methods	Sujala Deepak Shetty	SP
186	J SREENIVAS REDDY	Internet of things	Santhosh Kumar Vasudevan	SP
187	DIVYANSHI KOTHARI	STATISTICAL ANALYSIS OF HEART DISEASE DATA SET AND PROPOSING PREVENTIVE MEASURES	Maneesha	SP
188	YASHASWI	k-Center Clustering with Constraints	Rahul Chegot Sankaramenon	SP
189	VISHESH MEHTA	Study of human brain for ANN	NILESH GOEL	SP
190	RADHIKA SINGH	Deep Learning: Study on Generative Adversarial Networks	Tamizharasan Periyasamy	SP
191	SHRISHTI SRIVASTAVA	Computer Vision	NILESH GOEL	SP
192	JYOTI CHOWDHERY	Machine learning	NILESH GOEL	SP
193	SHREYA NANDANWAR	Neuromorphic Computing	NILESH GOEL	SP
194	VARUN AGARWAL	Regression and Analysis	Suhel Ahmad Khan	SP
195	KADARI SAINATH REDDY	Internet of things	Santhosh Kumar Vasudevan	SP
196	SHIVAKUMAR VINOD PILLAI	Application of Cryptography and Groups	Somasundaram	SP

S.No	Name	Topic	Instructor	Type
			Arumugam	
197	ANUKRITI JAISWAL	Cybersecurity	NILESH GOEL	SP
198	ANSHUMAAN CHAUHAN	Machine Learning Applied to Network Security using Neural Networks	Vadivel .S	SP
199	SRIYA REDDY SHABADU	Study on Influence of Deep Learning in Sensitive Applications	Tamizharasan Periyasamy	SP
200	EL HANOOUF ALBERIA SOUFAIN	Artificial Intelligence	Santhosh Kumar Vasudevan	SP
201	NAMAN BHATT	PREDICTIVE ANALYSIS AND ITS APPLICATIONS	Maneesha	SP
202	CATHERINE SAVIO	Effect of Polycyclic Aromatic Hydrocarbons on the Human Developmental Process	MAINAK DUTTA	SP
203	ACHALKUMAR RUCHIR MANKODI	Effect of tobacco smoke related nitrosamines on the human developmental process	MAINAK DUTTA	SP
204	ANAM ZAFAR KAZI	Hair analysis in Forensics.	Dawood Jalaluddin Shariff .D	SP
205	MIRZA ARSALAN BAIG	Applications and Current Developments of Pulsed Electric Fields in Biotechnology	Ramachandran .S	SP
206	SUFIYAN MUSHTAQ KHOT	A study on contagious clam cancer	Gokhale Trupti Swarup	SP
207	ZINNEERAH YUSUF KHAN	Novel methods of drug design and delivery	Neeru Sood	SP
208	SALMA NAVAZ	role of fungi in human health	Dawood Jalaluddin Shariff .D	SP
209	MAFHOOMA MAZHAR	Food Processing Techniques of Polyols (Sugar Substitues).	Gokhale Trupti Swarup	SP
210	KANNAT JAYALAL GOPIKA	A STUDY ON DNA PROFILING AND IT'S APPLICATIONS	Dawood Jalaluddin Shariff .D	SP
211	JOANA PATTAMUKKIL RENNY	PHARMACOGENOMICS OF ANTI-CANCER DRUGS	Vijaya Ilango	SP
212	FARHAN AHMAD	Digital Citizenship: Effective Use of Digital Media	Shazi Shah Jabeen	SP
213	ARNAV DAS	Analysis of Healthcare Policy of United States of America	VINNARASAN ARULDOSS	SP
214	SHAIKH FIRDOUS BANU MOHD NOOHU	Implementation of IoT in Smart Door	Jagadish Nayak	SP
215	YASHNA SHARMA	Brain Augmentation as our future	Kavita Sunil Jerath	SP
216	VINAYAK SENGUPTA	Facial Expression Recognition Algorithm Using Deep Convolutional Neural Networks	Shilpee Srivastava Saxena	SPECIAL
217	MOHAMMED SHOAIB	Music Generation using Deep Learning	Sujala Deepak Shetty	SPECIAL

List of First Degree Projects
First Semester 2020-2021 (August 2020 to January 2021)

S.No	Name	Topic	Instructor	Type
1	TUPE MITHILESH PREMNATH	IOT based Lab Automation using Arduino	Gomathi Bhavani .R	DP
2	SAI KRISHNA PONNEKANTI	Smart irrigation system using IOT	Gomathi Bhavani .R	DP
3	HARSHIT PUNEET BANSAL	IOT analytics in Medical Fields	Sujala Deepak Shetty	DP
4	GREESHMA KURUP	Interactive AI-based Chat Bot for Healthcare Diagnosis	Sujala Deepak Shetty	DP
5	SAYANTAN DATTA	iOS App Development	Sujala Deepak Shetty	DP
6	GOKUL SUDHEESH KUMAR	Mask Detection Application Development	Sujala Deepak Shetty	DP
7	RITIK PANDA	Machine Learning in Aviation	Sujala Deepak Shetty	DP

S.No	Name	Topic	Instructor	Type
8	TANYA AGASTIN	Design and implementation of Deep learning network to understand similarities in music audio and classify the genre of a given audio	Vadivel .S	DP
9	RITWICK SHARMA	Implementing Deep Learning for Facial Recognition	Vadivel .S	DP
10	KARTIKEY RAI	Machine Learning	Vadivel .S	DP
11	TORAL DHARMESH JAGADA	Development of Attendance Taking Application using Deep Learning Techniques	Vadivel .S	DP
12	SUNIDHI KASHYAP	Deep learning applied to Geographical information systems	Vadivel .S	DP
13	ANSHUMAAN CHAUHAN	Machine Learning Applied to Autonomous Driving	Vadivel .S	DP
14	SWATHIE BALAJI	A recommendation system based on multimedia information	Vijayakumar .B	DP
15	ABDULLAH SHAIKH	Content based Image Retrieval for distribted objects using a novel approach	Vijayakumar .B	DP
16	DEVANSH SHAH	Audio and Human Voice recognition fingerprints using a novel approach	Vijayakumar .B	DP
17	KUSHAJ BADGOYYA	Job Scheduling in Manufacturing systems by using NIC algorithms	Vijayakumar .B	DP
18	ARNAV AGRAWAL	A Novel Approach to Fake News Detection using NLP	Vijayakumar .B	DP
19	NIKHIL SATHISH	Task scheduling in Cloud Computing environment using NIC Algorithms	Vijayakumar .B	DP
20	KHUSHDEEP SINGH	Text summarization using a novell approach	Vijayakumar .B	DP
21	SAAIMA ANWAR FEROZ	Sustainable Robotic Arm with Memory Using Arduino	Swarnalatha .R	DP
22	SWETHA PERIAL PERICHIAPPAN	Sustainable Robotic Arm with Memory Using Arduino	Swarnalatha .R	DP
23	SANIA FIRDOUS HAMEED	Arduino Motion Detector using PIR Sensor	Ramadoss Roop Kumar	DP
24	PAVITIRA SANKER	HYDRAULIC BRAKING SYSTEMS IN AIRCRAFTS	Udayakumar	DP
25	ASHWIN VINOD BANGERA	Aerodynamics of a FSAE Vehicle	Udayakumar	DP
26	ABHISHEK ANIL KUMAR	Design and Modelling of Hybrid Vehicles	Udayakumar	DP
27	UMAR RIZWAN SHAIKH	Turbochargers	Udayakumar	DP
28	SIMRAN MORE	Designing an Autonomous Vehicle	Abdul Razak .A.R	DP
29	KAMNA SACHDEV	To improve the performance of Error correction and detection methods.	Abdul Razak .A.R	DP
30	A ADIBAN SAMY	Modelling of path planning for Mobile Robot and TAL BRABO	Karthikeyan .R	DP
31	K VAIKUNTH KESHAV	SIMULATION OF ISF USING ABAQUS	Karthikeyan .R	DP
32	ASHISH RAKESH CHANDRA KUKRETI	TAL ROBOT INTERFACING USING PYTHON	Karthikeyan .R	DP
33	NIKSHITA SARANGI	IMAGE PROCESSING USING PYTHON	Karthikeyan .R	DP
34	RISHIKA BANSAL	Machine learning based Object Detection and Path Planning for Robotic Applications	Kalaichelvi	DP
35	PARTH GANERIWALA	Application of Intelligent Techniques for Tracking Social Distancing	Kalaichelvi	DP
36	SHWETA SELIN ANTONY	Design of Controller for Turtlebot 2i using MATLAB	Kalaichelvi	DP
37	PASUPULETI DHANUSH BABU	Design of Controller for Mobile Robot	Kalaichelvi	DP

S.No	Name	Topic	Instructor	Type
38	DONTHA SHASHI PREETHAM	Modelling and Analysis of TAL brabo Manipulator using VREP and MATLAB	Kalaichelvi	DP
39	PARAMITA MAZUMDAR	Renewable and Sustainable Electric Power Generation (Power generation at a traffic signal using weight)	Sunil Thomas	DP
40	TANYA MATHUR	E-Commerce App Development	Jagadish Nayak	DP
41	ADITH NARAYAN	Image Character Recognition using Convolutional Neural Networks	RAJA MUTHALAGU	DP
42	APARNA RAGHUNATH	GAME DEVELOPMENT USING C++	RAJA MUTHALAGU	DP
43	ROSHNI DODHI	Aiding system administrators and monitoring file servers by prevention of ransomware	RAJA MUTHALAGU	DP
44	SURIYA RAGAVAN BADRINATH	Prevention and Detection of Ransomware in Windows File Shares and Local Drives	RAJA MUTHALAGU	DP
45	VARUN RANJAN KHANNA	Face Detection Software	RAJA MUTHALAGU	DP
46	SHWETHA SHANKAR	Sentiment Analysis of Airline Industry using Twitter Data	SIDDHALING UROLAGIN	DP
47	HUZAIFA AHMED	Gesture Recognition	SIDDHALING UROLAGIN	DP
48	JYOTI CHOWDHERY	Sentimental analysis of voice data	SIDDHALING UROLAGIN	DP
49	RAYYAN	Study of Magnesium in Aerospace Applications	VINCENT SHANTHA KUMAR	DP
50	ANCHAL NAHATA	Linear Polarisation and Impedance testing of Mg LEA	VINCENT SHANTHA KUMAR	DP
51	RIGVEDA SACHIN JANAI	Machine Learning on Covid-19	ELDHOSE IYPE	DP
52	JAGANNATHAN UMAPATHY	Design and Testing of Multi-layer Composites	PRIYANK UPADHYAYA	DP
53	PRAJIT SAMIR RAWTE	Wing Morphing Design and Analysis	PRIYANK UPADHYAYA	DP
54	SIDHANT SHARMA	A Numerical Study on Heat Transfer Characteristics using Nanofluids	SHASHANK KHURANA	DP
55	PRANSHU GOYANKA	Flow Visualization and Testing of Experiments in Subsonic Wind Tunnel	SHASHANK KHURANA	DP
56	SYED AHMAD HASHIR FARAZ	Analysis of a thermodynamic system using ANSYS Fluent	NAVEEN KUMAR SHRIVATSAVA	DP
57	MUHAMMED SALAH AL DIN AYOUBI	In Silico identification of potential drugs against the Spike protein of SARS - CoV - 2	MAINAK DUTTA	DP
58	KARANVEER SINGH	Molecular Docking analysis of potential therapeutic drugs against 3CLPro	MAINAK DUTTA	DP
59	SAKSHI SINGH	CIRCUIT MODELLING OF SYNAPSE FOR A NEUROMORPHIC CIRCUIT	NILESH GOEL	DP
60	SHRISHTI SRIVASTAVA	Analyzing brain signals and it's implementation using Neural Networks	NILESH GOEL	DP
61	SHREYA NANDANWAR	Neural Network that filters brain signals	NILESH GOEL	DP
62	FARHAN AHMAD	Neuron Circuit Design for Neuromorphic Application	NILESH GOEL	DP
63	UTKRISHT KUMAR	DENDRITE CIRCUIT DESIGN FOR NEUROMORPHIC APPLICATION	NILESH GOEL	DP
64	SAYED MUJAHID SALIM	NATURE INSPIRED COMPUTING - BAT ALGORITHMS	GAURAV SAXENA	DP
65	VIGNESH RAJ S	Nature Inspired Metaheuristics for NP-hard optimization problems	GAURAV SAXENA	DP
66	YASASWINI NIHARIKA DAMMU	Nature Inspired Computing	GAURAV SAXENA	DP

S.No	Name	Topic	Instructor	Type
67	EL HANOOUF ALBERIA SOUFAIN	Nature Inspired Computing: Optimization using ACO and Bees Algorithm	GAURAV SAXENA	DP
68	YASHNA SHARMA	Nature Inspired Optimization Algorithms	GAURAV SAXENA	DP
69	AADILA JASMIN	Nature Inspired Computing Applied to Data Science	GAURAV SAXENA	DP
70	MOHAMMAD SHAYAN ASJAD KHAN	Flow simulation of a model supersonic aircraft	SNEHAUNSHU CHOWDHURY	DP
71	MOHAMMED SIYAAM	Study on reacting flow through nozzles	SNEHAUNSHU CHOWDHURY	DP
72	RIYA NAIR	Biofuels and machine learning	NAMITA KHANNA	DP
73	SANMUGAPRIYA COIMBATORE BHOOPAL	Biocement	NAMITA KHANNA	DP
74	NIKITA KUMAR KULKARNI	GENE KNOCKOUT	NAMITA KHANNA	DP
75	KANAK JAIN	Automatic analysis of Metagenomics data using machine learning	ANGEL JOTHI	DP
76	ANUKRITI JAISWAL	Traffic Prediction	ANGEL JOTHI	DP
77	SANDHYA SAKTHIVEL	Analyzing Genomics data using machine learning	ANGEL JOTHI	DP
78	MIR ANSAF MAQSOOD	Design and analysis of foot over bridge	Vivek B	DP
79	ALEENA JOY	Crack Identification in Reinforced Concrete Beam using ABAQUS Software	Vivek B	DP
80	SHRUTHI VANDHANA V	Cyber security vulnerabilities in websites and suggestions to secure the sites from the developers end.	Sapna Sadhwani	DP
81	DEODA DHANESH SUNIL	Designing and Fabricaton of 3D Printer	Gulshan Kumar	DP
82	SANKALP MEHROTRA	Plane strain compression using Abaqus	Gulshan Kumar	DP
83	SYEDA HEBAH	Machine learning in designing and constructing a city	Razia Sulthana	DP
84	UTKARSH MUKHERJEE	Machine learning in designing and constructing a city	Razia Sulthana	DP
85	ANUP SIHAG	Supply Chain Management of Food Distribution using Machine Learning Algorithms	Razia Sulthana	DP
86	PRANAV RAMESH	Integrating density distribution and Non-Linear SVM to predict the behavioral trend of import and export of products across the world countries.	Razia Sulthana	DP
87	SEERAT PARVAIZ	Visualizing, Understanding and Designing Deep Neural Networks	Rahul Chegot Sankaramenon	DP
88	DIVYANSHI KOTHARI	Analyzing the sentiment of reviews with Keras	Rahul Chegot Sankaramenon	DP
89	RITIK JAIN	SIEUR	Rahul Chegot Sankaramenon	DP
90	RAVELLA SARAN SAI VENKAT	Multi agent emergence in Freeze Tag using reinforcement learning	Tamizharasan Periyasamy	DP
91	YATHARTH KHER	Anomaly/Unusual Event Detection in Video Surveillance using Deep Learning	Tamizharasan Periyasamy	DP
92	BUCHIREDDY CHAITANYA BHAARGAVA	Multi agent emergence in Freeze Tag using reinforcement learning	Tamizharasan Periyasamy	DP
93	AIDHA FAISAL	To evaluate the anti cancerous properties of Salicornia bigelovii exposed to high salinity.	Dawood Jalaluddin Shariff .D	LP
94	SALMA NAVAZ	Food sustainabilty and nutrtional analysis	Dawood Jalaluddin Shariff .D	LP
95	KANNAT JAYALAL GOPIKA	Food System and Nutrition	Dawood Jalaluddin Shariff .D	LP

S.No	Name	Topic	Instructor	Type
96	SAMAR KULSOOM NADEEM	Sustainable Robotic Arm with Memory Using Arduino	Swarnalatha .R	LP
97	UMAR RIZWAN SHAIKH	Simulation of robots using MoveIT	Karthikeyan .R	LP
98	SHRUTHI RAVINDRAN	Astaxanthin extraction from Haematococcus Pluvualis and upscaling production in photobioreactor	Prakash Kumar .B.G	LP
99	SAURAV THALIYAKATTIL	Sustainable Cultivation and Production of Wheat in United Arab Emirates	Ramachandran .S	LP
100	SRIVATSAV GOPIKRISHNAN	Extraction of Lecithin from Egg Yolk	Ramachandran .S	LP
101	SMRIDHI MATHUR	Sustainable Cultivation and Production of Alfalfa in United Arab Emirates	Ramachandran .S	LP
102	ELIZABETH JACOB POOTHICOT	Extraction of Lecithin from Egg Yolk	Ramachandran .S	LP
103	ARNAV DAS	Simulation of Quantum Circuits and Associated Logic Elements	Jagadish Nayak	LP
104	NETHRA PRASAD	Application of metal nanoparticles in polymer composites	Gokhale Trupti Swarup	LP
105	KAUSHIK PAVULURI	Understanding the mechanism underlying the bio synthesis of metal nanoparticles	Gokhale Trupti Swarup	LP
106	NAND KUMAR	Lab project testing just like that	NAND KUMAR	LP
107	TIRTH KETAN LAKHANI	Generation of eletricity from heat generated by IC engine	VILAS HARIDAS GAIDHANE	LP
108	AAMER ABDUL RAHMAN	AI and Deep Learning in Medicine	SAZIA HASAN	LP
109	KRISHI HARESH PUNJABI	Sustainable Use of Alternate Sources of Energy in Cement Industry	Nishant Pandya	LP
110	MOHAMMAD SHAYAN ASJAD KHAN	Metallic Foam - Study and Design	VINCENT SHANTHA KUMAR	LP
111	PAVITIRA SANKER	EFFECT OF PRESSURE RATIO ON Nozzle PERFORMANCE CHARACTERISTICS	SHASHANK KHURANA	LP
112	ASHWIN VINOD BANGERA	Numerical Study detailing the Effect of Area-Ratio on Performance of Dual-Bell Nozzles	SHASHANK KHURANA	LP
113	MOHAMED SHAKEEL	A Water Channel Investigation on Flow around Whale Tubercles	SHASHANK KHURANA	LP
114	VAISHNAVI MANOJ	A Water Channel Investigation on Flow around Tandem Cylinder Array	SHASHANK KHURANA	LP
115	ACHALKUMAR RUCHIR MANKODI	Combinatorial effects of nicotine and glucose on human metabolism	MAINAK DUTTA	LP
116	AIMAN AYESHA	Evaluation of anti-cancerous properties of Salicornia extracts on breast cancer cell line.	MAINAK DUTTA	LP
117	MADIHA SHAIKH	Anti cancerous properties of Salicornia exposed to low salinity on Gastric cancer cell line	MAINAK DUTTA	LP
118	MERIAM JOSEPH	Optimization using Bat Algorithm	GAURAV SAXENA	LP
119	AISHWARYA ATAKKATAN	Multiparameter Optimization for Enhanced Biohydrogen Yield using Machine Learning	NAMITA KHANNA	LP
120	SANJANA VENKATESH	Feasibility of overexpression of non-native hydA into Synechocystis PCC 6803 for enhanced hydrogen production	NAMITA KHANNA	LP
121	AMENA QADRI SYED	Automatic Detection of cracks in concrete structures using Machine Learning	ANGEL JOTHI	LP
122	RENIN ROJI	Strength Estimation of Recycled Concrete Through Destructive and Non-Destructive Testing	Vivek B	LP
123	EMIL SAJIV MATHEW	Strength Estimation of Recycled Concrete	Vivek B	LP

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		Through Destructive and Non-Destructive Testing		
124	SUMAIYYA FAREED	Predictive analysis of COVID-19 based on various Factors	Razia Sulthana	LP
125	YASHIKA JAMWAL	Video Anomaly Detection: Comparative study on various hardware platforms	Tamizharasan Periyasamy	LP
126	SANJAM CHHATWAL	Comparison of unsupervised learning algorithms for Video related applications	Tamizharasan Periyasamy	LP
127	SRIYA REDDY SHABADU	Comparison of Image Recognition Tasks from Limited Hardware Perspective	Tamizharasan Periyasamy	LP
128	PRATEEK PRASAD	HIGH-SPEED INTERNET USING LI-FI	Gomathi Bhavani .R	SP
129	NAYANIKA GOJE	Social Networking or Social Lying: A Linguistic Model for Analyzing Authenticity of News on Social Networking Platforms	Shazi Shah Jabeen	SP
130	AMEET RAVINDRA RAHANE	Correlation between Indiscrimination and Happiness	Shazi Shah Jabeen	SP
131	MOHAMMED BADAR UZ	Correlation between Respect and Happiness	Shazi Shah Jabeen	SP
132	AARYAN GARG	Impact of Gratitude on Sustainable Happiness	Shazi Shah Jabeen	SP
133	KAVYA PARTHASARATHY RAMASWAMY	Impact of COVID 19 on cyber security of financial institutions	Sujala Deepak Shetty	SP
134	ELIZABETH JACOB POOTHICOT	A comparative study on food -borne diseases and their linkage to diet habits	Dawood Jalaluddin Shariff .D	SP
135	SHWETHA SHANKAR	Covid-19: Visualizations,Predictions and Forecasting using Statistical Analysis	Maneesha	SP
136	ANUP SIHAG	Leslie Population Model using MATLAB	Tapan Kumar Datta	SP
137	SWETHA SURESH	Analysis of Electrical Circuits Under Different Conditions Through Numerical Methods and Implementation Through MATLAB	Kumar .K	SP
138	SUMAIYAH KAMAL FAIZI	Metal Nanoparticle ;Synthesis,applications and mechanism of their translocation in Plants	Neeru Sood	SP
139	SAMAR KULSOOM NADEEM	Study of Fiber Optic Communication in Computer Networks	Ramadoss Roop Kumar	SP
140	RAYYAN	Simulation of TETRIX mobile robot using VRep	Karthikeyan .R	SP
141	FAIZ ABDUL SALAM	Simulation of mobile manipulator using VRep	Karthikeyan .R	SP
142	DANIEL GNANARAJ RAJAN BABU	Simulation of Robotic Arm	Karthikeyan .R	SP
143	SHABIL SHAJI	A report on degradation of methylene blue dye using photocatalyst by spray technique	Prakash Kumar .B.G	SP
144	SWETHA PERIAL PERICHIAPPAN	Perovskites powered solar cells - Optimizing the design of device	Prakash Kumar .B.G	SP
145	GAYATHRI RAGHU MENON	Perovskite based Optoelectronic devices and energy efficiency of these solar cells	Prakash Kumar .B.G	SP
146	AGHIL SHAJU	Chemicals used in the disinfection of drinking water	Rusal Raj Francis	SP
147	SYED AHMAD HASHIR FARAZ	Aristotle's Golden Mean	Kavita Sunil Jerath	SP
148	APARNA DWIVEDI	Stories of Heritage	Kavita Sunil Jerath	SP
149	MANISHA ANN THOMAS	MULTIVARIATE REGRESSION ANALYSIS USING SPSS	Baskaran .S	SP

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150	PADMAKTSHNI SURYANARAYANAN	Natural Toxins produced and Pesticide Residue in Food	Gokhale Trupti Swarup	SP
151	AIDHA FAISAL	Foresnsic Psychiatry and criminology	Gokhale Trupti Swarup	SP
152	MESHAK NATH GHOSHAL	Scope of Nanoelectronics in quantum computing	VILAS HARIDAS GAIDHANE	SP
153	ADITYA SAXENA	A Near-Term Quantum Computing Approach for Hard Computational Problems in Space Exploration	VILAS HARIDAS GAIDHANE	SP
154	SHOBAL PHILIP ROY	Study on Synthesis and Application of Carbon nanotube	VINCENT SHANTHA KUMAR	SP
155	AMENA QADRI SYED	Study on Graph Theory and its implementation using Machine Learning concepts	SHILPEE SRIVASTAVA SAXENA	SP
156	GOYAL AASHI ARVIND	Analysis of Delay Diffrential Equation	SHILPEE SRIVASTAVA SAXENA	SP
157	DSOUZA ASHTON KEVIN	An Investigation on the Thermal Protection Systems used in Spacecrafts	SHASHANK KHURANA	SP
158	SHUBH MANGALAM GAUR	Exergy Analysis of Fuel Cells	NAVEEN KUMAR SHRIVATSAVA	SP
159	SANJANA VENKATESH	Computational Systems Biology	PALLAB SANPUI	SP
160	KARTIKEY RAI	Entrepreneurship and Economic Development in UAE: Gender Perspective	MRUTUYANJAYA SAHU	SP
161	YATHARTH KHER	Entrepreneurship and Economic Development in UAE	MRUTUYANJAYA SAHU	SP
162	SAGAR HEGDE	Derivatives and Risk Management	SARTAJ RASOOL RATHER	SP
163	SASHANK MACHIRAJU	Aviation Sector in India	SARTAJ RASOOL RATHER	SP
164	ASHRIT KUMAR DASH	Welfare costs of inflation	SARTAJ RASOOL RATHER	SP
165	SANDHI REDDY TARUN TEJA REDDY	Relation between "remittances and economic growth and inflation"	SARTAJ RASOOL RATHER	SP
166	APOORV ARYA	Coding for CFD applications	SNEHAUNSHU CHOWDHURY	SP
167	SHIVAM BANSAL	Study Applications of Machine Learning	ANGEL JOTHI	SP
168	RESHMA PRAPURNA VAKALAPUDI	Study on the analysis of text data using machine/deep learning	ANGEL JOTHI	SP
169	VIJAYASREE GARAPATI	Study on analysis of image data using machine / deep learning	ANGEL JOTHI	SP
170	RENIN ROJI	Prediction of flexible pavement responses using Ann	Deepthi	SP
171	ANISH MELVIN EDGER JOSEPH	Prediction of flexible pavement responses using Ann	Deepthi	SP
172	NATASHA STEPHANIE TIMOTHY	Game development using Unity	Sapna Sadhwani	SP
173	SAFURA ATEEQ	Machine Learning for Recommendation Systems	Sapna Sadhwani	SP
174	KARAN SHARMA	Study and analysis of authentication techniques in IoT devices	Sapna Sadhwani	SP
175	CHAITANYA GARG	Blockchain application in various domains	Sapna Sadhwani	SP
176	MARDIYAH KHADIJAH	IoT and security	Sapna Sadhwani	SP
177	A ADIBAN SAMY	An analysis of energy related company's sustainability reports from the GRI database in the GCC region: an examination of influential variables.	NITIN SIMHA VIHARI POLURU	SP
178	RITWICK SHARMA	Covid 19 and Digital Resilience of online	NITIN SIMHA VIHARI	SP

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		food delivery services in UAE	POLURU	
179	NIKHIL SATHISH	Multi stakeholder perspective towards the implementation of Telehealth Services in UAE: A Dyadic Approach	NITIN SIMHA VIHARI POLURU	SP
180	L M MRINAL	The role of HR manager in the age of contactless business and work from home	NITIN SIMHA VIHARI POLURU	SP
181	AMITH ROY	Micro machining	Gulshan Kumar	SP
182	ABILASH SADANANDAN	Friction Stir Processing	Gulshan Kumar	SP
183	ADNAN ASIF MOHAMMED	Welding Simulation in Simufact	Gulshan Kumar	SP
184	KARISHMA DAMANIA	Exploring Relationship Between Workplace Flexibility and Work-Life Balance	MAHIMA RAINA	SP
185	BHARAT VEAULI	A Systematic Review on Masculine and Feminine Traits	MAHIMA RAINA	SP
186	ANITA MAHIL INBANATHAN	The Role of English in Our Globalised World: An Analysis of its Implications and Challenges	DEVIKA SHARMA	SP
187	SAAIMA ANWAR FEROZ	Ethical Debate On Use Of Robot In Army	SHAMSHAD AHMAD KHAN	SP
188	SINGH SACHIN SHAMBHU	THE INTERNATIONAL POLITICS OF THE CREATION OF THE STATE OF ISRAEL IN 1948	SHAMSHAD AHMAD KHAN	SP
189	NEETESH SINGH BHATI	Smart City Solutions for Location Tracking	Sujala Deepak Shetty	SPECIAL
190	NEEHARIKA SENTHILKUMAR	Fate of Magnetic Nanoparticles in human body	Neeru Sood	SPECIAL
191	GOURISHA SETHI	Virtual Text Reader	Abdul Razak .A.R	SPECIAL
192	MUHAMMED SALAH AL DIN AYOUBI	Sustainable Cultivation and Production of Rice in United Arab Emirates	Ramachandran .S	SPECIAL
193	NIKITA KUMAR KULKARNI	Preparation and Characterisation of Nanoparticulate Systems of selected biosubstances	R N SAHA	SPECIAL

Special Lectures by Invited Scholars – 2020

S.No	Name	Topic	Date
1	Mr. Nasser Zuhair Al-Yazji, Al Badawi Road Contracting Ltd, UAE	Effect of a Pandemic Crisis in the Construction Industry	Friday, June 19, 2020
2	Nirajuthan Selvarajah (Techno/Commercial Project Manager) and Vesa Miettinen (R&D and Technical manager) at PEIKKO Gulf.	Introduction to Peikko Designer	Saturday, November 21, 2020
3	Mr. Raj Tilak, Principal Geotechnical Engineer, WorleyParsons, Dubai	Geotechniques - Key foundation for Civil Engineers	Saturday, December 12, 2020
4	Dr. Praveen Goyal, Assistant Professor, BITS Pilani, Pilani Campus	Corporate Sustainability	Tuesday, 03 November 2020.
5	Mr. Santosh Jose, Managing Director, Ms. Shilpa Sreekumar, HR Executive, Mr. Savaranan Natarajan, Technical Manager, Becker Industrial Coatings LLC, Ras Al-Khaimah	Career Prospects in Paint Industry	18th February 2020
6	Mr. S. Kumaravel, Director Operations Water, Transcrescent Water FZE, Dubai	Spirit of Entrepreneurship	21st October 2020
7	Mr. Varun Sharma, Co-Founder of Laumière Gourmet Fruits	Negotiating with Strangers	19th November 2020
8	Dr. Madan M. Gupta, Professor of Engineering at the University of Saskatchewan and Director of the Intelligent Systems Research Laboratory	"Design of a Robust Neuro-Controller for Complex Dynamic Systems (An Innovative Dynamic Pole Motion Approach)"	29-31, January, 2020
9	Dr. Lotfi Romdhane, Professor, Associate Dean of Engineering and Director of the Mechatronics Engineering Graduate Program at American university of Sharjah (AUS)	"Robotics being applied to several fields ranging from construction to health care and several on-going applications of robotic projects applied to the rehabilitation of the human body	29-31, January, 2020
10	Dr. Sukumar Mishra, Professor, Indian Institute of Technology Delhi, New Delhi, India,	"Shift towards Net-Zero demand distributions system using distributed PV and EV charging stations"	29-31, January, 2020
11	Dr. Navneet Gupta,Principal Engineer in Minima Processor,	"Emerging memory technologies and Architectures"	29-31, January, 2020
12	. Dr. Hussam Amrouch, Research Group Leader at the Chair for Embedded Systems (CES), Karlsruhe Institute of Technology(KIT), Germany,	" Negative Capacitance Transistor to Rescue Technology scaling from physics to the system level"	29-31, January, 2020
13	Mr. Aaditya Saraiya.,Computer Vision and Machine Learning Engineer at Outrider	Robot Perception :understanding what we see	December 6,2020
14	Mr. Vinay Kapoor, An Entrepreneur, former Investment banker (Ex MD @ Citigroup)	Identifying Opportunities - Dealing with Career Choice in an uncertain Environment	28th June 2020
15	Mr. Raed Hijer, Senior Principal Engineer, Product Technologist, Dell, UAE.	"Accelerating Artificial Intelligence, Machine Learning & Deep Learning Adoption	2nd July 2020
16	Dr. S. Nagesh, Scientist 'E', Aircraft Project Division, Combat Vehicles Research and Development	"Advanced Composites for High-Speed Rotor Applications	9th August 2020,
17	Mr. Ranjit Rajan, Vice President & Head of Research, Middle East, Turkey & Africa, International Data Corporation.	Digital Nation - How the United Arab Emirates is building a future based on Tech Innovation	3rd September 2020
18	Nikhil Nair , Customer Business Lead for Middle East and Africa., HTC	5G Meets Virtual Reality	5th September 2020
19	Mr. V. Venkatesh. Key Account Manager, Knimbus, India.	Effective Utilization of BPDC e-Library powered by Knimbus	8th September 2020,
20	Mr. Anshul Singhal, CEO and Founder, Sentient Labs FZ-LLC	Advances in Robotics: Where and How can you fit in?	26th September 2020
21	Bhim Singh, Professor, Department of Electrical Engineering, IIT Delhi, India	"How to Publish a Quality Technical Paper	10th October 2020
22	Ms. Rupali Saiya, the founder of fullfeel.	"How a reinvented full feel resume can enhance your career opportunity"	5th November 2020
23	Mr.Dinesh Dsouza, Director of Genesis Executive Search, a Passionate Recruiter and Consultant with 20 years of Middle East Expertise .	The Research, The Interview and The Follow-up	13th December 2020

LIST OF RESEARCH PUBLICATIONS – 2020

Journal Publications

S.No	Authors	Article Title	Journal Name	Vol_No	Pages
1	Bidkar A.P., Sanpui P., Ghosh S.S.	Transferrin-Conjugated Red Blood Cell Membrane-Coated Poly(lactic-co-glycolic acid) Nanoparticles for the Delivery of Doxorubicin and Methylene Blue	ACS Applied Nano Materials	3	3807-3819
2	Sreeja Rajendran., Mary Lourde Regeena	Testability Analysis and its Application to Hardware Security	International Journal of Circuits and Electronics	5	1 - 11
3	Ariane Ollier-malaterre., Mahima Raina., Kamlesh Singh	Happily Exhausted: Work Family Dynamics in India	Occupational Health Science	4	191-211
4	Mahima Raina, Eunae Cho, Kamlesh Singh	Toward contextual understanding: antecedents of work-family interface in India	South Asian Journal of Business Studies	9	
5	Sai Mahaan Gannavarapu, Addepalli Pranay	SUSTAINABLE GREEN VENTURE	International Journal of Engineering Applied Sciences and Technology	5	277-279
6	Satchit Chatterji, Aayush Desai, Aditya Dwarkesh, Anushree Ganesh, Ameya Kunder, Pulkit Malhotra, Roshni Sahoo, Jinal Shah, Kiranbhaskar Velmurugan, Markus Joos, Cristóvão Beirão Da Cruz E Silva and Gianfranco Morello	A Highschooler's Guide to GeV-Range Electromagnetism	The Physics Educator	2	1-17
7	Nand Kumar ,Vishal Naranje &Sachin Salunkhe	Cement strength prediction using cloud-based machine learning techniques	Journal of Structural Integrity and Maintenance	5	244-251
8	Jani Babu Shaik., Sonal Singhal., Nilesh Goel	Analysis of SRAM metrics for data dependent BTI degradation and process variability	Integration	72	148-162
9	Sevasti-Melissa Nolas ,Christos Varvantakis &Vinnarasan Aruldoss	Political activism across the life course	PAULUS: Revista de Comunicação da FAPCOM	4	41 -56
10	Eldhose Iype, Sadhya Gulati	Understanding the asymmetric spread and case fatality rate (CFR) for COVID-19 among countries	Medrxiv		1-9
11	Raja Muthalagu &Subeen Jain	Improved KASUMI block cipher for GSM-based mobile networks	Journal of Cyber Security Technology		
12	Tirth Lakhani, Vilas H. Gaidhane	An Efficient Thermoelectric Energy Harvesting System	International conference on Modelling, Simulation and Intelligent Computing		590 - 597
13	Upadhyaya P., Kumar S., Reddy J.N., Lacy T.E., Jr.	Multiscale modeling of strength and failure behavior of carbon nanostructure reinforced epoxy composite adhesives in bonded systems	European Journal of Mechanics, A/Solids	80	-
14	Tapan Kumar Datta	A New Green Efficiency-Based Carbon Taxing Policy and Its Effects on a Production-Inventory System with Random Carbon Emissions and Green Investment	Advances in Operations Research	-	1-13
15	Sreeja Rajendran and Mary Lourde Regeena	Sensitivity analysis of testability parameters for secure IC design	IET Computers and Digital Techniques	14	158 -165
16	Philip M.M., Natarajan K., Ramanathan A., Balakrishnan V.	Composite pattern to handle variation points in software architectural design of evolving application systems	IET Software	14	98 -105

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17	Milu Mary Philip., Nishank Singhal., Raagashree Ravi., Vijayakumar Balakrishnan	A Quantitative Approach to Analyze Modifiability in Software Architectural Design of Agile Application Systems	Information Technology and Control	49	249 -259
18	Mungekar A., Solanki Y., Swarnalatha R.	Augmentation of a SCADA based firewall against foreign hacking devices	International Journal of Electrical and Computer Engineering	10	1359 -1366
19	Gupta D., Parikh A., Swarnalatha R.	Integrated healthcare monitoring device for obese adults using internet of things (IoT)	International Journal of Electrical and Computer Engineering	10	1239 -1247
20	Kesar M Kothari., Udayakumar Rajamanickam., Ram Karthikeyan., Vishweshwar S., Nikitha Raj	Modeling of the Manifold Configuration for Maximum Efficiency in a Hydraulic Machine	International Journal of Fluid Machinery and Systems	13	136-149
21	Shazia Hasan, Ameya K.Kulakarni, Sebamayee Parija, P.K. Dash	A systematic review on detection and estimation algorithms of EEG signal for epilepsy	International Journal of Medical Engineering and Informatics	-	-
22	Neethu Elizabeth Michael, Shazia Hasan	Virtual Inertia Support in the microgrid, its research challenges and its technology potentials in recent years	International Journal of Power Electronics	-	-
23	Gireeshan M.G., Shankar D.D., Azhakath A.S.	Feature reduced blind steganalysis using DCT and spatial transform on JPEG images with and without cross validation using ensemble classifiers	Journal of Ambient Intelligence and Humanized Computing	-	-
24	B. Vivek &Prishati Raychowdhury	Soil–Structure Interaction Study on 3D SMRFs of Indo-Gangetic Plain Using Resonant Vibration Tests	Journal of Earthquake Engineering	-	1-23
25	NEERAJA PADMAN, R SWARNALATHA, VARSHA VENKATESH, NEELESH KUMAR	TELEDIAGNOSIS OF PARKINSON'S DISEASE SYMPTOM SEVERITY USING H&Y SCALE	Journal of Engineering Science and Technology	15	1466 -1480
26	Shivakumar C., Urolagin S.	The contrivance of prism rule-based algorithm using ADLs dataset in context database design	Journal of Engineering Science and Technology Review	13	206-214
27	Mani Cherish; Karthikeyan, R; Davim, J Paulo.	A REVIEW ON AUSTENITIC STAINLESS STEEL-BASED DISSIMILAR METAL WELDING USING GAS TUNGSTEN ARC WELDING	Journal of Manufacturing Technology Research	12	65-82
28	Rafsa Koyadeen Tharammal , Anand Kumar, A. R. Abdul Rajak, and Vilas Haridas Gaidhane	Theoretical Investigation of Design Methodology, Optimized Molecular Geometries, and Electronic Properties of Benzene-Based Single Molecular Switch with Metal Nanoelectrodes	Journal of Nanomaterials	-	-
29	Jyothi Yadav , Amol Prakash Pawar, Yadav Kacharu Nagare, Eldhose Iype, Krishnan Rangan, Joji Ohshita, Dalip Kumar, and Indresh Kumar*	Direct Amine-Catalyzed Enantioselective Synthesis of Pentacyclic Dibenzo[b, f][1,4]oxazepine/Thiazepine-Fused Isoquinuclidines along with DFT Calculations	Journal of Organic Chemistry	-	-
30	Ranjit Singh, Shazia Hasan	Comparative Study on Load Frequency Control of a Single Microgrid Coupled with Thermal Power Plant Using Fuzzy and PID Controllers	Lecture Notes in Electrical Engineering	659	19-29
31	Shailendra Saraf., Swarnalat Saraf., Sunil Kumar Dubey., K K Lakshmi., Kowthavarapu Venkata Krishna., Mukta	Insulin mediated novel therapies for the treatment of Alzheimer's disease	Life Sciences	-	-

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	Agrawal., Gautam Singhvi., Ranendra Narayan Saha., Rahul Shukla., Amit Alexander				
32	S. Kannan ,H. A. Kishawy,S. Pervaiz,K. Thomas,R. Karthikeyan &Ramanathan Arunachalam	Machining of novel AA7075 foams containing thin-walled ceramic bubbles	Materials and Manufacturing Processes	-	1-10
33	Suhel Ahmad Khan., Kaleem Raza Kazmi., Damrongsak Yambangwai., Watcharaporn Cholamjiak	A hybrid projective method for solving system of equilibrium problems with demicontractive mappings applicable in image restoration problems	Mathematical Methods in the Applied Sciences	-	-
34	Julia Tholath Jose., Adhir Baran Chattopadhyay	Mathematical Formulation of Feedback Linearizing Control of Doubly Fed Induction Generator Including Magnetic Saturation Effects	Mathematical Problems in Engineering	2020	1-10
35	Raavee Kadam., Srinivasa A Rao., Waheed Kareem Abdul., Shazi Shah Jabeen	Diversity climate perceptions and its impact on multicultural team innovation and performance	Measuring Business Excellence	-	-
36	Nanda A., Jana S K., K T., Wangdi T., Sharma P., Banerjee P., Mainak Dutta., Chaudhury K	Cytokines, Angiogenesis, and Extracellular Matrix Degradation are Augmented by Oxidative Stress in Endometriosis	Annals of Laboratory Medicine	40	390-397
37	Vyasaraj Manakari,Sathish Kannan,Gururaj Parande ,Mrityunjay Doddamani ,Soumya Columbus ,Priya Sudha K ,S. Vincent and Manoj Gupta	In-Vitro Degradation of Hollow Silica Reinforced Magnesium Syntactic Foams in Different Simulated Body Fluids for Biomedical Applications	Metals	10	1-13
38	SenganSudhakar, P Kanmani, K Amudha, PVishnu Raja, Anil Kumar Dubey, A Razia Sulthana, V Subramaniyaswamy, V Priya	Network Embedding Architecture using Laplace Regularization-Non-Negative Matrix Factorization for Virtualization	Microprocessors and Microsystems	-	-
39	Shaleen Bengani, Angel Arul Jothi J. & Vadivel S.	Automatic segmentation of optic disc in retinal fundus images using semi-supervised deep learning	Multimedia Tools and Applications	-	1-26
40	Deepa D. Shankar & Adresya Suresh Azhakath	Minor blind feature based Steganalysis for calibrated JPEG images with cross validation and classification using SVM and SVM-PSO	Multimedia Tools and Applications	-	1-20
41	Choudhary S., Yadav J., Mamta., Pawar A P., Vanaparthi S., Mir N A., Eldhose Iype., Sharma R., Kant R., Kumar I	Sequential multicomponent site-selective synthesis of 4-iodo and 5-iodopyrrole-3-carboxaldehydes from a common set of starting materials by tuning the conditions	Organic and Biomolecular Chemistry	-	--
42	Vijaya Gajanan, Buddhavarapu, Angel Arul JothiJ	An experimental study on classification of thyroid histopathology images using transfer learning	Pattern Recognition Letters	140	1-9
43	Kaleem Raza Kazmi., Watcharaporn Cholamjiak., Hemen Dutta., Suhel Ahmad Khan	Convergence analysis for combination of equilibrium problems and k-nonspreading set-valued mappings	Proyecciones	39	599-619

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44	Gorantla S., Waghule T., Rapalli V K., Singh P P., Sunil Kumar Dubey., Saha R N., Gautam Singhvi	Advanced hydrogels based drug delivery systems for ophthalmic delivery	Recent Patents on Drug Delivery and Formulation	14	-
45	Damrongsak Yambangwai., Watcharaporn Cholamjiak., Kaleem Raza Kazmi., Suhel Ahmad Khan	Strong convergence analysis of common variational inclusion problems involving an inertial parallel monotone hybrid method for a novel application to image restoration	Revista de la Real Academia de Ciencias Exactas, Fisicas y Naturales - Serie A: Matematicas	114	1-20
46	J. Rajevenceltha & Vilas H. Gaidhane	A novel approach for image focus measure	Signal, Image and Video Processing	-	1-9
47	Razia Sulthana Abdul Kareem., Maulika Gupta., Shruthi Subramanian., Sakina Mirza	Improvising the performance of image-based recommendation system using convolution neural networks and deep learning	Soft Computing	-	1-14
48	Mahmood A., Rapalli V.K., Waghule T., Gorantla S., Dubey S.K., Saha R.N., Singhvi G.	UV spectrophotometric method for simultaneous estimation of betamethasone valerate and tazarotene with absorption factor method: Application for in-vitro and ex-vivo characterization of lipidic nanocarriers for topical delivery	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	235	-
49	Gorantla S., Singhvi G., Rapalli V.K., Waghule T., Dubey S.K., Saha R.N.	Targeted drug-delivery systems in the treatment of rheumatoid arthritis: recent advancement and clinical status	Therapeutic delivery	11	269-284
50	Siddhanth Hejmady., Gautam Singhvi., Ranendra Narayan Saha., Sunil Kumar Dubey	Regulatory aspects in process development and scale-up of nanopharmaceuticals	Therapeutic delivery	-	-
51	Youssef Mobarak., Fahd Alharbi., Nithiyananthan Kannan., Sunil Thomas	Enhanced data communication models for real-time power system monitoring in a distributed platform	Transactions on Emerging Telecommunications Technologies	-	-
52	Mattara Chalill Subin, Abhilasha Singh, Venkatesan Kalaichelvi, Ramanujam Karthikeyan, and Chinnapalaniandi Periasamy	Design and Robustness Analysis of Intelligent Controllers for Commercial Greenhouse	Mechanical Sciences	11	299-316
53	Dutta M., Singh B., Joshi M., Das D., Subramani E., Maan M., Jana S.K., Sharma U., Das S., Dasgupta S., Ray C.D., Chakravarty B., Chaudhury K.	Author Correction: Metabolomics reveals perturbations in endometrium and serum of minimal and mild endometriosis (Scientific Reports, (2018), 8, 1, (6466), 10.1038/s41598-018-23954-7)	Scientific Reports	10	-
54	Drishti Dinesh Bhagchandanii ,Rishi Pramod Babu ,Jayesh M. Sonawane ,Namita Khanna ,Soumya Pandit ,Dipak A. Jadhav,Santimoy Khilari andRam Prasad	A Comprehensive Understanding of Electro-Fermentation	Fermentation	6	1-31
55	Thinking with feeling: Children's emotional orientations to public life Vinnarasan Aruldoss, Sevasti-Melissa Nolas, Christos Varvantakis	Thinking with Feeling: Children's Emotional Orientations to Public Life	Childhood	-	-
56	Mahima Raina, Eunae Cho, Kamlesh Singh	Towards Contextual Understanding: Antecedents of Work-Family Interface in India	Materials Today: Proceedings	28	852-855
57	R.Udayakumar, N.K.Miller Jothi, Saurav Saboo, Naseef Sadhik	Turbocharging in ceramic coated engines using Rankine cycle for automotive use – An inceptive study	Materials Today: Proceedings	28	991-997

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58	Subin Mattara Chalill R Karthikeyan	Upgradation of Conventional Commercial Greenhouse Using Climate Control Module to Reduce Energy Consumption	International Journal of Engineering Research and Technology	13	1709-1723
59	Udayakumar Rajamanickam., Yasho Vinay Pipada	Impact of Mixed Flow Turbines on the Efficiency of Automotive Turbocharger Applications	International Journal of Mechanical Engineering and Robotics Research	9	791-796
60	Somasundaram R., Arumugam S., Sood N.	Salt stress-responsive protein interaction in hordeum vulgare	Walailak Journal of Science and Technology	17	285-292
61	K Nithya., Amartya Das Sharma., Vijayakumar Balakrishnan	A Framework for Storage and Retrieval of Distributed Vector Graphics Objects	International Journal of Advanced Science and Technology	29	681-695
62	K. Nithya, P. Vidyadhari, P. Padmanabham, B. Vijayakumar	Design Considerations for Storage and Content-Based Retrieval of Distributed Music Audio Objects	International Journal of Advanced Science and Technology	29	11195-11204
63	K. Rathina, C. Senthamil Selvi, M. Umadevi, S. Karthiyayini, Ramalatha Marimuthu, and R. Mahalakshmi	Thermo physical and spectroscopic studies on aqueous mixtures of PVP with inorganic salts	AIP Conference Proceedings	2270	-
64	Yogesh Prabhu, S Vincent, S Manulal, Adithya Nair, Jatin Bhatt	Cu-Zr-Ti-Al Metallic Glass: Thermodynamic prediction, Synthesis, and Biocorrosion Studies	SSRN Electronic Journal		1-3
65	Amol Prakash Pawar, Jyothi Yadav, Nisar Ahmad Mir, Eldhose Iype, Krishnan Rangan, Sumati Anthal, Rajni Kantd and Indresh Kumar	Direct catalytic synthesis of β-(C3)-substituted pyrroles: a complementary addition to the Paal–Knorr reaction	Chemical Communications	-	-
66	Mukesh Singh Tomar , Shashank Khurana	Estimating Pyrolysis Kinetics Parameters of Wooden Pallets Commonly Used in Goods Transport Vehicles	Chemical Data Collections	30	100539
67	Kun Chen., P Velmurugan., Adhir Baran Chattopadhyay	Rigorous Mathematical Steps for Sensitivity Analysis of High Impedance Ground Fault Detection in Power Distribution Systems	Cogent Engineering	7	1-16
68	Perumal Velmurugan &Adhir Baran Chattopadhayay , N. Prabaharan	Sensitivity analysis of a single phase to ground fault system in connection with high impedance faults: A case study	Cogent Engineering	7	-
69	A Akshai., Aisha Abdul Raouf., Rajib Ghosh Chaudhuri	Importance of interfacial and rheological properties in the suppression of uniform deposition to coffee ring pattern of zinc oxide nanofluids in the presence of anionic surfactants	Colloid and Polymer Science	-	1-8
70	Muthalagu R., Bolimera A., Kalaichelvi V.	Lane detection technique based on perspective transformation and histogram analysis for self-driving cars	Computers and Electrical Engineering	85	-
71	Raja Muthalagu., Anudeepsekhar Bolimera., Kalaichelvi Venkatesan	Lane detection technique based on perspective transformation and histogram analysis for self-driving cars	Computers and Electrical Engineering	85	-
72	Sunil K. Dubey, Monika Jindal, Shakti Nagpal, Ranendra N. Saha, Gautam Singhvi, Amit Anand, Kowthavarapu V. Krishna	A Systematic Review on Analytical Methods to Determine Chiral and Achiral Forms of Venlafaxine and its Metabolite O-desmethylvenlafaxine	Current Pharmaceutical Analysis	16	474 - 486
73	Milu Mary Philip , Amrutha Seshadri , and B. Vijayakumar	Microservices Centric Architectural Model for Handling Data Stream Oriented Applications	Cybernetics and Information Technologies	20	32 -44

S.No	Authors	Article Title	Journal Name	Vol_No	Pages
74	T R Koyadeen., A Kumar	DESIGN OF SINGLE MOLECULE AROMATIC MOLECULAR SWITCHES WITH METAL ELECTRODES-A COMPUTATIONAL APPROACH	Digest Journal of Nanomaterials and Biostructures	15	447-458
75	Syed F Faisal., Abdul R Beig., Sunil Thomas	Time Domain Particle Swarm Optimization of PI Controllers for Bidirectional VSC HVDC Light System	Energies	13	1-15

Books Chapter Publications

S.No	Title	Authors	Publishing House	Year and Month of Acceptance/ Publishing
1	APPLICATIONS OF METAL NANOPARTICLES IN AGRICULTURE	Dali Vilma Francis., Neeru Sood., Trupti Swarup Gokhale	Progress and Prospects in Nanoscience Today	2020
2	Fundamentals of Biosensor Application in Environmental Pollutant Monitoring	Vinay Patel, Rishi Pramod, Namita Khanna, Prajakta Pawar, Abhilasha Singh Mathuriya, Soumya Pandit	Removal of Emerging Contaminants Through Microbial Processes	October 2020
3	Security Threats of Embedded Systems in IoT Environment	Sreeja Rajendran., Mary Lourde Regeena	Inventive Communication and Computational Technologies	January 2020
4	Security of an IoT Network : A VLSI Point of View	Sreeja Rajendran., Azhar Syed., Mary Lourde Regeena	Inventive Communication and Computational Technologies	January 2020
5	Importance of Bacterial Biofilm in Bioremediation	Rishi Pramod Babu, Soumya Pandit, Namita Khanna, Pankaj Chowdhary, Abhilasha Singh Mathuriya, Elvis Fosso-Kankeu	Contaminants and Clean Technologies	February 2020
6	A Study on Distance Based Representation of Molecules for Statistical Learning	Abdul WaseeRajib Ghosh ChaudhuriPrakash KumarEldhose Iype	New Trends in Computational Vision and Bio-inspired Computing	September 2020
7	Biochemical Aspects of Syngas Fermentation	Jyotirmayee SahooPriti PatilAakash VermaAbhijit LodhNamita KhannaRam PrasadSoumya PanditElvis Fosso-Kankeu	Environmental and Microbial Biotechnology	December 2020

List of Higher Degree Dissertations

Second Semester 2019-2020 (January 2020 to June 2020)

During the **Second Semester 2019-2020**, 21 Higher Degree dissertation projects have been completed. The list of completed Higher Degree dissertations during Second Semester 2019-2020 is given in below

S. No	Name	Topic	Supervisor
1	F. Z. Badrudeen Ahmed	Image Sentiment Analysis Using Deep Learning	Dr. Siddhaling Urolagin
2	Janhavi Narendra Hasabnis	Numerical Homogenization To Predict Thermo-Mechanical Response Of Nanocomposites With Curved CNTs	Dr. Priyank Upadhyaya
3	Jesu Raja Santiagu	The Impact Of Intra Organizational Social Capital And Perceived Organizational Support On Expatriate Job Performance In The Arab Peninsula: The Role Of Islamic Work Ethic	Dr. Nitin S Vihari
4	Jismin Poulose	To Study And Propose Enhancements In Design Of Low Voltage Switchboard Network And Also To Suggest Modifications / Improvements In Terms Commercial	Dr. Sunil Thomas
5	Jomon P.C	Case Study On Power Quality Problems, Mitigation Techniques And Energy Optimisation For A Low Voltage Industrial Plant.	Dr. Shazia Hasan
6	Saroj Mohapatra	IGBT Failure Investigation Due To Combined Effect Of Temperature Rise And Different Switching Frequencies	Dr. Abdul Rajak
7	Kavita Maji	Ethereum For IOT Security	Dr. Sujala D. Shetty
8	P. Manjari	Service Quality Assessment Of Educational Institution Using Quantitative And Qualitative Analyses	Dr R. Karthikeyan
9	Mannat Gill	Hybridization Of Solar-Wind-Pumped-Hydro Storage System	Dr. Shashank Khurana
10	Mohamed Nihas	Modelling, Kinematic Analysis And Path Planning Through Simulation Of Parallel Manipulators Using MATLAB Multibody Environment	Dr. Ram Karthikeyan
11	V. S. Praveen Kumar	Intrusion Detection In Home Network Security Using Machine Learning	Dr. Siddhaling Urolagin
12	Prem Dakshin	Factors Determining Reserve Accumulation Of Countries	Dr. Sartaj Rasool Rather
13	Rahul Srivastava	Study Of Heat Transfer And Flow Characteristics In Micro Pin Fin Heat Sink	Dr. Naveen Shrivastava
14	Saket Javeri	Exchange Rate Determination & Stability – An Analysis Of Preliminary Evidence	Dr. Sartaj Rasool Rather
15	Salim Sherali Virani	Studying The Cost – Benefit Analysis And Improving The Efficiency Of Biochemistry Analyzer (Dimension Exl 200) For Glucose And Other Parameter Placed At Laboratory Of Kalba Hospital.	Dr. Parizad Phiroze Dungore
16	Sanjay S Peter	Studying The Importance And Preservation Of Information Security In Industries	Dr. Sujala D. Shetty
17	Sheeba Uruj Ahmad	Cloud Security	Dr. S. Vadivel
18	Thamizh Selvan Baskaran	Impact Of Work Place Acculturation On Expatriate Job Performance: Empirical Evidence From UAE	Dr. Nitin Vihari
19	Yash Chaudhari	Erp Systems And Their Effects On Organizations	Dr. Gulshan Kumar
20	Zahabiya Mhowwala	Movie Rating Prediction Using Ensemble Learning	Dr. A. Razia Sulthana
21	Dhanya Shetty	Impact And Influence Of Organizational Culture On Innovation Management	Dr. Shazi Sha Jabeen

During the **first semester 2020-2021, 10** higher degree dissertation projects were completed. The list of completed higher degree dissertations during first semester 2020-2021 is given below:

First Semester 2020-2021 (August 2020 to December 2020)

S.No.	Name	Topic	Supervisor
1	Mahadevan Vaithilingam	Investigation Of Harmonic Generation From Dimmable Lamps	Dr.R. Gomathi Bhavani
2	Nabeel Nesam	A Study On Controlling Strategies At The Point Of Interconnection In Utility Grid	Dr. Sunil Thomas
3	Sarala Devi J	Video Object Segmentation guided refinement on foreground-background objects	Dr. Razia Sulthana
4	Deepu.S.	Response Spectrum Analysis Of Hydraulic Work Over Rig Structure	Dr. Priyank Upadhyaya
5	Gavuji Rohith	Analyzing Consumer Complaints using Natural Language Processing and Deep Learning	Dr. Angel Arul Jothi
6	Sweta Suman	Video/Image Sentiment Analysis to Publish Relevant Advertisements	Dr. Siddhaling Urolaign
7	DHARSANA SREE S	Impact of COVID 19 on Educational Sector	Dr Shazi Shah Jabeen
8	MOHAMED SUHAIL H	The Effect of Regional Pandemic Severity on Employee Mental Health Distress Outcomes: Role of Resilience Based Coping Strategies	Dr Nitin Simha Vihari
9	MALDE JAY RAJESH VANDANA	The Great Lockdown during Covid-19: Its long term economic consequences and challenges	Dr Sartaj Rasool Rather
10	SUJIT JOSEPH MATHEWS	Oil price shocks - its spillover and long-term consequences	Dr Sartaj Rasool Rather

List of First Degree Thesis

Second Semester 2019-2020 (January 2020 to June 2020)

S.No	Name	Topic	Supervisor
1	Keven Kalpesh Shah	Infrastructure Planning and Development	Mrs. Sreelakshmi Babu
2	Sulaf Alnaser	Effect of Foliar Application of Metal NPs on Plants	Dr. Trupti Gokhale
3	Somil Mathur	Delegated Vehicle Routing Problem Using Fruit Fly Optimization Algorithm	Dr. Rahul Sankaramenon
4	Parth Poply	Image Analysis	Dr. J. Angel Arul Jothi
5	Ashley Lobo	Obstacle Avoidance of Tetrix Prizm Robot Using Vision Based Path Planning	Dr. R. Karthikeyan
6	Jayant Panwar	Application and Implementation of Principal Component Analysis (PCA)	Dr. Naveen Shrivastava
7	Sanjeeth Reddy Gajjala	Numerical Analysis and Design of Mechanical Components Using SIMP	Dr. Priyank Upadhyaya
8	Mohammed Shoaib	American Sign Language Translation (Fingerspelling)	Dr. Santhosh Kumar
9	Kelvin Piety Decosta	Design of Deep Learning Based Models for Geographic Information Systems	Dr. S. Vadivel
10	Krishna G	Characterisation and Analysis of Thin Film Conductor	Dr. Vilas Gaidhane
11	Ritu Karnik	Biofactories for Biofuel Production	Dr. Namita Khanna
12	Kenish Shah	Financing for Real Estate Development Projects	Dr. Deepthi Mary Dilip
13	Kriti Srikanth	Progression of causation abilities in artificial intelligence	Ms. Sapna Sadhwani
14	M. Sai Rithish	Robotic Devices and Systems	Dr. R. Karthikeyan
15	Samantha Rachel Ferrao	Recombinant Keratin Based Biomaterials	Dr. Pallab Sanpui
16	Lalitha Natraj	Sentiment Analysis of Hotel & Restaurant Reviews Using AI and Machine Learning Techniques	Dr. Sujala D. Shetty
17	Aman Singh Bhati	Applications of IOT for Smart Classrooms	Dr. Santhosh Kumar
18	Rijul Kumar	Cross Platform Mobile App Development for Passport Management System in Institutes	Dr. Sujala D. Shetty
19	Dev Khare	Analysis of the Properties of Acoustic Metamaterials	Dr. Priyank Upadhyaya
20	Aditya Manocha	Autonomous Robot Navigation & Control	Dr. Kalaichelvi
21	Piyush Khandelwal	Sentiment Analysis of Video Using Machine Learning	Dr. Siddhaling Urolagin
22	Abhishek Anil Lata	Strategic Analysis of the Aviation Sector (Indian vs European)	Dr. Parizad Dungore
23	Almoumena Bellah Ali Alali Alsaeir	Treatment of Waste Water Using rGo-TiO2-GWW Photocatalyst	Dr. Prakash
24	Raghav Venkatesh	Network Security Situation Prediction Model	Dr. Raja M
25	Sachu Amaan	Corrosion Studies on Materials Used in Oil and Gas Industries	Dr. Vincent / Dr. Shashank
26	Chirag Parag Ghag	Transport phenomena in medicine and biology	Dr. Mainak Dutta
27	Anubhav Gupta	Modeling and analysis of efficiency of distributed protocols with deep learning	Dr. S. Vadivel

First Semester 2020-2021 (August 2020 to December 2020)

S.No.	Name	Topic	Supervisor
1	Dhruv Duseja	Home Network Security Analysis	Dr. Raja M
2	Adithya T P	Reinforcement Learning in Game Environments	Dr. Raja M
3	Haryani Kunal Ram	Analysis of Information Security using IoT devices	Dr. S. Vadivel
4	Melissaviyanee Antony Venancius	Testing the Feasibility of Fuel Generation from Marine Microbes	Dr. Namita Khanna
5	Mohammed Afaounodden Ahmed	Exploratory Analysis on Elimination of Poverty Using Financial Instruments: A Quantitative Approach	Dr. Razia Sultana
6	Pranav Prakash Shedge	Anti- Cancerous Property of Salicornia Extracts	Dr. Mainak Dutta
7	Rashmitha Ramesh Shetty	Impact of Dietary Fat Content on Animal Health and the Immune System	Dr. S. Ramachandran
8	Samayak Malhotra	Smart Parking Systems	Dr. Sujala D. Shetty
9	Shreya Pratap Singh	Numerical Study to Optimized the Fiber Orientation in Short Fiber Composites	Dr. Priyank Upadhyaya
10	Krishna C. Kushal	Predictive Analysis- Consumer behavior modelling.	Dr. Sujala D. Shetty
11	Anushka Patil	Face Recognition System for analysis of customer satisfaction and emotion	Dr. Siddhaling Urolagin
12	Stp Satwik	Novelty Detection	Dr. S. Vadivel
13	Karan Gupta	Design & Development of Smart 16S Battery Management System for LFP Chemistry Lithium Ion Battery Pack in EV Application	Dr. Vilas Gaidhane

DETAILS OF DISTRIBUTION OF PS I STUDENTS AND FACULTY OVER PRACTICE SCHOOL- I STATIONS DURING THE SUMMER TERM 2019-2020
(10.06.2020 to 09.08.2020)

S.No.	Station	No. of Students	No. of Faculty
I. Stations in United Arab Emirates (UAE)			
Ia. Stations at Abu Dhabi			
1	TED Information Systems L.L.C, Abu Dhabi	2	1
Ib. Stations at Ajman			
2	Al Fahad Electromechanical Contracting, Ajman	4	1
3	Elfit Arabia, Ajman	5	1
Ic. Stations at Dubai			
4	Al Bawadi Road Contracting LLC, Dubai	4	1
5	Astrid Oasis Group, Dubai	3	1
6	Focus M General Trading LLC, Dubai	2	1
7	Fractals, Dubai	4	1
8	Gulf Incon Controls International LLC, Dubai	4	1
9	Hedges Information Technology LLC, Dubai	3	1
10	Inaya, Dubai	1	1
11	Integrated Gulf Biosystems, Dubai	2	1
12	L&T, Dubai	6	1
13	Levtech Consulting, Dubai	3	1
14	Oasis Investment Company LLC (Al Shirawi), Dubai	3	1
15	Premier Car Care, Dubai	1	1
16	Protiviti, Dubai	3	1
17	Roughpaper Technologies, Dubai	5	1
18	Rove Automation and Installation, Dubai	2	1
19	Sanbook Quality Consultancy, Dubai	14	1
20	Sentient Lab, Dubai	10	1
21	Shimadzu Middle East & Africa FZE	3	1
22	Solar GridX, Dubai	4	1
23	Star B2B, Dubai	4	1
24	Techrobotix, Dubai	6	1
25	Tendercare FZE, Dubai	3	1
26	Trans Crescent, Dubai	4	1
27	WhizKey, Dubai	2	1
II. Stations in India			
IIa. Stations at Bangalore			
28	Relevence Lab Pvt. Ltd, Bangalore	5	1

S.No.	Station	No. of Students	No. of Faculty
IIb. Stations at Chennai			
29	fundsindia, Chennai	3	1
30	Peopleone, Chennai	8	1
IIc. Stations at Gurgaon			
31	Policy Bazaar, Gurgaon, India	4	1
IId. Stations at Hyderabad			
32	Sagarsoft (India) Limited, Hyderabad , Telengana	4	1
33	Verudix Software Solution Pvt. Ltd, Hyderabad	3	1
IIe. Stations at Mumbai			
34	Birla Carbon R&D, Mumbai, Maharastra	3	1
35	NetMagic, Mumbai	5	1
36	Tata Communications	3	1
IIf. Stations at Nagpur			
37	Sharekhan Ltd, Nagpur	6	1
38	T S Rawal and Co, Nagpur	2	1
IIg. Stations at Nasik			
39	Modern Enterprises, Nasik	1	1
IIh. Stations at New Delhi			
40	Chenab Valley Power Projects (CVPPPL), Delhi	4	1
41	Designkraft Solutions, Delhi, NCR	5	1
42	Floodkon Consultants LLP, Delhi	3	1
43	Hotage Corporation India, Delhi	5	1
44	Powergrid Corporation of India Ltd., Delhi	5	1
IIi. Stations in Ireland			
45	Trift Experiences, Ireland	6	1

Summary:

Total number of students   **182**

Total number of Stations   **47**

Total number of Faculty   **14****

Note:

* - also PS II station

** - Each PS I Faculty was allotted more than one station to monitor.

SOME PRACTICE SCHOOL- II STATISTICS

Statistical Details of the Distribution of Students & Faculty over Practice School-II during the calendar year 2019-20:

Sl. No	Name of the PS Station	Second Semester 2019-20 19-01-2020 – 02-07-2020		First Semester 2020-21 21-07-2020 –07-01-2021		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
A. Stations at Abu Dhabi						
1	TUV NORD, Abu Dhabi	3	1	1	1	**4**
2	UAE Exchange, Abu Dhabi	6	1	-	-	6
3	Paramount computer systems, Abu Dhabi	-	-	1	1	1
4	Standard Global Quality Certificate,Abu dhabi	-	-	5	1	5
B. Stations at Ajman						
5	Accurate Control Switchgear, Ajman	3	1	-	-	3
6	Elfit Arabia, Ajman	3	1	2	1	5
7	KHK Scaffholding, Ajman	3	1	3	1	6
8	Master Systems, Ajman	-	-	3	1	3
C. Stations at Dubai						
9	Al Ashwaq Electro-Mechanical Contr, Dubai	3	1	-	-	3
10	Al Bawadi Road Contracting, Dubai	6	1	3	1	9
11	Al Ghandi General Trading LLC, Dubai	2	1	2	1	4
12	Al Shirawi Equipment Co. LLC, Dubai	2	1	-	-	2
13	Al Tamimi Eng LLC, Dubai	3	1	2	1	5
14	Aroma Tierra, Dubai	-	-	3	1	3
15	Aseseal Middle East FZE, Dubai	-	-	1	1	1
16	Aspire Controls and Solutions, Dubai	2	1	-	-	2
17	Azbil Corporation, Dubai	3	1	2	1	5
18	Bruce Clay MENA, Dubai	2	1	-	-	2
19	Delphi Consulting, Dubai	2	1	-	-	2
20	Environment International Consultants, Dubai	1	1	-	-	1
21	Focus M, Dubai	1	1	-	-	1
22	Gargash Insurance, Dubai	2	1	-	-	2
23	Giro Fintech, Dubai	-	-	1	1	1
24	Green Oasis Gen. Cont. Co. LLC, Dubai	-	-	2	1	2
25	Hydro ME, Dubai	3	1	-	-	3
26	ICBA,Dubai	4	1	1	1	5
27	ICC Loyalty, Dubai	2	1	-	-	3
28	IoLetics, Dubai	-	-	3	1	3
29	Johnson Controls, Dubai	2	1	-	-	2
30	KPTAC, Dubai	-	-	4	1	4
31	Kyoto Technologies, Dubai	2	1	-	-	2
32	L & T, Dubai	7	1	8	1	15
33	Levtech Consulting, Dubai	2	1	1	1	3
34	Lucy Switchgear, Dubai	2	1	-	-	2
35	Marsicon, Dubai	3	1	-	-	3
36	Masafi Co. LLC, Dubai	3	1	-	-	3

Sl. No	Name of the PS Station	Second Semester 2019-20 19-01-2020 – 02-07-2020		First Semester 2020-21 21-07-2020 –07-01-2021		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
37	MBM Amnex Technologies LLC, Dubai	2	1	-	-	2
38	MSD DHCC, Dubai	8	1	7	1	15
39	Nuplas Industries Ltd, Dubai	2	1	-	-	2
40	Panacor Technologies, Dubai	2	1	1	1	3
41	Paramount Computer Systems FZ LLC, Dubai	1	1	1	1	2
42	PwC, Dubai	11	1	-	-	11
43	Reckitt Benckiser, Dubai	3	1	3	1	6
44	RNS Technology, Dubai	2	1	-	-	2
45	Savills LLC, Dubai	1	1	-	-	1
46	Schindler Pars International, Dubai	2	1	-	-	2
47	Sehteq, Dubai	3	1	-	-	3
48	Sentient Labs, Dubai	3	1	2	1	5
49	Skycap International, Dubai	4	1	-	-	4
50	Spotii DMCC, Dubai	-	-	1	1	1
51	Star Cements, Dubai	3	1	-	-	3
52	Subzero Motorsport, Dubai	-	-	5	1	5
53	Takaful Emarat, Dubai	2	1	-	-	2
54	TCAL, Dubai	1	1	-	-	1
55	Techrobotix FZCO, Dubai	3	1	4	1	7
56	Transcrescent, Dubai	-	-	1	1	1
57	TUV NORD, Dubai	4	1	2	1	6
58	TUV Rheinland, Dubai	5	1	-	-	5
59	Unique World Robotics, Dubai	4	1	-	-	4
60	UTP Pipe, Dubai	2	1	-	-	2
61	Vaasara, Dubai	1	1	-	-	1
62	Zomato Media Pvt. Ltd., Dubai	3	1	-	-	4
D. Stations at Sharjah						
63	Captain Industries FZE, Sharjah	2	1	-	-	2
64	ESRI, Sharjah	1	1	-	-	1
65	Industry Networks/BNC, Sharjah	5	1	3	1	8
66	Interplast Co Ltd, Sharjah	5	1	2	1	7
67	Savills LLC, Sharjah	3	1	-	-	3
E. Stations at UAQ						
68	Eiffel Lubricants LLC, UAQ	4	1	-	-	4

Summary:

Total No. of PS II stations in Semester II – 58   Total No. of PS II stations in Semester I – 32

Total No. of students in Semester II – 169   Total No. of students in Semester I – 80

Common Stations in Both Semesters – 20

* Also PS I stations

PRACTICE SCHOOL STATISTICS

PRACTICE SCHOOL- I

Session	No. of students who attended PS- I	No. of faculty who supervised PS- I	No. of PS- I Stations
Summer 2002	53	4	7
Summer 2003	102	10	24
Summer 2004	94	14	26
Summer 2005	155	21	49
Summer 2006	260	28	81
Summer 2007	256	32	91
Summer 2008	357	40	117
Summer 2009	357	40	126
Summer 2010	457	49	139
Summer 2011	343	32	89
Summer 2012	294	28	76
Summer 2013	325	23	89
Summer 2014	369	26	99
Summer 2015	324	29	86
Summer 2016	404	33	97
Summer 2017	423	27	96
Summer 2018	310	22	80
Summer 2019	278	20	63
Summer 2020	182	14	47

PRACTICE SCHOOL II					
Year	Semester	Period (Duration)	No. of Stations	No. of Students	No. of Faculty
2003-04	I	July 2003 to January 2004 (09.07.2003 to 18.01.2004)	17	27	16
	II	February 2004 to July 2004 (09.02.2004 to 22.07.2004)	16	26	13
2004-05	I	August 2004 to January 2005 (02.08.2004 to 10.01.2005)	27	43	17
	II	February 2005 to July 2005 (01.02.2005 to 14.07.2005)	28	39	26
2005-06	I	July 2005 to January 2006 (24.07.2005 to 05.01.2006)	30	47	30
	II	February 2006 to July 2006 (02.02.2006 to 16.07.2006)	31	43	27
2006-07	I	July 2006 to January 2007 (31.07.2006 to 12.01.2007)	40	76	40
	II	February 2007 to July 2007 (01.02.2007 to 15.07.2007)	45	75	38
2007-08	I	August 2007 to January 2008 (1.08.2007 to 15.01.2008)	59	116	50
	II	February 2008 to July 2008 (3.02.2008 to 17.07.2008)	57	115	50
2008-09	I	August 2008 to January 2009 (3.08.2008 to 15.01.2009)	67	140	52
	II	February 2009 to July 2009 (01.02.2009 to 15.07.2009)	61	133	51
2009-10	I	August 2009 – January 2010 (02.08.2009 to 14.01.2010)	73	155	60
	II	January 2010 to July 2010 (31.01.2010 to 14.07.2010)	59	163	52
2010-11	I	August 2010 to January 2011 (1.08.2010 to 13.01.2011)	71	170	65
	II	February 2011 – July 2011 (30.01.2011 to 14.07.2011)	66	199	59
2011-12	I	August 2011 – January 2012 (1.08.2011 to 12.01.2012)	71	204	62
	II	February 2012 – July 2012 (1.02.2012 to 12.07.2012)	76	242	60
2012-13	I	August 2012 – January 2013 (1.08.2012 to 10.01.2013)	40	144	38
	II	February 2013 – July 2013 (3.02.2013 to 15.07.2013)	42	152	40
2013-14	I	August 2013 – January 2014 (4.08.2013 to 9.01.2014)	41	134	39
	II	February 2014 – July 2014 (2.02.2014 to 3.07.2014)	42	141	41
2014-15	I	August 2014 – January 2015 (5.08.2014 to 8.01.2015)	47	152	43
	II	February 2015 – July 2015 (1.02.2015 to 2.07.2015)	44	148	43

		PRACTICE SCHOOL II			
Year	Semester	Period (Duration)	No. of Stations	No. of Students	No. of Faculty
2015-16	I	August 2015 – January 2016 (6.08.2015 to 13.01.2016)	52	160 FD 08 HD	35
	II	Feb 2016- July 2016 (1.02.2016 to 10.07.2016)	52	182	34
2016-17	I	August 2016 – January 2017 (01.08.2016 to 04.01.2017)	37	140	28
	II	January 2017-July 2017 (22.01.2017-03.07.2017)	51	176 FD 04 HD	35
2017-18	I	August 2017-January 2018 (01.08.2017-04.01.2018)	50	180	29
	II	January 2018-July 2018 (20.01.2018-02.07.2018)	61	199 FD 04 HD	32
2018-19	I	August 2018-January 2019 (01.08.2018-3.01.2019)	57	192	27
	II	January 2019 - July 2019 (20.01.2019-02.07.2019)	57	197 FD 06 HD	23
2019-20	I	(July 2019 – Jan 2020) (21.07.2019-02.01.2020)	43	112 FD 1 HD	21
	II	(Jan 2020 – July 2020) (19.01.2020 –02.07.2020)	58	165 FD 4 HD	26
2020-21	I	(July 2020 – Jan 2021) (21.07.2020 –07.01.2021)	32	76 FD 4 HD	11

Annexure B4-17
(1 page)

FACILITIES AVAILABLE AT PS I STATIONS DURING THE YEAR 2019-2020

S. No.	STATION	Out of Pocket allowance in AED & other facilities
I. Stations in United Arab Emirates (UAE)		
Ia. Stations at Dubai		
1	Focus M, Dubai	AED 400
2	Rove Automation and Installation, Dubai	AED 1000

LIST OF PROJECT ASSIGNMENTS FOR PS II - SECOND SEMESTER 2019-20

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1		**Accurate Control Switchgear, Ajman**
	1	Manufacturing of Electric Switchgear Panels
	2	The Working Process of a Reverse Osmosis (RO) Plant.
	3	BMS - Building Management System
2		**Al Ashwaq Electro-Mechanical Contr, Dubai**
	4	Electromechanical and Firefighting Installations
	5	Hydraulic Study of Service Water pipeline for a High rise building
	6	Cost Estimation of sub-contracting organization at Al-Ashwaq Electro-mechanical Contr. Dubai.
3		**Al Bawadi Road Contracting, Dubai**
	7	Road Contracting in Dubai
	8	Construction estimation, tendering , bidding and contracts management
	9	A study on Hydraulic Systems
	10	Database Management
	11	Road Construction in Dubai
	12	Employee Management System
4		**Al Ghandi General Trading LLC, Dubai**
	13	Low and high voltage switchgears in Dubai AGGT switchgear industry
	14	Load Distribution and Balancing with applied Machine Learning
5		**Al Shirawi Equipment Co. LLC, Dubai**
	15	Project Management - Work Flow
	16	The Enhancement of Finished Goods Standardization and Generation
6		**Al Tamimi Eng LLC, Dubai**
	17	Detailed Study and Analysis on Electrical Scope of Work in MEP Services
	18	A Study of Mechanical, Electrical and Plumbing Installations
	19	Intricacy of Coordination and Estimation in MEP Works
7		**Aspire Controls and Solutions, Dubai**
	20	Building Automation Systems and it's Energy Efficiency
	21	Building Automation & Building Management Systems
8		**Azbil Corporation, Dubai**
	22	Vitality Administration in Buildings Using Visible light Communication
	23	Integrating Azbil's IoT BMS with wireless Arduino sensors
	24	Smart and energy efficient building technologies
9		**Bruce Clay MENA, Dubai**
	25	SEO Report Automation using Web-Technologies
	26	Business Intelligence Dashboard

10	**Captain Industries FZE, Sharjah**	
	27	Heat Exchanger and Sulphuric Acid Production
	28	Production of Bio-CNG From Bio Gas
11	**Delphi Consulting, Dubai**	
	29	The Different Departments in Delphi Consulting
	30	Finance and Accounting Practices in a Consulting Firm
12	**EIC, Dubai**	
	31	Sewage Treatment Plants and Environmental Condition Monitoring
13	**Eiffel Lubricants LLC, UAQ**	
	32	Lubricants and lubricating oil
	33	Introduction of Grease Lubricant
	34	Increasing Production efficiency in a Manufacturing industry
	35	Introduction to programmable logic controller and Automation at lubricant industries
14	**Elfit Arabia, Ajman**	
	36	Efficiency of Solar Panels and Product development of a compact Electrical Winch
	37	Car engine lower side design on SolidWorks
	38	Intranet based GUI DATABASE.
15	**ESRI, Sharjah**	
	39	Exploring ArcGIS and Performing Regression Tests for Imagery Workflows
16	**Focus M, Dubai**	
	40	Import and Export Venture in Dubai
17	**Gargash Insurance, Dubai**	
	41	Business Development for Motor Corporate
	42	Customer Service Experience in Insurance Industry
18	**Hydro ME, Dubai**	
	43	Pump Maintenance and Overhaul
	44	Production Operation and its Techniques
	45	An Insight into Quality Assurance and Quality Control
19	**ICBA,Dubai**	
	46	A Genomic wide Association Study on Quinoa Genotypes and their functioning under Saline conditions in a Desert Environment
	47	Genome Wide Association Studies in Quinoa for agronomic and biochemical traits
	48	Effects of Salinity Stress on crops in the Hydroponics System
	49	Effects of Salinity Stress on Agriculture
20	**ICC Loyalty, Dubai**	
	50	Data Analysis of Digital Banking Data & Loyalty Programs
	51	Product and project management
21	**Industry Networks/BNC, Sharjah**	
	52	Data Upgradation of the Oil & Gas and Utilities Sectors within the BNC Network Database
	53	Structured Research Process and Data Analytics
	54	Automation Based Business Intelligence Platform

	55	Economic Implications of a Pandemic
	56	Air Self Help
22	**Interplast Co Ltd, Sharjah**	
	57	Business Intelligence System and Enterprise Applications for Mobile & Websites
	58	Assesment of pending purchase order at Interplast co. Ltd, Sharjah.
	59	Automation Of HR Forms In Interplast Co Ltd, Sharjah.
	60	Automation of Request Forms at Interplast Co. LTD, Sharjah
	61	Assessment of Pending Sales Order at Interplast co. Ltd, Sharjah.
23	**Johnson Controls, Dubai**	
	62	IT Infrastructure Support
	63	IT Application Development
24	**KHK Scaffholding, Ajman**	
	64	A study on effluent treatment plant
	65	Study on scaffolds
	66	Optimizing Processes using Lean Management Tools At KHK
25	**Kyoto Technologies, Dubai**	
	67	A Comparative Analysis of Cyber Security Solutions available in today's market
	68	Evaluation of Microsoft Azure as Cloud Management Platform in Today's Market
26	**L & T, Dubai**	
	69	Software development for business development
	70	Telecommunication and automation
	71	Telecommunication and automation PLC panels
	72	TP10 project and introduction to robot framework
	73	Procurement and purchasing
	74	CCTV security systems
	75	Role of procurement in an organisation
27	**Levtech Consulting, Dubai**	
	76	Marketing and Designing at Levtech Consulting
	77	Marketing Campaign and Management
28	**Lucy Switchgear, Dubai**	
	78	The CNC Programming & Production Engineering Department
	79	Website Development for Electronic Documentation
29	**Marsicon, Dubai**	
	80	Electrical Power Transmission: Underground Cables & Overhead Lines
	81	Back-End Development for Website, Web Apps and Applications
	82	Front-End Web Development with a Case Study
30	**Masafi Co. LLC, Dubai**	
	83	Hazard Analysis Approach to Sustainable Supply Chain Management"
	84	Need for Procurement Ethics in Strategic Sourcing and Vendor Management
	85	Importance of Quality Control in the Water Industry

31		**MBM Amnex Technologies LLC, Dubai**
	86	The Transportation and Mobility Market in GCC
	87	The Transportation Market in GCC
32		**MSD DHCC, Dubai**
	88	Debit Note Analysis and Processing
	89	Process maps for Saudi and gulf for medical , sales events and congresses
	90	Software-Led Automation of Business Operations
	91	360 Degree Approach to Digital Marketing
	92	Automation of Sales Data Analysis
	93	Pharmaceutical Marketing: Strategies and Systems
	94	Accounting in the Pharmaceutical Industry
33		**MSD DIC, Dubai**
	95	Aiding of Business Operations and Marketing Business Unit
34		**Nuplas Industries Ltd, Dubai**
	96	Calendar Machine Processes and Automation
	97	The Study of various Thermo-forming Machines in Plastic Manufacturing industries
35		**Panacor Technologies, Dubai**
	98	Audio Visual & Digital Signage
	99	Background Music Systems and Video Conferencing Systems
36		**Paramount Computer Systems FZ LLC, Dubai**
	100	How to set up Azure AD for an organization.
37		**PwC, Dubai**
	101	Voice Enabled BI tool Development and Data Warehousing for PWC
	102	The Scope of "Low-Code" Platforms in the Development of Enterprise-Grade Software - A Practical Investigation
	103	Developing a custom Dynamics CRM solution for a banking client at PwC
	104	.NET Development and Data Engineering Projects for PwC
	105	Puddle: A React Native Application
	106	Puddle App : Group chat application in React Native
	107	A Theoretical Roadmap to Business Intelligence and Analytics.
	108	BI reporting and warehousing for an end-to-end real estate project at PWC
	109	Effective digitalization of business processes through Salesforce.
	110	Implementation of Dynamics 365 CRM for a bank
	111	Salesforce Software Development – Sales and Marketing Process Management
38		**Reckitt Benckiser, Dubai**
	112	Research and Development Projects Undertaken During Reckitt Benckiser Internship
	113	Sustainability in the FMCG Industry: Aerosol Sprays
	114	Global detergent trends and Process of making new generation demos
39		**RNS Technology, Dubai**
	115	Cyber Security and Identity and Access Management
	116	Cyber Security and Vulnerability Assessment & Penetration Testing

40	Savills LLC, Dubai	
	117	Property valuation
41	Savills LLC, Sharjah	
	118	Real Estate Management Through Technical Assistance
	119	Urban Planning and Sustainable Real Estate Development in UAE
	120	Green Leasing in Commercial Real Estate
42	Schindler Pars International, Dubai	
	121	A Study on the Fundamental Risk Analysis and Credit Management at Schindler Pars
	122	Operations Management - Back Office Administration in Existing Installations Department
43	Sehteq, Dubai	
	123	A report on the insurance landscape in the UAE and the effect of COVID-19
	124	A report on Individual Policy Operations
	125	Pharmaceutical Benefits Management System
44	Sentient Labs, Dubai	
	126	Development of Unmanned Surface Vehicle with Remote Data Acquisition Capabilities
	127	Implementation of Futuristic Technologies in the Fintech Industry and Study of various components in the Water Drone Sector
	128	Containers with Docker in FinTech and Robotics
	129	DroneyDo A one thumb mobile game
	130	Product Development with Data Science Application
	131	Using AI/ML for Product Feature Development
	132	Impact of VFX on generation Z
	133	A brief overview and market analysis of the water quality monitoring industry
	134	Product development and business strategy formulation
45	Skycap International, Dubai	
	135	Real Estate Investment Trust
	136	Impact of Covid on REIT
	137	B2B Supply Chain Optimizing Business - DG-Mart
	138	Fintech, Reit and Private Equity
46	Star Cements, Dubai	
	139	Efficiency of Grinding Aid in Cements.
	140	Mechanical Failures in the Cement Industry: Causes and Solutions
	141	Advancements in Preventive Maintenance in Cement Industry
47	Takaful Emarat, Dubai	
	142	Website Development Project Management
	143	Business Development tools in Insurance
48	TCAL, Dubai	
	144	Analysis of Factors which Influence the Reliability and Design of Pressure Sensors and Pressure Transmitters in the Calibration Industry.
49	Techrobotix FZCO, Dubai	
	145	Development of Techrobotix App using Unity and Flutter
	146	Resolume mapping and after effects

	147	Front and Back end development of visitor tracking app using web application development
50	**TUV Nord Lab, Dubai**	
	148	Chemical and Microbiological laboratory testing
51	**TUV NORD, Abu Dhabi**	
	149	Analysis of systematic functioning of the MST department in TUV Nord Middle East
	150	The Health, Safety and Environment Department in TUV NORD Middle East.
	151	The Certification and Auditing Department of TÜV Nord Middle East
52	**TUV NORD, Dubai**	
	152	A study of HSE practices of various industries in UAE
	153	A review on the process of product certification in UAE
	154	Certification and Auditing Procedures
53	**TUV Rheinland, Dubai**	
	155	Government Inspection and International Trade at TUV Rheinland
	156	Product Certification System by TUV Rheinland
	157	Certification of Management System by TUV Rheinland
	158	Verification of Conformity Schemes at TUV Rheinland
	159	Government Inspections and International Trade
54	**Unique World Robotics, Dubai**	
	160	Digital Marketing
	161	Understanding the Technical Resources of Unique World Robotics Education
	162	The Artificial Intelligence Department of Unique World Robotics
	163	The Artificial Intelligence Department of Unique World Robotics
55	**UTP Pipe, Dubai**	
	164	Working of the UTP plant
	165	HFIW Pipes & Manufacturing Industry Processes
56	**Vaasara, Dubai**	
	166	Online Marketing and Business Development Pertaining to Health Care Industry
57	**Zomato Media Pvt. Ltd., Dubai**	
	167	Growth Operations
	168	Growth Operations in Zomato
	169	The Impact of Food Delivery Apps on the Economy

COMPUTING FACILITIES ACROSS THE CAMPUS

COMPUTING FACILITIES ACROSS THE CAMPUS

S.No.	Location	Hardware Equipment	QTY	Software
1	Server Room (Data Center)	HP ProLiant DL380 Gen9 Intel Xeon E5-2620v3 6-Core (2.40GHz 15MB) ,16GB (1 x 16GB) PC4-17000P-R 2133MHz, RDIMM ,3 x 300GB (10k rpm) Hot Plug 2.5in Small Form Factor Smart Carrier ,SAS Smart Array P440ar/2G HP Embedded 1Gb Ethernet 4-port 331i Adapter ,HP 2U SFF - Easy Install Rail Kit w/CMA, DVD-RW 2 x 500W ,3/3/3	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition, CentOS, REDHAT Linux Enterprise, Domain Controller, Web Server
		HP DL 380 G7 Single Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives & 600 GB x 6 Hard Drives	1	ESXI 5.5 update 2,Hypervisor,VMware,Replication server
		HP DL 380 G7 Dual Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives	3	ESXI 5.5 update 2,Hypervisor, Windows Server 2003/2012 R2-Enterprise x64 edition/Linux, Vcenter
		HP MSA 2040 FC 6x900 SAS SFF Bndl/TVlite, HP MSA 900GB 6G SAS 10K 2.5in DP ENT HDD,	1	HP Storage server
		12-Bay TurboNAS, Xeon E3-1200 v3 family, 4GB ECC RAM(max. 32GB RAM), 4-LAN, 10G-ready, iSCSI, RAID 0,1, 5, 6, 10, 5+spare, 6+spare, 10+spare, global hot spare, max 8-LAN, PCIe expansion slot x2, redundant power supply, Seagate NAS 4TBx12	1	NAS Backup Server
		DELL PE M1000e Blade Enclosure Chasis (includes 1xCMC and 9x12V High Efficiency Fans) + 3 x 300W redundant Power supply and Fans + 3 x C19 / C20 power cords, Front Media Tray DVD + SD card for CMC + Integrated Analog KVM Switch, Select Brocade M5424 FC8 Switch Redundant (FI) 12 Ports with 2x 8Gb SFPs,	1	
		PowerEdge M630 Blade Server for M 1000 with 2 x Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz (135W) Max Mem 2133MHz, 128GB RAM \(8 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive. QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition,CentOS, Ubuntu,Debian
		PowerEdge M630 Blade Server for M1000, 2 x Intel Xeon E5-2698 v3 2.3GHz,40M Cache,9.60GT/s QPI,Turbo,HT,16C/32T (135W) Max Mem 2133MHz, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive, 64GB RAM (4 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	1	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition, CentOS
		CISCO IDENTITY SERVICES ENGINE, SNS-3415-K9 (ISE Server)	1	Cisco IOS
		Cisco Prime Server, PRIME-NCS-APL-K9	1	Cisco IOS
		Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS
		Cisco Core Switch Cisco Nexus 9300 Series- N9K-C9372PX, 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps fixed QSFP+ ports,	2	Cisco IOS
		Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
		Sonicwall NSA 5600 Series	1	Wan optimization
		Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
		Cisco Unified Communication System,UCS-BE-6000	1	Vcenter
		Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS
2	Computer	IBM -LENOVO-Think Centre: Intel I7-8700,3.2GHz,	9	Windows 10, O365

S.No.	Location	Hardware Equipment	QTY	Software
	Programming Lab (332 & 333)	8GB RAM, 1TB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo		
		Dell OptiPlex Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB SATA HDD (**Total = 127**) Intel Core I5 4590 (Quad Core 3.30 Ghz) 4 GB RAM DDR 500 GB SATA HDD **(Total = 29)** 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	80+76 =156+ 9= **165**	Windows 8.1 and Windows 10, Office 365
3	Microprocess or Lab (108)	Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	30	Windows 8.1, Windows 10, MS Office 2007 and Red Hat Linux 5.0 , Ubuntu advanced platform
		IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GB RAM, 160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	2	Windows 7, MS Office 2013
4	Physics Lab (309)	HP 280 G2, Intel Core I3,6100, 3.70 GHz, 8GB RAM, 500 GB HDD	5	Windows 7 64 bit, MS Office 2013
		Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	1	Windows 10, MS Office 2016
		Dell OptiPlex 7050 MT Intel Core I7-7700 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB, Keyboard Dell OptiPlex 7040 MT Intel Core I7-6700 (Quad Core, 3.41 GHz 8 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB, Keyboard	4+1=5	Windows 10, MS Office 365
		Acer M2 series intel Core 2 Duo E 7400, 2.80 GHz, 2GH RAM, 320 GB HDD	2	Windows 7 32 bit and MS office 2007
5	Instrumentati on Lab (329	Acer 5600,3.0Ghz,1GB,80 GB	5	Windows 7 32 bit and MS office 2007
		IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GBRAM,160GBHardDisk	1	Windows 7 32 bit and MS office 2007
		Dell OptiPlex 9020 MT Intel Core I7-4770Quad Core 3.40 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	10	Windows 8.1 and Windows 10
6	Digital Electronics Lab and Analog Electronics lab (304)	HP prodesk 400G3MT, Intel Core I7 6700, 3.4Ghz, 8GB RAM, 1TB HDD,	2	Windows 8.1
7	Signal Processing and Simulation Lab (303)	Dell OptiPlex 7020 MT Intel Core I7-4770 (Quad Core, 3.40 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	20	Windows 7,10 64 bit
8	Communicati on Lab (330)	ACER:Intel Core 2 CPU 2.0GHz, 1 GB RAM, 150GB Hard Disk, DVD Writer	1	
		IBM -LENOVO-Think Centre:Inter® Intel I7-8700,3.2GHz, 16GB RAM, 256GB SSD, 1 TB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	6	Windows 7, MS Office 2007 and Matlab 19 sIMULINK-R2010a
		Inter Core i5 CPU 650 @ 3.20 Ghz 2 Gb RAM 500 HDD	1	
9	Power Electronics Lab (302)	Lenovo:Intel® Core to Due - 2.8 GHz uniprocessor PC, 1GB RAM, 80GB Hard Disk, 3COM Ether Link 10/100	5	Windows XP, MS Office 2007

S.No.	Location	Hardware Equipment	QTY	Software
10	Electrical Machine (313)	Dell Optiplex 9020, Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB GB SATA	2	Windows 8.1
11	Mechatronics Lab (MS2)	Dell Optiplex 9020, Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB GB SATA	2	Windows 10
		Dell OptiPlex 7050, Intel Core I7-7700Quad Core 3.60 GHz 16 GB RAM DDR, 1 TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	1	Window 10, O365, MATLAB2019
		Lenovo think center intel Core 2 Duo, 2 GB RAM, 160 GB HDD	6	Windows 7, MS office 2007
12	Heat Transformation lab (MS4)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7, MS Office 2007
13	PMFM Lab (MG2)	ACER Veriton:Intel® Core 2Duo E7400 - 2.8GHz ACPI uniprocessor PC, 2GB RAM, 320GB Hard Disk, 3COM Ether Link 10/100	1	Windows 7, MS Office 2013
14	Chemistry Lab (306)	IBM Lenovo Think Center Intel I5 8400, 2.81 GHz,8GB RAM, 1TB HDD	1	Windows 10, MS Office 2013
15	Class Rooms	Dell Optiplex 3070 Micro form factor,I5,8GB,500GB	21	Windows 10, MS Office 2013/2016
		Lenovo Think center M 700, Intel Core I5, 4GB RAM, 500GB HDD	10	Windows 7
16	Divisions(Grading, PSP, PCP, AAR,SW,I&E)	IBM -LENOVO-ThinkCentre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	5	Windows 7, MS Office 2007
		Dell Optiplex 9020,Core I5, 4590, 3.30GHz, 4GB RAM, 500GB HDD	1	Windows 8.1 MS office 2013
		Dell Optiplex 9020,Core I7, 4770, 3.30GHz, 8GB RAM, 1TB HDD	7	Windows 8.1 MS office 2013
		IBM Lenovo Think center: Intel i7 4790CPU, 3.60GHZ, 8GB RAM, 1TB HDD	1	Win 7 64 Bit
17	Library (BPDC)	LENOVO-ThinkCentreEdge :Inter® Core I3 4170@ 3.70 GHz, 3.70Ghz, 8GB RAM,500GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	50	Windows 7, MS Office 2007
		Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	3	Windows 8.1 MS Office 2013
18	Faculty (Academic)	Dell OptiPlex 9020 MT Intel Core I7-4770 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	35	Windows 8.1/Windows 10, MS Office 2013,16 and 19
		Lenovo M73 Tower Intel Core i7 3.6Ghz, RAM 8 GB, 1TB HDD	3	
		HP Laptop (Faculty and Staff),i7,8GB,1TB	33	
		HP Probook Laptop New(Faculty and Staff) i7,8GB,1TB/512 SSD/256SSD/1TB SSD	30	
		Lenovo ThinkPad E14 (Faculty and Staff) i7-1051U-1.8GHz,8GB,512 GB SSD,14"FHD, Windows 10 Pro, Intel UHD,Black	3	
19	Administration (Academic)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	15	Windows 7, MS Office 2013
		Lenovo M73 Tower Intel Core i7 3.6Ghz, RAM 8 GB, 1TB HDD	1	Windows 10, MS Office 2016
		Dell OptiPlex 9020 MT Intel Core I7-4770 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	12	Windows 8.1 , MS office 2013
		HP Pavilion Desktop (PA to Director) Intel i5 2400, 3010GHZ, 8GB RAM and 1TB HDD	1	Windows 10
		HP Pavilion laptop,i5,4GB,320GB	10	Windows 7/Windows 10 MS

S.No.	Location	Hardware Equipment	QTY	Software
				office 2013
		Acer Veriton M265 / Intel Core 2 Duo E7400 2.8 GHz / 2 GB RAM / DVD R/ /Mouse / Key Board	5	Windows 7, MS Office 2007
	Director Office	IMac,21.5",i5,8GB,SSD 500	1	MAC IOS 10
20	Engineering Graphics Lab (MS5)	Dell OptiPlex 7020 MT Intel Core I5-4590 (Quad Core, 3.30 GHz 4 GB RAM DDR 500 GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	80	Windows 8.1, AutoCAD 2015, CATIA V5 R6 ANSYS 2015, EASY5 2015 ESPRIT DFX Digimat VASP My Lammps OOF2, Franc & Casca
21	Engineering Graphics Lab	Acer Veriton M265 / Intel Core 2 Duo E7400 2.8 GHz / 2 GB RAM / DVD R/W Windows Server 2008 / Mouse / Key Board	1	Mechanical Software Server
22	CAD LAB -1 (MS6)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	8	Windows 7, MS Office 2007 ADAMS 2015, Aspen Automation Studio
23	CAD LAB -2 (MS6)	Dell OptiPlex 7050, Intel Core I7-7700Quad Core 3.60 GHz 16 GB RAM DDR, 1 TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	18	Windows 10, Abaqus, MATLAB 2016, PLAXIS 2D
24	CAD LAB -2	Dell OptiPlex 9020 MT, Intel Core I5-4590Quad Core 3.60 GHz 8 GB RAM DDR, 1 TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	6	Windows 8.1
25	Chemical Lab 1 (340)	Dell OptiPlex 9020 MT Intel Core I5-4790Quad Core 3.60 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	4	Windows 8.1 Aspen, Mat lab
		Lenovo Think center I5,2.4Ghz, 4GB RAM, 500GB HDD	1	Windows 10
26	Biotechnology Research Lab (305)	Dell OptiPlex 9020 MT Intel Core I7-4590Quad Core 3.30 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse	1	Windows 8.1,Office 2016
		IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7,Office 2013
27	Chemical Lab2 (331)	Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.30 GHz 4 GB RAM DDR 500GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	2	Windows 8.1
28	CCTV Control room	HP elite Desk+ HP Compaq8100+Dell Optiplex 9020 + Lenovo Think Center(2+3+2+1)	8	Windows 7 and Windows 8.1
29	Creative Lab (MS7)	Dell Optiplex 9020, Intel Core I7, 3.60 GHz, 8GB RAM, 1TB HDD	2	Windows 8.1
		GPU based workstation,64GB,K80 Tesla GPU,1TB SSD		Windows 10
		HP Think station, Intel Xeon E5 1620, 3.50GHz,8GB RAM, 1TB HDD.	2	Windows 8.1
30	Civil Lab	Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.30 GHz 8 GB RAM DDR 500GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	1	Windows 8.1 MS Office 2016
31	IT Stock	Wacom Device (2+2) Two Old and Two new	2+2=4	
		Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.30 GHz 8 GB RAM DDR 500GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	1	Window 10
		HP Laptop i7 7500, 2.9GHz,6GB RAM, 1TB HDD	1	Windows 10 MS office 2013
32	Microbiology Lab (307)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network	2	Windows 7

S.No.	Location	Hardware Equipment	QTY	Software
		Card, DVD Combo		
33	Advanced Molecular Bio Lab (308)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7
34	Material Testing Lab (MF3)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	3	Windows 7
		Inter Core i5 CPU 650 @ 3.20 Ghz 2 Gb RAM 500 HDD	1	Windows 7
		Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.30 GHz 8 GB RAM DDR 500GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	1	Windows 10
35	Fluid Mechanics Lab (MF 4)	IBM Lenovo Think center: Intel i7 4900CPU, 3.60GHZ, 8GB RAM, 1TB HDD	1	Windows 10
36	LAB 193	HP Z4 G4 workstation,i7,16GB,1TB,2GB graphics, 256 SSD	2	Windows 10
37	Lab 335	HP Probook 400 G6, I7-9700,3.0GHZ,8GBRAM,1TB HDD, Win 10 Pro,	76	Windows 10
38	Online Class Room Infrastructure	Polycom Studio USB 4K Video Bar Camera and BT Speakerphone	5	
		EPSON Projector EBX05	3	
		Epson EB2255U Projector	1	
	Online Class Room Infrastructure	Logitech Web Camera C270	5	
		Logitech Web Camera C525	10	
		USB Headset	22	
	Online Class Room Infrastructure	Logitech Web Camera C310	10	
		3.5mm Jack Headphone	80	

LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2020

S.No	Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
1.	METELLOGRAPHIC CUTOFF MACHINE & POLOSHING MACHINE	Mechanical Engineering Laboratory
2.	HIGH SPEED CAMERA	Mechanical Engineering Laboratory
3.	ROBOTIC KITS & ACCESSORIES	Mechanical Engineering Laboratory
4.	VACUUM BAG KIT & CONSUMABLES	Mechanical Engineering Laboratory
5.	FIXTURE FOR DYNAMIC TESTING MACHINE	Mechanical Engineering Laboratory
6.	ORBITAL SHAKER	Biotechnology Engineering Laboratory
7.	DNA AGAROSE GEL ELECTROPHORESIS	Biotechnology Engineering Laboratory
8.	PLANT GROWTH CHAMBER	Biotechnology Engineering Laboratory
9.	MANUAL VACCUM CONTROLLER (HIEVAP)	Biotechnology Engineering Laboratory
10.	GAS REGULATOR FOR CO2	Biotechnology Engineering Laboratory
11.	UV TRANSILLUMINATOR	Biotechnology Engineering Laboratory
12.	MINI CENTERFUGE	Biotechnology Engineering Laboratory
13.	WESTERN BLOT IMAGING & TRANSFER APPERATUS	Biotechnology Engineering Laboratory
14.	REALTIME PCR	Biotechnology Engineering Laboratory
15.	BEAD BEATER FOR CELL LYSIS	Biotechnology Engineering Laboratory
16.	SDS PAGE APPARATUS & WET BLOT APPARATUS	Biotechnology Engineering Laboratory
17.	BENCHTOP COLD CENTRIFUGE	Biotechnology Engineering Laboratory
18.	ACCESSORIES FOR MULTILABEL READER FILTERS	Biotechnology Engineering Laboratory
19.	STEAM GENERATOR-MODEL NBS-1314-12KW	Chemical Engineering Laboratory
20.	DIGITAL OVERHEAD STIRRER WITH STAND & PERISTALTIC PUMP	Chemical Engineering Laboratory
21.	AUTOMATIC WATER STILL WITH PREFILTER,HEATER &STORAGE TANK	Chemical Engineering Laboratory
22.	HANDHELD PH METER, TURBIDITY METER, CONDUCTIVITY METER WITH RS 232 OUTPUT	Chemical Engineering Laboratory
23.	CHEMICAL STORAGE CABINET	Chemical Engineering Laboratory
24.	STORAGE WATER PURIFIER	Chemical Engineering Laboratory
25.	MULTI 3510 IDS – DISOLVED OXYGEN METER	Chemical Engineering Laboratory
26.	HYDROGEN FUEL CELL & ULTRASONIC FLOW METER	Chemical Engineering Laboratory
27.	ULTRASONIC FLOW METER	Chemical Engineering Laboratory
28.	GOOGLE CORAL DEV BOARD	Computer Science Laboratory
29.	CAMERA MODULE FOR GOOGLE CORAL DEV BOARD	Computer Science Laboratory
30.	SENSORS	Computer Science Laboratory
31.	ARDUINO KITS	Computer Science Laboratory
32.	DESKTOP & MONITOR	DD & Analog Electronics Laboratory
33.	FPGA KIT	Microprocessor Laboratory
34.	SIGNAL LAB CONSUMABLES & ACCESSORIES	Signal & Simulation Laboratory
35.	VIRTUAL LAB EXPERIMENTATION	General Science Laboratory

S.No	Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
36.	BOOK STERLIZER MACHINE	Library
37.	COMB BINDING MACHINE	Library
38.	Vmware VSPHERE LICENSE	Data Center
39.	VEENAM BACKUP & REPLICATIO	Data Center
40.	CISCO IP TELEPHONE	Information Technology
41.	LAMP - PROJECTOR	Information Technology
42.	PROJECTOR & SCREEN	Information Technology
43.	MICROSOFT OFFICE LICENSE	Faculty & Staff
44.	DESKTOP & MONITOR	Information Technology
45.	CLOUD BACKUP	Information Technology
46.	IP TELEPHONE	Information Technology
47.	LAPTOPS	Information Technology
48.	CLASSROOM AUDIO VIDEO SOLUTION	Information Technology
49.	LASER ENGRAVING CUTTING MACHINE	Creative Laboratory
50.	DESKTOP & MONITOR	Civil Engineering Laboratory
51.	RAIFALL SMART SENSOR	Civil Engineering Laboratory
52.	ULTRASONIC PULS ECHO	Civil Engineering Laboratory
53.	GROUND PENETRATING RADAR	Civil Engineering Laboratory
54.	CORE MAP -1	Civil Engineering Laboratory
55.	MODEL TESTING TANK	Civil Engineering Laboratory
56.	50MM PROBE SPACING AND ACCESSORIES	Civil Engineering Laboratory

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Part B5: Work Integrated Learning Programmes

CONTENTS

WORK INTEGRATED LEARNING PROGRAMMES

B5.1 SENIOR OFFICERS OF THE WORK INTEGRATED LEARNING PROGRAMMES

1. Director (Off-Campus Programmes & Industry Engagement)

2. Dean

3. Associate Deans

4. Chief Executive Officer

5. Deputy General Manager, Operations

B5.2 HISTORY

Since 1979, the Institute has been participating in the human resources development activities of the industries by evolving several degree programmes that integrate the working environment of the employees with the learning environment required by the Institute. These programmes are offered in several domains like Information Technology, Engineering Technology and Management.

The Institute conducts Work Integrated Learning Programmes (WILP) as a means of continuing education for employed professionals to meet the Learning & Development needs of a diverse spectrum of industries. These programmes are a conducted through a collaborative partnership between BITS Pilani and the organization / industry, to build technical competencies and enable advancement of workplace skills. In a world of rapidly evolving technologies, these programmes represent a successful model to meet the consequent need for continuous education and up-skilling of the workforce.

Over the past three decades, these programmes have grown manifold, meeting the requirements of over 4000 organizations. At present, over 22,000 employed professionals are pursuing various degree programmes through WILP.

B5.3 SALIENT FEATURES

In line with the educational philosophy of the Institute of integrating theory with practice, the student's own work environment provides an ideal ground for a meaningful combination of the two through assignments, case studies, work experience, and projects. The interplay of work or practice and education is ensured since students are admitted only to a programme that is in line with their work profiles, and with the endorsement and active support of the employer.

The programmes are industry focused, with highly contemporary and relevant curriculum, and the individual courses are taught at the same level of rigor as in programmes on the campus. Instruction is delivered at the workplace, using a judicious combination of asynchronous electronic means, and synchronous, faculty-led classes conducted either physically or through the use of technology. Extensive use is made of virtual laboratories, remote laboratories, simulations, case studies, assignments and projects drawn from the workplace for enhanced experiential learning

B5.4 PROGRAMMES OFFERED

Currently Operative Work Integrated Learning Programmes

Programmes	Collaborating / Sponsoring Organization
B.Sc. Programme	
1. Design & Computing	- Designed for the HRD needs of a diverse spectrum of IT Industries, and HCL Technologies, Noida
2. Pharmaceutical Sciences	- Designed for the HRD needs of a diverse spectrum of Pharmaceutical Industries, and Dr. Reddy's Laboratories, Hyderabad
B.Tech. Programmes	
1. Engineering Design	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries and John Deere, Pune
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Bangalore
4. Manufacturing Technology	- Kirloskar Oil Engines, Kolhapur, Bharat Forge, Pune, Tata Motors, Jamshedpur; TACO, Pune; Maruti Suzuki, Gurgaon; Mahindra Motor Vehicles; Cummins, Pune; GE Locomotives
5. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy – Mumbai
6. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; Vedanta, Jharsuguda; BPCL, Mumbai
M.Sc. Programmes	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of IT Industries
2. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries
M.B.A. Programmes	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of IT Industries and HZL
2. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of consulting firms
3. Finance	- Designed for the HRD needs of business organizations and HZL
4. FinTech	- Designed for the HRD needs of business organizations
5. Hospital and Health Systems Management	- Designed for the HRD needs of a diverse spectrum of Hospitals and Healthcare organizations
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries and Bosch
7. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries

M.Tech. Programmes

1.	Automotive Electronics	- Designed for the HRD needs of a diverse spectrum of Automotive Industries and Aptive
2.	Automotive Engineering	- Designed for the HRD needs of a diverse spectrum of Automotive Industries, Tata Technologies, Tata Motors, Pune; Mercedes Benz; Cummins
3.	Computing Systems & Infrastructure	- Designed for the HRD needs of a diverse spectrum of IT Industries, and Wipro, Bangalore, VMware
4.	Data Science & Engineering	- Designed for the HRD requirements of a diverse spectrum of IT Industries and Intuit; Avaya; BEL; CISCO; HCL; Wipro Technologies
5.	Design Engineering	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, SKF and John Deere, Pune
6.	Digital Manufacturing	- Designed for the HRD needs of a diverse spectrum of Digital Industries
7.	Embedded Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries, Aricent Technologies; Cisco, Bangalore; UTC Bangalore and Hyderabad.
8.	Environmental Engineering	- Goa State Pollution Control Board, Goa
9.	Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
10.	Microelectronics	- Designed for the HRD needs of a diverse spectrum of IT Industries; Synopsys, Bangalore; Samsung, Gurgaon; Aricent Technologies
11.	Pharmaceutical Operations and Management	- Designed for the HRD needs of a diverse spectrum of Pharmaceutical Industries, and Sun Pharmaceutical Industries, Vadodara; Lupin, Mumbai
12.	Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
13.	Sanitation Science, Technology and Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
14.	Software Engineering	- Wipro Technologies, Dell, SAP Labs, Sabre, EMC, Oracle, Lowe's Services, Bangalore; Avaya, Tech Mahindra, Pune; Capgemini; Qualcomm, Hyderabad
15.	Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad; Cisco, Synopsys, Bangalore; Samsung, Gurgaon; Aricent Technologies, Mercedes-Benz, Bangalore; ATMECS
16.	Systems Engineering	- Wipro Infotech, Bangalore
17.	Telecommunications & Software Engineering	- Designed for the HRD needs of a diverse spectrum of Telecom Industries
18.	Transportation Engineering	- PWD, Goa

Post Graduate Diploma Programmes

1. Business Analytics	Designed for the HRD needs of a diverse spectrum of IT Industries
2. Finance	Designed for the HRD needs of a diverse spectrum of business organizations
3. FinTech	Designed for the HRD needs of business organizations
4. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing organizations

Post Graduate Certificate Programmes		
1. Artificial Intelligence and Machine Learning	-	Designed for the HRD needs of a diverse spectrum of IT industries
2. Big Data & Analytics	-	Designed for the HRD needs of a diverse spectrum of IT industries
3. Big Data Engineering	-	Designed for the HRD needs of a diverse spectrum of IT industries
4. Full Stack Engineering		Designed for the HRD needs of a diverse spectrum of IT industries
5. General Management	-	Designed for the HRD needs of a diverse spectrum of Engineering industries
6. Internet of Things	-	Designed for the HRD needs of a diverse spectrum of IT industries
7. Manufacturing Practice	-	Designed for the HRD needs of a diverse spectrum of Manufacturing organizations
Certificate Programmes		
1. Manufacturing Practice	-	Designed for the HRD needs of a diverse spectrum of Manufacturing organizations
2. General Management	-	Designed for the HRD needs of a diverse spectrum of Engineering industries

B5.5 MAP OF BITS WORK INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2020

MAP OF BITS WORK INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2020

B5.6   ADMISSIONS

The number of students admitted in each of the semester is given below.

	Certificate & Diploma Programmes	Integrated First Degree Programmes	Higher Degree Programmes	Total
Second Semester 2019-2020	333(058)	508(70)	5098(1778)	5939(1906)
First Semester 2020-2021	321(072)	545(59)	4260(0967)	5126(1098)

The programme-wise details are given in **Annexure 1** (Part B5).

B5. 7   REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

Semester	Number of students registered
Second Semester 2019-2020	19355
First Semester 2020-2021	21078

Details of Registration of students for the First Semester 2020-2021 are given in **Annexure 2** (Part B5).

B5.8 GEOGRAPHICAL DISTRIBUTION OF STUDENTS REGISTERED IN FIRST SEMESTER 2020-2021

(A)   INDIA

State	No. of students		
	Specific	**Non Specific**	**Total**
Andaman and Nicobar Islands		1	1
Andhra Pradesh	914	475	1389
Arunachal Pradesh	2	2	4
Assam	13	28	41
Bihar	318	71	389
Chhattisgarh	22	53	75
Dadra and Nagar Haveli		6	6
Daman and Diu		1	1
Delhi	205	477	682
Goa	7	78	85
Gujarat	56	261	317
Haryana	288	450	738
Himachal Pradesh	9	13	22
Jammu and Kashmir		25	25
Jharkhand	250	104	354
Karnataka	2766	2743	5509
Kerala	434	548	982
Madhya Pradesh	38	88	126
Maharashtra	710	1757	2467
Manipur		2	2
Meghalaya	1	3	4
Orissa	275	93	368
Pondicherry	2	25	27
Punjab	100	91	191

State	No. of students		
	Specific	**Non Specific**	**Total**
Rajasthan	122	250	372
Sikkim		1	1
Tamil Nadu	943	2081	3024
Telangana	272	1333	1605
Tripura	1	1	2
Uttar Pradesh	610	597	1207
Uttarakhand	94	49	143
West Bengal	217	278	495
Total	**8669**	**11985**	**20654**

(B)   Foreign

Country	No. of students		
	Specific	**Non Specific**	**Total**
Australia		2	2
Bahrain		2	2
Bhutan		1	1
Canada		23	23
China		3	3
Germany		4	4
Hong Kong		3	3
Indonesia	1		1
Iran		1	1
Iraq		1	1
Ireland	1		1
Japan		2	2
Kuwait		25	25
Malaysia		1	1
Nepal	1		1
Netherlands		1	1
Oman		20	20
Qatar		33	33
Saudi Arabia		49	49
Singapore		26	26
Sri Lanka		2	2
Sweden		2	2
Uganda		1	1
United Arab Emirates		208	208
United Kingdom		1	1
United States of America	1	9	10
Total	**4**	**420**	**424**
Grand Total	**8673**	**12405**	**21078**

B5.9   SPONSORING ORGANIZATIONS

During the year, 6426 organizations have sponsored their employees for Work Integrated Learning Programmes.
List of the organizations are given in *Annexure 'B5-3'.*

B5.10 ACADEMIC CALENDAR

For the year 2020, Second Semester 2019-2020 started on 11-01-2020 and ended on 31-05-2020, while First Semester 2020-2021 started on 08-08-2020 and ended on 13-12-2020 for all programmes except the following:

Second Semester 2019-2020				
Degree	**Programme Name**	**ORGANIZATION**	**Start Date**	**End Date**
B.Sc.	Design & Computing	HCL	27-Apr-20	21-Sep-20
B.Sc.	Design & Computing	HCL	25-Jan-20	27-Jun-20
B.Sc.	Pharmaceutical Sciences	DR. REDDY'S LABS	27-Apr-20	12-Sep-20
B.Tech.	Engineering Technology	JOHN DEERE	14-Jan-20	23-Jun-20
B.Tech.	Engineering Technology	TATA MOTORS	21-Apr-20	7-Sep-20
B.Tech.	Information Systems	WIPRO	7-Apr-20	9-Sep-20
B.Tech.	Manufacturing Technology	BHARAT FORGE LIMITED	21-Feb-20	20-Jul-20
B.Tech.	Manufacturing Technology	CUMMINS	19-Dec-19	24-Apr-20
B.Tech.	Manufacturing Technology	GE DIESEL LOCOMOTIVE	23-May-20	4-Nov-20
B.Tech.	Manufacturing Technology	MAHINDRA VEHICLE	19-Jan-20	24-Jun-20
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	12-May-20	21-Oct-20
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	7-Apr-20	9-Sep-20
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	31-Mar-20	6-Oct-20
B.Tech.	Manufacturing Technology	TATA AUTOCOMP SYSTEMS	12-Jul-20	11-Dec-20
B.Tech.	Manufacturing Technology	TATA AUTOCOMP SYSTEMS	30-Apr-20	17-Oct-20
B.Tech.	Manufacturing Technology	TATA MOTORS	30-Apr-20	17-Oct-20
B.Tech.	Manufacturing Technology	TATA MOTORS	12-Jul-20	11-Dec-20
B.Tech.	Power Engineering	ABG CEMENT BUSINESS	31-Dec-19	13-May-20
B.Tech.	Power Engineering	TATA POWER	31-Dec-19	13-May-20
B.Tech.	Process Engineering	JSW STEEL	17-Sep-19	11-Feb-20
B.Tech.	Process Engineering	JSW STEEL	12-Nov-19	7-Apr-20
B.Tech.	Process Engineering	JSW STEEL	31-Dec-19	26-May-20
B.Tech.	Process Engineering	JSW STEEL	2-Feb-20	10-Aug-20
B.Tech.	Process Engineering	VEDANTA ALUMINIUM	31-Dec-19	13-May-20
M.Tech.	Automotive Electronics	APTIVE	1-Jun-20	2-Nov-20
M.Tech.	Automotive Electronics	CLUSTER	26-May-20	27-Oct-20
M.Tech.	Automotive Engineering	CUMMINS	20-Apr-20	28-Sep-20
M.Tech.	Automotive Engineering	MERCEDES BENZ	13-Apr-20	14-Sep-20
M.Tech.	Computing Systems And Infrastructure	VMWARE	7-Jun-20	11-Oct-20
M.Tech.	Computing Systems And Infrastructure	WIPRO TECHNOLOGIES	7-Apr-20	9-Sep-20
M.Tech.	Computing Systems And Infrastructure	WIPRO TECHNOLOGIES	3-Jul-20	29-Nov-20
M.Tech.	Data Science & Engineering	AVAYA	5-May-20	20-Oct-20
M.Tech.	Data Science & Engineering	BEL	20-Apr-20	7-Sep-20
M.Tech.	Data Science & Engineering	CLUSTER	6-Jul-20	6-Dec-20
M.Tech.	Data Science & Engineering	CLUSTER	5-May-20	21-Oct-20
M.Tech.	Data Science & Engineering	CLUSTER	8-Mar-20	27-Sep-20
M.Tech.	Data Science & Engineering	HCL	25-Jul-20	27-Jun-20
M.Tech.	Data Science & Engineering	INTUIT	21-Apr-20	23-Sep-20
M.Tech.	Data Science & Engineering	PUNE	5-May-20	21-Oct-20
M.Tech.	Data Science & Engineering	WIPRO TECHNOLOGIES	12-May-20	14-Oct-20

M.Tech.	Design Engineering	CLUSTER	15-May-20	26-Oct-20
M.Tech.	Design Engineering	CLUSTER	4-Feb-20	21-Jul-20
M.Tech.	Design Engineering	CLUSTER	15-Dec-19	31-May-20
M.Tech.	Design Engineering	PUNE	7-Jul-20	29-Dec-20
M.Tech.	Embedded Systems	AEROSPACE SYSTEMS, BANGALORE	3-Feb-20	27-Jul-20
M.Tech.	Embedded Systems	CLUSTER	13-Apr-20	7-Sep-20
M.Tech.	Microelectronics	ARICENT	27-Jan-20	13-Jul-20
M.Tech.	Pharmaceutical Operations & Management	LUPIN LTD	17-Dec-19	13-Apr-20
M.Tech.	Software Engineering	SAP LABS	4-Feb-20	1-Jul-20
M.Tech.	Software Engineering	VERIZON DATA SERVICES	21-Jan-20	3-Jun-20
M.Tech.	Software Engineering	WIPRO TECHNOLOGIES	7-Apr-20	9-Sep-20
M.Tech.	Software Systems	ATMECS	11-May-20	5-Oct-20
M.Tech.	Software Systems	CISCO	20-Apr-20	21-Sep-20
M.Tech.	Software Systems	MERCEDES BENZ	25-Jul-20	15-Nov-20
M.Tech.	Software Systems	SAMSUNG	28-Feb-20	5-Sep-20
M.Tech.	Software Systems	SAMSUNG	31-Mar-20	24-Sep-20
M.Tech.	Software Systems	TCS, DELHI	15-May-20	27-Oct-20
M.Tech.	Software Systems	TCS	15-May-20	27-Oct-20
M.Tech.	Software Systems	WIPRO TECHNOLOGIES	3-Jul-20	29-Nov-20
M.Tech.	Systems Engineering	WIPRO INFOTECH	21-Apr-20	29-Sep-20
M.Tech.	Systems Engineering	WIPRO TECHNOLOGIES	21-Apr-20	29-Sep-20
PGC	Manufacturing Management	BOSCH	7-Dec-19	5-Mar-20

First Semester 2020-2021

Degree	Programme Name	ORGANIZATION	Start Date	End Date
B.Sc.	Design & Computing	HCL	17-Jan-21	07-Jun-21
B.Sc.	Design & Computing	HCL	25-Jul-20	26-Dec-20
B.Tech.	Engineering Technology	TATA MOTORS	13-Dec-20	13-May-21
B.Tech.	Process Engineering	JSW STEEL	10-May-20	08-Nov-20
B.Tech.	Process Engineering	JSW STEEL	18-Oct-20	21-Mar-21
B.Tech.	Process Engineering	JSW STEEL	08-Nov-20	04-Apr-21
B.Tech.	Power Engineering	ABG CEMENT BUSINESS	08-Aug-20	13-Dec-20
B.Tech.	Power Engineering	TATA POWER	08-Aug-20	13-Dec-20
B.Tech.	Manufacturing Technology	BHARAT FORGE	03-Jan-21	20-Jun-21
B.Tech.	Manufacturing Technology	GE DIESEL LOCOMOTIVE	01-Feb-21	01-Jul-21
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	14-Jan-21	14-Jun-21
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	06-Dec-20	15-Apr-21
B.Tech.	Manufacturing Technology	TATA AUTOCOMP SYSTEMS	14-Feb-21	14-Aug-21
B.Tech.	Manufacturing Technology	TATA AUTOCOMP SYSTEMS	17-Jan-21	17-Jun-21
B.Tech.	Manufacturing Technology	MAHINDRA VEHICLE	02-Aug-20	22-Feb-21
B.Tech.	Manufacturing Technology	CUMMINS	19-Oct-20	19-Mar-21
B.Tech.	Manufacturing Technology	TATA MOTORS	17-Jan-21	17-Jun-21
B.Tech.	Manufacturing Technology	TATA MOTORS	14-Feb-21	14-Aug-21
B.Sc.	Pharmaceutical Sciences	DR. REDDY'S LABS	18-Jan-21	18-Jun-21

Degree	Programme Name	ORGANIZATION	Start Date	End Date
M.Tech.	Automotive Electronics	CLUSTER	31-Jan-21	30-Jun-21
M.Tech.	Data Science & Engineering	CLUSTER	20-Mar-21	20-Aug-21
M.Tech.	Software Systems	ATMECS	10-Apr-21	25-Sep-21
M.Tech.	Automotive Electronics	APTIVE	06-Feb-21	30-Jun-21
M.Tech.	Data Science & Engineering	AVAYA	31-Jan-21	30-Jun-21
M.Tech.	Data Science & Engineering	BEL	07-Nov-20	10-Apr-21
M.Tech.	Software Systems	CISCO	08-Aug-20	06-Feb-21
M.Tech.	Data Science & Engineering	HCL	27-Jun-20	22-Nov-20
M.Tech.	Automotive Engineering	CUMMINS	20-Feb-21	20-Jul-21
M.Tech.	Microelectronics	ARICENT	13-Jul-20	28-Dec-20
M.Tech.	Data Science & Engineering	CLUSTER	07-Nov-20	11-Apr-21
M.Tech.	Software Systems	SAMSUNG	09-Nov-20	22-Feb-21
M.Tech.	Software Systems	SAMSUNG	09-Oct-20	14-Mar-20
M.Tech.	Software Engineering	SAP LABS	08-Aug-20	13-Jan-21
M.Tech.	Software Engineering	VERIZON DATA SERVICES	29-Aug-20	31-Jan-21
M.Tech.	Data Science & Engineering	WIPRO TECHNOLOGIES	12-Dec-20	16-May-21
M.Tech.	Software Engineering	WIPRO TECHNOLOGIES	09-Aug-20	25-Nov-20
M.Tech.	Software Engineering	WIPRO TECHNOLOGIES	10-Oct-20	14-Mar-21
M.Tech.	Computing Systems And Infrastructure	WIPRO TECHNOLOGIES	09-Aug-20	25-Nov-20
M.Tech.	Computing Systems And Infrastructure	WIPRO TECHNOLOGIES	10-Oct-20	14-Mar-21
M.Tech.	Systems Engineering	WIPRO WIMS	12-Dec-20	16-May-21
M.Tech.	Data Science & Engineering	INTUIT	06-Feb-21	17-Jul-21
M.Tech.	Design Engineering	CLUSTER	28-Jul-20	05-Jan-21
M.Tech.	Design Engineering	CLUSTER	21-Jul-20	10-Jan-21
PGD	Manufacturing Management	BOSCH	23-Aug-20	23-Jan-21
M.Tech.	Software Engineering	SAP LABS INDIA PVT. LTD.	08-Aug-20	13-Jan-21
M.Tech.	Software Systems	TCS, DELHI	13-Mar-21	13-Sep-21
M.Tech.	Software Systems	WIPRO TECHNOLOGIES	12-Dec-20	16-May-21
M.Tech.	Computing Systems And Infrastructure	WIPRO TECHNOLOGIES	12-Dec-20	16-May-21
B.Sc.	Design And Computing	HCL	07-Nov-20	10-Apr-21
MBA	Business Analytics	HINDUSTAN ZINC	22-Nov-20	22-Apr-21
MBA	Finance	HINDUSTAN ZINC	22-Nov-20	22-Apr-21
PGC	Full Stack Engineering	CERTIFICATE PROGRAMME	16-Nov-20	16-Apr-21
M.Tech.	Software Engineering	SAP LABS	08-Aug-20	13-Jan-21
M.Tech.	Systems Engineering	WIPRO SIM	10-Oct-20	14-Mar-21
B.Sc.	Design And Computing	HCL	08-Aug-20	09-Jan-21
M.Tech.	Software Engineering	ORACLE	17-Oct-20	13-Mar-21
M.Tech.	Software Systems	CISCO	19-Sep-20	20-Mar-21
M.Tech.	Data Science & Engineering	CISCO	26-Sep-20	27-Mar-21
PGC	Artificial Intelligence & Machine Learning	CERTIFICATE PROGRAMME	04-Nov-19	28-Nov-20
PGC	Artificial Intelligence & Machine Learning	CERTIFICATE PROGRAMME	07-Nov-20	21-Mar-21
PGC	Artificial Intelligence & Machine Learning	CERTIFICATE PROGRAMME	30-Mar-20	30-Aug-20

Degree	Programme Name	ORGANIZATION	Start Date	End Date
PGC	Internet Of Things	CERTIFICATE PROGRAMME	08-Nov-20	20-Mar-21
B.Tech.	Manufacturing Technology	MARUTI SUZUKI	06-Dec-20	15-Apr-21
B.Tech.	Manufacturing Technology	GE LOCOMOTIVE	29-Nov-20	31-Mar-21
PGD	Business Analytics	CLUSTER	07-Nov-20	04-Apr-21
PGD	Fintech	CLUSTER	07-Nov-20	04-Apr-21
M.Tech.	Data Science & Engineering	CLUSTER	07-Nov-20	11-Apr-21

B5.11 COURSES OFFERED

The number of courses, offered during the year 2020 is as follows:

	Number of Courses offered
Second Semester 2019-2020	692
First Semester 2020-2021	713

B5.12 NEW COURSES INTRODUCED

The new courses introduced during the year 2020 are given below:

S.No.	Course No.	Course Title
1.	CFSE ZG511	Overview of Full Stack Engineering
2.	CFSE ZG521	Web Development
3.	CFSE ZG531	Mobile Application Development
4.	CFSE ZG541	Cloud Native Development
5.	CFSE ZG551	Agile and DevOps
6.	CFSE ZG561	Deployment of Microservices
7.	CFSE ZG571	Capstone Project
8.	CNSS ZG511	Sanitation Technology
9.	CNSS ZG512	Sanitation and Public Health
10.	CNSS ZG513	Sanitation Governance, Behavioral Change and Advocacy
11.	CNSS ZG515	Emergency Sanitation and Leadership
12.	MBA ZC413	Analytics for Competitive Advantage
13.	MBA ZC419	Financial Risk Analytics
14.	MBA ZG512	Predictive Analytics
15.	MBA ZG516	Introduction to FinTech
16.	MBA ZG517	Financial Analytics
17.	MBA ZG520	Security Analysis & Portfolio Management
18.	MBA ZG527	Entrepreneurship in FinTech
19.	MBA ZG529	Machine Learning for Finance
20.	MBA ZG530	InsurTech
21.	MBA ZG532	Deep Learning Application in Finance
22.	MBA ZG533	Technology Disruptions in FinTech
23.	MBA ZG534	Sustainable Manufacturing
24.	MBA ZG536	Foundations of Data Science

S.No.	Course No.	Course Title
25.	MBA ZG538	Advanced Statistical Methods
26.	MBA ZG539	Data Visualization and Communication
27.	MBA ZG540	International Business and Trade
28.	MBA ZG542	Entrepreneurship and New Ventures
29.	MBA ZG543	Family Business Management
30.	MBA ZG544	Mergers, Acquisitions, and Corporate Restructuring
31.	MBA ZG545	Product Design and Development
32.	MBA ZG547	Modern Manufacturing
33.	MBA ZG548	Manufacturing Strategy
34.	MBA ZG549	Managing Quality in Services Industry
35.	MBA ZG550	Quality Management Systems
36.	MBA ZG551	Quality Analytics
37.	MBA ZG552	Business Acumen for Managing Quality
38.	MBA ZG553	Block Chain and Applications
39.	MBA ZG554	Digital Banking and Beyond
40.	MBA ZG555	Algorithmic and High Frequency Trading
41.	MBA ZG557	FinTech in Wealth Management
42.	MBA ZG558	Financial Risk Management
43.	MBA ZG559	Management of Banks & Financial Institutions
44.	MBA ZG560	Global Financial Markets and Products
45.	MBA ZG561	Behavioural Finance
46.	MBA ZG562	Derivatives & Financial Engineering
47.	MBA ZG563	Analytics for HR
48.	MBA ZG564	Models in Marketing
49.	MBA ZG565	Supply Chain Analytics
50.	MBA ZG566	Analytics for Marketing
51.	MBA ZG567	Analytics for Retail Industry
52.	MBA ZG568	Operations Research Models
53.	MBA ZG569	Analytics for Investment Banking
54.	MBA ZG570	Financial Risk Models
55.	MBA ZG571	Analytical Models in Finance
56.	PDBA ZC413	Analytics for Competitive Advantage
57.	PDBA ZC417	Quantitative Methods
58.	PDBA ZG512	Predictive Analytics
59.	PDBA ZG517	Financial Analytics
60.	PDBA ZG523	Project Management
61.	PDBA ZG536	Foundations of Data Science
62.	PDBA ZG538	Advanced Statistical Methods
63.	PDBA ZG539	Data Visualization and Communication
64.	PDBA ZG563	Analytics for HR

S.No.	Course No.	Course Title
65.	PDBA ZG564	Models in Marketing
66.	PDBA ZG565	Supply Chain Analytics
67.	PDBA ZG566	Analytics for Marketing
68.	PDBA ZG567	Analytics for Retail Industry
69.	PDBA ZG568	Operations Research Models
70.	PDBA ZG569	Analytics for Investment Banking
71.	PDBA ZG570	Financial Risk Models
72.	PDBA ZG571	Analytical Models in Finance
73.	PDFI ZG516	Introduction to FinTech
74.	PDFI ZG517	Financial Analytics
75.	PDFI ZG520	Security Analysis & Portfolio Management
76.	PDFI ZG558	Financial Risk Management
77.	PDFI ZG559	Management of Banks & Financial Institutions
78.	PDFI ZG561	Behavioural Finance
79.	PDFI ZG562	Derivatives & Financial Engineering
80.	PDFT ZC417	Quantitative Methods
81.	PDFT ZC419	Financial Risk Analytics
82.	PDFT ZG516	Introduction to FinTech
83.	PDFT ZG517	Financial Analytics
84.	PDFT ZG521	Financial Management
85.	PDFT ZG527	Entrepreneurship in FinTech
86.	PDFT ZG529	Machine Learning for Finance
87.	PDFT ZG530	InsurTech
88.	PDFT ZG532	Deep Learning Application in Finance
89.	PDFT ZG533	Technology Disruptions in FinTech
90.	PDFT ZG553	Block Chain and Applications
91.	PDFT ZG554	Digital Banking and Beyond
92.	PDFT ZG555	Algorithmic and High Frequency Trading
93.	PDFT ZG557	FinTech in Wealth Management
94.	PDFT ZG560	Global Financial Markets and Products
95.	SE ZC420	Data Visualization
96.	SE ZC444	Artificial Intelligence
97.	SE ZG514	Introduction to DevOps
98.	SE ZG516	Embedded System Design
99.	SE ZG522	Big Data Systems
100.	SE ZG528	Cyber Physical Systems
101.	SE ZG544	Agile Software Processes
102.	SE ZG568	Applied Machine Learning
103.	SE ZG569	Blockchain Technologies & Systems
104.	SE ZG583	Scalable Services

S.No.	Course No.	Course Title
105.	SE ZG585	Cross Platform Application Development
106.	SE ZG586	Edge Computing
107.	SE ZG587	Open Source Software Engineering
108.	SE ZG589	Middleware Technologies
109.	SE ZG681	Cyber Security
110.	SE ZG685	Software Product Management
111.	SS ZC111	Probability and Statistics
112.	SS ZC163	Computer Programming
113.	SS ZC222	Discrete Structures for Computer Science
114.	SS ZC234	Linear Algebra & Optimization
115.	SS ZC241	Principles of Management
116.	SS ZC263	Digital Electronics and Microprocessors
117.	SS ZC312	Technical Report Writing
118.	SS ZC313	Object Oriented Programming & Design
119.	SS ZC327	Systems Programming
120.	SS ZC328	Software Testing
121.	SS ZC337	Database Systems & Applications
122.	SS ZC343	Software Engineering
123.	SS ZC353	Computer Organization & Architecture
124.	SS ZC363	Data Structures & Algorithms
125.	SS ZC364	Operating Systems
126.	SS ZC373	Compiler Design
127.	SS ZC416	Mathematical Foundations for Data Science
128.	SS ZC425	Data Mining
129.	SS ZC427	Software for Embedded Systems
130.	SS ZC444	Artificial Intelligence
131.	SS ZC446	Data Storage Technologies and Networks
132.	SS ZC462	Network Programming
133.	SS ZC467	Computer Networks
134.	SS ZG512	Embedded System Design
135.	SS ZG522	Design and Operation of Data Centres
136.	SS ZG526	Distributed Computing
137.	SS ZG528	Cyber Physical Systems
138.	SS ZG529	Deep Learning
139.	SS ZG530	Natural Language Processing
140.	SS ZG536	Advanced Statistical Techniques for Analytics
141.	SS ZG553	Real Time Systems
142.	SS ZG556	Stream Processing and Analytics
143.	SS ZG567	AI and ML Techniques in Cyber Security
144.	SS ZG568	Applied Machine Learning

S.No.	Course No.	Course Title
145.	SS ZG569	Blockchain Technologies & Systems
146.	SS ZG570	Cloud, IoT and Enterprise Security
147.	SS ZG574	Embedded Network Security
148.	SS ZG575	Ethical Hacking
149.	SS ZG576	Identity and Access Management Technologies
150.	SS ZG577	Metaheuristics for Optimization
151.	SS ZG578	Mobile Networks
152.	SS ZG579	Real Time Scheduling
153.	SS ZG580	Software Defined Networks
154.	SS ZG584	Data Management for IoT
155.	SS ZG585	Cross Platform Application Development
156.	SS ZG586	Edge Computing
157.	SS ZG588	Cyber Crimes, Forensics and Incident Handling
158.	SS ZG589	Middleware Technologies
159.	SS ZG681	Cyber Security
160.	SS ZG682	Embedded Middleware Design
161.	SS ZG683	Fault Tolerant Embedded System
162.	SS ZG684	Parallel Embedded Architectures

B5.13 LIVE INTERACTIVE LECTURE SESSIONS

For the WILP courses offered during II Semester 2019-2020 and I Semester 2020-2021 for the B.Tech. Engineering Technology, B.Tech. Information Systems, B.Tech. Manufacturing Technology, B.Tech. Process Engineering, B.Tech. Power Engineering, MSc. Business Analytics, M.Sc. Information Systems, MBA Consultancy Management, MBA Finance, MBA Hospital & Health Systems Management, MBA Manufacturing Management, MBA Quality Management, M.Tech. Computing Systems & Infrastructure, M.Tech. Microelectronics, M.Tech. Software Systems, M.Tech. Manufacturing Management, M.Tech. Embedded Systems degree programmes, live interactive online lecture sessions were delivered through Internet Based Desktop Video Conferencing systems using Cisco WebEx technology. The video lectures were also recorded and made available on-demand. The students and faculty could also interact asynchronously and share learning resources through an online Learning Management System named Taxila, based on Moodle technology.

Second Semester 2019-2020		
S.No.	Course No.	COURSE TITLE
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AE ZC442	ADVANCED DRIVER ASSISTANCE SYSTEMS
3.	AE ZC443	CONNECTED CARS
4.	AE ZG510 / AEL ZG510	AUTOMOTIVE CONTROL SYSTEMS
5.	AE ZG511/AEL ZG533	MECHATRONICS
6.	AE ZG516	ADVANCES IN IC ENGINES
7.	AE ZG517	AUTOMATIVE SYSTEMS ENGINEERING
8.	AE ZG518	ELECTRIC AND HYBRID VEHICLES
9.	AE ZG519	AUTOMOTIVE SECURITY
10.	AE ZG522	ADVANCED VECHILE ACOUSTICS
11.	AE ZG524	VEHICLE DYNAMICS

S.No.	Course No.	COURSE TITLE
12.	AE ZG612/DM ZG612	ADVANCES IN MATERIALS, COMPOSITES AND PLASTICS
13.	AE ZG621	DURABILITY, CRASH & SAFETY ENGINEERING
14.	AE ZG633	ADVANCES IN VEHICLE BODY STRUCTURES
15.	AEL ZC441	AUTOMOTIVE VEHICLE
16.	AEL ZG512	EMBEDDED SYSTEM DESIGN
17.	BA ZC411 / MBA ZC411	MARKETING
18.	BA ZC412	MODELS & APP IN OPR RESEARCH
19.	BA ZC413	INTRO TO STATISTICAL METHODS
20.	BA ZC414	INTRO TO STATISTICAL METHODS
21.	BA ZC415	ANALYTICS FOR COMPETITIVE ADV
22.	BA ZC417	FINANCIAL RISK ANALYTICS
23.	BA ZC418	ADVANCED FINANCIAL MODELLING
24.	BA ZC420	DATA VISUALIZATION
25.	BA ZC421	MARKETING MODELS
26.	BA ZC423	RETAIL ANALYTICS
27.	BA ZC424	SUPPLY CHAIN ANALYTICS
28.	BA ZC425	HR ANALYTICS
29.	BA ZC426	REAL TIME ANALYTICS
30.	BA ZC471 / BITS ZC471 / POM ZC471	MANAGEMENT INFORMATION SYSTEMS
31.	BA ZG512	PREDICTIVE ANALYTICS
32.	BA ZG521 / FIN ZG521 / MBA ZG521 / POM ZG513	FINANCIAL MANAGEMENT
33.	BA ZG522	BUSINESS DATA MINING
34.	BA ZG523 / CSI ZG523	INTRO TO DATA SCIENCE
35.	BA ZG524	ADVANCED STATISTICAL METHODS
36.	BA ZG525	BIG DATA ANALYTICS
37.	BA ZG621 / MBA ZG621 / MM ZG621 / POM ZG621/QM ZG621	SUPPLY CHAIN MANAGEMENT
38.	BITS ZC463 / CSI ZC463	CRYPTOGRAPHY
39.	BITS ZG553 / ES ZG553 / MEL ZG553	REAL TIME SYSTEMS
40.	CS ZG524 / ES ZG524 / MEL ZG524	REAL TIME OPERATING SYSTEMS
41.	CS ZG525 / CSI ZG525/ ES ZG526	ADVANCED COMPUTER NETWORKS
42.	CSI ZC423 / IS ZC423/SSAT ZC423	S/W DEV FOR PORTABLE DEVICES
43.	CSI ZC446 / ES ZC446 / IS ZC446	DATA STORAGE TECH & NETWORKS
44.	CSI ZC462 / IS ZC462	NETWORK PROGRAMMING
45.	CSI ZG513 / ES ZG513 / SS ZG513	NETWORK SECURITY
46.	CSI ZG514	INTRO TO DEVOPS
47.	CSI ZG515 / SS ZG515	DATA WAREHOUSING
48.	CSI ZG518 / SS ZG518	DATABASE DESIGN & APPLICATIONS
49.	CSI ZG522	DESIGN AND OPERATIONS OF DATA CENTRES
50.	CSI ZG524	MIDDLEWARE TECHNOLOGIES
51.	CSI ZG526	WEB TECHNOLOGIES
52.	CSI ZG527 / SS ZG527	CLOUD COMPUTING
53.	CSI ZG528	CYBER PHYSICAL SYSTEMS
54.	CSI ZG538 / SS ZG538	INFRASTRUCTURE MANAGEMENT

S.No.	Course No.	COURSE TITLE
55.	CSI ZG582 / SS ZG582	TELECOM NETWORK MANAGEMENT
56.	CSI ZG656 / ES ZG656 / MEL ZG656 / SS ZG656/SSAT ZG656	NETWORK EMBEDDED APPLICATIONS
57.	DE ZC415 / MEL ZC415	INTRODUCTION TO MEMS
58.	DE ZG513	FINITE ELEMENT METHODS
59.	DE ZG514	FRACTURE MECHANICS
60.	DE ZG515	COMPUTATIONAL FLUID DYNAMICS
61.	DE ZG516 / DM ZG511 / ES ZG511	MECHATRONICS
62.	DE ZG523 / ES ZG523 / MBA ZG523 / MM ZG523 / POM ZG523 / QM ZG523	PROJECT MANAGEMENT
63.	DE ZG525	MECHANICAL SYSTEM DESIGN
64.	DE ZG526	ADVANCED COMPOSITES
65.	DE ZG535	ADV ENGINEERING MATHEMATICS
66.	DE ZG541 /DM ZG541/ MM ZG541	PRODUCT DESIGN
67.	DE ZG561 / ES ZG561	MECHANISMS & ROBOTICS
68.	DE ZG611	DYNAMICS & VIBRATIONS
69.	DE ZG622	COMPUTER AIDED ANALYSIS & DESIGN
70.	DE ZG631	MATERIALS TECH & TESTING
71.	DE ZG641	THEORY OF ELASTICITY AND PLASTICITY
72.	DE ZG663 / QM ZG663	CONCURRENT ENGINEERING
73.	DM ZG521	DESIGN FOR ADDITIVE MANUFACTURING
74.	DM ZG531	HIGH PRECISION MANUFACTURING
75.	DM ZG622	INDUSTRIAL IOT
76.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
77.	EEE ZG512 / ES ZG512 / MEL ZG526/SSAT ZG512	EMBEDDED SYSTEM DESIGN
78.	EEE ZG571 / ES ZG571	OPTICAL COMMUNICATION
79.	EEE ZG573 / ES ZG573 / MEL ZG573	DIGITAL SIGNAL PROCESSING
80.	ENGG ZC112 / PE ZC112 / PEAB ZC114	ELECTRICAL & ELECTRONIC TECH
81.	ENGG ZC232 / PE ZC234/PEAB ZC231	ENGINEERING MATERIALS
82.	ENGG ZC242 / POWAB ZC431	MAINTENANCE & SAFETY
83.	ENGG ZC243	MECHANICAL TECHNOLOGY
84.	ES ZC263	DIGITAL ELECTRONICS & MICROPROCESSORS
85.	ES ZC424 / IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
86.	ES ZC481 / IS ZC467	COMPUTER NETWORKS
87.	ES ZG531 / SS ZG531/SSAT ZG531	PERVASIVE COMPUTING
88.	ES ZG532 / MEL ZG531	TESTABILITY FOR VLSI
89.	ES ZG554 /MEL ZG554	RECONFIGURABLE COMPUTING
90.	ES ZG612	FAULT TOLERANT SYSTEM DESIGN
91.	ES ZG613 / MEL ZG613	ADV DIGITAL SIGNAL PROCESSING
92.	ES ZG621 / MEL ZG621	VLSI DESIGN
93.	ES ZG626 / MEL ZG651/SSAT ZG626	HARDWARE SOFTWARE CO-DESIGN
94.	ES ZG642 / MEL ZG642	VLSI ARCHITECTURES
95.	ET ZC235 / PE ZC236/PEAB ZC234	MANUFACTURING PROCESSES
96.	ET ZC323	MECHATRONICS & AUTOMATION
97.	ET ZC343 /PE ZC343	MATERIALS MANAGEMENT

S.No.	Course No.	COURSE TITLE
98.	ET ZC344 / POWAB ZC344	INSTRUMENTATION & CONTROL
99.	ET ZC353 / PE ZC352	ENERGY MANAGEMENT
100.	ET ZC362 / PE ZC411	ENVIRONMENTAL POLLUTION CTRL
101.	ET ZC413	ENGINEERING DESIGN
102.	ET ZC416 / PE ZC413/PEAB ZC414	PRODUCTION PLANNING & CONTROL
103.	ET ZC417	MANUFACTURING EXCELLENCE
104.	ET ZC423 /PE ZC423	ESSENTIALS OF PROJECT MGMT
105.	ET ZC424	PLANT LAYOUT AND DESIGN
106.	ET ZC434/ PE ZC434	QUALITY CONTROL ASSURANCE & RELIABILITY
107.	ET ZC448/ MM ZC448	ADDITIVE MANUFACTURING
108.	ET ZC449/MM ZC449	IOT IN MANUFACTURING
109.	FIN ZC415 / MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNT
110.	FIN ZG512	GLOBAL FIN MKTS AND PRODUCTS
111.	FIN ZG513	MGT OF BANKS & FIN INSTITUTIONS
112.	FIN ZG514	DERIVATIVES & RISK MANAGEMENT
113.	FIN ZG518	MULTINATIONAL FINANCE
114.	FIN ZG519	BUSINESS ANALYSIS & VALUATION
115.	FIN ZG520	SECURITY ANALYSIS & PORTFOLIO MGMT
116.	FIN ZG522	MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURING
117.	FIN ZG523	MARKET RISK MANAGEMENT
118.	FIN ZG524	CREDIT RISK MANAGEMENT
119.	FIN ZG528	VENTURE CAPITAL & PVT EQUITY
120.	HHSM ZG517	HEALTH CARE MANAGEMENT
121.	HHSM ZG615	SERVICE QUALITY EXCELLENCE IN HEALTH CARE
122.	HHSM ZG631	INTRO TO HEALTH SYSTEMS & ENV HEALTH
123.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
124.	IS ZC327	SYSTEMS PROGRAMMING
125.	IS ZC328	SOFTWARE TESTING
126.	IS ZC337	DATABASE SYSTEMS & APPLICATIONS
127.	IS ZC343	SOFTWARE ENGINEERING
128.	IS ZC353	COMPUTER ORGANISATION & ARCHITECTURE
129.	IS ZC363	DATA STRUCTURES & ALGORITHM
130.	IS ZC364	OPERATING SYSTEMS
131.	IS ZC373	COMPILER DESIGN
132.	IS ZC415	DATA MINING
133.	IS ZC444	ARTIFICIAL INTELLIGENCE
134.	MATH ZC222	DISCRETE STRUCTURES FOR COMPUTER SCIENCE
135.	MATH ZC233 / PE ZC233/PEAB ZC233	CALCULUS
136.	MATH ZC234 / PE ZC235 /POWTP ZC234	LINEAR ALGEBRA & OPTIMIZATION
137.	MBA ZC416	MANAGERIAL ECONOMICS
138.	MBA ZC417	QUANTITATIVE METHODS
139.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
140.	MBA ZG513	ENTERPRISE RESOURCE PLANNING

S.No.	Course No.	COURSE TITLE
141.	MBA ZG514 / MM ZG514 / QM ZG514	LEADERSHIP & MANAGING CHANGE
142.	MBA ZG515	CONSULTING & PEOPLE SKILLS
143.	MBA ZG522 / MM ZG522 / QM ZG532	TOTAL QUALITY MANAGEMENT
144.	MBA ZG524 / QM ZG524	QUALITY MANAGEMENT SYSTEMS
145.	MBA ZG525	BUSINESS PROCESS ANALYSIS
146.	MBA ZG526 / QM ZG526	OPERATIONS MANAGEMENT
147.	MBA ZG531 / QM ZG531	STATISTICAL QUALITY CONTROL
148.	MBA ZG535 / MM ZG535 / QM ZG535	DECISION ANALYSIS
149.	MBA ZG537 / MM ZG537	LEAN MANUFACTURING
150.	MBA ZG541	CONSULTANCY PRACTICE
151.	MBA ZG611 / MM ZG611 / QM ZG611 / POM ZG611	STRAT MGMT & BUSINESS POLICY
152.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
153.	MBA ZG661 / QM ZG662 / SS ZG661	SOFTWARE QUALITY MANAGEMENT
154.	MEL ZG510	RF MICROELECTRONICS
155.	MEL ZG611	IC FABRICATION TECHNOLOGY
156.	MEL ZG625	ADVANCED ANALOG AND MIXED SIGNAL DESIGN
157.	MEL ZG631	PHYSICS & MOD OF MICROELECT DEVICES
158.	MEL ZG632	ANALOG IC DESIGN
159.	MEL ZG641	CAD FOR IC DESIGN
160.	MGTS ZC211 / PE ZC221 / POWTP ZC232	PRINCIPLES OF MANAGEMENT
161.	MM ZC441 / POM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
162.	MM ZC472 / QM ZC472 / DM ZC472	PRECISION ENGINEERING
163.	MM ZG512	MANUFACTURING STRATEGY
164.	MM ZG515 / QM ZG515	QUANTITATIVE METHODS
165.	MM ZG533 / DM ZG533	MANUFACTURING PLANNING & CONT
166.	MM ZG534 / DM ZG534	SUSTAINABLE MANUFACTURING
167.	MM ZG539 / QM ZG539	SIX SIGMA
168.	MM ZG627	MANAGERIAL CORPORATE FINANCE
169.	PE ZC164 / TA ZC164 / PEAB ZC164	COMPUTER PROGRAMMING (MATLAB)
170.	PE ZC213 / TA ZC233/PEAB ZC215	ENGINEERING MEASUREMENTS
171.	PE ZC313	CHEMICAL ENGG THERMODYNAMICS
172.	PE ZC318/PEAB ZC318	FUNDA OF TRANSPORT PROCESSES
173.	PE ZC319/PEAB ZC319	UNIT OPERATIONS - I
174.	PE ZC320	UNIT OPERATIONS - II
175.	PE ZC321	CHEMICAL PROCESS CALCULATIONS
176.	PE ZC323	PROCESS DESIGN PRINCIPLES
177.	PE ZC412	PROCESS EQUIPMENT DESIGN
178.	PE ZC452	PROCESS PLANT SAFETY AND ENVIRONMENT
179.	PE ZC453	PROCESS CTRL & INSTRUMENTATION
180.	POM ZG512	DOSAGE FORM DESIGN
181.	POM ZG515	PHARMA ADMIN AND MANAGEMENT
182.	POM ZG521	STATISTICAL PROCESS CONTROL
183.	POM ZG522	QUALITY ASSU & REG AFFAIRS

S.No.	Course No.	COURSE TITLE
184.	POM ZG525	PHARMACEUTICAL DEVELOPMENT AND SCALE UP
185.	POM ZG534	ADVANCED PHARMACEUTICAL TECHNOLOGY
186.	POM ZG545	INTELLECTUAL PROPERTY RIGHTS AND PHARMACEUTICALS
187.	QM ZG528	RELIABILITY ENGINEERING
188.	SS ZG514	OBJ ORIENTED ANALYSIS & DESIGN
189.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN
190.	SS ZG520 / MEL ZG520/ES ZG520/CSI ZG520	WIRELESS & MOB COMMUNICATION
191.	SS ZG526/SSAT ZG526	DISTRIBUTED COMPUTING
192.	SS ZG536	ADV STAT TECHNIQUES FOR ANALYTICS
193.	SS ZG537	INFORMATION RETRIEVAL
194.	SS ZG547	USABILITY ENGINEERING
195.	SS ZG548	ADVANCED DATA MINING
196.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
197.	SS ZG554	DISTRIBUTED DATA SYSTEMS
198.	SS ZG562	SOFTWARE ENGINEERING AND MANAGEMENT
199.	SS ZG565	MACHINE LEARNING
200.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
201.	SS ZG653/SSAT ZG653	SOFTWARE ARCHITECTURES
202.	SS ZG681	CYBER SECURITY
203.	SSTM ZG511	SANITATION TECHNOLOGY
204.	SSTM ZG512	SANITATION AND PUBLIC HEALTH
205.	SSTM ZG524	ENVIRONMENTAL STATISTICS
206.	SSTM ZG528	ENVIRONMENTAL IMPACT AND RISK ASSESSMENT
207.	TA ZC163	COMPUTER PROGRAMMING
208.	TA ZC312 /PE ZC312/POWTP ZC321	TECHNICAL REPORT WRITING

First Semester 2020-2021

S.No.	Course No.	COURSE TITLE
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AE ZC442/ AEL ZC442	ADVANCED DRIVER ASSISTANCE SYSTEMS
3.	AE ZC443	CONNECTED CARS
4.	AE ZG510	AUTOMOTIVE CONTROL SYSTEMS
5.	AE ZG511/AEL ZG533	MECHATRONICS/AUTOTRONICS
6.	AE ZG512 / AEL ZG512	EMBEDDED SYSTEM DESIGN
7.	AE ZG516	ADVANCES IN IC ENGINES
8.	AE ZG517/ AEL ZG517	AUTOMATIVE SYSTEMS ENGINEERING
9.	AE ZG518	ELECTRIC AND HYBRID VEHICLES
10.	AE ZG519/AEL ZG519	AUTOMOTIVE SECURITY
11.	AE ZG522	ADVANCED VECHILE ACOUSTICS
12.	AE ZG524	VEHICLE DYNAMICS
13.	AE ZG612/ DM ZG612	ADVANCES IN MATERIALS, COMPOSITES AND PLASTICS
14.	AE ZG621	DURABILITY, CRASH & SAFETY ENGINEERING
15.	AE ZG633	ADVANCES IN VEHICLE BODY STRUCTURES

S.No.	Course No.	COURSE TITLE
16.	AEL ZC441	AUTOMOTIVE VEHICLE
17.	AEL ZG513	AUTOMOTIVE COMM SYSTEMS
18.	AEL ZG534	AUTOMOTIVE NETWORKING
19.	BA ZC411 / MBA ZC411	MARKETING
20.	BA ZC412	MODELS & APP IN OPR RESEARCH
21.	BA ZC413	INTRO TO STATISTICAL METHODS
22.	BA ZC414	OPTIMIZATION METHODS FOR ANALY
23.	BA ZC415	ANALYTICS FOR COMPETITIVE ADV
24.	BA ZC417	FINANCIAL RISK ANALYTICS
25.	BA ZC418	ADVANCED FINANCIAL MODELLING
26.	BA ZC420 / SE ZC420	DATA VISUALIZATION
27.	BA ZC421	MARKETING MODELS
28.	BA ZC423	RETAIL ANALYTICS
29.	BA ZC424	SUPPLY CHAIN ANALYTICS
30.	BA ZC425	HR ANALYTICS
31.	BA ZC426	REAL TIME ANALYTICS
32.	BA ZC471/BITS ZC471 / POM ZC471	MANAGEMENT INFORMATION SYSTEMS
33.	BA ZG512	PREDICTIVE ANALYTICS
34.	BA ZG521 / MBA ZG521 / POM ZG513/PDFI ZG521	FINANCIAL MANAGEMENT
35.	BA ZG522	BUSINESS DATA MINING
36.	BA ZG523 / CSI ZG523	INTRO TO DATA SCIENCE
37.	BA ZG524/PDBA ZG538	ADVANCED STATISTICAL METHODS
38.	BA ZG525	BIG DATA ANALYTICS
39.	BA ZG621 / MBA ZG621 / MM ZG621 / POM ZG621/QM ZG621	SUPPLY CHAIN MANAGEMENT
40.	BITS ZC463 / CSI ZC463/SS ZC463	CRYPTOGRAPHY
41.	BITS ZG553 / ES ZG553 / MEL ZG553	REAL TIME SYSTEMS
42.	CM ZC473	INTERNATIONAL BUSINESS
43.	CS ZG524 / ES ZG524 / MEL ZG524	REAL TIME OPERATING SYSTEMS
44.	CS ZG525 / CSI ZG525/ ES ZG526	ADVANCED COMPUTER NETWORKS
45.	CSI ZC423 / IS ZC423	S/W DEV FOR PORTABLE DEVICES
46.	CSI ZC446 / ES ZC446 / IS ZC446/SS ZC446	DATA STORAGE TECH & NETWORKS
47.	CSI ZC462 / IS ZC462	NETWORK PROGRAMMING
48.	CSI ZG513 / ES ZG513 / SS ZG513/SSAT ZG513	NETWORK SECURITY
49.	CSI ZG514 / SE ZG514	INTRO TO DEVOPS
50.	CSI ZG515 / SS ZG515	DATA WAREHOUSING
51.	CSI ZG518 / SS ZG518	DATABASE DESIGN & APPLICATIONS
52.	CSI ZG522	DESIGN AND OPERATIONS OF DATA CENTRES
53.	CSI ZG524	MIDDLEWARE TECHNOLOGIES
54.	CSI ZG526	WEB TECHNOLOGIES
55.	CSI ZG527 / SS ZG527 / SE ZG527	CLOUD COMPUTING
56.	CSI ZG528/SS ZG528 / SE ZG528	CYBER PHYSICAL SYSTEMS
57.	CSI ZG538 / SS ZG538	INFRASTRUCTURE MANAGEMENT
58.	CSI ZG582 / SS ZG582	TELECOM NETWORK MANAGEMENT

S.No.	Course No.	COURSE TITLE
59.	DE ZC415 / MEL ZC415	INTRODUCTION TO MEMS
60.	DE ZG513	FINITE ELEMENT METHODS
61.	DE ZG514	FRACTURE MECHANICS
62.	DE ZG515	COMPUTATIONAL FLUID DYNAMICS
63.	DE ZG516 / DM ZG511 / ES ZG511	MECHATRONICS
64.	DE ZG523 / ES ZG523 / MBA ZG523 / MM ZG523 / POM ZG523 / QM ZG523	PROJECT MANAGEMENT
65.	DE ZG525	MECHANICAL SYSTEM DESIGN
66.	DE ZG526	ADVANCED COMPOSITES
67.	DE ZG535	ADV ENGINEERING MATHEMATICS
68.	DE ZG541 /DM ZG541/ MM ZG541	PRODUCT DESIGN
69.	DE ZG561 / ES ZG561/DM ZG561	MECHANISMS & ROBOTICS
70.	DE ZG611	DYNAMICS & VIBRATIONS
71.	DE ZG622	COMPUTER AIDED ANALYSIS & DESIGN
72.	DE ZG631	MATERIALS TECH & TESTING
73.	DE ZG641	THEORY OF ELASTICITY AND PLASTICITY
74.	DE ZG663 / QM ZG663	CONCURRENT ENGINEERING
75.	DM ZG521	DESIGN FOR ADDITIVE MANUFACTURING
76.	DM ZG531	HIGH PRECISION MANUFACTURING
77.	DM ZG532	BIG DATA ANALYTICS IN MANUFACTURING
78.	DM ZG535	CYBER SECURITY IN MANUFACTURING
79.	DM ZG622	INDUSTRIAL IOT
80.	DM ZG631	ADDITIVE MANUFACTURING PROCESS
81.	EA ZC412 / MM ZC412/DM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
82.	EE ZG511	ENVIRONMENTAL CHEMISTRY
83.	EE ZG512	ENVIRONMENTAL BIOTECHNOLOGY
84.	EE ZG513	APPLIED TRANSPORT PHENOMENA
85.	EE ZG515	ENVIRONMENTAL MANAGEMENT SYSTEMS
86.	EEE ZG512 / ES ZG512 / MEL ZG526/SS ZG512	EMBEDDED SYSTEM DESIGN
87.	EEE ZG571 / ES ZG571	OPTICAL COMMUNICATION
88.	EEE ZG573 / ES ZG573 / MEL ZG573	DIGITAL SIGNAL PROCESSING
89.	ENGG ZC112 / PE ZC112	ELECTRICAL & ELECTRONIC TECH
90.	ENGG ZC232 / PE ZC234	ENGINEERING MATERIALS
91.	ENGG ZC242	MAINTENANCE & SAFETY
92.	ENGG ZC243	MECHANICAL TECHNOLOGY
93.	ES ZC263	DIGITAL ELECTRONICS & MICROPROCESSORS
94.	ES ZC424 / IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
95.	ES ZC481 / IS ZC467	COMPUTER NETWORKS
96.	ES ZG531 / SS ZG531/SSAT ZG531	PERVASIVE COMPUTING
97.	ES ZG532 / MEL ZG531	TESTABILITY FOR VLSI
98.	ES ZG554 /MEL ZG554	RECONFIGURABLE COMPUTING
99.	ES ZG612	FAULT TOLERANT SYSTEM DESIGN
100.	ES ZG613 / MEL ZG613	ADV DIGITAL SIGNAL PROCESSING
101.	ES ZG621 / MEL ZG621	VLSI DESIGN

S.No.	Course No.	COURSE TITLE
102.	ES ZG626 / MEL ZG651/SSAT ZG626	HARDWARE SOFTWARE CO-DESIGN
103.	ES ZG642 / MEL ZG642	VLSI ARCHITECTURES
104.	ES ZG656 / MEL ZG656 / SS ZG656/SSAT ZG656	NETWORK EMBEDDED APPLICATIONS
105.	ET ZC235 / PE ZC236	MANUFACTURING PROCESSES
106.	ET ZC323	MECHATRONICS & AUTOMATION
107.	ET ZC343 /PE ZC343	MATERIALS MANAGEMENT
108.	ET ZC344	INSTRUMENTATION & CONTROL
109.	ET ZC353 / PE ZC352	ENERGY MANAGEMENT
110.	ET ZC362 / PE ZC411/POWAB ZC411	ENVIRONMENTAL POLLUTION CTRL
111.	ET ZC413	ENGINEERING DESIGN
112.	ET ZC416 / PE ZC413	PRODUCTION PLANNING & CONTROL
113.	ET ZC417	MANUFACTURING EXCELLENCE
114.	ET ZC423 /PE ZC423	ESSENTIALS OF PROJECT MGMT
115.	ET ZC424	PLANT LAYOUT AND DESIGN
116.	ET ZC434/ PE ZC434/POWAB ZC434	QUALITY CONTROL ASSURANCE & RELIABILITY
117.	ET ZC448/MM ZC448	ADDITIVE MANUFACTURING
118.	ET ZC449/MM ZC449	IOT IN MANUFACTURING
119.	FIN ZG512/PDFI ZG560	GLOBAL FIN MKTS AND PRODUCTS
120.	FIN ZG513	MGT OF BANKS & FIN INSTITUTIONS
121.	FIN ZG514	DERIVATIVES & RISK MANAGEMENT
122.	FIN ZG518	MULTINATIONAL FINANCE
123.	FIN ZG519	BUSINESS ANALYSIS & VALUATION
124.	FIN ZG520/PDFI ZG520	SECURITY ANALYSIS & PORTFOLIO MGMT
125.	FIN ZG522	MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURING
126.	FIN ZG523	MARKET RISK MANAGEMENT
127.	FIN ZG528	VENTURE CAPITAL & PVT EQUITY
128.	HHSM ZG513	BIOSTATISTICS & EPIDEMIOLOGY
129.	HHSM ZG516	EPIDEMIC & DISASTER MANAGEMENT
130.	HHSM ZG517	HEALTH CARE MANAGEMENT
131.	HHSM ZG614	HOSPITAL OPERATIONS MANAGEMENT
132.	HHSM ZG615	SERVICE QUALITY EXCELLENCE IN HEALTH CARE
133.	HHSM ZG617	STATATEGIC MANAGEMENT OF HEALTH CARE ORGANIZATION
134.	HHSM ZG631	INTRO TO HEALTH SYSTEMS & ENV HEALTH
135.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
136.	IS ZC327	SYSTEMS PROGRAMMING
137.	IS ZC353	COMPUTER ORGANISATION & ARCHITECTURE
138.	IS ZC363	DATA STRUCTURES & ALGORITHM
139.	IS ZC415/SS ZC425 / SE ZC425	DATA MINING
140.	IS ZC444 / SS ZC444/SE ZC444	ARTIFICIAL INTELLIGENCE
141.	MATH ZC222	DISCRETE STRUCTURES FOR COMPUTER SCIENCE
142.	MATH ZC233 / PE ZC233	CALCULUS
143.	MATH ZC234 / PE ZC235	LINEAR ALGEBRA & OPTIMIZATION

S.No.	Course No.	COURSE TITLE
144.	MBA ZC415/PDFI ZC415	FINANCIAL & MANAGEMENT ACCOUNT
145.	MBA ZC416	MANAGERIAL ECONOMICS
146.	MBA ZC417/PDBA ZC417/CMZG515	QUANTITATIVE METHODS
147.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
148.	MBA ZG513	ENTERPRISE RESOURCE PLANNING
149.	MBA ZG514 / MM ZG514 / QM ZG514	LEADERSHIP & MANAGING CHANGE
150.	MBA ZG515	CONSULTING & PEOPLE SKILLS
151.	MBA ZG522 / MM ZG522 / QM ZG532	TOTAL QUALITY MANAGEMENT
152.	MBA ZG524 / QM ZG524	QUALITY MANAGEMENT SYSTEMS
153.	MBA ZG525	BUSINESS PROCESS ANALYSIS
154.	MBA ZG526 / QM ZG526	OPERATIONS MANAGEMENT
155.	MBA ZG531 / QM ZG531	STATISTICAL QUALITY CONTROL
156.	MBA ZG535 / MM ZG535 / QM ZG535	DECISION ANALYSIS
157.	MBA ZG537 / MM ZG537	LEAN MANUFACTURING
158.	MBA ZG541	CONSULTANCY PRACTICE
159.	MBA ZG611 / MM ZG611 / QM ZG611 / POM ZG611	STRAT MGMT & BUSINESS POLICY
160.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
161.	MBA ZG661 / QM ZG662 / SS ZG661 / SE ZG661	SOFTWARE QUALITY MANAGEMENT
162.	MEL ZG510	RF MICROELECTRONICS
163.	MEL ZG611	IC FABRICATION TECHNOLOGY
164.	MEL ZG623	ADVANCED VLSI DESIGN
165.	MEL ZG631	PHYSICS & MOD OF MICROELECT DEVICES
166.	MEL ZG632	ANALOG IC DESIGN
167.	MEL ZG641	CAD FOR IC DESIGN
168.	MGTS ZC211/ PE ZC221	PRINCIPLES OF MANAGEMENT
169.	MM ZC441 / POM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
170.	MM ZC472 / QM ZC472/DM ZC472	PRECISION ENGINEERING
171.	MM ZG512	MANUFACTURING STRATEGY
172.	MM ZG515 / QM ZG515	QUANTITATIVE METHODS
173.	MM ZG533/ DM ZG533	MANUFACTURING PLANNING & CONT
174.	MM ZG534	SUSTAINABLE MANUFACTURING
175.	MM ZG539/QM ZG539	SIX SIGMA
176.	MM ZG627	MANAGERIAL CORPORATE FINANCE
177.	PDBA ZG536	FOUNDATION OF DATA SCIENCE
178.	PDBA ZG539	DATA VISUALIZATION & COMMUNICATION
179.	PE ZC164 / TA ZC164	COMPUTER PROGRAMMING
180.	PE ZC312/TA ZC312	TECHNICAL REPORT WRITING
181.	PE ZC313	CHEMICAL ENGG THERMODYNAMICS
182.	PE ZC318	FUNDA OF TRANSPORT PROCESSES
183.	PE ZC320	UNIT OPERATIONS - II
184.	PE ZC323	PROCESS DESIGN PRINCIPLES
185.	PE ZC412	PROCESS EQUIPMENT DESIGN
186.	PE ZC452	PROCESS PLANT SAFETY AND ENVIRONMENT

S.No.	Course No.	COURSE TITLE
187.	PE ZC453	PROCESS CTRL & INSTRUMENTATION
188.	POM ZG512	DOSAGE FORM DESIGN
189.	POM ZG515	PHARMA ADMIN AND MANAGEMENT
190.	POM ZG521	STATISTICAL PROCESS CONTROL
191.	POM ZG522	QUALITY ASSU & REG AFFAIRS
192.	POM ZG525	PHARMACEUTICAL DEVELOPMENT AND SCALE UP
193.	POM ZG534	ADVANCED PHARMACEUTICAL TECHNOLOGY
194.	POM ZG541	MODERN ANALYTICAL TECHNIQUES
195.	POM ZG545	INTELLECTUAL PROPERTY RIGHTS AND PHARMACEUTICALS
196.	POM ZG631	TQM TOOLS & TECHNIQUES
197.	POWAB ZC231/POWTPZC231	THERMODYNAMICS
198.	POWAB ZC314	PRIME MOVERS AND FLUID MACHINES
199.	POWAB ZC441	POWER SYSTEM ENGINEERING - II
200.	POWTP ZC343	MICROPROCESSORS & MICROCONTROLLERS
201.	QM ZG528	RELIABILITY ENGINEERING
202.	QM ZG536	DESIGN OF EXPERIMENTS
203.	SE ZG544	AGILE SOFTWARE PROCESSES
204.	SS ZC416	MATHEMATICAL FOUNDATIONS FOR DATA SCIENCE
205.	SS ZC467	COMPUTER NETWORKS
206.	SS ZG514 / SE ZG512	OBJ ORIENTED ANALYSIS & DESIGN
207.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN
208.	SS ZG520 / MEL ZG520/ES ZG520/CSI ZG520	WIRELESS & MOB COMMUNICATION
209.	SS ZG526	DISTRIBUTED COMPUTING
210.	SS ZG536	ADV STAT TECHNIQUES FOR ANALYTICS
211.	SS ZG537	INFORMATION RETRIEVAL
212.	SS ZG547	USABILITY ENGINEERING
213.	SS ZG548	ADVANCED DATA MINING
214.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
215.	SS ZG554	DISTRIBUTED DATA SYSTEMS
216.	SS ZG562	SOFTWARE ENGINEERING AND MANAGEMENT
217.	SS ZG565	MACHINE LEARNING
218.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
219.	SS ZG653 / SE ZG651	SOFTWARE ARCHITECTURES
220.	SS ZG681	CYBER SECURITY
221.	SSTM ZG511	SANITATION TECHNOLOGY
222.	SSTM ZG512	SANITATION AND PUBLIC HEALTH
223.	SSTM ZG514	SANITATION FINANCING & PROJECT MANAGEMENT
224.	SSTM ZG515	EMERGENCY SANITATION & LEADERSHIP
225.	SSTM ZG516	ENVIRONMENTAL SAMPLING AND ANALYTICAL METHODS
226.	SSTM ZG523	BIOLOGICAL TREATMENT PRINCIPLES AND DESIGN OF WASTE WATER SYSTEMS
227.	SSTM ZG524	ENVIRONMENTAL STATISTICS

S.No.	Course No.	COURSE TITLE
228.	SSTM ZG528	ENVIRONMENTAL IMPACT AND RISK ASSESSMENT
229.	TA ZC163	COMPUTER PROGRAMMING
230.	TA ZC233	ENGINEERING MEASUREMENTS

B5.14 PROJECT WORK AND DISSERTATION

Students of B.Tech., M.Sc. programmes do a full-semester Project Work in their final semester, while students of higher degree programmes like M.Tech., MBA submit a Dissertation / Project based on a research and development effort. **Annexure 4** and **Annexure 5** list the titles of some of the Projects and Dissertations submitted by the students of WILP during the year 2020.

B5.15 AWARD OF DEGREES

During the year, a total of 4508 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
86th Award (vide Board of Governors meeting held on 20.03.2020)	4168(1516)
87th Award (vide Board of Governors meeting held on 08.09.2020)	2442(450)
Total:	**6610(1966)**

Note: The numbers in brackets indicate number of

Statistical details of these degrees are given in **Annexure 6** (Part B5).

B5.16 NEW COLLABORATIVE PROGRAMMES INTRODUCED

The following new corporate partnership programmes were introduced during the year 2020

1. MBA in Business Analytics (HZL)

2. MBA in Finance (HZL)

3. M.Tech. Data Science & Engineering (HCL)

4. M.Tech. Data Science & Engineering (CISCO)

5. M.Tech. Software Engineering (ORACLE)

6. M.Tech. Software Systems (Wipro)

B5.17 NEW PROGRAMMES INTRODUCED

The following new programmes were introduced during the year 2020

1. Post Graduate Certificate Programme in Full Stack Engineering

2. Post Graduate Diploma in Business Analytics

3. Post Graduate Diploma in FINTECH

4. MBA in Business Analytics

5. MBA in FINTECH

6. M.Tech. Environmental Engineering

7. M.Tech. Sanitation Science, Technology and Management

B5.18 COLLABORATIVE PROGRAMMES UNDER DISCUSSION

The new collaborative programmes under discussion are indicated below:

1. M.Tech. Data Science & Engineering with CitiusTech, Mumbai

2. B.Tech. Process Engineering with ArcelorMittal Nippon Steel, Gujarat

3. Integrated M.Tech. Software Systems with Hexaware Technologies, Chennai

4. Integrated M.Tech. Software Engineering with Hexaware Technologies, Chennai

5. M.Tech. Data Science & Engineering with Siemens, Pune

B5.19 New Initiatives in WILP

A. Digital Learning Initiatives:

1. A bottling plant with IOT capabilities has been commissioned to be used as a remote lab in Manufacturing suite of programs with an investment of about 60 lakhs.

2. The Automotive Engineering lab has been enhanced with an additional electric test vehicle which will help us in the EV projects and research.

LIST OF ANNEXURES

DETAILS OF ADMISSIONS MADE DURING THE YEAR 2020

(A) Second Semester 2019-2020

PROGRAMMES	No. of students joined
1. Certificate & Diploma Programmes	
Certificate	
Manufacturing Practice	46(001)
Post Graduate Certificate	
Artificial Intelligence & Machine Learning	184 (041)
Big Data Engineering	93 (015)
Post Graduate Diploma	
Finance	10 (001)
Sub Total	**333(058)**
2. Integrated First Degree Programmes:	
B.Tech.	
Engineering Technology	260(015)
Process Engineering	49 (003)
Manufacturing Technology	28 (000)
B.Sc.	
Design & Computing	47(018)
M.Sc.	
Business Analytics	73 (017)
Information Systems	51 (017)
Sub Total	**508(070)**
3. Higher Degree Programmes:	
M.Tech.	
Automotive Electronics	117 (024)
Automotive Engineering	43 (003)
Computing Systems & Infrastructure	1642 (834)
Data Science & Engineering	1074 (198)
Design Engineering	134 (012)
Digital Manufacturing	54 (002)
Embedded Systems	107 (028)
Manufacturing Management	77 (003)
Microelectronics	100 (024)
Pharmaceutical Operations & Management	26 (007)
Quality Management	54 (010)
Sanitation Science, Technology and Management	20 (003)
Software Systems	1379 (562)
MBA	
Consultancy Management	48 (010)
Finance	42 (007)
Hospital & Health Systems Management	83 (036)
Manufacturing Management	63 (003)
Quality Management	35 (012)
Sub total	**5098(1778)**
Total	**5939(1906)**

(B) First Semester 2020-2021

PROGRAMMES	No. of students joined

1. Certificate & Diploma Programmes
Post Graduate Certificate

Artificial Intelligence & Machine Learning	83 (021)
Full Stack Engineering	21 (006)
Internet of Things	33 (004)

Post Graduate Diploma

Business Analytics	154 (035)
Finance	6 (001)
FinTech	24 (005)
Sub Total	**321(072)**

2. Integrated First Degree Programmes:

B.Tech.

Engineering Technology	305 (016)
Manufacturing Technology	74 (007)
Process Engineering	28 (000)

B.Sc.

Design & Computing	98 (024)

M.Sc.

Business Analytics	40 (012)
Sub total	**545(059)**

3. Higher Degree Programmes:

M.Tech.

Automotive Electronics	162 (020)
Automotive Engineering	57 (002)
Computing Systems & Infrastructure	129 (020)
Data Science & Engineering	1114 (238)
Design Engineering	142 (015)
Digital Manufacturing	69 (003)
Embedded Systems	127 (027)
Environmental Engineering	66 (009)
Manufacturing Management	75 (005)
Microelectronics	125 (035)
Pharmaceutical Operations & Management	35 (007)
Quality Management	74 (007)
Sanitation Science, Technology and Management	11 (002)
Software Engineering	426 (128)
Software Systems	506 (111)
Systems Engineering	209 (076)

MBA

Business Analytics	415 (111)
Consultancy Management	69 (017)
Finance	85 (018)
FinTech	72 (021)
Hospital & Health Systems Management	166 (072)
Manufacturing Management	86 (014)
Quality Management	40 (009)
Sub total	**4260(967)**
Total	**5126(1098)**

SUMMARY

	II Semester 2019-20	I Semester 2020-21	Total
Post Graduate Certificates	333(058)	321(072)	654(130)
Integrated First Degree Programmes	508(070)	545(059)	1053(129)
Higher Degree Programmes	5098(1778)	4260(967)	9358(2745)
Total	**5939(1906)**	**5126(1098)**	**11065(3004)**

NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2020-2021

Programme	Year of Admission							Total
	2014 & Earlier	2015	2016	2017	2018	2019	2020	
Certificate & Diploma Programmes								
Post Graduate Certificate								
Artificial Intelligence and Machine Learning	-	-	-	-	-	-	83(21)	83(21)
Internet of Things	-	-	-	-	-	-	33(4)	33(4)
Full Stack Engineering	-	-	-	-	-	-	21(6)	21(6)
Sub-Total	-	-	-	-	-	-	**137(31)**	**137(31)**
Post Graduate Diploma								
Business Analytics	-	-	-	-	-	-	154(35)	154(35)
Finance	-	-	-	-	1	7(1)	6(1)	14(2)
FinTech	-	-	-	-	-	-	24(5)	24(5)
Manufacturing Management	-	-	-	-	-	23	-	23
Sub-Total	-	-	-	-	1	30(1)	**184(41)**	**215(42)**
First Degree Programmes								
B.S.								
Engineering Technology	9	-	-	-	-	-	-	9
Information Systems	2	-	-	-	-	-	-	2
B.Sc.								
Design & Computing	-	-	-	-	39(18)	46(18)	98(24)	183(60)
Pharmaceutical Sciences	-	-	-	-	-	42(13)	-	42(13)
B.Tech								
Engineering Technology	-	11	48(2)	441(13)	438(19)	604(35)	305(16)	1847(85)
Manufacturing Technology	-	-	-	139(11)	107(5)	100(9)	74(7)	420(32)
Power Engineering	-	-	4	43	36	-	-	83
Process Engineering	-	-	4	94(3)	111(3)	70(3)	28	307(9)
M.Sc.								
Information Systems	-	-	-	-	-	43(15)	-	43(15)
Business Analytics	-	-	1	15(4)	128(29)	129(33)	40(12)	313(78)
Sub-Total	11	11	57(2)	732(31)	859(74)	1034(126)	545(59)	**3249(292)**
Higher Degree Programmes								
M.S.								
Consultancy Management	4	-	-	-	-	-	-	4
Software Systems	10	-	-	-	-	-	-	10
M.Tech								
Automotive Electronics	-	-	-	-	-	170(29)	162(20)	332(49)
Automotive Engineering	-	-	-	-	84(22)	120(9)	57(2)	261(33)
Computing Systems & Infrastructure	-	-	619(381)	279(160)	868(396)	1705(838)	129(20)	3600(1795)
Data Science & Engineering	-	-	-	-	570(90)	1609(286)	1114(238)	3293(614)

Programme	Year of Admission							Total
	2014 & Earlier	2015	2016	2017	2018	2019	2020	
Design Engineering	-	-	3	14	93(9)	246(18)	142(15)	498(42)
Digital Manufacturing	-	-	-	-	-	85(5)	69(3)	154(8)
Embedded Systems	-	-	5	7	76(19)	207(54)	127(27)	422(100)
Environmental Engineering	-	-	-	-	-	-	66(9)	66(9)
Manufacturing Management	2	2	6	8	61(2)	171(10)	75(5)	325(17)
Microelectronics	-	-	-	6	106(38)	197(42)	125(35)	434(115)
Pharmaceutical Operations & Management	-	-	1	-	21(4)	49(17)	35(7)	106(28)
Quality Management	1	1	2	6(1)	58(3)	130(29)	74(7)	272(40)
Sanitation Science, Technology and Management	-	-	-	-	-	16(3)	11(2)	27(5)
Software Engineering	1(1)	59(46)	1456(814)	95(53)	585(327)	152(46)	426(128)	2774(1415)
Software Systems	14(1)	18(5)	46(10)	58(15)	396(107)	1882(679)	506(111)	2920(928)
Systems Engineering	-	-	-	-	-	112(44)	209(76)	321(120)
MBA								
Business Analytics	-	-	-	-	-	-	414(111)	414(111)
Consultancy Management	-	-	3	5(2)	54(13)	101(27)	71(18)	234(60)
Finance	-	-	-	3	36(3)	101(28)	85(18)	225(49)
FinTech	-	-	-	-	-	-	71(20)	71(20)
Hospital & Health Systems Management	-	-	-	6(5)	4(1)	109(48)	166(72)	285(126)
Manufacturing Management	-	2	1	4(1)	61(5)	123(8)	86(14)	277(28)
Quality Management	1		1(1)	2(1)	30(8)	78(27)	40(9)	152(46)
Sub-Total	**33(2)**	**82(51)**	**2143(1206)**	**493(238)**	**3103(1047)**	**7363(2247)**	**4260(967)**	**17477(5758)**
Grand Total	**44(2)**	**93(51)**	**2200(1208)**	**1225(269)**	**3963(1121)**	**8427(2374)**	**5126(1098)**	**21078(6123)**

LIST OF ORGANIZATIONS WHO HAVE SPONSORED THEIR EMPLOYEES FOR WORK INTEGRATED LEARNING PROGRAMMES OF BITS

S.No.	ORGANIZATION	LOCATION
1.	309 FIELD HOSPITAL INDIAN ARMY(ARMY MEDICAL CORPS)	MEERUT
2.	365 DAYS FREIGHT SERVICES FZCO	DUBAI
3.	3B SEMICONDUCTORS (P) LTD.	MUMBAI
4.	3D PLM SOFTWARE SOLUTIONS LTD.	BANGALORE
5.	3D PLM SOFTWARE SOLUTIONS LTD.	PUNE
6.	3WINGS ENGINEERS	HYDERABAD
7.	4G IDENTITY SOLUTIONS (P) LTD.	HYDERABAD
8.	4I ODC (P) LTD.	DELHI
9.	A O SMITH (I) WATER PRODUCTS (P) LTD.	BANGALORE
10.	A.P. TRANSPORT DEPARTMENT	RAJAHMUNDRY
11.	A3LOGICS	JAIPUR
12.	AAKASH HEALTHCARE SUPERSPECIALITY HOSPITAL	DELHI
13.	AAKRUTI SOFTWARE SOLUTIONS (P) LTD.	HYDERABAD
14.	AARETE TECHNOLOGY SERVICES	PUNE
15.	AAROH LABS (P) LTD.	PUNE
16.	AARVEE ASSOCIATES	HYDERABAD
17.	AARVI ENCON	SAUDIARABIA
18.	AASI MULTISPECIALITY HOSPITAL	RAMANATHAPURAM
19.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	ABUDHABI
20.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	BANGALORE
21.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	BARODA
22.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	CHENNAI
23.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	NASHIK
24.	ABB GLOBAL INDUSTRIES AND SERVICES (P) LTD.	VADODARA
25.	ABB IND LTD.	DELHI
26.	ABB IND LTD.	MUMBAI
27.	ABB INDUSTRIES LLC	DUBAI
28.	ABB POWER PRODUCTS AND SYSTEMS (I) LTD.	MUMBAI
29.	ABB POWER PRODUCTS AND SYSTEMS (I) LTD.	PUNE
30.	ABBEY SOFTWARE TECHNOLOGIES	HYDERABAD
31.	ABBOTT HEALTHCARE (P) LTD.	BANGALORE
32.	ABCO INDIA	CHENNAI
33.	ABCROB TECHNOLOGY (P) LTD.	DELHI
34.	ABHINAV IT SOLUTIONS (P) LTD.	PUNE
35.	ABLE DESIGN ENGINEERING SERVICES (P) LTD.	GOA
36.	ABOVE SOLUTIONS (P) LTD.	BANGALORE
37.	ABP (P) LTD.	KOLKATA
38.	ABRAJ ENERGY SERVICES S.A.O.C	CHENNAI
39.	ABS GROUP INC.	ABUDHABI
40.	ABS GROUP INC.	MUMBAI
41.	ABS GROUP INC.	UAE
42.	ABU DHABI GAS INDUSTRIES LTD. (GASCO)	ABUDHABI
43.	ABU DHABI OIL REFINERY COMPANY	ABUDHABI
44.	ABU DHABI OILFILED SERVICES COMPANY-ADOS L.L.C	DUBAI
45.	ABU DHABI POLYMERS LTD. (BOROUGE) (RUWAIS IND	ABUDHABI
46.	ABU DHABI PORTS	DUBAI
47.	ABU DHABI SHIP BUILDING	ABUDHABI
48.	ABUDHABI CO. FOR ONSHORE PETROLEUM O	ABUDHABI
49.	ABUDHABI NATIONAL OIL CO. (ADNOC)	ABUDHABI
50.	ABUDHABI OIL REFINING COMPANY	ABUDHABI
51.	ABUDHABI POLYMERS LTD.	GOA
52.	ACADEMY FOR PERFORMANCE & EXCELLENCE	FARIDABAD
53.	ACC LTD.	GOA
54.	ACC LTD.	KYMORE
55.	ACC LTD.	PUNE
56.	ACC LTD.	THANE
57.	ACCENTURE	BANGALORE
58.	ACCENTURE	CHENNAI
59.	ACCENTURE	DELHI
60.	ACCENTURE	GURGAON
61.	ACCENTURE	HYDERABAD
62.	ACCENTURE	KOLKATA
63.	ACCENTURE	MUMBAI
64.	ACCENTURE	PUNE

S.No.	ORGANIZATION	LOCATION
65.	ACCESS-CADD	NASHIK
66.	ACCION LABS	BANGALORE
67.	ACCION LABS	CHENNAI
68.	ACCION LABS	HYDERABAD
69.	ACCOLITE	HYDERABAD
70.	ACCOPS SYSTEM (P) LTD.	PUNE
71.	ACCORD GLOBAL TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
72.	ACCORD SOFTWARE AND SYSTEMS (P) LTD.	ASSPL
73.	ACCRETE HITECH SOLUTIONS (P) LTD.	BANGALORE
74.	ACCU PERICISION	BANGALORE
75.	ACCURATE INDUSTRIAL CONTROLS (P) LTD.	PUNE
76.	ACE ANTENNA (I) (P) LTD.	HYDERABAD
77.	ACE ENGINEERING ACADEMY	HYDERABAD
78.	ACG ASSOCIATED CAPSULES (P) LTD.	MUMBAI
79.	A-CHECK GLOBAL	CHENNAI
80.	ACI WORLDWIDE	PUNE
81.	ACIDAES SOLUTION (P) LTD.	DELHI
82.	ACIDAES SOLUTIONS (P) LTD.	MUMBAI
83.	ACME CLEANTECH SOLUTION (P) LTD.	HYDERABAD
84.	ACME INTERNATIONAL GEN. TRADING & CONTRA	KUWAIT
85.	ACTC (P) LTD.	HYDERABAD
86.	ACTEMIUM (I) PROCESS SOLUTIONS (VAES)	BANGALORE
87.	ACTIANCE (I) (P) LTD.	BANGALORE
88.	ACTIFIO TECHNOLOGIES (I) (P) LTD.	HYDERABAD
89.	ACTUALIZE CONSULTING ENGINEERS (I) (P) LTD.	PUNE
90.	ACUBETECH SOLUTIONS (P) LTD.	COIMBATORE
91.	AD2PRO GLOBAL CREATIVE SOLUTIONS (P) LTD.	BANGALORE
92.	ADAGE AUTOMATION (P) LTD.	GOA
93.	ADANI POWER MAHARASHTRA LTD.	TIRORA
94.	ADCO ABU DHABI	ABUDHABI
95.	ADCO ABU DHABI	UAE
96.	ADDONIX TECHNOLOGIES (P) LTD.	MUMBAI
97.	ADDRESSHEALTH SOLUTIONS (I) (P) LTD.	BANGALORE
98.	ADECCO (I) (P) LTD.	BADDI
99.	ADECCO (I) (P) LTD.	BANGALORE
100.	ADECCO (I) (P) LTD.	CHENNAI
101.	ADEPT CHIP SERVICES PVT.LTD	BANGALORE
102.	ADEPT CHIP SERVICES PVT.LTD	HYDERABAD
103.	ADEPTWORK SOFTWARE SOLUTIONS LLP	SURAT
104.	ADF DATA SCIENCE (P) LTD.	CHENNAI
105.	ADHI PARASAKTHI DENTAL COLLEGE	CHENNAI
106.	ADIENT (I) (P) LTD.	CHENNAI
107.	ADIENT (I) (P) LTD.	PUNE
108.	ADITYA BIRLA FASHION AND RETAIL LTD.	BANGALORE
109.	ADITYA BIRLA GROUP	ARIYALUR
110.	ADITYA BIRLA GROUP	BHARUCH
111.	ADITYA BIRLA GROUP	BHUJ
112.	ADITYA BIRLA GROUP	CHITTORGARH
113.	ADITYA BIRLA GROUP	DAVENGERA
114.	ADITYA BIRLA GROUP	DUBAI
115.	ADITYA BIRLA GROUP	HIRMI
116.	ADITYA BIRLA GROUP	KALABURGI
117.	ADITYA BIRLA GROUP	KHARACH
118.	ADITYA BIRLA GROUP	KOTPUTLI
119.	ADITYA BIRLA GROUP	MUMBAI
120.	ADITYA BIRLA GROUP	NAGDA
121.	ADITYA BIRLA INSULATORS	HALOL
122.	ADITYA BIRLA MANAGEMENT CORPORATION (P) LTD.	MUMBAI
123.	ADITYA BIRLA RETAIL LTD.	MUMBAI
124.	ADITYA ENVIRONMENTAL SERVICES (P) LTD.	MUMBAI
125.	ADIUVO DIAGNOSTICS (P) LTD.	CHENNAI
126.	ADLER MEDIEQUIP PVT.LTD	PUNE
127.	ADNOC DISTRIBUTION	ABUDHABI
128.	ADNOC LINDE INDUSTRIAL GASES(ELIXIER)	UAE
129.	ADNOC OFFSHORE	NALUMAVADI
130.	ADNOC REFINING	ABUDHABI
131.	ADNOC REFINING	DUBAI
132.	ADNOC REFINING	UAE
133.	ADOBE SYSTEMS (I) (P) LTD.	BANGALORE
134.	ADOBE SYSTEMS (I) (P) LTD.	NOIDA
135.	ADOR WELDING LTD.	PUNE

S.No.	ORGANIZATION	LOCATION
136.	ADOS	DUBAI
137.	ADP (I) (P) LTD.	HYDERABAD
138.	ADP (I) (P) LTD.	PUNE
139.	ADROIT FACILITY MANAGEMENT	DUBAI
140.	ADS GLOBAL KNOWLEDGE ACADEMY (P) LIM	DELHI
141.	ADTRAN NETWORKS (I) (P) LTD.	BANGALORE
142.	ADTRAN NETWORKS (I) (P) LTD.	HYDERABAD
143.	ADU DHABI OILFIELD SERVICES COMPANY-ADOS L.L C	DUBAI
144.	ADVANCE VISION	DELHI
145.	ADVANCED MICRO DEVICES	HYDERABAD
146.	ADVANCED TRAINING INSTITUTE	HYDERABAD
147.	ADVANTEK FUEL SYSTEMS (P) LTD.	PUNE
148.	ADVENT TECHNOLOGIES	DELHI
149.	ADVENT TOOLTECH (P) LTD.	PUNE
150.	ADVY CHEMICAL (P) LTD.	MUMBAI
151.	AE ARMA ELEKTROPANC ELECTROMECHANICAL LL	DUBAI
152.	AECOM (I) (P) LTD.	BANGALORE
153.	AECOM/URS BAHRAIN	BAHRAIN
154.	AEGIS GLOBAL	BANGALORE
155.	AEQUS	BANGALORE
156.	AEQUS (P) LTD.	BELAGAVI
157.	AERIALROOTS TECHNOLOGIES	PUDUCHERRY
158.	AERIS COMMUNICATION (I) (P) LTD.	NOIDA
159.	AERIS COMMUNICATIONS	DELHI
160.	AEROEURO ENGINEERING (I) (P) LTD.	BANGALORE
161.	AEROSTRUCTURES ASSEMBLIES (I) (P) LTD.	GOA
162.	AEROSTRUCTURES MANUFACTURING (I) (P) LTD.	BANGALORE
163.	AERZEN MACHINES (I) (P) LTD.	VADODARA
164.	AES INDIA	NOIDA
165.	AESSEAL (I) (P) LTD.	PUNE
166.	AESSEAL MIDDLE EAST LLC	JAFZA-SOUTH
167.	AFCH FORTIS ESCORTS HEART INSTITUTE KHULNA BD	BANGLADESH
168.	AFFLUENT GLOBAL SERVICES	HYDERABAD
169.	AFWWA HOMOEOPATHIC CLINIC	HYDERABAD
170.	AG MELCO ELEVATOR CO. LLC	DUBAI
171.	AGFA HEALTHCARE SOLUTIONS	DUBAI
172.	AGGREKO LTD.	DUBAI
173.	AGGREKO UK LTD.	DUBAI
174.	AGHARKAR RESEARCH INSTITUTE	PUNE
175.	AGILE COCKPIT	BANGALORE
176.	AGILENT TECHNOLOGIES	DELHI
177.	AGILENT TECHNOLOGIES	GURGAON
178.	AGNICE FIRE PROTECTION (P) LTD.	CHENNAI
179.	AGNISYS TECHNOLOGY	DELHI
180.	AGRAWAL GROUP OF COMPANIES	GOA
181.	AGRIOS PRICE CONSULTING SERVICES	BANGALORE
182.	AGRISOL (I) (P) LTD.	HYDERABAD
183.	AGS TRANSACT TECHNOLOGIES LTD.	MUMBAI
184.	AHEADRACE SOFTWARE DEVELOPMENT SERVICES	HYDERABAD
185.	AIIMSUDR	UDAIPUR
186.	AIMS ENGINEERING	PUNE
187.	AIR (I) LTD.	BANGALORE
188.	AIR (I) LTD.	CHENNAI
189.	AIR TREATMENT ENGINEERING (P) LIMITE	KOLKATA
190.	AIR WORLDWIDE D.B.A VERISK ANALYTICS	HYDERABAD
191.	AIRBUS GROUP	BANGALORE
192.	AIRCEL LTD.	CHENNAI
193.	AIRCEL LTD.	DELHI
194.	AIRCOM INTERNATIONAL (I) (P) LTD. (TEOCO)	DELHI
195.	AIRFRAME AERODESIGNS (P) LTD.	BANGALORE
196.	AIRPORTS AUTHORITY OF INDIA	CHENNAI
197.	AIRPORTS AUTHORITY OF INDIA	COCHIN
198.	AIRPORTS AUTHORITY OF INDIA	GOA
199.	AIRPORTS AUTHORITY OF INDIA	KOLKATA
200.	AIRPORTS AUTHORITY OF INDIA	MUMBAI
201.	AIRTEL X LABS	DELHI
202.	AISQUARE TECHNOLOGIES (P) LTD.	HYDERABAD
203.	AITHENT TECHNOLOGIES	CHENNAI
204.	AIVARG TECHNOLOGIES OPC (P) LTD.	CHENNAI
205.	AJ DEVTECH	CHANDIGARH
206.	AJEENKYA DY PATIL UNIVERSITY	PUNE

S.No.	ORGANIZATION	LOCATION
207.	AJNA INNOVATIONS (P) LTD.	BANGALORE
208.	AKAL INFO SYSTEMS	DELHI
209.	AKAMAI TECHNOLOGIES	BANGALORE
210.	AKKIPET E-COMMERCE (P) LTD.	BANGALORE
211.	AKQA MEDIA (I) (P) LTD.	GURGAON
212.	AKSA SOFTWARE SOLUTIONS (P) LTD.	SRINAGAR
213.	AKSHARA ENTERPRISES P LTD.	HYDERABAD
214.	AKTREA SOLUTIONS (I) (P) LTD.	CHENNAI
215.	AKZONOBEL (I) LTD.	MUMBAI
216.	AL ALAMIAH TECHNOLOGY GROUP	KUWAIT
217.	AL ANWAR CERAMIC TILES CO SAOG NIZWA OMA	OMAN
218.	AL ARABIA TSCD JUMA AL MAJID GROUP	DUBAI
219.	AL DHARIS SPECIALIZED PIPES FITTINGS	DUBAI
220.	AL FARAA GROUP	ABUDHABI
221.	AL FUTTAIM GROUP	DUBAI
222.	AL GHURAIR IRON & STEEL LLC	ABUDHABI
223.	AL HAJIRY TRADING LLC OMAN	OMAN
224.	AL HASHAR & CO LLC	OMAN
225.	AL HODERIYAT GEN CONTRACTING	ABUDHABI
226.	AL JABER TRANSPORT & GENERAL CONTRACTING	ABUDHABI
227.	AL JALILA CHILDREN'S SPECIALTY HOSPITAL	DUBAI
228.	AL KHALEEJ SUGAR CO LLC	DUBAI
229.	AL MAHASIN ELECTRO MECH CONT COMP ABUD	SHARJAH
230.	AL NABOODAH CONTRACTING GROUP	DUBAI
231.	AL NAHIYA GROUP(ADOC)	BANGALORE
232.	AL NAKHEEL ELECTRONICS - DUBAI UAE	DUBAI
233.	AL QABAS EMPLOYMENT	ABUDHABI
234.	AL QAHTANI BEVERAGES	HYDERABAD
235.	AL SABAH ELECTROMECHANICAL INTERNATIONAL	DUBAI
236.	AL SANANI TRADING ESTABLISHMENT	DUBAI
237.	AL SHIRAH RECRUITMENT SERVICES (ALSHIREC) ADNOC	DUBAI
238.	AL SHIRAWI ELECTRICAL & MECHANICAL ENGG	DUBAI
239.	AL TAJIR GLASS INDUSTRIES	DUBAI
240.	AL TAMIMI ENGINEERING SERVICES LLC DUBAI	DUBAI
241.	AL YAMAMA CO. FOR TRADING & CONTRACTING	RIYADH
242.	AL ZAHRA HOSPITAL DUBAI	DUBAI
243.	ALBA POWER (P) LTD.	SRINAGAR
244.	ALBAYAAN EDUCATIONAL COMPLEX	QATAR
245.	ALBERTA HEALTH SERVICES	BANGALORE
246.	ALCATEL DEVELOPMENT INDIA	CHENNAI
247.	ALCATEL LUCENT (P) LTD. (NOKIA CORPORATION)	BANGALORE
248.	ALDERLEY FZE	DUBAI
249.	ALDHARIS SPECIALISED PIPES FITTINGS	DUBAI
250.	ALDHOW ENGINEERING	CHENNAI
251.	ALEMBIC PHARMACEUTICALS LTD.	VADODARA
252.	ALETHE LABS (I) (P) LTD.	NOIDA
253.	ALEXANDER THAMM GMBH	CHENNAI
254.	ALFANAR ELECTRICAL SYSTEMS	CHENNAI
255.	ALFANAR ELECTRICAL SYSTEMS	RIYADH
256.	ALFARDAN GROUP	QATAR
257.	ALGOSCALE TECHNOLOGIES (P) LTD.	NOIDA
258.	ALGO'TECH INDIA	NOIDA
259.	ALKRAFT THERMOTECHNOLOGIES (P) LIMIT	CHENNAI
260.	ALL (I) INSTITUTE OF MEDICAL SCIENCES NEW DELHI	DELHI
261.	ALLAHABAD BANK	ALLAHABAD
262.	ALLEGION (I) (P) LTD.	BANGALORE
263.	ALLEGIS GROUP DEPUTED TO FORD TECHNOLOGY	CHENNAI
264.	ALLEGIS SERVICES (I) (P) LTD.	BANGALORE
265.	ALLGO EMBEDDED SYSTEMS	BANGALORE
266.	ALLIANCE TIRE GROUP	TIRUNELVELI
267.	ALLIANZ TECHNOLOGY	CHENNAI
268.	ALLIANZ TECHNOLOGY	THIRUVANANTHAPURAM
269.	ALLIED ELECTRICALS	BANGALORE
270.	ALLISON TRANSMISSION (I) (P) LTD.	CHENNAI
271.	ALLSCRIPTS	PUNE
272.	ALLSCRIPTS (I) (P) LTD.	BANGALORE
273.	ALLSCRIPTS (I) (P) LTD.	PUNE
274.	ALLSCRIPTS (I) LLP	PUNE
275.	ALLSOFT SOLUTIONS AND SERVICES (P) LTD.	DELHI
276.	ALLSTATE INDIA	BANGALORE
277.	ALMARAI COMPANY	RIYADH

S.No.	ORGANIZATION	LOCATION
278.	ALP CONSULTING LTD.	BANGALORE
279.	ALPHA ICT LLP	PUNE
280.	ALSTOM	AGRA
281.	ALSTOM BHARAT FORGE POWER (P) LIMITE	SANAND
282.	ALSTOM GROUP	CHENNAI
283.	ALSTOM GROUP	COIMBATORE
284.	ALSTOM GROUP	DELHI
285.	ALSTOM GROUP	KOLKATA
286.	ALSTOM SYSTEM (I) (P) LTD.	AGRA
287.	ALSTOM TRANSPORT (I) LTD.	BANGALORE
288.	ALSTOM TRANSPORT (I) LTD.	COIMBATORE
289.	ALSTOM TRANSPORT (I) LTD.	DELHI
290.	ALSTOM TRANSPORT (I) LTD.	PRAYAGRAJ
291.	ALSTRUT (I) (P) LTD.	CHENNAI
292.	ALTAIR ENGINEERING (I) (P) LTD.	BANGALORE
293.	ALTAIR ENGINEERING (I) (P) LTD.	PUNE
294.	AL-TASNIM ENTERPRISES LLC	MUSCAT,OMAN
295.	ALTEN CALSOFTLABS	BANGALORE
296.	ALTEN SVERIGE AB	PUNE
297.	ALTERNATIVE BUSINESS INTELLIGENCE (P) LTD.	BANGALORE
298.	ALTIMETRIK (I) (P) LTD.	BANGALORE
299.	ALTIMETRIK (I) (P) LTD.	CHENNAI
300.	ALTIMETRIK (I) (P) LTD.	HYDERABAD
301.	ALTIOSTAR	BANGALORE
302.	ALTISOURCE BUSINESS SOLUTIONS (P) LTD.	BANGALORE
303.	ALTRAN TECHNOLOGIES (I) (P) LTD.	BANGALORE
304.	ALTRAN TECHNOLOGIES (I) (P) LTD.	CHENNAI
305.	ALTRAN TECHNOLOGIES (I) (P) LTD.	COIMBATORE
306.	ALTRAN TECHNOLOGIES (I) (P) LTD.	DELHI
307.	ALTRAN TECHNOLOGIES (I) (P) LTD.	HYDERABAD
308.	ALUMINIUM BAHRAIN	BAHRAIN
309.	ALVAS EDUCATIONAL FOUNDATION	BANGALORE
310.	ALYX TECHNOLOGIES	PUNE
311.	AM EQUIPMENT & SERVICES (P) LTD.	DELHI
312.	AMADEUS SOFTWARE LABS (I) (P) LTD.	BANGALORE
313.	AMANA GENERAL CONTRACTING & STEEL BUILDINGS	DUBAI
314.	AMANA INDUSTRIES	SHARJAH
315.	AMAR IMPEX	CHENNAI
316.	AMARACORE (P) LTD.	BANGALORE
317.	AMARARAJA BATTERIES LTD.	BANGALORE
318.	AMAZATIC SOLUTIONS	PUNE
319.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	BANGALORE
320.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	CHENNAI
321.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	COIMBATORE
322.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	DELHI
323.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	GURGAON
324.	AMAZON DEVELOPMENT CENTER (I) (P) LTD.	HYDERABAD
325.	AMBOSELI PROFESSIONAL ASSOCIATE (P) LTD.	BANGALORE
326.	AMBUJA CEMENTS LTD.	GURGAON
327.	AMBUJA CEMENTS LTD.	JAIPUR
328.	AMD (I) (P) LTD.	BANGALORE
329.	AMD (I) (P) LTD.	HYDERABAD
330.	AMD R & D CENTER HYDERABAD	HYDERABAD
331.	AMDOCS	AMDOCS
332.	AMDOCS	DELHI
333.	AMDOCS	GURGAON
334.	AMDOCS	PUNE
335.	AMEC BLACKCAT	DOHA
336.	AMEC FOSTER WHEELER (I) (P) LTD.	KOLKATA
337.	AMEC FOSTER WHEELER ASIA PACIFIC PTE. LTD.	SINGAPORE
338.	AMERICAN COMMUNITY SCHOOL	DUBAI
339.	AMERICAN EXPRESS	BANGALORE
340.	AMERICAN EXPRESS	DELHI
341.	AMERICAN EXPRESS	GURGAON
342.	AMERICAN HOSPITAL DUBAI	DUBAI
343.	AMERICAN MEGATRENDS TECHNOLOGIES (I) (P) LTD.	CHENNAI
344.	AMERICAN ONCOLOGY INSTITUTE	DELHI
345.	AMERIPRISE (I) (P) LTD.	GURGAON
346.	AMERIPRISE FINANCIAL	DELHI
347.	AMERIPRISE FINANCIAL (P) LTD.	DELHI
348.	AMETEK INSTRUMENTS	BANGALORE

S.No.	ORGANIZATION	LOCATION
349.	AMETEK INSTRUMENTS (I) (P) LTD.	BANGALORE
350.	AMEYA PECISION ENGINEERS (P) LTD.	PUNE
351.	AMICORP MANAGEMENT (I) (P) LTD. (	BANGALORE
352.	AMIGOS VENTURES	PUNE
353.	AMMANN (I) (P) LTD.	DELHI
354.	AMPHENOL FCI	COCHIN
355.	AMPLEX EMIRATES LLC	ABUDHABI
356.	AMPOOL (I) (P) LTD.	PUNE
357.	AMRI HOSPITALS BHUBANESWAR	BHUBANESWAR
358.	AMRITA CENTRE FOR CYBER SECURITY	KOLLAM
359.	AMRITA VISWA VIDYAPEETHAM UNIVERSITY	CHENNAI
360.	AMS SEMICONDUCTORS IND.PVT. LTD.	HYDERABAD
361.	AMW AUTO COMPONENTS LTD.	BHUJ
362.	ANALGE INFOTECH (P) LTD.	BANGALORE
363.	ANALINEAR IMAGING SYSTEMS	HYDERABAD
364.	ANALOG DEVICES (I) (P) LTD.	BANGALORE
365.	ANALOG DEVICES INC	BANGALORE
366.	ANALOG DEVICES INDIA	BANGALORE
367.	ANALYTICAL SOLUTIONS	MUMBAI
368.	ANALYTICS QUOTIENT SERVICES (P) LTD.	BANGALORE
369.	ANALYZER CAE SOLUTIONS PVT.LTD.	PUNE
370.	ANAND NVH (P) LTD.	DELHI
371.	ANCHOR ELECTRICALS (P) LTD.	DAMAN
372.	ANCHOR ELECTRICALS (P) LTD.	THANE
373.	ANDORTECH (I) (P) LTD.	BANGALORE
374.	ANDREW TELECOMMUNICATION (I) (P) LTD. (COMMSCOPE)	GOA
375.	ANERGY LTD.	CHENNAI
376.	ANKURA HOSPITAL FOR WOMEN AND CHILDREN	DUBAI
377.	ANNORA PHARMA	HYDERABAD
378.	ANORA SEMICONDUCTOR LABS (P) LTD.	BANGALORE
379.	ANRITSU (I) (P) LTD.	HYDERABAD
380.	ANS STEEL TUBES LTD.	FARIDABAD
381.	ANSALDO STS (A) A HITACHI GROUP COMPANY	BANGALORE
382.	ANSALDO STS AUSTRALIA PTY LTD.	PERTHAUSTRALIA
383.	ANSYS SOFTWARE (P) LTD.	BANGALORE
384.	ANSYS SOFTWARE (P) LTD.	PUNE
385.	ANTARIKSH WASTE VENTURES (P) LTD.	CHENNAI
386.	ANVESHA COMMUNITY DEVELOPMENT	BANGALORE
387.	ANZ BANKING OPERATIONS AND TECHNOLOGY (P) LTD.	BANGALORE
388.	ANZ OPERATION AND TECHNOLOGY	BANGALORE
389.	ANZ OPERATIONS AND TECHNOLOGY (P) LTD.	BANGALORE
390.	ANZ SERVICES INDIA	BANGALORE
391.	AO SMITH (I) WATER PRODUCTS (P) LTD.	BANGALORE
392.	AON SERVICES (P) LTD.	BANGALORE
393.	AON SERVICES (P) LTD.	GURGAON
394.	AON SERVICES (P) LTD.	NOIDA
395.	AOTC LLC	MUMBAI
396.	APERTA LTD.	COIMBATORE
397.	APMOSYS TECHNOLOGIES (P) LTD.	MUMBAI
398.	APOLLO GLENEAGLES HOSPITALS	KOLKATA
399.	APOLLO HOSPITALS	ARAGONDA
400.	APOLLO HOSPITALS	CHENNAI
401.	APOLLO HOSPITALS	HYDERABAD
402.	APOLLO MEDICAL COLLEGE HYDERABAD	HYDERABAD
403.	APOLLO SPECIALITY HOSPITALS	NELLORE
404.	APOLLO TYRES GLOBAL R&D CENTRE-ASIA	CHENNAI
405.	APOLLO TYRES LTD.	CHENNAI
406.	APOLLO TYRES LTD.	COIMBATORE
407.	APOLLO TYRES LTD.	VADODARA
408.	APOLLOTYRES GLOBAL R&D CENTRE	CHENNAI
409.	APPBOX LAB (P) LTD.	DELHI
410.	APPICON IT (P) LTD.	HYDERABAD
411.	APPIRIO	BANGALORE
412.	APPIRIO INDIA	JAIPUR
413.	APPLE (I) (P) LTD.	HYDERABAD
414.	APPLE INC	HYDERABAD
415.	APPLIED MATERIALS	BANGALORE
416.	APPLIED MATERIALS	CHENNAI
417.	APPLIED MATERIALS (I) (P) LTD.	BANGALORE
418.	APPLIED MATERIALS (I) (P) LTD.	CHENNAI
419.	APPLIED RESEARCH & DEVELOPMENT LABORATOR	JAIPUR

S.No.	ORGANIZATION	LOCATION
420.	APPLUS VELOSI LLC	MUSCAT,OMAN
421.	APPS ASSOCIATES	HYDERABAD
422.	APPSTER LLP	GURGAON
423.	APPSTER LLP	NOIDA
424.	APRICOT FOODS (P) LTD.	DELHI
425.	APT ELECTRONICS (P) LTD.	DELHI
426.	APTEAN (I) (P) LTD.	BANGALORE
427.	APTIV	BANGALORE
428.	APTIV	CHENNAI
429.	APTIV - TCI	BANGALORE
430.	APTIV AUTOMOTIVE	BANGALORE
431.	APTIV COMPONENTS (I) (P) LTD.	BANGALORE
432.	APTIV COMPONENTS (I) (P) LTD.	PUNE
433.	APTIV COMPONENTS (I) (P) LTD.	DELHI
434.	APTIV-TECHNICAL CENTER INDIA	BANGALORE
435.	APTTUS	BANGALORE
436.	APTUS DATA LABS	HYDERABAD
437.	ARABIAN GULF SWITCHGEAR	SHARJAH
438.	ARABIAN INDUSTRIES MANUFACTURING	CHENNAI
439.	ARABIAN INDUSTRIES PROJECTS LLC	BANGALORE
440.	ARABTEC CONSTRUCTION LLC	DUBAI
441.	ARC ELECTRICALS	CUDDALORE
442.	ARCADIS DESIGN & CONSULTANCY INC	DUBAI
443.	ARCADIS GEC INDIA	BANGALORE
444.	ARCESIUM (I) (P) LTD.	HYDERABAD
445.	ARDC HAL(HINDUSTAN AERONAUTICS LTD.)	BANGALORE
446.	ARDEN TELECOM PVT.LTD.	DELHI
447.	ARGUS EMBEDDED SYSTEMS	HYDERABAD
448.	ARIAL ENGINEERING SERVICES	HYDERABAD
449.	ARIBA TECHNOLOGIES (I) (P) LTD.	BANGALORE
450.	ARICENT	BANGALORE
451.	ARICENT	BHUBANESWAR
452.	ARICENT	CHENNAI
453.	ARICENT	DELHI
454.	ARICENT	GURGAON
455.	ARICENT	HYDERABAD
456.	ARIES MARINE	SHARJAH
457.	ARISGLOBAL SOFTWARE (P) LTD.	BANGALORE
458.	ARISTOCRAT TECHNOLOGIES	NOIDA
459.	ARK 3D	CHENNAI
460.	ARKIPLAN ARCHITECTS CONSULTING ENGINEERS	DUBAI
461.	ARLO TECHNOLOGIES SERVICES INDIA	BANGALORE
462.	ARM EMBEDDED TECHNOLOGIES (P) LTD.	BANGALORE
463.	ARMACELL (I) (P) LTD.	AGRA
464.	ARMACELL (I) (P) LTD.	PUNE
465.	ARMED FORCES	DELHI
466.	ARMED FORCES	GUWAHATI
467.	ARMED FORCES	MUMBAI
468.	ARMED FORCES	NOIDA
469.	ARMED FORCES	PUNE
470.	ARMOR (I) CODING AND IMAGING SUPPLIES (P) LTD.	BANGALORE
471.	ARMSTRONG INTERNATIONAL (P) LTD.	HYDERABAD
472.	ARMY	DELHI
473.	ARMY	KOLKATA
474.	ARMY/ DRDO	KOLKATA
475.	ARPAN INFRASOLUTION (P) LTD.	LOHARDAGA
476.	ARRAYSTORM LIGHTING (P) LTD.	BANGALORE
477.	ARRIS GROUP (I) (P) LTD.	BANGALORE
478.	ARRK SOLUTIONS (P) LMTD	MUMBAI
479.	ARTEMIS HOSPITAL	DELHI
480.	ARTEMIS HOSPITAL GURGAON	DELHI
481.	ARTEMIS HOSPITALS GURGAON	DELHI
482.	ARTZ SOLUTIONS	COIMBATORE
483.	ARUBA NETWORKS (I) (P) LTD.	BANGALORE
484.	ARUNA ALLOY STEELS (P) LTD.	MADURAI
485.	ARYAKA NETWORKS	BANGALORE
486.	ARYAVRAT INFOTECH (P) LTD.	JAIPUR
487.	ASAHI (I) GLASS LTD.	GURGAON
488.	ASAHI (I) GLASS LTD.	MUMBAI
489.	ASAP BERHAD	KUALALUMPUR
490.	ASAS HUMAN RSOURCES	ABUDHABI

S.No.	ORGANIZATION	LOCATION
491.	ASB INTERNATIONAL	MUMBAI
492.	ASC RECORDS (AT)	BANGALORE
493.	ASCENT CONSULTING SERVICES (P) LTD.	BANGALORE
494.	ASD GLOBAL (I) (P) LTD.	DELHI
495.	ASERGIS TELECOM SERVICES (P) LTD.	GURGAON
496.	ASHOK IRON WORKS (P) LTD.	GOA
497.	ASHOK LEYLAND LTD.	BANGALORE
498.	ASHOK LEYLAND LTD.	CHENNAI
499.	ASHOK LEYLAND LTD.	HOSUR
500.	ASHOK LEYLAND LTD.	KOLKATA
501.	ASHOK LEYLAND LTD.	ALWAR
502.	ASHOK LEYLAND LTD.	DELHI
503.	ASHOK LEYLAND LTD.	DUBAI
504.	ASHOK LEYLAND LTD.	FARIDABAD
505.	ASHOK LEYLAND LTD.	JAMSHEDPUR
506.	ASHOK LEYLAND LTD.	SILIGURI
507.	ASHOK LEYLAND LTD.	VELLIVOYALCHAVADI
508.	ASHOK LEYLAND LTD.	CHENNAI
509.	ASHTECH TOOLING & STAMPING PVT.LTD	PUNE
510.	ASIA AUTOMATION (P) LTD.	PUNE
511.	ASIAAN METALS AND ALUMINIUM CASTING PVT.LTD	BANGALORE
512.	ASIAN HOSPITAL	DELHI
513.	ASIAN INSTITUTE OF MEDICAL SCIENCES FAR	FARIDABAD
514.	ASIAN PAINTS LTD.	COIMBATORE
515.	ASIAN PAINTS ME LLC	DELHI
516.	ASIAN PAINTS PPG (P) LTD.	MUMBAI
517.	ASIANPAINTS LTD.	CHENNAI
518.	ASK AUTOMOTIVE (P) LTD.	GURGAON
519.	ASM ENTERPRISE (I) (P) LTD.	HYDERABAD
520.	ASM TECHNOLOGIES (P) LTD.	BANGALORE
521.	ASP INFOTECH	DELHI
522.	ASPARTIKA BIOTECH (P) LTD.	BANGALORE
523.	ASPIRE SYSTEMS (I) (P) LTD.	CHENNAI
524.	ASPIRING MINDS	GURGAON
525.	ASQUARE RETAIL LLP	PUNE
526.	ASSAM ELECTRONICS DEVELOPMENT CORPORATION LTD.	ASSAM
527.	ASSET RECONSTRUCTION CO. (I) LTD.	MUMBAI
528.	ASTA (I) (P) LTD.	VADODARA
529.	ASTECHNOSOFT (P) LTD.	PUNE
530.	ASTER AADHAR HOSPITAL KOLHAPUR	MUMBAI
531.	ASTERIA AEROSPACE	BANGALORE
532.	ASTERIA AEROSPACE (P) LTD.	BANGALORE
533.	ASTRAZENECA	CHENNAI
534.	ASTRAZENECA (I) (P) LTD.	CHENNAI
535.	AT&S (I) (P) LTD.	NANJANGUD
536.	AT&T COMMUNICATION SERVICES (I) (P) LTD.	BANGALORE
537.	AT&T COMMUNICATIONS SERVICES (P) LTD.	BANGALORE
538.	ATC TELECOM INFRASTRUCTURE (P) LTD.	GURGAON
539.	ATC TIRES (P) LTD.	TAMILNADU
540.	ATC TIRES (P) LTD.	TIRUNELVELI
541.	ATC TIRES (P) LTD.	CHENNAI
542.	ATECH SOLUTIONS (P) LTD.	BANGALORE
543.	ATG TIRE (P) LTD.	BANGALORE
544.	ATHARVARAJ HATCHERIES	NAGPUR
545.	ATHENA DRUG DELIVERYSOLUTIONS	MUMBAI
546.	ATHENA HEALTH TECHNOLOGIES (P) LTD.	CHENNAI
547.	ATHENAHEALTH	BANGALORE
548.	ATHENAHEALTH TECHNOLOGY (P) LTD.	BANGALORE
549.	ATHENESE DIAGNOSTICS (P) LTD.	CHENNAI
550.	ATHENTA TECHNOLOGIES (P) LTD.	NOIDA
551.	ATHER ENERGY (P) LTD.	BANGALORE
552.	ATHMA HOSPITAL 12 B 10TH CROSS EAST	CHENNAI
553.	ATLAB	DUBAI
554.	ATLANTIS LAB PVT.LTD.	PUNE
555.	ATLAS COPCO (I) LTD.	BANGALORE
556.	ATLAS COPCO (I) LTD.	PUNE
557.	ATLAS ELEKTRONIK (I) (P) LTD.	MUMBAI
558.	ATLAS HEALTHCARE SOFTWARE (I) (P) LTD.	KOLKATA
559.	ATLASCOPCO (I) LTD.	HYDERABAD
560.	ATLASSIAN	BANGALORE
561.	ATMECS	BANGALORE

S.No.	ORGANIZATION	LOCATION
562.	ATMECS	HYDERABAD
563.	ATMECS TECHNOLOGIES (P) LTD.	HYDERABAD
564.	ATOLL SOLUTIONS (P) LTD.	BANGALORE
565.	ATOS (I) (P) LTD.	BANGALORE
566.	ATOS (I) (P) LTD.	GURGAON
567.	ATOS (I) (P) LTD.	KOLKATA
568.	ATOS (I) (P) LTD.	POLAND
569.	ATOS (I) (P) LTD.	PUNE
570.	ATOS GLOBAL IT SOLUTIONS AND SERVICES (P) LTD.	MUMBAI
571.	ATOS SYNTEL	CHENNAI
572.	ATOTECH DEVELOPMENT CENTRE (P) LIMIT	BANGALORE
573.	ATRIA CONVERGENCE TECHNOLOGIES	BANGALORE
574.	ATTRA INFOTECH (P) LTD.	BANGALORE
575.	ATTUNE INFOCOM (P) LTD.	AHMEDABAD
576.	ATTUNE INFOCOM (P) LTD.	BANGALORE
577.	ATUL LTD.	MUMBAI
578.	AUDIENCE SCIENCE (I) (P) LTD.	PUNE
579.	AUJAS NETWORKS (P) LTD.	DELHI
580.	AUM BADRINATH DENTAL & PHYSIOTHERAPY CLINIC	DELHI
581.	AURECON	DUBAI
582.	AURIGO SOFTWARE	BANGALORE
583.	AURIONPRO SOLUTIONS LTD.	PUNE
584.	AUROBINDO PHARMA LTD.	HYDERABAD
585.	AUROBINDO PHARMA LTD.	VISAKHAPATNAM
586.	AUTO IGNITION LTD.	MUMBAI
587.	AUTOCOP (I) (P) LDT	PUNE
588.	AUTODESK (I) (P) LTD.	BANGALORE
589.	AUTOGRID (I) (P) LTD.	BANGALORE
590.	AUTOLIV	BANGALORE
591.	AUTOLIV (I) (P) LTD.	BANGALORE
592.	AUTOMATIC DATA PROCESSING	HYDERABAD
593.	AUTOMATION SYSTEMS	HYDERABAD
594.	AUTOMOTIVE AXLES LTD.	BANGALORE
595.	AUTOMOTIVE AXLES LTD. INDIA	BANGALORE
596.	AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA	PUNE
597.	AUTOMOTIVE ROBOTICS (I) (P) LTD.	CHENNAI
598.	AUTOMOTIVE ROBOTICS (I) (P) LTD.	HYDERABAD
599.	AUTOMOTIVE ROBOTICS INC	HYDERABAD
600.	AV LIGHT AUTOMOTIVE LTD.	GURGAON
601.	AVADH RAIL INFRA LTD.	DELHI
602.	AVALON DATA SYSTEMS LLC	ABUDHABI
603.	AVALON TECHNOLOGY AND SERVICES (P) LTD.	CHENNAI
604.	AVANKIA LTD.	BANGALORE
605.	AVAYA (I) (P) LTD.	PUNE
606.	AVENCH SYSTEM (P) LTD.	BANGALORE
607.	AVEVA SOLUTIONS (I) LLP	HYDERABAD
608.	AVEVA SOLUTIONS LLP	HYDERABAD
609.	AVI SC-T&D-MULTI MODAL FACILITY	PUNE
610.	AVIHS TECHNOLOGIES	BANGALORE
611.	AVIN SYSTEMS	BANGALORE
612.	AVL (I) (P) LTD.	BANGALORE
613.	AVL (I) (P) LTD.	GURGAON
614.	AVL TECHNICAL CENTRE (P) LTD.	DELHI
615.	AVL TECHNICAL CENTRE PVT	DELHI
616.	AVTEC LTD.	BANGALORE
617.	AVTEC LTD.	HOSUR
618.	AVTEC.LTD	DELHI
619.	AVX ELECTRONICS	DELHI
620.	AWALGULF MANUFACTURING CO B.S.C (C)	MAVELIKARA
621.	AWNICS TECHNOLOGIES (P) LTD.	BANGALORE
622.	AXA BUSINESS SERVICES	PUNE
623.	AXIOM ENERGY CONVERSION LTD.	HYDERABAD
624.	AXIS BANK	DELHI
625.	AXIS BANK	MUMBAI
626.	AXIS BANK LTD.	CHENNAI
627.	AXIS CADES	BANGALORE
628.	AXIS CADES	HYDERABAD
629.	AXIS CADES ENGINEERING SOLUTIONS	HYDERABAD
630.	AXIS ELECTRICAL COMPONENTS (I) (P) LTD.	PUNE
631.	AXON AUTOTEC (P) LTD.	DELHI
632.	AYAAN INSTITUTE OF MEDICAL SCIENCES	HYDERABAD

S.No.	ORGANIZATION	LOCATION
633.	AYT INTERNATIONAL L.L.C	DUBAI
634.	AYURVEDIC CLINIC	HYDERABAD
635.	AZCOM INFOSOLUTIONS (I) (P) LTD.	GURGAON
636.	AZUGATELEMATICS (P) LTD.	BANGALORE
637.	B M BIRLA HEART RESEARCH CENTRE	KOLKATA
638.	B.A CONTINUUM (I) (P) LTD.	CHENNAI
639.	BA CONTINNUM (I) (P) LTD.	CHENNAI
640.	BA CONTINUUM	MUMBAI
641.	BA CONTINUUM (I) (P) LTD.	CHENNAI
642.	BA CONTINUUM (I) (P) LTD.	DELHI
643.	BA CONTINUUM (I) (P) LTD.	HYDERABAD
644.	BA CONTINUUM INDIA	HYDERABAD
645.	BABY DESTINATION	DELHI
646.	BACARDI (I) (P) LTD.	DELHI
647.	BACI	HYDERABAD
648.	BADVE ENGINEERING LTD.	GURGAON
649.	BAEHAL	BANGALORE
650.	BAEHAL SOFTWARE LTD.	BANGALORE
651.	BAHWAN ENGINEERING CO. LLC	DUBAI
652.	BAHWAN TECHNICAL CONTRACTING CO LLC	DUBAI
653.	BAINITE MACHINES (P) LTD.	MUMBAI
654.	BAJAJ AUTO LTD.	AURANGABAD
655.	BAJAJ AUTO LTD.	PANTNAGAR
656.	BAJAJ AUTO LTD.	PUNE
657.	BAJAJ ELECTRICALS LTD.	BANGALORE
658.	BAJAJ ELECTRICALS LTD.	MUMBAI
659.	BAJAJ FINANCE	PUNE
660.	BAJAJ POWER LTD.	DELHI
661.	BAJORIA APPLIANCES (P) LTD.	BHUBANESWAR
662.	BAKELITE COATINGS AND PAINTS (P) LTD.	HYDERABAD
663.	BAKER HUGHES	PUNE
664.	BAKER HUGHES SINGAPORE PTE.	MUMBAI
665.	BALCO MEDICAL CENTRE	CHENNAI
666.	BALFOUR BEATYY INFRASTRUCTURE LTD. BANGALORE	BANGALORE
667.	BALIRAM TECHNOLOGIES (OPC) (P) LTD.	PUNE
668.	BALL AEROCAN (I) (P) LTD.	AHMEDABAD
669.	BALLY TECHNOLOGIES (I) (P) LTD.	CHENNAI
670.	BANGALORE BAPTIST HOSPITAL	BANGALORE
671.	BANGALORE INTEGRATED SYSTEM SOLUTIONS PV	BANGALORE
672.	BANGALORE METRO RAIL CORPORATION LTD.	BANGALORE
673.	BANK OF AMERICA	CHENNAI
674.	BANK OF AMERICA	DELHI
675.	BANK OF AMERICA	HYDERABAD
676.	BANK OF AMERICA CONNTINNUM LTD.	CHENNAI
677.	BANK OF AMERICA CONTINUUM	HYDERABAD
678.	BANK OF AMERICA CONTINUUM SOLUTIONS	HYDERABAD
679.	BANK OF BARODA	CHENNAI
680.	BANK OF BARODA	MUMBAI
681.	BANK OF MAHARASHTRA	PUNE
682.	BARCLAYS BANK PLC	HYDERABAD
683.	BARCLAYS CAPITAL SERVICES LTD. SINGAPORE	SINGAPORE
684.	BARCLAYS GLOBAL SERVICE CENTRE (P) LTD.	GOA
685.	BARCLAYS GLOBAL SERVICE CENTRE (P) LTD.	PUNE
686.	BARCLAYS SERVICES (I) (P) LTD.	PUNE
687.	BARCO ELECTRONICS SYSTEMS (P) LTD.	NOIDA
688.	BARCO ELECTRONICS SYSTEMS P LTD.	DELHI
689.	BARRACUDA NETWORKS (P) LTD.	BANGALORE
690.	BASE INFORMATION MANAGEMENT (P) LTD.	MUMBAI
691.	BASF INDIA	GURGAON
692.	BASIS MOLD (I) (P) LTD.	PUNE
693.	BAYER ZYDUS PHARMA (P) LTD.	PUNE
694.	BBL DAIDO (P) LTD.	CHENNAI
695.	BCEC	CHENNAI
696.	BE ENGINEERING SERVICES (I) (P) LTD.	HYDERABAD
697.	BE NGINEERING SERVICES (I) PVT.LTD	HYDERABAD
698.	BECKMAN COULTER	BANGALORE
699.	BEKAERT INDUSTRIES (P) LTD.	PONDICHERRY
700.	BEKAERT INDUSTRIES (P) LTD.	PUNE
701.	BEL	BANGALORE
702.	BELCAN	BANGALORE
703.	BELCAN (I) (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
704.	BELEIVERS CHURCH MEDICAL COLLEGE HOSP;ITAL	COIMBATORE
705.	BELIEVERS CHURCH MEDICAL COLLEGE	THIRUVALLA
706.	BELIEVERS CHURCH MEDICAL COLLEGE HOSPITA	THIRUVALLA
707.	BELIEVERS CHURCH MEDICAL COLLEGE HOSPITAL	COIMBATORE
708.	BELLSONICA AUTO COMPONENT (I) (P) LTD.	GURGAON
709.	BEML LTD.	BANGALORE
710.	BEML LTD.	DELHI
711.	BEML LTD.	MYSORE
712.	BEML LTD.	BANGALORE
713.	BENGALURU	BANGALORE
714.	BENNETT COLEMAN & CO LTD.	PUNE
715.	BENNETT UNIVERSITY	NOIDA
716.	BENU NETWORKS PACKET SWITCH (P) TD.	HYDERABAD
717.	BERCO UNDERCARRIAGES(INDIA)PVT LTD.	HYDERABAD
718.	BERGER BECKER COATINGS (P) LTD.	GOA
719.	BERKADIA SERVICES (I) (P) LTD.	HYDERABAD
720.	BEST KOKI AUTOMOTIVE (P) LTD.	DELHI
721.	BETTER FINANCIAL CORPORATION	HYDERABAD
722.	BEUMER GROUP	DOHA
723.	BEUMER GROUP	QATAR
724.	BEWELL HOSPITALS	CHENNAI
725.	BG EXPLORATION & PRODUCTION (I) LTD.	MUMBAI
726.	BGR ENERGY SYSTEMS LTD.	CHENNAI
727.	BHANDARI ADVOCATES	DELHI
728.	BHARANI ADVANCED DENTAL CARE	BANGALORE
729.	BHARAT BIOTECH INTERNATIONAL LTD.	HYDERABAD
730.	BHARAT DYNAMICS LTD. KANCHANBAGH	HYDERABAD
731.	BHARAT ELECTRONICS LTD.	BANGALORE
732.	BHARAT ELECTRONICS LTD.	CHENNAI
733.	BHARAT ELECTRONICS LTD.	DELHI
734.	BHARAT ELECTRONICS LTD.	GHAZIABAD
735.	BHARAT ELECTRONICS LTD.	HYDERABAD
736.	BHARAT ELECTRONICS LTD. GHAZIABAD	DELHI
737.	BHARAT ELECTRONICS LTD.S	CHENNAI
738.	BHARAT FINANCIAL INCLUSION LTD.	HYDERABAD
739.	BHARAT FORGE	CHAKA
740.	BHARAT FORGE	MUNDWA
741.	BHARAT FORGE LTD.	BELAMB
742.	BHARAT FORGE LTD.	PUNE
743.	BHARAT HEAVY ELECTRICALS LTD.	BANGALORE
744.	BHARAT HEAVY ELECTRICALS LTD.	BHOPAL
745.	BHARAT HEAVY ELECTRICALS LTD.	CHENNAI
746.	BHARAT HEAVY ELECTRICALS LTD.	COIMBATORE
747.	BHARAT HEAVY ELECTRICALS LTD.	HARIDWAR
748.	BHARAT HEAVY ELECTRICALS LTD.	HYDERABAD
749.	BHARAT HEAVY ELECTRICALS LTD.	JAGDISHPUR
750.	BHARAT HEAVY ELECTRICALS LTD.	RANIPET
751.	BHARAT HEAVY ELECTRICALS LTD.	TIRUCHIRAPALLI
752.	BHARAT PETROLEUM CORPORATION LTD.	HYDERABAD
753.	BHARAT PETROLEUM CORPORATION LTD. KR	KOCHI
754.	BHARAT SANCHAR NIGAM LTD.	HYDERABAD
755.	BHARAT TECHNOPLAST (P) LTD.	AHMEDABAD
756.	BHARATH HEAVY ELECTRICALS LTD.	CHENNAI
757.	BHARATI VIDYAPEETH DEEMED UNIV. MEDICAL	PUNE
758.	BHARTI AIRTEL LTD.	GURGAON
759.	BHARTI INFRATEL LTD.	BHUBANESWAR
760.	BHAVYABANU ELECTRONICS (P) LTD.	HYDERABAD
761.	BHEL CORPORATE RESEARCH AND DEVELOPMENT HYDERABAD	HYDERABAD
762.	BHEL HARIDWAR	DELHI
763.	BHTC (I) (P) LTD.	PUNE
764.	BHUMI ENTECH EQUIPMENTS (P) LTD.	DELHI
765.	BHUSHAN POWER AND STEEL LTD.	KOLKATA
766.	BHUSHAN POWER AND STEEL LTD.	SAMBALPUR
767.	BHUSHAN STEEL LTD.	ANGUL
768.	BHUSHAN STEEL LTD.	DELHI
769.	BIDGELY	BANGALORE
770.	BIESSE MANUFACTURING (P) LTD.	BANGALORE
771.	BIESSE MANUFACTURING CO (P) LTD.	BANGALORE
772.	BIG TREE ENTERTAINMENT (P) LTD.	BANGALORE
773.	BIGTREE ENTERTAINMENT (P) LTD.	BANGALORE
774.	BILAD OMAN LLC (SUHAIL BAHWAN GROUP)	SOHAROMAN

S.No.	ORGANIZATION	LOCATION
775.	BILFINGER DEUTSCHE BABCOCK EMIRATES LLC	BITSPILANI
776.	BILLIONTAGS CREATIONS (P) LTD.	CHENNAI
777.	BIMS HOSPITAL	MUMBAI
778.	BINANI CEMENT FACTORY	DUBAI
779.	BINLADIN CONTRACTING GROUP	DUBAI
780.	BIO VEDA ACTION RESEARCH COMPANY	PAONTA
781.	BIOCON	BANGALORE
782.	BIOCON	HYDERABAD
783.	BIOCON	MALAYSIA
784.	BIOCON	SHAMEERPET
785.	BIOCON BIOLOGICS (I) LTD.	BANGALORE
786.	BIOCON LTD.	BANGALORE
787.	BIOLOGICAL E LTD.	HYDERABAD
788.	BIOLOGICAL E. LTD.	CHENNAI
789.	BIPL	CHENNAI
790.	BIRDEYE SOFTWARE (P) LTD.	GURGAON
791.	BIRLA COPPER DAHEJ GUJARAT	DAHEJ
792.	BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE PILANI	HYDERABAD
793.	BIRLA TYRES LTD.	CHENNAI
794.	BIRLA TYRES LTD.	HYDERABAD
795.	BIRLASOFT	BANGALORE
796.	BIRLASOFT	PUNE
797.	BIRLASOFT (I) LTD.	BANGALORE
798.	BIRLASOFT (I) LTD.	HYDERABAD
799.	BIRLASOFT (I) LTD.	NEWJERSEY
800.	BIRLASOFT (P) LTD.	PUNE
801.	BIRLASOFT LTD.	DELHI
802.	BIRLASOFT LTD. PLOT NO 22 SECTOR 135 NOIDA	DELHI
803.	BISS (P) LTD.	BANGALORE
804.	BISTA SOLUTIONS (P) LTD.	MUMBAI
805.	BITS PILANI GOA CAMPUS	BITSPILANI
806.	BITS PILANI GOA CAMPUS	GOA
807.	BITS PILANI GOA CAMPUS	VASCODAGAMA
808.	BIW SOFT (P) LTD.	CHENNAI
809.	BIZACUITY SOLUTIONS (P) LTD.	BANGALORE
810.	BIZIMPACT KNOWLEDGE SERVICES LLP	BANGALORE
811.	BK GULF LLC	DUBAI
812.	BLACK CAT CONTRACTING AND ENGINEERING SERVICES WLL	CHENNAI
813.	BLACKCAT ENGINEERING AND CONSTRUCTION	DUBAI
814.	BLACKPEPPER TECHNOLOGIES (P) LTD.	BANGALORE
815.	BLOOM ENERGY (I) (P) LTD.	BANGALORE
816.	BLUE STAR LTD.	BANGALORE
817.	BLUE STAR LTD.	CHENNAI
818.	BLUE STAR LTD.	DELHI
819.	BLUE STAR LTD.	HYDERABAD
820.	BLUE STAR LTD.	KOLKATA
821.	BLUE STAR LTD.	MUMBAI
822.	BLUECHIP ENERGY SOLUTIONS (P) LTD.	DELHI
823.	BLUECREST TECHNOLOGY (P) LTD.	DELHI
824.	BLUESTAR LTD.	BANGALORE
825.	BLUESTAR LTD.	THANE
826.	BLUESTONE.COM	BANGALORE
827.	BMC SOFTWARE	BANGALORE
828.	BMC SOFTWARE	HYDERABAD
829.	BMC SOFTWARE	PUNE
830.	BMC SOFTWARE (I) (P) LTD.	DELHI
831.	BMRCL	BANGALORE
832.	BNP PARIBAS ISPL	MUMBAI
833.	BNY MELLON (I) (P) LTD.	PUNE
834.	BNYMELLON TECHNOLOGY (P) LTD.	CHENNAI
835.	BOEING (I) (P) LTD.	BANGALORE
836.	BOEING (I) (P) LTD.	CHENNAI
837.	BOEING INTERNATIONAL CORPORATION (I) P	BANGALORE
838.	BOLTELL INFOMEDIA (P) LTD.	BANGALORE
839.	BOLTON OILFIELD SERVICES LLC	CHENNAI
840.	BOMBARDIER TRANSPORTATION (I) (P) LTD.	HYDERABAD
841.	BOMBARDIER TRANSPORTATION (I) (P) LTD.	PUNE
842.	BOMBARDIER TRANSPORTATION (I) (P) LTD.	VADODARA
843.	BOMBAY GAS	PUNE
844.	BONFLEET SOLUTIONS (P) LTD.	PUNE
845.	BOOKYOURGYM FITNESS (P) LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
846.	BORDER ROAD ORGANIZATION	DELHI
847.	BORQS SOFTWARE SOLUTIONS (P) LTD.	BANGALORE
848.	BORRI POWER ME FZCO	DUBAI
849.	BOSCH AUTOMOTIVE ELECTRONICS (I) (P) LTD.	BANGALORE
850.	BOSCH CHASSIS SYSTEMS (I) (P) LTD.	DELHI
851.	BOSCH CHASSIS SYSTEMS (I) (P) LTD.	PUNE
852.	BOSCH LTD.	BANGALORE
853.	BOSCH LTD.	COIMBATORE
854.	BOSCH LTD.	DELHI
855.	BOSCH LTD.	NASHIK
856.	BOSCH LTD.	PUNE
857.	BOSTON SCIENTIFIC	DELHI
858.	BOSTON SCIENTIFIC TECHNOLOGY & ENGG SERVICE PVTLTD	GURGAON
859.	BOTIL OIL TOOLS (I) (P) LTD.	GURGAON
860.	BOTTOMLINE TECHNOLOGIES	MUMBAI
861.	BP EQUITIES (P) LTD.	MUMBAI
862.	BRAHMOS AEROSPACE	BRAHMOSAEROSPACE
863.	BRAHMOS AEROSPACE	DELHI
864.	BRAHMOS AEROSPACE (P) LTD.	DELHI
865.	BRAINMOBI	NOIDA
866.	BRAINPAN INNOVATIONS (P) LTD.	DELHI
867.	BRAINTECHNOSYS (P) LTD.	NOIDA
868.	BRAKES (I) (P) LTD.	CHENNAI
869.	BRANDENBURG INNOVATIONS (I) (P) LTD.	BANGALORE
870.	BREACH CANDY HOSPITAL TRUST	MUMBAI
871.	BRIDGESTONE (I) (P) LTD.	INDORE
872.	BRIDGETREE CONSULTING (P) LTD.	KOLKATA
873.	BRILLIO	BANGALORE
874.	BRILLIO TECHNOLOGIES (P) LTD.	BANGALORE
875.	BRITANNIA INDUSTRIES LTD.	DELHI
876.	BRITANNIA INDUSTRIES LTD.	ERODE
877.	BRITANNIA INDUSTRIES LTD.	KOLKATA
878.	BRITISH COUNCIL MGT. SERVICES	DELHI
879.	BRITISH TELECOM	BANGALORE
880.	BRITISH TELECOM	DELHI
881.	BRITISH TELECOM ESERV	BANGALORE
882.	BROADCOM	BANGALORE
883.	BROADCOM	HYDERABAD
884.	BROADCOM COMMUNICATION TECHNOLOGIES PVT	BANGALORE
885.	BROADCOM COMMUNICATION TECHNOLOGIES PVT	HYDERABAD
886.	BROADCOM COMMUNICATIONS TECHNOLOGIES (P) LTD.	BANGALORE
887.	BROADCOM LTD.	BANGALORE
888.	BROADCOM LTD.	HYDERABAD
889.	BROADRIDGE	BANGALORE
890.	BROADRIDGE	HYDERABAD
891.	BROADRIDGE FINANCIAL SOLUTIONS (I) (P) LIM	BANGALORE
892.	BROADRIDGE FINANCIAL SOLUTIONS (I) (P) LTD.	HYDERABAD
893.	BROCADE COMMUNICATION SYSTEN	BANGALORE
894.	BROCADE COMMUNICATIONS SYSTEMS (P) LTD.	BANGALORE
895.	BROOKFIELD MULTIPLEX MEDGULF JV WLL QAT	DOHA
896.	BSBK (P) LTD.	RAIPUR
897.	BSH HOUSEHOLD APPLIANCES MANUFACTURING	PUNE
898.	BSH HOUSEHOLD APPLIANCES MFG. (P) LTD.	BANGALORE
899.	BSI GROUP (I) (P) LTD.	KOLKATA
900.	BSNL	CHENNAI
901.	BSNL	DELHI
902.	BSNL	HYDERABAD
903.	BSNL	RAIGARH
904.	BT ESERV (I) (P) LTD.	BANGALORE
905.	BT GLOBAL BUISNESS SERVICES (P) LTD.	DELHI
906.	BT GLOBAL SERVICE LTD.	GURGAON
907.	BTCXINDIA	HYDERABAD
908.	BTL (I) (P) LTD.	BANGALORE
909.	BUCHER HYDRAULICS (P) LTD.	DELHI
910.	BUHLER (I) (P) LTD.	BANGALORE
911.	BUILDING BLOCKS LEARNING SOLUTIONS (P) LTD.	DELHI
912.	BUMI ARMADA BERHAD	DELHI
913.	BUMI ARMADA BERHAD	KUALALUMPUR
914.	BUMI ARMADA BERHAD	SINGAPORE
915.	BUREAU OF INDIAN STANDARDS	ABUDHABI
916.	BUREAU OF INDIAN STANDARDS	KOCHI

S.No.	ORGANIZATION	LOCATION
917.	BUREAU OF INDIAN STANDARDS	NOIDA
918.	BUREAU VERITAS CPS (I) (P) LTD.	DELHI
919.	BUREAU VERITAS MIDDLE EAST COMPANY.L.L.C	DUBAI
920.	BURKAN MUNITIONS SYSTEMS	DUBAI
921.	BURNDY TECHNOLOGIES	CHENNAI
922.	BURNS & MCDONNELL INDIA	MUMBAI
923.	BUSINESS BRIO	KOLKATA
924.	BUSINESS GURU	CHENNAI
925.	BUSIPRO CONSULTANCY AND SERVICES (P) LTD.	CHENNAI
926.	BYDESIGN (I) (P) LTD.	BANGALORE
927.	C.R.I PUMPS	COIMBATORE
928.	C3I SOLUTIONS	HYDERABAD
929.	CA TECHNOLOGIES	HYDERABAD
930.	CAAVO LABS (I) (P) LTD.	BANGALORE
931.	CADD CENTRE TRAINING SERVICES (P) LTD.	CHENNAI
932.	CADENCE	BANGALORE
933.	CADENCE	BELLANDUR
934.	CADENCE	DELHI
935.	CADENCE	NOIDA
936.	CADENCE DESIGN SYSTEM	BANGALORE
937.	CADENCE DESIGN SYSTEMS	DELHI
938.	CADENCE DESIGN SYSTEMS (I) (P) LTD.	PUNE
939.	CADFEM ENGINEERING SERVICES (I) (P) LTD.	HYDERABAD
940.	CADFEM INDIA	HYDERABAD
941.	CADILA HEALTH CARE LTD.	HYDERABAD
942.	CADILA HEALTHCARE LTD.	DELHI
943.	CADMAXX SOLUTIONS (P) LTD.	BANGALORE
944.	CAG OF INDIA(GOI)	HYDERABAD
945.	CAIR DRDO	BANGALORE
946.	CAIRN (I) LTD.	GURGAON
947.	CALCON INSTRUMENTATION & SALES LLC	DUBAI
948.	CALCUTTA GUJRATI SAMAJ MEDICAL CENTRE	KOLKATA
949.	CALCUTTA MEDICAL REASERCH INSTITUTE	KOLKATA
950.	CALIBER INTERCONNECT SOLUTIONS	BANGALORE
951.	CALIBER INTERCONNECT SOLUTIONS (P) LTD.	COIMBATORE
952.	CALITRON CALIBRATION LABORATORY	PUNE
953.	CALLHEALTH SERVICES (P) LTD.	HYDERABAD
954.	CALLIDUSCLOUD AS SAP COMPANY	HYDERABAD
955.	CALSOFT INC.	PUNE
956.	CALSONIC KANSEI MOTHERSON AUTO PRODUCTS	CHENNAI
957.	CALYPSO TECHNOLOGY (I) (P) LTD.	CHENNAI
958.	CAMERON MANUFACTURING (I) (P) LTD.	COIMBATORE
959.	CAMERON MANUFACTURING INDIA	COIMBATORE
960.	CAMERON-A SCHLUMBERGER COMPANY	COIMBATORE
961.	CAMFIL (I) (P) LTD.	DELHI
962.	CAMPUS EAI (I) (P) LTD.	DELHI
963.	CAMPUS MANAGEMENT INTERNATIONAL (P) LTD.	BANGALORE
964.	CAMTECH MANUFACTURING FZCO	DUBAI
965.	CANARA BANK	ERNAKULAM
966.	CANARA HSBC OBC LIFE INSURANCE	GURGAON
967.	CANARYS AUTOMATIONS (P) LTD.	SINGAPORE
968.	CANDELA LABS(FORMERLY AWPL)	BANGALORE
969.	CAN-PACK (I) (P) LTD.	AURANGABAD
970.	CANVASINFRA BUILD (P) LTD.	DELHI
971.	CAP GEMININ (I) (P) LTD.	HYDERABAD
972.	CAPACIOUS IT SERVICES	HYDERABAD
973.	CAPCO TECHNOLOGIES	BANGALORE
974.	CAPGEMINI (I) (P) LTD.	CHENNAI
975.	CAPGEMINI (I) (P) LTD.	GURGAON
976.	CAPGEMINI (I) (P) LTD.	HYDERABAD
977.	CAPGEMINI (I) (P) LTD.	NOIDA
978.	CAPGEMINI (I) (P) LTD.	PUNE
979.	CAPGEMINI (I) (P) LTD.	BANGALORE
980.	CAPGEMINI SERVICES (I) (P) LTD.	DELHI
981.	CAPGEMINI SERVICES (I) (P) LTD.	MUMBAI
982.	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	BANGALORE
983.	CAPGEMINI TECHNOLOGY SERVICES INDIA	MUMBAI
984.	CAPGEMINI TECHNOLOGY SERVICES LTD.	PUNE
985.	CAPITA	PUNE
986.	CAPITAL PRECISION TECHNOLOGY (P) LTD.	CHENNAI
987.	CAPRICORN GROUP	TRIVANDRUM

S.No.	ORGANIZATION	LOCATION
988.	CAPRUSIT (P) LTD.	HYDERABAD
989.	CAPSULE8 (I) (P) LTD.	CHENNAI
990.	CAPTRONIC SYSTEMS (P) LTD.	BANGALORE
991.	CARBORUNDUM UNIVERSAL LTD.	CHENNAI
992.	CARBORUNDUM UNIVERSAL LTD.	HOSUR
993.	CARBYNETECH (I) (P) LTD.	HYDERABAD
994.	CARDIAC DESIGN LABS	MYSORE
995.	CARE HOSPITAL	HYDERABAD
996.	CAREER INSTITUTE OF COMMERCE & ACCOUNTI	KOTA
997.	CAREER NET	BANGALORE
998.	CAREERBUILDER (P) LTD.	DELHI
999.	CARESOFT GLOBAL	COIMBATORE
1000.	CARESOFT GLOBAL (P) LTD.	CHENNAI
1001.	CARESOFT GLOBAL (P) LTD.	COIMBATORE
1002.	CARGILL (I) (P) LTD.	GURGAON
1003.	CARGILL BUSINESS SERVICES (I) (P) LTD.	BANGALORE
1004.	CARGO ON GO (P) LTD.	DELHI
1005.	CARL ZEISS (I) (P) LTD.	BANGALORE
1006.	CARL ZEISS INDIA(BANGALORE) PVT.LTD	BANGALORE
1007.	CARLISLE TRADING AND MANUFACTURING (I) (P) LTD.	CHENNAI
1008.	CARRARO (I) (P) LTD.	PUNE
1009.	CARRIER AIRCONDITIONING & REFRIGERATION LTD.	KOLKATA
1010.	CARS24 SERVICES (P) LTD.	GURGAON
1011.	CARTEBLANCHE	DELHI
1012.	CARTINI (I) LTD.	MADKAIGOA
1013.	CARTINI (I) LTD.	PONDA
1014.	CASCADE FANS (P) LTD.	PUNE
1015.	CASE NEW HOLLAND	PUNE
1016.	CASE NEW HOLLAND CONSTRUCTION EQUIPMENTS (P) LTD.	PITHAMPUR
1017.	CASE STRUCTURAL ENGINEERS	KOLLAM
1018.	CAST SOFTWARE (I) (P) LTD.	BANGALORE
1019.	CATALENT PHARMA	BANGALORE
1020.	CATALINA MARKETING JAPAN	HYDERABAD
1021.	CATERPILLAR (I) (P) LTD.	BANGALORE
1022.	CATERPILLAR (I) (P) LTD.	CHENNAI
1023.	CATERPILLAR (I) (P) LTD.	HOSUR
1024.	CATERPILLAR (I) (P) LTD.	THIRUVALLUR
1025.	CAUSECODE TECHNOLOGIES (P) LTD.	PUNE
1026.	CAUSEWAY SOFTWARE TECHNOLOGIES	BANGALORE
1027.	CAVENDISH INDUSTRIES LTD.	HARIDWAR
1028.	CAVENDISH INDUSTRIES LTD.(J K TYRE ASSOCIATE)	DELHI
1029.	CAVIUM NETWORKS (I) (P) LTD.	HYDERABAD
1030.	CBK INFOTETECH (I) (P) LTD.	BANGALORE
1031.	CBRE SOUTH ASIA (P) LTD.	CHENNAI
1032.	CBRI	ROORKEE
1033.	CDAC HYDERABAD	HYDERABAD
1034.	CDAC THIRUVANANTHAPURAM	PUNE
1035.	CDAC-NOIDA	DELHI
1036.	CDK GLOBAL	HYDERABAD
1037.	CDK GLOBAL	PUNE
1038.	CDK GLOBAL (I) (P) LTD.	HYDERABAD
1039.	CEAT LTD.	MUMBAI
1040.	CEAT SPECIALTY TYRES LTD.	AMBERNATH
1041.	CEAT TYRES LTD.	PUNE
1042.	CEB (NOW GARTNER)	BANGALORE
1043.	C-EDGE TECHNOLOGIES LTD.	DELHI
1044.	CELEBRITY FASHIONS LTD.	CHENNAI
1045.	CELIGO	HYDERABAD
1046.	CELLERITE SYSTEMS	HYDERABAD
1047.	CELLIBER TECHNOLOGIES	BANGALORE
1048.	CENDUIT (I) SERVICES (P) LTD.	BANGALORE
1049.	CENEDEX (I) SOFTWARE SOLUTIONS	DELHI
1050.	CENTER FOR DEVELOPMENT OF ADVANCED COMPU	BANGALORE
1051.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	CHENNAI
1052.	CENTER FOR STUDY OF SCIENCE TECHNOLOGY	BANGALORE
1053.	CENTRAL BOARD OF INDIRECT TAXES	DELHI
1054.	CENTRAL GOVERNMENT	KOLKATA
1055.	CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE	BANGALORE
1056.	CENTRE FOR DEVELOPMENT OF ADVANCED COMPU	DELHI
1057.	CENTRE FOR DEVELOPMENT OF ADVANCED COMPU	MUMBAI
1058.	CENTRE FOR DEVELOPMENT OF ADVANCED COMPU	PUNE

S.No.	ORGANIZATION	LOCATION
1059.	CENTRE FOR DEVELOPMENT OF ADVANCED COMPU	THIRUVANANTHAPURAM
1060.	CENTRE FOR DEVELOPMENT OF TELEMATICS	BANGALORE
1061.	CENTRE FOR DEVELOPMENT OF TELEMATICS(C-DOT)	BANGALORE
1062.	CENTRE FOR DEVOLOPMENT OF ADVANCED COMPU	TRIVANDRUM
1063.	CENTROMOTION INDIA	BANGALORE
1064.	CENTUM ELECTRONICS	BANGALORE
1065.	CENTUM ELECTRONICS LTD.	BANGALORE
1066.	CENTURY HOSPITAL	BANGALORE
1067.	CENTURYLINK (I) (P) LTD.	DELHI
1068.	CENTURYLINK INDIA	BANGALORE
1069.	CENTURYLINK INDIA	NOIDA
1070.	CENTURYLINK TECHNOLOGIES (I) (P) LTD.	BANGALORE
1071.	CENTURYLINK TECHNOLOGIES (I) (P) LTD.	DELHI
1072.	CEREBRA CONSULTING INC	HYDERABAD
1073.	CEREBROZ EDUTREE	AHMEDABAD
1074.	CEREBTEC TECHNOLOGIES (P) LTD.	BANGALORE
1075.	CERIUM SYSTEMS (P) LTD.	BANGALORE
1076.	CERNER HEALTHCARE SOLUTIONS (I) (P) LTD.	BANGALORE
1077.	CG POWER & INDUSTRIAL SOLUTIONS LTD.	AURANGABAD
1078.	CG POWER & INDUSTRIAL SOLUTIONS LTD.	NASHIK
1079.	CGI INC.	HYDERABAD
1080.	CGTECH (I) (P) LTD.	PUNE
1081.	CHAITHANYA EYE HOSPITAL & RESERACH INSTI	TRIVANDRUM
1082.	CHAKRA NETWORK SOLUTIONS (P) LTD.	CHENNAI
1083.	CHAMBAL FERTLISERS AND CHEMICALS LTD.	KOTA
1084.	CHAOLOGIX TECHNOLOGIES (I) (P) LTD.	BANGALORE
1085.	CHARNOCK HOSPITALS	KOLKATA
1086.	CHECKPOINT SYSTEMS	BANGALORE
1087.	CHECKTRONIX (I) (P) LTD.	CHENNAI
1088.	CHELLAM ELECTRICAL SERVICES	CHENNAI
1089.	CHELSIO COMMUNICATIONS	BANGALORE
1090.	CHEMTEX CONSULTING OF (I) (P) LTD.	BANGALORE
1091.	CHENNAI CRITICAL CARE CONSULTANTS (P) LTD.	CHENNAI
1092.	CHETAK ENTERPRISES LTD.	NIMBAHERA
1093.	CHETTINAD CEMENT CORPORATION LTD.	DINDIGUL
1094.	CHEVRON ORONITE PTE LTD.	CHENNAI
1095.	CHEVRON ORONITE PTE LTD.	SINGAPORE
1096.	CHINA PETROLEUM PIPELINE ENGG-ABUDHABI	DUBAI
1097.	CHINA SYSTEM (DUBAI) UNIQUE ITS	CHENNAI
1098.	CHRISTIAN MEDICAL COLLEGE	DELHI
1099.	CHRISTIAN MEDICAL COLLEGE	LUDHIANA
1100.	CHRISTIAN MEDICAL COLLEGE	TAMILNADU
1101.	CHRISTIAN MEDICAL COLLEGE	VELLORE
1102.	CHRISTIAN MEDICAL COLLEGE AND HOSPITAL LUDHIANA	DELHI
1103.	CHRISTIAN MEDICAL COLLEGE VELLORE	CHENNAI
1104.	CHRISTIE DIGITAL SYSTEMS	CHENNAI
1105.	CHRISTIE DIGITAL SYSTEMS (I) (P) LTD.	BANGALORE
1106.	CHROMEBASE MINING	ZIMBABWE
1107.	CHRYSALISGOLD (P) LTD.	BANGALORE
1108.	CHUBB ALBA CONTROL SYSTEMS LTD.	BANGALORE
1109.	CIBER AN HTC GLOBALCOMPANY	BANGALORE
1110.	CIBERSITIES (I) (P) LTD.	CHENNAI
1111.	CIENA	DELHI
1112.	CIENA (I) (P) LTD.	DELHI
1113.	CIENA (I) (P) LTD.	GURGAON
1114.	CIENA (I) LTD.	DELHI
1115.	CIENA INDIA	DELHI
1116.	CIENTRA TECHSOLUTIONS (P) LTD.	BANGALORE
1117.	CIGITAL ASIA (P) LTD.	BANGALORE
1118.	CIGNETIX SYSTEMS	DUBAI
1119.	CIGNEX DATAMETIX	GURGAON
1120.	CIGNEX DATAMETIX	HYDERABAD
1121.	CIGNITI TECHNOLOGIES	HYDERABAD
1122.	CIGNITI TECHNOLOGIES LTD.	HYDERABAD
1123.	CINCH BUSINESS SOLUTIONS (P) LTD.	COIMBATORE
1124.	CIPLA LTD.	GOA
1125.	CIPLA LTD.	HYDERABAD
1126.	CIPLA LTD.	MUMBAI
1127.	CISCO (I) (P) LTD.	BANGALORE
1128.	CISCO SYSTEMS	PUNE
1129.	CISCO SYSTEMS (I) (P) LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
1130.	CISCO SYSTEMS INC.	BANGALORE
1131.	CISCO SYSTEMS INC.	DELHI
1132.	CISCO SYSTEMS INDIA	BANGALORE
1133.	CITI TECHNOLOGY CENTRE	PUNE
1134.	CITIBANK	BANGALORE
1135.	CITIBANK	MUMBAI
1136.	CITIBANK	SINGAPORE
1137.	CITICORP SERVICES (I) (P) LTD.	BANGALORE
1138.	CITICORP SERVICES (I) (P) LTD.	CHENNAI
1139.	CITICORP SERVICES (I) (P) LTD.	PUNE
1140.	CITIUSTECH	PUNE
1141.	CITRIX R AND D	BANGALORE
1142.	CITY CONSTRUCTION	GOA
1143.	CITYKART RETAIL (P) LTD.	DELHI
1144.	CK BIRLA HOSPITALS (CMRI & BMBHRC)	KOLKATA
1145.	CKBIRLAHOSPITAL FOR WOMEN	GURGAON
1146.	CLADTECH INTERNATIONAL AL RAJHI HOLDING	DUBAI
1147.	CLAIRVOLEX KNOWLEDGE PROCESSES (P) LTD.	BANGALORE
1148.	CLASSIC INFO PTY LTD.	CHENNAI
1149.	CLASSIC MARBLE COMPANY	SILVASSA
1150.	CLAUSION (I) (P) LTD.	CHANDIGARH
1151.	CLEARA LLC MARYLAND USA	GUNTUR
1152.	CLEVELAND BRIDGE & ENGINEERING MIDDLE EA	DUBAI
1153.	CLIMATE MAKER ELECTROMECHANICAL CO. LLC.	DUBAI
1154.	CLIX CAPITAL	DELHI
1155.	CLOUD ELEMENTS	HYDERABAD
1156.	CLOUD ELEMENTS INDIA	HYDERABAD
1157.	CLOUD LENDING SOLUTIONS	BANGALORE
1158.	CLOUD TECHNOLOGIES	BANGALORE
1159.	CLOUD TECHNOLOGIES	HYDERABAD
1160.	CLOUDMANTRA	PUNE
1161.	CLOUDWAVE TECHNOLOGIES (P) LTD.	BANGALORE
1162.	CLOVE DENTAL	DELHI
1163.	CLOVER INFOTECH (P) LTD.	MUMBAI
1164.	CLUES NETWORK (P) LTD.	DELHI
1165.	CLUGRID CLOUD SERVICES (P) LTD.	MUMBAI
1166.	CMAI	BANGALORE
1167.	CMC VELLORE	VELLORE
1168.	CME (I) TECHNOLOGY AND SUPPORT SERVICES (P) LTD.	BANGALORE
1169.	CME GROUP	BANGALORE
1170.	CME GROUP (I) LTD.	BANGALORE
1171.	CME INDIATECHNOLOGY AND SUPPORT SERVICES LTD.	BANGALORE
1172.	CMI INDUSTRY AUTOMATION (P) LTD.	PUNE
1173.	CMS COMPUTERS	BANGALORE
1174.	CNH CONSTRUCTION EQUIPMENT (I) (P) LTD.	PUNE
1175.	CNH INDUSTRIAL	NOIDA
1176.	CNSI	CHENNAI
1177.	COBHAM MISSION EQUIPMENT	HYDERABAD
1178.	COCHIN SHIPYARD LTD.	COCHIN
1179.	CODE ORGO	HYDERABAD
1180.	CODEEVEREST (P) LTD.	BANGALORE
1181.	CODEHALL TECHNOLOGY	BANGALORE
1182.	COGNAM TECHNOLOGY (P) LTD.	DELHI
1183.	COGNITIVE RESEARCH AND INNOVATIONS (P) LTD.	BANGALORE
1184.	COGNIZANT- CALL LETTER PENDING	CHENNAI
1185.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	HYDERABAD
1186.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	KOLKATA
1187.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	BANGALORE
1188.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	CHENNAI
1189.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	COIMBATORE
1190.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	DELHI
1191.	COGNIZANT TECHNOLOGY SOLUTIONS (I) (P) LTD.	PUNE
1192.	COGNIZANT WORLDWIDE LTD.	HYDERABAD
1193.	COINTRIBE TECHNOLOGIES (P) LTD.	DELHI
1194.	COLE PARMER (I) (P) LTD.	HYDERABAD
1195.	COLGATE GLOBAL BUSINESS SERVICES	PUNE
1196.	COLLAB HOUSE (P) LTD.	HYDERABAD
1197.	COLLEGE OF DENTAL SCIENCES	DAVENGERA
1198.	COLLINS AEROSPACE	BANGALORE
1199.	COLLINS AEROSPACE	HYDERABAD
1200.	COLLINS AEROSPACE SYSTEMS	BANGALORE

S.No.	ORGANIZATION	LOCATION
1201.	COLORTOKEN	BANGALORE
1202.	COLRUYT IT CONSULTANCY (I) (P) LTD.	HYDERABAD
1203.	COLT TECHNOLOGIES (P) LTD.	BANGALORE
1204.	COLT TECHNOLOGIES (P) LTD.	GURGAON
1205.	COLUMBIAASIA HOSPITAL	BANGALORE
1206.	COLUMBUS GLOBAL SERVICES (I) (P) LTD.	HYDERABAD
1207.	COMAKEIT	HYDERABAD
1208.	COMAU (I) (P) LTD.	PUNE
1209.	COMCAST (I) ENGINEERING CENTER	CHENNAI
1210.	COMFOTEC ELECTROMECHANICAL SERIVCES LLC	DUBAI
1211.	COMHARD TECHNOLOGIES	DELHI
1212.	COMMSCOPE	BANGALORE
1213.	COMMSCOPE	GOA
1214.	COMMSCOPE	VERNA
1215.	COMMVAULT	BANGALORE
1216.	COMMVAULT	HYDERABAD
1217.	COMMVAULT SYSTEMS	BANGALORE
1218.	COMMVAULT SYSTEMS	HYDERABAD
1219.	COMODO SECURITY SOLUTINS (P) LTD.	CHENNAI
1220.	COMPASS (I) SUPPORT SERVICES (P) LTD.	MUMBAI
1221.	COMPRO TECHNOLOGIES (P) LTD.	DELHI
1222.	COMPUCOM-CSI INDIA	PUNE
1223.	COMPUNNEL TECHNOLOGIES	NOIDA
1224.	COMPUTER AID INC. INDIA	BANGALORE
1225.	COMPUTER WAVE	BANGALORE
1226.	COMPUTERSCIENCECORPORATION	HYDERABAD
1227.	COMSTAR AUTOMOTIVE TECHNOLOGIES	CHENNAI
1228.	COMSTAR AUTOMOTIVE TECHNOLOGY (P) LTD.	CHENNAI
1229.	CONAX ACCESS SYSTEMS (P) LTD.	NOIDA
1230.	CONCENTRIX	BANGALORE
1231.	CONCENTRIX DAKSH (I) (P) LTD.	DELHI
1232.	CONGRUENT INFO-TECH	CHENNAI
1233.	CONSERVE INFOTECH (P) LTD.	DELHI
1234.	CONSILIENCE	MUMBAI
1235.	CONSOLIDATED CONTRACTORS INTERNATIONAL C	ABUDHABI
1236.	CONSTAIR PROJECTS	PUNE
1237.	CONSTEMS-AI SYSTEM (P) LTD.	DELHI
1238.	CONSUL NEOWATT POWER SOLUTION (P) LTD.	CHENNAI
1239.	CONSUL NEOWATT POWER SOLUTIONS (P) LTD.	CHENNAI
1240.	CONTATA SOLUTIONS (P) LTD.	NOIDA
1241.	CONTINENTAL AG	BANGALORE
1242.	CONTINENTAL AUTOMOTIVE	BANGALORE
1243.	CONTINENTAL AUTOMOTIVE (P) LTD. BANGALORE	BANGALORE
1244.	CONTINENTAL AUTOMOTIVE COMPONENT (I) (P) LTD.	BANGALORE
1245.	CONTINENTAL AUTOMOTIVE COMPONENTS	BANGALORE
1246.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) (P) LTD.	BANGALORE
1247.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT.LTD	BANGALORE
1248.	CONTINENTAL AUTOMOTIVE COMPONENTS (INDIA	BANGALORE
1249.	CONTINENTAL AUTOMOTIVE COMPONENTS (INDIA	BHIWADI
1250.	CONTINENTAL AUTOMOTIVE COMPONENTS (INDIA	MANESAR
1251.	CONTINENTAL AUTOMOTIVE COMPONENTS (INDIA)	BANGALORE
1252.	CONTINENTAL AUTOMOTIVE COMPONENTS (P) LTD.	BANGALORE
1253.	CONTINENTAL AUTOMOTIVES	BANGALORE
1254.	CONTINENTAL AUTOMOTIVES (P) LTD.	BANGALORE
1255.	CONTINUUM MANAGED SOLUTIONS	PUNE
1256.	CONTINUUM MANAGED SOLUTIONS (P) LTD.	MUMBAI
1257.	CONTROL COMPUTER SYSTEMS (SYSCOM)	DUBAI
1258.	CONTROLBLUE AUTOMATION AND SOFTWARE (P) LIMITE	KOLKATA
1259.	CONVERGYS (I) SERVICES	GURGAON
1260.	CONVERGYS (I) SERVICES	HYDERABAD
1261.	CONVERSANT SOFTWARE DEVELOPMENT AND CAMPAIGN MANAG	BANGALORE
1262.	COOPER STANDARD	PUNE
1263.	CORALHIRE TECHNOLOGIES	BANGALORE
1264.	CORAZA TECHNOLOGIES/ONEDIRECT	BANGALORE
1265.	CORE VALUE TECHNOLOGIES DELHI INDIA	NOIDA
1266.	COREEL TECHNOLOGIES	BANGALORE
1267.	CORODEX AGENCIES LLC	DUBAI
1268.	COROMANDEL INTERNATIONAL LTD.	VAPI
1269.	COROMANDEL TRAVELS LTD.	CHENNAI
1270.	CORONA DIGITEX	BANGALORE
1271.	CORP. R&D BHARAT HEAVY ELECTRICAL LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
1272.	COSMO FILMS LTD.	VADODARA
1273.	COSTRATEGIX TECH (P) LTD.	BANGALORE
1274.	COTTON UNIVERSITY	GUWAHATI
1275.	COVANCE (I) PHARMACEUTICAL SERVICES (P) LTD.	MUMBAI
1276.	COVIAM TECHNOLOGIES PVT.LTD	HYDERABAD
1277.	COVIDIEN (I) ENGINEERING CENTER (MEDTR	HYDERABAD
1278.	COVIDIEN ENGINEERING SERVICES	HYDERABAD
1279.	COVIDIEN HEALTHCARE (I) PVT.LTD .	MYSORE
1280.	CP PUMPS AND SYSTEMS FZE	DUBAI
1281.	CPA GLOBAL	DELHI
1282.	CPA GLOBAL	GURGAON
1283.	CRAFTSMAN AUTOMATION (P) LTD.	JAMSHEDPUR
1284.	CRANE GLOBAL HEALTH SOLUTION	PUNE
1285.	CRANE PROCESS FLOW TECH.	SATARA
1286.	CRANE PROCESS FLOW TECHNOLOGIES	MUMBAI
1287.	CRANE PROCESS FLOW TECHNOLOGIES	PUNE
1288.	CREATIVE ABODE	GOA
1289.	CREATIVE SYNERGIES CONSULTING (I) PVT	BANGALORE
1290.	CREDIT SUISSE	MUMBAI
1291.	CREDIT SUISSE SERVICES (I) (P) LTD.	BANGALORE
1292.	CRESTTEK ENGINEERING SOLUTIONS (P) LTD.	CHENNAI
1293.	CRIPUMPS (P) LTD.	KOLKATA
1294.	CROMPTON GREAVES LTD.	AHMEDNAGAR
1295.	CROMPTON GREAVES LTD.	BANGALORE
1296.	CROMPTON GREAVES LTD.	MUMBAI
1297.	CROPIN TECHNOLOGY SOLUTIONS	BANGALORE
1298.	CRPF	DELHI
1299.	CRYOGENIC PROCESS CONTROLS	CHENNAI
1300.	CRYOLOR ASIA PACIFIC (P) LTD.	CHENNAI
1301.	CSG SYSTEMS INTERNATIONAL	BANGALORE
1302.	CSIR-IGIB	DELHI
1303.	CSIR-NATIONAL INSTITUTE OF OCEANOGRAPHY	GOA
1304.	CSIR-NATIONAL PHYSICAL LABORATORY NEW DELHI	DELHI
1305.	CSS CORP (P) LMTD	BANGALORE
1306.	CSS CORP (P) LTD.	CHENNAI
1307.	CTK SOFTWARE	BANGALORE
1308.	CTRLS DATACENTERS LTD.	HYDERABAD
1309.	CTS (I) (P) LTD.	KOLKATA
1310.	CUBELOGIC SOFTWARE (I) (P) LTD.	BANGALORE
1311.	CULLIGAN INTERNATIONAL (EMIRATES) LLC	DUBAI
1312.	CUMMINS (I) LTD.	BANGALORE
1313.	CUMMINS (I) LTD.	DELHI
1314.	CUMMINS (I) LTD.	GUWAHATI
1315.	CUMMINS (I) LTD.	JAIPUR
1316.	CUMMINS (I) LTD.	JAMSHEDPUR
1317.	CUMMINS (I) LTD.	KOLKATA
1318.	CUMMINS (I) LTD.	LUCKNOW
1319.	CUMMINS (I) LTD.	PHALTAN
1320.	CUMMINS (I) LTD.	PITHAMPUR
1321.	CUMMINS (I) LTD.	PUNE
1322.	CUMMINS (I) LTD.	RANCHI
1323.	CUMMINS BUSINESS UNIT	PUNE
1324.	CUMMINS EMISSION SOLUTION	PUNE
1325.	CUMMINS GENERATOR TECHNOLOGIES (I) (P) LTD.	PUNE
1326.	CUMMINS MIDDLE EAST	DUBAI
1327.	CUMMINS TECHNICAL CENTER INDIA.	PUNE
1328.	CUMMINS TECHNOLOGIES	PHALTAN
1329.	CUMMINS TECHNOLOGIES (I) (P) LTD.	PUNE
1330.	CUMMINS TURBO TECHNOLOGIES (I) LTD.	PITHAMPUR
1331.	CUMMINS TURBO TECHNOLOGIES (I) LTD.	PUNE
1332.	CUMULUS SYSTEMS (P) LTD.	PUNE
1333.	CUREWELL HOSPITAL	INDORE
1334.	CURIOKIDZ	CHENNAI
1335.	CUSTOMER ANALYTICS	CHENNAI
1336.	CUSTOMERXPS SOFTWARE (P) LTD.	BANGALORE
1337.	CUTTING EDGE DIGITAL (P) LTD.	DELHI
1338.	CV DESIGNERS (I) (P) LTD.	HYDERABAD
1339.	CVC TECHNOLOGIES (I) (P) LTD.	MUMBAI
1340.	CVENT (I) (P) LLTD	GURGAON
1341.	CYBAGE SOFTWARE (P) LTD.	HYDERABAD
1342.	CYBAGE SOFTWARE (P) LTD.	KALYANINAGAR

S.No.	ORGANIZATION	LOCATION
1343.	CYBAGE SOFTWARE (P) LTD.	MUMBAI
1344.	CYBAGE SOFTWARE (P) LTD.	PUNE
1345.	CYBRILLA TECHNOLOGIES	BANGALORE
1346.	CYGNUS MICROSYSTEMS (P) LTD.	HYDERABAD
1347.	CYIENT LTD.	HYDERABAD
1348.	CYIENT.LTD.	DELHI
1349.	CYPRESS	BANGALORE
1350.	CYPRESS SEMICONDUCTORS	BANGALORE
1351.	CYRUS-XP HEALTH INFORMATION TECHNOLOGY (P) LTD.	BANGALORE
1352.	CYWARE LABS	MUMBAI
1353.	D VIATE SYSTEMS (P) LTD.	HYDERABAD
1354.	D. E. SHAW (I) (P) LTD.	HYDERABAD
1355.	D2C INSURANCE BROKING (P) LTD.	DELHI
1356.	DABUR (I) LTD.	SILVASSA
1357.	DAH2 (P) LTD.	HYDERABAD
1358.	DAIKIN AIRCONDITIONING (I) (P) LTD.	DELHI
1359.	DAIKIN AIRCONDITIONING (I) (P) LTD.	NEEMRANA
1360.	DAIMLER (I) COMMERCIAL VEHICLE (P) LIM	CHENNAI
1361.	DAIMLER (I) COMMERCIAL VEHICLES	CHENNAI
1362.	DAIMLER (I) COMMERCIAL VEHICLES (P) LTD.	CHENNAI
1363.	DAIMLER (I) COMMERCIAL VEHICLES (P) LTD.	KANCHEEPURAM
1364.	DAIMLER (I) COMMERCIAL VEHICLES ORAGADAM	CHENNAI
1365.	DAIMLER (I) DEPUTED BY LEADHR	CHENNAI
1366.	DALMIA CEMENT BHARAT LTD.	DCBL
1367.	DALTON CLINSYS	VADODARA
1368.	DAMCO SOLUTIONS (P) LTD.	NOIDA
1369.	DANA (I) TECHNICAL CENTRE	PUNE
1370.	DANFOSS INDUSTRIES (P) LTD.	CHENNAI
1371.	DANILELI (I) LTD.	TADA
1372.	DANSKE IT	BANGALORE
1373.	DANSKE IT & SUPPORT SERVICES (P) LTD.	BANGALORE
1374.	DANWAY EME LLC	DUBAI
1375.	DAR AL HANDASAH	PUNE
1376.	DARASHAW & CO. (P) LTD.	DELHI
1377.	DARE DRDO	BANGALORE
1378.	DASSAULT SYSTEMES	BANGALORE
1379.	DASSAULT SYSTEMES	PUNE
1380.	DASSAULT SYSTEMS	PUNE
1381.	DATAFACTORS SOFTWARE (I) (P) LTD.	BANGALORE
1382.	DATAFLOW SERVICE (P) LTD.	DELHI
1383.	DATAM INTELLIGENCE 4MARKET RESEARCH	HYDERABAD
1384.	DATAMATICS GLOBAL SERVIES LTD.	BANGALORE
1385.	DATAMETICA	PUNE
1386.	DATAMI MOBILE SOLUTIONS (P) LTD.	BANGALORE
1387.	DATARESOLVE TECHNOLOGIES	BANGALORE
1388.	DATT MEDIPRODUCTS (P) LTD.	DELHI
1389.	DATYLER PHARMA PACKAGING (I) (P) LTD.	PUNE
1390.	DBOI GLOBAL SERVICES (P) LTD.	BANGALORE
1391.	DBS ASIA HUB 2 (P) LTD.	HYDERABAD
1392.	DBS ASIA HUB2 (P) LTD.	HYDERABAD
1393.	DBS BANK	SINGAPORE
1394.	DBT MISSION CABINET SECRETARIAT	DELHI
1395.	DCB BANK LTD.	CHENNAI
1396.	DCM SHRIRAM LTD. UNIT: SHRIRAM ALKALI &	BHARUCH
1397.	DECATHLON SPORTS (I) (P) LTD.	PUNE
1398.	DECISION MINDS (I) (P) LTD.	BANGALORE
1399.	DECISION RESOURCES GROUP	BANGALORE
1400.	DEENANATH MANGESHKAR HOSPITAL PUNE	PUNE
1401.	DEEPTI ELECTRONICS & ELECTRO OPTICS (P) LTD.	BANGALORE
1402.	DEFENCE	DELHI
1403.	DEFENCE COMMUNICATION NETWORK SUB GROUP	MEERUT
1404.	DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY	PUNE
1405.	DEFENCE R&D ORG (DRDO) MIN OF DEFENCE	HYDERABAD
1406.	DEFENCE RESEARCH & DEVELOPMENT ORGANIZATION	DELHI
1407.	DEFENCE RESEARCH & DEVELOPMENT ORGANIZATION	HYDERABAD
1408.	DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION	DELHI
1409.	DEFENCE RESEARCH DEVELOPMENT LABORATORY	HYDERABAD
1410.	DEFENCE SERVICE(ARMY)	DELHI
1411.	DEFENCE SERVICE(ARMY)	JALANDHAR
1412.	DEFENCE SERVICE(ARMY)	JAMNAGAR
1413.	DEFENCE SERVICE(ARMY)	PANCHKULA

S.No.	ORGANIZATION	LOCATION
1414.	DEFENCE SERVICES (ARMY)	DELHI
1415.	DEFENCE TERRAIN RESEARCH LABORATORY (DTRL) DRDO	DELHI
1416.	DEFINITION NETWORKS (I) (P) LIMI	PUNE
1417.	DEFINITION NETWORKS (P) LTD.	PUNE
1418.	DELHI INTEGRATED MULTI MODAL TRANSIT SYSTEM LTD.	DELHI
1419.	DELL EMC	BANGALORE
1420.	DELL EMC	CHENNAI
1421.	DELL EMC	RIYADH
1422.	DELL EMC CORPORATION	BANGALORE
1423.	DELL EMC TECHNOLOGIES	BANGALORE
1424.	DELL INTERNATIONAL SERVICES (P) LTD.	BANGALORE
1425.	DELL R&D	BANGALORE
1426.	DELL TECHNOLOGIES	BANGALORE
1427.	DELL TECHNOLOGIES	CHENNAI
1428.	DELL TECHNOLOGIES	HYDERABAD
1429.	DELL TECHNOLOGIES INTERNATIONAL	HYDERABAD
1430.	DELL TECHNOLOGY	PUNE
1431.	DELLEMC	BANGALORE
1432.	DELLNER (I) (P) LTD.	CHENNAI
1433.	DELOITTE CONSULTING (I) (P) LTD.	BANGALORE
1434.	DELOITTE CONSULTING (I) (P) LTD.	DELHI
1435.	DELOITTE CONSULTING (I) (P) LTD.	GURGAON
1436.	DELOITTE CONSULTING (I) (P) LTD.	HYDERABAD
1437.	DELOITTE CONSULTING LLC	BANGALORE
1438.	DELOITTE CONSULTING LLP	HYDERABAD
1439.	DELOITTE CONSULTING US (I) (P) LTD.	HYDERABAD
1440.	DELOITTE CONSULTING US (I) (P) LTD.	MUMBAI
1441.	DELOITTE LLP USI	BANGALORE
1442.	DELOITTE USI	BANGALORE
1443.	DELOITTE USI	HYDERABAD
1444.	DELOITTE USI	MUMBAI
1445.	DELOITTE USI HYDERABAD	HYDERABAD
1446.	DELPHI - TVS TECHNOLOGIES	CHENNAI
1447.	DELPHI AUTOMOTIVE SYSTEMS	BANGALORE
1448.	DELPHI AUTOMOTIVE SYSTEMS	DELHI
1449.	DELPHI CONNECTION SYSTEMS (I) LTD.	BANGALORE
1450.	DELPHI CONNECTION SYSTEMS (I) LTD.	CHENNAI
1451.	DELPHI CONNECTION SYSTEMS (I) LTD.	KOCHI
1452.	DELPHI TVS	BANGALORE
1453.	DELPHI TVS	CHENNAI
1454.	DELPHI TVS	THIRUVALLUR
1455.	DELTA (I) ELECTRONICS	DELHI
1456.	DELTA MAGNETS LTD.	PUNE
1457.	DELTA POWER SOLUTIONS (I) (P) LTD.	BANGALORE
1458.	DELTA POWER SOLUTIONS (I) (P) LTD.	DELHI
1459.	DELTRON	DELHI
1460.	DENSO (I) (P) LTD.	DELHI
1461.	DENSO INTERNATIONAL (I) (P) LTD.	DELHI
1462.	DENTAL CLINIC	DELHI
1463.	DEP (I) (P) LTD.	BANGALORE
1464.	DEP (I) (P) LTD.	CHENNAI
1465.	DEPARTMENT OF ATOMIC ENERGY AMD CR	HYDERABAD
1466.	DEPARTMENT OF TECHNICAL EDUCATION J&K GO	SRINAGAR
1467.	DEPT OF PHE GOVERNMENT OF JAMMU AND KASHMIR	DELHI
1468.	DEQODE (TECHRACERS (P) LTD.)	PUNE
1469.	DESDYNAMICS (P) LTD.	PUNE
1470.	DESIGN TECH SYSTEM LTD.	BANGALORE
1471.	DESIGN TECH SYSTEM LTD.	PUNE
1472.	DESIGNFLYOVER CONSULTING LLP	MUMBAI
1473.	DESIGNTECH SYSTEMS	HYDERABAD
1474.	DESIGNTECH SYSTEMS LTD.	CHENNAI
1475.	DESIRE ENGINEERING WORKS	MUMBAI
1476.	DESMANIA DESIGN (P) LTD.	DELHI
1477.	D-ESPAT (P) LTD.	CHENNAI
1478.	DETROIT ENGINEERED PRODUCTS INC	CHENNAI
1479.	DEUTSCHE BANK	MUMBAI
1480.	DEUTSCHE BANK	PUNE
1481.	DEUTSCHE BANK OPERATIONS INTERNATIONAL	PUNE
1482.	DEUTSCHE BÖRSE AG - FRANKFURT - GERMANY	HYDERABAD
1483.	DEVELOPMENT BANK OF SINGAPORE	HYDERABAD
1484.	DEVELOPMENT BANK OF SINGAPORE(DBS)	HYDERABAD

S.No.	ORGANIZATION	LOCATION
1485.	DEWA	DUBAI
1486.	DEXCEL ELECTRONICS DESIGNS (P) LTD.	BANGALORE
1487.	DEXCEL ELECTRONICS DESIGNS (P) LTD.	KANNUR
1488.	DEZMINDZ TECHNOLOGY	BANGALORE
1489.	DFCCIL	GURGAON
1490.	DGAQA MIN OF DEFENCE	BANGALORE
1491.	DGAQA MINISTRY OF DEFENCE	PUNE
1492.	DGCA	DELHI
1493.	DGQA	HYDERABAD
1494.	DGQA MINISTRY OF DEFENCE	HYDERABAD
1495.	DHAFIR GROUP FOR GENERAL TRADING	ABUDHABI
1496.	DHATRIINFO SOLUTIONS (P) LTD.	HYDERABAD
1497.	DHI (I) WATER & ENVIRONMENT (P) LTD.	DELHI
1498.	DHOOT TRANSMISSION (P) LTD.	PUNE
1499.	DHRUV CONSULTANCY SERVICES (P) LIMIT	MUMBAI
1500.	DHRUV EMBEDDED SOLUTIONS	HYDERABAD
1501.	DHS INFORMATICS	BANGALORE
1502.	DHYAN NETWORKS AND TECHNOLOGIES	CHENNAI
1503.	DIABETO MEDTECH (I) (P) LTD.	MUMBAI
1504.	DIAGNOSEARCH LIFE SCIENCES (P) LTD.	MUMBAI
1505.	DIAGNOSYS ELECTRONICS (I) (P) LTD.	BANGALORE
1506.	DICETEK	DUBAI
1507.	DIEBOLD NIXDORF (I) (P) LTD.	GOA
1508.	DIEBOLD NIXDORF (I) (P) LTD.	HYDERABAD
1509.	DIERS BIOMEDICAL SOLUTIONS (P) LTD.	DELHI
1510.	DIETECH (I) (P) LTD.	CHENNAI
1511.	DIFACTO ROBOTICS AND AUTOMATION	BANGALORE
1512.	DIGI DRIVES (P) LTD.	FARIDABAD
1513.	DIGICOLLECT (I) (P) LTD.	BANGALORE
1514.	DIGITAL DESK INFO SYSTEMS (P) LTD.	HYDERABAD
1515.	DIGITALFACTORS (I) (P) LTD.	BANGALORE
1516.	DIGITALTRUST TECHNOLOGIES (P) LTD.	HYDERABAD
1517.	DIGITECH CONTROL AND AUTOMATION	CHENNAI
1518.	DIGITEL SOFTCOM	DELHI
1519.	DIMENSION DATA	BANGALORE
1520.	DIMENSION DATA	CHENNAI
1521.	DIMENSION DATA	MUMBAI
1522.	DINESH ENTERPRISES	KALYAN
1523.	DIRECTORATE GENERAL OF TRAINING MOSDE	DELHI
1524.	DIRECTORATE OF HEALTH SERVICES KERALA	TRIVANDRUM
1525.	DIRECTORATE OF TRANSPORT GOA	GOA
1526.	DISH TV (I) LTD.	DELHI
1527.	DITELLIGENCE (P) LTD.	BANGALORE
1528.	DIXON TECHNOLOGIES (I) LTD.	DELHI
1529.	DM WAYANAD INSTITUTE OF MEDICAL SCIENCES	HYDERABAD
1530.	DMDE	COIMBATORE
1531.	DMI	BANGALORE
1532.	DMRC	DELHI
1533.	DN HOMES	BHUBANESWAR
1534.	DNATA / EMIRATES GROUP	DUBAI
1535.	DNV GL BUSINESS ASSURANCE (I) (P) LTD.	CHENNAI
1536.	DOHA PETROLEUM	DOHA
1537.	DOIT&C GOVT. OF RAJASTHAN	SRIMADHOPUR
1538.	DOMAIN EXPERT SERVICES	CHENNAI
1539.	DONALDSON (I) FILTER SYSTEMS (P) LTD.	GURGAON
1540.	DONALDSON (I) FILTER SYSTEMS (P) LTD.	MANESAR
1541.	DONGFANG ELECTRONICS	CHENNAI
1542.	DOOSAN POWER SYSTEMS (I) (P) LTD.	CHENNAI
1543.	DORMA (I) (P) LTD.	CHENNAI
1544.	DOTWORLD TECHNOLOGIES	COIMBATORE
1545.	DOVER (I) (P) LTD.	BANGALORE
1546.	DOVER (I) (P) LTD.	CHENNAI
1547.	DOW CHEMICALS INTERNATIONAL (P) LIMI	CHENNAI
1548.	DPWORLD -UAE	DUBAI
1549.	DQS INDIA	BANGALORE
1550.	DR MEHTA HOSPITAL	CHENNAI
1551.	DR PRAFULLA PAATIL MULTISUPERSPECIALITY HOSPITAL	MUMBAI
1552.	DR ROHIT'S DENTA& IMPLANT CENTREL	DELHI
1553.	DR SUNDARARAJAN NEURO HOSPITAL (P) LTD.	CHENNAI
1554.	DR TMA PAI ROTARY HOSPITAL	MANIPAL
1555.	DR. CHAUDHARY HOSPITAL AND MEDICAL RESEARCH CENTRE	UDAIPUR

S.No.	ORGANIZATION	LOCATION
1556.	DR. NTR VAIDYA SEVA TRUST	VISAKHAPATNAM
1557.	DR. R.N. LAHOTI AYURVEDIC COLLEGE SULTA	SULTANPUR
1558.	DR. RANJEET JAGTAPS HEART CLINIC	PUNE
1559.	DR. REDDYS LABORATORIES	HYDERABAD
1560.	DR. REDDYS LABORATORIES LTD.	VISAKHAPATNAM
1561.	DREAM STEPS TECHNOLOGIES (P) LTD.	NOIDA
1562.	DREAMERINDIA INNOVATIONS	CHENNAI
1563.	DREAMORBIT SOFTECH (P) LTD.	BANGALORE
1564.	DRESSER-RAND	PUNE
1565.	DRESSER-RAND A SIEMENS BUSINESS	PUNE
1566.	DRUVA DATA SOLUTIONS (P) LTD.	PUNE
1567.	DRY DOCKS WORLD DUBAI	DUBAI
1568.	DSI TECHNOLOGIES (P) LTD.	CHENNAI
1569.	DSM - SINOCHEM PHARMACEUTICALS (I) (P) LTD.	TOANSA
1570.	DSMART SYSTEMS (P) LTD.	HYDERABAD
1571.	DTDC EXPRESS LTD.	MUMBAI
1572.	DUBAI AIR NAVIGATION SERVICES	DUBAI
1573.	DUBAI CABLE COMPANY	DUBAI
1574.	DUBAI ELECTRICITY & WATER AUTHORITY	DUBAI
1575.	DUBAI ELECTRICITY AND WATER AUTHORITY	DUBAI
1576.	DUFRY BUSINESS SERVICES LLP	BANGALORE
1577.	DUN & BRADSTREET TECHNOLOGY AND DATA SERVICES	CHENNAI
1578.	DUNBAR AND BOARDMAN PARTNERSHIP LTD.	DUBAI
1579.	DUNCAN ENGINEERING LTD.	PUNE
1580.	DUNNHUMBY	DELHI
1581.	DUPONT INDIA	HYDERABAD
1582.	DURA AUTOMOTIVE SERVICES (I) (P) LTD.	HYDERABAD
1583.	DUSANE INFOTECH (P) LTD.	PUNE
1584.	DVS TECHNOSOFT (P) LTD.	PUNE
1585.	DXC TECHNOLOGIES	BANGALORE
1586.	DXC TECHNOLOGIES	CHENNAI
1587.	DXC TECHNOLOGIES	HYDERABAD
1588.	DXC TECHNOLOGIES	NOIDA
1589.	DXC TECHNOLOGIES	PUNE
1590.	DXC TECHNOLOGY (I) (P) LTD.	DELHI
1591.	DYNAFUSION TECHNOLOGIES (P) LTD.	BANGALORE
1592.	DYNAMATICS HYDRAULICS	CHENNAI
1593.	DYNAMIC INDUSTRIES	ABUDHABI
1594.	DYNAMIC INDUSTRIES	DELHI
1595.	DYNASPEDE INTEGRATED SYSTEMS	HOSUR
1596.	E CUBE (I) SOLUTIONS LTD.	VADODARA
1597.	E SQUARE PROFESSIONAL TRAINING AND CONSULTING	CHENNAI
1598.	E.I DUPONT (I) (P) LTD.	GURGAON
1599.	E.I DUPONT (I) (P) LTD.	VADODARA
1600.	EAGLEBURGMANN KE (P) LTD.	CHENNAI
1601.	EAGLEBURGMANN SAUDIARABIA LTD.	SAUDIARABIA
1602.	EASI - ALLEGIS GROUP	BANGALORE
1603.	EASUN REYROLLE LTD.	BANGALORE
1604.	EASUN-MR TAP CHANGERS (P) LTD.	CHENNAI
1605.	EATON (I) INNOCATION CENTER	PUNE
1606.	EATON (I) INNOVATION CENTER	MAGARPATTA
1607.	EATON (I) INNOVATION CENTER	PUNE
1608.	EATON FLUID POWER LTD.	AHMEDNAGAR
1609.	EATON FLUID POWER LTD.	CHENNAI
1610.	EATON INDUSTRIAL SYSTEMS (P) LTD.	AHMEDNAGAR
1611.	EATON TECHNOLOGIES (P) LTD.	PONDICHERRY
1612.	EATON TECHNOLOGIES (P) LTD.	PUNE
1613.	EBIX SOFTWARE (I) (P) LTD.	COIMBATORE
1614.	EBSAVVY INFOTECH (P) LTD.	NOIDA
1615.	E-BUSINESS SOLUTIONS LTD.	RIYADH
1616.	EBZ SYSTEC (I) (P) LTD.	GURGAON
1617.	ECCENTRIC INFOTECH (P) LTD.	PUNE
1618.	ECENTRIC HR SOLUTIONS (P) LTD.	BANGALORE
1619.	ECENTRIC SOLUTIONS	BANGALORE
1620.	ECI TELECOM	BANGALORE
1621.	ECIL	BANGALORE
1622.	ECIL	HYDERABAD
1623.	ECIL(UNDER DEPARTMENT OF ATOMIC ENERGY)	HYDERABAD
1624.	ECLERX	CHANDIGARH
1625.	ECLERX SERVICES LTD.	PUNE
1626.	ECLINICALWORKS	AHMEDABAD

S.No.	ORGANIZATION	LOCATION
1627.	ECLINICALWORKS (I) (P) LTD.	PUNE
1628.	ECOLOGIKOL ADVISORS (I) (P) LTD.	CHENNAI
1629.	EDAG PRODUCTION SOLUTION	GURGAON
1630.	EDGEVERVE LTD.	PUNE
1631.	EDGEVERVE SYSTEMS	BANGALORE
1632.	EDGEVERVE SYSTEMS	PUNE
1633.	EDGEVERVE SYSTEMS LTD.	BANGALORE
1634.	EDGEVERVE SYSTEMS LTD.	PUNE
1635.	EDGEVERVE(AN INFOSYS COMPANY)	BANGALORE
1636.	EDGEVERVE(AN INFOSYS COMPANY)	HYDERABAD
1637.	EDIC PRECISION INDUSTRIES	ABUDHABI
1638.	EDIFECS TECHNOLOGIES (P) LTD.	GURGAON
1639.	EDUPRISTINE	GURGAON
1640.	EDUTECH	HYDERABAD
1641.	EF INFORMATION SYSTEMS	BANGALORE
1642.	EF INFORMATION SYSTEMS (P) LTD.	BANGALORE
1643.	EFFECTUAL KNOWLEDGE SERVICES	NOIDA
1644.	EFI (I) (P) LTD.	BANGALORE
1645.	EGAIN COMMUNICATIONS (P) LTD.	PUNE
1646.	EGIS RAIL	RIYADH
1647.	EICHER POLARIS	INDORE
1648.	EICHER POLARIS	JAMSHEDPUR
1649.	EINFOCHIPS	AHMEDABAD
1650.	EINFOCHIPS	BANGALORE
1651.	EINFOCHIPS (I) (P) LTD.	DELHI
1652.	EINFOCHIPS (P) LTD.	AHMEDABAD
1653.	EINFOCHIPS (P) LTD.	MUMBAI
1654.	EKA SOFTWARE SOLUTIONS (P) LTD.	BANGALORE
1655.	EKAM VENTURE	NASHIK
1656.	EKUBE DESIGN SOLUTIONS	BANGALORE
1657.	ELCO INTERNATIONAL ENGINEERING CO. LLC	DUBAI
1658.	ELECTRICITY AND WATER AUTHORITY	BAHRAIN
1659.	ELECTRO AUTOMATION	COIMBATORE
1660.	ELECTRO METER CORPORATION	KOLKATA
1661.	ELECTRODRIVE POWERTRAIN SOLUTIONS (P) LTD.	PUNE
1662.	ELECTROMECH MATERIAL HANDLINGSYSYTEMS	PUNE
1663.	ELECTRON BRIDGE	NOIDA
1664.	ELECTRONICA HITECH MACHINE TOOLS (P) LTD.	PUNE
1665.	ELECTRONICS CORPORATION OF (I) LTD.	CHENNAI
1666.	ELECTRONICS CORPORATION OF (I) LTD.	HYDERABAD
1667.	ELECTRONICS FOR IMAGING (I) (P) LI	BANGALORE
1668.	ELECTROSTEEL STEELS LTD.	KOLKATA
1669.	ELEKTROBIT INDIA	BANGALORE
1670.	ELEKTRONIKA SALES (I) (P) LTD.	DELHI
1671.	ELEMENT DOHA LLC	HYDERABAD
1672.	ELEMENT INFOMATICS (I) (P) LTD.	BANGALORE
1673.	ELGI EQUIPMENTS LTD.	COIMBATORE
1674.	ELGI EQUIPMENTS LTD.	KOLKATA
1675.	ELGI EQUIPMENTS LTD.	MUMBAI
1676.	ELI RESEARCH (I) (P) LTD.	CHENNAI
1677.	ELI RESEARCH (I) (P) LTD.	DELHI
1678.	ELI RESEARCH (I) (P) LTD.	FARIDABAD
1679.	ELI RESEARCH (I) (P) LTD.	GURGAON
1680.	ELIXIER ADNOC LINDE INDUSTRIAL GASES LTD.	ABUDHABI
1681.	ELMACH PACKAGES (I) (P) LTD.	BHIWADI
1682.	ELPIS IT SOLUTIONS (P) LTD.	BANGALORE
1683.	ELSEWEDY CABLES	DOHA
1684.	ELSYTEC POWER PROJECTS (P) LTD. CHENNAI	CHENNAI
1685.	ELTEX SUPER CASTINGS	COIMBATORE
1686.	EMAMI CEMENT LTD.	HYDERABAD
1687.	EMARAT ALOULA INDUSTRIES	DUBAI
1688.	EMBITEL TECHNOLOGIES (I) (P) LTD.	PUNE
1689.	EMC SOFTWARE & SERVICES (I) P LTD.	BANGALORE
1690.	EMC SOFTWARE & SERVICES (I) P LTD.	MAHADEVAPURA
1691.	EMC SOFTWARE AND SERVICES (I) (P) LTD.	BANGALORE
1692.	EMCO - A DIVISION OF ETA	DUBAI
1693.	EMCURE PHARMACEUTICALS LTD.	PUNE
1694.	EME AUTOMATION	PANAJI
1695.	EMEDISCENE	DELHI
1696.	EMERALD HOMEDEVELOPERS (P) LTD.	DELHI
1697.	EMERIO TECHNOLOGIES	CHENNAI

S.No.	ORGANIZATION	LOCATION
1698.	EMERSON	AMBERNATH
1699.	EMERSON	BANGALORE
1700.	EMERSON	CHENNAI
1701.	EMERSON	DUBAI
1702.	EMERSON	NASHIK
1703.	EMERSON	SAUDIARABIA
1704.	EMERSON - FISHER CHENNAI ENGINEERING CENTRE	CHENNAI
1705.	EMERSON AUTOMATION SOLUTIONS	CHENNAI
1706.	EMERSON INNOVATION CENTER - PUNE	PUNE
1707.	EMERSON PROCESS MANAGEMENT (I) PVT.LTD	PUNE
1708.	EMESA (I) ELEVATOR COMPONENT (P) L	MUMBAI
1709.	EMIDS TECHNOLOGIES	BANGALORE
1710.	EMIRATE ADVANCE RESEARCH & TECHNOLOGY HO	ABUDHABI
1711.	EMIRATES AIRLINES	DUBAI
1712.	EMIRATES ALUMINIUM	ABUDHABI
1713.	EMIRATES ALUMINIUM	ALTAWEELAH
1714.	EMIRATES BLOCK FACTORY	ABUDHABI
1715.	EMIRATES BLOCKS FACTORY	DUBAI
1716.	EMIRATES GENERAL PETROLEUM CORPORATION(EMARA	DUBAI
1717.	EMIRATES GLOBAL ALUMINIUM	ABUDHABI
1718.	EMIRATES GLOBAL ALUMINIUM	DUBAI
1719.	EMIRATES GROUP	DUBAI
1720.	EMIRATES NBD	DUBAI
1721.	EMIRATES STEEL	ABUDHABI
1722.	EMIRATES STEEL	DUBAI
1723.	EMIRATES TELECOMMUNICATIONS	HYDERABAD
1724.	EMMANUEL HOSPITAL ASSOCIATION	KOLKATA
1725.	EMPLAY INC.	BANGALORE
1726.	EMRILL SERVICES LLC	CHENNAI
1727.	EMTEC TECH (P) LTD.	PUNE
1728.	EMTEC TECHNOLOGIES	PUNE
1729.	EMUDHRA LIMTED	BANGALORE
1730.	EMUDHRA LTD.	BANGALORE
1731.	EMUG ENGINEERING SERVICES (P) LTD.	HYDERABAD
1732.	E-MUG TECHNOLOGIES (P) LTD.	HYDERABAD
1733.	ENARKA (I) (P) LTD.	BANGALORE
1734.	ENARKA (I) (P) LTD. BANGALORE	BANGALORE
1735.	ENCO ENGINEERS COMBINE (P) LTD.	NOIDA
1736.	ENDEAVOUR (A GENPACT COMPANY)	BANGALORE
1737.	ENDRESS + HAUSER FLOWTEC (I) (P) LTD.	AURANGABAD
1738.	ENDRESS+HAUSER FLOWTEC (I) (P) LTD.	PUNE
1739.	ENDRESS+HAUSER INSTRUMENTS INTERNATIONAL AG	DUBAI
1740.	ENDRESS+HAUSER WETZER (I) (P) LTD.	AURANGABAD
1741.	ENDURANCE INTERNATIONAL GROUP	BANGALORE
1742.	ENDURANCE TECHNOLOGIES LTD.	AURANGABAD
1743.	ENDURANCE TECHNOLOGIES LTD.	DELHI
1744.	ENDURANCE TECHNOLOGIES LTD.	PUNE
1745.	ENERGY EFFICIENCY SERVICES LTD.	MUMBAI
1746.	ENEXL TECHNOLOGIES & SOLUTIONS (P) LMT	BANGALORE
1747.	ENGINEERING CONSORTIUM CONSULTING ENGINE	DUBAI
1748.	ENGINEERING INTEGRITY SOLUTIONS	CHENNAI
1749.	ENGINEERS (I) LTD.	DELHI
1750.	ENOIA BABCOCK BORSIG (P) LTD.	CHENNAI
1751.	ENOVA FACILITIES MANAGEMENT	DUBAI
1752.	ENPHASE ENERGY	BANGALORE
1753.	ENSEMBLE TECH (P) LTD.	CHENNAI
1754.	ENTER ORGANIZATION	HOSUR
1755.	ENTROPIK TECHNOLOGIES (P) LTD.	BANGALORE
1756.	ENVESTNET	BANGALORE
1757.	ENVESTNET	THIRUVANANTHAPURAM
1758.	ENVESTNET	TRIVANDRUM
1759.	ENZENE BIOSCIENCES LTD. PUNE	PUNE
1760.	EPAM SYSTEMS	HYDERABAD
1761.	EPAM SYSTEMS (I) (P) LTD.	HYDERABAD
1762.	EPIROC MINING (I) LTD.	PUNE
1763.	EPPINGER TOOLING ASIA P LTD.	COIMBATORE
1764.	EPSILON	BANGALORE
1765.	EPSILON CONVERSANT	BANGALORE
1766.	EPTISA (I) PROVATE LTD.	KOLKATA
1767.	EQ TECHNOLOGIC	PUNE
1768.	EQ TECHNOLOGIC INC.	PUNE

S.No.	ORGANIZATION	LOCATION
1769.	EQUAL EXPERTS	BANGALORE
1770.	EQUATE PETROCHEMICAL COMPANY	KUWAIT
1771.	EQUILIBRIUM SOLUTIONS PVT.LTD	PUNE
1772.	ERBHS-CNI	DELHI
1773.	ERCON COMPOSITES	JODHPUR
1774.	ERICSSON	BANGALORE
1775.	ERICSSON	DELHI
1776.	ERICSSON (I) (P) LTD.	BANGALORE
1777.	ERICSSON (I) (P) LTD.	DELHI
1778.	ERICSSON (I) GLOBAL (P) LTD.	BANGALORE
1779.	ERICSSON (I) GLOBAL (P) LTD.	DELHI
1780.	ERICSSON (I) GLOBAL SERVICES	CHENNAI
1781.	ERICSSON (I) GLOBAL SERVICES (P) LTD.	BANGALORE
1782.	ERICSSON (I) GLOBAL SERVICES (P) LTD.	DELHI
1783.	ERICSSON GLOBAL (I) LTD.	BANGALORE
1784.	ERICSSON GLOBAL (I) LTD.	GHAZIABAD
1785.	ERICSSON GLOBAL (I) LTD.	GURGAON
1786.	ERICSSON GLOBAL (I) LTD.	GUWAHATI
1787.	ERICSSON GLOBAL (I) LTD.	KOLKATA
1788.	ERICSSON GLOBAL (I) LTD.	NOIDA
1789.	ERICSSON GLOBAL (I) SERVICES	BANGALORE
1790.	ERICSSON GLOBAL (I) SERVICES	DELHI
1791.	ERNST & YOUNG	BANGALORE
1792.	ERNST & YOUNG	CHENNAI
1793.	ERNST & YOUNG	KOCHI
1794.	ERNST & YOUNG (P) LTD.	BANGALORE
1795.	ERNST & YOUNG GLOBAL DELIVERY SERVICES (I) LLP	BANGALORE
1796.	ERNST & YOUNG LLP	HYDERABAD
1797.	ERNST & YOUNG LLP	KOLKATA
1798.	ERNST AND YOUNG	BANGALORE
1799.	ERNST AND YOUNG LLP	DELHI
1800.	ERON ENERGY (P) LTD.	GURGAON
1801.	ESCORTS LTD.	DELHI
1802.	ESI CORPORATION	DELHI
1803.	ESI HARYANA	DELHI
1804.	ESKAYEM CONSULTANTS (P) LTD.	MUMBAI
1805.	ESKO GRAPHICS (I) (P) LTD.	BANGALORE
1806.	E-SOURCE SOLUTIONS LTD.	BANGALORE
1807.	ESRI	DELHI
1808.	ESSAR PROJECTS (I) LTD.	CHENNAI
1809.	ESSAR STEEL (I) LTD.	HYDERABAD
1810.	ESSAR STEEL (I) LTD.	SURAT
1811.	ESSAR STEEL LTD. INDIA.	MUMBAI
1812.	ESSAR STEELS LTD.	MUMBAI
1813.	ESSENTRA	BANGALORE
1814.	ESSEX LAKE GROUP	DELHI
1815.	ESTECH DESIGN	PUNE
1816.	ESTERLINE TECHNOLOGIES (I) (P) LTD.	BANGALORE
1817.	ETA ASCON (M&E DIVISION)	DUBAI
1818.	ETA MELCO ELEVATOR CO. LLC (DUBAI)	DUBAI
1819.	ETECHACES MARKETING AND CONSULTING (P) LTD.	DELHI
1820.	ETIHAD AIRWAYS ENGINEERING	ABUDHABI
1821.	ETIMAD RESEARCH AND DEVELOPMENT LLC	DUBAI
1822.	ETISALAT	ABUDHABI
1823.	EUPHORIA TECHNOLOGIES	CHENNAI
1824.	EUPHOTIC LABS	BANGALORE
1825.	EUROFINS IT SOLUTIONS	BANGALORE
1826.	EUROFLEX TRANSMISSIONS (I) (P) LTD.	HYDERABAD
1827.	EUROGULF MACHINES AND TOOLS	DUBAI
1828.	EVALUESERVE	DUBAI
1829.	EVALUESERVE	GURGAON
1830.	EVALUESERVE.COM	DELHI
1831.	EVALUESERVE.PVT.LTD	DELHI
1832.	EVANGELICAL MISSION HOSPITAL TILDA	RAIPUR
1833.	EVEREADY INDUSTRIES (I) LTD.	UAE
1834.	EVERSENDAI OFFSHORE LLC	UAE
1835.	EVOBI AUTOMATION (P) LTD.	BANGALORE
1836.	EVOKE TECHNOLOGIES	HYDERABAD
1837.	EVOLVUS SOLUTIONS	BANGALORE
1838.	EVOQUA WATER TECHNOLOGIES PTE LTD.	SINGAPORE
1839.	EVRY INDIA	BANGALORE

S.No.	ORGANIZATION	LOCATION
1840.	EVRY INDIA	MOHALI
1841.	EXADATUM	PUNE
1842.	EXCEL DESIGN TECHNOLOGIES (P) LTD.	DELHI
1843.	EXCEL INDUSTRIES LTD.	MUMBAI
1844.	EXCELLENCE INFOCOM	PUNE
1845.	EXEDY (I) LTD.	NOIDA
1846.	EXEED GEO TEXTILE LLC	ABUDHABI
1847.	EXIDE INDUSTRIES LTD.	REWARI
1848.	EXIMIUS DESIGN	BANGALORE
1849.	EXIMIUS DESIGN (I) (P) LTD.	BANGALORE
1850.	EXL ANALYTICS	CHENNAI
1851.	EXL ANALYTICS NOIDA	NOIDA
1852.	EXL SERVICE(INDUCTIS)	DELHI
1853.	EXL SERVICE.COM(I) (P) LTD.	DELHI
1854.	EXL SERVICES	GURGAON
1855.	EXL SERVICES	NOIDA
1856.	EXPEDIA	DELHI
1857.	EXPEDIA	GURGAON
1858.	EXPEDIA	VISAKHAPATNAM
1859.	EXPEDIA (I) (P) LTD.	GURGAON
1860.	EXPEDIA (I) TRAVEL (P) LTD.	GURGAON
1861.	EXPEDIA GROUP	DELHI
1862.	EXPEDIA INC	GURGAON
1863.	EXPEDIA INC.	BANGALORE
1864.	EXPEDIA ONLINE TRAVEL SERVICES (I) (P) LIMIT	DELHI
1865.	EXPEDIA ONLINE TRAVEL SERVICES (I) (P) LTD.	BANGALORE
1866.	EXPEDIA ONLINE TRAVEL SERVICES (I) (P) LTD.	DELHI
1867.	EXPEDIA ONLINE TRAVEL SERVICES (I) (P) LTD.	GURGAON
1868.	EXPEDIA ONLINE TRAVEL SERVICES INDIA	DELHI
1869.	EXPERION TECHNOLOGIES	KOCHI
1870.	EXPERION TECHNOLOGIES	TRIVANDRUM
1871.	EXPERIS INIDA (P) LTD.	BANGALORE
1872.	EXPERIS INIDA (P) LTD.	PUNE
1873.	EXPERT GLOBAL SOLUTIONS	AURANGABAD
1874.	EXPERT GLOBAL SOLUTIONS	PUNE
1875.	EXPLORIDE TECHNOLOGIES (P) LTD.	BANGALORE
1876.	EXPONENTIA DATALABS	MUMBAI
1877.	EXPONENTIAL (I) (P) LTD.	NOIDA
1878.	EXPRO NORTH SEA	MUMBAI
1879.	EXTERRAN BELLELI ENERGY FZE	SHARJAH
1880.	EXTRACO INDUSTRIES LLC	UAE
1881.	EXTRAPRENEURSINDIA (P) LTD.	PUNE
1882.	EXTREME NETWORKS (I) (P) LTD.	CHENNAI
1883.	EXUSIA	BANGALORE
1884.	EY GBS (P) LTD.	THIRUVANANTHAPURAM
1885.	EY GBS (P) LTD.	TRIVANDRUM
1886.	EY GDS INDIA	BANGALORE
1887.	EYGBS (I) LLP	BANGALORE
1888.	EZESOFTWARE (I) (P) LTD.	HYDERABAD
1889.	EZYTECH INTERNATIONAL	DELHI
1890.	F5 NETWORKS INNOVATION (P) LTD.	HYDERABAD
1891.	FAB FACTORY	BANGALORE
1892.	FACADE ONE SYSTEMS (P) LTD.	THANE
1893.	FACETS FACE AND SMILE 12KADAVANTHRA KOCHI	ERNAKULAM
1894.	FAFADIA TECH	MUMBAI
1895.	FAIR ISAAC (I) SOFTWARE (P) LIMITE	BANGALORE
1896.	FAIR ISAAC (I) SOFTWARE (P) LTD. (FICO)	BANGALORE
1897.	FAIVELEY RAIL TRASPORT	CHENNAI
1898.	FAIVELEY TRANSPORT	BANGALORE
1899.	FAIVELEY TRANSPORT	HOSUR
1900.	FAIVELEY TRANSPORT RAIL TECHNOLOGIES (I) LTD.	BANGALORE
1901.	FAIVELEY TRANSPORT RAIL TECHNOLOGY (I) LTD.	DELHI
1902.	FAMILY DENTAL WELLNESS CLINIC	MUMBAI
1903.	FARADAY'S TECHNOLOGIES TECHNICAL SERVICES LLC	DUBAI
1904.	FARAH EXPERIENCES LLC	DUBAI
1905.	FASTMAN PTE LTD.	SINGAPORE
1906.	FAURACIA AUTOMOTIVE	PUNE
1907.	FAURECIA (I) (P) LTD.	BANGALORE
1908.	FAURECIA AUTOMOTIVE SEATING (I) (P) LTD.	PUNE
1909.	FAURECIA CLEAN MOBILITY	BANGALORE
1910.	FAURECIA EMISSION CONTROL TECHNOLOGIES	BANGALORE

S.No.	ORGANIZATION	LOCATION
1911.	FAURECIA EMISSIONS CONTROL TECH	CHENNAI
1912.	FAURECIA EMISSIONS CONTROL TECHNOLOGIES (I) PVT	BANGALORE
1913.	FAURECIA INDIA	BANGALORE
1914.	FAVE LABS	HYDERABAD
1915.	FCA ENGINEERING (I) (P) LTD.	CHENNAI
1916.	FCSG (I) (P) LTD.	DELHI
1917.	FDC LTD.	MUMBAI
1918.	FDC LTD.	VERNA
1919.	FEDERAL MOGUL GOETZE INDIA	DELHI
1920.	FELIX INDUSTRIES LTD.	DELHI
1921.	FENCE INTERNATIONAL L.L.C.	ABUDHABI
1922.	FESTO (I) (P) LTD.	BANGALORE
1923.	FEV (I) (P) LTD.	PUNE
1924.	FIABILITE NETWORK SOLUTION (P) LTD.	BANGALORE
1925.	FIAT (I) AUTOMOBILES (P) LTD.	HYDERABAD
1926.	FIAT (I) AUTOMOBILES (P) LTD.	PUNE
1927.	FIAT CHRYSLER AUTOMOBILES	CHENNAI
1928.	FIAT CHRYSLER AUTOMOBILES	PUNE
1929.	FIBCOM (I) LTD.	DELHI
1930.	FIBRE KING CO LTD. - THAILAND	THAILAND
1931.	FIDELITY BUSINESS SERVICES (I) (P) LTD.	BANGALORE
1932.	FIDELITY BUSINESS SERVICES (I) (P) LTD.	CHENNAI
1933.	FIDELITY BUSINESS SERVICES (I) (P) LTD.	GURGAON
1934.	FIDELITY INFORMATION SERVICES	DELHI
1935.	FIDELITY INTERNATIONAL	DELHI
1936.	FIDELITY INVESTMENTS	BANGALORE
1937.	FIDELITY INVESTMENTS	DUBAI
1938.	FIELDCORE SERVICE SOLUTIONS INTERNATIONAL	DUBAI
1939.	FINANCIAL SOFTWARE & SYSTEMS (P) LTD.	CHENNAI
1940.	FINASTRA FORMLEY KNOWN AS D+H	TRIVANDRUM
1941.	FINE FINISH ORGANICS (P) LTD.	MUMBAI
1942.	FINISAR (I) (P) LTD.	HYDERABAD
1943.	FIREEYE CYBERSECURITY (P) LTD.	BANGALORE
1944.	FIRST AMERICAN	BANGALORE
1945.	FIRST AMERICAN FINANCIAL CORPORATION	CHENNAI
1946.	FIRST AMERICAN FINANCIAL CORPORATION	HYDERABAD
1947.	FIRST CONSULTING ENGINEERS & SERVICES (P) LTD.	KOLKATA
1948.	FIRST ENERGY (P) LMT PUNE	PUNE
1949.	FIRST OPINION SERVICES	MOHALI
1950.	FIRST PASS SEMICONDUCTOR (P) LTD.	HYDERABAD
1951.	FIRST PASS SEMICONDUCTORS (P) LTD.	HYDERABAD
1952.	FIS GLOBAL (I) (P) LTD.	BANGALORE
1953.	FIS GLOBAL (I) (P) LTD.	CHENNAI
1954.	FIS GLOBAL (I) (P) LTD.	GURGAON
1955.	FIS GLOBAL (I) (P) LTD.	NOIDA
1956.	FIS GLOBAL (I) (P) LTD.	PUNE
1957.	FIS SOLUTIONS (I) (P) LTD.	DELHI
1958.	FISERV (I) (P) LTD.	DELHI
1959.	FISERV (I) (P) LTD.	GURGAON
1960.	FISERV (I) (P) LTD.	NOIDA
1961.	FISERV (I) (P) LTD.	PUNE
1962.	FISERV INDIA	DELHI
1963.	FISSION COMPUTER LABS (P) LTD.	HYDERABAD
1964.	FISSION LABS	HYDERABAD
1965.	FLAKTGROUP SINGAPORE (P) LTD.	SINGAPORE
1966.	FLASH ELECTRONICES(I)PVT.LTD	PUNE
1967.	FLATIRONS SOLUTIONS (I) LTD.	CHENNAI
1968.	FLEX (I) (P) LTD.	CHENNAI
1969.	FLEX (I) (P) LTD.	PUNE
1970.	FLEXTRONICS TECHNOLOGIES (I) (P) LTD.	CHENNAI
1971.	FLEXTRONICS TECHNOLOGIES (I) (P) LTD.	HYDERABAD
1972.	FLINT ARABIA CONSULTING COMPANY	BANGALORE
1973.	FLIPKART	BANGALORE
1974.	FLIPKART (I) (P) LTD.	BANGALORE
1975.	FLIPKART (I) (P) LTD.	COIMBATORE
1976.	FLIPKART INTERNET (P) LTD.	BANGALORE
1977.	FLOWSERVE (I) CONTROLS (P) LTD.	BANGALORE
1978.	FLOWSERVE (I) CONTROLS (P) LTD.	CHENNAI
1979.	FLOWSERVE (I) CONTROLS (P) LTD.	COIMBATORE
1980.	FLOWSERVE GULF FZE	BANGALORE
1981.	FLOWSERVE GULF FZE	DUBAI

S.No.	ORGANIZATION	LOCATION
1982.	FLOWSERVE PTE LTD.	CHENNAI
1983.	FLSMIDTH (P) LTD.	CHENNAI
1984.	FLUIDLINE HYDRO EQUIPMENTS	SONIPAT
1985.	FLUOR DANIEL (I) (P) LTD.	DELHI
1986.	FLUOR DANIEL (I) (P) LTD.	GURGAON
1987.	FLYJAC LOGISTICS (P) LTD.	CHENNAI
1988.	FLYMATE (P) LTD.	DELHI
1989.	FOI SYSTEMS	BANGALORE
1990.	FOLEYDESIGNS (P) LTD.	BANGALORE
1991.	FORBES MARSHALL ARCA (P) LTD.	PUNE
1992.	FORCE MOTORS LTD.	PUNE
1993.	FORCE MTU POWER SYSTEMS (P) LTD.	PUNE
1994.	FORD (I) (P) LTD.	AHMEDABAD
1995.	FORD (I) (P) LTD.	CHENNAI
1996.	FORD MOTOR (P) LTD.	CHENNAI
1997.	FORD MOTOR (P) LTD. INDIA	CHENNAI
1998.	FORENSIC SCIENCE LABORATORY MUMBAI MAH	MUMBAI
1999.	FORESEE SOLUTIONS DMCC	DUBAI
2000.	FORTE RESEARCH SYSTEMS (I) (P) LTD.	BANGALORE
2001.	FORTHOUGHT REALISTIC CODER (P) LTD.	NOIDA
2002.	FORTINET TECHNOLOGY	HYDERABAD
2003.	FORTIS HEALTHCARE	BANGALORE
2004.	FORTIS HEALTHCARE	CHANDIGARH
2005.	FORTIS HEALTHCARE	MUMBAI
2006.	FORTIS HEALTHCARE LTD.	DELHI
2007.	FORTIUS UNIVERSITAS	BANGALORE
2008.	FORTUNE PHARMACAL CO. LTD.	HYDERABAD
2009.	FOWLER WESTRUP	BANGALORE
2010.	FRAMEWORK PE	BANGALORE
2011.	FRAMEWORK PE INVESTMENT DATA MANAGEMENT (P) LTD.	BANGALORE
2012.	FRANCONNECT (I) SOFTWARE (P) LTD.	NOIDA
2013.	FRANKLIN TEMPLETON	HYDERABAD
2014.	FRANKLIN TEMPLETON INTERNATIONAL SERVICES (P) LTD.	HYDERABAD
2015.	FRAUSCHER SENSOR TECHNOLOGY	BANGALORE
2016.	FREIGHTWORKS (DUBAI EXPRESS)	DUBAI
2017.	FRESENIUS KABI ONCOLOGY LTD.	BADDI
2018.	FRESHDESK TECHNOLGIES (P) LTD.	CHENNAI
2019.	FRESHFISH CONSULTING AND TECHNOLOGIES	BANGALORE
2020.	FRESHFISH CONSULTING AND TECHNOLOGIES	CHENNAI
2021.	FRESHWORKS	CHENNAI
2022.	FRESHWORKS INC	CHENNAI
2023.	FRICK (I) LTD.	DELHI
2024.	FRIENDS CONSULTANCY SERVICES	VERNA
2025.	FRONIUS (I) (P) LTD.	CHENNAI
2026.	FRONTIER KNITTERS	BANGLADESH
2027.	FROST & SULLIVAN (I) (P) LTD.	BANGALORE
2028.	FTD (I) (P) LTD.	HYDERABAD
2029.	FTV PROCLAD (S) PTE LTD.	SINGAPORE
2030.	FU CHUN SHIN MACHINERY MANUFACTURE CO;LTD	TAINAN
2031.	FUGENIC CS (P) LTD.	HYDERABAD
2032.	FUJAIRAH ASIA POWER COMPANY	COCHIN
2033.	FUJAIRAH ASIA POWER COMPANY	UAE
2034.	FUJI ELECTRIC (I) (P) LTD.	MUMBAI
2035.	FUJITSU CONSULTING (I) (P) LTD.	BANGALORE
2036.	FUJITSU CONSULTING INDIA	DELHI
2037.	FUJSENG CONSTRUCTION LLC	DUBAI
2038.	FUJSENG CONSTRUCTION LLC	UAE
2039.	FUNSKOOL (I) LTD.	GOA
2040.	FUSIONSTAK TECHNOLOGIES (P) LTD.	PUNE
2041.	FUTURE CAE TECHNOLOGIES (P) LTD.	CHENNAI
2042.	FUTURE ELECTRONICS (DISTRIBUTION) INC.PTE.LT	BANGALORE
2043.	FUTURE PACK - ENPI DIVISION	SHARJAH
2044.	FUTURE PIPE INDUSTRIES	DUBAI
2045.	FUTURE SUPPLY CHAIN SOLUTIONS LTD.	THANE
2046.	FUTURES FIRST INFO SERVICES	HYDERABAD
2047.	FUTURES FIRST INFO SERVICES (P) LTD.	HYDERABAD
2048.	FUTURISTIC BUDDHA TECH (P) LTD.	DELHI
2049.	G E D L F MARHOWRAH	MARHOWRAH
2050.	G4S IT SERVICES (I) (P) LTD.	GURGAON
2051.	GABRIEL (I) LTD.	GURGAON
2052.	GABRIEL (I) LTD.	HOSUR

S.No.	ORGANIZATION	LOCATION
2053.	GABRIEL (I) LTD.	PUNE
2054.	GABRIEL (I) LTD. HOSUR	BANGALORE
2055.	GABRIEL (I) LTD. PUNE	PUNE
2056.	GAIN CREDIT	CHENNAI
2057.	GAINSIGHT (I) (P) LTD.	HYDERABAD
2058.	GALA PRECISION ENGINEERING (P) LTD.	BHANDARA
2059.	GALA PRECISION ENGINEERING (P) LTD.	VILLAGEVADAVALI
2060.	GALFAR ENGINEERING & CONTG. SAOG	BANGALORE
2061.	GAMESA RENEWABLE (P) LTD.	CHENNAI
2062.	GANESH INDUSTRIES	DUBAI
2063.	GAP IT SERVICES (I) (P) LTD.	HYDERABAD
2064.	GARAM MATKA	PUNE
2065.	GARDNER AEROSPACE PRANITA (P) LTD.	BANGALORE
2066.	GARRETT	PUNE
2067.	GASCO (ABUDHABI GAS INDUSTRIES)	ABUDHABI
2068.	GATELENGTH TECHNOLOGY (P) LTD.	NOIDA
2069.	GATES (I) (P) LTD.	PUNE
2070.	GAURISHANKER ELECTROCASTINGS (P) LTD.	GIRIDIH
2071.	GAVS TECHNOLOGIES	CHENNAI
2072.	GAVS TECHNOLOGIES	DUBAI
2073.	GAYATRI PROJECTS LTD.	HYDERABAD
2074.	GAZPROM	KOLKATA
2075.	GBG SERVICES (I) (P) LTD.	HYDERABAD
2076.	GE (I) EXPORTS (P) LTD.	HYDERABAD
2077.	GE (I) IND (P) LTD.	PUNE
2078.	GE (I) INDUSTRIAL (P) LTD.	BANGALORE
2079.	GE (I) INDUSTRIAL (P) LTD.	HYDERABAD
2080.	GE (I) INDUSTRIAL (P) LTD.	PUNE
2081.	GE (I) INDUSTRIAL (P) LTD.	TELANGANA
2082.	GE (I) PRIVET LTD.	BANGALORE
2083.	GE APPLIANCES	BANGALORE
2084.	GE APPLIANCES	HYDERABAD
2085.	GE AVIATION	BANGALORE
2086.	GE BE (P) LTD.	BANGALORE
2087.	GE CAPITAL	HYDERABAD
2088.	GE DIESEL LOCOMOTIVE (P) LTD.	KOLKATA
2089.	GE DIESEL LOCOMOTIVE (P) LTD.	MARHOWRAH
2090.	GE DIESEL LOCOMOTIVE (P) LTD.	ROZA
2091.	GE DIESEL LOCOMOTIVE FACTORY	MARHOWRAH
2092.	GE DIESEL LOCOMOTIVE PVT.LTD	MARHOWRAH
2093.	GE DIGITAL GE (I) EXPORTS (P) LTD.	BANGALORE
2094.	GE ENERGY MANAGEMENT	HYDERABAD
2095.	GE GLOBAL RESEARCH	BANGALORE
2096.	GE GLOBAL RESEARCH	TIRUNELVELI
2097.	GE GLOBAL RESEARCH	TUTICORIN
2098.	GE HEALTHCARE	BANGALORE
2099.	GE HEALTHCARE	PUNR
2100.	GE OIL AND GAS(BHGE)	BANGALORE
2101.	GE POWER CONVERSION (I) (P) LTD.	CHENNAI
2102.	GE POWER CONVERSION (I) (P) LTD.	HYDERABAD
2103.	GE RENEWABLE ENERGY	BANGALORE
2104.	GE RENEWABLE ENERGY	HYDERABAD
2105.	GE T&D (I) LTD.	CHENNAI
2106.	GE T&D (I) LTD.	HOSUR
2107.	GE TRANSPORTATION	BANGALORE
2108.	GE TRANSPORTATION	KOLKATA
2109.	GE TRANSPORTATION	MARHOWRAH
2110.	GE TRANSPORTATION	ROZA
2111.	GE TRANSPORTATION (A WABTE COMPANY)	BANGALORE
2112.	GE TRANSPORTATION A WEBTEC COMPANY	ROZA
2113.	GE TRASPORTATION	MARHOWRAH
2114.	GEBR PFEIFFER (I) (P) LTD.	NOIDA
2115.	GEC JAGDALPUR	JAGDALPUR
2116.	GEDL (P) LTD.	MARHOWRAH
2117.	GEDL MARHOWRAH	MARHOWRAH
2118.	GEM ENGINEERING INDUSTRIES (I) PRIVA	HYDERABAD
2119.	GEMALTO (ERSTWHILE SAFENET INC)	NOIDA
2120.	GEMALTO SMART CARDS (P) LTD.(THALES)	DELHI
2121.	GEMINI SOLUTIONS	GURGAON
2122.	GEMS PARTNERS	DELHI
2123.	GENAU EXTRUSIONS LTD.	HOSUR

S.No.	ORGANIZATION	LOCATION
2124.	GENERAL ELECTRIC	ABUDHABI
2125.	GENERAL ELECTRIC	BANGALORE
2126.	GENERAL ELECTRIC	DELHI
2127.	GENERAL ELECTRIC	HYDERABAD
2128.	GENERAL ELECTRIC	MUMBAI
2129.	GENERAL ELECTRIC (I) INDUSTRIAL PRIVET LTD.	PUNE
2130.	GENERAL ELECTRIC (I) INDUSTRIAL PVT.LTD.	PUNE
2131.	GENERAL ELECTRIC TRANSPORTATION	BANGALORE
2132.	GENERAL ELECTRICALS	BANGALORE
2133.	GENERAL ELETRIC PUNE	PUNE
2134.	GENERAL MILLS (I) (P) LTD.	MUMBAI
2135.	GENERAL MOTORS	BANGALORE
2136.	GENERAL MOTORS TECHNICAL CENTER (I) (P) LTD.	BANGALORE
2137.	GENERAL MOTORS TECHNICAL CENTER (I) PVT.LTD	BANGALORE
2138.	GENERAL MOTORS TECHNICAL CENTER BENGALURU	BANGALORE
2139.	GENERAL MOTORS TECHNICAL CENTER INDIA	BANGALORE
2140.	GENESYS BIOLOGICS (P) LTD.	HYDERABAD
2141.	GENESYS TELECOM	MUMBAI
2142.	GENIE SOFT SYSTEM	THANE
2143.	GENNEXT PLM (P) LTD.	CHENNAI
2144.	GENPACT	BANGALORE
2145.	GENPACT	GURGAON
2146.	GENPACT	HYDERABAD
2147.	GENPACT	NOIDA
2148.	GENPACT (I) (P) LTD.	BANGALORE
2149.	GENPACT (I) (P) LTD.	DELHI
2150.	GENPACT PHARMALINK CONSULTING	AHMEDABAD
2151.	GEOCONSULT (I) (P) LTD.	GURGAON
2152.	GEOMATIC ENGINEERING	BANGALORE
2153.	GEOMATIC ENGINEERING	PUNE
2154.	GEOMETRIX AUTOMATION AND ROBOTICS (P) LTD.	PUNE
2155.	GERDAU STEEL (I) LTD.	TADIPATRI
2156.	GESTAMP AUTOMOTIVE CHENNAI LTD.	CHENNAI
2157.	GEXCON (I) (P) LTD.	PUNE
2158.	GGS ENGINEERING SERVICES	CHENNAI
2159.	GGS ENGINEERING SERVICES	PUNE
2160.	GHMC	HYDERABAD
2161.	GIA (I) LABORATORY (P) LTD.	MUMBAI
2162.	GIESECKE & DEVRIENT (P) LTD.	PUNE
2163.	GIGAMON (P) LTD.	CHENNAI
2164.	GIGAMON SOLUTIONS (I) (P) LTD.	CHENNAI
2165.	GILBARCO VEEDER ROOT (I) (P) LTD.	COIMBATORE
2166.	GILBARCO VEEDER ROOT (I) (P) LTD.	MUMBAI
2167.	GILBARCO VEEDER-ROOT	KOLKATA
2168.	GILBARCO VEEDER-ROOT	MUMBAI
2169.	GIMPEX(P) LTD.	BANGALORE
2170.	GIRIKON SOLUTIONS (P) LTD.	NOIDA
2171.	GIRISH ENTERPRISES (P) LTD.	MUMBAI
2172.	GIRNAR SOFTWARE (P) LTD.	JAIPUR
2173.	GIRNARSOFT SERVICE (P) LTD.	DELHI
2174.	GIVAUDAN (I) (P) LTD.	MUMBAI
2175.	GKN AEROSPACE ENGINE SYSTEMS (I) (P) LTD.	BANGALORE
2176.	GKN AEROSPACE INDIA	BANGALORE
2177.	GKN SINTER METALS INDIA	PUNE
2178.	GL&V (I) (P) LTD.	PUNE
2179.	GLAXO SMITHKLINE CONSUMER HEALTHCARE LTD.	DELHI
2180.	GLAXO SMITHKLINE R&D HYDERABAD	HYDERABAD
2181.	GLENMARK GOA	GOA
2182.	GLENMARK PHARMACEUTICAL LTD.	GOA
2183.	GLENMARK PHARMACEUTICALS LTD.	DELHI
2184.	GLENMARK PHARMACEUTICALS LTD.	MUMBAI
2185.	GLIDER AVIATION SERVICES	CHENNAI
2186.	GLOBAL ANALYTICS	CHENNAI
2187.	GLOBAL CONVEYOR SYSTEMS	VASCODAGAMA
2188.	GLOBAL DELIGHT	BANGALORE
2189.	GLOBAL EDGE SOFTWARE	BANGALORE
2190.	GLOBAL EDGE SOFTWARE	HYDERABAD
2191.	GLOBAL FOUNDRIES	BANGALORE
2192.	GLOBAL HEALTH (P) LTD.	GURGAON
2193.	GLOBAL HOSPITAL	HYDERABAD
2194.	GLOBAL LOGIC	BANGALORE

S.No.	ORGANIZATION	LOCATION
2195.	GLOBAL PHARMATECH (P) LTD.	BANGALORE
2196.	GLOBAL PHARMATECH (P) LTD.	HOSUR
2197.	GLOBAL PROCESS SYSTEM	ABUDHABI
2198.	GLOBAL PROCESS SYSTEMS LLC	DUBAI
2199.	GLOBAL TELECOMMUNICATION (P) LTD.	DELHI
2200.	GLOBALE CAPO INDIA. (P) LTD.	THANE
2201.	GLOBALFOUNDRIES	BANGALORE
2202.	GLOBALFOUNDRIES (I) (P) LTD.	BANGALORE
2203.	GLOBALFOUNDRIES ENGINEERING (P) LTD.	BANGALORE
2204.	GLOBALFOUNDRIES SINGAPORE PTE LTD.	SINGAPORE
2205.	GLOBALLOGIC	CHENNAI
2206.	GLOBALLOGIC	DELHI
2207.	GLOBALLOGIC (I) (P) LTD.	NAGPUR
2208.	GLOBALLOGIC (I) LTD.	BANGALORE
2209.	GLOBALLOGIC (P) LTD.	NOIDA
2210.	GLOBANT (I) (P) LTD.	PUNE
2211.	GLOCAL HEALTHCARE SYSTEMS	DELHI
2212.	GLOCHEM INDUSTRIES (P) LTD.	HYDERABAD
2213.	GM TECH CENTER	BANGALORE
2214.	GMAX AUTO LTD.	BAWAL
2215.	GMMCO LTD.	CHENNAI
2216.	GMMCO LTD.	GOA
2217.	GMMCO LTD.	HYDERABAD
2218.	GMR AERO TECHNIC LTD.	HYDERABAD
2219.	GOA POLLUTION CONTROL BOARD	GOA
2220.	GOA POLLUTION CONTROL BOARD	PANAJI
2221.	GOA SHIPYARD LTD.	VASCODAGAMA
2222.	GOA STATE INFRASTRUCTURE DEV CORP.LTD	PANAJI
2223.	GOA STATE INFRASTRUCTURE DEVELOPMENT CORPORATION L	GOA
2224.	GOA WASTE MANAGEMENT CORPORATION	GOA
2225.	GODREJ & BOYCE MFG CO LTD.	BANGALORE
2226.	GODREJ & BOYCE MFG CO LTD.	CHENNAI
2227.	GODREJ & BOYCE MFG CO LTD.	HARIDWAR
2228.	GODREJ & BOYCE MFG CO LTD.	KHOPOLI
2229.	GODREJ & BOYCE MFG CO LTD.	KOLKATA
2230.	GODREJ & BOYCE MFG CO LTD.	MAPUSA
2231.	GODREJ & BOYCE MFG CO LTD.	MUMBAI
2232.	GODREJ & BOYCE MFG CO LTD.	PUNE
2233.	GODREJ & BOYCE MFG CO LTD.	VADODARA
2234.	GODREJ AGROVET LTD.	HYDERABAD
2235.	GODREJ INDUSTRIES LTD.	MUMBAI
2236.	GOGO INC	CHENNAI
2237.	GOLDMAN SACHS	BANGALORE
2238.	GOODRICH AEROSPACE SERVICES (P) LTD.	BANGALORE
2239.	GOODRICH AEROSPACE SYSTEMS (P) LTD.	BANGALORE
2240.	GOODS AND SERVICES TAX NETWORK	DELHI
2241.	GOODWORKLABS (P) LTD.	BANGALORE
2242.	GOODYEAR SATL	AURANGABAD
2243.	GOOGLE	BANGALORE
2244.	GOVERNMENT FLYING TRAINING SCHOOL	BANGALORE
2245.	GOVERNMENT INSTITUTE OF MEDICAL SCIENCES	NOIDA
2246.	GOVERNMENT OF HARYANA	CHANDIGARH
2247.	GOVERNMENT OF INDIA	DELHI
2248.	GOVERNMENT OF MAHARASHTRA	MUMBAI
2249.	GOVT COLLEGE ARTS SCIENCE & COMMERCE -	GOA
2250.	GOVT MEDICAL COLLEGE & HOSPITAL	JAMMUANDKASHMIR
2251.	GOVT OF INDIA	DELHI
2252.	GOVT OF INDIA	GURDASPUR
2253.	GOVT OF RAJASTHAN (RAS)	JAIPUR
2254.	GOVT. COLLEGE OF ARTS SC & COMMERCE	MARCELAGOA
2255.	GOVT. COLLEGE OF ENGG. KALAHANDI BHAWANI	BHAWANIPATNA
2256.	GOVT. ENGINEERING COLLEGE JAGDALPUR	JAGDALPUR
2257.	GOVT. OF INDIA MEITY NATIONAL INFORMAT	DELHI
2258.	GOWRA ENGINEERING TECHNOLOGIES (P) L	GURGAON
2259.	GP GREEN ENERGY SYSTEMS (P) LTD.	PUNE
2260.	GPS CHEMOIL LLC FZC	DUBAI
2261.	GRAEBERT (I) SOFTWARE (P) LTD.	NOIDA
2262.	GRAMEEN KOOTA FINANCIAL SERVICE (P) LTD.	BANGALORE
2263.	GRANDLAKES ENGINEERING WORKS (P) LTD.	CHENNAI
2264.	GRANDWAY INCORPORATED	DELHI
2265.	GRANULES (I) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
2266.	GRANULES OMNICHEM (P) LTD.	VISAKHAPATNAM
2267.	GRAPHENE HEALTH TECH (P) LTD.	BANGALORE
2268.	GRAPHENE SEMICONDUCTOR	BANGALORE
2269.	GRAPHENE SEMICONDUCTORS PVT.LTD	BANGALORE
2270.	GRAPHENE SEMICONDUCTORS SERVICES (P) LTD.	BANGALORE
2271.	GRASIM INDUSTRIES LTD.	MUMBAI
2272.	GRASIMS JANASEVA TRUST HOSPITAL	DAVENGERA
2273.	GREAT INNOVUS SOLUTION (P) LTD.	MADURAI
2274.	GREAT LAKES INSTITUTE OF MANAGEMENT	GURGAON
2275.	GREAT RESOURCES M&E CONTRACTOR PTE LTD.	COIMBATORE
2276.	GREAT SOFTWARE LABORATORY (P) LTD.	PUNE
2277.	GREEN CARRIER CONSULTANCY AND TECH SOLUTIONS	HYDERABAD
2278.	GREENARK ENERSOL (P) LTD.	HYDERABAD
2279.	GREENKO SOLAR ENERGY (P) LTD.	HYDERABAD
2280.	GREENLINE DELMARK (P) LTD.	KHARAGPUR
2281.	GREENSCAPES LANDSCAPES & MAINTENANCE CONTRACTING	DUBAI
2282.	GREENTURN IDEA FACTORY	COCHIN
2283.	GREY ORANGE (I) (P) LTD.	GURGAON
2284.	GRIFFIN PROJECT DEVELOPMENT CONSULTANT	DUBAI
2285.	GRINDWELL NORTON LTD.	CHENNAI
2286.	GRIT INNOVATION SOFTWARE (P) LTD.	HYDERABAD
2287.	GROUND WATER DEPARTMENT	JHUNJHUNU
2288.	GROUP 42	DUBAI
2289.	GROUPON SHARED SERVICE LTD.	BANGALORE
2290.	GROUPON SHARED SERVICES	BANGALORE
2291.	GRUNDFOS	COIMBATORE
2292.	GRUNDFOS PUMPS (I) (P) LTD.	CHENNAI
2293.	GRUPO ANTOLIN (I) (P) LTD.	PUNE
2294.	GRUPO COSMOS (I) (P) LTD.	CHENNAI
2295.	GS ENGINEERING & CONSTRUCTION DELHI (P) LTD.	SURAT
2296.	GSFC LTD.	VADODARA
2297.	GSPANN TECH. INC.	DELHI
2298.	GT NEXUS AN INFOR COMPANY	BANGALORE
2299.	GTN ENGINEERING (I) LTD.	COIMBATORE
2300.	GTTT(MBI) INDIAN NAVY	MUMBAI
2301.	GUARDIAN ZOUJAJ INTERNATIONAL FLOAT GLAS	UAE
2302.	GUAVUS A THALES COMPANY	DELHI
2303.	GUAVUS NETWORK SYSTEMS (P) LTD.	GURGAON
2304.	GUILTFREE INDUSTRIES LTD.	KOLKATA
2305.	GULATI STEEL (P) LTD.	FARIDABAD
2306.	GULBARGA INSTITUTE OF MEDICAL SCIENCES	HYDERABAD
2307.	GULF CONTRACTING CO. WLL	DOHA
2308.	GULF EXTRUSIONS CO. LLC	DUBAI
2309.	GULF GLASS INDUSTRIES	SHARJAH
2310.	GULF MEDICAL UNIVERSITY	COIMBATORE
2311.	GULF MEP SERVICES	UAE
2312.	GULF OIL LUBRICANTS (I) LTD.	MUMBAI
2313.	GULF PIPING CO. W.L.L.	ABUDHABI
2314.	GULF SNIPE ENGINEERING CONSTRUCTIONS LLC	DUBAI
2315.	GULFTAINER CO. LTD.	DUBAI
2316.	GUMBI SOFTWARE (P) LTD.	BANGALORE
2317.	GURUKRUPA ENTERPRISES	PUNE
2318.	GUSTORA FOODS (P) LTD.	DELHI
2319.	GV TOOL CO.	CHENNAI
2320.	GVK EMERGENCY MANAGEMENT & RESEARCH INST	HYDERABAD
2321.	GVK EMERGENCY MANAGEMENT & RESEARCH INST	MEGHALAYA
2322.	GWYNNIEBEE (I) (P) LTD.	BANGALORE
2323.	GXS (I) TECHNOLOGY CENTER (P) LTD.	BANGALORE
2324.	GXS (I) TECHNOLOGY CENTRE (P) LTD.	BANGALORE
2325.	H COM CONTRACTING AND SERVICES	BANGALORE
2326.	H&R BLOCK (I) (P) LTD.	BANGALORE
2327.	H.H SHEIKH MOHAMMED BIN RASHID AL MAKTOU	DUBAI
2328.	HABASIT (I) (P) LTD.	COIMBATORE
2329.	HABBOUSH GROUP GLOBAL LTD.	BAHRAIN
2330.	HADEED SABIC	JUBAIL
2331.	HAL HELICOPTER MRO DIV	BANGALORE
2332.	HALLIBURTON FAR EAST PTE LTD.	SINGAPORE
2333.	HALLIBURTON OFFSHORE SERVICES	MUMBAI
2334.	HAMAD MEDICAL CORPORATION	BANGALORE
2335.	HAMILTON HOUSEWARES (P) LTD.	MUMBAI
2336.	HANON AUTOMOTIVE SYSTEM (I) P LTD.	CHENNAI

S.No.	ORGANIZATION	LOCATION
2337.	HANON AUTOMOTIVE SYSTEMS (I) (P) LTD.	BHOPAL
2338.	HANON CLIMATE SYSTEM (I) LTD.	BHIWADI
2339.	HANSOL LOGISTICS (P) LTD.	GURGAON
2340.	HAPPIEST MINDS TECHNOLOGIES	BANGALORE
2341.	HARISHANKAR SINGHANIA ELASTOMER AND TYRE RESEARCH	MUMBAI
2342.	HARITA FEHRER LTD.	BANGALORE
2343.	HARITA FEHRER LTD.	CHENNAI
2344.	HARITA FEHRER LTD.	DELHI
2345.	HARITA FEHRER LTD.	HOSUR
2346.	HARITA FEHRER LTD.	PUNE
2347.	HARITA SEATING SYSTEMS LTD.	BANGALORE
2348.	HARITA SEATING SYSTEMS LTD.	DHARWAD
2349.	HARITA SEATING SYSTEMS LTD.	HOSUR
2350.	HARITA TECH SERV LTD.	BANGALORE
2351.	HARITA TECH SERV LTD.	INDORE
2352.	HARITA TECH SERV LTD.	PUNE
2353.	HARLEY DAVIDSON MOTOR COMPANY	BAWAL
2354.	HARLEY DAVIDSON MOTOR COMPANY	GURGAON
2355.	HARMAN CONNECTED SERVICE	BANGALORE
2356.	HARMAN CONNECTED SERVICE	GURGAON
2357.	HARMAN CONNECTED SERVICES	BANGALORE
2358.	HARMAN CONNECTED SERVICES	PUNE
2359.	HARMAN CONNECTED SERVICES CORPORATION	CHENNAI
2360.	HARMAN CONNECTED SERVICES CORPORATION INDIA	BANGALORE
2361.	HARMAN INTERNATIONAL	BANGALORE
2362.	HARMAN INTERNATIONAL	PUNE
2363.	HARMAN INTERNATIONAL (I) (P) LTD.	BANGALORE
2364.	HARRISONS MALAYALAM LTD. AN RPG GROU	COIMBATORE
2365.	HARSCO (I) (P) LTD.	HYDERABAD
2366.	HARTFORD STEAM BOILER INTERNATIONAL GMBH	KUWAIT
2367.	HARVEL IRRIGATIONS (P) LTD.	DELHI
2368.	HARYANA INDUSTRIES	GURGAON
2369.	HASHTECH SYSTEMS (P) LTD.	PUNE
2370.	HAUTE COTURE	BANGALORE
2371.	HAVELLS (I) LTD.	DELHI
2372.	HAVELLS (I) LTD.	FARIDABAD
2373.	HAVELLS (I) LTD.	NOIDA
2374.	HAWLE MID EAST FZE	DUBAI
2375.	HB ASSOCIATES	BANGALORE
2376.	HBL POWER SYSTEMS LTD.	HYDERABAD
2377.	HCENTIVE (I) (P) LTD.	NOIDA
2378.	HCL TECHNOLOGIES	AHMEDABAD
2379.	HCL TECHNOLOGIES	BANGALORE
2380.	HCL TECHNOLOGIES	CHENNAI
2381.	HCL TECHNOLOGIES	DELHI
2382.	HCL TECHNOLOGIES	GUWAHATI
2383.	HCL TECHNOLOGIES	KOLKATA
2384.	HCL TECHNOLOGIES	LUCKNOW
2385.	HCL TECHNOLOGIES	NOIDA
2386.	HCL TECHNOLOGIES	PUNE
2387.	HCL TECHNOLOGIES	TOKYO
2388.	HD INFO (P) LTD.	HYDERABAD
2389.	HDFC BANK LTD.	GOA
2390.	HDFC BANK LTD.	TRICHY
2391.	HEALTH POINT HOSPITAL	ABUDHABI
2392.	HEALTH SERVICES	KOLLAM
2393.	HEALTH SERVICES	TRIVANDRUM
2394.	HEALTHASYST	BANGALORE
2395.	HEALTHINDIA INSURANCE TPA SERVICES (P) LTD.	MUMBAI
2396.	HEALTHIUM MEDTECH (P) LTD.	BANGALORE
2397.	HEALTHLINE (P) LTD.	BANGALORE
2398.	HEAVY ENGINEERING INDUSTRIES & SHIPBUILD	KUWAIT
2399.	HEAVY ENGINEERING INDUSTRIES AND SHIPBUILDING CO	CHENNAI
2400.	HEAVY WATER PLANT MANUGURU	MANUGURU
2401.	HEDRICH VACUUM SYSTEMS (I) (P) LTD.	BANGALORE
2402.	HEISCO KUWAIT.	KUWAIT
2403.	HELA SYSTEMS (P) LTD.	HYDERABAD
2404.	HELLA (I) AUTOMOTIVE (P) LTD.	CHENNAI
2405.	HELLA (I) AUTOMOTIVE (P) LTD.	COIMBATORE
2406.	HELLA (I) AUTOMOTIVE (P) LTD.	PUNE
2407.	HELLA INIDA AUTOMOTIVE	COIMBATORE

S.No.	ORGANIZATION	LOCATION
2408.	HELLA NANJING TECHNICAL CENTER	HYDERABAD
2409.	HEMARUS THERAPEUTICS LTD.	HYDERABAD
2410.	HENDERSON INTERNATIONAL	DUBAI
2411.	HENKEL ANAND (I) (P) LTD.	CHENNAI
2412.	HENKEL ANAND (I) (P) LTD.	GURGAON
2413.	HEPATICA TECHNOLOGIES (P) LTD.	BANGALORE
2414.	HEPTAGON TECHNOLOGIES	CHENNAI
2415.	HERE MAPS	HYDERABAD
2416.	HERE SOLUTIONS (I) (P) LTD.	MUMBAI
2417.	HERE SOLUTIONS (I) (P) LTD.	PUNE
2418.	HERE TECHNOLOGIES	MUMBAI
2419.	HERE TECHNOLOGIES	PUNE
2420.	HERO FUTURE ENERGIES (P) LTD.	DELHI
2421.	HERO MOTO CORP LTD.	DELHI
2422.	HERO MOTO CORP LTD.	GURGAON
2423.	HERO MOTO CORP LTD.	JAIPUR
2424.	HERO MOTO CORP LTD.	NEEMRANA
2425.	HERO MOTOCORP LTD.	DELHI
2426.	HERRENKNECHT (I) (P) LTD.	CHENNAI
2427.	HESTON KUWAIT (MANPOWER SUPPLY TO KNPC)	KUWAIT
2428.	HETA DATAIN	NAGPUR
2429.	HETERO DRUGS	HYDERABAD
2430.	HETERO LABS LTD.	HYDERABAD
2431.	HEURISTECH LABS (P) LTD.	DELHI
2432.	HEWLETT PACKARD	BANGALORE
2433.	HEWLETT PACKARD (I) SOFTWARE OPERATION (P) LTD.	BANGALORE
2434.	HEWLETT PACKARD ENTERPRISE	BANGALORE
2435.	HEWLETT PACKARD ENTERPRISE	CHENNAI
2436.	HEWLETT PACKARD ENTERPRISE	GURGAON
2437.	HEWLETT PACKARD ENTERPRISE	MUMBAI
2438.	HEWLETT PACKARD ENTERPRISE	SINGAPORE
2439.	HEXAWARE TECHNOLOGIES	BANGALORE
2440.	HEXAWARE TECHNOLOGIES	CHENNAI
2441.	HEXAWARE TECHNOLOGIES	MUMBAI
2442.	HEXAWARE TECHNOLOGIES	PUNE
2443.	HFN INC	BANGALORE
2444.	HHA GLOBAL CONSULTANTS LLP WE	PUNE
2445.	HICAL TECHNOLOGIES (P) LTD.	BANGALORE
2446.	HIDADA	HYDERABAD
2447.	HIDI RAE CONSULTING ENGINEERS INC (DUBAI BRA	DUBAI
2448.	HIGH RADIUS	HYDERABAD
2449.	HIGHER COLLEGES OF TECHNOLOGY	DUBAI
2450.	HIGHRADIUS	HYDERABAD
2451.	HIGHWAY INDUSTRIES LTD.	LUDHIANA
2452.	HIL LTD.	HYDERABAD
2453.	HILLSBOROUGH GENERAL TRADING LLC	MADURAI
2454.	HILTI MANUFACTURING (I) (P) LTD.	MUMBAI
2455.	HIMACHAL FUTURISTIC COMMUNICATIONS LTD.	GURGAON
2456.	HIMATSINGKA SEIDE LTD.	BANGALORE
2457.	HINDALCO INDUSTRIES LTD.	ERNAKULAM
2458.	HINDALCO INDUSTRIES LTD.	KOCHI
2459.	HINDALCO INDUSTRIES LTD.	KOLKATA
2460.	HINDALCO INDUSTRIES LTD.	MUMBAI
2461.	HINDUJA FOUNDRIES LTD.	CHENNAI
2462.	HINDUJA GLOBAL SOLUTION	BANGALORE
2463.	HINDUJA GLOBAL SOLUTIONS	BANGALORE
2464.	HINDUJA NATIONAL POWER CORPORATION LTD.	CHENNAI
2465.	HINDUJA TECH LTD.	CHENNAI
2466.	HINDUSTAN AERONAUTICS LTD.	BANGALORE
2467.	HINDUSTAN AERONAUTICS LTD.	HYDERABAD
2468.	HINDUSTAN AERONAUTICS LTD.	PUNE
2469.	HINDUSTAN AERONAUTICS LTD.-MCSRDC	BANGALORE
2470.	HINDUSTAN COCA-COLA BEVERAGE (P) LTD.	MUMBAI
2471.	HINDUSTAN COMPUTERS LTD.	HYDERABAD
2472.	HINDUSTAN HARDY SPICER LTD.	NASHIK
2473.	HINDUSTAN PETROLEUM CORPORATION LTD.	DELHI
2474.	HINDUSTAN PETROLEUM CORPORATION LTD.	KOCHI
2475.	HINDUSTAN SHIPYARD LTD. VISAKHAPATNAM	VISAKHAPATNAM
2476.	HINDUSTAN TIMES LEARNING CENTERS LTD.	GURGAON
2477.	HINDUSTAN TIMES MEDIA LTD.	DELHI
2478.	HINDUSTAN ZINC LTD.	CHITTORGARH

S.No.	ORGANIZATION	LOCATION
2479.	HINDUSTAN ZINC LTD.	DELHI
2480.	HINE HYDRAULICS (I) (P) LTD.	CHENNAI
2481.	HINE HYDRAULICS (I) (P) LTD.	THIRUVALLUR
2482.	HINUSTAN AERONAUTICS LTD.	ODISHA
2483.	HITACHI (I) (P) LTD.	BANGALORE
2484.	HITACHI AUTOMOTIVE SYSTEMS	HOSUR
2485.	HITACHI CONSULTING	CHENNAI
2486.	HITACHI CONSULTING	HYDERABAD
2487.	HITACHI SOLUTIONS LTD.	PUNE
2488.	HITACHI VANTARA PTE LTD.	SINGAPORE
2489.	HLL LIFECARE LTD.	CHENNAI
2490.	HMC MM AUTO LTD.	DELHI
2491.	HMC MM AUTO LTD.	GURGAON
2492.	HNG FLOAT GLASS LTD.	HALOL
2493.	HNI OFFICE (I) LTD.	NAGPUR
2494.	HOLTEC ASIA (P) LTD.	PUNE
2495.	HOLTEC CONSULTING (P) LTD.	DELHI
2496.	HOME2THEATRE	BANGALORE
2497.	HONDA CARS (I) LTD.	ALWAR
2498.	HONDA CARS (I) LTD.	NOIDA
2499.	HONDA MOTORCYCLE & SCOOTER (I) (P) LTD.	BANGALORE
2500.	HONDA MOTORCYCLE & SCOOTER (I) (P) LTD.	BHIWADI
2501.	HONDA MOTORCYCLE & SCOOTER (I) (P) LTD.	GURGAON
2502.	HONDA MOTORCYCLE & SCOOTERS INDIA	DELHI
2503.	HONDA R&D (I) (P) LTD.	DELHI
2504.	HONEYWEL TECHNOLOGY SOLUTION LABS	BANGALORE
2505.	HONEYWELL	BANGALORE
2506.	HONEYWELL	HADAPSAR
2507.	HONEYWELL	HYDERABAD
2508.	HONEYWELL (I) (P) LTD.	BANGALORE
2509.	HONEYWELL AUTOMATION (I) LTD.	PUNE
2510.	HONEYWELL INTERNATIONAL	BANGALORE
2511.	HONEYWELL TECHNOLOGIES	BANGALORE
2512.	HONEYWELL TECHNOLOGIES	CHENNAI
2513.	HONEYWELL TECHNOLOGIES	MADURAI
2514.	HONEYWELL TECHNOLOGIES	PUNE
2515.	HONEYWELL TECHNOLOGY SOLUTION	BANGALORE
2516.	HONEYWELL TECHNOLOGY SOLUTION LAB	BANGALORE
2517.	HONEYWELL TECHNOLOGY SOLUTIONS	BANGALORE
2518.	HONEYWELL TECHNOLOGY SOLUTIONS	CHENNAI
2519.	HONEYWELL TECHNOLOGY SOLUTIONS LAB	BANGALORE
2520.	HONEYWELL TECHNOLOGY SOLUTIONS LAB (P) LTD.	BANGALORE
2521.	HOOQ	GURGAON
2522.	HORIZON ELECTRO SOLUTION (P) LTD.	PUNE
2523.	HORTONWORKS (I) (P) LTD.	BANGALORE
2524.	HOSPICLEAN	BANGALORE
2525.	HOSPINORM LLC	DUBAI
2526.	HOWARD FINLEY AL KHALEEJ	ABUDHABI
2527.	HP (I) SALES (P) LTD.	GURGAON
2528.	HP COMPUTING & PRINTING SYSTEMS (I) (P) LTD.	BANGALORE
2529.	HP ENTERPRISES	BANGALORE
2530.	HP INC	BANGALORE
2531.	HP INC	HOODI
2532.	HP INC	PUNE
2533.	HP INC.	BANGALORE
2534.	HP INC. R&D	BANGALORE
2535.	HP PPS (I) OPERATIONS (P) LTD.	BANGALORE
2536.	HP R&D(CONTIGENT EMPLOYEE FROM TEK SYSTEMS)	BANGALORE
2537.	HPCL MITTAL ENERGY LTD.	DELHI
2538.	HPCL MITTAL ENERGY LTD. (AARVI ENCON	BATHINDA
2539.	HPCL-MITTAL ENERGY LTD.	DELHI
2540.	HRS PROCESS SYSTEMS LTD.	PUNE
2541.	HRUSTA TECHNOLOGIES (P) LTD.	BANGALORE
2542.	HSBC ELECTRONIC DATA PROCESSING (I) (P) LTD.	CHENNAI
2543.	HSBC SOFTWARE & DEVELOPMENT (I) (P) LTD.	PUNE
2544.	HSBC TECHNOLOGY INDIA	PUNE
2545.	HTC GLOBAL SERVICES (P) LTD.	CHENNAI
2546.	HTRUNK SOFTWARE SOLUTIONS (P) LTD.	BANGALORE
2547.	HUAWEI TECHNOLOGIES	BANGALORE
2548.	HUAWEI TECHNOLOGIES (I) (P) LTD.	BANGALORE
2549.	HUBNER INTERFACE SYSTEMS (I) (P) LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
2550.	HUGHES SYSTIQUE	GURGAON
2551.	HUGHES SYSTIQUE (P) LTD.	DELHI
2552.	HUGHES SYSTIQUE CORPORATION GURGAON	DELHI
2553.	HUMANETICS INNOVATIVE SOLUTIONS	BANGALORE
2554.	HUMANETICS INNOVATIVE SOLUTIONS (I) PV	BANGALORE
2555.	HUMANITICS DIMENSION SOFTWARE (P) LTD.	NOIDA
2556.	HUMMINGWAVE TECHNOLOGIES	BANGALORE
2557.	HUNTSMAN INTERNATIONAL (I) (P) LTD.	VADODARA
2558.	HURITS CONSULTING PVT. LTD.	BANGALORE
2559.	HUSCO (P) LTD.	PUNE
2560.	HUSCO HYDRAULICS (P) LTD.	PUNE
2561.	HUSKY INJECTION MOLDING SYSTEMS	CHENNAI
2562.	HUSSAM TECHNOLOGY CO. LLC	KOLKATA
2563.	HUSYS CONSULTING LTD.	BANGALORE
2564.	HUTCHINSON SA (I) LIAISON OFFICE	GURGAON
2565.	HYDAC (I) (P) LTD.	PUNE
2566.	HYFLUX ENGINEERING(INDIA) (P) LTD.	PUNE
2567.	HYFLUX PTE LTD.	SINGAPORE
2568.	HYPERGRID	DELHI
2569.	HYPERWORKS IMAGING (P) LTD.	BANGALORE
2570.	HYSTER-YALE LIFT TRUCKS (I) (P) LTD.	PUNE
2571.	HYUNDAI MOBIS	CHENNAI
2572.	HYUNDAI MOBIS	HYDERABAD
2573.	HYUNDAI MOBIS (I) L IMITE D RESEARCH AND DEVELOP	HYDERABAD
2574.	HYUNDAI MOTOR (I) ENGG (P) LTD.	HYDERABAD
2575.	HYUNDAI MOTOR (I) ENGINEERING (P) LTD.	CHENNAI
2576.	HYUNDAI MOTOR (I) ENGINEERING PRIVATE	CHENNAI
2577.	HYUNDAI MOTOR (I) ENGINNERING PRIVATE	CHENNAI
2578.	HYUNDAI MOTOR (I) LTD.	CHENNAI
2579.	HYUNDAI MOTOR (I) LTD.	DELHI
2580.	HYUNDAI MOTOR ENGINEERING LTD.	CHENNAI
2581.	HYUNDAI MOTOR INDIA	CHENNAI
2582.	HYUNDAI MOTORS (I) LTD.	CHENNAI
2583.	HYUNDAI ROTEM	DELHI
2584.	I DESIGN ENGINEERING SOLUTIONS LTD.	PUNE
2585.	I LABS GLOBAL	BANGALORE
2586.	I SHARE BUSINESS (P) LTD.	JAIPUR
2587.	I&B AUTOMATION & CONTROLS (P) LTD.	NOIDA
2588.	I|NAUTIX TECHNOLOGIES (I) (P) LIMI	CHENNAI
2589.	I2I TELESOLUTIONS & TELEMEDICINE (P) LTD.	BANGALORE
2590.	IAF	AMBALA
2591.	IAF	DELHI
2592.	IBAHN ILLUMINATION (P) LTD.	DELHI
2593.	IBASET (I) (P) LTD.	AHMEDABAD
2594.	IBASET (I) SOFTWARE (P) LTD.	MUMBAI
2595.	IBM (CLIENT OF EXPERIS IT)	DELHI
2596.	IBM (I) (P) LTD.	BANGALORE
2597.	IBM (I) (P) LTD.	CHENNAI
2598.	IBM (I) (P) LTD.	DELHI
2599.	IBM (I) (P) LTD.	KOLKATA
2600.	IBM (I) (P) LTD.	PUNE
2601.	IBM SINGAPORE	BANGALORE
2602.	IBM SINGAPORE PTE. LTD.	SINGAPORE
2603.	IBS SOFTWARE (P) LTD.	BANGALORE
2604.	IBS SOFTWARE SERVICES	BANGALORE
2605.	IBS SOFTWARE SERVICES	TRIVANDRUM
2606.	IBS SOFTWARE SERVICES LTD.	BANGALORE
2607.	IBUILDING AUTOMATION (P) LTD.	CHENNAI
2608.	ICAM SOLUTION (P) LTD. BANGALORE	BANGALORE
2609.	ICAT MANESAR INDIA	DELHI
2610.	ICE (ASIA) (P) LTD.	MUMBAI
2611.	ICICI BANK	JAIPUR
2612.	ICICI LOMBARD GENERAL INSURANCE CO. (P) LTD.	BANGALORE
2613.	ICMR NICPR	DELHI
2614.	ICONMA PROFESSIONAL SERVICES AND SOLUTIONS	HYDERABAD
2615.	ICRA MANAGEMENT CONSULTANCY SERVICES LTD.	MUMBAI
2616.	ICUBE CONSULTING SERVICES	BANGALORE
2617.	IDBI BANK	HYDERABAD
2618.	IDC ENGINEERING (P) LTD.	BANGALORE
2619.	IDCUBE IDENTIFICATION SYSTEM	BANGALORE
2620.	IDEA CELLULAR LTD.	COCHIN

S.No.	ORGANIZATION	LOCATION
2621.	IDEA CELLULAR LTD.	ERNAKULAM
2622.	IDEA CELLULAR LTD.	KOCHI
2623.	IDEA CELLULAR LTD.	KOLKATA
2624.	IDEA CELLULAR LTD.	LUCKNOW
2625.	IDEA CELLULAR LTD.	TRIVANDRUM
2626.	IDEA ENTITY TECH SOLUTIONS	HYDERABAD
2627.	IDEAL CURES (P) LTD.	MUMBAI
2628.	IDEAL3D	CHENNAI
2629.	IDEAS - A SAS COMPANY	PUNE
2630.	IDEAS REVENUE SOLUTIONS	PUNE
2631.	IDEAZ INFINITE	MUMBAI
2632.	IDEEYA TECH SERVICES	DELHI
2633.	IDRIVE SOFTWARE (I) (P) LTD.	BANGALORE
2634.	IEC AIR TOOLS (P) LTD.	PUNE
2635.	IFB AUTOMOTIVE (P) LTD.	BANGALORE
2636.	IFB AUTOMOTIVE (P) LTD.	CHENNAI
2637.	IFCI LTD.	DELHI
2638.	IFS SOLUTIONS (I) (P) LTD.	NOIDA
2639.	IGATE GLOBAL SOLUTIONS	BANGALORE
2640.	IGENETIC DIAGNOSTICS (P) LTD.	MUMBAI
2641.	IGNITARIUM TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
2642.	IGT SOLUTIONS (P) LTD.	DELHI
2643.	IGUS (I) (P) LTD.	BANGALORE
2644.	IHCL (TAJ GROUP OF HOTELS)	MUMBAI
2645.	IHS MARKIT	DELHI
2646.	IHS MARKIT	GURGAON
2647.	IHSMARKIT (I) (P) LTD.	DELHI
2648.	IIFL WEALTH	BANGALORE
2649.	IINTERCHANGE SYSTEMS	CHENNAI
2650.	IIT BHUBANESWAR	BANGALORE
2651.	IITM	CHENNAI
2652.	IKABIT SOFTWARE SYSTEMS (P) LTD.	BANGALORE
2653.	IKAYA HUMAN CAPITAL RESOURCES	DELHI
2654.	IKK GROUP OF COMPANIES SAUDI ARABIA	SAUDIARABIA
2655.	IL&FS ENGINEERING	DEHRADUN
2656.	IL&FS ENGINEERING	HYDERABAD
2657.	IMAGINATION TECHNOLOGIES	HYDERABAD
2658.	IMARSH TECHNOLOGIES	MUMBAI
2659.	IMAX DIAGNOSTICS	BANGALORE
2660.	IMI CCI	BANGALORE
2661.	IMI PRECISION ENGINEERING	NOIDA
2662.	IMINDSNTHOUGHTS TECHNOLOGY SOLUTIONS AND	BANGALORE
2663.	IMPETUS INFOTECH (I) (P) LTD.	BANGALORE
2664.	IMPETUS INFOTECH (P) LTD.	DELHI
2665.	IMPETUS INFOTECH(INDIA) (P) LTD.	BANGALORE
2666.	IMPIGER TECHNOLOGIES	BANGALORE
2667.	IMPLANTAIRE TECHNOLOGIES (I) (P) LTD.	MYSORE
2668.	IMPRESSICO BUSINESS SOLUTION	DELHI
2669.	IMS GHAZIABAD	GHAZIABAD
2670.	IMS LEARNING RESOURCES (P) LTD.	DELHI
2671.	IMS NOIDA	NOIDA
2672.	INA BEARINGS (I) (P) LTD.	PUNE
2673.	INAPP INFORMATION TECHNOLOGIES (I) P	THIRUVANANTHAPURAM
2674.	INAPP INFORMATION TECHNOLOGY	THIRUVANANTHAPURAM
2675.	INATECH (I) (P) LTD.	CHENNAI
2676.	INATECH INFO SOLUTIONS	CHENNAI
2677.	INAUTIX	BNYMELLON
2678.	INAUTIX	CHENNAI
2679.	INAUTIX	HYDERABAD
2680.	INAUTIX	PUNE
2681.	INCAP CMS (P) LTD.	BANGALORE
2682.	INCEDO	CHENNAI
2683.	INCEDO TECHNOLOGIES SOLUTIONS LTD.	DELHI
2684.	INCESSANT TECHNOLOGIES	HYDERABAD
2685.	INCESSANT TECHNOLOGIES (P) LTD.	HYDERABAD
2686.	INCREX	HYDERABAD
2687.	INDECOMM GLOBAL SERVICES	BANGALORE
2688.	INDEPENDENT PROFESSIONAL COSNULTANT	MUMBAI
2689.	INDIA AIR FORCE	BANGALORE
2690.	INDIA ARMY	DELHI
2691.	INDIA IMPEX LOGISTICS (P) LTD.	CHENNAI

S.No.	ORGANIZATION	LOCATION
2692.	INDIA JAPAN LIGHTING (P) LTD.	CHENNAI
2693.	INDIA JAPAN LIGHTING (P) LTD.	THIRUVALLUR
2694.	INDIA MEDTRONIC (P) LTD.	BANGALORE
2695.	INDIA MEDTRONIC (P) LTD.	CHENNAI
2696.	INDIA METEOROLOGICAL DEPARTMENT	DELHI
2697.	INDIA WORLD TECHNOLOGIES (P) LTD.	GURGAON
2698.	INDIA YAMAHA MOTORS (P) LTD.	CHENNAI
2699.	INDIAN AIR FORCE	AGRA
2700.	INDIAN AIR FORCE	ALLAHABAD
2701.	INDIAN AIR FORCE	ASSAM
2702.	INDIAN AIR FORCE	BANGALORE
2703.	INDIAN AIR FORCE	BARRACKPORE
2704.	INDIAN AIR FORCE	BHOPAL
2705.	INDIAN AIR FORCE	BHUJ
2706.	INDIAN AIR FORCE	CARNICOBAR
2707.	INDIAN AIR FORCE	CHABUA
2708.	INDIAN AIR FORCE	CHANDIGARH
2709.	INDIAN AIR FORCE	CHENNAI
2710.	INDIAN AIR FORCE	COIMBATORE
2711.	INDIAN AIR FORCE	DARBHANGA
2712.	INDIAN AIR FORCE	DELHI
2713.	INDIAN AIR FORCE	FEROZEPUR
2714.	INDIAN AIR FORCE	GUWAHATI
2715.	INDIAN AIR FORCE	HINDAN
2716.	INDIAN AIR FORCE	HYDERABAD
2717.	INDIAN AIR FORCE	JAMNAGAR
2718.	INDIAN AIR FORCE	JODHPUR
2719.	INDIAN AIR FORCE	LEH
2720.	INDIAN AIR FORCE	MOUNTABU
2721.	INDIAN AIR FORCE	NAINITAL
2722.	INDIAN AIR FORCE	NASHIK
2723.	INDIAN AIR FORCE	PATHANKOT
2724.	INDIAN AIR FORCE	PUNE
2725.	INDIAN AIR FORCE	SURATGARH
2726.	INDIAN AIR FORCE	THIRUVANANTHAPURAM
2727.	INDIAN AIRFORCE	DELHI
2728.	INDIAN ARMY	ARUNANCHALPRADESH
2729.	INDIAN ARMY	BANGALORE
2730.	INDIAN ARMY	BAREILLY
2731.	INDIAN ARMY	BHOPAL
2732.	INDIAN ARMY	CHANDIGARH
2733.	INDIAN ARMY	CHENNAI
2734.	INDIAN ARMY	DELHI
2735.	INDIAN ARMY	DINJAN
2736.	INDIAN ARMY	GOA
2737.	INDIAN ARMY	HYDERABAD
2738.	INDIAN ARMY	JAISALMER
2739.	INDIAN ARMY	JODHPUR
2740.	INDIAN ARMY	KASAULI
2741.	INDIAN ARMY	KOLKATA
2742.	INDIAN ARMY	MANESAR
2743.	INDIAN ARMY	MANIPUR
2744.	INDIAN ARMY	MEERUT
2745.	INDIAN ARMY	NAINITAL
2746.	INDIAN ARMY	PUNE
2747.	INDIAN ARMY	SECUNDERABAD
2748.	INDIAN ARMY	SHILLONG
2749.	INDIAN ARMY	SHIMLA
2750.	INDIAN ARMY	SRIGANGANAGAR
2751.	INDIAN ARMY	SRINAGAR
2752.	INDIAN ARMY	UDHAMPUR
2753.	INDIAN COAST GUARD	PORBANDAR
2754.	INDIAN COUNCIL OF MEDICAL RESEARCH	DELHI
2755.	INDIAN DENTAL SPECIALITIES	HYDERABAD
2756.	INDIAN HOTELS CO. LTD.	MUMBAI
2757.	INDIAN INSTITUTE OF ASTROPHYSICS	BANGALORE
2758.	INDIAN INSTITUTE OF MANAGEMENT BANGLORE	BANGALORE
2759.	INDIAN INSTITUTE OF MANAGEMENT LUCKNOW	NOIDA
2760.	INDIAN INSTITUTE OF SCIENCE EDUCATION AND RE	PUNE
2761.	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	HYDERABAD
2762.	INDIAN INSTITUTE OF TECHNOLOGY ROPAR	RUPNAGAR

S.No.	ORGANIZATION	LOCATION
2763.	INDIAN INTITUTE OF TECHNOLOGY BHUBANESWA	BHUBANESWAR
2764.	INDIAN NAVY	BANGALORE
2765.	INDIAN NAVY	DELHI
2766.	INDIAN NAVY	GOA
2767.	INDIAN NAVY	HYDERABAD
2768.	INDIAN NAVY	KOCHI
2769.	INDIAN NAVY	MUMBAI
2770.	INDIAN NAVY	PUNE
2771.	INDIAN NAVY	VISAKHAPATNAM
2772.	INDIAN OIL CORPORATION LTD.	KOLKATA
2773.	INDIAN RAILWAY	KOLKATA
2774.	INDIAN RAILWAYS	DELHI
2775.	INDIAN RAILWAYS	JAIPUR
2776.	INDIAN SOCIETY FOR EDUCATION AND ENVIRONMENT	CHENNAI
2777.	INDIAN SPACE RESEARCH ORGANISATION	BANGALORE
2778.	INDIAN SPACE RESEARCH ORGANISATION (ISRO	BANGALORE
2779.	INDIAN SPACE RESEARCH ORGANISATION (ISRO	MAHENDRAGIRI
2780.	INDIAN SPACE RESEARCH ORGANISATION (ISRO	SRIHARIKOTA
2781.	INDIAN SPACE RESEARCH ORGANIZATION	PUNE
2782.	INDIAN SPINAL INJURIES CENTRE	DELHI
2783.	INDIAN SUCROSE LTD.	DELHI
2784.	INDIAN TECHNOCRAT LTD.	DELHI
2785.	INDIANA CONVEYORS (P) LTD.	KOLKATA
2786.	INDICATION INSTRUMENTS LTD.	DELHI
2787.	INDIRA GANDHI INSTITUTE OF DENTAL SCIENC	PUDUCHERRY
2788.	INDO CHAINS (RAIPUR) (P) LTD.	KOLKATA
2789.	INDO DANISH TOOL ROOM	PUNE
2790.	INDO GERMAN CHAMBER OF COMMERCE	DELHI
2791.	INDO TIBBETAN BORDER POLICE FORCE	KANPUR
2792.	INDOFIL INDUSTRIES LTD.	MUMBAI
2793.	INDORE COMPOSITE (P) LTD.	AMBERNATH
2794.	INDRAPURI HOSPITAL	MUMBAI
2795.	INDUMATI HR FACILITIES (P) LTD.	GURGAON
2796.	INDUS IND BANK	AHMEDABAD
2797.	INDUS INTERNATIONAL FZC	SHARJAH
2798.	INDUS TEQSITE	CHENNAI
2799.	INDUS TOWERS LTD.	GURGAON
2800.	INDUS VALLEY PARTNERS	NOIDA
2801.	INDUSIND BANK	CHENNAI
2802.	INDUSTRIAL BANK OF KUWAIT	DUBAI
2803.	INDUSTRIAL ELECTRIC SPARE CENTRE	CHENNAI
2804.	INEDA SYSTEMS	BANGALORE
2805.	INEDA SYSTEMS (P) LTD.	HYDERABAD
2806.	I-NET SOFTWARE SOLUTIONS	HYDERABAD
2807.	INFANT ENGINEERS (P) LTD.	CHENNAI
2808.	INFILL LIFE SCIENCES	AURANGABAD
2809.	INFINEON TECHNOLOGIES	BANGALORE
2810.	INFINEON TECHNOLOGIES (I) (P) LTD.	BANGALORE
2811.	INFINEON TECHNOLOGIES (I) (P) LTD.	DELHI
2812.	INFINERA	BANGALORE
2813.	INFINERA (I) (P) LTD.	BANGALORE
2814.	INFINERA IND (P) LTD.	BANGALORE
2815.	INFINIDAT	MUMBAI
2816.	INFINITE COMPUTER SOLUTIONS	BANGALORE
2817.	INFINITY AUTOMATED SOLUTIONS (P) LTD.	PUNE
2818.	INFO BASE SYSTEMS (P) LTD.	HYDERABAD
2819.	INFO EDGE (I) LTD.	DELHI
2820.	INFO EDGE (I) LTD.	NOIDA
2821.	INFOCORP SOFTWARE SOLUTIONS	DELHI
2822.	INFOEDGE	DELHI
2823.	INFONAS WLL	BAHRAIN
2824.	INFOOBJECTS	JAIPUR
2825.	INFOPRO LEARNING	NOIDA
2826.	INFOR (I) (P) LTD.	HYDERABAD
2827.	INFOR GLOBAL SOLUTION (P) LTD.	BANGALORE
2828.	INFOR GLOBAL SOLUTION (P) LTD.	HYDERABAD
2829.	INFOR GLOBAL SOLUTION (P) LTD.	PUNE
2830.	INFOR GLOBAL SOLUTIONS	HYDERABAD
2831.	INFORMATICA	BANGALORE
2832.	INFORMATICA BUSINESS (P) LTD.	BANGALORE
2833.	INFORMATICA BUSINESS SOLUTION	BANGALORE

S.No.	ORGANIZATION	LOCATION
2834.	INFORMATICA BUSINESS SOLUTIONS	BANGALORE
2835.	INFORMATICA BUSINESS SOLUTIONS (P) LTD.	BANGALORE
2836.	INFORMATION EVOLUTION (I) (P) LTD.	COIMBATORE
2837.	INFOSREE TECHNOLOGIES (P) LTD.	BANGALORE
2838.	INFOSTRETCH CORPORATION	AHMEDABAD
2839.	INFOSTRETCH CORPORATION (I) (P) LTD.	MUMBAI
2840.	INFOSTRETCH CORPORATION (P) LTD.	MUMBAI
2841.	INFOSTRETCH CORPORATION (P) LTD.	PUNE
2842.	INFOSYS	BANGALORE
2843.	INFOSYS	DELHI
2844.	INFOSYS	HYDERABAD
2845.	INFOSYS BPM LTD.	BANGALORE
2846.	INFOSYS LIMTED	DELHI
2847.	INFOSYS LTD.	BANGALORE
2848.	INFOSYS LTD.	BHUBANESWAR
2849.	INFOSYS LTD.	CHANDIGARH
2850.	INFOSYS LTD.	CHENGALPET
2851.	INFOSYS LTD.	CHENNAI
2852.	INFOSYS LTD.	COIMBATORE
2853.	INFOSYS LTD.	DELHI
2854.	INFOSYS LTD.	GURGAON
2855.	INFOSYS LTD.	JAIPUR
2856.	INFOSYS LTD.	MANGALURU
2857.	INFOSYS LTD.	MUMBAI
2858.	INFOSYS LTD.	MYSORE
2859.	INFOSYS LTD.	NOIDA
2860.	INFOSYS LTD.	PUNE
2861.	INFOSYS LTD.	THIRUVANANTHAPURAM
2862.	INFOSYS LTD.	TRIVANDRUM
2863.	INFOSYS LTD.	BANGALORE
2864.	INFOVENTURES SYSTEMS & SERVICES	QATAR
2865.	INFRASOFT TECHNOLOGIES	KOLKATA
2866.	INFRATECH FZ LLC	DUBAI
2867.	ING BANK PERSONEEL BV	HYDERABAD
2868.	INGEROLL RAND TECHNOLOGIES AND SERVICES	BANGALORE
2869.	INGEROLL RAND TECHNOLOGIES AND SERVICES	CHENNAI
2870.	INGERSOLL RAND	BANGALORE
2871.	INGERSOLL RAND	CHENNAI
2872.	INGERSOLL RAND TECHNOLIGES (P) LTD.	BANGALORE
2873.	INGERSOLL RAND TECHNOLOGIES AND SERVICE (P) LTD.	CHENNAI
2874.	INGERSOLL RAND TECHNOLOGIES AND SERVICES	BANGALORE
2875.	INGERSOLL RAND TECHNOLOGIES AND SERVICES	CHENNAI
2876.	INGRAM MICRO	CHENNAI
2877.	INGRAM MICRO (I) (P) LTD.	CHENNAI
2878.	INGRAM MICRO SSC	CHENNAI
2879.	INJAZAT DATA SYSTEMS	ABUDHABI
2880.	INMANTEC INSTITUTIONS	GHAZIABAD
2881.	INNODATA (I) (P) LTD.	DELHI
2882.	INNODATA (I) (P) LTD.	NOIDA
2883.	INNODATATICS	HYDERABAD
2884.	INNOHABIT TECHNOLOGIES (P) LTD.	BANGALORE
2885.	INNOKON LABS	CHENNAI
2886.	INNOLOGIX CONSULTING (P) LTD.	DELHI
2887.	INNOMINDS	HYDERABAD
2888.	INNOMINDS SOFTWARE SEZ (I) (P) LTD.	HYDERABAD
2889.	INNOV8 INTERIORS LLC	DUBAI
2890.	INNOVA RUBBERS (P) LTD.	NASHIK
2891.	INNOVA SOLUTIONS	CHENNAI
2892.	INNOVATION COMMUNICATIONS SYSTEMS LTD.	HYDERABAD
2893.	INNOVATIONS GROUP	SHARJAH
2894.	INNOVATIVE CENTRE FOR AUTOMATION PEOPLE	HYDERABAD
2895.	INNOVENT ENGINEERING SOLUTIONS (P) LTD.	DELHI
2896.	INNOVENT SPACES PVT.LTD.	BANGALORE
2897.	INSOFE EDUCATION (P) LTD.	HYDERABAD
2898.	INSPOP.COM LTD. (INDIA BRANCH OFFICE)	GURGAON
2899.	INSTAVERITAS	DELHI
2900.	INSTITUTE OF LIVER AND BILIARY SCIENCES	DELHI
2901.	INSTITUTE OF TECHNOLOGY & SCIENCE (ITS)	GHAZIABAD
2902.	INTEGRAL (I) SOFTWARE DEVELOPMENT CENTER (P) LTD.	BANGALORE
2903.	INTEGRATED GAS CONTROLS TECHNOLOGIES PVT	HYDERABAD
2904.	INTEGRATED SOFTWARE SYSTEMS	FARIDABAD

S.No.	ORGANIZATION	LOCATION
2905.	INTEGRATED SOFTWARE SYSTEMS	NOIDA
2906.	INTEL	BANGALORE
2907.	INTEL (I) (P) LTD. A-46	BANGALORE
2908.	INTEL (I) (P) LTD.	MARATHALLI
2909.	INTEL (I) (P) LTD.	RAMBUS
2910.	INTEL (I) (P) LTD..	BANGALORE
2911.	INTEL (I) TECHNOLOGY (P) LMT	BANGALORE
2912.	INTEL CORPORATION	BANGALORE
2913.	INTEL INDIA	BANGALORE
2914.	INTEL MICRO ELECTRONICS	HYDERABAD
2915.	INTEL MOBILE COMMUNICATION (I) (P) LTD.	BANGALORE
2916.	INTEL TECHNOLOGIES	BANGALORE
2917.	INTEL TECHNOLOGIES (P) LTD.	BANGALORE
2918.	INTEL TECHNOLOGIES LTD.	BANGALORE
2919.	INTEL TECHNOLOGY (I) (P) LTD.	BANGALORE
2920.	INTEL TECHNOLOGY (I) (P) LTD.	BANGALORE
2921.	INTEL TECHNOLOGY (P) LTD.	BANGALORE
2922.	INTEL TECHNOLOGY INDIA	DELHI
2923.	INTELENET GLOBAL SERVICES	HYDERABAD
2924.	INTELLECT DESIGN	CHENNAI
2925.	INTELLECT DESIGN	PISCATAWAY
2926.	INTELLECT DESIGN ARENA	HYDERABAD
2927.	INTELLECT DESIGN ARENA LTD.	CHENNAI
2928.	INTELLECT DESIGN ARENA LTD.	MUMBAI
2929.	INTELLIFOUR SOFTWARE (P) LTD.	PUNE
2930.	INTENSE TECHNOLOGIES LTD.	HYDERABAD
2931.	INTER UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHY	PUNE
2932.	INTERLACE (I) (P) LTD.	CHENNAI
2933.	INTERMACRO ASSOCIATES	BANGALORE
2934.	INTERMASS ENGINEERING & CONTRACTING	DUBAI
2935.	INTERMASS ENGINEERING & CONTRACTING COMPANY	DUBAI
2936.	INTERMEC TECHNOLOGIES (S) PTE LTD.	HYDERABAD
2937.	INTERNATIONAL AEROSPACE MANUFACTURING (P) LTD.	BANGALORE
2938.	INTERNATIONAL AEROSPACE MANUFACTURING (P) LTD.	BANGALORE
2939.	INTERNATIONAL AIRCON (P) LTD.	DELHI
2940.	INTERNATIONAL CENTRE FOR AUTOMOTIVE TECH	GURGAON
2941.	INTERNATIONAL CENTRE FOR AUTOMOTIVE TECH	MANESAR
2942.	INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY	DELHI
2943.	INTERNATIONAL COMBUSTION (I) LTD.	KOLKATA
2944.	INTERNATIONAL DENTAL HOSPITAL	VELLORE
2945.	INTERNATIONAL SCHOOL OF BUSINESS & MEDIA KOLKATA	KOLKATA
2946.	INTERNATIONAL SCHOOL OF ENGINEERING (P) LTD.	HYDERABAD
2947.	INTERNATIONAL TRACTOR LTD.	DELHI
2948.	INTERNATIONAL TRACTORS LTD.	DELHI
2949.	INTERPUMP HYDRAULICS (I) (P) LTD.	HOSUR
2950.	INTERTEK	DUBAI
2951.	INTEVA PRODUCTS	BANGALORE
2952.	INTEVA PRODUCTS (I) AUTOMOTIVE (P) LTD.	PUNE
2953.	INTLTEC - SKYBAND	DUBAI
2954.	INTRAEDGE TECHNOLOGIES (P) LTD.	PUNE
2955.	INTUIT INC	BANGALORE
2956.	INTUIT INC.	BANGALORE
2957.	INTUIT INDIA	BANGALORE
2958.	INTUIT PRODUCT DEVELOPMENT CENTER (P) LT	BANGALORE
2959.	INVECAS	HYDERABAD
2960.	INVENSOFT TECHNOLOGIES (P) LTD.	MYSORE
2961.	INVENT WELD AUTOMATION	CHENNAI
2962.	INVESCO	HYDERABAD
2963.	INVESTCORP BSC	HYDERABAD
2964.	INVISTA SINGAPORE FIBRES PTE LTD.	SINGAPORE
2965.	ION TRADING (I) (P) LTD.	DELHI
2966.	ION TRADING (I) (P) LTD.	NOIDA
2967.	IONTRADING (HTTPS://IONGROUP.COM/)	DELHI
2968.	IP CORE SOLUTIONS (P) LTD.	BANGALORE
2969.	IP INFUSION SOFTWARE (I) (P) LIMIT	BANGALORE
2970.	IP RINGS LTD.	CHENNAI
2971.	IPE GLOBAL LTD.	DELHI
2972.	IPRC MAHENDRAGIRI TAMILNADU	MAHENDRAGIRI
2973.	IPROSONIC SYSTEMS (P) LTD.	GURGAON
2974.	IPSOFT GLOBAL SERVICES	BANGALORE
2975.	IQUANTELA TECHNOLOGIES (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
2976.	IQVIA	BANGALORE
2977.	IQVIA (QUINTILESIMS)	BANGALORE
2978.	IQVIA RDS (I) (P) LTD.	BANGALORE
2979.	IRIS SOFTWARE INC.	DELHI
2980.	IRIS SOFTWARE TECHNOLOGIES (P) LTD.	DELHI
2981.	ISAM KHAIRY KABBANI PLASTIC AND INSULATION FACTORY	DAMMAM
2982.	ISDC GLOBAL (P) LTD.	BANGALORE
2983.	ISGEC HEAVY ENGINEERING LTD.	NOIDA
2984.	ISGEC HEAVY ENGINEERING LTD.	YAMUNANAGAR
2985.	ISHAN NETSOL (P) LTD.	RAJKOT
2986.	ISHWAR METALS	WANI
2987.	ISORIS TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
2988.	ISOS CONSULTANCY SERVICES (P) LTD.	BANGALORE
2989.	ISPARTA MENSUCAT SAN VE TIC	SALEM
2990.	ISPAT GROUP	PUNE
2991.	ISRO	BANGALORE
2992.	ISRO	HYDERABAD
2993.	ISRO PROPULSION COMPLEX	MAHENDRAGIRI
2994.	ISRO SATELLITE CENTRE BENGALURU	BANGALORE
2995.	ISUZU MOTORS (I) (P) LTD.	CHENNAI
2996.	ISUZU MOTORS (I) (P) LTD.	KANCHIPURAM
2997.	IT CONVERGENCE PROFESSIONAL SERVICES (P) LTD.	HYDERABAD
2998.	ITC	BANGALORE
2999.	ITC INFOTECH	BANGALORE
3000.	ITC INFOTECH (I) (P) LTD.	BANGALORE
3001.	ITC INFOTECH (I) LTD.	BANGALORE
3002.	ITC INFOTECH (I) LTD.	PUNE
3003.	ITC INFOTECH LTD.	BANGALORE
3004.	ITC LTD.	BANGALORE
3005.	ITC LTD.	COIMBATORE
3006.	ITC LTD.	DELHI
3007.	ITC LTD.	HARIDWAR
3008.	ITC LTD.	HYDERABAD
3009.	ITC LTD.	KOLKATA
3010.	ITC LTD.	PUNE
3011.	ITC PSPD	BHADRACHALAM
3012.	ITC PSPD	CHENNAI
3013.	ITC PSPD LTD.	HYDERABAD
3014.	ITER-INDIA INSTITUTE FOR PLASMA RESEARC	AHMEDABAD
3015.	ITI LTD.	BANGALORE
3016.	ITPEOPLEGULF	DUBAI
3017.	ITRA	DELHI
3018.	ITRUST CENTRE FOR RESEARCH IN CYBER SECURITY SING	PUKHRAYAN
3019.	ITT FLUID TECHNOLOGY INTERNATIONAL (THAILAND) CO.	PUNE
3020.	ITT INC.	VADODARA
3021.	ITTIAM SYSTEMS (P) LTD.	BANGALORE
3022.	ITW (I) (P) LTD.	CHENNAI
3023.	ITW (I) (P) LTD.	PUNE
3024.	ITW INDIA	HYDERABAD
3025.	IVY SOFTWARE	HYDERABAD
3026.	IVY SOFTWARE DEVELOPMENT SERVICES (P) LTD.	HYDERABAD
3027.	IZAPY PTE. LTD. SINGAPORE	CHENNAI
3028.	J D INDUSTRIES	MUMBAI
3029.	J K CEMENT MANGROL WORKS	MANGROL
3030.	J K LAKSHMI CEMENT LTD.	JAYKAYPURAM
3031.	J P MORGAN	BANGALORE
3032.	J P MORGAN CHASE & CO	HYDERABAD
3033.	J. P MORGAN CHASE	MUMBAI
3034.	J.KUMAR INFRA PROJECTS LTD.	MUMBAI
3035.	J.KUMAR INFRAPROJECTS LTD.	MUMBAI
3036.	J.P.MORGAN SERVICES (I) (P) LTD.	BANGALORE
3037.	JABIL CIRCUIT (I) (P) LTD.	CHENNAI
3038.	JABIL CIRCUIT (I) (P) LTD.	RANJANGAON
3039.	JABIL CIRCUIT (I) P LTD.	PUNE
3040.	JABS INTERNATIONAL (P) LTD.	UDHAMSINGHNAGAR
3041.	JACOBS ENGINEERING	MUMBAI
3042.	JACOBS ENGINEERING (I) (P) LTD.	DELHI
3043.	JACOBS ENGINEERING (I) LTS	MUMBAI
3044.	JACOBS ENGINEERINGINDIA (P) LTD.	DELHI
3045.	JADE GLOBAL SOFTWARE (P) LTD.	DELHI
3046.	JADE GLOBAL SOFTWARE (P) LTD.	PUNE

S.No.	ORGANIZATION	LOCATION
3047.	JAI BHARAT MARUTI	DELHI
3048.	JAMNA AUTO INDUSTRIES LTD.	JAMSHEDPUR
3049.	JANSSEN (JOHNSON AND JOHNSON)	MUMBAI
3050.	JASMIN INFOTECH	CHENNAI
3051.	JASMIN INFOTECH (P) LTD.	CHENNAI
3052.	JAY JAY MILLS (I) (P) LTD.	COIMBATORE
3053.	JAY JAY MILLS(INDIA) (P) LTD.	COIMBATORE
3054.	JAYASWAL NECO INDUSTRIES LTD. SILTARA	RAIPUR
3055.	JAYPEE CEMENT CORPORATION LTD.	GUNTUR
3056.	JAZEERA AL MARJAN ELECTRO MECHANICAL WOR	DUBAI
3057.	JBJ TECHNOLOGY LTD.	NOIDA
3058.	JBM (NEEL METAL PRODUCTS)	GURGAON
3059.	JBM AUTO LTD.	CHENNAI
3060.	JBM AUTO LTD.	PUNE
3061.	JBM AUTO LTD.	RUDRAPUR
3062.	JBM INDUSTRIES LTD.	DELHI
3063.	JBT AERO TECH	MUSCAT
3064.	JCB (I) LTD.	DELHI
3065.	JCB (I) LTD.	JAIPUR
3066.	JCB (I) LTD.	JCB(I)LTD
3067.	JCB (I) LTD.	KOLKATA
3068.	JCB (I) LTD.	MOHALI
3069.	JCB (I) LTD.	PUNE
3070.	JDA	HYDERABAD
3071.	JDA SOFTWARE	BANGALORE
3072.	JDA SOFTWARE (I) (P) LTD.	BANGALORE
3073.	JET AVIATION DUBAI LLC	DUBAI
3074.	JIGYASA ANALYTICS	NEWJERSEY
3075.	JINDAL SAW LTD.	KUTCH
3076.	JINDAL STAINLESS LTD.	DAMMAM
3077.	JINDAL STAINLESS LTD.	HISAR
3078.	JINDAL STAINLESS LTD.	KOLKATA
3079.	JK FENNER IND LTD.	HYDERABAD
3080.	JK RISK MANAGERS & INSURANCE BROKERS LTD.	NOIDA
3081.	JK TECHNOSOFT LTD.	BANGALORE
3082.	JK TECHNOSOFT LTD.	NOIDA
3083.	JK TYRE & INDUSTRIES LTD.	BANGALORE
3084.	JK TYRE & INDUSTRIES LTD.	CHENNAI
3085.	JK TYRE & INDUSTRIES LTD.	MYSORE
3086.	JK TYRES & INDUSTRIES LTD.	BANGALORE
3087.	JMC PROJECTS (I) LTD.	MUMBAI
3088.	JOGESWAR BEVERAGES	ANAKAPALLE
3089.	JOHN CRANE SEALING SYSTEMS (P) LTD. (SMIT	BANGALORE
3090.	JOHN DEERE	HADAPSAR
3091.	JOHN DEERE	JABALPUR
3092.	JOHN DEERE	MAGARPATTA
3093.	JOHN DEERE	RAIPUR
3094.	JOHN DEERE (I) (P) LTD.	PUNE
3095.	JOHNSON & JOHNSON (I) LTD.	AURANGABAD
3096.	JOHNSON & JOHNSON (I) LTD.	MUMBAI
3097.	JOHNSON CONTROLS	AHMEDABAD
3098.	JOHNSON CONTROLS	BANGALORE
3099.	JOHNSON CONTROLS	DUBAI
3100.	JOHNSON CONTROLS	PUNE
3101.	JOHNSON CONTROLS (I) (P) LTD.	PUNE
3102.	JOHNSON CONTROLS MUMBAI	MUMBAI
3103.	JOHNSON ELECTRIC	HYDERABAD
3104.	JOHNSON MATTHEY CHEMICALS (I) (P) LTD.	MUMBAI
3105.	JONES LANG LASALLE	BANGALORE
3106.	JONSON RUBBER INDUSTRIES LTD.	SONIPAT
3107.	JOSEPH DIGITAL SOLUTIONS	DUBAI
3108.	JP MOREGAN CHASE	BANGALORE
3109.	JP MORGAN	BANGALORE
3110.	JP MORGAN & CHASE	HYDERABAD
3111.	JP MORGAN (I) (P) LTD.	BANGALORE
3112.	JP MORGAN CHASE	BANGALORE
3113.	JP MORGAN CHASE & CO	BANGALORE
3114.	JP MORGAN CHASE & CO	MUMBAI
3115.	JP MORGAN CHASE LTD.	MUMBAI
3116.	JP MORGAN SERVICES (I) (P) LTD.	BANGALORE
3117.	JP MORGAN SERVICES (I) (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
3118.	JP MORGAN SERVICES (I) (P) LTD.	MUMBAI
3119.	JP MORGAN SERVICES (P) LTD.	BANGALORE
3120.	JPMC	BANGALORE
3121.	JRAY MCDERMOTT ENGINEERING SERVICES (P) LTD.	CHENNAI
3122.	JSD ELECTRONICS (I) (P) LTD.	DELHI
3123.	JSW ENERGY	BARMER
3124.	JSW ENERGY	BELLARY
3125.	JSW ENERGY	RATNAGIRI
3126.	JSW ENERGY	SHOLTU
3127.	JSW ENERGY	VIJAYANAGAR
3128.	JSW JAIGARH PORT LTD.	GOA
3129.	JSW STEEL	BALLARI
3130.	JSW STEEL	BELLARY
3131.	JSW STEEL	NAGPUR
3132.	JSW STEEL	TORANAGALLU
3133.	JSW STEEL LTD.	BANGALORE
3134.	JSW STEEL LTD.	HYDERABAD
3135.	JTEKT (I) LTD.	DELHI
3136.	JUBILANT BIOSYS LTD.	BANGALORE
3137.	JUBILANT GENERICS LTD.	MYSORE
3138.	JUDGE (I) SOLUTIONS (P) LTD.	DELHI
3139.	JUNIPER NETWORK	BANGALORE
3140.	JUNIPER NETWORKS	BANGALORE
3141.	JUNIPER NETWORKS INC	BANGALORE
3142.	JURONG SHIPYARD PTE LTD.	SINGAPORE
3143.	JUSPAY	BANGALORE
3144.	JUST DIAL LTD.	BANGALORE
3145.	JUST DIAL LTD.	MUMBAI
3146.	K&S PARTNERS	HYDERABAD
3147.	K.I.T RAIGARH(C.G)	RAIGARH
3148.	KAAR TECHNOLOGIES	CHENNAI
3149.	KAHRAMAA QATAR ELECTRICITY & WATER COPERATION	DOHA
3150.	KAKATIYA EYE HOSPITAL	TELANGANA
3151.	KALA HOSPITALS	BANGALORE
3152.	KALSON ENGINEERING SOLUTIONS	PUNE
3153.	KALSON ENGINEERING SOLUTIONS	SHIRWAL
3154.	KALYANI MAXION WHEELS (P) LTD.	PUNE
3155.	KALYANI STEELS LTD.	PUNE
3156.	KANNU IMPEX (I) (P) LTD.	DELHI
3157.	KANSAL INDUSTRIES	DELHI
3158.	KANTAR	HYDERABAD
3159.	KANTAR ANALYTICS (I) (P) LTD.	BANGALORE
3160.	KAPIL HOSPITAL	DELHI
3161.	KAPPIAN	COCHIN
3162.	KAR MOBILES LTD.	TUMKUR
3163.	KARCHER CLEANING SYSTEMS (P) LTD.	KOLKATA
3164.	KARUNA HOSPITAL	MUMBAI
3165.	KARVY	HYDERABAD
3166.	KARVY INNOTECH LTD.	HYDERABAD
3167.	KATALYST SOFTWARE SERVICES LTD.	PUNE
3168.	KATOMARAN	COIMBATORE
3169.	KATOMARAN TECHNOLOGY AND BUSINESS SOLUTIONS	COIMBATORE
3170.	KAUVERY HOSPITAL	CHENNAI
3171.	KAVYA CHEMICALS	MUMBAI
3172.	KBR ABU DHABI	CHENNAI
3173.	KDDL LTD.	DELHI
3174.	KEC INTERNATIONAL LTD.	HYDERABAD
3175.	KEC INTERNATIONAL LTD.	KOLKATA
3176.	KEC INTERNATIONAL LTD.	MUMBAI
3177.	KEEPWORKS TECHNOLOGIES (P) LTD.	BANGALORE
3178.	KEI INDUSTRIES	DELHI
3179.	KEI LTD.	DELHI
3180.	KEIHIN (I) MANUFACTURING (P) LTD.	DELHI
3181.	KELLTON TECH	DELHI
3182.	KELLY SERVICES	BANGALORE
3183.	KELLY SERVICES (I) (P) LTD.	DELHI
3184.	KELLY SERVICES (P) LTD.	GURGAON
3185.	KELLY SERVICES PTE LTD.	PUNE
3186.	KEMIN INDUSTRIES SOUTH ASIA (P) LTD.	KOLKATA
3187.	KEMWELL BIOPHARMA (P) LTD.	BANGALORE
3188.	KEMWELL BIOPHARMA PVT.LTD	BANGALORE

S.No.	ORGANIZATION	LOCATION
3189.	KENNAMETAL (I) LTD.	BANGALORE
3190.	KENNAMETAL SHARED SERVICES (P) LTD.	BANGALORE
3191.	KENT RO SYSTEM PVT.LTD.	NOIDA
3192.	KEOLIS HYDERABAD MASS RAPIDTRANSIT SYSTEMS (P) LTD.	HYDERABAD
3193.	KEPPELFELS LTD.	CHENNAI
3194.	KERALA AGRO MACHINERY CORPORATION LTD.	COCHIN
3195.	KERALA INSTITUTE OF MEDICAL SCIENCES	TRIVANDRUM
3196.	KERALA ROAD FUND BOARD	TRIVANDRUM
3197.	KERALA STATE IT MISSION	THIRUVANANTHAPURAM
3198.	KERALA WATER AUTHORITY	TRIVANDRUM
3199.	KESHAVAM SOFTWARE SOLUTIONS LLP	PUNE
3200.	KEYSIGHT TECHNOLOGIES	BANGALORE
3201.	KEYSIGHT TECHNOLOGIES	CHENNAI
3202.	KEYSIGHT TECHNOLOGIES	DELHI
3203.	KEYSIGHT TECHNOLOGIES	PUNE
3204.	KEYSIGHT TECHNOLOGIES (I) (P) LTD.	BANGALORE
3205.	KEYSIGHT TECHNOLOGIES (I) (P) LTD.	KOLKATA
3206.	KEYSIGHT TECHNOLOGIES (P) LTD.	DELHI
3207.	KEYSIGHT TECHNOLOGIES INTERNATIONAL (I) (P) LTD.	GURGAON
3208.	KEYSTONE FOUNDATION	COIMBATORE
3209.	KH EXPORTS (I) (P) LTD.	CHENNAI
3210.	KHD HUMBOLDT WEDAG (I) (P) LTD.	DELHI
3211.	KIA MOTORS INDIA	BANGALORE
3212.	KIKUBARI	BANGALORE
3213.	KIMS HOSPITAL	MUMBAI
3214.	KIMS-SAVEERA HOSPITALS	ANANTAPUR
3215.	KINAPSE (A SYNEOS HEALTH COMPANY	DELHI
3216.	KINAPSE LTD.	GURGAON
3217.	KINDER WOMEN'S HOSPITAL AND FERTILITY CENTRE	CHERTHALA
3218.	KIRLOSKAR BROTHERS LTD.	PUNE
3219.	KIRLOSKAR CHILLER (P) LTD.	PUNE
3220.	KIRLOSKAR EBARA PUMPS LTD.	PUNE
3221.	KIRLOSKAR OIL ENGINES LTD.	PUNE
3222.	KIRLOSKAR PNEUMATIC CO LTD.	PUNE
3223.	KK WIND SOLUTIONS (I) (P) LTD.	BANGALORE
3224.	KL UNIVERSITY	VIJAYWADA-GUNTUR
3225.	KL UNIVERSITY HYDERABAD	HYDERABAD
3226.	KLA SOFTWARE (I) (P) LTD.	CHENNAI
3227.	KLA-TENCOR INDIA	CHENNAI
3228.	KLAUS IT SOLUTIONS (P) LTD.	CHENNAI
3229.	KLAZINA SOFTECH LTD.	GAUTAMBUDDHANAGAR
3230.	KLINGELNBERG (I) (P) LTD.	PUNE
3231.	KLOVERTEL (P) LTD.	DELHI
3232.	KMF AUTOMOTIVE (P) LTD.	CHENNAI
3233.	KNAB FINANCE	BANGALORE
3234.	KNAUF EXEED INSULATION LLC	ABUDHABI
3235.	KNM MANAGEMENT ADVISORY SERVICES (P) LTD.	GURGAON
3236.	KNORR BREMSE (I) (P) LTD.	DELHI
3237.	KNORR-BREMSE TECHNOLOGY CENTRE INDIA	PUNE
3238.	KNOWLEDGEHUT SOLUTIONS (P) LTD.	BANGALORE
3239.	KODIAK MOTOROLA SOLUTIONS	BANGALORE
3240.	KODIAK NETWORKS	BANGALORE
3241.	KODIAK NETWORKS	HYDERABAD
3242.	KOHLER (I) CORP. (P) LTD.	BHARUCH
3243.	KOHLEX (I) DESIGN CENTER (P) LTD.	HYDERABAD
3244.	KOKILABEN DHIRUBHAI AMBANI HOSPITAL	MUMBAI
3245.	KOMATSU (I) (P) LTD.	CHENNAI
3246.	KONARAK INDUSTRIA (P) LTD.	BANGALORE
3247.	KONE ASSARAIN LLC	OMAN
3248.	KONE ELEVATOR (I) (P) LTD.	CHENNAI
3249.	KONE ELEVATOR INDIA	CHENNAI
3250.	KONECRANES	DELHI
3251.	KONECRANES & DEMAG (P) LTD.	PUNE
3252.	KONECRANES (I) (P) LTD.	PUNE
3253.	KONECRANES AND DEMAG (I) (P) LTD.	PUNE
3254.	KONGSBERG MARITIME MIDDLE EAST	DUBAI
3255.	KOOKY INFOMEDIA (P) LTD.	DELHI
3256.	KOOUD SOFTWARE	BANGALORE
3257.	KOREA FUEL TECH (I) (P) LTD.	CHENNAI
3258.	KOSO (I) (P) LTD.	PUNE
3259.	KOTA PROJECTS LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
3260.	KOTAK MAHINDRA BANK LTD.	MUMBAI
3261.	KOVAION CONSULTING (I) (P) LTD.	CHENNAI
3262.	KP MURTHY & ASSOCIATES	BANGALORE
3263.	KPI PARTNERS	HYDERABAD
3264.	KPIT ENGINEERING LTD.	PUNE
3265.	KPIT TECHNOLOGIES	BANGALORE
3266.	KPIT TECHNOLOGIES	PUNE
3267.	KPIT TECHNOLOGIES LTD.	BANGALORE
3268.	KPIT TECHNOLOGIES LTD.	DELHI
3269.	KPMG GLOBAL DELIVERY CENTER	BANGALORE
3270.	KPMG GLOBAL SERVICES	BANGALORE
3271.	KPMG GLOBAL SERVICES (P) LTD.	BANGALORE
3272.	KPOINT TECHNOLOGIES (P) LTD.	PUNE
3273.	KRAFF SOFTWARE (P) LTD.	AHMEDABAD
3274.	KRITIKAL SOLUTION (P) LTD.	DELHI
3275.	KROMBERG & SCHUBERT GMBH	DUBAI
3276.	KROMBERG & SCHUBERT MEFZ	DUBAI
3277.	KROMBERG AND SCHUBERT	DUBAI
3278.	KSB MIL CONTROLS LTD.	PALAKKAD
3279.	KSB PUMPS LIMATED	PUNE
3280.	KSB TECH (P) LTD.	PUNE
3281.	KSK MAHANADI POWER CO. LTD.	BILASPUR
3282.	KSS ABHISHEK SAFETY SYSTEMS (P) LTD.	DELHI
3283.	KSS ABHISHEK SAFETY SYSTEMS (P) LTD.	MANASAR
3284.	KUANTUM PAPERS LTD.	PUNJAB
3285.	KUWAIT NATIONAL PETROLEUM COMPANY	KUWAIT
3286.	KUWAIT TELECOMMUNICATIONS VIVA	DUBAI
3287.	KVANTUM INC	DELHI
3288.	KVSS CONSULTANCY	MUMBAI
3289.	L & T CONSTRUCTION	COIMBATORE
3290.	L & T CONSTRUCTION	CUTTACK
3291.	L & T CONSTRUCTION	DELHI
3292.	L & T CONSTRUCTION	FIROZABAD
3293.	L & T CONSTRUCTION	JAIPUR
3294.	L & T CONSTRUCTION	MUMBAI
3295.	L & T CONSTRUCTION	NAGAUR
3296.	L & T HYDROCARBON ENGINEERING	MUMBAI
3297.	L & T INFOTECH	BANGALORE
3298.	L & T INFOTECH	CHENNAI
3299.	L & T TECHNOLOGY SERVICES	BANGALORE
3300.	L & T TECHNOLOGY SERVICES LTD.	BANGALORE
3301.	L & T TECHNOLOGY SERVICES LTD.	MUMBAI
3302.	L & TIES VADODARA	BANGALORE
3303.	L AND T INFOTECH	BANGALORE
3304.	L AND T TECHNOLOGY SERVICES	BANGALORE
3305.	L G BALAKRISHNAN & BROS LTD.	COIMBATORE
3306.	L&T CHIYODA LTD.	MUMBAI
3307.	L&T CONSTRUCTION	AHMEDABAD
3308.	L&T CONSTRUCTION	BANGALORE
3309.	L&T CONSTRUCTION	BHOPAL
3310.	L&T CONSTRUCTION	BHUBANESWAR
3311.	L&T CONSTRUCTION	CHENNAI
3312.	L&T CONSTRUCTION	CUTTACK
3313.	L&T CONSTRUCTION	DELHI
3314.	L&T CONSTRUCTION	DOHA
3315.	L&T CONSTRUCTION	GULBARGARH
3316.	L&T CONSTRUCTION	HYDERABAD
3317.	L&T CONSTRUCTION	JHUNJHUNU
3318.	L&T CONSTRUCTION	JOSHIMATH
3319.	L&T CONSTRUCTION	KOLKATA
3320.	L&T CONSTRUCTION	PRAYAGRAJ
3321.	L&T CONSTRUCTION	PUNE
3322.	L&T CONSTRUCTION	RAIGARH
3323.	L&T CONSTRUCTION	SURAT
3324.	L&T CONSTRUCTION	THOOTHUKUDI
3325.	L&T CONSTRUCTION	VISAKHAPATNAM
3326.	L&T CONSTRUCTION	VYARA
3327.	L&T CONSTRUCTION HCI	CHENNAI
3328.	L&T CONSTRUCTION PT&D IC	MUMBAI
3329.	L&T CONSTRUCTION-HEAVY CIVIL INFRASTRUCTURE	CHENNAI
3330.	L&T ELECTRICAL & AUTOMATION	MUMBAI

S.No.	ORGANIZATION	LOCATION
3331.	L&T HCI IC	CHENNAI
3332.	L&T HYDROCARBON ENGINEERING	JAMNAGAR
3333.	L&T HYDROCARBON ENGINEERING	VADODARA
3334.	L&T HYDROCARBON ENGINEERING LTD.	PUNE
3335.	L&T HYDROCARBON SAUDI COMPANY	CHENNAI
3336.	L&T HYDROCARBON SAUDI COMPANY	COIMBATORE
3337.	L&T INFOTECH	BANGALORE
3338.	L&T INFOTECH	CHENNAI
3339.	L&T INFOTECH	JAIPUR
3340.	L&T INFOTECH LTD.	PUNE
3341.	L&T INFOTECH PVT	CHENNAI
3342.	L&T INFRASTRUCTURE	CHENNAI
3343.	L&T LTD.	AURANGABAD
3344.	L&T MODULAR FABRICATION YARD LLC OMAN	BANGALORE
3345.	L&T POWER	TIRUCHIRAPALLI
3346.	L&T RUBBER PROCESSING MACHINERY	CHENNAI
3347.	L&T SHIPBUILDING LTD.	CHENNAI
3348.	L&T SPECIAL STEELS AND HEAVY FORGINGS PV	SURAT
3349.	L&T TECHNOLOGIES LTD.	BANGALORE
3350.	L&T TECHNOLOGY SERVICES	BANGALORE
3351.	L&T TECHNOLOGY SERVICES	CHENNAI
3352.	L&T TECHNOLOGY SERVICES	DELHI
3353.	L&T TECHNOLOGY SERVICES	MYSORE
3354.	L&T TECHNOLOGY SERVICES	VADODARA
3355.	L&T TECHNOLOGY SERVICES LTD.	BANGALORE
3356.	L&T TECHNOLOGY SERVICES LTD.	DELHI
3357.	L&T TECHNOLOGY SERVICES LTD.	MUMBAI
3358.	L&T TECHNOLOGY SERVICES LTD.	PUNE
3359.	L&T TS	BANGALORE
3360.	L&T VALDEL ENGINEERING LTD.	BANGALORE
3361.	L&T VALVES	CHENNAI
3362.	L&T VALVES LTD.	CHENNAI
3363.	L&T VALVES LTD.	COIMBATORE
3364.	L&T VALVES LTD.	KANCHEEPURAM
3365.	LADCO GALVANIZERS (P) LTD.	CHENNAI
3366.	LAKSHMI ELECTRICAL CONTROL SYSTEM	TIRUPATI
3367.	LAKSHMI MACHINE WORKS - MACHINE TOOL DIVISION	COIMBATORE
3368.	LAKSHMI MACHINE WORKS LTD.	COIMBATORE
3369.	LAKSHMI MACHINES WORKS	COIMBATORE
3370.	LAM RESEARCH	BANGALORE
3371.	LAM RESEARCH (I) (P) LTD.	BANGALORE
3372.	LAM RESEARCH (I) (P) LTD.	DOMLUR
3373.	LAM RESEARCH CORPORATION	BANGALORE
3374.	LAM RESEARCH INDIA	BANGALORE
3375.	LAMPRELL ENERGY LTD.	DUBAI
3376.	LAMPRELL ENERGY LTD.	UAE
3377.	LANDIS + GYR LTD.	DELHI
3378.	LANDIS GYR	DELHI
3379.	LANDMARK IT SOLUTIONS	HYDERABAD
3380.	LANXESS (I) (P) LTD.	BHARUCH
3381.	LARK LABORATORIES (I) LTD. BHIWADI RAJASTHAN	BHIWADI
3382.	LARSAN AND TOUBRO LTD.	DELHI
3383.	LARSEN & TOUBRO	ABUDHABI
3384.	LARSEN & TOUBRO	BANGALORE
3385.	LARSEN & TOUBRO	BARODA
3386.	LARSEN & TOUBRO	BATHINDA
3387.	LARSEN & TOUBRO	BHUBANESWAR
3388.	LARSEN & TOUBRO	CHENNAI
3389.	LARSEN & TOUBRO	CHHABRA
3390.	LARSEN & TOUBRO	COIMBATORE
3391.	LARSEN & TOUBRO	CUTTACK
3392.	LARSEN & TOUBRO	DAMMAM
3393.	LARSEN & TOUBRO	DELHI
3394.	LARSEN & TOUBRO	DOHA
3395.	LARSEN & TOUBRO	DUBAI
3396.	LARSEN & TOUBRO	FARIDABAD
3397.	LARSEN & TOUBRO	GANDHINAGAR
3398.	LARSEN & TOUBRO	GOA
3399.	LARSEN & TOUBRO	GURGAON
3400.	LARSEN & TOUBRO	HYDERABAD
3401.	LARSEN & TOUBRO	INDORE

S.No.	ORGANIZATION	LOCATION
3402.	LARSEN & TOUBRO	JAIPUR
3403.	LARSEN & TOUBRO	JAMNAGAR
3404.	LARSEN & TOUBRO B5: A-	JAMSHEDPUR
3405.	LARSEN & TOUBRO	JHUNJHUNU
3406.	LARSEN & TOUBRO	JODHPUR
3407.	LARSEN & TOUBRO	KANCHEEPURAM
3408.	LARSEN & TOUBRO	KANNUR
3409.	LARSEN & TOUBRO	KANPUR
3410.	LARSEN & TOUBRO	LUCKNOW
3411.	LARSEN & TOUBRO	MANPAKKAM
3412.	LARSEN & TOUBRO	MUSCAT,OMAN
3413.	LARSEN & TOUBRO	MYSORE
3414.	LARSEN & TOUBRO	NAGAUR
3415.	LARSEN & TOUBRO	ODISHA
3416.	LARSEN & TOUBRO	OMAN
3417.	LARSEN & TOUBRO	PITHAMPUR
3418.	LARSEN & TOUBRO	PUDUKKOTTAI
3419.	LARSEN & TOUBRO	QATAR
3420.	LARSEN & TOUBRO	RAIGARH
3421.	LARSEN & TOUBRO	RIYADH
3422.	LARSEN & TOUBRO	RUDRAPRAGAY
3423.	LARSEN & TOUBRO	SAUDIARABIA
3424.	LARSEN & TOUBRO	SHAKTINAGAR
3425.	LARSEN & TOUBRO	SHARJAH
3426.	LARSEN & TOUBRO	SIKKIM
3427.	LARSEN & TOUBRO	SILIGURI
3428.	LARSEN & TOUBRO	SURAT
3429.	LARSEN & TOUBRO	TAMILNADU
3430.	LARSEN & TOUBRO	TELANGANA
3431.	LARSEN & TOUBRO	TIRUNELVELI
3432.	LARSEN & TOUBRO	TUTICORIN
3433.	LARSEN & TOUBRO	UAE
3434.	LARSEN & TOUBRO	VADODARA
3435.	LARSEN & TOUBRO	VARANASI
3436.	LARSEN & TOUBRO	VISAKHAPATNAM
3437.	LARSEN & TOUBRO	VYARA
3438.	LARSEN & TOUBRO CONSTRUCTION LTD.	KOLKATA
3439.	LARSEN & TOUBRO ECC DIVISION	DUBAI
3440.	LARSEN & TOUBRO INFOTECH	PUNE
3441.	LARSEN & TOUBRO LTD.	BANGALORE
3442.	LARSEN & TOUBRO LTD.	CHENNAI
3443.	LARSEN & TOUBRO LTD.	DELHI
3444.	LARSEN & TOUBRO LTD.	DUBAI
3445.	LARSEN & TOUBRO LTD.	GOA
3446.	LARSEN & TOUBRO LTD.	KOLKATA
3447.	LARSEN & TOUBRO(OMAN)LLC	DUBAI
3448.	LARSEN AND TOUBRO	CHENNAI
3449.	LARSEN AND TOUBRO	DELHI
3450.	LARSEN AND TOUBRO (P) LTD.	MUMBAI
3451.	LARSEN AND TOUBRO LTD.	CHENNAI
3452.	LARSEN AND TOUBRO LTD.	COIMBATORE
3453.	LARSEN AND TOUBRO LTD.	DELHI
3454.	LARSEN AND TOUBRO LTD.	DUBAI
3455.	LARSEN AND TOUBRO LTD.	GOA
3456.	LARSEN AND TOUBRO LTD.	PUNE
3457.	LARSEN AND TOUBRO LTD. CONSTRUCTION	BANGALORE
3458.	LARSEN&TOUBRO LTD.	CHENNAI
3459.	LARSERN AND TOUBRO CONSTRUCTION	BANGALORE
3460.	LASTEC (DRDO)	DELHI
3461.	LASTEC DRDO MIN. OF DEFENCE	DELHI
3462.	LATENTVIEW ANALYTICS	CHENNAI
3463.	LAURUS LABS	HYDERABAD
3464.	LAXMANBHAI & CO.	SEYCHELLES
3465.	LEADSOC TECHNOLOGIES (P) LTD.	BANGALORE
3466.	LEAP & SCALE GROWTH PARTNERS (P) LTD.	PUNE
3467.	LEAP INFRAASYS (P) LTD.	NOIDA
3468.	LEAR (I) ENGINEERING LLP	PUNE
3469.	LEAR AUTOMOTIVE (I) (P) LTD.	CHENNAI
3470.	LEAR AUTOMOTIVE (I) (P) LTD.	PUNE
3471.	LEAR CORPORATION	PUNE
3472.	LEARNING MATE SOLUTIONS	KOLKATA

S.No.	ORGANIZATION	LOCATION
3473.	LEARNINGMATE SOLUTIONS (P) LTD.	PUNE
3474.	LEARNIPHI TECHNOLOGY (P) LTD.	AHMEDABAD
3475.	LEARNPEDIA EDUTECH (P) LTD.	HYDERABAD
3476.	LEIGHTON OFFSHORE SDN BHD	KUALALUMPUR
3477.	LEITWIND SHRIRAM MFG. LTD.	CHENNAI
3478.	LEIXIR RESOURCES (P) LTD.	DELHI
3479.	LENNOX (I) TECHNOLOGY CENTER	CHENNAI
3480.	LENOVO (I) (P) LTD.	BANGALORE
3481.	LENOVO GLOBAL TECHNOLOGY (I) PRIVATE	BANGALORE
3482.	LEOFORCE TECHNOLOGIES INDIA(PVT) LTD.	HYDERABAD
3483.	LETO CENTRE FOR WOMEN'S HEALTH	CHENNAI
3484.	LEVADATA SOFTWARE SOLUTIONS (P) LTD.	HYDERABAD
3485.	LEXMARK INTERNATIONAL INDIA(PVT) LTD.	KOLKATA
3486.	LG ELECTRONICS (I) (P) LTD.	DELHI
3487.	LG ELECTRONICS (I) LTD.	PUNE
3488.	LG SOFT (I) (P) LTD.	BANGALORE
3489.	LG SOFT INDIA	BANGALORE
3490.	LGSOFT (I) (P) LTD.	BANGALORE
3491.	LIEBHERR (I) (P) LTD.	MUMBAI
3492.	LIEBHERR CMCTECH (I) (P) LTD.	PUNE
3493.	LIFE LINE HOSPITAL	CHENNAI
3494.	LIGHTING TECHNOLOGIES (I) (P) LTD.	BANGALORE
3495.	LINCOLN ELECTRIC MIDDLE EAST FZE	DUBAI
3496.	LINKEDIN TECHNOLOGY INFORMATION PRIVATE	BANGALORE
3497.	LINKS MIDDLE EAST TECHNICAL SERVICES LLC	ABUDHABI
3498.	LINKS MIDDLEEAST TECHNICAL SERVICES LLC	ABUDHABI
3499.	LINKSTREET LEARNING (P) LTD.	BANGALORE
3500.	LIONBRIDGE TECHNOLOGY (P) LTD.	BANGALORE
3501.	LIPI DATA SYSTEMS LTD.	UDAIPUR
3502.	LIQUID PROPULSION SYSTEMS CENTRE (ISRO)	BANGALORE
3503.	LITTLE (I) DENTIST PTE LTD.	SINGAPORE
3504.	LIVA PHARMACEUTICALS LTD.	VADODARA
3505.	LKS (I) (P) LTD.	GOA
3506.	LKS (I) (P) LTD.	PANAJI
3507.	LLOYD'S REGISTER ASIA	MUMBAI
3508.	LM WIND POWER	BANGALORE
3509.	LM WIND POWER	VADODARA
3510.	LM WIND POWER BLADES (I) (P) LTD.	BANGALORE
3511.	LM WIND POWER BLADES(INDIA) (P) LTD.	BANGALORE
3512.	LNT TECHNOLOGY SERVICES	VADODARA
3513.	LOCUZ ENTERPRISE SOLUTIONS	CHENNAI
3514.	LOCUZ ENTERPRISE SOLUTIONS LTD.	HYDERABAD
3515.	LOESCHE (I) (P) LTD.	NOIDA
3516.	LOGIXHEALTH SOLUTIONS (P) LTD.	BANGALORE
3517.	LOGMEIN INDIA	BANGALORE
3518.	LOGMEIN SYSTEMS (I) (P) LTD.	BANGALORE
3519.	LOGWELL FORGE LTD. GURUGAON HARYANA	GURGAON
3520.	LOMBARDINI (I) (P) LTD.	PUNE
3521.	LONESTAR TECHNICAL AND INDUSTRIAL SERVIC	ABUDHABI
3522.	LONESTAR TECHNICAL SERVICES	DUBAI
3523.	LONGBOW TECHNOLOGIES	HYDERABAD
3524.	LOTUS WIRELESS TECHNOLOGIES (I) (P) LTD.	HYDERABAD
3525.	LOURDES HOSPITAL & PG INSTITUTE OF MEDICINE	BANGALORE
3526.	LOWES SERVICES (I) (P) LTD.	BANGALORE
3527.	LTI(L&T INFOTECH)	BANGALORE
3528.	LTI(L&T INFOTECH)	CHENNAI
3529.	LUCAS-TVS	CHENNAI
3530.	LUCKNOW METRO RAIL CORPORATION LTD.	MUMBAI
3531.	LUCY ELECTRIC	DUBAI
3532.	LUCY ELECTRIC INDIA	VADODARA
3533.	LUCY ELECTRIC MANUFACTURING&TECHNOLOGIES (I) PVT	MUMBAI
3534.	LUCY SWITCHGEAR FZE	DUBAI
3535.	LUMAX INDUSTRIES LTD.	DELHI
3536.	LUMILEDS (I) (P) LTD.	CHENNAI
3537.	LUMINOUS POWER TECHNOLOGIES (P) LTD.	DELHI
3538.	LUPIN LTD.	AURANGABAD
3539.	LUPIN LTD.	BHOPAL
3540.	LUPIN LTD.	GOA
3541.	LUPIN LTD.	HYDERABAD
3542.	LUPIN LTD.	INDORE
3543.	LUPIN LTD.	JAMMUANDKASHMIR

S.No.	ORGANIZATION	LOCATION
3544.	LUPIN LTD.	MUMBAI
3545.	LUPIN LTD.	NAGPUR
3546.	LUPIN LTD.	PITHAMPUR
3547.	LUPIN LTD.	VADODARA
3548.	LUPIN LTD.	VISAKHAPATNAM
3549.	LUXOFT	BANGALORE
3550.	M J CASTING LTD.	BAWAL
3551.	M J ENGINEERING CONSULTANTS	DELHI
3552.	M S RAMAIAH MEDICAL COLLEGE	BANGALORE
3553.	M. H. ALSHAYA (INDIA)	BANGALORE
3554.	M.A.H.Y KHOORY	ABUDHABI
3555.	M.N.DASTUR & CO. (P) LTD.	KOLKATA
3556.	M.S.RAMAIAH MEDICAL COLLEGE AND HOSPITALS	BANGALORE
3557.	M.VENKATA RAO INFRA PROJECTS (P) .LTD	GOA
3558.	M3BI LTD.	HYDERABAD
3559.	MAADEN ALUMINIUM COMPANY	JUBAIL
3560.	MAADEN ALUMINUM CO. SAUDI ARABIYA	UAE
3561.	MAAVILA ENTERPRISES	MUMBAI
3562.	MAC ENERGY SYSTEMS	BANGALORE
3563.	MAC MACHINE TOOLS AND AUTOMATION	BANGALORE
3564.	MACBROUT ENGINEERING (P) LTD.	GOA
3565.	MACER AUTOMOTIVE SYSTEM (P) LTD.	BANGALORE
3566.	MACHINEPULSE TECH (P) LTD.	BANGALORE
3567.	MACQUARIE GLOBAL SERVICES (P) LTD.	GURGAON
3568.	MADINA GROUP W.L.L	CHENNAI
3569.	MADINA GROUP W.L.L	QATAR
3570.	MADISON ORTHO INC.	MUMBAI
3571.	MADRAS ENGINEERING INDUSTRIES (P) LI	SRIPERUMBUDUR
3572.	MADURA COATS (P) LTD.	BANGALORE
3573.	MAERSK DIGITAL	BANGALORE
3574.	MAERSK GLOBAL SERVICE CENTER	PUNE
3575.	MAERSK LINE FLEET MANAGEMENT & TECHNOLOGY (I) P	RANCHI
3576.	MAGGROUP	DUBAI
3577.	MAGNA AUTOMOTIVE (I) (P) LTD.	PUNE
3578.	MAGNA INFOTECH	BANGALORE
3579.	MAGNA INFOTECH DEPLOYED AT SAP LABS PVT.	NOIDA
3580.	MAGNA INFOTECH LTD.	DELHI
3581.	MAGNA INFOTECH(DEPUTED - CATERPILLAR IND	THIRUVALLUR
3582.	MAGNA SEATING ENGINEERING SERVICES INDIA	PUNE
3583.	MAGNA STEYR (I) (P) LTD.	PUNE
3584.	MAGNA STEYR INDIA	PUNE
3585.	MAGNACODE HEALTHCARE AND RESEARCH (P) LTD.	CHENNAI
3586.	MAGNETI MARELLI	DELHI
3587.	MAGNETI MARELLI (I) (P) LTD.	BANGALORE
3588.	MAGNETI MARELLI (I) (P) LTD.	DELHI
3589.	MAGNETI MARELLI (I) (P) LTD.	MANESAR
3590.	MAGNETI MARELLI MOTHERSON AUTOSYSTEMS (P) LTD.	PUNE
3591.	MAGNETI MARELLI POWERTRAIN (I) PVT.LTD	GURGAON
3592.	MAGNITUDE SOFTWARE (P) LTD.	HYDERABAD
3593.	MAGNUSVISTA TECHNOLOGIES	COIMBATORE
3594.	MAHALANOBIS NATIONAL CROP FORECAST CENTRE	DELHI
3595.	MAHAMETRO	PUNE
3596.	MAHARAJA AGRASEN MEDICAL COLLEGE AGROHA	AGROHA
3597.	MAHARASHTRA SEAMLESS LTD.	PUNE
3598.	MAHARSHTRA KNOWLEDGE CORPORATION LTD.	PUNE
3599.	MAHATHI SOFTWARE	HYDERABAD
3600.	MAHAVIR CANCER SANSTHAN	KOLKATA
3601.	MAHINDRA & MAHINDRA	CHENNAI
3602.	MAHINDRA & MAHINDRA LTD.	BANGALORE
3603.	MAHINDRA & MAHINDRA LTD.	CHENNAI
3604.	MAHINDRA & MAHINDRA LTD.	KANCHEEPURAM
3605.	MAHINDRA & MAHINDRA LTD.	MUMBAI
3606.	MAHINDRA & MAHINDRA LTD.	NASHIK
3607.	MAHINDRA & MAHINDRA LTD.	PUNE
3608.	MAHINDRA & MAHINDRA LTD.	RUDRAPUR
3609.	MAHINDRA & MAHINDRA LTD.	TAMILNADU
3610.	MAHINDRA AND MAHINDRA LTD.	CHENNAI
3611.	MAHINDRA AND MAHINDRA LTD. - AFS ; MRV MWC -603204	CHENNAI
3612.	MAHINDRA AND MAHINDRA RESEARCH VALLEY	CHENNAI
3613.	MAHINDRA CIE AUTOMOTIVE LTD.	PUNE
3614.	MAHINDRA CIE AUTOMOTIVE LTD.	ZAHEERABAD

S.No.	ORGANIZATION	LOCATION
3615.	MAHINDRA COMVIVA	BANGALORE
3616.	MAHINDRA COMVIVA	DELHI
3617.	MAHINDRA COMVIVA	GURGAON
3618.	MAHINDRA CONSTRUCTION EQUIPMENT	PUNE
3619.	MAHINDRA CONSULTING ENGINEERS LTD.	CHENNAI
3620.	MAHINDRA ECOLE CENTRALE	HYDERABAD
3621.	MAHINDRA ELECTRIC MOBILITY LTD.	BANGALORE
3622.	MAHINDRA ELECTRIC MOBILITY LTD.	PUNE
3623.	MAHINDRA HEAVY ENGINES LTD.	PUNE
3624.	MAHINDRA LOGISTICS LTD.	PUNE
3625.	MAHINDRA RISE	NAGPUR
3626.	MAHINDRA SUSTEN (P) LTD.	CHENNAI
3627.	MAHINDRA SUSTEN (P) LTD.	HYDERABAD
3628.	MAHINDRA SUSTEN (P) LTD.	MUMBAI
3629.	MAHINDRA SWARAJ	DELHI
3630.	MAHINDRA SWARAJ	MOHALI
3631.	MAHINDRA TRUCKS & BUS DIVISION	PUNE
3632.	MAHINDRA VEHICLE MANUFACTURERS LTD.	MAHINDRACHAKAN
3633.	MAHINDRA VEHICLE MANUFACTURING LTD.	PUNE
3634.	MAHLE BEHR (I) (P) LTD.	PUNE
3635.	MAHLE BEHR (I) (P) LTD. CHAKAN PUNE	NOIDA
3636.	MAHLE ENGINEERING SERVICES (I) (P) LTD.	PUNE
3637.	MAHLE FILTERS (I) (P) LTD.	CHENNAI
3638.	MAHLE FILTERS (I) (P) LTD.	GURGAON
3639.	MAINI PRECISION PRODUCTS	BANGALORE
3640.	MAJ HOSPITAL	KOCHI
3641.	MAJESCO	PUNE
3642.	MAKE MY TRIP	DELHI
3643.	MAKE MY TRIP (I) (P) LTD.	BANGALORE
3644.	MAKE MY TRIP (I) (P) LTD.	GURGAON
3645.	MAKEMYTRIP(REDBUS)	BANGALORE
3646.	MAKEPOSITIVE SOFTWARE SOLUTIONS (P) LTD.	DELHI
3647.	MAKINO (I) (P) LTD.	CHENNAI
3648.	MALABAR MULTI SPECIALITY CENTER	CHENNAI
3649.	MAMMUT BUILDING SYSTEM	SHARJAH
3650.	MAN ENERGY SOLUTIONS	MUMBAI
3651.	MANAV ENERGY (P) LTD.	BANGALORE
3652.	MANAV ENTERPRISE MIDDLE EAST	DUBAI
3653.	MANDO AUTO MOTIVE (I) (P) LTD.	BANGALORE
3654.	MANDO AUTO MOTIVE (I) (P) LTD.	CHENNAI
3655.	MANDO SOFTTECH (I) (P) LTD.	BANGALORE
3656.	MANDO SOFTTECH (I) (P) LTD.	CHENNAI
3657.	MANDO SOFTTECH (I) PVT.LTD.	DELHI
3658.	MANHATTAN ASSOCIATES DEVELOPMENT CENTRE (P) LTD.	BANGALORE
3659.	MANIKGARH BIRLA GOLD CEMENT	CHANDIGARH
3660.	MANIPAL HOSPITALS	BANGALORE
3661.	MANIPAL HOSPITALS	TADEPALLI
3662.	MANIPAL TECHNOLOGIES LTD.	BANGALORE
3663.	MANITOWOC CRANES POTAIN (I) PVT.LTD.	PUNE
3664.	MANN AND HUMMEL FILTERS (P) LTD.	BANGALORE
3665.	MANNAI CORPORATION	QATAR
3666.	MANOJ KUMAR LENKA	AHMEDABAD
3667.	MANPOWERGROUP	PUNE
3668.	MANTENA CONSULTECH (P) LTD.	HYDERABAD
3669.	MANUH GLOBAL TECHNOLOGIES	HYDERABAD
3670.	MAP_IT	BHOPAL
3671.	MAPAL (I) (P) LTD.	COIMBATORE
3672.	MAPCO LLC	ABUDHABI
3673.	MARATHON ELECTRIC (I) (P) LTD.	BANGALORE
3674.	MARATHWADA MITRA MANDAL'S INSTITUTE OF TECHNOLOGY	PUNE
3675.	MARICO LTD.	KOLKATA
3676.	MARINE ELECTRONICS & NAVIGATION SYSTEMS (P) LTD.	MUMBAI
3677.	MARINI (I) FAYAT GROUP	AHMEDABAD
3678.	MARITIME INDUSTRIAL SERVICES ARABIA CO. LTD.	CHENNAI
3679.	MARKEM-IMAJE (I) (P) LTD.	BANGALORE
3680.	MARKET CUBE LLC (CUBEVO INSIGHTS (P) LTD.)	GURGAON
3681.	MARKET SIMPLIFIED (I) LTD.	BANGALORE
3682.	MARLABS INNOVATIONS	MYSORE
3683.	MARLABS SOFTWARE PVT.LTD	BANGALORE
3684.	MARQUARDT (I) (P) LTD.	PUNE
3685.	MARQUARDT INDIA	PUNE

S.No.	ORGANIZATION	LOCATION
3686.	MARUTI SUZUKI (I) LTD.	DELHI
3687.	MARUTI SUZUKI (I) LTD.	GURGAON
3688.	MARUTI SUZUKI (I) LTD.	MANESAR
3689.	MARUTI SUZUKI (I) LTD.	ROHTAK
3690.	MARVELL (I) (P) LTD.	BANGALORE
3691.	MARVELL (I) (P) LTD.	PUNE
3692.	MARVELL SEMICONDUCTOR	BANGALORE
3693.	MASHREQ GLOBAL SERVICE (P) LTD.	BANGALORE
3694.	MASTERCARD	PUNE
3695.	MASTERCARD (I) (P) LTD.	PUNE
3696.	MASTERCARD (P) LTD.	PUNE
3697.	MASTERCARD MOBILE TRANSACTIONS SOLUTIONS	VADODARA
3698.	MASTERCARD TECHNOLOGY (P) LTD.	PUNE
3699.	MASTERPCB TECH (P) LTD.	HYDERABAD
3700.	MATHURA-VRINDAVAN MUNICIPAL CORPORATION	DELHI
3701.	MATHWORKS	BANGALORE
3702.	MATHWORKS	HYDERABAD
3703.	MATHWORKS (I) (P) LTD.	BANGALORE
3704.	MATHWORKS (I) (P) LTD.	HYDERABAD
3705.	MATRIMONY.COM	CHENNAI
3706.	MATRIX CONSTRUCTION	DUBAI
3707.	MATTSENKUMAR	GURGAON
3708.	MAURYA MOTORS LTD.	PATNA
3709.	MAVENIR SYSTEMS (P) LTD.	BANGALORE
3710.	MAVERICKGLOBAL INFO SOFT SERVICES (P) LT	BANGALORE
3711.	MAXIM INTEGRATED	BANGALORE
3712.	MAXLINEAR	BANGALORE
3713.	MAXVY TECHNOLOGIES (P) LTD.	BANGALORE
3714.	MAYAMEDIA	CHENNAI
3715.	MAYFLOWER SOFTWARE (P) LTD.	CHENNAI
3716.	MAYURA AUTOMATION & ROBOTIC SYSTEMS	CHENNAI
3717.	MAZAGON DOCK SHIPBUILDERS LTD.	MUMBAI
3718.	MBRDI	BANGALORE
3719.	MCAFEE (I) (P) LTD.	BANGALORE
3720.	MCAFEE SOFTWARE (I) (P) LTD.	BANGALORE
3721.	MCC PTA (I) CORP.PVT.LTD	HALDIA
3722.	MCDERMOTT INDIA	DELHI
3723.	MCDERMOTT INTERNATIONAL INC.	ABUDHABI
3724.	MCELROY SALES & SERVICE (I) (P) LTD.	BANGALORE
3725.	MCGILL ENGINEERING (I) (P) LTD.	CHENNAI
3726.	MCKINSEY & COMPANY	GURGAON
3727.	MCKINSEY AND COMPANY	GURGAON
3728.	MCNALLY BHARAT ENGG. CO. LTD.	KOLKATA
3729.	MEAN METAL MOTORS	BANGALORE
3730.	MECON	DELHI
3731.	MEDIA IQ DIGITAL	BANGALORE
3732.	MEDIATEK	BANGALORE
3733.	MEDIATEK BANGALORE (P) LTD.	BANGALORE
3734.	MEDICA SUPERSPECIALTY HOSPITAL	KOLKATA
3735.	MEDITRINA ISTITUTE OF MEDICAL SCIENCES	MANKAPUR
3736.	MEDLIFE.COM	BANGALORE
3737.	MEDREICH	BANGALORE
3738.	MEDREICH LTD.	BANGALORE
3739.	MEDTEK (I) (P) LTD.	HYDERABAD
3740.	MEDTRONIC	BANGALORE
3741.	MEDTRONIC (COVIDIEN ENGINEERING SERVICES	HYDERABAD
3742.	MEDTRONIC (COVIDIEN)	HYDERABAD
3743.	MEDTRONIC (I) (P) LTD.	BANGALORE
3744.	MEDTRONIC ENGINEERING AND INNOVATION CENTRE	HYDERABAD
3745.	MEDTRONIC ENGINEERING INNOVATION CENTER PVT.LTD.	HYDERABAD
3746.	MEDWAY HOSPITALS	CHENNAI
3747.	MEEAMI TECHNOLOGIES	HYDERABAD
3748.	MEENAKSHI MISSION HOSPITAL & RESEARCH CE	MADURAI
3749.	MEENAKSHI MISSION HOSPITAL & RESEARCH CENTRE	DUBAI
3750.	MEFAB ENGINEERING INDUSTRY LLC	DUBAI
3751.	MEGA FOOD INDUSTRIES CO. LTD.	COIMBATORE
3752.	MEGAVENT TECHNOLOGIES (P) LTD.	BANGALORE
3753.	MEGGITT (I) (P) LTD.	BANGALORE
3754.	MEGHNAD SAHA INSTITUTE OF TECHNOLOGY	KOLKATA
3755.	MEIYAD (I) LLP	NOIDA
3756.	MELINK CORPORATION	BANGALORE

S.No.	ORGANIZATION	LOCATION
3757.	MELVAULT SOFTWARE SOLUTIONS (P) LTD.	HYDERABAD
3758.	MERCATUS SOLUTIONS (I) (P) LTD.	PUNE
3759.	MERCEDES BENZ (I) (P) LTD.	PUNE
3760.	MERCEDES BENZ R&D (I) (P) LTD.	BANGALORE
3761.	MERCEDES BENZ RESEARCH & DEVELOPMENT (I) (P) LTD.	BANGALORE
3762.	MERCEDES BENZ RESEARCH AND DEVELOPMENT	PUNE
3763.	MERCEDES BENZ RESEARCH AND DEVELOPMENT	STUTTGART
3764.	MERCEDES BENZ RESEARCH AND DEVELOPMENT INDIA	BANGALORE
3765.	MERCER CONSULTING (I) (P) LTD.	GURGAON
3766.	MERCER CONSULTING INDIA	DELHI
3767.	MERCK LIFE SCIENCE	BANGALORE
3768.	MERCURY MANAGEMENT AND TECHNICAL SERVICE	MUMBAI
3769.	MERIT SOFTWARE SERVICES (P) LTD.	CHENNAI
3770.	MERIT TECHNOLOGIES (I) LTD.	CHENNAI
3771.	MERITOR CVS	BANGALORE
3772.	MERKLEBLOCK	HYDERABAD
3773.	MERLINHAWK AEROSPACE (P) LTD.	BANGALORE
3774.	MESHA ENERGY SOLUTION (P) LTD.	BANGALORE
3775.	MESSER CUTTING SYSTEMS (I) (P) LTD.	COIMBATORE
3776.	METAC GENERAL CONTRACTING CO LLC	DUBAI
3777.	METACUBE SOFTWARE (P) LTD.	DELHI
3778.	METACUBE SOFTWARES (P) LTD.	GURGAON
3779.	METACUBE SOFTWARES (P) LTD.	JAIPUR
3780.	METAFIL	GURGAON
3781.	METAFLEX DOORS (I) (P) LTD.	NOIDA
3782.	METAL CRAFT	COIMBATORE
3783.	METAL SCOPE (I) (P) LTD.	CHENNAI
3784.	METALMAN MICRO TURNERS	RUDRAPUR
3785.	METALMAN MICROTURNERS	UTTARAKHAND
3786.	METAOPTION SOFTWARE (P) LTD.	DELHI
3787.	METEC DESIGN & CONSTRUCTION ENGINEERING PVT.LTD	CHENNAI
3788.	METHODE ELECTRONICS (I) (P) LTD.	BANGALORE
3789.	METHODE ELECTRONICS INC	BANGALORE
3790.	METI M2M (I) (P) LTD.	BANGALORE
3791.	METICULOUS MARKET RESEARCH (P) LTD.	PUNE
3792.	METITO OVERSEAS LTD.	DUBAI
3793.	METLIFE GOSC INDIA	DELHI
3794.	METRICSTREAM	PUNE
3795.	METRICSTREAM (I) (P) LTD.	BANGALORE
3796.	METRICSTREAM INDIA	BANGALORE
3797.	METRICSTREAM INFOTECH (I) (P) LTD.	BANGALORE
3798.	METROLAB ENGINEERING (P) LTD.	PUNE
3799.	METSO (I) (P) LTD.	DELHI
3800.	METSO (I) (P) LTD.	MUMBAI
3801.	METSYS TECHNOLOGIES (P) LTD.	PUNE
3802.	MEWAR HITECH ENGINEERING LTD.	UDAIPUR
3803.	MFX INFOTECH	BANGALORE
3804.	MFX INFOTECH	SALEM
3805.	MG UNIVERSITY	HYDERABAD
3806.	MGA INDUSTRIES	FARIDABAD
3807.	MICHELIN (I) (P) LTD.	BHUBANESWAR
3808.	MICHELIN (I) (P) LTD.	CHENNAI
3809.	MICHELIN (I) (P) LTD.	GUMMIDIPOONDI
3810.	MICHELIN (I) (P) LTD.	PUNE
3811.	MICHELIN (I) (P) LTD.	THIRUVALLUR
3812.	MICHELIN TYRES	CHENNAI
3813.	MICRO FOCUS INTERNATIONAL PLC	BANGALORE
3814.	MICRO FOCUS SOFTWARE (I) (P) LTD.	BANGALORE
3815.	MICRO LABS LTD.	BANGALORE
3816.	MICRO MACHINING SYSTEMS	CHENNAI
3817.	MICROCHIP (I) (P) LTD.	BANGALORE
3818.	MICROCHIP (I) (P) LTD.	CHENNAI
3819.	MICROCHIP TECHNOLOGY (I) (P) LTD.	BANGALORE
3820.	MICROCHIP TECHNOLOGY (I) (P) LTD.	CHENNAI
3821.	MICROCON I2I (P) LTD.	BANGALORE
3822.	MICROFOCUS	BANGALORE
3823.	MICROLABS LTD.	GOA
3824.	MICROLAND LTD.	BANGALORE
3825.	MICRON TECHNOLOGY	HYDERABAD
3826.	MICROSEMI COMMUNICATIONS (I) (P) L	BANGALORE
3827.	MICROSEMI COMMUNICATIONS (I) (P) L	HYDERABAD

S.No.	ORGANIZATION	LOCATION
3828.	MICROSOFT (I) (P) LTD.	BANGALORE
3829.	MICROSOFT (I) (R&D) (P) LTD.	BANGALORE
3830.	MICROSOFT (I) R & D	BANGALORE
3831.	MICROSOFT (I) R & D (P) LTD.	BANGALORE
3832.	MICROSOFT (I) R& D (P) LTD.	BANGALORE
3833.	MICROSOFT (I) R&D (P) LTD.	BANGALORE
3834.	MICROSOFT (R&D) (P) LTD.	BANGALORE
3835.	MICROSOFT CORPORATION (I) LTD.	CHENNAI
3836.	MICROSOFT GTSC	BANGALORE
3837.	MICROSOFT IDC	DELHI
3838.	MICROSOFT INDIA	BANGALORE
3839.	MICROSOFT R & D (P) LTD.	BANGALORE
3840.	MICROSOFT RESEARCH AND DEVELOPMENT BANGALORE	BANGALORE
3841.	MICROTEK FORGINGS. A UNIT OF BAJAJ MOTORS LTD.	DELHI
3842.	MIDAS SAFETY PRODUCTS (P) LTD.	COIMBATORE
3843.	MIDDLE EAST AND AFRICA GROUP FOR TECHNOLOGY	BANGALORE
3844.	MIDDLEBY (I) ENGINEERING (P) LTD.	BANGALORE
3845.	MIEROBOT.COM	BANGALORE
3846.	MIFY SOLUTIONS (P) LTD.	DELHI
3847.	MIJO AUTOGAS (P) LTD.	DELHI
3848.	MILANN	BANGALORE
3849.	MILLENNIUM TECHNOSOFT LTD.	HYDERABAD
3850.	MINDA CORPORATION LTD.	PUNE
3851.	MINDA CORPORATION LTD. PANTNAGAR UTTARAKHAND	DELHI
3852.	MINDA FURUKAWA ELECTRIC (P) LTD.	BAWAL
3853.	MINDA INDUSTRIES LTD.	GURGAON
3854.	MINDA KYORAKU LTD.	DELHI
3855.	MINDA KYORAKU LTD.	REWARI
3856.	MINDA SAI LTD.	CHENNAI
3857.	MINDA STONERIDGE INSTRUMENT LTD.	PUNE
3858.	MINDCURV TECHINCAL SERVICES (P) LTD.	COCHIN
3859.	MINDCURV TSPL	COCHIN
3860.	MINDFIRE SOLUTION	DELHI
3861.	MINDLANCE TECH	BANGALORE
3862.	MINDSPACE SOFTWARE TECHNOLOGIES (P) LTD.	MUMBAI
3863.	MINDTECK (I) (P) LTD.	CHENNAI
3864.	MINDTECK (I) LTD.	BANGALORE
3865.	MINDTECK (I) LTD.	KOLKATA
3866.	MINDTREE (P) LTD.	BANGALORE
3867.	MINDTREE LTD.	CHENNAI
3868.	MINDTREE LTD.	HYDERABAD
3869.	MINDTREE LTD.	KOCHI
3870.	MINEBEA INTEC	BANGALORE
3871.	MINISTRY OF COMMUNICATION	DELHI
3872.	MINISTRY OF DEFENCE	DELHI
3873.	MINISTRY OF DEFENCE	JAMMUANDKASHMIR
3874.	MINISTRY OF DEFENCE	VADODARA
3875.	MINISTRY OF DEFENCE GOVT OF INDIA	DELHI
3876.	MINISTRY OF DEFENCE ON PAYROLL	DELHI
3877.	MINISTRY OF NATIONAL GUARD-HEALTH AFFAIR	SAUDIARABIA
3878.	MIRABEL TECHNOLOGIES (I) (P) LIMIT	HYDERABAD
3879.	MIRAFRA SOFTWARE TECHNOLOGIES	BANGALORE
3880.	MIRAFRA SOFTWARE TECHNOLOGIES (P) LTD.	BANGALORE
3881.	MIRAFRA TECHNOLOGIES	HYDERABAD
3882.	MIRAFRA TECHNOLOGIES (P) LTD. BANGALORE	BANGALORE
3883.	MIRAFRA TECHNOLOGY	CHENNAI
3884.	MISTRAL SOLUTIONS (P) LTD.	BANGALORE
3885.	MISYS FINANCIAL SOFTWARE	BANGALORE
3886.	MISYS SOFTWARE SOLUTIONS	BANGALORE
3887.	MISYS SOFTWARE SOLUTIONS (I) (P) LTD.	BANGALORE
3888.	MIT ADT UNIVERSITY	PUNE
3889.	MIT WORLD PEACE UNIVERSITY	PUNE
3890.	MITCELL MARTIN INC	CHENNAI
3891.	MITRAZ FINANCIAL SERVICES (P) LTD.	BANGALORE
3892.	MITSUBISHI ELECTRIC	PUNE
3893.	MITTCO	DUBAI
3894.	MITTCO LLC	DUBAI
3895.	MIVIN ENGG. TECHNOLOGIES (P) LTD. BOSCH REXROTH	BANGALORE
3896.	MIVIN ENGG. TECHNOLOGIES(P) LTD.	BANGALORE
3897.	MJ ASSOCIATES	BANGALORE
3898.	ML OUTSOURCING SERVICES (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
3899.	MLL HOSPITAL	MADANAPALLE
3900.	MM E-TECH DESIGNS (P) LTD.	PUNE
3901.	MMC INFRASTRUCTURES (I) (P) LTD.	DELHI
3902.	MMODAL GLOBAL SERVICES (P) LTD.	BANGALORE
3903.	MNADO AUTOMOTIVE INDIAN (P) LTD.	CHENNAI
3904.	MOBILE PROGRAMMING (I) (P) LTD.	DELHI
3905.	MOBILE PROGRAMMING (I) (P) LTD.	GURGAON
3906.	MOBILECODERZ TECHNOLIGES	GURGAON
3907.	MOBILECOMM TECHNOLOGIES (I) (P) LTD.	GURGAON
3908.	MOBILECOMM TECHNOLOGIES INDIA (P) LTD.	DELHI
3909.	MOBILEIRON	BANGALORE
3910.	MOBILEUM (I) (P) LTD.	GURGAON
3911.	MOBILY INFOTECH	BANGALORE
3912.	MOBILY INFOTECH (I) (P) LTD.	BANGALORE
3913.	MOBIS (I) LTD.	HYDERABAD
3914.	MOBISIR TECHNOLOGIES (P) LTD.	BANGALORE
3915.	MOBME WIRELESS SOLUTIONS	KOCHI
3916.	MOD- ARMY	NAGROTAJAMMU
3917.	MODEL N	HYDERABAD
3918.	MODEL N INDIA	HYDERABAD
3919.	MODERN HOMEOPATHY	GOA
3920.	MODULAR MACHINES	DELHI
3921.	MOHAMED ABDUL RAHMAN AL BAHAR	SHARJAH
3922.	MOL INFORMATION TECHNOLOGY (I) (P) LTD.	KOLKATA
3923.	MOLBIO DIAGNOSTICS (P) LTD.	GOA
3924.	MOLEX (I) (P) LTD.	BANGALORE
3925.	MOL-IT (I) (P) LTD.	KOLKATA
3926.	MOMENTS INFO SERVICES (P) LTD.	AHMEDABAD
3927.	MONDELEZ (I) FOODS (P) LTD.	BADDI
3928.	MONOTYPE SOLUTIONS (I) (P) LTD.	DELHI
3929.	MONOTYPE SOLUTIONS (I) (P) LTD.	NOIDA
3930.	MONSANTO HOLDINGS (P) LTD.	HYDERABAD
3931.	MONTBLEU TECHNOLOGIES	COIMBATORE
3932.	MOODYS ANALYTICS	GURGAON
3933.	MOOLCHAND MEDCITY	DELHI
3934.	MORGAN STANLEY	BANGALORE
3935.	MORGAN STANLEY	MUMBAI
3936.	MORGAN STANLEY ADVANTAGE SERVICES	BANGALORE
3937.	MORGAN STANLEY ADVANTAGE SERVICES (P) L	MUMBAI
3938.	MORGAN STANLEY ADVANTAGES SERVICES LTD.	BANGALORE
3939.	MOSCHIP	BANGALORE
3940.	MOTHER HOSPITAL	CHENNAI
3941.	MOTHER SUMI INFOTECH & DESIGN LTD.	DELHI
3942.	MOTHERSON AUTOMOTIVE TECHNOLOGIES & ENGINEERING	BANGALORE
3943.	MOTHERSON SUMI SYSTEMS LTD.	AHMEDABAD
3944.	MOTHERSON SUMI SYSTEMS LTD.	CHENNAI
3945.	MOTHERSONSUMI INFOTECH & DESIGNS LTD.	NOIDA
3946.	MOTOROLA (I) (P) LTD.	HYDERABAD
3947.	MOTOROLA MOBILITY (I) (P) LTD.	BANGALORE
3948.	MOTT MACDONALD & CO. LLC	MUSCAT,OMAN
3949.	MOUNTAIN HAZELNUTS	KOLKATA
3950.	MOURI TECH GLOBAL ENTERPRISE SOLUTION	HYDERABAD
3951.	MPHASIS	BANGALORE
3952.	MPHASIS	CHENNAI
3953.	MPHASIS LTD.	BANGALORE
3954.	MPHASIS LTD.	CHENNAI
3955.	MPHASIS TECHNOLOGIES	BANGALORE
3956.	MRF LTD.	ARRAKONAM
3957.	MRF LTD.	CHENNAI
3958.	MRF LTD.	HYDERABAD
3959.	MRF LTD.	TRICHY
3960.	MRF TYRES	CHENNAI
3961.	MRF TYRES	PERAMBALUR
3962.	MRF TYRES	TRICHY
3963.	MRF TYRES -THIRUVOTTIYUR	CHENNAI
3964.	MRMMBS VISION (P) LTD.	DELHI
3965.	MRV INFOTECH (I) (P) LTD.	CHENNAI
3966.	MS.HONDA MOTORCYCLE & SCOOTER (I) PRIV	BANGALORE
3967.	MSCEB	MANAMA
3968.	MSD INTERNATIONAL GMBH	SINGAPORE
3969.	MSL DRIVELINE SYSTEMS LTD.	NASHIK

S.No.	ORGANIZATION	LOCATION
3970.	MSL DRIVELINE SYSTEMS LTD.	PUNE
3971.	MSN LABORATORIES (P) LTD.	HYDERABAD
3972.	MSYS TECHNOLOGIES	CHENNAI
3973.	MSYS TECHNOLOGIES (P) LTD.	PUNE
3974.	MTR FOODS (P) LTD.	BANGALORE
3975.	MTU (I) (P) LTD.	PIMPRI
3976.	MTU (I) (P) LTD.	PUNE
3977.	MU SIGMA	BANGALORE
3978.	MUBEA AUTOMOTIVE INDIA	PUNE
3979.	MUDREX INC.	BANGALORE
3980.	MUNJAL CASTINGS	LUDHIANA
3981.	MUNJAL SHOWA (P) LTD.	GURGAON
3982.	MUSTAFA SULTAN SCIENCE AND INDUSTRY.CO.LLC	MUSCAT,OMAN
3983.	MVS ACMEI TECHNOLOGIES (P) LTD.	HYDERABAD
3984.	MYCOM OSI SOLUTIONS (I) (P) LTD.	DELHI
3985.	MYHAMMER.AG	PUNE
3986.	MYLAN LABORATORIES	BANGALORE
3987.	MYLAN LABORATORIES LTD.	BANGALORE
3988.	MYLAN LABORATORIES LTD.	HOSUR
3989.	MYLAN LABORATORIES LTD.	HYDERABAD
3990.	MYLAN LABORATORIES LTD.	PUNE
3991.	MYLAN LABORATORIES LTD. UNIT-09	VISAKHAPATNAM
3992.	MYMONEYKARMA INFOMATICS (I) (P) LTD.	HYDERABAD
3993.	MYNTRA DESIGNS (P) LTD.	BANGALORE
3994.	MYSTIFLY	BANGALORE
3995.	MYTEX POLYMERS (I) (P) LTD.	GURGAON
3996.	NAAVNIYA CAD SOFT (DEPUTED FOR FLSMIDTH (P) LTD.)	COIMBATORE
3997.	NABIL QADDUMI & PARTNERS	DELHI
3998.	NABORS DRILLING INTERNATIONAL LTD.	SAUDIARABIA
3999.	NAFFCO ELECTROMECHANICAL CO LLC	DUBAI
4000.	NAFFCO FZCO	DUBAI
4001.	NAGALAND UNIVERSITY	DIMAPUR
4002.	NAGARRO	DELHI
4003.	NAGARRO ENTERPRISE SERVICES (P) LTD.	DELHI
4004.	NAGARRO SOFTWARE (P) LTD.	DELHI
4005.	NAGARRO SOFTWARES	DELHI
4006.	NAGARRO SOFTWARES (I) (P) LTD.	GURGAON
4007.	NAGRA (I) VISION (P) LTD.	BANGALORE
4008.	NAGRAVISION (I) (P) LTD.	BANGALORE
4009.	NALASHAA SOLUTIONS (I) (P) LTD.	BANGALORE
4010.	NANO SCIENTIFIC RESEARCH CENTRE PVT.LIMI	HYDERABAD
4011.	NAPINO AUTO & ELECTRONICS LTD.	GURGAON
4012.	NARAYAAN HRUDAYALAYA LTD.	BANGALORE
4013.	NARAYANA DENTAL COLLEGE AND HOSPITAL	CHENNAI
4014.	NARAYANA HEALTH	BANGALORE
4015.	NARAYANA HEALTH	JAMMUANDKASHMIR
4016.	NARAYANA HRUDAYALAYA LTD.	BANGALORE
4017.	NARVAR (I) (P) LTD.	BANGALORE
4018.	NASMYTH (I) (P) LTD.	BANGALORE
4019.	NASMYTHINDIA	BANGALORE
4020.	NATCO PHARMA LTD.	HYDERABAD
4021.	NATIOAL ENGINEERING INDUSTRIES	JAIPUR
4022.	NATIONAL AEROSPACE LABORATORIES (CSIR-NAL)	BANGALORE
4023.	NATIONAL ALUMINIUM CO. LTD.	ODISHA
4024.	NATIONAL AUTO PLAST	CHENNAI
4025.	NATIONAL CANCER INSTITUTE	HYDERABAD
4026.	NATIONAL CENTRE FOR BIOLOGICAL SCIENCES	BANGALORE
4027.	NATIONAL CENTRE FOR EARTH SCIENCE STUDIES	COIMBATORE
4028.	NATIONAL CONTRACTING CO. LTD.	ABUDHABI
4029.	NATIONAL CONTRACTING COMPANY	CHENNAI
4030.	NATIONAL DEFENCE ACADEMY	PUNE
4031.	NATIONAL ENGINEERING INDUSTRIES	BHIWADI
4032.	NATIONAL ENGINEERING INDUSTRIES (P) LTD.	JAIPUR
4033.	NATIONAL ENGINEERING INDUSTRIES L.T.D C.K.BIRLA	MUMBAI
4034.	NATIONAL ENGINEERING INDUSTRIES LTD.	DELHI
4035.	NATIONAL ENGINEERING INDUSTRIES LTD.	JAIPUR
4036.	NATIONAL ENGINEERING INDUSTRIES LTD.	MUMBAI
4037.	NATIONAL ENGINEERING INDUSTRIES LTD.	VADODARA
4038.	NATIONAL HIGHWAYS AUTHORITY OF INDIA	GUWAHATI
4039.	NATIONAL INFORMATICS CENTER	AGARTALA
4040.	NATIONAL INFORMATICS CENTER	CHENNAI

S.No.	ORGANIZATION	LOCATION
4041.	NATIONAL INFORMATICS CENTER	DELHI
4042.	NATIONAL INFORMATICS CENTER	DHAMTARI
4043.	NATIONAL INFORMATICS CENTER	GOA
4044.	NATIONAL INFORMATICS CENTER	JAIPUR
4045.	NATIONAL INFORMATICS CENTER	PANCHKULA
4046.	NATIONAL INFORMATICS CENTRE	BANGALORE
4047.	NATIONAL INFORMATICS LTD.	BANGALORE
4048.	NATIONAL INSTITUTE OF FASHION TECHNOLOGY	BANGALORE
4049.	NATIONAL INSTITUTE OF NUTRITION	HYDERABAD
4050.	NATIONAL INSTITUTE OF OCEAN TECHNOLOGY	CHENNAI
4051.	NATIONAL INSTITUTE OF SOLAR ENERGY	DELHI
4052.	NATIONAL INSTRUMENTS	BANGALORE
4053.	NATIONAL OILWELL VARCO	DUBAI
4054.	NATIONAL OILWELL VARCO FIBER GLASS SYSTE	MALAYSIA
4055.	NATIONAL OILWELL VARCO PUNE	PUNE
4056.	NATIONAL REMOTE SENSING CENTER ISRO DOS GOI	HYDERABAD
4057.	NATIONAL REMOTE SENSING CENTRE	HYDERABAD
4058.	NATIONAL SECURITIES DEPOSITORY LTD.	MUMBAI
4059.	NATSTEEL HOLDINGS PTE LTD.	SINGAPORE
4060.	NAVA BHARAT VENTURES LTD.	TELANGANA
4061.	NAVIGATORS SOFTWARE (P) LTD.	MUMBAI
4062.	NAYARA ENERGY LTD.	PUNE
4063.	NBHH	DUBAI
4064.	NCC LTD.	GWALIOR
4065.	NCC LTD.	HYDERABAD
4066.	NCC LTD.	KOLKATA
4067.	NCERT	DELHI
4068.	NCR CORPORATION	DUBAI
4069.	NCR CORPORATION	GURGAON
4070.	NCR CORPORATION (P) LTD.	HYDERABAD
4071.	NEBEL INFOTECH	DELHI
4072.	NEBULARC TECHNOLOGIES	DELHI
4073.	NEC TECHNOLOGIES (I) (P) LTD.	BANGALORE
4074.	NECTAR LIFESCIENCES LTD.	DELHI
4075.	NEEL METAL PRODUCTS LTD.	DELHI
4076.	NEI LTD.	JAIPUR
4077.	NEILSOFT LTD.	PURNA
4078.	NELCO LTD.	MUMBAI
4079.	NEOAIRTECH (I) (P) LTD.	BANGALORE
4080.	NEOPHARMA LLC	DUBAI
4081.	NEOSOFT TECHNOLOGIES	PUNE
4082.	NEPA INDIA	MUMBAI
4083.	NEPHROPLUS	HYDERABAD
4084.	NESANS MINING AND AUTOMATION (P) LIM	COIMBATORE
4085.	NESS TECHNOLOGIES	HYDERABAD
4086.	NEST 3 PARTY LOGISTICS (P) LTD.	GURGAON
4087.	NEST INFORMATION TECHNOLOGIES	COCHIN
4088.	NESTLE (I) LTD.	GOA
4089.	NESTLE (I) LTD.	MOGA
4090.	NETAPP	BANGALORE
4091.	NETAPP INDIA	BANGALORE
4092.	NETCORE SOLUTIONS (P) LTD.	BANGALORE
4093.	NETCRACKER TECHNOLOGY	HYDERABAD
4094.	NETCRACKER TECHNOLOGY (I) (P) LTD.	BANGALORE
4095.	NETENRICH	HYDERABAD
4096.	NETENRICH TECHNOLOGIES (P) LTD.	HYDERABAD
4097.	NETHRAM LLC	SULTHANBATHERY
4098.	NETS SINGAPORE	BANGALORE
4099.	NETSUTRA	GHAZIABAD
4100.	NETWORK COMPONENTS (P) LTD. PUNE	PUNE
4101.	NEULAND LABORATORIES LTD.	HYDERABAD
4102.	NEULAND LABS (P) LTD.	HYDERABAD
4103.	NEURIOT TECHNOLOGIES LLP	DELHI
4104.	NEUSTAR INC	BANGALORE
4105.	NEW AGE	DUBAI
4106.	NEW KRISONSAI TOOLCRAFT	HYDERABAD
4107.	NEWGEN SOFTWARE	MUMBAI
4108.	NEWT GLOBAL (P) LTD.	CHENNAI
4109.	NEXAMATIC SOFTWARE SOLUTIONS (P) LTD.	BANGALORE
4110.	NEXII IT LABS (P) LTD.	BANGALORE
4111.	NEXTEDUCATION (I) (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
4112.	NEXTGEN HEALTHCARE	BANGALORE
4113.	NEXTGEN HEALTHCARE	NEXTGENHEALTHCARE
4114.	NEXTGEN HEALTHCARE (P) LTD.	BANGALORE
4115.	NEXVAL INFOTECH (P) LTD.	KOLKATA
4116.	NHK AUTOMOTIVE COMPONENTS (I) (P) LTD.	AHMEDNAGAR
4117.	NI SYSTEMS (I) (P) LTD.	BANGALORE
4118.	NICCO ENGINEERING SREVICES LTD.	MUMBAI
4119.	NICE ACTIMIZE	PUNE
4120.	NICE INTERACTIVE SOLUTIONS (I) (P) LIM	PUNE
4121.	NICE INTERACTIVE SOLUTIONS (P) LTD.	MUMBAI
4122.	NICE LTD.	BANGALORE
4123.	NICE SYSTEMS	PUNE
4124.	NICHINO (I) (P) LTD.	HYDERABAD
4125.	NIC-NATIONAL INFORMATICS CENTRE	DELHI
4126.	NIDUS ENTERPRISES (P) LTD.	AHMEDABAD
4127.	NIELIT	DELHI
4128.	NIELIT DELHI CENTRE	DELHI
4129.	NIELSEN (I) (P) LMT	CHENNAI
4130.	NIELSEN (I) (P) LTD.	CHENNAI
4131.	NIGM LLC	DUBAI
4132.	NIHILENT ANALYTICS LTD.	KOLKATA
4133.	NIHILENT TECHNOLOGIES LIMETED PUNE	PUNE
4134.	NIHON COMMUNICATION SOLUTIONS (P) LTD.	BANGALORE
4135.	NIIT TECHNOLOGIES LTD.	DELHI
4136.	NIIT TECHNOLOGIES LTD.	GURGAON
4137.	NIIT TECHNOLOGIES LTD.	NOIDA
4138.	NIKUNJ STOCK BROKERS LTD.	DELHI
4139.	NILATECH	CHENNAI
4140.	NIMHANS (AN INI) GOVT. OF INDIA	BANGALORE
4141.	NIMR AUTOMOTIVE LLC	ABUDHABI
4142.	NINE DOTS TECHNOLOGIES (P) LTD.	MUMBAI
4143.	NIPMAN FASTENER INDUSTRIES (P) LTD.	CHENNAI
4144.	NIPPON DATA SYSTEMS LTD.	DELHI
4145.	NIPPON KOEI (I) (P) LTD.	HYDERABAD
4146.	NIRMAL FIBER (P) LTD.	GAJUROLA
4147.	NIST ITI	MANTHRIPALEM
4148.	NITS SOLUTIONS	GURGAON
4149.	NITTAN (I) TECH (P) LTD.	CHENNAI
4150.	NITYAM WEBTECH	RAJKOT
4151.	NIVEA (I) (P) LTD.	AHMEDABAD
4152.	NIVIDAPPS TECHNOLOGY SOLUTIONS	BANGALORE
4153.	NIVIDOUS SOFTWARE SOLUTION (P) LTD.	MUMBAI
4154.	NIVIDOUS SOFTWARE SOLUTIONS	MUMBAI
4155.	NIZWA COLLEGE OF TECHNOLOGY .	OMAN
4156.	NJS ENGINEERS (I) (P) LTD.	BANGALORE
4157.	NLC (I) LTD.	NEYVELI
4158.	NMC TRADING LLC	DUBAI
4159.	NMDC IRON & STEEL PLANT JAGDALPUR	HYDERABAD
4160.	NOKIA	BANGALORE
4161.	NOKIA	CHENNAI
4162.	NOKIA	DELHI
4163.	NOKIA	DUBAI
4164.	NOKIA	HYDERABAD
4165.	NOKIA	MUMBAI
4166.	NOKIA NETWORK (P) LTD.	DELHI
4167.	NOKIA NETWORKS	BANGALORE
4168.	NOKIA SOLUTIONS & NETWORKS	BANGALORE
4169.	NOKIA SOLUTIONS & NETWORKS	CHENNAI
4170.	NOKIA SOLUTIONS & NETWORKS	DELHI
4171.	NOKIA SOLUTIONS & NETWORKS	MUMBAI
4172.	NOKIA SOLUTIONS AND NETWORKS (P) LTD.	DELHI
4173.	NOMURA SERVICES (I) (P) LTD.	MUMBAI
4174.	NON SPECIFIC	DELHI
4175.	NORDSON (I) (P) LTD.	PUNE
4176.	NORDSON (I) (P) LTD. - BANGALORE	CHENNAI
4177.	NORTH TELECOM LLC	MUMBAI
4178.	NORTHERN RAILWAY	DELHI
4179.	NORTHLAB PTE LTD.	SINGAPORE
4180.	NOUS INFOSYSTEMS	BANGALORE
4181.	NOV- DRECO MIDDLE EAST	DUBAI
4182.	NOV FGS PTE LTD.	SINGAPORE

S.No.	ORGANIZATION	LOCATION
4183.	NOV FGS SINGAPORE	SINGAPORE
4184.	NOV FGS SINGAPORE PTE LTD.	SINGAPORE
4185.	NOVARTIS	HYDERABAD
4186.	NOVARTIS SINGAPORE PHARMACEUTICAL MANUFACTUR	SINGAPORE
4187.	NOVI DIGITAL ENTERTAINMENT (P) LIMIT	GURGAON
4188.	NOVONORDISK GLOBAL SERVICE CENTRE	BANGALORE
4189.	NOVOZYMES SOUTH ASIA (P) LTD.	BANGALORE
4190.	NOVUS FORGE AND CAST (P) LTD.	DELHI
4191.	NPCI	MUMBAI
4192.	NRI FINTECH (I) PVT.LTD	KOLKATA
4193.	NSIC	DELHI
4194.	NSK PRINTS	CHENNAI
4195.	NTC LOGISTICS (I) (P) LTD.	CHENNAI
4196.	NTPC LTD.	CHENNAI
4197.	NTPC LTD.	FARIDABAD
4198.	NTPC LTD.	HYDERABAD
4199.	NTPC LTD.	KOLKATA
4200.	NTPC LTD.	ODISHA
4201.	NTRO GOI	DELHI
4202.	NTT DATA	BANGALORE
4203.	NTT DATA	CHENNAI
4204.	NTT DATA	NOIDA
4205.	NTT DATA INFORMATION PROCESSING SERVICES	BANGALORE
4206.	NTT DATA SERVICES	DELHI
4207.	NTT DATA SERVICES INC	HYDERABAD
4208.	NTT DATA SINGAPORE PTY LTD.	CHENNAI
4209.	NTT LTD.	MUMBAI
4210.	NTTDATA INFO PRO SER PTE LTD.	DELHI
4211.	NTTF	JAMSHEDPUR
4212.	NUANCE (I) (P) LTD.	LUCKNOW
4213.	NUANCE (I) (P) LTD.	PUNE
4214.	NUANCE COMMUNICATIONS	PUNE
4215.	NUCLEAR FUEL COMPLEX	HYDERABAD
4216.	NUCLEAR POWER CORPORATION OF (I) LIMIT	KAIGA
4217.	NUCLEAR POWER CORPORATION OF (I) LIMIT	MUMBAI
4218.	NUCLEAR POWER CORPORATION OF (I) LTD.	MUMBAI
4219.	NUCLEUS ENERGY (P) LTD.	PUNE
4220.	NUCLEUS SOFTWARE EXPORTS	NOIDA
4221.	NUCON AEROSPACE (P) LTD.	HYDERABAD
4222.	NUCTECH (I) (P) LTD.	GURGAON
4223.	NUSECOND TECHNOLOGIES (P) LTD.	BANGALORE
4224.	NUTANIX	BANGALORE
4225.	NUTANIX (I) (P) LTD.	BANGALORE
4226.	NUTECH CONTRACTS (P) LTD.	DELHI
4227.	NUVOCO VISTAS CORPLTD	BALODA
4228.	NVIDIA	BANGALORE
4229.	NVIDIA GRAPHICS	BANGALORE
4230.	NVIDIA GRAPHICS (I) (P) LTD.	BANGALORE
4231.	NVIDIA GRAPHICS (P) LTD.	BANGALORE
4232.	NVIDIA GRAPHICS (P) LTD.	PUNE
4233.	NXP (I) (P) LTD.	BANGALORE
4234.	NXP (I) (P) LTD.	NOIDA
4235.	NYK AUTO LOGISTICS (I) (P) LTD.	CHENNAI
4236.	NYQUEST INNOVATION LABS (P) LTD.	KOLLAM
4237.	NYSA COMMUNICATIONS (P) LTD.	NOIDA
4238.	OAKNET HEALTHCARE (P) LTD.-ADCOCK INGRAM HEALTHCARE	DELHI
4239.	OASIS EPC SOLUTIONS LTD.	MUMBAI
4240.	OBJECT-FRONTIER SOFTWARE (P) LTD.	CHENNAI
4241.	OBJECTIFY TECHNOLOGIES (P) LTD.	DELHI
4242.	OCWEN FINANCIALS	MUMBAI
4243.	ODC STANDARDS	HYDERABAD
4244.	ODESSA INC	BANGALORE
4245.	OERLIKON GRAZIANO TRASMISSIONI (I) (P) LTD.	NOIDA
4246.	OIL & NATURAL GAS CORPORATION LTD.	PUDUCHERRY
4247.	OILFIELD SUPPLY CENTRE LTD. DUBAI(UAE)	DUBAI
4248.	OLA (ANI TECHNOLOGIES (P) LTD.)	BANGALORE
4249.	OLA CABS	BANGALORE
4250.	OLA FLEET TECHNOLOGIES	BANGALORE
4251.	OLECTRA GREENTECH LTD.	HYDERABAD
4252.	OLEO BUFFERS (I) (P) LTD.	BANGALORE
4253.	OLEO INTERNATIONAL	BANGALORE

S.No.	ORGANIZATION	LOCATION
4254.	OLOVI DESINO GRAFICO	HYDERABAD
4255.	OLX (I) (P) LTD.	DELHI
4256.	OMAN FIBER OPTIC SAOG	OMAN
4257.	OMAN OIL REFINERIES AND PETROLEUM INDUST	OMAN
4258.	OMAN TRADING ESTABLISHMENT	COIMBATORE
4259.	OMEGA HEALTH CARE MANAGEMENT	BANGALORE
4260.	OMNI AUTO LTD.	JAMSHEDPUR
4261.	OMNIX INTERNATIONAL LLC	DUBAI
4262.	OMNIX INTERNATIONAL UAE	DUBAI
4263.	OMRON AUTOMATION (P) LTD.	MUMBAI
4264.	OMT INTERNATIONAL FZE	BANGALORE
4265.	OMT SOFTWARE (P) LTD.	DELHI
4266.	ON SEMICONDUCTOR	BANGALORE
4267.	ON SEMICONDUCTOR (I) (P) LTD.	BANGALORE
4268.	ON SEMICONDUCTOR TECHNOLOGY (I) (P) LTD.	BANGALORE
4269.	ON SEMICONDUCTORS	BANGALORE
4270.	ON SEMICONDUCTORTECHONOLOGY (I) (P) LT	BANGALORE
4271.	ONCEHUB	DELHI
4272.	ONE TRUST PRIVACY MANAGEMENT SOFTWARE	BANGALORE
4273.	ONEDIRECT (P) LTD.	BANGALORE
4274.	ONGC LTD. (PSU)	DELHI
4275.	ONMOBILE GLOBAL LTD.	BANGALORE
4276.	ONTIME INDUSTRIAL SERVICE LTD.	CHENNAI
4277.	ONWARD TECHNOLOGIES	PUNE
4278.	ONWARD TECHNOLOGIES LTD.	PUNE
4279.	OOREDOO	MUMBAI
4280.	OOTTRU TECHNOLOGIES	BANGALORE
4281.	OPEN DESTINATION INFOTECH (P) LTD.	PANAJI
4282.	OPENTEXT	BANGALORE
4283.	OPENTEXT (I) (P) LTD.	HYDERABAD
4284.	OPENTEXT CORP.	HYDERABAD
4285.	OPENTEXT TECHNOLOGIES (I) (P) LTD.	HYDERABAD
4286.	OPENTEXT TECHNOLOGIES IND (P) LTD.	HYDERABAD
4287.	OPERATIONAL ENERGY GROUP (I) PVT.LTD	CHENNAI
4288.	OPPO MOBILES (I) (P) LTD.	HYDERABAD
4289.	OPSRAMP (I) (P) LTD.	HYDERABAD
4290.	OPTEL VISION (I) (P) LTD.	GOA
4291.	OPTIEMUS ELECTRONICS LTD.	NOIDA
4292.	OPTIMIZORY TECHNOLOGIES (P) LTD.	NOIDA
4293.	OPTIMUM SOLUTIONS	BANGALORE
4294.	OPTIMUM SOLUTIONS	SINGAPORE
4295.	OPTIV	BANGALORE
4296.	OPTUM GLOBAL SOLUTIONS	DELHI
4297.	OPTUM GLOBAL SOLUTIONS	HYDERABAD
4298.	OPTYM (I) (P) LTD.	BANGALORE
4299.	ORACEL (I) (P) LTD.	AHMEDABAD
4300.	ORACEL (I) (P) LTD.	BANGALORE
4301.	ORACEL (I) (P) LTD.	GURGAON
4302.	ORACEL (I) (P) LTD.	HYDERABAD
4303.	ORACEL (I) (P) LTD.	NOIDA
4304.	ORACEL (I) (P) LTD.	SERVICENOW
4305.	ORACEL (I) (P) LTD.	THIRUVANANTHAPURAM
4306.	ORACEL (I) (P) LTD.	TRIVANDRUM
4307.	ORACLE (I) (P) LTD.	BANGALORE
4308.	ORACLE (I) (P) LTD.	PUNE
4309.	ORACLE (I) DEVELOPMENT CENTER	PUNE
4310.	ORACLE FINANCIAL SERIVES SOFTWARE LTD.	BANGALORE
4311.	ORACLE FINANCIAL SERIVES SOFTWARE LTD.	CHENNAI
4312.	ORACLE FINANCIAL SERIVES SOFTWARE LTD.	MUMBAI
4313.	ORACLE INDIA	BANGALORE
4314.	ORACLE SOLUTION SERVICES (I) (P) LTD.	BANGALORE
4315.	ORACLE SOLUTION SERVICES INDIA	BANGALORE
4316.	ORANA (I) (P) LTD.	DELHI
4317.	ORANGE BUSINESS SERVICES (I) SOLUTIONS	MUMBAI
4318.	ORANGE CITY WATER (P) LTD.	NAGPUR
4319.	ORANGE SORTING MACHINES (I) (P) LTD.	BANGALORE
4320.	ORBIT TECHNOLOGIES	MOHALI
4321.	ORCHID PHARMA LTD.	CHENNAI
4322.	ORGANIZEIN GLOBAL INTERNET MARKETING SOLUTION	BANGALORE
4323.	ORIENT ELECTRIC LTD.	DELHI
4324.	ORIENTAL BANK OF COMMERCE	MUMBAI

S.No.	ORGANIZATION	LOCATION
4325.	ORIENTAL STRUCTURAL ENGINEERS (P) LI	DELHI
4326.	ORION (I) SYSTEMS (P) LTD.	CHENNAI
4327.	ORION (I) SYSTEMS (P) LTD.	MUMBAI
4328.	OSB INDIA	BANGALORE
4329.	OSI SYSTEMS (P) LTD.	HYDERABAD
4330.	OSRAM CONTINENTAL (I) (P) LTD.	BANGALORE
4331.	OTIS ELEVATOR (I) LTD.	BANGALORE
4332.	OTIS ELEVATOR (I) LTD.	CHENNAI
4333.	OTIS ELEVATOR COMPANY	BANGALORE
4334.	OTIS ELEVATORS	BANGALORE
4335.	OVERSEAS AST CO. LLC	DUBAI
4336.	OWLER (I) (P) LTD.	COIMBATORE
4337.	P.E.S INSTITUTE OF MEDICAL SCIENCES	BANGALORE
4338.	P2 POWER SOLUTIONS (P) LTD.	DELHI
4339.	PACIFIC COLLEGE OF ENGINEERING	UDAIPUR
4340.	PACT ENGINEERING	MUMBAI
4341.	PADMINI VNA MECHATRONICS (P) LTD.	DELHI
4342.	PADMINI VNA MECHATRONICS (P) LTD.	GURGAON
4343.	PALFINGER CRANES (I) (P) LTD.	CHENNAI
4344.	PALMMASON (P) LTD.	NOIDA
4345.	PANACEA MEDICAL & WELLNESS CENTER	DUBAI
4346.	PANASONIC (I) (P) LTD.	DELHI
4347.	PANASONIC (I) (P) LTD.	GURGAON
4348.	PANASONIC (I) (P) LTD.	JHAJJAR
4349.	PANASONIC (I) (P) LTD.	NOIDA
4350.	PANASONIC AVIONICS CORPORATION	DUBAI
4351.	PANASONIC LIFE SOLUTIONS (I) (P) LTD.	MUMBAI
4352.	PANDIT DEENDAYAL PETROLEUM UNIVERSITY	MUMBAI
4353.	PANDIT DEENDAYAL PETROLEUM UNIVERSITY GA	GANDHINAGAR
4354.	PANGULF TECHNOLOGIES (P) LTD.	THANE
4355.	PANORAMA TELEVISION (P) LTD.(NETWORK18 GR	HYDERABAD
4356.	PANTONE PRINTING AND ADVERTISING	DELHI
4357.	PARADEEP PHOSPHATES LTD.	KOLKATA
4358.	PARAGON POLYMER PRODUCTS (P) LTD.	BANGALORE
4359.	PARALLEL WIRELESS	DELHI
4360.	PARALLEL WIRELESS (I) (P) LTD.	PUNE
4361.	PARAMETRIC TECHNOLOGY CORPORATION	DELHI
4362.	PARAMETRIC TECHNOLOGY CORPORATION	GURGAON
4363.	PARASON MACHINERY	AURANGABAD
4364.	PARASON MACHINERY (I) (P) LTD.	PUNE
4365.	PARASON MACHINERY I (P) LTD.	PUNE
4366.	PAREXEL INTERNATIONAL	BANGALORE
4367.	PAREXEL INTERNATIONAL	HYDERABAD
4368.	PAREXEL INTERNATIONAL (I) (P) LTD.	HYDERABAD
4369.	PARI WASHINGTON CO. ADVISORS (P) LTD.	CHENNAI
4370.	PARIROBOTICS	PUNE
4371.	PARKER HANNIFIN (I) (P) LTD.	BANGALORE
4372.	PARLE GLOBAL TECHNOLOGIES (P) LTD.	MUMBAI
4373.	PARSONS INTERNATIONAL	DUBAI
4374.	PARVATHY ORTHO HOSPITAL (P) LTD.	CHENNAI
4375.	PASCO CORPORATION JAPAN	TOKYO
4376.	PATEL INFRASTRUCTURE LTD.	DELHI
4377.	PATENT OFFICE	MUMBAI
4378.	PATHCARE (P) LTD.	DELHI
4379.	PATHPARTNER TECHNOLOGY	BANGALORE
4380.	PATRIOT SOFTWARE (I) (P) LTD.	PUNE
4381.	PATSPIN (I) LTD.	KOCHI
4382.	PAYPAL	BANGALORE
4383.	PAYPAL	CHENNAI
4384.	PAYPAL (I) (P) LTD.	BANGALORE
4385.	PAYPAL (I) (P) LTD.	CHENNAI
4386.	PAYSENSE	DELHI
4387.	PAYTM PAYMENTS BANK	DELHI
4388.	PAYU INDIA	DELHI
4389.	PBR TECHNOLOGY SRL	ABUDHABI
4390.	PC LAND	TRIVANDRUM
4391.	PCM INC.	DELHI
4392.	PDSC GENERAL HOSPITAL	HYDERABAD
4393.	PEARSON (I) EDUCATION SERVICES (P) LTD.	BANGALORE
4394.	PEGA SYSTEMS	HYDERABAD
4395.	PEGASYSTEMS WORLDWIDE (I) (P) LTD.	HYDERABAD

S.No.	ORGANIZATION	LOCATION
4396.	PELF INFOTECH (P) LTD.	PUNE
4397.	PEMAC PTE LTD.	SINGAPORE
4398.	PENNAR ENGINEERED BUILDING SYSTEMS LTD.	HYDERABAD
4399.	PENNAR INDUSTRIES LTD.	CHENNAI
4400.	PENNAR INDUSTRIES LTD.	HYDERABAD
4401.	PENNSUMMIT TUBULAR ENGINEERING (P) LTD.	DELHI
4402.	PENTA	DOHA
4403.	PENTA GLOBAL ENGINEERING CO. L.L.C	DUBAI
4404.	PENTAIR VALVES & CONTROLS (P) LTD.	PUNE
4405.	PENTAIR WATER (I) (P) LTD.	NOIDA
4406.	PENTANET INFOSYS	DELHI
4407.	PEOPLE INTERACTIVE	MUMBAI
4408.	PEOPLESTRONG	GURGAON
4409.	PEOPLESTRONG HR SERVICES LTD.	DELHI
4410.	PEOPLETECH	HYDERABAD
4411.	PEOPLETREE HOSPITALS	BANGALORE
4412.	PERFECTPAC LTD.	NOIDA
4413.	PERFETTI VAN MELLE (I) (P) LTD.	GURGAON
4414.	PERFETTI VAN MELLE (I) PVT.LTD.	GURGAON
4415.	PERNOD RICARD (I) (P) LTD.	DELHI
4416.	PERSISTENT SYSTEM LTD.	BANGALORE
4417.	PERSISTENT SYSTEM LTD.	GOA
4418.	PERSISTENT SYSTEM LTD.	VERNA
4419.	PERSISTENT SYSTEMS	BANGALORE
4420.	PERSISTENT SYSTEMS (P) LTD.	HYDERABAD
4421.	PERSISTENT SYSTEMS LTD.	HYDERABAD
4422.	PERSISTENT SYSTEMS LTD.	PUNE
4423.	PETROFAC	DELHI
4424.	PETROFAC	PUNE
4425.	PETROFAC EMIRATES	ABUDHABI
4426.	PETROFAC INT. LTD.	DUBAI
4427.	PETROFAC INT. LTD.	KUWAIT
4428.	PETROFAC INTERNATIONAL LLC	SHARJAH
4429.	PETROFAC INTERNATIONAL LTD. (KUWAIT)	KUWAIT
4430.	PETROLEUM DEVELOPMENT OMAN	MUSCAT,OMAN
4431.	PETRON EMIRATES	DUBAI
4432.	PETRON EMIRATES	OMAN
4433.	PETRONAS LUBRICANT INTERNATIONAL (P) LTD.	MUMBAI
4434.	PETRONASH DUBAI	DUBAI
4435.	PFBR BHAVINI	KANCHEEPURAM
4436.	PFIZER	CHENNAI
4437.	PFIZER HEALTHCARE (I) (P) LTD.	CHENNAI
4438.	PFIZER LTD.	GOA
4439.	PHARMAZELL VIZAG (P) LTD.	HYDERABAD
4440.	PHARMAZELL VIZAG (P) LTD.	VISAKHAPATNAM
4441.	PHENIX CONSTRUCTION TECHNOLOGIES	HARIDWAR
4442.	PHENOM PEOPLE (P) LTD.	HYDERABAD
4443.	PHILADELPHIA MIXING SOLUTIONS ASIA (P) LTD.	PUNE
4444.	PHILIPS	BANGALORE
4445.	PHILIPS (I) LTD.	BANGALORE
4446.	PHILIPS (I) LTD.	CARLZEISS
4447.	PHILIPS (I) LTD.	CHENNAI
4448.	PHILIPS (I) LTD.	GURGAON
4449.	PHILIPS (I) LTD.	NOIDA
4450.	PHILIPS (I) LTD.	PUNE
4451.	PHILIPS GLOBAL BUSINESS SERVICES	CHENNAI
4452.	PHILIPS INNOVATION CAMPUS	BANGALORE
4453.	PHILLIPS MACHINE TOOLS (I) (P) LTD.	PUNE
4454.	PHILTEG	HOSUR
4455.	PHOENIX CONTACT MIDDLE EAST FZ LLC	DUBAI
4456.	PHOENIX MEDICAL SYSTEMS (P) LTD.	CHENNAI
4457.	PHOTON INTERACTIVE	CHENNAI
4458.	PHYTEC EMBEDDED (P) LTD.	BANGALORE
4459.	PIAGGIO VEHICLES (P) LTD.	COCHIN
4460.	PIAGGIO VEHICLES (P) LTD.	DELHI
4461.	PIAGGIO VEHICLES (P) LTD.	PUNE
4462.	PICNFRAMES TECHNOLOGIES	CHANDIGARH
4463.	PILKINGTON AUTOMOTIVE (I) LTD.	VISAKHAPATNAM
4464.	PINAK INTERNATIONAL	CHENNAI
4465.	PINNACLE HOSPITALS	HYDERABAD
4466.	PINNACLE HOSPITALS	VISAKHAPATNAM

S.No.	ORGANIZATION	LOCATION
4467.	PIONEER NF FORGINGS (I) (P) LTD.	CHENNAI
4468.	PIONEER ROAD CONSTRUCTION	DUBAI
4469.	PIRAMAL ENTERPRISES	HYDERABAD
4470.	PIRAMAL HEALTHCARE LTD.	CHENNAI
4471.	PIRAMAL SWASTHYA MANAGEMENT AND RESEARCH INSTITUTE	HYDERABAD
4472.	PITNEY BOWES	DELHI
4473.	PITNEY BOWES	NOIDA
4474.	PLAN INDIA	BHUBANESWAR
4475.	PLANARIND ONLINE SERVICES (I) (P) LTD.	BANGALORE
4476.	PLANET EXPRESS INNOVATIONS (P) LTD.	BANGALORE
4477.	PLANIT TESTING (I) (P) LTD.	HYDERABAD
4478.	PLANSEE INDIA	BANGALORE
4479.	PLASTIC OMNIUM AUTO EXTERIORS (I) (P) LTD.	PUNE
4480.	PNASAONIC (I) (P) LTD.	GURGAON
4481.	PNBMETLIFE LTD.	MUMBAI
4482.	POCKET APP	MUMBAI
4483.	POLAKULATH NARAYANAN RENAI MEDICITY	COCHIN
4484.	POLARIS (I) (P) LTD.	BANGALORE
4485.	POLE TO WIN	BANGALORE
4486.	POLESTAR INDUSTRIES	PUNE
4487.	POLESTAR SOLUTIONS AND SERVICES	DELHI
4488.	POLICY BAZAAR	DELHI
4489.	POLICY BAZAAR	GURGAON
4490.	POLICYBAZAAR INSURANCA WEB AGGRGATOR (P) LTD.	DELHI
4491.	POLICYBAZAAR INSURANCE WEB AGGREGATOR (P) LTD.	DELHI
4492.	POLICYBAZAAR.COM	DELHI
4493.	POLMON VESNFER (P) LTD.	HYDERABAD
4494.	POLUS SOFTWARE (P) LTD.	BANGALORE
4495.	POLYCOM INC	HYDERABAD
4496.	POLYPLASTICS INDUSTRIES (I) (P) LTD.	PUNE
4497.	POLYPLASTICS INDUSTRIES (I) (P) LTD.	YAMUNANAGAR
4498.	PONDICHERRY INSTITUTE OF HEALTH SCIENCES	CHENNAI
4499.	PONDICHERRY UNIVERSITY	CHENNAI
4500.	POONA HOSPITAL AND RESEARCH CENTER	PUNE
4501.	PORTESCAP (I) (P) LTD.	MUMBAI
4502.	PORTESCAP INDIA	MUMBAI
4503.	POSCO	MANGAON
4504.	POSITRONIC INTERCONNECTS (P) LTD.	PUNE
4505.	POSOCO LTD.	DELHI
4506.	POTAIN (I) (P) LTD. MANITOWOC CRANE GROUP	PUNE
4507.	POWER SYSTEMS	BANGALORE
4508.	POWERGRID CORPORATION OF (I) LTD.	GURGAON
4509.	POWERLAND AGRO TRACTOR VEHICLES (P) LTD.	GOA
4510.	POZIBILITY TECHNOLOGIES (P) LTD.	BANGALORE
4511.	PPAP AUTOMOTIVE LTD.	NOIDA
4512.	PPG ASIAN PAINTS (P) LTD.	PUNE
4513.	PRADEEP METALS LTD.	MUMBAI
4514.	PRAGATI AUTOMATION (P) LTD.	BANGALORE
4515.	PRAGITI INC.	BANGALORE
4516.	PRAGITI INTERNET TECHNOLOGIES	BANGALORE
4517.	PRAJ INDUSTRIES LTD.	PUNE
4518.	PRAKASH NETRALAYA & RETINA FOUNDATION	DELHI
4519.	PRAMATI TECHNOLOGIES	CHENNAI
4520.	PRAMATI TECHNOLOGIES	HYDERABAD
4521.	PRAMATI TECHNOLOGIES (P) LTD.	HYDERABAD
4522.	PRAMUKHSWAMI MEDICAL COLLEGE	DELHI
4523.	PRANAVA EET	HYDERABAD
4524.	PRARAS BIOSCIENCES (P) LTD.	BANGALORE
4525.	PRAVIN ELECTRICAL (P) LTD.	MUMBAI
4526.	PRAXAIR (I) (P) LTD.	DURGAPUR
4527.	PRECIMETRIX TECHNOLOGIES (P) LTD.	PUNE
4528.	PREETHI HOSPITALS (P)LTD	MADURAI
4529.	PREM AUTO ENTERPRISES SIKANDRA	DELHI
4530.	PREM INDUSTRIES	MYSORE
4531.	PREM TEXTILES INTERNATIONAL (P) LTD.	PUNE
4532.	PREMIER EXPLOSIVES LTD.	HYDERABAD
4533.	PRENETICS INNOVATION LABS	CHENNAI
4534.	PRESTO INFOSOLUTIONS (P) LTD.	BANGALORE
4535.	PRICE WATERHOUSE COOPER	BANGALORE
4536.	PRICEWATERHOUSE COOPERS	CHENNAI
4537.	PRICEWATERHOUSE COOPERS (P) LTD.	KOLKATA

S.No.	ORGANIZATION	LOCATION
4538.	PRICEWATERHOUSECOOPERS	BANGALORE
4539.	PRICEWATERHOUSECOOPERS SDC	BANGALORE
4540.	PRICEWATERHOUSECOOPERS SERVICE DELIVERY CENTER	BANGALORE
4541.	PRICOL	GURGAON
4542.	PRICOL CORPORATE SERVICES LTD.	CHENNAI
4543.	PRICOL LTD.	CHENNAI
4544.	PRICOL LTD.	COIMBATORE
4545.	PRIJO SKYCAM TECHNOLOGIES PVT. LTD.	CHENNAI
4546.	PRIME 4 INSPECTION LLC	DUBAI
4547.	PRIME FOCUS TECHNOLOGIES	BANGALORE
4548.	PRIME M2I CONSULTING (P) LTD.	FARIDABAD
4549.	PRIMERA MEDICAL TECHNOLOGIES	HYDERABAD
4550.	PRIMETALS TECHNOLOGIES (I) (P) LTD.	KOLKATA
4551.	PRINCIPAL GLOBAL SERVICES	PUNE
4552.	PRINCIPAL GLOBAL SERVICES (P) LTD.	PUNE
4553.	PRIVATE DENTAL CLINIC	GURGAON
4554.	PRIVATE PRACTITIONER	RANCHI
4555.	PRIYA SOFTWEB SOLUTIONS AHMEDABAD	PUNE
4556.	PRO DYNAMICS TECHNOLOGIES LLC	DUBAI
4557.	PRO MINERALS (P) LTD.	KOLKATA
4558.	PROCENTRIS LTD.	MUMBAI
4559.	PROCESSMAP (I) (P) LTD.	HYDERABAD
4560.	PROCESSOR SYSTEMS (I) (P) LTC	BANGALORE
4561.	PROCESSOR SYSTEMS (I) (P) LTD.	BANGALORE
4562.	PROCUBED TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
4563.	PRODAPT SOLUTIONS	CHENNAI
4564.	PRODAPT SOLUTIONS (P) LTD.	BANGALORE
4565.	PROEXCEL TECHNOLOGIES (P) LTD.	DELHI
4566.	PROFISOLUTIONS (P) LTD.	CHENNAI
4567.	PROKARMA SOFTECH	HYDERABAD
4568.	PROMAT FIRE PROTECTION	DUBAI
4569.	PROMAT FIRE PROTECTION LLC	DUBAI
4570.	PROMETIC TESTING (P) LTD.	GURGAON
4571.	PRONTO SOFTWARE SOLUTIONS	BANGALORE
4572.	PROPERTYGURU	SINGAPORE
4573.	PROTECH SYSTEMS (P) LTD.	DELHI
4574.	PROTEGO MIDDLE EAST	DUBAI
4575.	PROTOCOL SYSTEMS SDN BHD	PETALINGJAYA
4576.	PROTON METALCRAFTS (P) LTD.	PUNE
4577.	PROWARENESS	BANGALORE
4578.	PRUTECH SOLUTIONS (I) (P) LTD.	HYDERABAD
4579.	P-SERVE PTE LTD.	SINGAPORE
4580.	PSG HOSPITALS	COIMBATORE
4581.	PSPR 3D PROSTHETICS (P) LTD.	HYDERABAD
4582.	PT.JNMMC RAIPUR	RAIPUR
4583.	PUBLICIS SAPIENT	BANGALORE
4584.	PUBLICIS SAPIENT	DELHI
4585.	PUBMATIC (I) LTD.	PUNE
4586.	PUNJ LLOYD LTD.	BHIND
4587.	PUNJAB STATE POWER CORPORATION	DELHI
4588.	PURE SOFTWARE	DELHI
4589.	PURESOFTWARE	NOIDA
4590.	PURESOFTWARE (P) LTD.	DELHI
4591.	PURETRAININGS SOFTWARE (P) LTD.	NOIDA
4592.	PURPLETALK (I) (P) LTD.	HYDERABAD
4593.	PURSHOTHAM ENGG INDUSTRIES	BANGALORE
4594.	PUZZOLANA MACHINERY FABRICATORS (HYDERAB	HYDERABAD
4595.	PWC (VISION TECHNOLOGIES)	DELHI
4596.	PWC SDC	BANGALORE
4597.	PWD B&R	DELHI
4598.	PYOME INFRA SOLUTIONS	BANGALORE
4599.	PYRAMID ENGINEERING	MUMBAI
4600.	PYRO NETWORKS (P) LTD. .	HYDERABAD
4601.	PYRODYNAMICS	BANGALORE
4602.	Q M COMPUTECH (P) LTD.	NAGPUR
4603.	Q3 INFOTECH (P) LTD.	DELHI
4604.	QA INFOTECH	NOIDA
4605.	QA INFOTECH SOFTWARE SERVICES (P) LTD.	DELHI
4606.	QATAR AIRWAYS	QATAR
4607.	QATAR ALUMINIUM	DOHA
4608.	QATAR ALUMINIUM CO LTD.	DOHA

S.No.	ORGANIZATION	LOCATION
4609.	QATAR ALUMINIUM CO LTD.	QATAR
4610.	QATAR AMIRI FLIGHT	DOHA
4611.	QATAR CHEMICAL CO. LTD.	CHENNAI
4612.	QATAR CHEMICAL CO. LTD.	HYDERABAD
4613.	QATAR CHEMICAL COMPANY	DOHA
4614.	QATAR CHEMICAL COMPANY	MUMBAI
4615.	QATAR CHEMICAL COMPANY	QATAR
4616.	QATAR CHEMICAL COMPANY	STATEOFQATAR
4617.	QATAR COOL DISTRICT COOLING	DOHA
4618.	QATAR ENGINEERING & CONSTRUCTION CO WLL	DOHA
4619.	QATAR ENGINEERING AND CONSTRUCTION CO. W.L.L	QATAR
4620.	QATAR ENGINEERING AND CONSTRUCTION CO. WLL	BANGALORE
4621.	QATAR FERTILIZER COMPANY	QATAR
4622.	QATAR FOUNDATION	QATAR
4623.	QATAR GAS	QATAR
4624.	QATAR GAS CO. LTD.	CHENNAI
4625.	QATAR GENERAL ELECTRICITY & WATER CORPOR	QATAR
4626.	QATAR POWER COMPANY	DOHA
4627.	QATAR SHELL GTL- QATAR	DOHA
4628.	QATARGAS OPERATING CO. LTD.	QATAR
4629.	QBURST TECHNOLOGIES	BANGALORE
4630.	QBURST TECHNOLOGIES (P) LTD.	SINGAPORE
4631.	QD-SBG CONSTRUCTION	CHENNAI
4632.	QD-SBG CONSTRUCTION	QATAR
4633.	QED GROUP LLC	DELHI
4634.	QI SPINE CLINIC	DELHI
4635.	QISH MEDICAL	COIMBATORE
4636.	QISPINE CLINIC KARKARDOOMA	DELHI
4637.	QLIQIT GLOBAL SOLUTIONS (P) LTD.	CHENNAI
4638.	QRUIZE TECHNOLOGIES (P) LTD.	CHENNAI
4639.	Q-TEC SWITCHGEAR W.L.L.	QATAR
4640.	QUADRANT 4 SOFTWARE SOLUTIONS (P) LI	CHENNAI
4641.	QUADRANT EPP SURLON (I) LTD.	GHAZIABAD
4642.	QUADRATYX	HYDERABAD
4643.	QUAKER CHEMICAL (I) (P) LTD.	PUNE
4644.	QUALCOMM	BANGALORE
4645.	QUALCOMM	HYDERABAD
4646.	QUALCOMM	NOIDA
4647.	QUALCOMM	SINGAPORE
4648.	QUALCOMM (I) (P) LTD.	BANGALORE
4649.	QUALCOMM (I) (P) LTD.	CHENNAI
4650.	QUALCOMM (I) PVT.LTD	BANGALORE
4651.	QUALCOMM (P) LTD.	BANGALORE
4652.	QUALCOMM INDIA	BANGALORE
4653.	QUALITEST (I) (P) LTD.	BANGALORE
4654.	QUALITY COUNCIL OF INDIA	DELHI
4655.	QUANT GULF EQUIPMENT & MAINTENANCE LLC	DUBAI
4656.	QUANTAFIC BUSINESS SOLUTION	KOLKATA
4657.	QUANTELA	HYDERABAD
4658.	QUANTELA PTE LTD.	HYDERABAD
4659.	QUATRRO INC	GURGAON
4660.	QUATRRO PROCESSING SERVICES (P) LTD.	CHENNAI
4661.	QUESS CORP/ DEPUTED TO CATERPILLAR	CHENNAI
4662.	QUEST GLOBAL	BANGALORE
4663.	QUEST GLOBAL	BELAGAVI
4664.	QUEST GLOBAL	BELGAUM
4665.	QUEST GLOBAL	SINGAPORE
4666.	QUEST GLOBAL	TRIVANDRUM
4667.	QUEST GLOBAL	YOKOHAMA
4668.	QUEST GLOBAL ENGINEERING SERVICES (P) LTD.	CHENNAI
4669.	QUEST GLOBAL ENGINEERING SERVICES PVT.LTD	BANGALORE
4670.	QUICK RAYS (P) LTD.	DELHI
4671.	QUIKR (I) (P) LTD.	BANGALORE
4672.	QUIKR (I) (P) LTD.	PUNE
4673.	QUINTILES IMS	BANGALORE
4674.	QUINTILESIMS RESEARCH	BANGALORE
4675.	QUINTILESIMS RESEARCH (I) (P) LTD.	BANGALORE
4676.	QUIPPO VALUERS AND AUCTIONEERS (P) LTD.	KOLKATA
4677.	QUITYPE TECHNOLOGIES	BANGALORE
4678.	QVANTEL SOFTWARE SOLUTION LTD.	HYDERABAD
4679.	QWIKCILVER SOLUTIONS LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
4680.	R SYSTEMS INTERNATIONAL	BANGALORE
4681.	R V SOLUTIONS (P) LTD.	NOIDA
4682.	R.P.TECHSOFT INTERNATIONAL (P) LTD.	TRIVANDRUM
4683.	R.S. ENGINEERING	CHENNAI
4684.	RAAD SYSTEMS (P) LTD.	BANGALORE
4685.	RADHAKRISHNA FOODLAND (P) LTD.	DELHI
4686.	RADHARANI RAIL ENGINEERING SYSTEM (P) LTD.	BANGALORE
4687.	RADISYS (I) (P) LTD.	BANGALORE
4688.	RADISYS INDIA	BANGALORE
4689.	RADIUS DEVELOPERS	MUMBAI
4690.	RADIX MICROSYSTEMS	HYDERABAD
4691.	RAGHAVA LIFE SCIENCES PVT.LTD	HYDERABAD
4692.	RAGHWENDRA WEB SERVICES	KOLKATA
4693.	RAILTEL CORPORATION OF (I) LTD.	KOLKATA
4694.	RAISING STAT MOBILE (I) (P) LTD.	CHENNAI
4695.	RAJA RAMANNA CENTRE FOR ADVANCED TECHNOL	INDORE
4696.	RAJA SOFTWARE LABS	PUNE
4697.	RAJASHREE CEMENT WORKS ULTRATECH CEMENT LTD.	HYDERABAD
4698.	RAJASTHAN STATE MINES AND MINERALS LTD.	UDAIPUR
4699.	RAJIV GANDHI CANCER INSTITUTE & RESEARCH CENTRE	DELHI
4700.	RAJIV GANDHI CANCER INSTITUTE AND RESEARCH CENTRE	DELHI
4701.	RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES	HYDERABAD
4702.	RAJSRIYA AUTOMOTIVE INDUSTRIES (P) LTD.	BANGALORE
4703.	RAJSRIYA AUTOMOTIVE INDUSTRIES P LTD.	BANGALORE
4704.	RAKMHSU	UAE
4705.	RAKON (I) (P) LTD.	BANGALORE
4706.	RAKUTEN	BANGALORE
4707.	RAKUTEN (I) (P) LTD.	BANGALORE
4708.	RAKUTEN INDIA	BANGALORE
4709.	RAMAN RESEARCH INSTITUTE	BANGALORE
4710.	RAMBOLL (I) (P) LTD.	DELHI
4711.	RAMBOLL (I) (P) LTD.	HYDERABAD
4712.	RAMBUS CHIP TECHNOLOGIES (I) PRIVATE	BANGALORE
4713.	RAMBUS CHIP TECHNOLOGIES(INDIA) PRIVATE	BANGALORE
4714.	RAMCO STEELS (P) LTD.	DELHI
4715.	RAMCO SYSTEMS	CHENNAI
4716.	RAMCO SYSTEMS LTD.	CHENNAI
4717.	RAMESH CARDIAC & MULTI SPECIALITY HOSPIT	HYDERABAD
4718.	RAMKRISHNA FORGINGS LTD.	JAMSHEDPUR
4719.	RAMTECH MANUFACTURING INDUSTRIES	HYDERABAD
4720.	RAMYAM INTELLIGENCE LAB (PART OF ARVATO)	BANGALORE
4721.	RANDSTAD (I) (P) LTD.	BANGALORE
4722.	RANE (MADRAS) LTD.	CHENNAI
4723.	RANE (MADRAS) LTD. DIECASTING DIVISION	TELANGANA
4724.	RANE BRAKE LINING LTD.	CHENNAI
4725.	RANE BRAKE LINING LTD.	TRICHIRAPPALI
4726.	RANE BRAKE LINING LTD.	TRICHY
4727.	RANE ENGINE VALVE LTD.	CHENNAI
4728.	RANE ENGINE VALVE LTD. COMPANY	CHENNAI
4729.	RANE MADRAS LTD.	CHENNAI
4730.	RANE MADRAS LTD.	PUDUCHERRY
4731.	RANE NSK STEERING SYSTEM (P) LTD.	BAWAL
4732.	RANE NSK STEERING SYSTEM (P) LTD.	CHENNAI
4733.	RANE NSK STEERING SYSTEM (P) LTD.	DELHI
4734.	RANE NSK STEERING SYSTEM (P) LTD.	GURGAON
4735.	RANE NSK STEERING SYSTEM PVT.LTD.	DELHI
4736.	RANE NSK STEERING SYSTEMS (P) LTD.	DELHI
4737.	RANE TRW STEERING SYSTEM PVT.LTD	CHENNAI
4738.	RANE TRW STEERING SYSTEMS (P) LTD.	CHENNAI
4739.	RANE TRW STEERING SYSTEMS (P) LTD.	TRICHY
4740.	RAQMIYAT INFORMATION TECHNOLOGY PRIVATE	CHENNAI
4741.	RAQMIYAT LLC	DUBAI
4742.	RARE SOLUTIONS (P) LTD.	HYDERABAD
4743.	RAREFIELD ENGINEERS (P) LTD.	CHENNAI
4744.	RASHTRIYA CHEMICALS & FERTILIZERS LTD.	KOLKATA
4745.	RASOFT CONSULTNG SERVICES	HYDERABAD
4746.	RAVE TECHNOLOGIES	MUMBAI
4747.	RAYCHEM RPG P. LTD.	VADODARA
4748.	RAYON 3D	HYDERABAD
4749.	RBS SERVICES (I) (P) LTD.	BANGALORE
4750.	RBS SERVICES (I) (P) LTD.	CHENNAI

S.No.	ORGANIZATION	LOCATION
4751.	RBS SERVICES (I) (P) LTD.	DELHI
4752.	RBS SERVICES (I) (P) LTD.	GURGAON
4753.	RCI DRDO	HYDERABAD
4754.	RCV INNOVATIONS	HYDERABAD
4755.	RDT HOSPITAL	BATHALAPALLI
4756.	REACH EMPLOYMENT SERVICES	DUBAI
4757.	READYMIX CONSTRUCTION MACHINARY (P) LTD.	PUNE
4758.	REALPAGEINDIA	HYDERABAD
4759.	REALTY AUTOMATION & SECURITY SYSTEMS PVT	PUNE
4760.	REC POWER DISTRIBUTION CO. LTD.	GOA
4761.	REC-PDCL NOIDA ON PAYROLL OF T&M (P) LTD. MUMBAI	DELHI
4762.	RED HAT	BANGALORE
4763.	RED HAT	PUNE
4764.	RED PLANET CONSULTING	CHENNAI
4765.	REDGRAPE BUSINESS SERVICES	CHENNAI
4766.	REDMART (I) (P) LTD.	BANGALORE
4767.	REDPINE SIGNALS	HYDERABAD
4768.	REFINITIV	BANGALORE
4769.	REGEN POWERTECH (P) LTD.	CHENNAI
4770.	REGENT RESEARCH WRITING	BANGALORE
4771.	REGULATORY AFFAIRS	MUMBAI
4772.	RELIABLE INDUSTRIES	CHENNAI
4773.	RELIANCE	MUMBAI
4774.	RELIANCE CORPORATE IT PARK LTD.	AHMEDABAD
4775.	RELIANCE DEFENCE LTD.	NAGPUR
4776.	RELIANCE FOUNDATION	MUMBAI
4777.	RELIANCE GENERAL INSURANCE CO LTD.	HYDERABAD
4778.	RELIANCE GLOBAL CORPORATE SECURITY	MUMBAI
4779.	RELIANCE INDUSTRIES LTD.	JAMNAGAR
4780.	RELIANCE INDUSTRIES LTD.	MUMBAI
4781.	RELIANCE INDUSTRIES LTD.	VADODARA
4782.	RELIANCE INFRASTRUCTURE LTD.	DELHI
4783.	RELIANCE INFRASTRUCTURE LTD.	MUMBAI
4784.	RELIANCE JIO (RELIANCE INFOCOMM)	GHANSOLI
4785.	RELIANCE JIO (RELIANCE INFOCOMM)	GOA
4786.	RELIANCE JIO (RELIANCE INFOCOMM)	JAIPUR
4787.	RELIANCE JIO INFOCOM	DELHI
4788.	RELIANCE JIO INFOCOMM LTD.	HYDERABAD
4789.	RELIANCE JIO INFOCOMM LTD.	PUNE
4790.	RELIANCE RETAIL	MUMBAI
4791.	RELIANCE RETAIL LTD.	MUMBAI
4792.	RELISYS MEDICAL DEVICES LTD.	HYDERABAD
4793.	RELX (I) (P) LTD.(ELSEVIER)	GURGAON
4794.	REMITWARE PAYMENTS	MUMBAI
4795.	RENAULT NISSAN	CHENNAI
4796.	RENAULT NISSAN (RNTBCI)	CHENNAI
4797.	RENAULT NISSAN AUTOMATIVE (I) (P) LTD.	CHENNAI
4798.	RENAULT NISSAN AUTOMATIVE (I) (P) LTD.	KANCHEEPURAM
4799.	RENAULT NISSAN BUSINESS CENTRE (I) (P) LTD.	CHENNAI
4800.	RENAULT NISSAN TECH. BUSINESS CENTRE (I) (P) LT	CHENNAI
4801.	RENAULT NISSAN TECHNOLOGY & BUSINESS CENTRE INDIA	CHENGALPET
4802.	RENAULT NISSAN TECHNOLOGY & BUSINESS CENTRE INDIA	CHENNAI
4803.	RENAULT NISSAN TECHNOLOGY & BUSINESS CENTRE INDIA	KANCHEEPURAM
4804.	RENAULT NISSAN TECHNOLOGY & BUSINESS CENTRE INDIA	PUNE
4805.	RENAULT NISSAN TECHNOLOGY AND BUSINESS CENTER	BANGALORE
4806.	RENAULT NISSAN TECHNOLOGY AND BUSINESS CENTER	CHENNAI
4807.	RENAULT NISSAN TECHNOLOGY AND BUSINESS CENTER IND	CHENNAI
4808.	RENAULT NISSAN TECHNOLOGY AND BUSINESS CENTRE	CHENNAI
4809.	RENAULT NISSAN TECHNOLOGY AND BUSSINESS CENTER	CHENNAI
4810.	RENAULT NISSAN TECHNOLOGY BUSINESS CENTRE INDIA	CHENNAI
4811.	RENAULT NISSAN TECHNOLOGY& BUSSINESS CENTRE (P) LT	CHENNAI
4812.	RENAULT NISSAN TECHNOLOGY&BUSINESS CENTRE (I) PV	CHENNAI
4813.	RENAULT-NISSAN	CHENNAI
4814.	RENEW POWER LIMTED	GURGAON
4815.	RENISHAW METROLOGY SYSTEMS	PUNE
4816.	RENOM ENERGY SERVICES LLP	MUMBAI
4817.	RESEARCH CENTER IMARAT	HYDERABAD
4818.	RESEARCH LAKE INNOVATION LABS (P) LTD.	HYDERABAD
4819.	RESERVE BANK OF INDIA	MUMBAI
4820.	RESILIENT LAB (P) LTD.	MUMBAI
4821.	REWA STABILIZERS & LUBRICANTS (P) LTD.	MUMBAI

S.No.	ORGANIZATION	LOCATION
4822.	REXNORD EUROFLEX	HYDERABAD
4823.	RGUKT BASAR	BASAR
4824.	RHYTHM LABS (P) LTD.	BANGALORE
4825.	RICARDO (I) (P) LTD.	DELHI
4826.	RICO AUTO INDUSTRIES	DELHI
4827.	RICOH (I) LTD.	AHMEDABAD
4828.	RIEKE PACKAGING SYSTEMS	NOIDA
4829.	RIETER (I) (P) LTD.	PUNE
4830.	RIIS TRADING (I) (P) LTD.	PUNE
4831.	RIMINI STREET (I) (P) LTD.	HYDERABAD
4832.	RIOT LABZ PVT.LTD.	NOIDA
4833.	RISE HOSPITAL	HYDERABAD
4834.	RISHITH'S DENTAL CARE CENTRE	BANGALORE
4835.	RISING STAR MOBILE (I) (P) LTD.	SRICITY,TADA
4836.	RIVER BUSINESS SOLUTIONS (P) LTD.	BANGALORE
4837.	RIVERBED TECHNOLOGY	BANGALORE
4838.	RIVERBED TECHNOLOGY (I) (P) LTD.	BANGALORE
4839.	RIVIGO SERVICES PVT	CHENNAI
4840.	RLE (I) MANUFACTURING ENGINEERING (P) LTD.	BANGALORE
4841.	RNTBCI	CHENNAI
4842.	ROADS AND TRANSPORT AUTHORITY	DUBAI
4843.	ROBERT BOSCH	BANGALORE
4844.	ROBERT BOSCH	COIMBATORE
4845.	ROBERT BOSCH AUTOMOTIVE ELECTRONICS (I) PV	BANGALORE
4846.	ROBERT BOSCH AUTOMOTIVE ELECTRONICS (I) PV	PUNE
4847.	ROBERT BOSCH BUSINESS AND ENGINEERING SO	BANGALORE
4848.	ROBERT BOSCH ENGG AND BUSINESS SOLUTIONS (P) LTD.	BANGALORE
4849.	ROBERT BOSCH ENGINEEIRNG AND BUSINESS SOLUTIONS	BANGALORE
4850.	ROBERT BOSCH ENGINEEIRNG AND BUSINESS SOLUTIONS	COIMBATORE
4851.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BANGALORE
4852.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS LTD.	BANGALORE
4853.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS PVT	BANGALORE
4854.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS PVT	COIMBATORE
4855.	ROBERT BOSCH ENGINEERING & BUSSINESS SOLUTION LTD.	BANGALORE
4856.	ROBERT BOSCH ENGINEERING AND BUSINESS SOLUTION	BANGALORE
4857.	ROBERT BOSCH ENGINEERING AND BUSINESS SOLUTION LTD.	BANGALORE
4858.	ROBERT BOSCH ENGINEERING AND BUSINESS SOLUTIONS	BANGALORE
4859.	ROBERT BOSCH ENGINEERING AND BUSINESS SOLUTIONS	COIMBATORE
4860.	ROBERT BOSCH ENGINEERING INDIA	COIMBATORE
4861.	ROBERT BOSCH(HCL PAYROLL)	COIMBATORE
4862.	ROBIN SYSTEMS	BANGALORE
4863.	ROBOTECH LABS (P) LTD.	DELHI
4864.	ROBOTIC AUTOMATION AND DESIGN	BANGALORE
4865.	ROCA BATHROOM PRODUCTS (P) LTD.	BHIWADI
4866.	ROCKET SOFTWARE	PUNE
4867.	ROCKETFLYER TECHNOLOGY (P) LTD.	GURGAON
4868.	ROCKMAN INDUSTRIES LTD.	DELHI
4869.	ROCKWELL COLLINS	HYDERABAD
4870.	ROHDE & SCHWARZ (I) (P) LTD.	HYDERABAD
4871.	ROKI R&D (I) (P) LTD.	DELHI
4872.	ROLLS ROYCE	BANGALORE
4873.	ROLLS ROYCE (I) (P) LIMTED	BANGALORE
4874.	ROLLS ROYCE (I) (P) LTD.	BANGALORE
4875.	ROLLS ROYCE POWER SYSTEM AG (MTU (I) P	PUNE
4876.	ROLLS-ROYCE (I) (P) LTD.	BANGALORE
4877.	ROLTA INDIA	DELHI
4878.	ROMERT BOSCH ENGINEERING AND SOLUTION LI	BANGALORE
4879.	ROOM TO READ	DELHI
4880.	ROOTS INDUSTRIES (I) LTD.(HORN DIVISION)	COIMBATORE
4881.	ROSSELL TECH SYS	BANGALORE
4882.	ROSSELL TECHSYS	BANGALORE
4883.	ROSSELL TECHSYS	BELAGAVI
4884.	ROTORK CONTROL (I) (P) LTD.	CHENNAI
4885.	ROULUND BRAKING INDIA	DELHI
4886.	ROURKELA STEEL PLANT STEEL AUTHORITY OF	ROURKELA
4887.	ROYAL BANK OF SCOTLAND	CHENNAI
4888.	ROYAL BANK OF SCOTLAND	GURGAON
4889.	ROYAL CARE HOSPITAL	COIMBATORE
4890.	ROYAL DUYCH SHELL	BANGALORE
4891.	ROYAL ENFIELD	CHENNAI
4892.	ROYAL ENFIELD	DELHI

S.No.	ORGANIZATION	LOCATION
4893.	ROYAL ENFIELD MOTORS	CHENNAI
4894.	ROYOTA ENGINEERING SOLUTIONS PVT.LTD	BANGALORE
4895.	ROYOTA ENGINEERING SOLUTUIONS PVT.LTD	BANGALORE
4896.	RPG LIFE SCIENCES LTD.	MUMBAI
4897.	RSAM TECHNOLOGIES INDIA	BANGALORE
4898.	RSB PHARMA (P) LTD.	DELHI
4899.	RSB TRANSMISSIONS (I) LTD.	PUNE
4900.	RT VISION TECHNOLOGIES (P) LTD.	NOIDA
4901.	RTP CONTROLS (I) (P) LTD.	BANGALORE
4902.	RUBY HALL CLINIC	PUNE
4903.	RUD (I) CHAIN (P) LTD.THANE	THANE
4904.	RUHSA DEPARTMENT CMC VELLORE	CHENNAI
4905.	RURAL DEVELOPMENT DEPARTMENT BIHAR	BIHAR
4906.	RV MATRIX SOFTWARE TECHNOLOGIES (P) LTD.	BANGALORE
4907.	RX EXPRESS PHARMACY	BANGALORE
4908.	RYNA TECHNOLOGIES (P) LTD.	HYDERABAD
4909.	RYPE ONLINE SERVICES (P) LTD.	HYDERABAD
4910.	S MOBILE DEVICES LTD.	DELHI
4911.	S N PANDIT AYURVEDIC CO (P) LTD.	BANGALORE
4912.	S S ENTERPRISES	PUNE
4913.	S&P GLOBAL RATINGS	HYDERABAD
4914.	S. NARENDRAKUMAR & CO	MUMBAI
4915.	S.S.CONTROLS	AURANGABAD
4916.	S.VE.J ASSOCIATES	COIMBATORE
4917.	SAAB ENGINEERING	BANGALORE
4918.	SAAMA TECHNOLOGIES	PUNE
4919.	SAAZ IMAGING SYSTEMS (P) LTD.	HYDERABAD
4920.	SABMILLER (I) LTD.	SONIPAT
4921.	SABRE TRAVEL TECHNOLOGIES	BANGALORE
4922.	SABRE TRAVEL TECHNOLOGIES (P) LTD.	BANGALORE
4923.	SACHA ENGINEERING (P) LTD.	CHENNAI
4924.	SADEKAR ENVIRO ENG (P) LTD.	PANAJI
4925.	SAEZAROBOTICS	DELHI
4926.	SAFAL ENT HOSPITAL	SURAT
4927.	SAFE KIDS HOSPITAL	RAJGARH
4928.	SAFENET(A GEMALTO SUBSIDIARY)	GEMALTO
4929.	SAFRAN ENGINEERING SERVICES	BANGALORE
4930.	SAGA LABORATORIES LTD.	MUMBAI
4931.	SAGAR ASIA (P) LTD.	HYDERABAD
4932.	SAHARA ENGINEERING	COIMBATORE
4933.	SAHARA PETROCHEMICAL COMPANY	ABUDHABI
4934.	SAI LIFE SCIENCES	HYDERABAD
4935.	SAI STANDARDS SERVICES	CHENNAI
4936.	SAIL POINT TECHNOLOGIES (I) (P) LTD.	PUNE
4937.	SAIL/DSP	DURGAPUR
4938.	SAINT GOBAIN (I) (P) LTD.	CHENNAI
4939.	SAINT GOBAIN GLASS (I) (P) LTD.	BHIWADI
4940.	SAINT GOBAIN GLASS (I) (P) LTD.	CHENNAI
4941.	SAINT-GOBAIN	CHENNAI
4942.	SAINT-GOBAIN (I) (P) LTD.	BANGALORE
4943.	SAIPEM (I) PROJECTS (P) LTD.	CHENNAI
4944.	SAIPEM SNAMPROGETTI	DAMMAM
4945.	SAKAE RIKEN POLYPLASTICS (I) PVT.LTD.	BAWAL
4946.	SAKRA WORLD HOSPITAL	BANGALORE
4947.	SAKSOFT (P) LTD.	CHENNAI
4948.	SAKSOFT LTD.	PUNE
4949.	SAKTHI AUTOMOBILES	CHENNAI
4950.	SALCOMP MANUFACTURING (I) (P) LIMI	CHENNAI
4951.	SALCOMP MANUFACTURING (I) (P) LTD.	CHENNAI
4952.	SALESFORCE	HYDERABAD
4953.	SALESFORCE (I) (P) LTD.	HYDERABAD
4954.	SALINI IMPREGILO S.P.A.	DOHA
4955.	SAMSUNG (I) (P) LTD.	GURGAON
4956.	SAMSUNG (I) ELECTRONICS	KOLKATA
4957.	SAMSUNG (I) ELECTRONICS (P) LTD.	DELHI
4958.	SAMSUNG (I) ELECTRONICS (P) LTD.	MUMBAI
4959.	SAMSUNG (I) ELECTRONICS (P) LTD.	NOIDA
4960.	SAMSUNG ENGINEERING (I) (P) LTD.	DELHI
4961.	SAMSUNG R & D INSTITUTE INDIA	BANGALORE
4962.	SAMSUNG R&D INSTITUTE	BANGALORE
4963.	SAMSUNG R&D INSTITUTE	DELHI

S.No.	ORGANIZATION	LOCATION
4964.	SAMSUNG R&D INSTITUTE	NOIDA
4965.	SAMSUNG RESEARCH INSTITUTE NOIDA	DELHI
4966.	SAMSUNG RESEARCH INSTITUTE NOIDA	HYDERABAD
4967.	SAMSUNG RIB	BANGALORE
4968.	SAMSUNG SEMICONDUCTOR (I) R & D CENTER	BANGALORE
4969.	SAMVARDHANA MOTHERSON REFLECTEC	DELHI
4970.	SAMYAK ANALYTICS	PUNE
4971.	SAN AND SAN AUTO (P) LTD.	PUNE
4972.	SAN TECHNOLOGIES (P) LTD.	HYDERABAD
4973.	SANAKALP SEMICONDUCTOR (P) LTD.	BANGALORE
4974.	SANATHAN TEXTILE	MUMBAI
4975.	SANDEN VIKAS (I) (P) LTD.	FARIDABAD
4976.	SANDISK (I) DEVICE DESIGN CENTRE (P) LTD.	BANGALORE
4977.	SANDVIK AB	PUNE
4978.	SANDVIK ASIA (P) LTD.	BANGALORE
4979.	SANDVIK ASIA (P) LTD.	CHENNAI
4980.	SANDVIK ASIA (P) LTD.	KOLKATA
4981.	SANDVIK ASIA (P) LTD.	NAGPUR
4982.	SANDVIK ASIA (P) LTD.	PUNE
4983.	SANDVINE TECHNOLOGIES (I) (P) LTD.	BANGALORE
4984.	SANKALP SEMICONDUCTOR	GOA
4985.	SANKALP SEMICONDUCTOR (P) LTD.	BANGALORE
4986.	SANKALP SEMICONDUCTOR (P) LTD.	GOA
4987.	SANKALP SEMICONDUCTORS PVT.LTD	BANGALORE
4988.	SANKALPA AUTOMATION AND CONTROL	PUNE
4989.	SANMAR SPECIALITY CHEMICALS LTD.	HOSUR
4990.	SANMINA-SCI TECHNOLOGY (I) (P) LT	CHENNAI
4991.	SANOFI (I) LTD.	GOA
4992.	SANOFI PASTEUR	MUMBAI
4993.	SANRIA ENGINEERING & CONSULTANTS	MYSORE
4994.	SANSERA ENGINEERING	BANGALORE
4995.	SANT PARMANAND HOSPITAL	DELHI
4996.	SANTECH TECHNOSOFT (P) LTD.	GURGAON
4997.	SANTRES ENGINEERING (P) LTD.	CHENNAI
4998.	SANY HEAVY EQUIPMENT INDUSTRY (I) PVT.	PUNE
4999.	SANY HEAVY INDUSTRY (I) (P) LTD.	PUNE
5000.	SAP (I) (P) LTD.	BANGALORE
5001.	SAP ARIBA	BANGALORE
5002.	SAP LABS (I) (P) LTD.	BANGALORE
5003.	SAP LABS (I) (P) LTD.	DELHI
5004.	SAP LABS (I) (P) LTD.	GURGAON
5005.	SAP LABS (I) (P) LTD.	HYDERABAD
5006.	SAP LABS (I) (P) LTD.	NOIDA
5007.	SAP LABS (I) (P) LTD.	PUNE
5008.	SAP LABS (I) PVT.LTD	BANGALORE
5009.	SAPIENS TECHNOLOGY	CHENNAI
5010.	SAPIENT CONSULTING (P) LTD.	BANGALORE
5011.	SAPIENT CONSULTING (P) LTD.	DELHI
5012.	SAPIENT CONSULTING (P) LTD.	GURGAON
5013.	SAPIENT CONSULTUNG (P) LTD.	DELHI
5014.	SAPPIO CONSULTANCY SERVICES (P) LTD.	KOCHI
5015.	SARASWATHI HOSPITAL	COIMBATORE
5016.	SARK INDUSTRIES	DELHI
5017.	SAROOJ CONSTRUCTION CO. OMAN	DELHI
5018.	SARVESHWARI TECHNOLOGIES LTD.	HYDERABAD
5019.	SAS INTERNATIONAL MARINE SERVICES LLC	DUBAI
5020.	SAS RESEARCH AND DEVELOPMENT (P) LTD.	PUNE
5021.	SASKEN TECHNOLOGIES LTD.	BANGALORE
5022.	SASKEN TECHNOLOGIES LTD.	CHENNAI
5023.	SASKEN TECHNOLOGIES LTD.	HYDERABAD
5024.	SASKEN TECHNOLOGIES LTD.	PUNE
5025.	SATHSANKALPA SOFT SOLUTIONS (P) LTD.D	HYDERABAD
5026.	SATHYA DENTAL CLINIC	BITSPILANI
5027.	SATISH EYE HOSPITAL	CHENNAI
5028.	SATVEN ENGG SERVICES- FORD TECHNOLOGY SE	CHENNAI
5029.	SATYAM AUTO COMPONENT (P) LTD.	DELHI
5030.	SATYAM COMPUTERS SERVICE LTD.	BANGALORE
5031.	SATYAM VENTURE ENGINEERING SERVICES	BANGALORE
5032.	SATYAM VENTURE ENGINEERING SERVICES	CHENNAI
5033.	SATYAM VENTURE ENGINEERING SERVICES	HYDERABAD
5034.	SATYAM VENTURE ENGINEERING SERVICES (P) LTD.	CHENNAI

S.No.	ORGANIZATION	LOCATION
5035.	SAUDI ARABIA PETROCHEMICAL COMPANY	SAUDIARABIA
5036.	SAUDI ARAMCO BASE OIL CO. - LUBEREF	JEDDAH
5037.	SAUDI ARAMCO/GIS/GTC	DUBAI
5038.	SAUDI INVESTMENT BANK	CHENNAI
5039.	SAUDI NATIONAL CONTRACTING CO. LLC	MUSCAT,OMAN
5040.	SAUDI POWER TRANSFORMER COMPANY	DAMMAM
5041.	SAVEETHA MEDICAL COLLEGE	CHENNAI
5042.	SAVIC TEHNOLOGIES (P) LTD.	CHENNAI
5043.	SAYEE HOSPITALS	CHENNAI
5044.	SCARLET ENTERPRISES	PUNE
5045.	SCHAEFFLER (I) LTD.	BANGALORE
5046.	SCHAEFFLER (I) LTD.	MUMBAI
5047.	SCHAEFFLER (I) LTD.	PUNE
5048.	SCHEMATIC ENGINEERING INDUSTRIES	HYDERABAD
5049.	SCHEMAZEN TECHNOLOGIES (P) LTD.	BANGALORE
5050.	SCHINDLER (I) (P) LTD.	HYDERABAD
5051.	SCHINDLER (I) (P) LTD.	PUNE
5052.	SCHINDLER CR&D (I) (P) LTD.	PUNE
5053.	SCHLUMBERGER	COIMBATORE
5054.	SCHLUMBERGER (I) TECHNOLOGY CENTER (P) LTD.	COIMBATORE
5055.	SCHLUMBERGER (I) TECHNOLOGY CENTER (P) LTD.	PUNE
5056.	SCHNEIDER ELECTRIC	BANGALORE
5057.	SCHNEIDER ELECTRIC	COIMBATORE
5058.	SCHNEIDER ELECTRIC	DUBAI
5059.	SCHNEIDER ELECTRIC (I) (P) LTD.	BANGALORE
5060.	SCHNEIDER ELECTRIC (I) (P) LTD.	CHENNAI
5061.	SCHNEIDER ELECTRIC (I) (P) LTD.	DUBAI
5062.	SCHNEIDER ELECTRIC (I) (P) LTD.	HYDERABAD
5063.	SCHNEIDER ELECTRIC (I) (P) LTD.	VADODARA
5064.	SCHNEIDER ELECTRIC (P) LTD.	BANGALORE
5065.	SCHNEIDER ELECTRIC INFRASTRUCTURE LIMITE	MUMBAI
5066.	SCHNEIDER ELECTRIC SA	ABUDHABI
5067.	SCHNEIDER ELECTRIC SYSTEM (I) (P) LTD.	CHENNAI
5068.	SCHNEIDER ELECTRIC SYSTEMS (I) (P) LTD.	CHENNAI
5069.	SCHNEIDER ELECTRIC SYSTEMS (I) (P) LTD.	HYDERABAD
5070.	SCHUNK METAL AND CARBON (I) (P) LTD.	BANGALORE
5071.	SCHWING STETTER (I) (P) LTD.	CHENNAI
5072.	SCHWING STETTER (I) (P) LTD.	MUMBAI
5073.	SCHWING STETTER INDIA	MUMBAI
5074.	SCI TANZANIA LTD.	DUBAI
5075.	SCIENTECHNIC LLC	DUBAI
5076.	SCIFORMIX TECHNOLOGY (P) LTD.	MUMBAI
5077.	SCMS GROUP OF EDUCATIONAL INSTITUTIONS	CHENNAI
5078.	SCOPE INTERNATIONAL	CHENNAI
5079.	SCOPE T & M (P) LTD.	PUNE
5080.	SCRY ANALYTICS	GURGAON
5081.	SD MIDDLE EAST LLC	DUBAI
5082.	SDMS DEVASTHANAM ENDOWMENTS DEPARTMENT	HYDERABAD
5083.	SEAGATE HDD (I) (P) LTD.	BANGALORE
5084.	SEAGATE TECHNOLOGY HDD (I) (P) LTD.	BANGALORE
5085.	SEAGATE TECHNOLOGY HDD (I) (P) LTD.	PUNE
5086.	SEAGATE TECHNOLOGY INT	SINGAPORE
5087.	SEARS IT & MANAGEMENT SERVICES (I) PVT	BANGALORE
5088.	SECO TOOLS (I) P LTD.	DELHI
5089.	SECO TOOLS (I) P LTD.	PUNE
5090.	SECURE METERS LTD.	UDAIPUR
5091.	SECURE METERS LTD. SANAND	MUMBAI
5092.	SECURE METERS LTD. UDAIPUR	UDAIPUR
5093.	SECURITY SOFTWARE AND SOLUTIONS	MUMBAI
5094.	SEDEMAC MECHATRONICS (P) LTD.	PUNE
5095.	SEEDAC SYSTEMS(P) LTD.	BANGALORE
5096.	SEEKERS EDUCATIONAL SERVICES	TIRUCHIRAPALLI
5097.	SEFA (P) LTD.	DELHI
5098.	SEGULA TECHNOLOGIES	CHENNAI
5099.	SELENO SYSTEMS (P) LTD.	DELHI
5100.	SEMBCORP ENERGY (I) LTD.	CHENNAI
5101.	SEMCON (I) (P) LTD.	BANGALORE
5102.	SEMCON (I) (P) LTD.	COIMBATORE
5103.	SENSEI TECHNOLOGIES	BANGALORE
5104.	SEPTECH MARKETING(I)PVT LTD.	HYDERABAD
5105.	SERVEU (L.L.C)	DUBAI

S.No.	ORGANIZATION	LOCATION
5106.	SERVICE & COMPUTER INDUSTRIES KENYA LTD.	KENYA
5107.	SERVION GLOBAL SOLUTIONS	CHENNAI
5108.	SERVOSYS SOLUTIONS GURGAON	MUMBAI
5109.	SETCO AUTOMOTIVE LTD.(LAVA CAST (P) LTD.)	MUMBAI
5110.	SEVEN LAKES TECHNOLOGIES	BANGALORE
5111.	SEVERN GLOCON (I) (P) LTD.	KATTUPAKKAM
5112.	SEVITECH SYSTEMS (P) LTD.	BANGALORE
5113.	SEYNSE TECHNOLOGIES (P) LTD.	HYDERABAD
5114.	SFO TECHNOLOGIES	COCHIN
5115.	SFO TECHNOLOGIES	ERNAKULAM
5116.	SFO TECHNOLOGIES (P) LTD.	BANGALORE
5117.	SFO TECHNOLOGIES (P) LTD.	COIMBATORE
5118.	SGS INSPECTION SERVICES SA LTD.	SAUDIARABIA
5119.	SHADAN INSTITUTE OF MEDICAL SCIENCES	HYDERABAD
5120.	SHALIVAHANA GREEN ENERGY LTD.	HYDERABAD
5121.	SHANGHAI SHUJIN ENVIRONMENTAL TECHNOLOGY	AHMEDABAD
5122.	SHANTHA BIOTECHNICS (P) LTD.	HYDERABAD
5123.	SHANTHI GEARS LIMITE	COIMBATORE
5124.	SHAPOORJI PALLONJI CO (P) LTD.	MUMBAI
5125.	SHAPOORJI PALLONJI CO (P) LTD.	PUNE
5126.	SHAPOORJI PALLONJI MIDEAST LLC	DUBAI
5127.	SHARAT LASER EYE HOSPITAL	TELANGANA
5128.	SHARDUL SOLUTIONS (P) LTD.	PUNE
5129.	SHAREKHAN BY BNP PARIBAS	MUMBAI
5130.	SHARP SOFTWARE DEVELOPMENT (I) (P) LTD.	BANGALORE
5131.	SHARQ A SABIC AFFILIATE	SAUDIARABIA
5132.	SHDM J-SYS TECHNOLOGIES (P) LTD.	JODHPUR
5133.	SHELL (I) MARKETS	BANGALORE
5134.	SHELL (I) MARKETS (P) LTD.	BANGALORE
5135.	SHELL (I) MARKETS (P) LTD.	CHENNAI
5136.	SHELL ENERGY (I) (P) LTD.	HYDERABAD
5137.	SHELL INDIA	BANGALORE
5138.	SHELL SERAYA CHEMICALS PTE LTD.	SINGAPORE
5139.	SHIFT (I) (P) LTD.	ATHENAHEALTH
5140.	SHIMI DESIGNS AND CONSULTING ENGINEERS (P) LTD.	CHENNAI
5141.	SHIRDI SAI ELECTRICALS LTD.	HYDERABAD
5142.	SHIV NADAR UNIVERSITY	NOIDA
5143.	SHIVANSH SOLUTIONS LTD.	MUMBAI
5144.	SHOPSENSE RETAIL TECHNOLOGIES (P) LTD.	MUMBAI
5145.	SHOPTIMIZE (I) (P) LTD.	PUNE
5146.	SHOWA (I) (P) LTD.	DELHI
5147.	SHREE AMBA INDUSTRIES(SAI GROUP)	ROORKEE
5148.	SHREE CEMENT LTD.	BEAWAR
5149.	SHREE DENTAL HOSPITAL	KALYAN
5150.	SHREE KRISHNA HOSPITAL	BANGALORE
5151.	SHREE PRATHAMESH HOSPITAL	THANE
5152.	SHREE SAMARTH HOSPITAL	PUNE
5153.	SHRI RAM PISTON AND RINGS LTD.	ALWAR
5154.	SHRI RAM PISTON AND RINGS LTD.	BHIWADI
5155.	SHRI RAM PISTON AND RINGS LTD.	DELHI
5156.	SHRI RAM PISTON AND RINGS LTD.	GHAZIABAD
5157.	SHRIRAM CITY UNION FINANCE LTD.	DELHI
5158.	SHRIRAM PISTONS & RINGS LTD.	DELHI
5159.	SHRIRAM PROPERTIES	BANGALORE
5160.	SHRIRAM PROPERTIES LTD.	BANGALORE
5161.	SHUAIBA OXYGEN COMPANY KUWAIT	KUWAIT
5162.	SHUWEIHAT O & M LTD. PARTNERSHIP	DUBAI
5163.	SHYAM ENTERPRISES	JAMSHEDPUR
5164.	SHYAM METALICS&ENERGY LTD.	HYDERABAD
5165.	SI GLOBAL PVT.LTD.	BANGALORE
5166.	SI2CHIP TECHNOLOGIES (P) LTD.	BANGALORE
5167.	SIAM MAKRO PCL	BANGALORE
5168.	SIAM MAKRO PUBLIC CO. LTD.	BANGKOK
5169.	SIEMENS (I) (P) LTD.	PUNE
5170.	SIEMENS GAMESA RENEWABLE ENERGY	BANGALORE
5171.	SIEMENS GAMESA RENEWABLE ENERGY (P) LTD.	BANGALORE
5172.	SIEMENS GAMESA RENEWABLE ENERGY ECPL	BANGALORE
5173.	SIEMENS GAMESA RENEWABLE ENERGY ENGINEERING C.P.L.	BANGALORE
5174.	SIEMENS GAMESA RENEWABLES ENERGY ECPL	BANGALORE
5175.	SIEMENS GAMESA WIND POWER	BANGALORE
5176.	SIEMENS HEALTHCARE (P) LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
5177.	SIEMENS HEALTHCARE (P) LTD.	GOA
5178.	SIEMENS HEALTHINEERS	BANGALORE
5179.	SIEMENS HEALTHINEERS	GOA
5180.	SIEMENS INDUSTRY SOFTWARE (I) (P) LTD.	PUNE
5181.	SIEMENS INDUSTRY SOFTWARE LTD.	CHENNAI
5182.	SIEMENS INDUSTY SOFTWARE (I) (P) LTD.	DELHI
5183.	SIEMENS LLC	DUBAI
5184.	SIEMENS LTD.	AURANGABAD
5185.	SIEMENS LTD.	CHENNAI
5186.	SIEMENS LTD.	DELHI
5187.	SIEMENS LTD.	GOA
5188.	SIEMENS LTD.	GURGAON
5189.	SIEMENS LTD.	HYDERABAD
5190.	SIEMENS LTD.	JHARSUGUDA
5191.	SIEMENS LTD.	KOLKATA
5192.	SIEMENS LTD.	MUMBAI
5193.	SIEMENS LTD.	QATAR
5194.	SIEMENS LTD.	VADODARA
5195.	SIEMENS PLM SOFTWARE	PUNE
5196.	SIEMENS TECHNOLOGY (P) LTD.	BANGALORE
5197.	SIEMENS TECHNOLOGY AND SERVICES	PUNE
5198.	SIEMENS TECHNOLOGY AND SERVICES (P) LTD.	BANGALORE
5199.	SIEMENS TECHNOLOGY SERVICES (P) LTD.	BANGALORE
5200.	SIEMENS WLL	DOHA
5201.	SIENNA ECAD TECHNOLOGIES	BANGALORE
5202.	SIERRA CEDAR (I) (P) LTD.	HYDERABAD
5203.	SIEVERT EMIRATES INSPECTION LLC	DUBAI
5204.	SIFIVE INC.	PUNE
5205.	SIFT CONSULTANCY	BANGALORE
5206.	SIFY TECHNOLOGIES LTD.	CHENNAI
5207.	SIFY TECHNOLOGIES LTD. NOIDA SECTOR-132	DELHI
5208.	SIGED EMIRATES L.L.C	ABUDHABI
5209.	SIGMA ELECTRIC MANUFACTURING CORP (P) LTD.	PUNE
5210.	SIGMA ELECTRIC MANUFACTURING CORPORATION (P) LTD.	DELHI
5211.	SIGMA ENGINEERING	CHENNAI
5212.	SIGMA ENGINEERING WORKS	DUBAI
5213.	SIGNIFY INNOVATIONS (I) LTD.	BANGALORE
5214.	SIGNODE (I) LTD.	HYDERABAD
5215.	SIGNODE INDAI LTD.	PUNE
5216.	SIGNODE INDIA	CHENNAI
5217.	SII (I) IT AND ENGINEERING SERVICE PVT	BANGALORE
5218.	SIKICH (I) TECHNOLOGIES	PUNE
5219.	SILERGY TECHNOLOGIES	DELHI
5220.	SILVERSKILLS (P) LTD.	GURGAON
5221.	SILVERTECH MIDDLE EAST	DUBAI
5222.	SIM INFOSYSTEMS (P) LTD.	CHENNAI
5223.	SIMHAPURI HOSPITAL	CHENNAI
5224.	SIMILITY SOFTWARE SERVICES (I) (P) LT	BANGALORE
5225.	SIMON (I) LTD.	MUMBAI
5226.	SIMPLEWORKS AI (P) LTD.	HYDERABAD
5227.	SIMPLEWORKS SOLUTIONS (P) LTD.	BANGALORE
5228.	SIMPLEX INFRASTRUCTURES LTD.	KOLKATA
5229.	SIMS HOSPITAL	CHENNAI
5230.	SINENG ELECTRIC (I) (P) LTD.	BANGALORE
5231.	SINGAPORE MANAGEMENT UNIVERSITY	SINGAPORE
5232.	SINMEC ENGINEERING SERVICES (I) (P) LTD.	CHENNAI
5233.	SINTO BHARAT MANUFACTURING (P) LTD.	CHENNAI
5234.	SIPC SERVICES	HYDERABAD
5235.	SIR H N RELIANCE FOUNDATION HOSPITAL	MUMBAI
5236.	SIROYA DENTAL CLINIC	MUMBAI
5237.	SITEL (I) (P) LTD.	HYDERABAD
5238.	SIVANI PHARMA AND SURGICALS DISTRIBUTION	DELHI
5239.	SIVASAKTHI PRECISION TOOLS	COIMBATORE
5240.	SIX CONSTRUCT	DUBAI
5241.	SIXDEE TELECOM SOLUTION (P) LTD.	BANGALORE
5242.	SKAAS TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
5243.	SKANDA AEROSPACE TECHNOLOGY (P) LTD.	HYDERABAD
5244.	SKARDIN INDUSTRIAL CORP	TAIWAN
5245.	SKAVA SYSTEMS (P) LTD.	COIMBATORE
5246.	SKF (I) LTD.	BANGALORE
5247.	SKF (I) LTD.	PUNE

S.No.	ORGANIZATION	LOCATION
5248.	SKF TECHNOLOGIES (I) (P) LTD.	BANGALORE
5249.	SKILLNET SOLUTIONS (I) (P) LTD.	MUMBAI
5250.	SKORUZ	BANGALORE
5251.	SKORUZ TECHNOLOGY (P) LTD.	BANGALORE
5252.	SKP BUSINESS CONSULTING LLP	PUNE
5253.	SKYBAND	BANGALORE
5254.	SKYBAND	PUNE
5255.	SKYLINE SEMICONDUCTOR SERIVES	DELHI
5256.	SLK SOFTWARE SERVICES (P) LTD.	BANGALORE
5257.	SM ELECTRONICS (P) LTD.	BANGALORE
5258.	SMAK SOFTWARE	CHENNAI
5259.	SMALL SPARK CONCEPTS	PUNE
5260.	SMART IMS	HYDERABAD
5261.	SMART INFORMATION MANAGEMENT SYSTEMS	HYDERABAD
5262.	SMART IOPS	MUMBAI
5263.	SMARTIOPS	BANGALORE
5264.	SMARTMEGH SOLUTIONS	CHENNAI
5265.	SMARTRON (I) (P) LTD.	BANGALORE
5266.	SMARTRON (I) (P) LTD.	HYDERABAD
5267.	SMARTSOC SOLUTIONS (P) LTD.	HYDERABAD
5268.	SMARTSTREAM TECHNOLOGIES (P) LTD.	BANGALORE
5269.	SMARTSTREAM TECHNOLOGIES (P) LTD.	MUMBAI
5270.	SMCSI MEDICAL COLLEGE KARAKKONAM	CHENNAI
5271.	SMILEASY DENTAL CARE	CHENNAI
5272.	SMILES FOUNDATION	HYDERABAD
5273.	SMM TECH SOLUTIONS	MYSORE
5274.	SMR AUTOMOTIVE SYSTEMS (I) LTD.	CHENNAI
5275.	SN INDUSTRIAL CONSULTANTS	BANGALORE
5276.	SNAM ALLOYS (P) LTD.	HOSUR
5277.	SNAMPROGETTI SAUDI ARABIA CO LTD. (SAIPEM)	CHENNAI
5278.	SNAPDEAL	BANGALORE
5279.	SNAPDEAL	GURGAON
5280.	SNAPDEAL	PUNE
5281.	SNC- LAVALIN INTERNATIONAL- INC	DUBAI
5282.	SNIMS CHALAKKA NORTH KUTHIYATHODE	BANGALORE
5283.	SOCIETE GENERALE GLOBAL SOLUTIONS CENTER	BANGALORE
5284.	SOCIETE GENERALE GLOBAL SOLUTIONS CENTRE	CHENNAI
5285.	SOCIETY OF NUTRITION EDUCATION AND HEAL	MUMBAI
5286.	SOCOMEC INNOVATIVE POWER SOLUTIONS	MUMBAI
5287.	SOCTRONICS (P) LTD.	HYDERABAD
5288.	SOCTRONICS TECHNOLOGIES (P) LTD.	HYDERABAD
5289.	SOFTLABAS	HYDERABAD
5290.	SOFTLINK ASIA (P) LTD.	FARIDABAD
5291.	SOFTTEK (I) (P) LTD.	BANGALORE
5292.	SOFTTEK (I) (P) LTD.	HYDERABAD
5293.	SOFTWARE AG	BANGALORE
5294.	SOFTWARE AG	CHENNAI
5295.	SOFTWARE AG TECHNOLOGIES (P) LTD.	BANGALORE
5296.	SOFTWARE AG TECHNOLOGIES (P) LTD.	CHENNAI
5297.	SOFTWARE DATA (I) LTD.	DELHI
5298.	SOFTWARE TECHNOLOGY PARKS OF INDIA MEIT	SRINAGAR
5299.	SOFTWAREAG	CHENNAI
5300.	SOGEFI MNR	GURGAON
5301.	SOHAMSAA SYSTEM (P) LTD.	BANGALORE
5302.	SOHAR ALUMINIUM COMPANY	CHENNAI
5303.	SOLITON TECHNOLOGIES (P) LTD.	COIMBATORE
5304.	SOLTIUS ME	DUBAI
5305.	SOLUTIONS MIDDLE EAST	DUBAI
5306.	SOLUTIONSMAX TECHNOLOGY SERVICES	VISAKHAPATNAM
5307.	SOLVEDGE	CHENNAI
5308.	SOMA ISOLUX SURAT HAZIRA TOLLWAY (P) LT	SURAT
5309.	SOMI CONVEYOR BELTING LTD.	JODHPUR
5310.	SOMIC ZF COMPONENTS (P) LTD.	GURGAON
5311.	SONA BLW PRECISION FORGINGS LTD.	GURGAON
5312.	SONA COMSTAR	DELHI
5313.	SONATA SOFTWARE LTD.	BANGALORE
5314.	SONDREL IC DESIGN SERVICES	HYDERABAD
5315.	SONIM TECHNOLOGIES	BANGALORE
5316.	SONY (I) SOFTWARE CENTRE (P) LTD.	BANGALORE
5317.	SOPHOS TECHNOLOGIES	BANGALORE
5318.	SOPRA STERIA	DELHI

S.No.	ORGANIZATION	LOCATION
5319.	SOPRA STERIA	NOIDA
5320.	SOURCESOL INTERACTIVE TECHNOLOGIES (P) LTD.	CHENNAI
5321.	SOURIAU (I) (P) LTD.	COCHIN
5322.	SOUTH (I) KRISHNAN OILS AND FATS (P) L	NELLORE
5323.	SOUTH INDIAN BANK	ERNAKULAM
5324.	SOUTH WEST CERTIFICATION SERVICES	DUBAI
5325.	SP ULTRAFLEX SYSTEMS (P) LTD.	THANE
5326.	SPAINET (P) LTD.	GURGAON
5327.	SPARK MINDA	CHENNAI
5328.	SPARK MINDA TECHNICAL CENTRE	PUNE
5329.	SPB CORPORATION LTD.	LONDON
5330.	SPECTRAMEDIX	DELHI
5331.	SPECTRANET NIGERIA LTD.	MUMBAI
5332.	SPECTRUM CONSULTANT (P) LTD.	HYDERABAD
5333.	SPECTRUM DYES & CHEMICALS (P) LTD.	SURAT
5334.	SPHENIX WORLD WIZ LTD.	PUNE
5335.	SPICER (I) (P) LTD.	RUDRAPUR
5336.	SPICER (I) (P) LTD.	UTTARAKHAND
5337.	SPIME (I) TECHNOLOGIES (A TRIMBLE COM	CHENNAI
5338.	SPIRAX SARCO (I) (P) LTD.	CHENNAI
5339.	SPIRENT COMMUNICATIONS (P) LTD.	BANGALORE
5340.	SPLASH GULF	DUBAI
5341.	SPONTEY COMPUTER SYSTEMS (P) . LTD.	BANGALORE
5342.	SPOTFLOCK TECHNOLOGIES (P) LTD.	HYDERABAD
5343.	SPRAYING SYSTEMS (I) (P) LTD.	KOLKATA
5344.	SPRINKLR (I) (P) LTD.	BANGALORE
5345.	SPXFLOW	PUNE
5346.	SQS (I) INFOSYSTEMS (P) LTD.	PUNE
5347.	SQUARE YARDS CONSULTING (P) LTD.	GURGAON
5348.	SRC LABORATORIES (P) LTD.	HYDERABAD
5349.	SREE AMARAVATHI MULTISPECIALITY HOSPITAL	CHENNAI
5350.	SREE ENTERPRISE	CHENNAI
5351.	SREE NARAYANA INSTITUTE OF MEDICAL SCIENCES	COIMBATORE
5352.	SREE SHYAM SAYI CORPORATION (P) LTD.	CHENNAI
5353.	SRF LTD.	INDORE
5354.	SRF LTD.	MANALI
5355.	SRF LTD.	MUMBAI
5356.	SRF LTD.	PUNE
5357.	SRI KRISHNA INDUSTRIES	HOSUR
5358.	SRI MANIDWEEPA TRIPURA MAHASHKTI PEETHAM	KARMANGHAT
5359.	SRI SAI ENTERPRISES	CHENNAI
5360.	SRI SAI RAM TECHNOLOGIES	BANGALORE
5361.	SRIC IIT KHARAGPUR	KOLKATA
5362.	SRI-D	DELHI
5363.	SRIJA SOLUTIONS (P) LTD.	PUNE
5364.	SRIJAN TECHNOLOGIES	CHENNAI
5365.	SRIJAN TECHNOLOGIES (P) LTD.	BANGALORE
5366.	SRL DIAGNOSTICS (P) LTD.	MUMBAI
5367.	SRM TECHNOLOGIES (P) LTD.	CHENNAI
5368.	SRS ENTERPRISES	PUNE
5369.	SS CONSULTANTS	CHENNAI
5370.	SS INFRASTRUCTURE DEVELOPMENT CONSULTANT	HYDERABAD
5371.	SS&C GLOBE OP	MUMBAI
5372.	SSA INFOSYSTEMS (P) LTD.	DELHI
5373.	SSA IT CONSULTING SDN BHD	KUALALUMPUR
5374.	SSIR	BANGALORE
5375.	SSNC GLOBEOP FINANCIAL COMP.	MUMBAI
5376.	SSNC GLOBEOP FINANCIAL SERVICES	MUMBAI
5377.	SSNC GLOBEOP FINANCIAL SERVICES TECHNOLOGIES	MUMBAI
5378.	SSS CREATION	CHENNAI
5379.	ST MARTINS HOSPITAL	WAYANAD
5380.	ST MICROELECTRONICS (P) LTD.	DELHI
5381.	ST MICROELECTRONICS (P) LTD.	NOIDA
5382.	STAMPEDE CAPITAL LTD.	HYDERABAD
5383.	STANDARD CHARTERED BANK	HYDERABAD
5384.	STANDARD CHARTERED GBS (P) LTD.	CHENNAI
5385.	STANDARD CHARTERED GLOBAL BUSINESS SERVI	CHENNAI
5386.	STANDARD CHARTERED GLOBAL BUSINESS SERVICES	BANGALORE
5387.	STANDAV	HYDERABAD
5388.	STANDERD CHARTERED GLOBAL SERVICES	BANGALORE
5389.	STANDOUT IT SOLUTIONS	ERNAKULAM

S.No.	ORGANIZATION	LOCATION
5390.	STAR (I) (P) LTD.	MUMBAI
5391.	STAR CEMENT ADITYA BIRLA GROUP ULTRATECH	UAE
5392.	STAR CEMENT CO. L.L.C	DUBAI
5393.	STAR CEMENT CO. LLC	DUBAI
5394.	STAR CEMENT COMPANY	UAE
5395.	STAR GULF/BOS-SHELF LLC	AZERBAIJAN
5396.	STAR HEALTH AND ALLIED INSURANCE CO LTD.	CHENNAI
5397.	STAR HOSPITAL	HYDERABAD
5398.	STARTAPP GLOBAL	FARIDABAD
5399.	STATE BANK OF INDIA	COIMBATORE
5400.	STATE STREET CORPORATION	HYDERABAD
5401.	STATE STREET GLOBAL ADVISERS	BANGALORE
5402.	STATE TECHNICAL EDUCATION	JAMMUANDKASHMIR
5403.	STEEL AUTHORITY OF (I) LTD.	BHILAI
5404.	STEEL AUTHORITY OF (I) LTD.	BOKARO
5405.	STEEL PLANTECH (I) (P) LTD.	KOLKATA
5406.	STEEL STRIPS WHEELS LTD.	JAMSHEDPUR
5407.	STELIS BIOPHARMA PVT.LTD	BANGALORE
5408.	STEMROBO TECHNOLOGIES (P) LTD.	NOIDA
5409.	STERLING & WILSON (P) LTD.	KOLKATA
5410.	STERLING & WILSON (P) LTD.	MUMBAI
5411.	STERLING AND WILSON	MUMBAI
5412.	STERLING AND WILSON (P) LTD.	KOLKATA
5413.	STERLITE POWER TRANSMISSION LTD.	JHARSUGUDA
5414.	STERLITE TECHNOLOGIES LTD.	AURANGABAD
5415.	STERLITE TECHNOLOGIES LTD.	GURGAON
5416.	STHAPATYA CONSULTANT (I) (P) LTD.	AMRAVATI
5417.	STMICROELECTRONICS (P) LTD.	DELHI
5418.	STMICROELECTRONICS (P) LTD.	NOIDA
5419.	STONCOR MIDDLE EAST LLC	DUBAI
5420.	STOREMOTION FURNITURE INDUSTRY LLC	BANGALORE
5421.	STORK RUBBER PRODUCTS (P) LTD.	NOIDA
5422.	STRATA MANUFACTURING	DUBAI
5423.	STRATA MANUFACTURING PJSC	UAE
5424.	STRATOSPHERE IT SERVICES (P) LTD.	HYDERABAD
5425.	STRIDES SHASUN LTD.	BANGALORE
5426.	STRING BIO (P) LTD.	BANGALORE
5427.	STRUCTURAL SOLUTIONS (P) LTD.	HYDERABAD
5428.	STRYKER	DELHI
5429.	STRYKER GLOBAL TECHNOLOGY CENTRE	GURGAON
5430.	STTELEMEDIA GDC I (P) LTD.	CHENNAI
5431.	SUBEX LTD.	BANGALORE
5432.	SUBROS LTD.	CHENNAI
5433.	SUBROS LTD.	NOIDA
5434.	SUCHI HOSPITAL	MUMBAI
5435.	SUDHA HOSPITAL	CHENNAI
5436.	SUHNER (I) PVT.LTD.	BANGALORE
5437.	SULZER (I) (P) LTD.	PUNE
5438.	SULZER CHEMTECH UK LTD.	MUMBAI
5439.	SUN LIFE (I) SERVICE CENTRE (P) LTD.	DELHI
5440.	SUN MOBILITY (P) LTD.	BANGALORE
5441.	SUN PHARMA ADVANCED RESEARCH CO. LTD.	BARODA
5442.	SUN PHARMA ADVANCED RESEARCH CO. LTD.	GURGAON
5443.	SUN PHARMA ADVANCED RESEARCH CO. LTD.	MUMBAI
5444.	SUN PHARMACEUTICAL INDUSTRIES LTD.	BARODA
5445.	SUN PHARMACEUTICAL INDUSTRIES LTD.	DELHI
5446.	SUN PHARMACEUTICAL INDUSTRIES LTD.	GURGAON
5447.	SUN PHARMACEUTICALS INDUSTRIES LTD.	BARODA
5448.	SUN PHARMACEUTICALS INDUSTRIES LTD.	GURGAON
5449.	SUN PHARMACEUTICALS INDUSTRIES LTD.	MUMBAI
5450.	SUN PHARMACEUTICALS INDUSTRIES LTD.	VADODARA
5451.	SUNBEAM AUTO (P) LTD.	GURGAON
5452.	SUNDARAM AUTO COMPONENTS LTD.	BANGALORE
5453.	SUNDARAM AUTO COMPONENTS LTD.	CHENNAI
5454.	SUNDARAM AUTO COMPONENTS LTD.	HOSUR
5455.	SUNDARAM AUTO COMPONENTS LTD.	MYSORE
5456.	SUNDARAM BRAKE LININGS LTD.	CHENNAI
5457.	SUNDARAM CLAYTON LTD.	CHENNAI
5458.	SUNDARAM CLAYTON LTD.	HOSUR
5459.	SUNDARAM FASTENERS LTD.	CHENNAI
5460.	SUNDARAM MEDICAL FOUNDATION	CHENNAI

S.No.	ORGANIZATION	LOCATION
5461.	SUNDARAM MEDICAL FOUNDATION CHENNAI	CHENNAI
5462.	SUNDRAM FASTENERS LTD.	BANGALORE
5463.	SUNDRAM FASTENERS LTD.	CHENNAI
5464.	SUNDRAM FASTENERS LTD.	PUDUCHERRY
5465.	SUNDYOTA NUMANDIS RESEARCH & FORMULATION	AHMEDABAD
5466.	SUNGARD AVAILABILITY SERVICES (I) (P) LTD.	PUNE
5467.	SUNGARD AVAILIBILITY SERVICES	BANGALORE
5468.	SUNGARD IT AVAILABILITY SERVICES	BANGALORE
5469.	SUNMACHX ENGINEERING INDUSTRIES	TRICHY
5470.	SUNPHARMA	HALOL
5471.	SUNPHARMACEUTICAL INDUSTRIES LTD.	GURGAON
5472.	SUNPHARMACEUTICAL INDUSTRIES LTD.	SUNPHARMA
5473.	SUNPHARMACEUTICAL INDUSTRIES LTD.	VADODARA
5474.	SUNPOWER (I) VENTURES (P) LTD.	PUNE
5475.	SUNSMART IP SERVICES	BANGALORE
5476.	SUPER AUTO FORGE (P) LTD.	CHENNAI
5477.	SUPER HIGHWAY LABS (P) LTD.(SHUTTL)	GURGAON
5478.	SUPER SMELTERS LTD.	KOLKATA
5479.	SUPERSIKE GAMES (P) LTD.	DELHI
5480.	SUPRAJA HOSPITALS	HYDERABAD
5481.	SUPREME TELECOMMUNICATIONS LTD.	BANGALORE
5482.	SURELOCK PLASTICS (P) LTD.	MUMBAI
5483.	SURESH COMMUNICATIONS	HYDERABAD
5484.	SURETECH INFRASTRUCTURE (P) LTD.	MUMBAI
5485.	SUREWAVES MEDIATECH (P) LTD.	BANGALORE
5486.	SURIN AUTOMOTIVE (P) LTD.	BANGALORE
5487.	SURIN AUTOMOTIVE (P) LTD. PUNE	PUNE
5488.	SURTEL TECHNOLOGIES (P) LTD.	INDORE
5489.	SURYA AROMATIC & ESSENTIAL OILS	DELHI
5490.	SURYA HOSPITAL	MUMBAI
5491.	SURYAGEN RENEWABLE ENERGY (P) LTD.	BANGALORE
5492.	SUSMITHAM DENTAL CLINIC	CHENNAI
5493.	SUTHERLAND	COIMBATORE
5494.	SUTHERLAND GLOBAL SERVICES	CHENNAI
5495.	SUVEN LIFE SCIENCES LTD.	HYDERABAD
5496.	SUZLON ENERGY LTD.	BANGALORE
5497.	SUZLON ENERGY LTD.	PUNE
5498.	SUZUKI MOTORCYCLE (I) (P) LTD.	GURGAON
5499.	SVIMTECH SOFTWARE PVT.LTD.	DELHI
5500.	SWASTIK INFRA LOGICS (I) (P) LTD.	BANGALORE
5501.	SWAYAM EDUCATIONAL INSTITUTE	MUMBAI
5502.	SWIFTANT IT SOLUTIONS	BANGALORE
5503.	SWIFTANT IT SOLUTIONS	HOSUR
5504.	SWIGGY	BANGALORE
5505.	SWITCHGEAR ELECTROMECHANICAL L.L.C	DUBAI
5506.	SWORD GLOBAL(INDIA) (P) LTD.	CHENNAI
5507.	SYMANTEC	BANGALORE
5508.	SYMANTEC SOFTWARE (I) (P) LTD.	CHENNAI
5509.	SYMANTEC SOFTWARE (I) (P) LTD.	PUNE
5510.	SYMANTEC SOFTWARE AND SERVICES (I) PVT	CHENNAI
5511.	SYMANTEC SOFTWARE AND SERVICES (I) PVT	PUNE
5512.	SYMBIANCE PHARMA SOLUTIONS	CHENNAI
5513.	SYMMETRIC ENGINEERING	BANGALORE
5514.	SYMONY SYSTEMS AND SOLUTIONS (P) LTD.	DELHI
5515.	SYMPHONY FINTECH SOLUTIONS (P) LTD.	MUMBAI
5516.	SYMPHONY RETAIL AI	BANGALORE
5517.	SYNAMEDIA TECHNOLOGIES (I) (P) LTD.	BANGALORE
5518.	SYNAPSE DESIGN	BANGALORE
5519.	SYNAPSE TECHNO DESIGN (P) LTD.	BANGALORE
5520.	SYNAPSE TECHNO DESIGN INNOVATIONS (P) L	BANGALORE
5521.	SYNAPSE TECHNO DESIGN INNOVATIONS (P) LT	BANGALORE
5522.	SYNAPTICS	HYDERABAD
5523.	SYNAXIS SAVETO L.L.C.	ABUDHABI
5524.	SYNCHRONOSS TECHNOLOGIES	BANGALORE
5525.	SYNCHRONY FINANCIAL	HYDERABAD
5526.	SYNECHRON TECHNOLOGIES (P) LTD.	CHENNAI
5527.	SYNECHRON TECHNOLOGIES (P) LTD.	PUNE
5528.	SYNERGIES CASTINGS LTD.	VISAKHAPATNAM
5529.	SYNERGY MARITIME (P) LTD.	CHENNAI
5530.	SYNERZIP SOFTECH (I) (P) LTD.	PUNE
5531.	SYNFINITY MANAGEMENT CONSULTANTS (P) LTD.	BANGALORE

S.No.	ORGANIZATION	LOCATION
5532.	SYNGENE INTERNATIONAL	BANGALORE
5533.	SYNOPSYS (I) (P) LTD.	BANGALORE
5534.	SYNOPSYS (I) (P) LTD.	DELHI
5535.	SYNOPSYS (I) (P) LTD.	HYDERABAD
5536.	SYNOPSYS (I) (P) LTD.	MUMBAI
5537.	SYNOPSYS (I) (P) LTD.	NOIDA
5538.	SYNOPSYS (I) (P) LTD.	SRILANKA
5539.	SYNTEL TELECOM- ARVIND LTD.	CHENNAI
5540.	SYNTEL TELECOM- ARVIND LTD.	GURGAON
5541.	SYNTEL TELECOM- ARVIND LTD.	PUNE
5542.	SYNTHESIS WINDING TECHNOLOGIES (P) LTD.	BANGALORE
5543.	SYSDOC TECHNOLOGIES (P) LTD.	BANGALORE
5544.	SYSNUCLEUS	KOCHI
5545.	SYSTECH SOLUTIONS (P) LTD.	BANGALORE
5546.	SYSTECH SOLUTIONS (P) LTD.	CHENNAI
5547.	SYSTECH SOLUTIONS (P) LTD.	PUNE
5548.	SYSTEM CONSULTANT INFORMATION INDIA	BANGALORE
5549.	SYSTEM SOFT TECHNOLOGIES	HYDERABAD
5550.	SYSTEMATIC STEEL INDUSTRIES LTD.	MUMBAI
5551.	SYSWEAVE TECHNOCRAFT (P) LTD.	PUNE
5552.	T M INPUTS & SERVICES (P) LTD.	HYDERABAD
5553.	T&AS DESIGNTECH SERVICES (P) LTD.	HYDERABAD
5554.	T.V.S SUNDRAM FASTENERS LTD. PADI CHENNAI	CHENNAI
5555.	TAALTECH	BANGALORE
5556.	TACO	JAMSHEDPUR
5557.	TAEGUTEC (I) (P) LTD.	BANGALORE
5558.	TAFE	BANGALORE
5559.	TAFE CHENNAI	CHENNAI
5560.	TAG CORPORATION	CHENNAI
5561.	TAGROS CHEMICALS (I) LTD.	CUDDALORE
5562.	TAIKISHA ENGINEERING (I) (P) LTD.	GURGAON
5563.	TAJ AIR LTD.	MUMBAI
5564.	TAKAHATA PRECISION (I) (P) LTD.	NEEMRANA
5565.	TAKASAGO ENGINEERING (I) (P) LTD.	BANGALORE
5566.	TAKREER REFINERY	ABUDHABI
5567.	TAL MANUFACTURING SOLUTIONS LTD.	BELGAUM
5568.	TAL MANUFACTURING SOLUTIONS LTD.	HYDERABAD
5569.	TAL MANUFACTURING SOLUTIONS LTD.	NAGPUR
5570.	TAL MANUFACTURING SOLUTIONS LTD.	PUNE
5571.	TALENTICA SOFTWARE	PUNE
5572.	TALENTMICRO INNOVATIONS (P) LTD.	BANGALORE
5573.	TALLY SOLUTIONS (P) LTD.	BANGALORE
5574.	TAMIL NADU ROAD DEVELOPMENT CO. LTD.	CHENNAI
5575.	TANGO TELECOM	MUMBAI
5576.	TAPCOENPRO	ENGLAND
5577.	TAPZO	BANGALORE
5578.	TARGET CORPORATION INDIA	BANGALORE
5579.	TARGET CORPORATION LTD.	BANGALORE
5580.	TARGET ENGINEERING CONSTRUCTION COMPANY	ABUDHABI
5581.	TARGET ENGINEERING LLC	DUBAI
5582.	TARGET EXECUTIVE SERVICES (P) LTD.	HYDERABAD
5583.	TARGET INDIA	BANGALORE
5584.	TARGETINGMANTRA	GURGAON
5585.	TASEC LTD.	GURGAON
5586.	TATA ADVANCED MATERIAL LTD.	BANGALORE
5587.	TATA ADVANCED MATERIALS LTD.	BANGALORE
5588.	TATA ADVANCED SYSTEMS	HYDERABAD
5589.	TATA ADVANCED SYSTEMS LTD.	BANGALORE
5590.	TATA ADVANCED SYSTEMS LTD.	DELHI
5591.	TATA ADVANCED SYSTEMS LTD.	HYDERABAD
5592.	TATA ADVANCED SYSTEMS LTD.	TELANGANA
5593.	TATA AUTOCOMP SYSTEMS LTD.	PUNE
5594.	TATA AUTOCOMP SYSTEMS LTD.	UTTARAKHAND
5595.	TATA BOEING AEROSPACE LTD.	HYDERABAD
5596.	TATA COMMUNICATIONS LTD.	BANGALORE
5597.	TATA COMMUNICATIONS LTD.	CHENNAI
5598.	TATA COMMUNICATIONS LTD.	DELHI
5599.	TATA COMMUNICATIONS LTD.	MUMBAI
5600.	TATA COMMUNICATIONS LTD.	PUNE
5601.	TATA CONSULTANCY LTD.	CHENNAI
5602.	TATA CONSULTANCY SERVICE	CHENNAI

S.No.	ORGANIZATION	LOCATION
5603.	TATA CONSULTANCY SERVICES	BANGALORE
5604.	TATA CONSULTANCY SERVICES	CHENNAI
5605.	TATA CONSULTANCY SERVICES	COIMBATORE
5606.	TATA CONSULTANCY SERVICES	DELHI
5607.	TATA CONSULTANCY SERVICES	HYDERABAD
5608.	TATA CONSULTANCY SERVICES (P) LTD.	AHMEDABAD
5609.	TATA CONSULTANCY SERVICES (P) LTD.	AMARESH
5610.	TATA CONSULTANCY SERVICES (P) LTD.	BANGALORE
5611.	TATA CONSULTANCY SERVICES (P) LTD.	BUDAPEST
5612.	TATA CONSULTANCY SERVICES (P) LTD.	CHENNAI
5613.	TATA CONSULTANCY SERVICES (P) LTD.	DELHI
5614.	TATA CONSULTANCY SERVICES (P) LTD.	GURGAON
5615.	TATA CONSULTANCY SERVICES (P) LTD.	KOCHI
5616.	TATA CONSULTANCY SERVICES (P) LTD.	KOLKATA
5617.	TATA CONSULTANCY SERVICES (P) LTD.	KUALALUMPUR
5618.	TATA CONSULTANCY SERVICES (P) LTD.	LUCKNOW
5619.	TATA CONSULTANCY SERVICES (P) LTD.	MUMBAI
5620.	TATA CONSULTANCY SERVICES (P) LTD.	NOIDA
5621.	TATA CONSULTANCY SERVICES (P) LTD.	PUDUPAKKAM
5622.	TATA CONSULTANCY SERVICES (P) LTD.	PUNE
5623.	TATA CONSULTANCY SERVICES (P) LTD.	TELANGANA
5624.	TATA CONSULTANCY SERVICES LTD.	BANGALORE
5625.	TATA CONSULTANCY SERVICES LTD.	CHENNAI
5626.	TATA CONSULTANCY SERVICES LTD.	DELHI
5627.	TATA CONSULTANCY SEVICES	BANGALORE
5628.	TATA CONSULTING ENGINEERS	PUNE
5629.	TATA CONSULTING ENGINEERS LTD.	KOLKATA
5630.	TATA CUMMINS (I) PVT.LTD.	PUNE
5631.	TATA ELXSI	BANGALORE
5632.	TATA ELXSI	COIMBATORE
5633.	TATA ELXSI LTD.	BANGALORE
5634.	TATA ELXSI LTD.	CHENNAI
5635.	TATA ELXSI LTD.	HYDERABAD
5636.	TATA ELXSI LTD.	PUNE
5637.	TATA ELXSI LTD.	THIRUVANANTHAPURAM
5638.	TATA HEALTH	BANGALORE
5639.	TATA HOUSING DEVELOPMENT CO LTD.	MUMBAI
5640.	TATA INSTITUTE OF FUNDAMENTAL RESEARCH	MUMBAI
5641.	TATA MARCOPOLO MOTORS	DHARWAD
5642.	TATA MARCOPOLO MOTORS LTD.	BANGALORE
5643.	TATA MEMORIAL CENTRE	MUMBAI
5644.	TATA MOTORS	KOLKATA
5645.	TATA MOTORS	PUNE
5646.	TATA MOTORS (P) LTD.	AHMEDABAD
5647.	TATA MOTORS (P) LTD.	DHARWAD
5648.	TATA MOTORS (P) LTD.	GURGAON
5649.	TATA MOTORS (P) LTD.	JAIPUR
5650.	TATA MOTORS (P) LTD.	JAMESHPUR
5651.	TATA MOTORS (P) LTD.	JAMSHEDPUR
5652.	TATA MOTORS (P) LTD.	LUCKNOW
5653.	TATA MOTORS (P) LTD.	PUNE
5654.	TATA MOTORS ERC	PUNE
5655.	TATA MOTORS FINANCE SOLUTIONS LTD.	KOLHAPUR
5656.	TATA MOTORS LTD.	DELHI
5657.	TATA MOTORS LTD.	HYDERABAD
5658.	TATA MOTORS LTD.	KOLKATA
5659.	TATA MOTORS PANTNAGAR	DELHI
5660.	TATA POWER	AJMER
5661.	TATA POWER	BANGALORE
5662.	TATA POWER	BHIVPURI
5663.	TATA POWER	HALDIA
5664.	TATA POWER	JAMSHEDPUR
5665.	TATA POWER	JOJOBERA
5666.	TATA POWER	KALINGANAGAR
5667.	TATA POWER	MAITHON
5668.	TATA POWER	MUMBAI
5669.	TATA POWER	RAIGARH
5670.	TATA POWER	TROMBAY
5671.	TATA POWER DELHI DISTRIBUTION LTD.	GOA
5672.	TATA POWER SOLAR SYSTEMS LTD.	BANGALORE
5673.	TATA PROJECTS LTD.	CHENNAI

S.No.	ORGANIZATION	LOCATION
5674.	TATA PROJECTS LTD.	COIMBATORE
5675.	TATA PROJECTS LTD.	DELHI
5676.	TATA PROJECTS LTD.	DUBAI
5677.	TATA PROJECTS LTD.	HYDERABAD
5678.	TATA PROJECTS LTD.	KOLKATA
5679.	TATA PROJECTS LTD.	MUMBAI
5680.	TATA PROJECTS LTD.	PUNE
5681.	TATA REALTY	DELHI
5682.	TATA SIKORSKY AEROSPACE LTD.	HYDERABAD
5683.	TATA SIKORSKY AEROSPACE LTD.	TELANGANA
5684.	TATA STEEL LTD.	JAMSHEDPUR
5685.	TATA STRIVE	PUNE
5686.	TATA TECHNOLOGIES LTD.	BANGALORE
5687.	TATA TECHNOLOGIES LTD.	CHENNAI
5688.	TATA TECHNOLOGIES LTD.	GURGAON
5689.	TATA TECHNOLOGIES LTD.	HYDERABAD
5690.	TATA TECHNOLOGIES LTD.	KOLKATA
5691.	TATA TECHNOLOGIES LTD.	PUNE
5692.	TATA TOYO RADIATORS LTD.	PUNE
5693.	TATAELXSI	BANGALORE
5694.	TATAMOTORS LTD. JAMSHEDPUR	KOLKATA
5695.	TATAPOWER SED	BANGALORE
5696.	TATA-SIKORSKY AEROSPACE LTD.	HYDERABAD
5697.	TATATECHNOLOGIES LTD.	KOLKATA
5698.	TATVASOFT	AHMEDABAD
5699.	TAURUS (P) LTD.	COIMBATORE
5700.	TAURUS GENERAL CONTRACTING LLC UAE	DUBAI
5701.	TAURUS POWERTRONICS (P) LTD.	BANGALORE
5702.	TAV TECHNOLOGIES	ABUDHABI
5703.	TAVANT TECHNOLOGIES	BANGALORE
5704.	TAVANT TECHNOLOGIES (P) LTD.	BANGALORE
5705.	TAXILLA IT SOLUTIONS (P) LTD.	HYDERABAD
5706.	TAYANA SOFTWARE SOLUTIONS	BANGALORE
5707.	TBEA ENERGY (I) (P) LTD.	VADODARA
5708.	TCT HOLIDAYS AND TECHNOLOGIES (P) LTD.	HYDERABAD
5709.	TE CONNECTIVITY (I) (P) LTD.	BANGALORE
5710.	TEACH GLOBAL SOLUTIONS PVT.LTD	HYDERABAD
5711.	TEAMF1 NETWORKS(D-LINK)	HYDERABAD
5712.	TEAMLEADER CONTRACTING COMPANY	DUBAI
5713.	TEAMLEASE /DEPLOYED BY GIESECKE AND DEVRIENT	PUNE
5714.	TEBODIN MIDDLE EAST	ABUDHABI
5715.	TECH MAHINDRA	BANGALORE
5716.	TECH MAHINDRA	CHENNAI
5717.	TECH MAHINDRA	KOLKATA
5718.	TECH MAHINDRA (P) LTD.	BANGALORE
5719.	TECH MAHINDRA LTD.	BANGALORE
5720.	TECH MAHINDRA LTD.	CHENNAI
5721.	TECH MAHINDRA LTD.	HYDERABAD
5722.	TECH MAHINDRA LTD.	PUNE
5723.	TECH VAISHNAV	HYDERABAD
5724.	TECHAVERA SOLUTIONS (P) LTD.	DELHI
5725.	TECHBINS SOLUTION LTD.	BANGALORE
5726.	TECHMAHIDNRA LTD.	MUMBAI
5727.	TECHMAHINDRA LTD.	ABUDHABI
5728.	TECHMAHINDRA LTD.	BANGALORE
5729.	TECHMAHINDRA LTD.	CHANDIGARH
5730.	TECHMAHINDRA LTD.	CHENNAI
5731.	TECHMAHINDRA LTD.	DELHI
5732.	TECHMAHINDRA LTD.	DUBAI
5733.	TECHMAHINDRA LTD.	MUMBAI
5734.	TECHMAHINDRA LTD.	NAGPUR
5735.	TECHMAHINDRA LTD.	NASHIK
5736.	TECHMAHINDRA LTD.	NOIDA
5737.	TECHMAHINDRA LTD.	RANCHI
5738.	TECHMATIC SYSTEMS	HYDERABAD
5739.	TECHNICAL CONCEPTS ARABIA	SAUDIARABIA
5740.	TECHNICAL OILFIELD SUPPLIES CENTRE	QATAR
5741.	TECHNICO INDUSTRIES LTD.	GURGAON
5742.	TECHNIP (I) LTD.	CHENNAI
5743.	TECHNIP (I) LTD.	MUMBAI
5744.	TECHNIP KUWAIT	HYDERABAD

S.No.	ORGANIZATION	LOCATION
5745.	TECHNIPFMC	DOHA
5746.	TECHNIPFMC	HYDERABAD
5747.	TECHNIPFMC	NOIDA
5748.	TECHNIPFMC ABU DHABI	ABUDHABI
5749.	TECHNO (I) NJR INSTITUTE AND TECHNOLOGY UDAIPUR	PUNE
5750.	TECHNO (I) NJR INSTITUTE OF TECHNOLOGY	UDAIPUR
5751.	TECHNOLOGY VENTURE MARINE EQPT LLC	DUBAI
5752.	TECHNOMED INDIA	DELHI
5753.	TECHNOSOFT ENGINEERING PROJECTS LTD.	MUMBAI
5754.	TECHNOSOLUTIONS & DESIGNS (P) LTD.	BANGALORE
5755.	TECHOLUTION (I) (P) LTD.	HYDERABAD
5756.	TECHOMAX AUTOMATION	DELHI
5757.	TECHOMEGA	HYDERABAD
5758.	TECHPROLABZ (P) LTD.	DELHI
5759.	TECHTRUNK VENTURES (P) LTD.	DELHI
5760.	TECHWAVE CONSULTING (I) (P) LTD.	HYDERABAD
5761.	TECNICAS REUNIDAS	DUBAI
5762.	TECRA SYSTEMS (P) LTD.	HYDERABAD
5763.	TECSOL SOFTWARE (P) LTD.	BANGALORE
5764.	TECTON ENGINEERING AND CONSTRUCTION CO	QATAR
5765.	TECUMSEH PRODUCTS (I) (P) LTD.	FARIDABAD
5766.	TEFUGEN TECHNOLOGIES (P) LTD.	TRICHY
5767.	TEJAS NETWORKS	BANGALORE
5768.	TEJAS NETWORKS LTD.	BANGALORE
5769.	TEJAS NETWORKS LTD.	DELHI
5770.	TEK SYSTEMS	PUNE
5771.	TEK TRAVELS (P) LTD.	DELHI
5772.	TEKSYSTEMS (ALLEGIS GROUP)	BANGALORE
5773.	TEKSYSTEMS (ALLEGIS GROUP)	HYDERABAD
5774.	TEKTRONIX (I) (P) LTD.	BANGALORE
5775.	TEKTRONIX (R&D) INDIA	BANGALORE
5776.	TELERAD TECH (P) LTD.	BANGALORE
5777.	TELESONIC (P) LTD.	HYDERABAD
5778.	TELIT COMMUNICATIONS (I) (P) LTD.	BANGALORE
5779.	TELSTRA (I) (P) LTD.	HYDERABAD
5780.	TEMENOS	BANGALORE
5781.	TEMENOS (I) (P) LTD.	CHENNAI
5782.	TENNECO AUTOMOTIVE (I) (P) LTD.	BANGALORE
5783.	TENNECO AUTOMOTIVE (I) (P) LTD.	HOSUR
5784.	TENOVA (I) (P) LTD.	CHENNAI
5785.	TENTACLE TECHNOLOGIES SDN BHD	KUALALUMPUR
5786.	TERADATA (I) (P) LTD.	BANGALORE
5787.	TERADATA (I) (P) LTD.	HYDERABAD
5788.	TERADATA (I) (P) LTD.	MUMBAI
5789.	TEREX (I) (P) LTD.	BANGALORE
5790.	TEREX (I) (P) LTD.	PUNE
5791.	TESSOLVE SEMICONDUCTOR (P) .LTD	BANGALORE
5792.	TESSOLVE SEMICONDUCTOR (P) LTD.	BANGALORE
5793.	TESSOLVE SEMICONDUCTORS (P) LTD.	BANGALORE
5794.	TESSOLVE SEMICONDUCTROS (P) LTD.	BANGALORE
5795.	TEST AND VERIFICATION SOLUTIONS (P) LTD.	BANGALORE
5796.	TEST AND VERIFICATION SOULTIONS	BANGALORE
5797.	TESTO ENGINEERING WORKS (P) LTD.	PUNE
5798.	TESTYANTRA (I) (P) LTD.	BANGALORE
5799.	TETRA PAK SOUTH EAST ASIA (P) LTD.	TETRAPAKSOUTH
5800.	TEVA API (I) (P) LTD.	DELHI
5801.	TEXAS INSTRUMENTS	BANGALORE
5802.	TEXAS INSTRUMENTS (I) (P) LTD.	BANGALORE
5803.	TEXAS INSTRUMENTS BANGALORE INDIA	BANGALORE
5804.	TEXAS INSTRUMENTS INDIA	BANGALORE
5805.	TEXTRON (I) (P) LTD.	BANGALORE
5806.	THALES	DELHI
5807.	THALES (I) (P) LTD.	BANGALORE
5808.	THALES ESECURITY	DELHI
5809.	THARMAX GLOBAL	DELHI
5810.	THARMAX GLOBAL	HYDERABAD
5811.	THARMAX GLOBAL	KOLKATA
5812.	THARMAX GLOBAL	PUNE
5813.	THDCIL	DELHI
5814.	THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA	PUNE
5815.	THE BOEING CO	BANGALORE

S.No.	ORGANIZATION	LOCATION
5816.	THE BOEING COMPANY	BANGALORE
5817.	THE CATHOLIC SYRIAN BANK LTD.	BANGALORE
5818.	THE DENTAL CLINIC	PUNJAGUTTA
5819.	THE EYE FOUNDATION	BANGALORE
5820.	THE EYE FOUNDATION	COIMBATORE
5821.	THE EYE VIEW DEVELOPERS (P) LTD.	SHARJAH
5822.	THE FEDERAL BANK LTD.	BANGALORE
5823.	THE HI TECH ROBOTIC SYSTEMZ LTD.	DELHI
5824.	THE HI-TECH GEARS LTD.	PUNE
5825.	THE HI-TECH ROBOTIC SYSTEMZ LTD.	DELHI
5826.	THE HI-TECH ROBOTIC SYSTEMZ LTD.	PUNE
5827.	THE INDIAN STEEL & WIRE PRODUCTS LTD.	KOLKATA
5828.	THE KANOO GROUP	ABUDHABI
5829.	THE MADRAS PHARMACEUTICALS	CHENNAI
5830.	THE MISSION HOSPITAL	KOLKATA
5831.	THE MISSION HOSPITAL DURGAPUR WEST BENGAL	DURGAPUR
5832.	THE OMAN CONSTRUCTION COMPANY	CHENNAI
5833.	THE PATENT OFFICE MINISTRY OF COMMERCE A	DELHI
5834.	THE RAMCO CEMENTS LTD.	ARIYALUR
5835.	THE RAMCO CEMENTS LTD.	TAMILNADU
5836.	THE TATA POWER CO. LTD.	MUMBAI
5837.	THE TATA POWER CO. LTD. STATERGIC	BANGALORE
5838.	THE TINPLATE CO. OF (I) LTD.	JAMSHEDPUR
5839.	THE WORLD BANK	CHENNAI
5840.	THE WORLD BANK GROUP	CHENNAI
5841.	THERMAX LTD.	CHENNAI
5842.	THERMAX LTD.	PUNE
5843.	THERMO FISHER SCIENTIFIC	BANGALORE
5844.	THINCI SEMICONDUCTORS	HYDERABAD
5845.	THINK FUTURE TECHNOLOGIES (P) LTD.	GURGAON
5846.	THINKNSOLUTIONS	CHENNAI
5847.	THINVENT TECHNOLOGIES (P) LTD.	MANESAR
5848.	THIRD I TECHNOSOFT (P) LMT.	PUNE
5849.	THOMASSEN SERVICES & CONTRACTING CO.LLC	DUBAI
5850.	THOMSON REUTERS	BANGALORE
5851.	THOMSON REUTERS INTERNATIONAL SERVICES P	BANGALORE
5852.	THOUGHTWORKS TECHNOLOGIES (I) (P) LTD.	GURGAON
5853.	THOUGHTWORKS TECHNOLOGIES (I) (P) LTD.	HYDERABAD
5854.	THOUGHTWORKS TECHNOLOGIES (I) (P) LTD.	PUNE
5855.	THRIVENI EARTHMOVERS (P) LTD.	JAMSHEDPUR
5856.	THUMBAY HOSPITAL	AJMAN
5857.	THUNDERSOFT (I) (P) LTD.	HYDERABAD
5858.	THYSSENKRUPP ELEVATORS QATAR	HYDERABAD
5859.	THYSSENKRUPP INDUSTRIES (I) (P) LTD.	PUNE
5860.	THYSSENKRUPP SYSTEM ENGINEERING (P) LTD.	HYDERABAD
5861.	THYSSENKRUPP SYSTEM ENGINEERING (P) LTD.	MUMBAI
5862.	THYSSENKRUPP SYSTEM ENGINEERING (P) LTD.	PUNE
5863.	THYSSENKRUPP SYSTEM ENGINEERING (P) LTD.	THANE
5864.	TIBCO SOFTWARE (I) (P) LTD.	BANGALORE
5865.	TIBCO SOFTWARE (I) (P) LTD.	HYDERABAD
5866.	TIETO (I) (P) LTD.	PUNE
5867.	TIFR HYDERABAD	HYDERABAD
5868.	TIGER ANALYTICS	BANGALORE
5869.	TIGER ANALYTICS	CHENNAI
5870.	TIL LTD.	KOLKATA
5871.	TIMES INTERNET (P) LTD.	GURGAON
5872.	TIMES INTERNET (P) LTD.	NOIDA
5873.	TIMES INTERNET LTD.	DELHI
5874.	TIMKEN ENGINEERING & RESEARCH (I) (P) LTD.	BANGALORE
5875.	TIPL AJMER	AJMER
5876.	TISMO TECHNOLOGY SOLUTIONS (P) LTD.	BANGALORE
5877.	TITAN CO. LTD.	BANGALORE
5878.	TITAN CO. LTD.	HOSUR
5879.	TITAN ENGINEERING & AUTOMATION LTD.	BANGALORE
5880.	TITAN ENGINEERING AND AUTOMA.	BANGALORE
5881.	TITAN ENGINEERING AND AUTOMATION	BANGALORE
5882.	TITAN ENGINEERING AND AUTOMATION LTD.	CHENNAI
5883.	TMEIC INDUSTRIAL SYSTEMS (I) (P) LTD.	HYDERABAD
5884.	TMF GROUP	DELHI
5885.	TMF SERVICES (I) (P) LTD.	DELHI
5886.	TML DRIVELINES LTD.	JAMSHEDPUR

S.No.	ORGANIZATION	LOCATION
5887.	TML DRIVELINES LTD.	LUCKNOW
5888.	TO THE NEW	DELHI
5889.	TOKAI RIKA MINDA (I) (P) LTD.	BANGALORE
5890.	TOKOPEDIA	NOIDA
5891.	TOLANI MARITIME INSTITUTE	PUNE
5892.	TOLANI PROJECTS (P) LTD.	GOA
5893.	TOLEDO ARABIA RIYASH	TOLEDOARABIA
5894.	TONGLIT AUTOGISTIC (P) LTD.	BANGALORE
5895.	TOOLTECH GLOBAL ENGINEERING PUNE	PUNE
5896.	TOPNET DISTRIBUTION	DUBAI
5897.	TORONTO DOMINION BANK SINGAPORE	HYDERABAD
5898.	TORRENT PHARMACEUTICALS LTD.	CHENNAI
5899.	TOSHIBA	DELHI
5900.	TOSHIBA (I) (P) LTD.	DELHI
5901.	TOSHIBA SOFTWARE (I) (P) LTD.	BANGALORE
5902.	TOSIL SYSTEMS (P) LTD.	BANGALORE
5903.	TOTAL DENTAL CARE	MIRAJ
5904.	TOTAL E&P QATAR	GOA
5905.	TOTAL OIL (I) (P) LTD.	HYDERABAD
5906.	TOTAL SYSTEM SERVICES	NOIDA
5907.	TOWNSCRIPT	PUNE
5908.	TOYOTA INDUSTRIES ENGINE (I) (P) LTD.	BANGALORE
5909.	TP VISION (I) (P) LTD.	BANGALORE
5910.	TPS INFRASTRUCTURE LTD.	BHILAI
5911.	TPSC (I) (P) LTD.	HYDERABAD
5912.	TRACKMYBEAT HEALTHCARE (I) (P) LTD.	DELHI
5913.	TRACTOR AND FARM EQUIPMENTS LTD.	CHENNAI
5914.	TRACTORS AND FARM EQUIPMENT LTD.	BANGALORE
5915.	TRACTORS AND FARM EQUIPMENT LTD.	CHENNAI
5916.	TRAINING AND TECHNICAL EDUCATION UTTARAK	HARIDWAR
5917.	TRANSASIA BIO MEDICALS LTD.	MUMBAI
5918.	TRANSCEND INFOSYSTEMS (P) LTD.	DELHI
5919.	TRANSCEND INFOSYSTEMS (P) LTD.	NOIDA
5920.	TRANTER (I) (P) LTD.	PUNE
5921.	TRAVANCORE ANALYTICS (P) LTD.	BANGALORE
5922.	TREDENCE ANALYTICS	BANGALORE
5923.	TRENCHANT TRADING SYSTEMS (P) LTD.	CHENNAI
5924.	TRENCHLESS ENGINEERING SERVICES (P) LTD.	DELHI
5925.	TRENDS ELECTROMECHANICAL WORKS LLC	DUBAI
5926.	TRI WORLD DEVELOPERS	ERNAKULAM
5927.	TRIAD SOFTWARE (P) LTD.	CHENNAI
5928.	TRIANGLE MARINE SERVICES	DUBAI
5929.	TRIANGULE	BANGALORE
5930.	TRIANZ HOLDINGS (P) LTD.	CHENNAI
5931.	TRICHY INSTITUTE FOR WELDING	TRICHY
5932.	TRICON INFOTECH LLP	BANGALORE
5933.	TRICORE SOLUTIONS (P) LTD.	NOIDA
5934.	TRIDENT INFOSOL	BANGALORE
5935.	TRIDENT INFOSOL (P) LTD.	BANGALORE
5936.	TRIMAX IT INFRASTRUCTURE	UJJAIN
5937.	TRIMBLE INFORMATION TECHNOLOGIES	CHENNAI
5938.	TRIMBLE INFORMATION TECHNOLOGIES (I) (P) LTD.	CHENNAI
5939.	TRIO ELEVATORS	PUNE
5940.	TRIPOD	HYDERABAD
5941.	TRIQUESTA PTE LTD. SINGAPORE	SINGAPORE
5942.	TRIUMPH MOTORCYCLES (I) (P) LTD.	DELHI
5943.	TRIVENI TURBINES LTD.	BANGALORE
5944.	TRUE INFLUENCE	BANGALORE
5945.	TRUMPF (I) (P) LTD.	PUNE
5946.	TRUSTED AEROSPACE ENGINEERING (P) LTD.	CHENNAI
5947.	TSU- JHARKHAND STATE AIDS CONTROL SOCIETY	DELHI
5948.	TSYS	DELHI
5949.	T-SYSTEMS ICT (I) (P) LTD.	PUNE
5950.	TTS MARINE SERVICES	DUBAI
5951.	TTS MARINE SERVICES L.L.C	DUBAI
5952.	TTS MARINE SERVICES LLC	DUBAI
5953.	TUBACEX	ASANGAON
5954.	TUBE INVESTMENT OF (I) LTD.	CHENNAI
5955.	TUBE INVESTMENTS OF (I) LTD.	CHENNAI
5956.	TUBE INVESTMENTS OF (I) LTD.	COIMBATORE
5957.	TUBE PRODUCTS OF INDIA	CHENNAI

S.No.	ORGANIZATION	LOCATION
5958.	TURBINE SERIVES & SOLUTIONS	ABUDHABI
5959.	TURBOLAB TECHNOLOGIES	KOCHI
5960.	TURNER CONSULTING & MANAGEMENT SERVICES (I) PVT	MUMBAI
5961.	TURNER CONSULTING AND MANAGEMENT SERVICES INDIA	MUMBAI
5962.	TURNER PROJECT MANAGMENT	MUMBAI
5963.	TURNIN INNOVATION TECHNOLOGIES (P) LTD.	HYDERABAD
5964.	TUV (I) (P) LTD.	PUNE
5965.	TUV RHEINLAND MIDDLE EAST LLC	DUBAI
5966.	TV SUNDRAM IYENGAR & SONS (P) LTD.	CHENNAI
5967.	TVARANA SOFTWARE SOLUTIONS	HYDERABAD
5968.	TVM SIGNALLING AND TRANSPORTATION SYSTEMS (P) LTD.	BANGALORE
5969.	TVM SIGNALLING AND TRANSPORTATION SYSTEMS PV	BANGALORE
5970.	TVS - SUNDRAM FASTENERS LTD.	CHENNAI
5971.	TVS BRAKES (I) (P) LTD.	INDORE
5972.	TVS ELASTOMERIC	MADURAI
5973.	TVS MOTOR CO. (P) LTD.	DELHI
5974.	TVS MOTOR CO. LTD.	BANGALORE
5975.	TVS MOTOR COMAPNY LTD.	BANGALORE
5976.	TVS MOTOR COMAPNY LTD.	DELHI
5977.	TVS MOTOR COMAPNY LTD.	HOSUR
5978.	TVS MOTOR COMAPNY LTD.	TAMILNADU
5979.	TVS MOTOR COMPANY	BANGALORE
5980.	TVS MOTOR MANUFACTURING CO. LTD.	BANGALORE
5981.	TVS SUNDRAM FASTENERS	CHENNAI
5982.	TVS SUNDRAM FASTENERS LTD.	CHENGALPET
5983.	TVS SUNDRAM FASTENERS LTD.	CHENNAI
5984.	TVS TRAINING & SERVICES LTD.	CHENNAI
5985.	TVSMOTOR MANUFUTURING COMPANY	BANGALORE
5986.	TWI (I) (P) LTD.	CHENNAI
5987.	TYCO FIRE & SECURITY UAE LLC.	ABUDHABI
5988.	U N MEHTA INSTITUTE OF CARDIOLOGY & RESE	AHMEDABAD
5989.	U R RAO SATELLITE CENTRE (URSC) / ISRO	BANGALORE
5990.	U.P. PROVINCIAL MEDICAL AND HEALTH SERVICES	DELHI
5991.	U.R.RAO SATELLITE CENTRE	BANGALORE
5992.	U.S CONSULATE. DUBAI.	DUBAI
5993.	U.S.P.C. JAIN CHARITABLE HOSPITAL	LUDHIANA
5994.	UBER (I) RESEARCH AND DEVELOPMENT (P) LTD.	CHENNAI
5995.	UBIBOTS TECHNOLOGIES (P) LTD.	CHENNAI
5996.	UBISOFT ENTERTAINMENT (I) (P) LTD.	PUNE
5997.	UBS BUSINESS SOLUTIONS (I) (P) LTD.	HYDERABAD
5998.	UBS BUSINESS SOLUTIONS (I) (P) LTD.	MUMBAI
5999.	UCAL FUEL SYSTEMS	CHENNAI
6000.	UCAL FUEL SYSTEMS LTD.	CHENNAI
6001.	UDAIPUR CEMENT WORKS LTD.	UDAIPUR
6002.	UDGAM HOSPITAL	MUMBAI
6003.	UIPATH INDIA	BANGALORE
6004.	UK MECHANICAL ENGINEERING (P) LTD.	KOLKATA
6005.	UL (I) (P) LTD.	BANGALORE
6006.	ULTRA ARCHITECTURAL CONSULTANCY	DUBAI
6007.	ULTRA ENGINEERS	PUNE
6008.	ULTRATECH CEMENT	DELHI
6009.	ULTRATECH CEMENT LTD.	JAFRABAD
6010.	ULTRATECH CEMENT LTD.	KOTPUTLI
6011.	UMAS (I) (P) LTD. PUNE	PUNE
6012.	UNDERWRITERS LABORATORIES INC	BANGALORE
6013.	UNICEF	DELHI
6014.	UNICHEM LABORATORIES LTD.	DELHI
6015.	UNICOMMERCE ESOLUTIONS (P) LTD.	GURGAON
6016.	UNICORN INDUSTRIES LTD.	HYDERABAD
6017.	UNIKEN (I) (P) LTD.	BANGALORE
6018.	UNIMONI GBS	CHENNAI
6019.	UNION BANK OF INDIA	MUMBAI
6020.	UNIQUE BIOTECH LTD.	HYDERABAD
6021.	UNIQUE IDENTIFICATION AUTHORITY OF INDIA	BANGALORE
6022.	UNISYS (I) (P) LTD.	BANGALORE
6023.	UNISYS GLOBAL SERVICES	BANGALORE
6024.	UNITED AIRLINES	GURGAON
6025.	UNITED HEALTH CARE	BANGALORE
6026.	UNITED HEALTH GROUP	HYDERABAD
6027.	UNITED HEALTH GROUP	NOIDA
6028.	UNITED ONLINE SOFTWARE DEVELOPMENT INDIA	HYDERABAD

S.No.	ORGANIZATION	LOCATION
6029.	UNITED STEEL INDUSTRIAL CO. (K.S.C.C)	CHENNAI
6030.	UNITED STEEL INDUSTRIAL CO. (K.S.C.C)	COIMBATORE
6031.	UNITED TECHNOLOGIES	HYDERABAD
6032.	UNITED TECHNOLOGIES CORPORATION	MUMBAI
6033.	UNITED TECHNOLOGY AEROSPACE SYSTEMS IND	BANGALORE
6034.	UNITEDHEALTH GROUP	BANGALORE
6035.	UNITEDHEALTH GROUP	HYDERABAD
6036.	UNITEDHEALTHCARE	BANGALORE
6037.	UNITEDLEX BPO (P) LTD.	GURGAON
6038.	UNIVERSAL VOLTAS	DUBAI
6039.	UNIVERSITY GRANTS COMMISSION	DELHI
6040.	UNIVLABS	HYDERABAD
6041.	UNLIMIT IOT (P) LTD. (RELIANCE GROUP COMPANY)	BANGALORE
6042.	UPADPRO SOFTWARE	MUMBAI
6043.	UPANAL CNC SOLUTION	KHAMBHAT
6044.	UPDATER SERVICES (P) LTD.	CHENNAI
6045.	UPL LTD.	MUMBAI
6046.	UR RAO SATELLITE CENTRE	BANGALORE
6047.	UR RAO SATELLITE CENTRE (ISRO)	BANGALORE
6048.	URB ENGG. PVT.LTD.	DELHI
6049.	US TECH SOLUTIONS	HYDERABAD
6050.	US TECHNOLOGY INTERN (P) LTD.	BANGALORE
6051.	US TECHNOLOGY INTERNATIONAL (P) LTD.	BANGALORE
6052.	USEREADY TECHNOLOGY (P) LTD.	BANGALORE
6053.	USO PRL	UDAIPUR
6054.	UST GLOBAL	BANGALORE
6055.	UST GLOBAL	CHENNAI
6056.	UST GLOBAL	COIMBATORE
6057.	UST GLOBAL	DELHI
6058.	UST GLOBAL	MALAYSIA
6059.	UST GLOBAL	TRIVANDRUM
6060.	UST GLOBAL SINGAPORE PTE LTD.	CHENNAI
6061.	USTER TECHNOLOGIES (I) (P) LTD.	AHMEDABAD
6062.	UST-GLOBAL	BANGALORE
6063.	USUI SUSIRA INTERNATIONAL (P) LTD.	CHENNAI
6064.	UTC AEROSPACE SYSTEM	BANGALORE
6065.	UTC FIRE & SECURITY (I) LTD.	BANGALORE
6066.	UTC(GOOD RICH) AEROSPACE SYSTEMS	BANGALORE
6067.	UTICO FZC	UAE
6068.	UTILE SOFTWARE SOLUTINOS (P) LTD.	BANGALORE
6069.	UTKAL ALUMINA INTERNATIONAL LTD.	HYDERABAD
6070.	UTKAL ALUMINA INTERNATIONAL LTD.	KOLKATA
6071.	UTKAL ALUMINA INTERNATIONAL LTD.	RAYAGADA
6072.	UTM SHILLONG	DELHI
6073.	UTOPUS INSIGHTS (I) (P) LTD.	CHENNAI
6074.	UTTARAKHAND FOREST RESOURCE MANAGEMENT PROJECT	DELHI
6075.	V GUARD INDUSTRIES LTD.	ERNAKULAM
6076.	V.C.S.G. MEDICAL COLLEGE & RESEARCH INST	SRINAGAR
6077.	V.M.SALGAOCAR HOSPITAL	GOA
6078.	V2SOFT (P) LTD.	BANGALORE
6079.	V5 SEMICONDUCTORS	BANGALORE
6080.	VA TECH WABAG LTD.	CHENNAI
6081.	VAKRANGEE LTD.	MUMBAI
6082.	VALE OMAN PELLETIZING CO. LLC	OMAN
6083.	VALE OMAN PELLETIZING CO. LLC	SOHAROMAN
6084.	VALE OMAN PELLETZING COMPANY	CHENNAI
6085.	VALEO (I) (P) LTD.	BANGALORE
6086.	VALEO (I) (P) LTD.	CHENNAI
6087.	VALEO (I) (P) LTD.	PUNE
6088.	VALEO (I) (P) LTD. NAVALUR	CHENNAI
6089.	VALEO LIGHTING SYSTEMS	CHENNAI
6090.	VALEOMAN PELLETIZING COMPANY	SOHAROMAN
6091.	VALGEN DECISION TECHNOLOGIES	BANGALORE
6092.	VALMONT STRUCTURES	PUNE
6093.	VALUE MOMENTUM	HYDERABAD
6094.	VALUE POINT SYSTEM (P) LTD.	HYDERABAD
6095.	VALUELABS SOLUTIONS LLP	HYDERABAD
6096.	VALUELABS SOLUTIONS LLP	SINGAPORE
6097.	VAM SOLAR POWER LLP	NOIDA
6098.	VAMSHADHARA PAPER MILLS	HYDERABAD
6099.	VANDERLANDE INDUSTRIES B.V.	CHENNAI

S.No.	ORGANIZATION	LOCATION
6100.	VANNA INFORMATION TECHNOLOGIES (I) PVT	HYDERABAD
6101.	VARA UNITED (P) LTD.	HYDERABAD
6102.	VARANG INFORMATION TECHNOLOGIES (P) LTD.	HYDERABAD
6103.	VARIAN MEDICAL SYSTEMS	PUNE
6104.	VARROC POLYMERS (P) LTD.	PUNE
6105.	VASSAR LABS	HYDERABAD
6106.	VASUDHA PHARMA CHEM LTD.	HYDERABAD
6107.	VASUDHA PHARMA CHEM LTD.	VISAKHAPATNAM
6108.	VATECH WABAG LTD.	CHENNAI
6109.	VATECH WABAG LTD.	DELHI
6110.	VAYAVYA LABS (P) LTD.	DELHI
6111.	VE COMMERCIAL VEHICLE	DELHI
6112.	VE COMMERCIAL VEHICLED LTD.	INDORE
6113.	VE COMMERCIAL VEHICLED LTD.	PITHAMPUR
6114.	VE COMMERCIAL VEHICLED LTD.	SALEM
6115.	VE COMMERCIAL VEHICLES LTD.	MUMBAI
6116.	VEC OIL & GAS CONSULTANTS	MUSCAT,OMAN
6117.	VEDANG CONSULTANCY SERVICES (P) LTD.	CHENNAI
6118.	VEDANTA LTD.	BHATAPARA
6119.	VEDANTA LTD.	CHITRADURGA
6120.	VEDANTA LTD.	CHITTORGARH
6121.	VEDANTA LTD.	CODLIMINE
6122.	VEDANTA LTD.	GAUTAMBUDDHANAGAR
6123.	VEDANTA LTD.	GOA
6124.	VEDANTA LTD.	GULBARGARH
6125.	VEDANTA LTD.	JHARSUGUDA
6126.	VEDANTA LTD.	KHARACH
6127.	VEDANTA LTD.	KOTPUTLI
6128.	VEDANTA LTD.	RAIPUR
6129.	VEDANTA LTD.	RATNAGIRI
6130.	VEDANTA LTD.	SCWSEWAGRAM
6131.	VEDANTA LTD.	SILVASSA
6132.	VEDANTA LTD.	TAMILNADU
6133.	VEDANTA LTD.	THOOTHUKUDI
6134.	VEDANTA LTD.	TUTICORIN
6135.	VEE TECHNOLOGIES	BANGALORE
6136.	VEE TECHNOLOGIES (P) LTD.	BANGALORE
6137.	VEEBRIJ SOFTWARE (P) LTD.	DELHI
6138.	VELMENNI R&D (P) LTD.	DELHI
6139.	VELMENNI RESEARCH & DEVELOPMENT (P) LTD.	DELHI
6140.	VELOCIS SYSTEM (P) LTD. NOIDA	NOIDA
6141.	VELOCIS SYSTEMS (P) LTD.	DELHI
6142.	VELOSI CERTIFICATION LLC	QATAR
6143.	VELVETBUD TECHNOLOGIES (P) LTD.	HYDERABAD
6144.	VEM TECHNOLOGIES (P) LTD.	HYDERABAD
6145.	VENKATESH HR SOLUTIONS	PUNE
6146.	VENKATESHWAR HOSPITAL	DELHI
6147.	VENTURE CENTER (ENTREPRENEURSHIP DEVELOPMENT CEN)	PUNE
6148.	VERIFONE (I) TECHNOLOGY (P) LTD.	BANGALORE
6149.	VERINT SYSTEMS (I) (P) LTD.	BANGALORE
6150.	VERITAS SOFTWARE TECHNOLOGIES (I) (P) LTD.	PUNE
6151.	VERITAS STORAGE (SINGAPORE) PTE LTD.	SINGAPORE
6152.	VERITAZ HEALTHCARE LTD. HYDERABAD	HYDERABAD
6153.	VERNALIS SYSTEMS	CHENNAI
6154.	VERTEX AUTOMATION (P) LTD.	DELHI
6155.	VERTEXONE PROCESS SOLUTION (P) LTD.	GURGAON
6156.	VERTIV ENERGY (PVT) LTD.	HYDERABAD
6157.	VERTIV ENERGY (PVT) LTD.	MUMBAI
6158.	VERTIV ENERGY (PVT) LTD.	PUNE
6159.	VERTIV ENERGY (PVT) LTD.	THANE
6160.	VESTAS TECH R&D (P) LTD.	CHENNAI
6161.	VESUVIUS (I) LTD.	CHENNAI
6162.	VESUVIUS (I) LTD.	PUNE
6163.	VGUARD INDUSTRIES LTD.	COCHIN
6164.	VGUARD INDUSTRIES LTD.	COIMBATORE
6165.	VIASAT (I) (P) LTD.	CHENNAI
6166.	VIBRACOUSTIC NOIDA (P) LTD.	NOIDA
6167.	VICTORA AUTO (P) LTD.	DELHI
6168.	VIDAL HEALTH SYSTEMS	CHENNAI
6169.	VIDEOCON INDUSTRIES LTD.	MUMBAI
6170.	VIHAA MULTISPECIALITY HOSPITAL	CHENNAI

S.No.	ORGANIZATION	LOCATION
6171.	VIHAAN NETWORKS LTD.	GURGAON
6172.	VIHAS HOSPITAL	TRICHY
6173.	VIJAY INDUSTRIES	CHENNAI
6174.	VIJAYA HOSPITALS	SALEM
6175.	VIKAS INDUSTRIES	MUMBAI
6176.	VINAYAKA COMPUTERS	BANGALORE
6177.	VINODRAI ENGINEERS (P) LTD.	PUNE
6178.	VINOVE SOFTWARE & SERVICES	DELHI
6179.	VIPANY MANAGEMENT CONSULTING (P) LTD.	BANGALORE
6180.	VIRINCHI HOSPITAL	HYDERABAD
6181.	VIRINCHI HOSPITALS	HYDERABAD
6182.	VIRTUAL ENGINEERING SERVICES (P) LMD.	DELHI
6183.	VIRTUAL SIMUTECH (P) LTD.	PUNE
6184.	VIRTUOSOS SOLUTIONS (P) LTD.	BANGALORE
6185.	VIRTUOSOS SOLUTIONS (P) LTD.	CHENNAI
6186.	VIRTUOSOS SOLUTIONS (P) LTD.	GURGAON
6187.	VIRTUOSOS SOLUTIONS (P) LTD.	HYDERABAD
6188.	VISA WORLD WIDE PTE LTD.	SINGAPORE
6189.	VISAKA INDUSTRIES LTD.	HYDERABAD
6190.	VISHAL HOSPITAL	JAGADHRI
6191.	VISHAY PRECISION TRANSDUCERS (I) (P) LTD.	CHENNAI
6192.	VISION TECHNOLOGY	DELHI
6193.	VISTA AUTOMATION	DUBAI
6194.	VISTEON CORPORATION	PUNE
6195.	VISTEON ELECTRONICS (I) (P) LIMITE	CHENNAI
6196.	VISTEON ELECTRONICS GERMANY GMBH	BANGALORE
6197.	VISTEON TECHICAL & SERVICES CENTRE	CHENNAI
6198.	VISTEON TECHNICAL & SERVICES CENTRE (P) LTD.	PUNE
6199.	VISUAL IQ TECHNO SERVICES (I) (P) LTD.	COCHIN
6200.	VITALHEALTH SOFTWARE (P) LTD.	MUMBAI
6201.	VITECH SYSTEMS ASIA (P) LTD.	HYDERABAD
6202.	VIVEN INNOVATIVE TECHNOLOGIES	HYDERABAD
6203.	VIVOTEX (I) (P) LTD.	HYDERABAD
6204.	VIZAG STEEL RINL	VISAKHAPATNAM
6205.	VK:E ENVIRONMENTAL	PUNE
6206.	VLOCITY CLOUD APPLICATIONS	BANGALORE
6207.	VMC SYSTEMS LTD.	HYDERABAD
6208.	VMWARE SOFTWARE (I) (P) LTD.	BANGALORE
6209.	VMWARE SOFTWARE (I) (P) LTD.	CHENNAI
6210.	VMWARE SOFTWARE (I) (P) LTD.	HYDERABAD
6211.	VMWARE SOFTWARE (I) (P) LTD.	PUNE
6212.	VODAFONE (I) SERVICES (P) LTD.	PUNE
6213.	VODAFONE IDEA LTD.	BANGALORE
6214.	VODAFONE IDEA LTD.	KOLKATA
6215.	VODAFONE SHARED SERVICE	PUNE
6216.	VOEREIR (I) (P) LTD.	GURGAON
6217.	VOITH PAPER TECHNOLOGY (I) (P) L	KOLKATA
6218.	VOITH TURBO (P) LTD.	HYDERABAD
6219.	VOLANSYS TECHNOLOGIES	AHMEDABAD
6220.	VOLEN SOFTWARE SERVICES (P) LTD.	BANGALORE
6221.	VOLKSWAGEN (I) (P) LTD.	PUNE
6222.	VOLKSWAGEN INDIA	PUNE
6223.	VOLTAS QATAR WLL	DUBAI
6224.	VOLVO (I) (P) LTD.	BANGALORE
6225.	VOLVO (I) (P) LTD.	PUNE
6226.	VORTEX ENGINEERING (P) LTD.	CHENNAI
6227.	VOYAGE GROUP	DUBAI
6228.	VOYAGE MARINE AUTOMATION	DUBAI
6229.	VOYANTS SOLUTION (P) LTD.	CHENNAI
6230.	VTL ELECTRONICS LTD.	KOLKATA
6231.	VURAM TECHNOLOGIES	BANGALORE
6232.	VVDN TECHNOLOGIES	CHENNAI
6233.	VVDN TECHNOLOGIES	DELHI
6234.	VWR LAB PRODUCTS	COIMBATORE
6235.	VWR PART OF AVANTOR	COIMBATORE
6236.	VYOMINI TECH (P) LTD.	NOIDA
6237.	WAAREE ENERGIES LTD.	MUMBAI
6238.	WABCO (I) LTD.	CHENNAI
6239.	WABCO (I) LTD.	PUNE
6240.	WABTEC (I) TRANSPORTATION (P) LTD.	BANGALORE
6241.	WABTEC CORPORATION	BANGALORE

S.No.	ORGANIZATION	LOCATION
6242.	WADHWANI FOUNDATION	BANGALORE
6243.	WALLMAX INDIA	FARIDABAD
6244.	WALMAN	FARIDABAD
6245.	WALMART GLOBAL TECHNOLOGY SERVICES INDIA	BANGALORE
6246.	WALTER TOOLS (I) P LTD.	PUNE
6247.	WANBURY LTD.	MUMBAI
6248.	WANCLOUDS	BANGALORE
6249.	WAPCOS LTD.	HISAR
6250.	WARTSILA LLC	DUBAI
6251.	WATCHDATA TECHNOLOGIES (I) (P) LTD.	BANGALORE
6252.	WAVENET SOLUTION (P) LTD.	DELHI
6253.	WAY2LEAD EOMMERCE (P) LTD.	BANGALORE
6254.	WDTS (I) (P) LTD.	DELHI
6255.	WEALTHENGINE SOFTWARE (P) LTD.	BANGALORE
6256.	WEATHERFORD INTERNATIONAL	IRAQ
6257.	WEB ACCESS (I) (P) LTD.	MUMBAI
6258.	WEB INDIA	HYDERABAD
6259.	WEBSITE SKETCHERS (P) LTD.	DELHI
6260.	WEG INDUSTRIES (I) (P) LTD.	BANGALORE
6261.	WEIR ENSCI	BANGALORE
6262.	WEIR OIL & GAS	DUBAI
6263.	WELL FARGO INDIA	BANGALORE
6264.	WELLS FARGO	HYDERABAD
6265.	WELLS FARGO EGS (I) (P) LTD.	BANGALORE
6266.	WELLS FARGO EGS (I) (P) LTD.	HYDERABAD
6267.	WELMADE LOCKING SYSTEMS (P) LTD.	PUNE
6268.	WELUE STRATEGIC ALLIANCES (P) LTD.	GURGAON
6269.	WENDT (I) LTD.	HOSUR
6270.	WENDT INDIA	BANGALORE
6271.	WENDT INDIA	HOSUR
6272.	WEP SOLUTIONS LTD.	BANGALORE
6273.	WEP SOLUTIONS LTD.	DELHI
6274.	WEST BENGAL ELECTRONICS INDUSTRY DEVELOPMENT CORP	KOLKATA
6275.	WEST UNIFIED COMMUNICATION	BANGALORE
6276.	WESTEC SUPPLIES GENERAL TRADING-WESCO MANAGED	DUBAI
6277.	WESTERN DIGITAL	BANGALORE
6278.	WHEELS (I) LTD.	CHENNAI
6279.	WHIRLPOOL OF (I) LTD.	DELHI
6280.	WHIRLPOOL OF (I) LTD.	GURGAON
6281.	WHIRLPOOL OF (I) LTD.	PONDICHERRY
6282.	WHIRLPOOL OF (I) LTD.	PUNE
6283.	WHISHWORKS	HYDERABAD
6284.	WHITECROSS CLINIC HEALTH INITATIVE (P) LTD.	BANGALORE
6285.	WHIZCHIP DESIGN TECHNOLOGIES	HYDERABAD
6286.	WHIZCHIP DESIGN TECHNOLOGIES (P) LTD.	BANGALORE
6287.	WHIZCHIP DESING TECHNOLOGIES (P) LTD.	BANGALORE
6288.	WIKA INSTRUMENTS (I) (P) LTD.	PUNE
6289.	WILLIAM CONTROL (I) (P) LTD.	PUNE
6290.	WIMMBY TECHNOLOGIES (P) LTD.	DELHI
6291.	WINCOR NIXDORF PTE. LTD.	SINGAPORE
6292.	WINDLASS ENGINEERS & SERVICES	DEHRADUN
6293.	WIPRO GE HEALTHCARE	BANGALORE
6294.	WIPRO HR SOLUTIONS (P) LTD.	DELHI
6295.	WIPRO INFOTECH	BANGALORE
6296.	WIPRO INFOTECH	MUMBAI
6297.	WIPRO INFOTECH	MYSORE
6298.	WIPRO INFOTECH	PUNE
6299.	WIPRO LTD.	BANGALORE
6300.	WIPRO LTD.	CHENNAI
6301.	WIPRO LTD.	COIMBATORE
6302.	WIPRO LTD.	DELHI
6303.	WIPRO LTD.	GURGAON
6304.	WIPRO LTD.	HYDERABAD
6305.	WIPRO LTD.	JAIPUR
6306.	WIPRO LTD.	KOCHI
6307.	WIPRO LTD.	KOLKATA
6308.	WIPRO LTD.	MUMBAI
6309.	WIPRO LTD.	MYSORE
6310.	WIPRO LTD.	NOIDA
6311.	WIPRO LTD.	PUNE
6312.	WIPRO LTD.	TAMILNADU

S.No.	ORGANIZATION	LOCATION
6313.	WIPRO LTD.	UAE
6314.	WIRINTCO TECHNOLOGIES (P) LTD.	BANGALORE
6315.	WIRTGEN (I) (P) LTD.	PUNE
6316.	WISSEN BAUM ENGINEERING SOLUTIONS LLP	PUNE
6317.	WITZENMANN (I) (P) LTD.	KOLKATA
6318.	WJ GROUNDWATER QATAR LTD.	CHENNAI
6319.	WLT CORP	BANGALORE
6320.	WM GLOBAL TECHNOLOGY SERVICES (I) (P) LIMITE	BANGALORE
6321.	WME CONSULTANT	BANGALORE
6322.	WME CONSULTANTS	DUBAI
6323.	WMGTS - WALMARTLABSINDIA	BANGALORE
6324.	WNS GLOBAL SERVICES	DELHI
6325.	WOCKHARDT LTD.	MUMBAI
6326.	WOCKHARDT LTD.	VAPI
6327.	WOOD PLC	GURGAON
6328.	WOODFIELD SYSTEMS INTERNATIONAL PVT.LTD	MUMBAI
6329.	WOODGROUP PSN	DUBAI
6330.	WOODWARD (I) (P) LTD.	PUNE
6331.	WORLD BANK GROUP	CHENNAI
6332.	WORLD HEALTH ORGANIZATION	DELHI
6333.	WORLD METALS & ALLOYS (FZC)	CHENNAI
6334.	WORLD PLANNER S CONSULTING ENGINEERS	ABUDHABI
6335.	WORLDLINE (I) (P) LTD.	PUNE
6336.	WORLDPAY	PUNE
6337.	WORLEY	CHENNAI
6338.	WORLEY QATAR	HYDERABAD
6339.	WORLEYPARSON ENGINEERING (P) LTD.	ABUDHABI
6340.	WORLEYPARSON ENGINEERING (P) LTD.	DOHA
6341.	WORLEYPARSON ENGINEERING (P) LTD.	MUMBAI
6342.	WORLEYPARSON ENGINEERING (P) LTD.	MUSCAT,OMAN
6343.	WORLEYPARSON ENGINEERING (P) LTD.	SAUDIARABIA
6344.	WORLEYPARSONS OMAN	MUMBAI
6345.	WS ATKINS (I) (P) LTD.	BANGALORE
6346.	WS ATKINS (I) (P) LTD.	DELHI
6347.	WS ATKINS AND PARTNERS OVERSEAS	SHARJAH
6348.	WS ATKINS(IND) (P) LTD.	BANGALORE
6349.	WSP CONSULTANTS (I) (P) LTD.	BANGALORE
6350.	WSP CONSULTANTS (I) (P) LTD.	DUBAI
6351.	WSP CONSULTANTS (I) (P) LTD.	NOIDA
6352.	WSP MIDDLE EAST	UAE
6353.	XANADU REALTY	MUMBAI
6354.	XAVIENT DIGITAL (P) LTD.	NOIDA
6355.	XAVIENT INFORMATION SYSTEM	GURGAON
6356.	XAVIENT INFORMATION SYSTEM	NOIDA
6357.	XCHANGING SOLUTIONS LTD.	BANGALORE
6358.	XEBIA IT ARCHITECTS (I) (P) LTD.	GURGAON
6359.	XEEVA (I) (P) LTD.	HYDERABAD
6360.	XEROX TECHNOLOGIES SERVICES	BANGALORE
6361.	XEROX TECHNOLOGIES SERVICES (I) LLP	KOCHI
6362.	XILINX (I) TECHNOLOGIES (P) LTD.	HYDERABAD
6363.	XITADEL CAE TECHNOLOGIES (I) (P) LTD.	BANGALORE
6364.	XITADEL CAE TECHNOLOGIES (I) (P) LTD.	CHENNAI
6365.	XL SOLUTIONS LLC	BANGALORE
6366.	XORIANT SOLUTIONS (P) LTD.	PUNE
6367.	XORIANT TECGNOLOGIES	DELHI
6368.	XPO LOGISTICS	MUMBAI
6369.	XYLEM WATER SOLUTION (P) LTD.	VADODARA
6370.	XYTEL (I) (P) LTD.	PUNE
6371.	YAHOO SDC	BANGALORE
6372.	YAMAZAKI MAZAK INDIA	BANGALORE
6373.	YAMAZAKI MAZAK INDIA	CHENNAI
6374.	YAMAZAKI MAZAK INDIA	PUNE
6375.	YAMUNA MACHINE WORKS LTD.	SURAT
6376.	YANFENG (I) AUTOMOTIVE INTERIOR SYSTEM	PUNE
6377.	YARA ASIA PTE LTD.	BANGALORE
6378.	YARDI SOFTWARE (I) (P) LTD.	PUNE
6379.	YASHASWI DENTAL CLINIC	BANGALORE
6380.	YASHODA HOSPITALS (P) LTD.	HYDERABAD
6381.	YATRA.COM	GURGAON
6382.	YAZAKI (I) (P) LTD.	PUNE
6383.	YESTOSYSTEMS	GOA

S.No.	ORGANIZATION	LOCATION
6384.	YODLEE INFOTECH (P) LTD.	BANGALORE
6385.	YOGRAJ MULTITECH ENGINEERING PVT.LTD	PUNE
6386.	YOKOGAWA (I) LTD.	BANGALORE
6387.	YSCART	BANGALORE
6388.	YUKEN (I) LTD.	BANGALORE
6389.	YULU BIKES	BANGALORE
6390.	ZAID AL HUSSAIN LLC	DUBAI
6391.	ZAMIL PLASTICS LTD.	DAMMAM
6392.	ZAMIL STEEL	DUBAI
6393.	ZARAVYA INFORMATICS (P) LTD.	BANGALORE
6394.	ZAWAWI POWERTECH ENGINEERING LLC	DUBAI
6395.	ZCL CHEMICALS LTD.	MUMBAI
6396.	ZCON SOLUTIONS (P) LTD.	PUNE
6397.	ZEAL ENCORE TECHNOLOGIES	BANGALORE
6398.	ZEBRA TECHNOLOGIES LTD.	BANGALORE
6399.	ZEN TECHNOLOGIES LTD.	HYDERABAD
6400.	ZENCORP PTE LTD.	SINGAPORE
6401.	ZENSAR TECHNOLOGIES	BANGALORE
6402.	ZENSAR TECHNOLOGIES	HYDERABAD
6403.	ZENSAR TECHNOLOGIES	MUMBAI
6404.	ZENSAR TECHNOLOGIES	PUNE
6405.	ZEOMEGA INFOTECH (P) LTD.	BANGALORE
6406.	ZERO GALAXY TECHNOLOGIES (P) LTD.	NOIDA
6407.	ZEUS BIOTECH PRIVATE.LTD MYSORE	MYSORE
6408.	ZF (I) (P) LTD.	PUNE
6409.	ZF ELECTRONICS TVS (I) (P) LTD.	MADURAI
6410.	ZF HERO CHASSIS SYSTEMS (P) LTD.	CHENNAI
6411.	ZF WIND POWER COIMBATORE LTD.	COIMBATORE
6412.	ZH HEALTHCARE INC	KOCHI
6413.	ZIA SEMICONDUCTOR (P) LTD.	DELHI
6414.	ZILOGIC SYSTEMS	CHENNAI
6415.	ZINKA LOGISTICS SOLUTIONS (P) LTD.	BANGALORE
6416.	ZOHO CORPORATION	CHENNAI
6417.	ZOHO CORPORATION (P) LTD.	CHENNAI
6418.	ZOOL TECH SOLUTIONS (P) LTD.	BANGALORE
6419.	ZS ASSOCIATES	DELHI
6420.	ZS ASSOCIATES	GURGAON
6421.	ZS ASSOCIATES	PUNE
6422.	ZUARI INFRAWORLD (I) LTD.	GOA
6423.	ZYCUS INC.	MUMBAI
6424.	ZYDUS HOSPITAL ANAND	MUMBAI
6425.	ZYME SOLUTIONS (P) LTD.	BANGALORE
6426.	ZYNGA GAME NETWORK (P) LTD.	BANGALORE

LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2020

S.No.	PROJECT TITLE
B.Tech. Engineering Technology	
1.	11 KV AIR INSULATED SWITCH GEAR INSTALLATION
2.	3D VISUALIZATION OF SURFACE DAMAGE IN COMPLEX COMPOSITE STRUCTURES USED IN WIND BLADES
3.	4M CHANGE MANAGEMENT
4.	6 COQ REDUCTION BY USING 6-SIGMA
5.	7QC TECHNIQUES TO REDUCE DEFECTS IN AEROSPACE INDUSTRY
6.	A STUDY IN SOLAR PV PLANT PERFORMANCE AND A PRACTICAL APPROACH TO INVERTOR ANALYTICS
7.	A STUDY ON IMPLEMENTATION OF BUILDING AUTOMATION AND CONTROL SYSTEMS FOR ENERGY MANAGEMENT IN PNUW, RIYADH-KSA
8.	A STUDY TO REDUCE COMBUSTION AIR DUCT VIBRATIONS BY USING CFD ANALYSIS AND DESIGN IMPROVEMENTS
9.	A SYSTEM LEVEL PI CO-SIMULATION OF LPDDR4X AT 4267MBPS SPEED
10.	ADVANCED BUILDING AUTOMATION
11.	ADVANCED EMPLOYEE MANAGEMENT SYSTEM
12.	ADVANCED ENERGY CONVERSION IN AIR CONDITIONING SYSTEM FOR RESIDENTIAL BUILDING
13.	ADVANCED ENERGY MANAGEMENT USING GUEST ROOM MANAGEMENT SYSTEM IN LUXURY HOTELS
14.	ADVANCED SAFETY OPERATION IN COAL STACKING AND RECLAIMING IN THERMAL POWER PLANT
15.	AIRCONDITIONER WITH THERMOELECTRIC GENERATOR
16.	AIRCRAFT MAINTENANCE & SAFETY MANAGEMENT SYSTEM
17.	AIRPORT MAINTENANCE
18.	ANALYSING THE PERFORMANCE OF AIR COOLED CONDENSERS/HEAT EXCHANGERS DUE TO THE EFFECTS OF WIND AND HOT AIR RECIRCULATION
19.	ANALYSIS AND ENHANCEMENT OF SERVICE DELIVERY PERFORMANCE WITH PROCESS INSTITUTIONALIZATION ACROSS SERVICE FUNCTIONS
20.	ANALYSIS OF CATHODIC PROTECTION SYSTEM FAILURE IN UNDERGROUND PIPING
21.	ANALYSIS OF COOLING WATER PUMP FAILURE
22.	ANALYSIS OF LIGHTING LEVEL FOR OIL & GAS FACILITIES
23.	ANALYSIS ON CONSTRUCTION METHODOLOGY FOR INTERNAL STRUCTURE OF NATURAL DRAUGHT COOLING TOWER
24.	ANALYTICAL STUDY ON MACHINE SHOP LAYOUT AND UTILITY OF THE PLACE USE BY 'C' PROGRAMMING - FOR EDUCATIONAL INSTITUTES
25.	ANDROID MOBILE APP FOR CONNECTING SMART DEVICES
26.	ANIMAL CLASSIFICATION USING FACIAL IMAGES WITH SCORE LEVEL FUSION
27.	APC (AUXILIARY POWER CONSUMPTION) IN THERMAL POWER PLANT
28.	ASSESSING SAFETY CULTURE, VALUES, PRACTICES, AND IT'S IMPACT
29.	AUTOMATED SWITCHING OF LOCOMOTIVE COMMUNICATION CHANNELS
30.	AUTOMATED TEST MEASUREMENT SETUP FOR OSCILLATORS
31.	AUTOMATED WORKFLOW MANAGEMENT TO ENHANCE THE B2C RELATIONSHIP
32.	AUTOMATIC DE WATERING SYSTEM FOR MAIN SUB STATION CABLE CELLAR AREA
33.	AUTOMATIC PUMP MANAGING SOLUTION ON DISTRIBUTED CONTROL SYSTEM FOR WATER TRANSMISSION PROJECTS
34.	AUTOMATIC TRAIN CONTROL OPERATION
35.	AUTOMATION FOR TEST RECOMMENDATION-PCN
36.	AUTOMATION IN PURCHASING
37.	AUTOMATION LED LEGACY SHUTDOWN OF TELECOM NETWORKS
38.	AUTOMATION OF ACTIVE LOT RELEASE PROCESS

S.No.	PROJECT TITLE
39.	AUTOMATION OF CALCULATION FOR LEVEL CROSSING DESIGN
40.	AUTOMATION OF HIGH RELIABILITY QUARTZ CRYSTAL MEASUREMENT SYSTEM
41.	AUTOMATION OF PNEUMATIC PRODUCT TEST SETUP.
42.	AUTOMATION OF SPARK PLUG INSULATOR CRACK DETECTION
43.	AUTOMATION OF TEST MACHINE
44.	AUTOMATION TEST SYSTEM FOR SIGNAL AMPLIFICATION CIRCUIT
45.	AUTOMATION WITH DATA TRACEABILITY FOR MANUFACTURING PROCESS
46.	AUTOMOTIVE HIL TESTING
47.	AUTOMOTIVE SOFTWARE DEVELOPMENT
48.	AUTOMOTIVE SOFTWARE TESTING
49.	AUTOMOTIVE WIRING HARNESS AND ELECTRICAL SYSTEM DESIGN
50.	BANDGAP REFERENCE
51.	CBM EFFECTIVENESS OF CONDITION MONITORING ON CRITICAL COMPRESSORS
52.	CELL FUNCTIONING IN MANUFACTURING
53.	CENTERLINE WELD CRACK IN ASTM B366 CS INCONEL 825 CLAD PIPE TO CS INCONEL 825 CLAD ELBOW WELD BUTT JOINT
54.	CENTRALIZED RECIPE MANAGEMENT SYSTEM
55.	CHANNEL PARTNER PROFITABILITY MANAGEMENT
56.	CHEMICAL INJECTION FOR ELIMINATING CORROSION OF O2 STRIPPER OVERHEAD CIRCUIT
57.	CIRCUIT BREAKER (11KV) REPLACEMENT AND ASSOCIATED PROTECTION MODIFICATION WORKS
58.	CLOUD BASED SYSTEM FOR MONITORING AND CONTROL OF GENERATOR SET AND SWITCHBOARD POWER MANAGEMENT
59.	CNC MACHINING PROCESS DEVELOPMENT
60.	COAL HANDLING PLANT WITH SILO LOADING ARRANGEMENT & TRANSPORTATION OF COAL THROUGH PIPE CONVEYOR AT BHUBANESWARI OCP
61.	COINING STATION
62.	COLD WATER PUMP HOUSE (CWPH) CONSTRUCTION ANALYSIS
63.	COMMISSIONING OF A HIGH END AUTOMATED BLAST FURNACE
64.	COMPARISON OF AIR COOLED CHILLERS WITH THE VRV SYSTEM
65.	COMPONENT REJECTION AND REWORK REDUCTION IN ENGINE MACHINING
66.	CONCRETE MIX DESIGN WITH GGBS
67.	CONDITION BASED MAINTENANCE USING IIOT
68.	CONDITION MONITORING- VIBRATION ANALYSIS
69.	CONNECTED VEHICLE
70.	CONSERVATION OF WATER THROUGH NETWORKING OF ELECTROMAGNETIC FLOW METERS & SCADA
71.	CONSTRUCTION EQUIPMENT MANAGEMENT AT PROJECT SITE
72.	CONSTRUCTION OF ELECTROSTATIC PRECIPITATOR (ESP)
73.	CONSTRUCTION PROJECT COST ESTIMATE FOR A MEDIUM SIZE CIVIL, MECHANICAL, PIPING, ELECTRICAL AND INSTRUMENTATION WORKS IN OIL AND GAS SECTOR.
74.	CONSTRUCTION SAFETY STANDARD OF WELL FOUNDATION USING JACK DOWN METHOD
75.	CONTINUOUS MINER-MC250: PREVENTION OF CONTAMINATION IN WATER CIRCUIT & HYDRAULIC CIRCUIT BY SYSTEM MODIFICATION & MAINTENANCE IMPROVISATION"
76.	CONTROL CENTER INFORMATION SYSTEM
77.	CONTROLLING & MONITORING OF WELD REPAIR IN PIPING FABRICATION FOR ENSURING WELD QUALITY THROUGH MEASURING SYSTEMS
78.	COST OPTIMIZATION FOR AIRCRAFT FIRST CLASS PRODUCTS
79.	COST OPTIMIZATION THROUGH SCM TO CONSTRUCT GARDEN REACH FLYOVER PROJECT
80.	COST OUT ANY FUNCTIONAL PART BY WEIGHT REDUCTION
81.	COST REDUCTION THROUGH PROCESS IMPROVEMENT AT ASSEMBLY LINE
82.	CRANES AND LIFTING SAFETY MANAGEMENT
83.	CUSTOMER COMPLAINT REDUCTION THROUGH POKA-YOKE

S.No.	PROJECT TITLE
84.	CUSTOMER COMPLAINT SOLVING BY USING QC TOOLS
85.	CUSTOMER EXPERIENCE IMPROVEMENT
86.	CUSTOMER RETENTION IMPROVEMENT
87.	CYBER SECURITY MEASURES & RECOMMENDATIONS IN AN IT/OT ENVIRONMENT
88.	CYCLE TIME REDUCTION
89.	DATA ACQUISITION SYSTEM
90.	DATA CONNECT -POWER GRID SOLUTIONS
91.	DATABASE COMPARISON TOOL
92.	DCU FILTER TEST RIG
93.	DEEP FOUNDATIONS USING PILING
94.	DEEP LOOK INTO DESIGN OF ELECTRIC VEHICLE CHARGING STATION FOR POSSIBLE IMPROVEMENT
95.	DENSITY CONTROL THROUGH IOT
96.	DESIGN ,SUPPLY AND INSTALLATION OF PRE ENGINEERED BUILDING STRUCTURES AND ITS ADVANTAGES
97.	DESIGN AND ANALYSIS OF WATER COOLED VARIABLE REFRIGERANT FLOW SYSTEM
98.	DESIGN AND DEVELOPMENT OF CV CLUSTER ASSEMBLY LINE
99.	DESIGN AND DEVELOPMENT OF DUAL AXIS TRAVERSE SYSTEM
100.	DESIGN AND DEVELOPMENT OF OUTER TRACK MEASURING TOOL TO ACHIEVE FTR FOR MEASURE & MATCH OPERATION
101.	DESIGN AND DEVELOPMENT OF STANDARDISED SHIPPING SKID FOR X1.3, X2.7, X3.6 AND 4B3.3 CUMMINS ENGINES
102.	DESIGN IMPROVEMENTS TO MEET CIRCULAR TORTURE TRACK (CTT) REQUIREMENTS IN AGRICULTURAL TRACTOR SEAT
103.	DESIGN OF CUSTOMIZED CARTRIDGE FILTER FOR SEAWATER REVERSE OSMOSIS (SWRO) PLANT
104.	DESIGN OF DATA CENTER & COMMAND CONTROL CENTER FOR INTEGRATED SECURITY SOLUTION
105.	DESIGN OF FORKLIFTS DRIVER'S MODULE
106.	DESIGN OF ROTARY-WING UNMANNED AERIAL VEHICLE FOR SPACE
107.	DESIGNING OF LOW COST MANUAL CHECKING STATION
108.	DESIGNING OF TEST BED SUPPORT FOR MRT
109.	DEVELOP ARTIFICIAL INTELLIGENCE MODEL TO ANALYZE AND IMPROVE EFFICIENCY OF PRODUCTION / ASSEMBLY LINE IN MANUFACTURING INDUSTRIES
110.	DEVELOP WELDED STEEL BASE MEMBERS (36 NOS.) TO REPLACE THE CASTING ELEMENTS AS ORIGINALLY DESIGNED
111.	DEVELOPMENT OF A QUANTIFIABLE INDEX FOR MONITORING SAFETY PERFORMANCE AT CONSTRUCTION PROJECTS
112.	DEVELOPMENT OF AIR CLEANER FOR 800CC CAR
113.	DEVELOPMENT OF AIR DRIER HOUSING COMPONENT
114.	DEVELOPMENT OF ASSEMBLY LINE BASE ON LEAN MANUFACTURING
115.	DEVELOPMENT OF IOT SOLUTIONS TO MONITOR HEALTH PARAMETERS FOR GRINDING MACHINES
116.	DEVELOPMENT OF SERVICE DELIVERY FOR IMPROVEMENT IN SERVICE PERFORMANCE AND GO BEYOND CUSTOMER SATISFACTION
117.	DEVELOPMENT OF VERTICALLY MOUNTED FUEL MEASURING UNIT IN COMMON RAIL HIGH PRESSURE FUEL PUMP FOR COMMERCIAL VEHICLES
118.	DEVELOPMENT OF WIRELESS CHARGING PAD FOR MOBILE DEVICES
119.	DIE CHANGEOVER TIME REDUCTION TO 20% IN HIGH PRESSURE DIE CASTING (HPDC)
120.	DIFFERENT TYPE OF EXECUTION METHODOLOGY IN WASTE WATER NETWORK PROJECT
121.	DIGITALIZATION IN CONSTRUCTION MACHINERIES
122.	DM110 (TWIN BOOM ROOF BOLTER) COMPONENTS AND CIRCUIT DESIGN MODIFICATION TO REDUCE BREAKDOWN AND PROCESS TIME OF BOLTING.
123.	DRAG BENZENE COLUMN CONDENSER(HEAT EXCHANGER) DEW POINT CORROSION STUDY & IMPLEMENT IMPROVEMENT
124.	DRINKING WATER TREATMENT AND DISTRIBUTION
125.	DUST COLLECTOR AND AIR FILTERING SYSTEM USING ARDUINO

S.No.	PROJECT TITLE
126.	EFFECT OF HYDRAULIC CONTROL VALVE BODY FUNCTIONAL PARAMETERS ON THE PERFORMANCE OF AUTOMATIC SHIFT TRANSMISSION BY DESIGN OF EXPERIMENT
127.	EFFECT OF PRODUCTION PROCESS VARIABLE ON SPRING-BACK
128.	EFFECTIVENESS OF QUALITY MANAGEMENT SYSTEM ON WATER AND WASTEWATER PROJECTS.
129.	EFFICIENCY IMPROVEMENT OF PACKING LINE
130.	ELECTRICAL SIGNATURE ANALYSIS FOR MOTOR FAULT DETECTION
131.	ELECTRICAL SUBSTATION MAINTENANCE
132.	ELECTRONIC AXLE COUNTING SYSTEM
133.	ELIMINATE ERGONOMIC ISSUES ON BUS PASSENGER SEATS
134.	ELIMINATE QUALITY ISSUES AND IMPROVE PRODUCTIVITY IN JOHN DEERE SEATS
135.	ELIMINATE TACTILE ISSUES ON DRIVER SEAT
136.	ELIMINATE WARRANTY ISSUES AND IMPROVE PRODUCT RELIABILITY IN TATA HITACHI SEATS
137.	ELIMINATION OF CUSTOMER CONCERN IN
138.	ELIMINATION OF FRONT WINDSHIELD GLASS FITMENT ISSUE IN TRIM LINE
139.	END OF LINE PACKAGING AUTOMATION
140.	ENERGY AUDITING IN CUDDALORE CITY
141.	ENERGY EFFICIENCY & RENEWABLE ENERGY - DISTRICT COOLING, BIOGAS & ITS USE, SEWAGE TREATED WATER, SOLAR - WATER & ELECTRICITY, POWER MANAGEMENT, ANALYSIS & THEIR COMPUTATIONAL METHODS, ITS USE,
142.	ENERGY MANAGEMENT & OPTIMIZATION OF ELECTRICAL SYSTEMS IN HOSPITALITY SECTOR FOR A HOT & HUMID CLIMATE
143.	ENGINEERING PROCESS FLOW OPTIMIZATION
144.	ENGINEERING, PROCUREMENT & CONSTRUCTION
145.	ENHANCING SAFETY DURING MAINTENANCE OF UNDER CARRIAGE OF CRAWLER MOUNTED EQUIPMENT'S
146.	ENSURING DATA SECURITY IN CLOUD
147.	EPS ASSEMBLY LINE SETUP
148.	EQUIPMENT MAINTENANCE AND REPLACEMENT DECISION PROCESS
149.	ERECTION AND COMMISSIONING OF NEW AIR COMPRESSOR
150.	ERECTION OF PRE-CAST BEAMS AND SPLASH BARS
151.	ESSENTIALS OF FACILITIES MANAGEMENT
152.	EXECUTION OF SYSTEM STRENGTHENING WORKS UNDER INTEGRATED POWER DEVELOPMENT SCHEME (IPDS) IN BENGALURU METROPOLITAN AREA ZONE IN THE JURISDICTION OF BESCOM.
153.	EXPORT LOGISTICS PROCESS AND DOCUMENTATION
154.	FABRICATION AND ERECTION OF CMLC (CEMENT MORTAR LINED & COATED) PIPES AROUND NDCT (NATURAL DRAUGHT COOLING TOWER)
155.	FABRICATION OF WELDING SLAG CLEANING MACHINE
156.	FACE RECOGNITION BASED NON-CONTACT ATTENDANCE SYSTEM
157.	FAILURE ANALYSIS FOR BRASS SOCKET CRACKS WITH 3130 HOSE
158.	FAILURE ANALYSIS OF A HYDRAULIC CYLINDER PISTON ROD
159.	FAILURE ANALYSIS OF SEA WATER EXCHANGER TUBE IN NAPHTHA HYDROTREATING UNIT
160.	FAILURE ANALYSIS OF SIMPLEX STRAINER COVER ASSEMBLY & BENDING
161.	FAILURE/INCIDENT RECOVERY & UP TIME IN METRO RAIL
162.	FAILURE/INCIDENT RECOVERY TIME IMPROVEMENT BY 20% FOR HYDERABAD METRO RAIL BY IMPROVING COMPETENCY GAP AND CORRECT TECHNICAL SOPS
163.	FAULT RECORDING IN ELECTRICAL POWER SYSTEM
164.	FEASIBILITY STUDY & TESTING SETUP OF MIRROR CAMERA SYSTEM IN BUS.
165.	FEASIBILITY STUDY FOR ROBOTIC PROCESS AUTOMATION
166.	FILED COMPLAIN REDUCTION
167.	FIRE DETECTION FOR UNCERTAIN SURVEILLANCE ENVIRONMENT
168.	FLEXIBLE MANUFACTURING FOR OPERATIONAL EFFICIENCY IMPROVEMENT
169.	FLEXURAL BEHAVIOUR OF REINFORCED CONVENTIONAL VIBRATED CONCRETE AND COMPACTING CONCRETE BEAMS

S.No.	PROJECT TITLE
170.	FREQUENCY SYNTHESIZER USING CRYSTAL OSCILLATOR
171.	FUEL ECONOMY IMPROVEMENT IN COMMERCIAL VEHICLES USING UNIQUE GEAR SHIFT ALGORITHMS
172.	GAS DETECTION SYSTEM
173.	HARNESS AUTOMATION TEST JIG
174.	HIGH IN-HOUSE REWORK IN EXPORT LAWN MOWER SEATS
175.	HOWDEN MINING VENTILATION PROJECT
176.	HRSG BASE DESIGN AND MODULERIZATION
177.	HTTP TRAFFIC MONITOR OF WEB APPLICATION.
178.	HUMAN FACTORS AND ERGONOMICS
179.	HUMAN FACTORS ENGINEERING INVOLVED IN SUPPLY CHAIN RISK MANAGEMENT (SCRM)
180.	IMPLEMENTATION OF COMMISSIONING MANAGEMENT SYSTEM (CMS) FOR OPTIMIZATION IN CONSTRUCTION PROJECTS
181.	IMPLEMENTATION OF DIESEL GENERATOR CONTROL SYSTEM AT TELECOM SITE TO REDUCE OPERATION COST & INCREASE RESOURCE EFFICIENCY
182.	IMPLEMENTATION OF LEAN MANUFACTURING PRINCIPLES
183.	IMPLEMENTATION OF PROJECT MANAGEMENT SOFTWARE IN CONSTRUCTION PROJECTS
184.	IMPLEMENTATION OF SMALL LOT PRODUCTION - AGILE AND FLEXIBLE SUPPLY CHAIN
185.	IMPLEMENTATION OF VALUE STREAM MAPPING TOOL FOR WASTE REDUCTION IN ALLOY WHEEL PLANT
186.	IMPLEMENTING FIRST TIME RIGHT APPROACH TO IMPROVE RELIABILITY AND LEAD-TIME OF HPDC DIES DEVELOPMENT
187.	IMPLIMENTATION OF NEW PRODUCTS IN FIRE PROTECTION.
188.	IMPORTANCE OF SAFETY AT CONSTRUCTION SITE & SAFE PRACTICES TO IMPROVE EHS PERFORMANCE
189.	IMPROVE MATERIAL HANDLING IN WORKSHOP
190.	IMPROVE THE PRODUCTIVITY IN JD UTAI CELL TO MEET THE CUSTOMER SUDDEN REQUIREMENTS
191.	IMPROVED DESIGN OF A RAILWAY CARBODY MODULE
192.	IMPROVEMENT FOR REDUCTION IN MANUFACTURING CYCLE TIME OF CONTAINER BY ELIMINATING DEFECTS.
193.	IMPROVEMENT IN FIRE PROTECTION SYSTEM PIPING INSTALLATION AT ELEVATED METRO STATION
194.	IMPROVEMENT OF PRODUCTION PROCESS THROUGH IMPLEMENTATION OF PROPANEL MODULE OF EPLAN ELECTRIC P8"
195.	IMPROVING AUTOMOTIVE SEAT COMFORT WITHOUT COMPROMISING SAFETY
196.	IMPROVING CONSTRUCTION PROGRESS PLANNING AND MONITORING BY IMPLEMENTING BIM TOOLS AND TECHNIQUES
197.	IMPROVING HANDLING OF AIRCRAFT DOOR ASSEMBLY
198.	IMPROVING LOGISTICS FOR FRUITS & VEGETABLES : REDUCE COST AND WASTAGE
199.	IMPROVING LOGISTICS FOR NAVIGATIONAL PARTS AND COST REDUCTION
200.	IMPROVING PERFORMANCE OF FIRE WATER DIESEL PUMP IN NUCLEAR POWER PROJECT
201.	IMPROVING THE LIFE OF THE TRANSFORMER BY CONTINUOUS ONLINE MOISTURE MANAGEMENT AND KEY GAS (DGA) MONITORING
202.	IMPROVISATION OF INDOOR AIR QUALITY IN COMMERCIAL BUILDING
203.	INCREASE ORDERS FROM NEW CUSTOMERS BY USING WCM TOOLS
204.	INCREASE SAFETY IN RUN IN (TEMPERATURE CONTROL)ROOM
205.	INCREASE THE PRODUCTIVITY BY REDUCING NON VALUE ADDED ACTIVITIES
206.	INCREASE USABLE VOLUME,REDUCE COST OUT,INCREASE STRUCTURAL STRENGTH OF PLASTIC PAN
207.	INDIGENISATION OF COMPONENT OF QSK 60 ENGINES
208.	INDUSTRY 4.0 IMPLEMENTATION
209.	INPROCESS QUALITY-SHIFTING FOCUS FROM PRODUCT QUALITY TO PROCESS QUALITY.
210.	INSTALLATION AND COMMISSIONING OF 2X10MW SOLAR POWER PROJECT
211.	INSTALLATION OF CENTRAL PATIENT MONITORING SYSTEM
212.	INSTALLATION OF PV SOLAR SYSTEM ON FACTORY ROOF
213.	INSTRUMENT TRACEABILITY THROUGH RADIO-FREQUENCY IDENTIFICATION (RFID)

S.No.	PROJECT TITLE
214.	INTEGRITY IMPROVEMENT OF BOILERFEED WATER SYSTEMS
215.	INTERFACING OF ELECTRIC STEAM BOILER WITH SCADA
216.	INTERNAL DIAMETER 10 REJECTION
217.	INVENTORY OPTIMIZATION PLAN
218.	IOT BASED REMOTE PERFORMANCE MONITORING SYSTEM FOR POWER PLANT
219.	J1L CRANKCASE ASSEMBLY LINE
220.	LAB SCALE SEED CLEANER - AIR/SCREEN-DESIGN OPTIMIZATION COST AND AIR FLOW
221.	LEAD ENGINEER
222.	LEAD TIME REDUCTION
223.	LIGHT EMITTING DIODES TECHNOLOGY AND APPLICATIONS
224.	LOCOMOTIVE FIELD TEST AUTOMATION & TEST RECIPE MANAGEMENT
225.	LOGISTICS AND SUPPLY CHAIN MANAGEMENT
226.	MAINTAINING PLANTS & EQUIPMENTS FOR SAFE CONSTRUCTION OF REHABILITATION AND UP GRADATION TO FOUR LANING OF NH-31D FROM KM 0.000 TO KM 83.785 (PACKAGE-1) GHOSHPUKUR SALSALABARI SECTION IN THE STATE OF WEST BENGAL ON EPC BASIS PROJECT
227.	MAINTENANCE & SAFETY IN CONSTRUCTION
228.	MAJOR MODIFICATION ON BASIC DESIGN OF METAL BOND SUPER ABRASIVE PRODUCTS
229.	MAJOR RECERTIFICATION FOR PRESSURE CONTROL EQUIPMENT
230.	MANAGEMENT OF AQUIFER RECHARGE SYSTEM BY RAIN WATER HARVESTING IN STATE OF QATAR
231.	MANPOWER & MATERIAL MANAGEMENT THROUGH RFID SYSTEM
232.	MANUFACTURING COST AND PROJECT TIMELINE REDUCTION
233.	MANUFACTURING EXCELLENCE USING DIGITIZATION
234.	MARKETING MANAGEMENT
235.	MATERIAL BEHAVIOR STUDY OF FORGED DISK AND SLM MADE CIRCULAR DISK FOR GAS TURBINE APPLICATION
236.	MATERIAL COST SAVING
237.	MAXIMIZING PROFITABILITY WITH SAFETY CULTURE DEVELOPMENT
238.	MEASURING INSTRUMENT CONTROL
239.	MECHANICAL PART MACHINING PROCESS DESIGN & DEVELOPMENT FOR MEDICAL EQUIPMENT
240.	MECHANICAL SEAL PERFORMANCE ENHANCEMENT PROJECT - PERFORMANCE ENHANCEMENT ON CRUDE OIL PUMPS
241.	MECHANICAL SERVICES DESIGN FOR AN INTERNATIONAL EXHIBITION CENTER
242.	MECHATRONICS
243.	MELTING FURNACE - ADVANCED CONTROLLING SYSTEM
244.	METRO RAIL PLATFORM AUTOMATIC SCREEN DOOR MAINTENANCE - COST OPTIMIZATION OF PREVENTIVE MAINTENANCE TO REDUCE MAINTENANCE COST AND INCREASE SYSTEM AVAILABILITY
245.	MINIMIZE WASTE BY DEPLOYING LEAN TOOLS
246.	MIS AS A TOOL FOR IMPROVING PLANT PERFORMANCE
247.	MODIFICATION OF PARTS TO SALVAGE NON-MOVING INVENTORY AND COST SAVING SOLUTION ON OBSOLESCENCE MATERIAL
248.	MODULATED AIR FLOW MACHINE UPGRADATION WITH LATEST TECHNOLOGY
249.	MOISTURE BASED OXIDATION
250.	MOULD DESIGN FOR GEAR COMPONENT
251.	MTTR & MTBF IMPROVEMENT IN THERMIC FLUID HEATER MACHINE
252.	NATURAT DRAUGHT COOLING TOWER (NDCT) CONSTRUCTION ANALYSIS
253.	NEW PRODUCT DESIGN AND DEVELOPMENT
254.	NEW PRODUCT DEVELOPMENT OF UV ENCLOSURE
255.	NEW SCREEN SYSTEM INSTALLATION TO PRODUCE 5-15 MM AGGREGATE @ 150 TPH
256.	OBSOLESCENCE MANAGEMENT
257.	ON GRID SOLAR SYSTEM
258.	ONPREMISE MIGRATION TO AZURE CLOUD WITH A SITE RECOERY AND BACKUP

S.No.	PROJECT TITLE
259.	OPERATION & MAINTENANCE OF TRACK MACHINES ON WDFCC PROJECT AT MARWAR DEPOT
260.	OPERATION MANAGER
261.	OPERATION SCRAP REDUCTION & DELIVERY IMPROVEMENT IN CYLINDER HEAD MACHINING
262.	OPTIMISING THERMAL AND POWER MANEMENT IN ECAD
263.	OPTIMIZATION OF TOTAL INPUT ENERGY (KWHR) FOR GLASS COATING UNIT
264.	OPTIMIZE PRODUCT DESIGN METHODOLOGY & REDUCE DESIGN CYCLE TIME BY 20%
265.	OPTIMIZE THE ORGANIZATION MANAGEMENT STRUCTURE
266.	OPTIMIZING THE PRODUCT TEMPERATURE IN REFINED SUGAR DRYER WITH DEHUMIDIFIED AIR
267.	OVERALL SAFETY IMPROVEMENT AT LEVEL CROSSINGS
268.	PCM BEST PLANT MODEL
269.	PERFORMANCE AND EMISSION IMPROVEMENT OF 1 LITRE NATURALLY ASPIRATED GASOLINE ENGINE
270.	PLC MIGRATION PROJECT (MICRO CONTROLLER TO PLC)
271.	PNEUMATIC CONVEYING SYSTEM
272.	PNEUMATIC PIPE BENDING MACHINE
273.	POWER FACTOR CORRECTION AND BUS VOLTAGE CONTROL USING SINGLE STAGE AC-DC ISOLATED POWER TRANSFER CONVERTER
274.	PREPARATION OF PUSH BOX CULVERT AT BULB AREA
275.	PREVENT HEAT TINT DURING STAINLESS STEEL WELDING
276.	PRICING BENCHMARK TOOL
277.	PROBLEM SOLVING IN PROTECTIVE COATINGS
278.	PROCESS POKA-YOKE
279.	PROCESS SCRAP REDUCTION
280.	PROCUREMENT PROCEDURES
281.	PRODUCT DESIGN AND DEVELOPMENT
282.	PRODUCT DESIGN OF AUTOMATED ROBOTIC KITCHEN FOR COOKING INDIAN RECIPES
283.	PRODUCT QUALITY AND RELIABILITY IMPROVEMENT FOR AUTOMOTIVE INSIDE DOOR HANDLE (IDH)
284.	PRODUCTION
285.	PRODUCTION ,TRANSPORTATION AND PLACEMENT OF SPECIAL HEAVY CONCRETE AND HEAVY GROUT MATERIAL IN NUCLEAR POWER PROJECT
286.	PRODUCTION DECISION SUPPORT SYSTEMS
287.	PRODUCTION,PLANNING AND CONTROL
288.	PRODUCTIVITY IMPROVEMENT
289.	PRODUCTIVITY IMPROVEMENT
290.	PRODUCTIVITY IMPROVEMENT BY 15-20% THROUGH LEAN MANUFACTURING TECHNIQUES FOR HYDRAULIC GEAR PUMPS AT BOSCH REXROTH BY DECEMBER 2020
291.	PRODUCTIVITY IMPROVEMENT BY APPLYING LEAN CONCEPTS
292.	PRODUCTIVITY IMPROVEMENT BY LINE BALANCING AND ADOPTING MANUFACTURING EXCELLENCE PRACTICES
293.	PRODUCTIVITY IMPROVEMENT OF GLOVE BOX ASSEMBLY BY PRODUCING DEFECT FREE PRODUCTS AND SUSTAIN AT REDUCED COST OF QUALITY.
294.	PRODUCTIVITY IMPROVEMENT OF PORT SEALING MACHINE
295.	PRODUCTIVITY IMPROVEMENT THROUGH LEAN CONCEPT
296.	PRODUCTIVITY IMPROVEMENT THROUGH LINE BALANCING AND CYCLE TIME REDUCTION
297.	PRODUCTIVITY IMPROVEMENT THROUGH TOTAL QUALITY MANAGEMENT(AN OVERVIEW ON TQM)
298.	PRODUCTIVITY IMPROVEMENT THROUGH VALUE STRREAM MAPPING
299.	PRODUCTIVITY MONITORING AND ENHANCEMENT- LABOUR & MACHINERY
300.	PROJECT EXECUTION MANAGEMENT IN HILLY TERRAIN FOR 220KV D/C RUDRAPUR - SRINAGAR TL
301.	PROJECT MANAGEMENT
302.	PROJECT MANAGEMENT FOR IMPROVING PROJECT PERFORMANCE
303.	PROJECT MANAGEMENT IN CONSTRUCTION
304.	PROJECT MANAGEMENT IN ENGINEERING, PROCUREMENT, CONSTRUCTION, TESTING, COMMISSIONING &

S.No.	PROJECT TITLE
	PG TEST OF BULK MATERIAL HANDLING SYSTEM (COAL HANDLING PLANT) OF 2X660 MW SUPER THERMAL POWER PLANT
305.	PROJECT MANAGEMENT IN RENEWABLE ENERGY
306.	PROJECT MANAGEMENT OF 28MWP DC/20MW AC SOLAR PHOTOVOLTAIC POWER PLANT IN PAYAGPUR BAHRAICH DIST., UTTAR PRADESH
307.	PROJECT MANAGEMENT OF FLUE GAS DESULFURIZATION (FGD)
308.	PROJECT MANAGEMENT OF INSTALLATION ,TESTING AND COMMISSIONING WORKS FOR 132KV/11KV SUBSTATION
309.	PROJECT MANAGEMENT OF KUNDLIYA MICRO IRRIGATION PROJECT
310.	PROJECT MANAGEMENT ON TRACTION SUB-STATION AND DESIGN BASIS OF CROSS FEEDING ARRANGEMENT
311.	PROJECT MANAGEMENT: HARNESS DESIGN & DEVELOPMENT FOR X-BAND SEEKER
312.	PROJECT MONITORING & CONTROL SYSTEM OF A MEGA LIFT IRRIGATION PROJECT
313.	PROJECT PLANNING AND MANAGEMENT FOR SMART WATER INFRASTRUCTURE, BUSINESS SEGMENT
314.	PROJECT SCHEDULING AND CONTROL APPROACH IN DELHI INTERNATIONAL AIRPORT PHASE -3A EXPANSION PROJECT
315.	PROOF STRESS VARIATION
316.	QUALITATIVE AND COST EFFECTIVE: SIMPLIFIED PROCESS DESIGN
317.	QUALITY IMPROVEMENT BY PROBLEM SOLVING AND INTRODUCING QUALITY CONTROL AND ASSURANCE
318.	QUALITY IMPROVEMENT FOR VARIOUS ASSEMBLY AND COMPONENT
319.	QUALITY IMPROVEMENT IN HVAC PART
320.	QUALITY MANAGEMENT SYSTEM OF CONSTRUCTION HEAVY EQUIPMENTS.
321.	QUICK TROUBLESHOOTING OF HT MOTOR FEEDERS BY USING PLC
322.	REAL TIME TEST INSIGHTS ON LOCOMOTIVE WITH DYNAMIC & HISTORIC DATA VISUALIZATION
323.	REDUCE IN-HOUSE REWORK IN SINGLE PAN SEAT
324.	REDUCE LT SWITCH-GEAR CONCEPT TO COMMISSIONING CYCLE TIME
325.	REDUCE MACHINE BREAKDOWN TIME AND IMPROVE MACHINE SAFETY
326.	REDUCE NON-CONFORMITY BY OPTIMIZING RAW MATERIAL DEFECTS
327.	REDUCE OF SPECIFIC OIL CONSUMPTION DURING STARTUP OF BOILER IN THERMAL POWER PLANT
328.	REDUCE THE REJECTION COST BY 80% IN ENGINE MANUFACTURE CENTER
329.	REDUCE WASTAGE AND IMPROVE THE YIELD EFFICIENCY OF I SEATER FABRIC
330.	REDUCTION IN CYCLE TIME OF DISTRIBUTED CONTROL SYSTEM FROM CONCEPT TO COMMISSIONING.
331.	REDUCTION IN DOWNTIME OF DRAG CHAIN CONVEYOR THROUGH IMPROVEMENT IN THE DESIGN
332.	REDUCTION IN ENGINE FAILURE IN FIELD DUE TO BALANCER SHAFT NOISE
333.	REDUCTION IN ENGINE FAILURE IN FIELD DUE TO CRANKSHAFT REAR OIL SEAL LEAKAGE
334.	REDUCTION IN IN PROCESS REJECTION THRU PROBLEM SOLVING TECHNIQUES
335.	REDUCTION IN REWORK AND ITS ASSOCIATED COST IN MANUFACTURING PROCESS
336.	REDUCTION OF AUXILIARY POWER CONSUMPTION IN COAL BASED THERMAL POWER PLANT
337.	REDUCTION OF DPU (DEFECT PER UNIT) IN XTREME GRADIENT AMPLIFIER 2 WHICH IS USED IN SIGNA OPTIMA MRI MACHINE.
338.	REDUCTION OF PRODUCT LEAD TIME BY ADOPTING SYNCHRONOUS FLOW MANUFACTURING
339.	REDUCTION OF PROJECT DURATION
340.	RE-INSTRUMENTATION,DIGITALIZATION, SMART AND AUTOMATION OF EXISTING OIL WELLHEADS.
341.	REJECTION REDUCTION IN TIP BLOW HOLE IN MODEL # 7112(KWPA EX)
342.	RELIABILITY OF POWER SUPPLY BY CONSTRUCTION OF UNDERGROUND CABLING NETWORK UNDER MODEL SUB-DIVISION SCHEME
343.	RELIABILITY OF PRODUCTIVE EQUIPMENT ENGAGED IN THE CONSTRUCTION PROJECTS OF THE ORGANISATION
344.	REMOTE PERFORMANCE MONITORING SYSTEM FOR BOILER SYSTEM
345.	REMOTELY CONFIGURING LOCOMOTIVE CONTROL SYSTEM HARDWARE FOR HITL TESTING WITHOUT HUMAN INTERVENTION
346.	REPLACEMENT OF TRADITIONAL SCR BASED UPS WITH HIGH EFFICIENT MODULAR UPS

S.No.	PROJECT TITLE
347.	REPORT ON DIGITAL RENOVATION OF TRANSMISSION LINE
348.	RISK ASSESMENT TO CONTROL SCHEDULE & COST OVERUN
349.	RISK MITIGATION OF ELECTRONIC COMPONENTS PROCUREMENT
350.	RIVETING STATION
351.	RURAL WATER SUPPLY SYSTEM
352.	SAFETY AND MAINTENANCE IN CONSTRUCTION INDUSTRY
353.	SAFETY LEVEL IMPROVEMENT OF OBSTRUCTION DETECTION SYSTEM FOR LEVEL CROSSINGS
354.	SAVING ENERGY BY IMPROVING UNIT HEAT RATE
355.	SCHEDULING SYSTEM FOR AEROSPACE ASSEMBLY LINE
356.	SECURE AND EFFICIENT GAS LEAK DETECTION BASED ON A WIRELESS SENSOR AND NETWORK SYSTEMS
357.	SELECTION OF ENGINEERING MATERIALS IN POWER TRANSMISSION SYSTEM
358.	SEMI-AUTOMATIC PCB TESTING SYSTEM FOR INHOUSE PRODUCTION
359.	SETUP OF NEW ASSEMBLY LINE AS CUSTOMER REQUIRMENT
360.	SHAPE CHECKING MACHINE, TILT AND ENVELOPE CHECKING.
361.	SHEET METAL STAMPING PART WEIGHT REDUCTION ANALYSIS USING FORMALITY SIMULATION
362.	SHELF DEFLECTION ANALYSIS
363.	SHIP MAINTENANCE AND SAFETY
364.	SINGLE PHASE TO THREE PHASE INVERTER FOR 10HP AC MOTOR DRIVE
365.	SMALL CELL SITES FOR REMOTE LOCATION
366.	SMART AUTOMOTIVE INTERIORS TRIMS
367.	SMART DOCKING FOR YACHTS
368.	SMART IOT
369.	SMART MAINTENANCE USING COMOS SOFTWARE
370.	SMED (SINGLE-MINUTE EXCHANGE OF DIE)
371.	SOLAR POWER INSTALLATION, POWER CALCULATION USING REAL TIME APPLICATIONS,IMPROVISATION, CHALLENGES AND FUTURISTIC DEMAND.
372.	SPECIAL PURPOSE MACHINE DESIGN FOR BEARING BORE MEASURING
373.	STACK EMISSION MEASUREMENT & MONITOR THROUGH IIOT SOLUTION.
374.	STANDARDIZED PROCESS FOR DESIGN CHANGE INTRODUCTION IN OPERATIONS
375.	STATE-OF -THE-ART INSTRUMENT CALIBRATION IN OIL AND GAS INDUSTRIES
376.	STEERING COLUMN LEVER DESIGN OPTIMIZATION THROUGH POLYMER
377.	STRATEGIC RE-MARKETING PROJECT
378.	STRATEGIES FOR GROWTH
379.	STRUCTURAL OPTIMIZATION OF BRACKET IN AEROSPACE APPLICATION
380.	STUDIES ON GMAW AUTOMATIC WELDING TECHNOLOGY FOR PIPELINES
381.	STUDY & IMPLEMENTATION OF STRATEGIES OF SUPPLY CHAIN & VENDOR SELECTION
382.	STUDY AND ANALYSIS ON PHOTOVOLTAIC BASED POWER NETWORK ONBOARD THE SHIP
383.	STUDY AND APPLICATION OF ADVANCE CAMERA RADAR - FUSION DATA MANAGER
384.	STUDY AND RESEARCH ON APPLICATION OF STEEL FIBER IN PRODUCTION OF PUMPABLE HEAVY DENSITY GROUT OF 2900 KG/CUM IN NUCLEAR POWER CONSTRUCTION
385.	STUDY OF FREQUENT FAILURES OF INVERTERS IN HEATSET MACHINE #2
386.	STUDY OF HARMONIC ANALYSIS IN PUMPING STATION
387.	STUDY OF SUPPLY CHAIN MANAGEMENT IN SOLAR RENEWABLE INDUSTRY
388.	STUDY ON CONSTRUCTION COST OPTIMIZATION THROUGH PROCESS EFFICIENCY IMPROVEMENT INITIATIVES IN HYDROCARBON PROJECTS
389.	STUDY TO INCREASE THE LIFE TIME OF BURNER COMPONENTS
390.	SUPER ABRASIVE SEGMENTED WEHEEL FOR CARBIDE FACE GRINDING
391.	SUPPLY CHAIN ANALYSIS & REPORTING TOOL
392.	SUPPLY CHAIN MANAGEMENT (SMART & LIVE INVENTORY MANAGEMENT - SLIM)

S.No.	PROJECT TITLE
393.	SW TEST AUTOMATION USING CAPL SCRIPTING
394.	SWITCHING BETWEEN ACTUAL DEVICES AND VIRTUAL MODELS REMOTELY
395.	TECHNICAL SUPPORT OUTSOURCING SERVICES
396.	TEST AUTOMATION
397.	TESTING AND COMMISSIONING OF ELECTRICAL SYSTEM IN 33 KV SUBSTATION
398.	THERMAL ENERGY STORAGE IN CONCRETE
399.	THIRD PARTY LOGISTICS
400.	TO AUTOMATE THE EXECUTION PROCESS OF ANNUAL MAINTENANCE CONTRACTS
401.	TO CRUSH QUEENBALLS ON OVERSIZE CONVEYOR,SO THAT WE CAN AVOID SHREDDERS AND IT™S ACCESSORIES
402.	TO ELIMINATE THE PROBLEM OF WRONG PART FITMENT ON LINE BY IMPLEMENTING BARCODE STICKER ON PART AND SCANNING & PART NO MATCHING SYSTEM AT ASSEMBLY LINE
403.	TO ELIMINATE UNDER-CUT (WELD DEFECT) ISSUE IN LOADER ARM USING 7 QC PROBLEM SOLVING TOOL.
404.	TO INCREASE CUSTOMER SATISFACTION BY IMPROVING DELIVERY COMPLIANCE (ON TIME IN FULL) TO 92%
405.	TO OPTIMIZE THE RANGE OF TRIP TRAVEL AND TRIP STROKE FOR 630A MCCB
406.	TO OPTIMIZE THE WIP AND FCS IN COMPRESSOR DIVISION THROUGH PRODUCTION, PLANNING AND CONTROL
407.	TO REDUCE INVENTORY COST BY IMPLEMENTING THEORY OF CONSTRAINTS
408.	TO REDUCE TIP BLOW HOLE REJECTION IN MODEL 7112
409.	TOC BASED PRODUCTION, PLANNING & CONTROL
410.	TORCH WEAVING MECHANISM USING LINEAR POTENTIOMETER FOR GMAW WELDING APPLICATIONS
411.	TPM BASED PM PILLAR 07 STEP IMPLEMENTATION AT NEW MANUFACTURING FACILITY
412.	TQM APPROACH IN PROJECT EXECUTION FOR BUSINESS EXCELLENCE
413.	TRADITIONAL DATA CENTER VS CLOUD DATA CENTER - ANALYSIS
414.	TRANSFORMING WORKSPACES
415.	UNDERSTANDING THE BENEFITS OF FLY ASH CONCRETE IN CONSTRUCTION INDUSTRY
416.	UPGRADATION OF HIGH-PRESSURE TEST CHAMBER FOR HIGH PRESSURE API VALVES
417.	UPGRADATION OF MATERIAL PROCESSING FLOW AT L&T ENGINEERING WORKSHOPS
418.	UPGRADING OF COOLING TOWER TO MEET LATEST AIR CONDITIONING LOAD
419.	USAGE OF PROCESS BEHAVIOUR ANALYSIS IN CLOUD INFRASTRUCTURE OPERATIONS
420.	USE OF ENQUIRY MANAGEMENT SYSTEM
421.	VALUE ENGINEERING IN MEP TENDERS TO WIN PROJECTS IN COMPETITIVE MARKET
422.	VARIATION OF COMPRESSION STRENGTH OF CONCRETE BY USING JUTE-FIBER AND STEEL BINDING WIRES AS COMPOSITES.
423.	VISUAL, DIMENSIONAL, AND QUALITATIVE ANALYSIS OF INCOMING MATERIAL AND OUTBOUND PRODUCTS ALONG WITH WITNESSING CUSTOMER QUALITY INSPECTIONS - FOR INSTRUMENTATION INDUSTRY
424.	WALL THICKNESS ANALYSIS OF DURCO PLUG VALVE
425.	WASTE WATER PIT LEVEL SENSING SYSTEM
426.	WASTE WATER PROCESS OPTIMIZATION AND IMPROVE RECOVERY RATIO
427.	WDFC PROJECT CTP-1 (PKG-A)
428.	WEB APPLICATION AUTOMATION TEST FRAMEWORK DEVELOPMENT
429.	WIND TURBINE HEALTH MONITORING SYSTEM
430.	WINDOW DAMAGE ISSUE SOLVING IN FMCG MACHINE (BLADE TUCKING MACHINE)
431.	WIRELESS DATA ACQUISITION SYSTEM FOR ROTATING EQUIPMENT
432.	WIRING HARNESS PRODUCT DESIGN
433.	WORK SAFE PRACTICE, ANALYSIS AND ENVIRONMENT INTO ENGINEERING PROJECT
434.	WORKING CAPITAL MANAGEMENT
435.	YIELD IMPROVEMENT IN 2 PASS PRINTING - LAMINATED WINDSHIELD MANUFACTURING
436.	DATA CENTER INFRASTRUCTURE MANAGEMENT
437.	OPTIMIZATION IN OFFSHORE JACKET CONSTRUCTION MANAGEMENT

S.No.	PROJECT TITLE
438.	ROOT CAUSE ANALYSIS ON DOWNHOLE TOOL FAILURE
439.	SHORE TO SHIP CONTAINER HANDLING GANTRY CRANE MODIFICATION
B.Tech. Information Systems	
440.	HOSTING E-BUSINESS SUITE APPLICATIONS IN CLOUD WITH FOCUS ON TCO AND SECURITY
441.	PC BASED INTERLOCKING SYSTEM
B.Tech. Processing Engineering	
442.	AFR ENHANCEMENT
443.	ANALYZING AND DEBOTTLENECKING OF PLANT PROCESSING
444.	CONTROLING OF BLAIN AND RESIDUE OF CEMENT
445.	ENERGY CONSERVATION IN CLINKER GRINDING CEMENT MILL.
446.	ENHANCE USAGE OF ALTERNATE FUEL RAWMATERIALS (AFR) FROM 3% TO 8% (TSR) IN LINE-2 KILN
447.	ENHANCEMENT OF BUCKET ELEVATOR CAPACITY
448.	HEATREATE OPTIMIZATION OF TURBINE & BOILER
449.	IMPROVE PRODUCT QUALITY
450.	IMPROVEMENT IN LUMPS RECOVERY
451.	IMPROVEMENT OF OPERATIONAL EFFICIENCY OF FLOATING TRANSFER STATION M.V. ROYAL SESA
452.	INCREASING THE RELIABILITY OF LIME STONE CRUSHER SECTION
453.	KILN OPTIMIZATION (REDUCTION OF SPECIFIC POWER CONSUMPTION)
454.	LIMESTONE CRUSHER INTERNAL PARTS LIFE ENHANCEMENT AT KOTPUTLI CEMENT WORKS
455.	MINIMIZATION OF KILN HOOD PRESSURIZATION
456.	OPTIMIZATION OF CEMENT GRINDING IN VRM TO MEET QUALITY REQUIREMENT
457.	PROCESS FAN POWER REDUCTION BY KS FAN MODIFICATION
458.	PROCESS SAFETY MANAGEMENT IN CEMENT GRINDING UNIT
459.	REDUCE ZINC AND PH VARIATION IN EFFLUENT: LIME DOSING AUTOMIZATION
460.	REDUCTION IN CEMENT MILL-3 GRINDING POWER CONSUMPTION FOR OPC-53,PPC-S AND IRST
461.	REDUCTION IN COP AND DOWNTIME
462.	REDUCTION IN FUGITIVE DUST EMISSION AT SHIP LOADER
463.	REDUCTION IN POWER CONSUMPTION & PERFORMANCE OPTIMIZATION OF POLLUTION CONTROL , UTILITIES & GRINDING SECTION EQUIPMENTS
464.	REDUCTION IN SPECIFIC POWER CONSUMPTION OF KILN-1 CINKERISATION
465.	REDUCTION IN SPECIFIC POWER CONSUMPTION OF KILN-II
466.	REDUCTION OF AUXILIARY POWER IN BOILER FANS
467.	REDUCTION OF BAG BURSTAGE OF PACKING PLANT LESS THAN 0.03%
468.	REDUCTION OF CEMENT MILL SPECIFIC POWER CONSUMPTION
469.	REDUCTION OF COOLING WATER CONSUMPTION FROM 267 KL/DAY TO 240 KL/DAY I.E. 10%
470.	REDUCTION OF ENERGY CONSUMPTION AND ENHANCE AFR SUBSTITUTIONE IN CEMENT PLANT
471.	REDUCTION OF SPECIFIC POWER OF PACKING PLANT BY LESS THAN 1.0 UNIT/TON
472.	REMOVAL OF PHOSPHATES FROM PHOSPHOGYPSUM FOR CEMENT APPLICATIONS
473.	SELECTIVE NON CATALYTIC REDUCTION(SNCR) OF NITROGEN OXIDE EMISSION: A PERSPECTIVE FROM NUMERICAL MODELING
474.	SPECIFIC POWER REDUCTION IN CEMENT MILL
475.	STUDYING AND IMPLEMENTATION OF ENERGY SAVING OPPORTUNITIES IN BLAST FURNACE PROCESS.
476.	TO IMPROVE PHYSICAL AVAILABILITY OF CODLI PLANT FROM EXISTING 55 % TO 88%
477.	UTILIZATION OF ALTERNATIVE FUEL REGARDING SAVING IN NON-RENEWABLE ENERGY
478.	ANALYSIS AND PREVENTION OF PROCESS SAFETY CRITICAL EQUIPMENT FAILURE DURING HSE OVERRIDE CONDITION FOR PREVENTIVE MAINTENANCE JOBS
479.	ANALYSIS OF CARBON FOOTPRINT REDUCTION BY BOIL OF GAS RECOVERY IN LNG INDUSTRY
480.	CONSTRUCTION OF INTERNAL COATING MACHINE
481.	CONTINUOUS PROCESS IMPROVEMENTS
482.	DCS BASED INTEGRATED SUBSEA PUMP CONTROL SOLUTION

S.No.	PROJECT TITLE
483.	FLUID INLET AND OUTLET MODULE FOR DIALYSIS MACHINE
484.	IDENTIFY THE AREAS OF YIELD IMPROVEMENT AND ACHIEVE REDUCTION IN TS LOSS BY 25% IN PROCESS BY FLUSH QUANTITY AS AGAINST Q1-2020
485.	IMPLEMENTATION OF STATISTICAL PROCESS CONTROL (SPC) IN THE ADVANCED CRACKING EVALUATION UNIT
486.	PROCESS CERTIFICATION TO IMPROVE QUALITY
487.	SAFE WORK ENVIRONMENT
488.	SAFETY PRACTICES IN ALUMINIUM INDUSTRY
489.	VALUE STREAM MAPPING FOR 6" BILLET PRODUCTION AND INCREASE ITS PRODUCTIVITY
490.	WDFC EMP-16 PROJECT
B.Tech. Power Engineering	
491.	AUXILIARY POWER REDUCTION IN TG BUILDING LIGHTS
492.	CONSERVATION OF POWER IN COMPRESSOR BY OPTIMIZATION OF COMPRESSED AIR SYSTEM.
493.	EFFICIENCY IMPROVEMENT IN ACW & CCW PUMPS BY ABRASION RESISTANCE COATING ON PUMP INTERNALS.
494.	ENERGY COST SAVING THROUGH REDUCTION IN UTILITY POWER CONSUMPTION
495.	ENERGY MANAGEMENT THROUGH OCCUPANCY SENSOR
496.	ENERGY OPTIMIZATION OF MILL BAG HOUSE THROUGH DIGITIZATION- IN EXPERT OPTIMIZER AND REDUCING AUXILIARY™S
497.	ENERGY SAVING BY REDUCTION IN COMPRESSED AIR POWER CONSUMPTION
498.	ENERGY SAVING IN THERMAL POWER PLANT
499.	INSTALLATION OF SPRS (SLIP POWER RECOVERY SYSTEM) IN FANS APPLICATION DRIVE FOR ENERGY SAVING
500.	LIGHTING POWER REDUCTION IN TG BUILDING AREA
501.	LOI REDUCTION IN CFBC BOILER
502.	OPTIMISATION OF POWER CONSUMPTION OF ACC FANS IN WHRS BY 5-8 %.
503.	OPTIMIZATION OF COMPRESSOR POWER
504.	PH BOILER AUXILLARY POWER REDUCTION UP TO OPTIMUM LEVEL
505.	PLANT HEAT RATE REDUCTION
506.	POWER AVAILABILITY THROUGH CHANGEOVER AND LOAD SHEDDING
507.	POWER OPTIMISATION IN SEPARATOR FAN
508.	POWER OPTIMIZATION OF (ESP) ELECTROSTATIC PRECIPITATION SYSTEM OF COOLER IN CEMENT INDUSTRIES
509.	POWER REDUCTION IN LS CRUSHER & RAW MATERIAL HANDLING AREA IN CEMENT PLANT.
510.	POWER SAVING BY INOVATION
511.	POWER SAVING IN BFP OPERATION
512.	POWER SYSTEM STUDIES OF ELECTRICAL AT OUR PLANT
513.	POWER TRANSMISSION & DISTRIBUTION WITH GRID ,TPP & WHRS TO PLANT
514.	PROTECTION OF ELECTRICAL EQUIPMENT THROUGH PROPER RELAY COORDINATION FOR WHRS PROJECT
515.	REDUCTION OF ENERGY CONSUMPTION IN BFP PUMP OPERATION
516.	REDUCTION OF ENERGY CONSUMPTION IN CONDENSATE EXTRACTION PUMP OPERATION
517.	REPLACEMENT OF CONVENTIONAL CEILING FAN WITH ENERGY EFFICIENT BLDC FAN
518.	STUDY AND IMPLEMENTATION OF ADVANCE PROCESS CONTROL SYSTEM IN CAPTIVE THERMAL POWER PLANT TO OPTIMISE POWER CONSUMPTION AND IMPROVE HEAT RATE
519.	STUDY AND OPTIMISATION OF POWER CONSUMPTION OF WHRS.2 BOILER FEED PUMP NO.3 BY 5-8%
520.	TPP HEAT RATE REDUCTION
521.	TROUBLE SHOOTING THE FC MIN FAULT IN SCHENCK CORIOLIS FEEDER.
522.	UP GRADATION OF CALCINER FAN,3080 KW HT MOTOR SPRS:FOR ENERGY SAVING AND REDUCE THE BREAKDOWN
523.	ACHIEVING STABLE OPERATIONS AT 55% MTL (MINIMUM TECHNICAL LIMIT) CONDITION.
524.	APPLICATION OF SOLAR POWERED AUTOMATION IN DISTRIBUTION MO

S.No.	PROJECT TITLE
525.	AUTOMATIC TRIPPING MESSAGE TO CONSUMER AND RELIABILITY INDICES CALCULATION
526.	AUX POWER REDUCTION
527.	AUX.POWER REDUCTION IN KHOPOLI & BHIVPURI HYDRO PLANT
528.	BELT VULCANIZING PROCESS TIME REDUCTION
529.	COAL MILL PERFORMANCE MONITORING USING DIRTY AIRFLOW & ISOKINETIC COAL SAMPLING TEST.
530.	DECARBONISATION IN LOGISTICS AND TRANSPORTATION SECTOR WITH ELECTRIC AND HYBRID VEHICLES
531.	DESIGN, PLANNING, SAFETY INNOVATIONS, AND CHALLENGES FACED DURING THE EXECUTION OF 220KV NAVI MUMBAI INTERNATIONAL AIRPORT (NMIA) CABLE PROJECT AT PANVEL, NAVI MUMBAI.
532.	DESIGNING, ERECTION & COMMISSIONING OF CONSUMER SUB STATION.
533.	DIGITALISATION OF UNDERGROUND EHV CABLE ROUTE AND TEMPERATURE MONITORING METHODS.
534.	DISASTER RECOVERY SYSTEM
535.	EFFICIENCY MANAGEMENT & ENERGY CONSERVATION IN THERMAL POWER PLANT
536.	ENHANCING THE ANALOG INPUT/OUTPUT OF VFD TO ENABLE QUICK FAULT FINDING
537.	FORCE OUTAGE REDUCTION OF POWER PLANT DUE TO ELECTRICAL & INSTRUMENTATION REASON
538.	ID FAN HIGH R.P.M ISSUE
539.	IMPACT OF SPLIT-DISTANCE ON PIN-FINS OVER NATURAL CONVECTION HEAT TRANSFER ENHANCEMENT
540.	IMPROVEMENT OF STATION HEATRATE
541.	IMPROVING RELIABILITY INDICES THROUGH ENHANCEMENT OF FAULT PASSAGE DETECTION SYSTEM IN UNDER GROUND HT NETWORK OF POWER DISTRIBUTION SYSTEM.
542.	INNOVATION AND BEST PRACTICES IN DISTRIBUTION MANAGEMENT TO MITIGATE KEY CHALLENGES FOR DISCOM.
543.	INSTALL MICRO HYDEL TURBINES AT VARIOUS SITES
544.	INSTALLATION OF ADDITIONAL SOOT BLOWERS AT BOILER PRESSURE PARTS IN ORDER TO REDUCE ID (INDUCED DRAFT) FAN LOADING
545.	IOT ENABLED REMOTE MONITORING FOR NON-AUTOMATED CONSUMER SUBSTATIONS
546.	MAINTENANCE AND SAFETY OF RECEIVING STATION
547.	MAINTENANCE AND SAFETY PRACTICES IN TRANSMISSION LINES WORK
548.	MAINTENANCE PRACTICES OF OVERHEAD TRANSMISSION LINES
549.	MARG- MOBILE ASSISTED ROUTE VIA GIS
550.	OFFSHORE WIND ENERGY - UNTAPPED RENEWABLE POWER RESOURCE IN INDIA
551.	OPTIMIZATION OF MAINTENANCE PRACTICES THROUGH RELIABILITY CENTERED MAINTENANCE
552.	OPTIMIZATION OF POWER PLANT AUXILIARY POWER CONSUMPTION
553.	REALTIME 24/7 SUPPORT USING IOT TO HELP IMPROVE PRODUCTIVITY AND RELIABILITY
554.	REDUCING ENERGY CONSUMPTION IN COAL LOGISTIC &PLANT(TROMBAY)
555.	REDUCTION IN DE-MINERALIZED WATER CONSUMPTION IN POWER HOUSE-6
556.	REDUCTION OF BOILER COLD START UP TIME
557.	REMOTE OPERATION OF 33/11KV SUBSTATION
558.	STUDY ON NEW TECHNOLOGY OF ELECTRICAL EQUIPMENTS
559.	TO IMPROVE RELIABILITY OF OIL CENTRIFUGE BY REDUCING ITS FREQUENT TRIPPING
560.	UTILIZATION OF SEEPAGE , RAIN WATER FROM CABLE TRENCHES TO USE IN COOLING TOWER, FOR REDUCTION OF MAKEUP WATER CONSUMPTION
561.	WASTE WATER MANAGEMENT -ZLD PLANT
562.	WI-FI BASED MOBILE APPLICATION FOR METER READING
563.	WIND SOLAR TOWER
M.Sc. Business Analytics	
564.	A STUDY ON USAGE OF ANALYTICS IN PROJECT COMMUNICATION MANAGEMENT
565.	ACCESSING BUSINESS REPORTS USING CHATBOT BY NATURAL LANGUAGE PROCESSING
566.	AN ANALYSIS TO INCREASE THE SALES OF CROMPTON PREMIUM FANS IN KARNATAKA
567.	ANALYSING IMPACT OF EXTERNAL FACTORS ON DSO (DAYS SALES OUTSTANDING) IN RECEIVABLE MANAGEMENT.

S.No.	PROJECT TITLE
568.	ANALYSIS OF AUDIO FOR BEHAVIOR MAPPING
569.	ANALYSIS OF DATA AND STRATEGIC PLANNING, USING DATA SCIENCE AND MACHINE LEARNING
570.	ANALYSIS OF FINANCIAL IMPACT DUE TO COVID19
571.	ANALYSIS OF WARSHIPS ACCIDENT DATABASE FOR USE IN RISK BASED SHIP DESIGN
572.	ANALYTICS DRIVEN MIS FRAMEWORK FOR GOOGLE PAY CUSTOMER SUPPORT SERVICE
573.	ANOMALY DETECTION
574.	ANOMALY DETECTION IN POSTGRESQL DATABASE LOGS
575.	ANTICIPATING CUSTOMER BEHAVIOR WITH CTR & MARKET BASKET ANALYSIS
576.	API ERROR TYPE CLASSIFICATION
577.	APPLICATION OF ANALYTICS IN HEALTH INSURANCE FRAUD DETECTION
578.	AUTOMATION IN ASSET ALLOCATION
579.	AUTOMOBILE FINANCING: LEASE AS A PRODUCT OFFERING
580.	BRAND SENTIMENT ANALYSIS WITH ML USING AZURE
581.	BUSINESS INTELLIGENCE TOOL DESIGN USING POWER BI
582.	BUSINESS STRATEGIES AND ANALYSIS IN MANUFACTURING INDUSTRY
583.	CAMPAIGN BUDGET OPTIMIZATION
584.	CLUSTERING AND CLASSIFICATION OF NEWS ARTICLES
585.	COMPETITIVE REAL-TIME PRICING
586.	CREATING BUSINESS PLAN & FINANCIAL MODEL
587.	CREATIVE USER SEGMENTATION
588.	CREDIT AND OPERATIONAL RISK MANAGEMENT
589.	CREDIT CARD FRAUD DETECTION
590.	CREDIT RISK ANALYTICS ON LOANS
591.	CREDIT SCORING ANALYSIS USING MACHINE LEARNING ALGORITHMS
592.	CROP YIELD PREDICTION BASED ON SOIL TYPE
593.	CUSTOMER CHURN ANALYSIS
594.	CUSTOMER CHURN PREDICTION IN TELECOM
595.	CUSTOMER PROFILING AND PERSONALIZED RECOMMENDATIONS USING BODY MEASUREMENTS
596.	DATA DRIVEN DECISION MAKING FOR PLANNING ANNUAL BUSINESS MEETS
597.	DATA VISUALIZATION IN LOGISTIC INDUSTRY
598.	DATA VISUALIZATION IN POWER BI
599.	DESIGN EFFECTIVE DATA STRATEGY FOR A GLOBAL RETAIL-FMCG COMPANY
600.	DESIGN OF AN OPEN SOURCE LEAD MANAGEMENT SYSTEM FOR CAPITAL ADVISORY FIRM
601.	DEVELOP AND DEPLOY A COMPREHENSIVE CUSTOMER EXPERIENCE DASHBOARD FROM MULTIPLE DATA SOURCES OF CUSTOMER COMPLAINTS
602.	DEVELOPMENT OF INTELLIGENT FORECASTING MODEL FOR BANK DATA SET USING DATA SCIENCE TECHNIQUES
603.	DIGITAL MARKETING VS TRADITIONAL MARKETING
604.	DIGITAL SYSTEM ARCHITECTURE FOR CONDITIONAL MONITORING OF INDUSTRIAL MACHINERY
605.	DYNAMIC ASSET PRICING OF FUNGIBLE, PERISHABLE GOODS
606.	EARLY WARNING SYSTEM - PREDICTING EMPLOYEE ATTIRION
607.	EFFECT OF BRANDING ON CONSUMER BUYING BEHAVIOR
608.	EFFECTIVE MAINTENANCE PLANNING THROUGH PREDICTIVE ANALYSIS
609.	ELK BASED ANALYTICS ENGINE
610.	EMOTION DETECTION FROM TEXT USING NLP(DEEP LEARNING)
611.	EMOTION DETECTION IN TWITTER STREAMS
612.	EMPLOYEE ATTRITION MODELLING
613.	EMPLOYEE ATTRITION PREDICTION MODEL
614.	ENABLE PEER SELLER LEARNING USING PAST SALES OUTCOMES
615.	ENTERPRISE PRODUCT RECOMMENDER

S.No.	PROJECT TITLE
616.	EXPECTED RETURN FOR STOCKS
617.	FACIAL EXPRESSION RECOGNITION
618.	FINANCIAL ANALYSIS WITH PEER GROUP COMPANIES USING FINANCIAL MODELLING & STATISTICAL TOOLS
619.	FLIGHT SORT FOR BUSINESS CUSTOMER RELEVANCE
620.	FMCG SALES DEVELOPMENT
621.	FORWARD LOOK ANALYSIS
622.	FULFILMENT OPTIMIZATION IN STORES
623.	GLOBAL PLANT MANUFACTURING DASHBOARD
624.	HARAYANA AGRICULTURE INFORMATION MANAGEMENT SYSTEM
625.	HIRING PENETRATION
626.	IDENTIFY PRODUCTIVITY PROBLEMS AND SOLUTION IN ORGANIZATION IN THE PANDEMIC SITUATIONS
627.	IDENTIFYING PERFORMANCE AREAS AND APPLYING PREDICTION TECHNIQUES ON BUSINESS FINANCIALS
628.	IMAGE CLASSIFICATION USING COMPUTER VISION
629.	IMPROVING PEOPLE EXPERIENCE OF IT SYSTEMS - CORRELATION OF MONITORING EVENTS TO IMPROVE TAT OF INCIDENTS RESOLUTION
630.	INCREASING CUSTOMER RETENTION WITH PREDICTIVE ANALYTICS
631.	INDIA RAINFALL KARNATAKA FLOOD
632.	INSURANCE - SALES PERFORMANCE BY BUSINESS UNIT BY CHANNEL
633.	INTEGRATED DEMAND MANAGEMENT
634.	INTELLIGENT ASSISTANT FOR INFORMATION RETRIEVAL FROM MAIL ARCHIVES
635.	INTELLIGENT CALENDAR
636.	INTELLIGENT DEVOPS FOR CLOUD NATIVE PLATFORM & APPLICATIONS
637.	INVENTORY MANAGEMENT OPTIMISATION FOR PERISHABLE GOODS
638.	INVOICE EXTRACTION THROUGH OCR AND INTELLIGENT AUTOMATION
639.	IT SUPPORT TICKET MANAGEMENT - USING TEXT ANALYTICS
640.	KPIS VISUALIZATION
641.	LEAD TIME & DEMAND PATTERN ANALYSIS AT WATCHES MANUFACTURING
642.	MINING BUSINESS DATA TO ANALYSE BUSINESS IMPACT IN 2020
643.	ML & DATA ANALYTICS ON CUSTOMER DESIGN REVIEW DATASET
644.	NETWORK ANALYSIS FOR CUSTOMER SEGMENTATION
645.	NORTON MEMBERSHIP CHURN PREDICTION
646.	NPS PREDICTION MODEL FOR A NETHERLANDS BASED LIFE INSURANCE COMPANY
647.	OPINION MINING
648.	OPTIMAL ASSEMBLY LOADING STRATEGY USING LINEAR PROGRAMMING AND PYTHON
649.	ORDER TO CASH ANALYTICS
650.	PATIENTS SOCIAL SUPPORT NEEDS PREDICTION SYSTEM
651.	PEOPLE ANALYTICS SUPPORTING MANAGEMENT & DECISION MAKING
652.	PREDICT WHICH TWEETS ARE ABOUT REAL DISASTERS AND WHICH ONES ARE NOT
653.	PREDICTING AND MEASURING RESPONSE FOR CAMPAIGNS
654.	PREDICTING ANOMALIES IN CLIENT KPIS
655.	PREDICTING CLAIM STATUS OF WORKERS' COMPENSATION CLAIMS
656.	PREDICTING DISEASE BY ANALYZING PATIENTS SYMPTOMS
657.	PREDICTION OF CUSTOMER DELINQUENCY
658.	PREDICTIVE ANALYSIS ON APPLICATION HEALTH BY ANALYZING ERROR LOGS AND TRACE
659.	PREDICTIVE ANALYTICS
660.	PREDICTIVE ANALYTICS IN RETAIL
661.	PREDICTIVE ANALYTICS IN WORKFORCE MANAGEMENT
662.	PREDICTIVE ANALYTICS ON INSURANCE DEBT COLLECTION

S.No.	PROJECT TITLE
663.	PREDICTIVE ENGAGEMENT
664.	PREDICTIVE INSIGHTS OF POWER OUTAGE
665.	PREDICTIVE MAINTENANCE
666.	PREDICTIVE MODELLING FOR HEALTH INSURANCE RENEWAL FROM THE SAME ENTITY
667.	PREDICTIVE POLICING
668.	PREDICTIVE TAG MANAGEMENT IN HYBRID IT
669.	PRESENTING DATA, PEOPLE CANT IGNORE - CXO DASHBOARD
670.	PRODUCT ESCALATION ANALYSIS
671.	PRODUCTION OPTIMIZATION STRATEGY FOR MTO SCENARIO
672.	PROJECT PERFORMANCE IMPROVEMENT WITH ENHANCED RISK MANAGEMENT
673.	PUBLIC HEALTH PROGRAM: USING TECHNOLOGY FOR CASCADE MONITORING AND DATA DRIVEN DECISION
674.	REAL TIME STREAM ANALYTICS AND PROCESSING APPLICATION IN FIRE ALARM EVENT MONITORING & MANAGEMENT
675.	REAL-TIME SERVER HEALTH MONITORING AND ANALYSIS PLATFORM
676.	REAL-TIME TRANSACTION ANALYTICS AND ADAPTIVE MACHINE LEARNING FOR ATM AND POS
677.	RELIABILITY ANALYSIS FOR MAINTENANCE ACTIVITIES
678.	REPORTING AND ANALYTICS FOR WINERY DISTRIBUTORS
679.	RISK MODELS IN BANKING
680.	ROLE OF SUPPLY CHAIN IN ECOMMERCE
681.	SALES FORECASTING (TIME SERIES ANALYSIS)
682.	SENTIMENT ANALYSIS
683.	SERVICE DISRUPTION PREDICTION IN TELECOM NETWORKS
684.	SERVICENOW: PERFORMANCE DASHBOARD
685.	SMART ACTION RECOGNITION AND VIDEO CLASSIFICATION USING AI
686.	SMART PICKING APPLICATION
687.	SOFTWARE PROJECT EFFORT ESTIMATION PREDICTION TOOL
688.	SPACE OPTIMIZATION IN STORES
689.	SUPERVISED MACHINE LEARNING TECHNIQUE BASED ANALOGUE POWER SWITCH MODELLING & SOLVING DESIGN VERIFICATION CHALLENGES
690.	TRACKING EMPLOYEE PERFORMANCE USING EXAGO BI, SSRS AND MICROSTRATEGY DESKTOP
691.	TRAFFIC SIGNS RECOGNITION
692.	TRENDS AND PRACTIVE IN SCM
693.	UP SALES USING ANALYSIS OF TRANSPORT NETWORK INSTALLED BASE
694.	USING AI FOR COMPETITIVE ADVANTAGE

LIST OF DISSERTATION WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2020

S.No.	DISSERTATION TITLE
M.B.A. Consultancy Management	
1.	4PL SOLUTION TO TRANSFORM END-TO-END PROCUREMENT AND TRANSPORT SERVICES
2.	A RESEARCH STUDY ON ENERGY CONSERVATION IN BUILDINGS THROUGH 3D-WHOLE BUILDING ENERGY SIMULATION PRACTICES
3.	ADVANCED CONSULTANCY MANAGEMENT WITH CHALLENGES AND IMPROVEMENTS
4.	ADVANCEMENTS IN SOFTWARE AUTOMATION USING ROBOTIC PROCESS AUTOMATION
5.	AEROSPACE MRO'S IN INDIA
6.	AGILE PROJECT MANAGEMENT FOR DISTRIBUTED TEAM
7.	AI IN PROJECT MANAGEMENT
8.	AN EMPIRICAL STUDY ON EXTREME VERSUS TRADITIONAL PROJECT MANAGEMENT IN LOW CODE APPLICATION DEVELOPMENT
9.	ANALYSIS OF PRODUCT RELEASE SCHEDULE PLAN OF INFOR EAM
10.	ANALYSIS ON THE IMPACT OF LEADERSHIP AND CHANGE MANAGEMENT IN A GLOBALIZED ORGANIZATION
11.	ATTRITION CONTROL AND EMPLOYEE RETENTION IN SOFTWARE INDUSTRY
12.	AUTOMATION ENGINEERING PROCESS
13.	AUTOMATION OF IT INFRASTRUCTURE MANAGEMENT
14.	BITETAT: A HOMEMADE FOOD DELIVERY HUB.
15.	BIZOPS MANAGEMENT SYSTEM
16.	BPM SOLUTION ON INSURANCE BUSINESS ORGANIZATION
17.	BUSINESS PROCESS IMPROVEMENT FOR GOVERNANCE STRATEGY USING CAMUNDA MODELER & SPLUNK DASHBOARD
18.	BUSINESS PROCESS IMPROVEMENT FOR SECURITY VULNERABILITY ASSESSMENT TO ENHANCE CUSTOMER EXPERIENCE
19.	BUSINESS PROCESS MANAGEMENT IN IT SECTOR
20.	CAPACITY MANAGEMENT MODEL - PILOT
21.	CHALLENGES IN PROJECT SCHEDULLING
22.	CHANGE MANAGEMENT DURING PRODUCT MERGER
23.	CHANGE MANAGEMENT IMPLEMENTATION IN ERP SYSTEM
24.	CLOUD COMPUTING - CHALLENGES & BENEFITS
25.	COMPASS BUDDY: CUSTOMER QUERY MANAGEMENT SYSTEM
26.	CONCEPTUALISING INDUSTRIAL PARKS USING SUSTAINABLE INCLUSIVE PRACTICES
27.	CONCEPTUALIZING & DEVELOPING NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FRAMEWORK USING OPEN GIS
28.	CONSTRUCTION SCHEDULE & PROGRESS MEASUREMENT PROCESSES IMPROVEMENT IN LARGE SCALE INFRASTRUCTURE PROGRAMMES
29.	CONSULTATION FRAMEWORK ON MIGRATION OF ON-PREM TO CLOUD ANALYTICS SERVICES
30.	CONSULTING A START-UP ON PROSPECTS OF ACQUISITION/MERGER OR EXPANSION FOR FUTURE BUSINESS
31.	CONSULTING IS MORE THAN GIVING ADVICE
32.	CONVERSATIONAL ANALYTICS TOOL
33.	CREATION OF A FEASIBILITY STUDY REPORT FOR PROPOSED BUSINESS CASE
34.	CRITSITWIZ
35.	CRM IN AUTO SECTOR: IMPLEMENTATION USING SALESFORCE
36.	CUSTOMER EXPERIENCE ON CLOUD
37.	DESIGN AND IMPLEMENTATION OF SCADA SYSTEM FOR ELECTRICAL TRACTION SYSTEM FOR TRAM OPERATION IN EDUCATION CITY
38.	DETAILED STUDY OF EMPLOYEE ENGAGEMENT IN AN IT ORGANIZATION
39.	DEVELOPING HIGH POTENTIAL EMPLOYEES
40.	DIGITAL FINANCE - ROBOTICS PROCESS AUTOMATION

S.No.	DISSERTATION TITLE
41.	DIGITAL TRANSFORMATION AT AMBU PRODUCTS INTERNATIONAL
42.	DIGITAL TRANSFORMATION JOURNEY BEFORE AND AFTER COVID-19
43.	DISRUPTION BRINGS OPPORTUNITY
44.	DROP SHIPPING PROCESS FOR AN E-COMMERCE CLIENT USING ERP SOLUTIONS
45.	ECOMMERCE PLATFORM DEVELOPMENT : TRANSFORMATIONAL TECHNOLOGIES AND APPROACHES TO DELIVER THE FUTURE OF ECOMMERCE
46.	ECOSYSTEM DRIVEN BUSINESS MANAGEMENT
47.	EFFECTIVE DIGITAL MARKETING ANALYTICS STRATEGY FOR STARTUPS
48.	ENABLING AGILE FOR SAP IMPLEMENTATIONS
49.	ENHANCE THE MAINTENANCE WORKFLOW TO PROVIDE UNINTERRUPTED WATER SUPPLY BY IMPLICATION OF INHOUSE, OUTSOURCE MANPOWER AND WORK CONTRACT POLICIES
50.	EVALUATING THE GROWING IMPORTANCE OF IT IN THE MANAGEMENT OF LOGISTICS AND SUPPLY CHAIN
51.	EVALUATING TRAINING EFFECTIVENESS OF A LONGTERM MDP FOR MIDDLE MANAGEMENT USING SUCCESS CASE METHOD
52.	EXPLORATORY AND PREDICTIVE DATA ANALYSIS TO AID DECISION MAKING
53.	IMPACT OF LEADERSHIP AND MANAGEMENT ON ORGANIZATIONAL EFFICIENCY
54.	IMPACT OF VIRTUAL TEAM MANAGEMENT ON EMPLOYEE PERFORMANCE
55.	IMPLEMENTATION OF ERP IN PROCUREMENT PROCESS AT ICAT MANESAR
56.	IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN THE FIELD OF COMPONENT TESTING AT ICAT MANESAR BY USING THE GUIDING PRINCIPALS OF ISO/IEC 17025:2005
57.	IMPLEMENTING STRATEGIC CHANGE MANAGEMENT IN RAIL INDUSTRY
58.	IMPROVING FLOW BASED PROCESSES IN ORGANIZATION WITH RPA TO ENHANCE THE EFFICIENCY AND CUSTOMER SATISFACTION
59.	IMPROVISATION OF DATA SECURITY IN BANKS AND INSURANCE COMPANY
60.	INCREASING PROJECT EFFICIENCY BY CRITICAL CHAIN METHOD
61.	INDIAN SERVICE COMPANY CXOS NAVIGATING COVID-19 CRISIS
62.	INNOVATION IN SUPPLY CHAIN OF RURAL FOOD PROCESSING & PACKAGING INDUSTRY
63.	INTELLIGENT HEALTHCARE DEMAND MANAGEMENT USING ANALYTICS
64.	IT ENVIRONMENT STRATEGY FOR LEGACY APPLICATION MODERNIZATION PROJECTS
65.	IT MODERNIZATION FOR BUSINESS TRANSFORMATION
66.	IT PRODUCT MANAGEMENT FOR START UP: IMBIBING LEAN & QUALITY
67.	LEADING AND MANAGING ORGANIZATIONAL CHANGE FOR SECURITY ENHANCEMENT OF SMART IOT DEVICE
68.	LEAN SIX-SIGMA AT VMWARE
69.	LEAN THROUGH DEVOPS
70.	MACROECONOMIC FACTORS THAT AFFECT PACKAGING INDUSTRY
71.	MANAGEMENT OF INFRASTRUCTURE IN DEFENCE: NUANCES AND THE MANAGEMENT ASPECTS
72.	MANAGING CHANGE IN INCREASINGLY VOLATILE AUTOMOTIVE CONSULTING BUSINESS
73.	MANAGING EFFICIENCY OF PROCESSES INVOLVED IN PRODUCTION AND DISPATCH
74.	MANAGING SUPPLY CHAIN IN DIGITAL WORLD
75.	MARKET LANDSCAPE STUDY
76.	MARKET RESEARCH ANALYSIS DUE TO EMERGING FMCG COMPANY
77.	MULTIPLE DIMENSIONS OF EMPLOYEE ENGAGEMENT
78.	MUNCH TOGETHER: A WEB BASED APPLICATION OF ORDERING FOOD FOR EMPLOYEES IN ORGANIZATION
79.	NVA BASED MAPPING PRIORITIZATION
80.	OCCUPATIONAL HEALTH AND SAFETY AS DETERMINANTS OF EMPLOYEES PRODUCTIVITY WITH REFERENCE TO GARMENT INDUSTRY
81.	OPERATIONAL EFFICIENCY IMPROVEMENT IN INTERNATIONAL ENGINEERING CONSULTANCIES
82.	OPERATIONS SERVICE OPTIMIZATION FOR MANAGED CLIENTS
83.	OPTIMISING BASELINE INSPECTION PROCESS
84.	ORGANIZATIONS WAY FORWARD IN DISRUPTIVE AGE
85.	PROCESS IMPROVEMENT ANALYSIS IN HARDWARE DECOMMISSIONG WORK USING CI FRAMEWORK IN BT
86.	PROCESS OPTIMIZATION USING BUSINESS PROCESS RE-ENGINEERING
87.	PRODUCTION, PLANNING & CONTROL (PROJECT MANAGEMENT)
88.	PROJECT MANAGEMENT IN AGILE METHODOLOGY

S.No.	DISSERTATION TITLE
89.	PROJECT PROCUREMENT MANAGEMENT
90.	QUALITATIVE RISK MANAGEMENT FOR CLOSEOUT STAGE OF CONSTRUCTION PROJECTS
91.	RECOMMENDATION SYSTEM BASED ON MACHINE LEARNING
92.	REORGANISATION OF KNOWLEDGE REPOSITORY AS PER THE BUSINESS PROCESS
93.	RETAIL GAME CHANGER " AI/ML/BIG DATA
94.	REVIEW OF AN ONGOING PROJECT WITH RESPECT TO THE PMBOK
95.	RISK ANALYSIS IN PRODUCT ENHANCEMENTS
96.	ROLE OF CRYPTO CURRENCIES IN INDIAN FINANCE INDUSTRY
97.	ROLE OF EMPLOYEE COMMUNICATION IN TRANSITIONING TO A VIRTUAL WORKPLACE
98.	ROLE OF SENIOR MANAGEMENT IN BUSINESS DEVELOPMENT AND BUSINESS CONTINUITY
99.	SAILING THROUGH THE CRISIS - EFFECTIVE PROJECT MANAGEMENT OF HIGHLY TIME BOUND INFRASTRUCTURE PROJECTS DURING AN EXTRAORDINARY CRISIS PERIOD
100.	SCALED AGILE FRAMEWORK TO EMPOWER COMPLEX ORGANIZATIONS TO ACHIEVE THE BENEFITS OF LEAN-AGILE SOFTWARE AND SYSTEMS DEVELOPMENT AT SCALE
101.	SHAPING UP THE MARKETING STRATEGY FOR A STARTUP E-LEARN ORGANISATION
102.	STAKEHOLDER'S PERFORMANCE MANAGEMENT ANALYSIS
103.	STRATEGIC CHANGE MANAGEMENT FOR A MARITIME CLASSIFICATION SOCIETY " A TRANSFORMATIONAL FRAMEWORK TO BECOME A MEMBER OF INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES
104.	STRATEGIC PLANNING FOR STARTING ONLINE OUTREACH PROGRAM FOR ISKCON PANIHATI
105.	STRATEGY OUTSOURCING PROPOSAL FOR COVID-19 AFFECTED INDUSTRIES IN ELECTRO-MECHANICAL SECTOR
106.	STUDY FOR IMPLEMENTATION CLOUD REPORTING AND DIGITAL COMMUNICATION
107.	SUBJECT MATTER EXPERT MODEL LEVERAGING STRATEGIC CHANGE MANAGEMENT
108.	TECHNO STRUCTURAL TRANSFORMATION DRIVEN BY ATOM EXECUTION MODEL AND PEOPLE MANAGEMENT FRAMEWORK
109.	TECHNO STRUCTURAL TRANSFORMATIONS TO MANAGE LEADERSHIP TRANSITION AND ENGINEERING FOCUSED EXECUTION
110.	THE ORGANIZATION'S BUSINESS AREA NETWORKS (BNEW) UNIT'S BOTTOM LINE IMPROVEMENT TO COMPETE WITH OTHER UNITS FOR AN UNIFORM ORGANIZATIONAL GROWTH
111.	TO DEVELOP NEW TARIFF MODEL FOR POWER PLANT
112.	TRANSFORMING ON-PREM PRODUCT TO SAAS
113.	TRANSFORMING OPERATIONS & MAINTENANCE AND ACHIEVING EXCELLENCE THROUGH RELIABILITY CENTERED MAINTENANCE
114.	USE OF SIX SIGMA FOR REDUCTION OF SCRAP AND REWORK ON PRODUCTION LINE
115.	M.B.A. Finance
116.	A CASE STUDY ON WORKING CAPITAL MANAGEMENT AT BHEL
117.	A STUDY ON REDUCING RESOLUTION TIME OF SERVICE REQUEST
118.	A STUDY ON STORES SALES FORECASTING
119.	AAKRITI - "SHAPE YOUR FUTURE", EMPLOYEE DRIVEN INITIATIVES FOR THE BETTER FUTURE OF THE COMPANY
120.	ANALYSIS OF CREDIT MANAGEMENT FUNCTION ON FINANCE RECEIVABLE
121.	ANALYSIS OF RECENT SUCCESSFUL INITIAL PUBLIC OFFERING (IPO) STOCKS AND THEIR FUTURE POTENTIAL
122.	ARTHADNYAN - A FINANCIAL REVIEW
123.	ASSET LIABILITY MANAGEMENT
124.	B2B INTEGRATION OF L&T AND OMCS IN DIESEL PROCUREMENT PROCESS
125.	BLACK SCHOLES MODEL, VOLATILITY SMILES AND OPTION STRATEGIES ON NIFTY AND BANK-NIFTY USING R
126.	BUSINESS VALUATION ASSESSOR
127.	CASH FLOW ANALYSIS OF LINKS MIDDLE EAST TECHNICAL SERVICES LLC
128.	CHARACTERIZING ECONOMICALLY VIABLE ZONES FOR RESERVIOR EXPLORATION USING MACHINE LEARNING
129.	CONSOLIDATED AUDIT TRAIL AND TRADE BLOTTER
130.	CORPORATE BANKING
131.	COST OPTIMIZATION AND PROFITABILITY MANAGEMENT OF EPC BUSINESS
132.	COST REDUCTION OF FEED PUMP BY VALUE CHAIN ANALYSIS

S.No.	DISSERTATION TITLE
133.	CREATE REVENUE FORECAST MODEL FOR FINANCIAL DASHBOARD
134.	CREDIT AND ACQUISITION RISK MANAGEMENT, ANALYTICS AND MODEL BUILDING: ACQUIRING RIGHT CUSTOMERS AND COST BENEFIT ANALYSIS AND FINANCIAL BENEFITS OF MODEL BUILDING
135.	CREDIT RISK MANAGEMENT - BAD DEBT CONTROL
136.	DERIVATIVES & RISK MANAGEMENT
137.	DESIGN OF WAREHOUSE INVENTORY MANAGEMENT IN INFRASTRUCTURE CONSTRUCTION
138.	DIGITAL TRANSFORMATION OF TELECOM NETWORK AND ITS IMPACT ON PROFITABILITY & PRODUCTIVITY
139.	DUREX INDIA " INCREASING MARKET SHARE & REVENUE GROWTH
140.	EFFECT OF CHANGE IN DBMS IN INCREASING THE EFFICIENCY FOR WORKFORCE AND COST REDUCTION
141.	END TO END DIGITAL PROCESSING OF PRIORITY SECTOR LENDING INCLUDING DEVELOPING CREDIT RATING MODEL THROUGH ADOPTING SUITABLE ORGANIZATIONAL STRUCTURE
142.	EVALUATION OF A POTENTIAL M&A TARGET FOR THE CURRENT ORGANIZATION.
143.	FINANCIAL DATA MIGRATION AND REPORTING ON FINX
144.	FINANCIAL MANAGEMENT IN RETAIL
145.	FINANCIAL RATIO ANALYSIS ON CAPITAL ONE
146.	FINANCING AVENUES TO ENTREPRENEURS AND MSMES IN INDIA: EVALUATION OF VARIOUS OPTIONS THROUGH CASE STUDIES
147.	FORECASTING THE BALANCE SHEETS OF A SUB- STATION PROJECT IN HEAVY ENGINEERING INDUSTRIES AND SHIPBUILDING COMPANY
148.	FOREX RISK MANAGEMENT FOR INDIAN CONGLOMERATES
149.	FRANCHISING STRATEGY
150.	FRAUD MANAGEMENT IN BANKS
151.	FUTURE OF DIGITAL PAYMENTS IN INDIA
152.	IMPACT OF MERGER AND ACQUISITIONS ON EXISTING COMPANIES TO EXPAND BUSINESS
153.	IMPROVING PROFITABILITY OF THE COMPANY BY CONVERTING LOSS MAKING PRODUCTS TO PROFITABLE PRODUCT
154.	INCOME TAX PLANNING WITH RESPECT TO INDIVIDUAL ASSESSEE
155.	INTERNAL CONTROLS IN ACCOUNTS PAYABLE PROCESS
156.	INVENTORY MANAGEMENT & EFFECTIVE SCHEDULING OF SERVICE MANPOWER
157.	INVOICING NINJA
158.	IT PROJECT MANAGEMENT IN MANAGED SERVICES CONTRACTS IN BANKS
159.	LOOPHOLES IN THE REGULATORY SYSTEM WITH INDIAN BANKS
160.	MARKET ENABLING: ELECTRIC VEHICLE AND ITS ALLIED BUSINESSES
161.	MARKET STUDY & FORECAST OF ARTIFICIAL INTELLIGENCE INDUSTRY
162.	MEASURES FOR MAINTENANCE COST REDUCTION
163.	METHODOLOGY IMPROVEMENT IN BUSINESS BUDGET FORECAST FOR BETTER PREDICTABILITY.
164.	MICRO FINANCE
165.	MODEL FRAMEWORK DEVELOPMENT FOR AUTOMATED MARKET RISK ASSESSMENT
166.	MUTUAL FUNDS
167.	NOV WORKING CAPITAL MANAGEMENT
168.	O&M BUDGET OPTIMIZATION AND RISK ASSESSMENT
169.	OPERATIONAL COST REDUCTION
170.	OPTIMIZATION IN STORE & INVENTORY IN STOCK TO MANAGE WORKING CAPITAL OF TATA POWER KALINGANAGAR
171.	PRIVATIZATION OF PUBLIC SECTOR BANKS
172.	PROCUREMENT SYSTEMS AND CASH FLOWS IN EPC CONTRACT
173.	PROJECT PRIORITIZATION AND PORTFOLIO OPTIMIZATION -- MAXIMIZING VALUE THROUGH EFFECTIVE MANAGEMENT
174.	PROJECT SETUP AND CLOSER
175.	REDUCTION OF POWER GENERATION COST
176.	RISK MANAGEMENT IN CONSTRUCTION OF ROAD PROJECTS
177.	STRATEGIC AUDIT OF J.S.W ENERGY LTD
178.	STRATEGIC DECISION AND ANALYTICS
179.	STRATEGIC PLAN FOR SUSTAINABLE TOP-LINE GROWTH GAGR 5% FOR L&T " KUWAIT
180.	STUDY ON SOFTWARE PROJECT EFFORT AND COST ESTIMATION TO PRODUCE AN ESTIMATION

S.No.	DISSERTATION TITLE
	TEMPLATE
181.	STUDY TO FIND WHETHER CREDIT CARD USAGE IS REALLY ADVANTAGEOUS OR NOT
182.	SUBJECT TO DISCUSSION-STD
183.	SUSTAINABLE RETAIL BUSINESS- THE TRIPLE BOTTOM LINE APPROACH
184.	THE ECONOMICS OF SECURITY
185.	THE IMPACT OF LEADERSHIP IN ORGANISATIONAL BEHAVIOUR AND OUTCOME
186.	TRADING IN OPTIONS FOR RETAILERS & CHALLENGES
187.	TRANSFER PRICING STUDY FOR DIABETO MEDTECH INDIA PVT. LTD.
188.	VALUE CREATION THROUGH STRATEGIC SUPPLY CHAIN MANAGEMENT IN TRANSMISSION LINE INDUSTRY
189.	VENTURE CAPITAL FINANCING AND PRIVATE EQUITY INVESTMENT IN INDIA
190.	WHOLESALE CREDIT RISK MODELING PROCESS IN COMMERCIAL BANK
191.	WORKING CAPITAL MANAGEMENT
192.	WORKING CAPITAL MANAGEMENT OF A CONSTRUCTION PROJECT AND ITS RELATED STRATEGIES
M.B.A. Hospital & Health Systems Management	
193.	A COMPARATIVE EVALUATION OF VIDEO BASED TUTORIAL VS. TRADITIONAL LIVE LECTURE IN AWARENESS OF ONE OF ORAL HYGIENE INSTRUCTIONS TO PATIENTS IN A DENTAL CLINIC.
194.	A STUDY ON BIOMEDICAL WASTE MANAGEMENT IN HOSPITAL AND RECOMMENDATION FOR SAFE DISPOSAL
195.	A STUDY ON CANCELLATION OF SURGICAL PROCEDURES IN A SINGLE SPECIALTY HOSPITAL
196.	A STUDY ON DECREASING PATIENT WAITING TIME AND INCREASING PATIENT SATISFACTION
197.	A STUDY ON EVALUATION AND IMPROVING PATIENT SATISFACTION IN DENTAL HEALTH SERVICES
198.	A STUDY ON FACTORS AFFECTING EFFICIENCY OF TRAUMA THEATRE UTILISATION IN A TERTIARY CARE HOSPITAL.
199.	A STUDY ON OUTPATIENT FLOW FROM ENTRY TILL EXIT USING TIME MOTION STUDY IN A TERTIARY CARE HOSPITAL
200.	A STUDY ON UTILIZATION OF OPERATION THEATRES IN A TERTIARY CARE HOSPITAL
201.	AN ANALYTICAL STUDY ON JOB SATISFACTION LEVEL OF THE EMPLOYEES IN A MULTI SPECIALITY HOSPITAL.
202.	AN EVALUATION OF UNPLANNED EMERGENCY DEPARTMENT REVISITS WITH IN 72 HOURS WITH SIMILAR COMPLAINTS TO A TERTIARY CARE HOSPITAL
203.	AN EVIDENCE BASED STUDY ON HOSPITAL ACQUIRED INFECTIONS, PREVENTION AND RECOMMENDATION AT SMRC'S V.M.SALGAOCAR HOSPITAL
204.	ANALYTICAL STUDY OF OPERATION THEATRE, PRE OPERATIVE AREA AND RECOVERY AREA TURN AROUND TIME OF PATIENTS IN A TERTIARY CARE HOSPITAL
205.	ASSESSING AND IDENTIFYING FACTORS ENHANCING PATIENT EXPERIENCE IN RADIATION ONCOLOGY OUTPATIENT CLINIC
206.	ASSESSMENT OF CHANGES IN HEALTH CARE SYSTEM PERFORMANCE PRE AND POST NABH ACCREDITION
207.	BURNOUT AMONG NURSES IN EMERGENCY AND CRITICAL CARE AREAS
208.	CLINICAL PHARMACISTS-THEREPEUTICS AND ECONOMICS IN HEALTHCARE
209.	COGNITIVE BIASES THAT LEAD TO NEAR MISSES AND ERRORS IN CLINICAL CARE: A CORRELATIVE STUDY
210.	COMPARISON OF INCIDENCE OF VENTILATOR ASSOCIATED PNEUMONIA CLOSED VERSUS OPEN SUCTIONING SYSTEM IN A TERTIARY ICU OF ODISHA
211.	COST EFFECTIVENESS IN ESTABLISHING HDU AT CIVIL HOSPITAL
212.	COSTING FOR INTENSIVE CARE UNIT.
213.	DELIVERING HEPATITIS C TESTING ACROSS DIFFERENT TIERS OF HEALTH CARE: SELECTING THE MOST COST EFFECTIVE STRATEGY.
214.	DETERMINANTS OF MOTIVATION STATUS OF EMPLOYEES WORKING IN A TERTIARY HEALTH CARE INSTITUTE IN A RURAL AREA OF HARYANA.
215.	DISASTER MANAGEMENT PLAN FOR FLOODS
216.	DISINFECTION POLICIES AND BIO MEDICAL WASTE MANAGEMENT IN HOSPITALS IN TIMES OF CORONA PANDEMIC
217.	EFFICACY QUALITY MANAGEMENT SYSTEMS IN INDIAN HEALTHCARE SECTOR
218.	EXCELLENCE IN SERVICE THROUGH IMPLEMENTATION OF VALUE ADDED CUSTOMER CENTRIC SERVICE STRATEGY AT DR TMA PAI HOSPITAL
219.	HAND HYGIENE KNOWLEDGE SURVEY AMONGST INTENSIVE CARE UNIT HEALTH CARE WORKERS IN A MIDDLE EASTERN TERTIARY CARE HOSPITAL
220.	HEALTH CARE ASSOCIATED COST OF LEPROSY

S.No.	DISSERTATION TITLE
221.	IMPLEMENTATION OF CSSD AND LAUNDRY SERVICE IN HOSPITAL USING HOSPITAL INFORMATION SYSTEM
222.	IMPLEMENTING NEW PROCESSES TO IMPROVE TOP FIVE LOW SCORING AREAS ACROSS INTERNAL AND EXTERNAL CUSTOMER SATISFACTION SURVEYS IN EMERGENCY DEPARTMENT OF A TERTIARY HEALTHCARE HOSPITAL.
223.	IMPROVING CLIENTELE SATISFACTION IN A REMOTELY LOCATED MEDICAL CARE CENTRE THROUGH EFFICIENT SET-UP AND NON-CONVENTIONAL APPROACH.
224.	IMPROVING PATIENT FLOW, QUALITY OF CARE BY IMPLEMENTING ELECTRONIC MEDICAL RECORD (EMR) & LEAN PRINCIPLES AND TOOLS IN A SMALL ARMY HOSPITAL
225.	INFECTION CONTROL PROCESSES & PRACTICES OF A DENTAL DEPARTMENT IN A POLY CLINIC IN DUBAI, UAE
226.	LATENT CAPACITY UTILIZATION OF INFRASTRUCTURE IN DENTAL CLINICS.
227.	LEAN MANAGEMENT
228.	MARKETING IN HEALTHCARE ORGANIZATION.
229.	MEASURING CUSTOMER SATISFACTION IN CORPORATE SETUP HEALTHCARE
230.	OPERATION THEATRE ONLINE BOOKING SYSTEM-BOON TO ALL STAKEHOLDERS IN HEALTHCARE INDUSTRY
231.	PREDICTING TOTAL NUMBER OF INPATIENT DISCHARGES IN A HOSPITAL
232.	PREOPERATIVE WEIGHT CHANGE AND ADHERENCE TO CLINIC APPOINTMENTS: IMPACT ON PREOPERATIVE PATIENT PREPARATION AND POST OPERATIVE PREDICTION OF CLINICAL OUTCOMES
233.	PRESENTATION OF PATIENTS WITH NONURGENT ILLNESSES TO THE EMERGENCY DEPARTMENT: ROOT CAUSE ANALYSES TO DETERMINE PLAUSIBLE CAUSES AND ASSOCIATIONS
234.	QUALITY INDICATORS FOR CRITICAL BIOMEDICAL EQUIPMENT MAINTENANCE
235.	RISK OF EXPOSURE, IMPACT AND BIOSAFETY MEASURES AMONG HEALTH CARE WORKERS IN COVID -19 INFECTION
236.	SERVICE QUALITY EXCELLENCE IN DENTISTRY
237.	STRATEGIES FOR IMPROVING ACCESSIBILITY TO ORAL HEALTH CARE SERVICES IN ARMED FORCES: AN INSIGHT
238.	STUDY OF DISCHARGE PROCESS
239.	STUDY OF REDUCTION IN TURNAROUND TIME OF PATIENTS IN OUTPATIENT DEPARTMENT IN SAFAL ENT HOSPITAL, SURAT
240.	TIME, COST & SCOPE MANAGEMENT IN OPERATION THEATRE RENOVATION
241.	TO STUDY THE PROCESS OF COMMUNICATION OF LABORATORY CRITICAL VALUES TO CRITICAL CARE AREAS: THE ERRORS AND THEIR PREVENTION
242.	TO STUDY THE PROCESS OF SHIFTING PATIENTS FROM EMERGENCY DEPARTMENT TO OTHER CLINICAL AREAS OF SAME SMALL MULTISPECIALITY HOSPITAL.
243.	TO UNDERSTAND CAPACITY UTILIZATION AND TO OPTIMIZE THE EFFICIENCY IN A CLINIC
M.B.A. Manufacturing Management	
244.	A LEAP TOWARDS LEAN MANUFACTURING IN OPHTHALMIC LENS GENERATING WORKSHOP
245.	A RESEARCH ON THE EFFECTIVENESS OF TOTAL QUALITY MANAGEMENT IMPLEMENTED IN THE ORGANISATION
246.	A STUDY ON EFFECTIVENESS OF PACKAGING IN LOGISTICS
247.	A STUDY TO REDUCE LINE STOPPAGE FOR WANT OF RAW MATERIALS
248.	ACHIEVING SUSTAINABLE PRODUCTION THROUGH LEAN MANUFACTURING
249.	AN ANALYSIS ON APPROACHES OF CUSTOMIZED ERP - A SIGHT ON OLAM'S SAP IMPLEMENTATION
250.	ANALYSIS AND IMPROVEMENT OF PROCESS AND QUALITY IN AUTOMOTIVE CAE SERVICES
251.	ANALYSIS ON POSSIBLE DEVELOPMENTS OF NEW PRODUCTS AND APPLICATIONS FOR THE SEVER SERVICE VALVES IN FCCU OF PETROLEUM REFINERIES IN THE ERA OF CHANGING ENVIRONMENTAL NORMS
252.	APPLICATION OF LEAN MANUFACTURING PRINCIPLE IN GLASS INDUSTRY
253.	APPLICATION OF PROJECT MANAGEMENT PROCESSES IN PRODUCT HOMOLOGATION
254.	APPLICATION OF SPC IN RAW MATERIAL DOSING SYSTEMS AND CONTROLLING MATERIAL LOSSES
255.	APPLICATION OF TRIZ IN AUTONOMATION OF VEHICLE MANUFACTURING DESIGN & DEVELOPMENT
256.	APPLICATIONS OF LEAN MANUFACTURING IN A BAKING INDUSTRY
257.	APPLYING LEAN PRACTICES IN AEROSPACE INDUSTRY
258.	AUTOMATION OF PHARMACEUTICAL PROCESS EQUIPMENT FOR BETTER CONTROL
259.	BUSINESS MANAGEMENT FOR SMALL ORGANISATION
260.	C.G. BOGIE DEVELOPMENT

S.No.	DISSERTATION TITLE
261.	C3 C4 AND PYGAS VENT GASES DIVERSION TO FUEL GAS SYSTEM
262.	CAPACITY ENHANCEMENT IN BRAKE PANEL SMALL FACTORY UNIT THROUGH LEAN CONCEPTS.
263.	CAPACITY ENHANCEMENT IN CARRIER PLANETARY LINE
264.	CBN GRINDING WHEEL FOR GEAR GRINDING
265.	CENTRALISATION OF PLANNING
266.	CHAT BOT FOR MANUFACTURING FACTORIES TO ADDRESS OPERATORS/SUPERVISORS PROBLEMS AND FAQS
267.	COMPUTER ASSISTED ORDERING
268.	CONTINUOUS IMPROVEMENT PROCESS AND QUALITY
269.	COST SAVING WITH EXTENDING COOLANT LIFE & REDUCING HAZARDOUS WASTE GENERATION USING "C-THROUGH SEPARATOR" & "FREDDY ECOVAC"
270.	DENT REJECTION CONTROL IN ALUMINUM LOAD CELL
271.	DESIGN AND DEVELOPMENT OF TORQUE POKE-YOKES IN LCV ASSEMBLY LINE
272.	DEVELOP ENERGY MANAGEMENT PROGRAMME IN EMAMI LIMITED,PACHARIA
273.	DEVELOP LIGHT WEIGHT SLEEPER BERTH FOR NORTH AMERICAN TRUCK CABIN
274.	DEVELOPMENT OF STREAMLINED PROCESS FOR WORK PACKAGE RELEASE USING LEAN APPROACH
275.	DISSERTATION ON VEHICLE MAPPING SYSTEM DEVELOPMENT: AN APPROACH TOWARDS VEHICLE RECALL SYSTEM
276.	EFFECTIVENESS OF TRAINING AND ITS IMPACT ON JOB PERFORMANCE OF EMPLOYEES
277.	ELEMINATION OF REJECTION DUE TO FLANGE DIA EXCESS RUN-OUT IN TURBINE SHAFT
278.	ELGI'S INDUSTRIAL AFTERMARKET: GROWING THE CORE - ENHANCING GTM STRATEGY
279.	ELIMINATE THE REJECTION DUE TO EXCESS RUN-OUT IN TURBINE SHAFT HEAT TREATMENT PROCESS
280.	ERP FOR LOW VOLUME MULTIPLE PRODUCT LINE
281.	ESTABLISHING PROCESS FOR DESIGNATED SUPPLIER QUALITY REPRESENTATIVE IN AEROSPACE
282.	EVALUATION AND OPTIMIZATION OF OPERATIONS IN DAIRY INDUSTRY
283.	FLEXIBLE CABLE CAPACITY ENHANCEMENT
284.	FORMULATION OF LAYERED PROCESS AUDIT AND ITS INTEGRATION TO SHOP FLOOR MANAGEMENT
285.	HV GIS PRODUCT LOCALIZATION FOR COMPETITIVE PRODUCTS AVAILABILITY IN INDIA
286.	IDENTIFICATION & OPTIMIZATION OF COST SAVING MEASURES BY USING LEAN WAY
287.	IMPACT OF PRODUCT CHANGE MANAGEMENT ON THE SUPPLY CHAIN IN AUTOMOTIVE MANUFACTURING
288.	IMPLEMENTATION OF JIT IN GREEN FIELD PROJECT OF NEW TRUCK MANUFACTURING ASSEMBLY LINE FOR 40K/ANNUM.
289.	IMPLEMENTATION OF LEAN & TPM METHODOLOGIES FOR THROUGHPUT ENHANCEMENT & BREAKDOWN REDUCTION
290.	IMPLEMENTATION OF LEAN MANUFACTURING MANAGEMENT IN INLINE PUMP VALUE STREAM
291.	IMPLEMENTATION OF OPERATIONAL EXCELLENCE STRATEGIES IN HPDC LINE
292.	IMPLEMENTATION OF TOTAL PRODUCTIVE MAINTENANCE IN EXEDY INDIA LTD.
293.	IMPLEMENTATION OF TPM IN BALL MILL FOR GLAZE PREPARATION
294.	IMPLEMENTATION OF TQM IN ORGANIZATION
295.	IMPLEMENTING CUSTOMER CENTRIC DELIVERY METRIC
296.	IMPLEMENTING WAREHOUSE MANAGEMENT TECHNOLOGY FOR CHAOTIC STOCK MAINTENANCE AND FIFO
297.	IMPORTANCE AND CHALLENGES OF INFORMATION FLOW AND DATA ANALYTICS FOR MANUFACTURING MANAGEMENT OF AUTOMOTIVE COMPANY TO ACHIEVE WORLD CLASS MANUFACTURING.
298.	IMPORTED INVENTORY REDUCTION
299.	IMPROVEMENT IN UTILITY COOLING WATER & BOILER SYSTEM
300.	IMPROVING OEE BY SETUP TIME REDUCTION USING SMED CONCEPTS
301.	INCREASING OTIF EFFICIENCY LEVERAGING SUPPLY CHAIN & LEAN MANUFACTURING
302.	INCREASING THE THROUGHPUT OF CERAMIC INSULATORS FOR RAILWAYS
303.	KANBAN SYSTEM
304.	LEAN MINING - ADOPTING LEAN MANUFACTURING CONCEPTS POWERED BY 3DEXPERIENCE PLATFORM TO MINING.
305.	LEAN PROCESS AND PROCESS IMPROVEMENT OF CONTINOUS ENGINEERING PROCESS
306.	MANUFACTURING CYCLE TIME REDUCTION FOR BATCH PRODUCTION
307.	MANUFACTURING OF PENUMATIC RUBBER FENDERS
308.	MANUFACTURING ORGANISATION & ITS MANAGEMENT

S.No.	DISSERTATION TITLE
309.	MANUFACTURING ORGANISATION AND ITS MANAGEMENT
310.	MARKET RESEARCH ON STARTING A GREEN FIELD MANUFACTURING BASE FOR AIR COOLED HEAT EXCHANGERS TO CAPTURE ASIA MARKET
311.	METHODOLOGY FOR OPTIMIZING PRODUCTION PLAN
312.	MOULD SETUP CHANGEOVER TIME REDUCTION IN COIL MANUFACTURING (SMED PROJECT)
313.	NAOH CONSUMPTION OPTIMIZATION AT CLEANING SECTION FOR CONTINUOUS ANNEALING LINE
314.	NON-STRATEGIC SUPPLIERS™ BASE CONSOLIDATION.
315.	OEE IMPROVEMENT OF BALL BEARING PRODUCTION LINE
316.	OEE IMPROVEMENT ON BOTTLENECK PROCESS
317.	OPTIMISATION OF PACKAGING FOR THE INBOUND MATERIALS TO MANUFACTURING PLANTS-SUSTAINABLE & ENVIRONMENTAL FRIENDLY APPROACH
318.	OPTIMIZATION OF INWARD AND OUTWARD VEHICLE MOVEMENT INSIDE THE FACTORY
319.	OPTIMIZATION OF SUPPLY CHAIN COST IN 6 SPEED & 8 SPEED TRANSMISSION SHAFTS MANUFACTURING
320.	OPTIMIZE BLADE WEIGHT PPK >1.33 WITH PROCESS IMPROVEMENTS IN THE CURRENT PROCESS
321.	OPTIMIZING THE PROJECT PERFORMANCE BY EARNED VALUE METHOD SYSTEM & LAST PLANNER SYSTEM
322.	ORACLE ERP CLOUD, AND HOW IT IMPROVES PROCESSES SUCH AS PROCURE TO PAY PROCESS FOR INDUSTRIES
323.	PACKAGING OPTIMIZATION TO DECREASE PACKAGING COST BY 2 % OF 20 CR PACKAGING BUYING FOR INCREASING SUPPLY CHAIN SURPLUS
324.	PACKAGING STATION OPTIMIZATION
325.	PREDICT THE POTENTIAL RISK OF A CHANGE TO CAUSE BUSINESS DISRUPTION IN AN IT ORGANISATION - BY WHOLISTIC ASSESSMENT OF IT CHANGE MANAGEMENT AND IT INFRASTRUCTURE SYSTEMS
326.	PREDICTIVE ANALYSIS OF BOBCAT B900 BACKHOE LOADER MACHINE
327.	PROBABILISTIC RISK ASSESSMENT ON ELECTRICAL POWER SYSTEMS IN LAUNCH VEHICLE FOR HUMAN SPACE MISSIONS OF ISRO
328.	PRODUCT LIFECYCLE MANAGEMENT TOOL: COMPARISON & ENHANCEMENTS
329.	PRODUCTIVITY AND QUALITY IMPROVEMENT USING LEAN TOOLS
330.	PRODUCTIVITY IMPROVEMENT BY LEAN TECHNIQUES
331.	PRODUCTIVITY IMPROVEMENT IN AEC CASTING
332.	PROJECT HEALTH MONITORING AND MAINTAINING USING PROJECT WEB APP
333.	PROJECT PLANNING & CONTROL
334.	QUALITY ANALYSIS OF PROJECTS AND METHODS TO ANALYSE AND IMPROVE
335.	REDEFINING STORAGE & HANDLING STRATEGY FOR AESTHETIC PART (WASHING MACHINE OUTER SHELL)
336.	REDUCING THE INSTALLATION TIME AND COMPLEXITY AT JOB SITE BY ADOPTING TO SUB-ASSEMBLY OF COMPONENTS
337.	REDUCTION IN ENGINE CYLINDER HEAD REJECTION
338.	REDUCTION IN PITCH BEARING HARDWARE ROTATION BY 80%
339.	REDUCTION IN THROUGHPUT TIME FOR CONNECTOR ASSEMBLY PARTS
340.	REDUCTION OF CATALYST CONSUMPTION FOR POLYETHYLENE PRODUCTION
341.	REDUCTION OF NON-CONFORMANCE ISSUES RAISED AT SITE DURING COMMISSIONING RELATED TO CONTROLS AUTOMATION DESIGN ENGINEERING SCOPE
342.	REENGINEERING OF CUTTING ROOM
343.	REMOVE BOTTLE NECK OPERATION TO INCREASE PRODUCTIVITY
344.	RESOURCE PLANNING AND SCHEDULING IN THE ENGINEERING PROJECTS
345.	RISK ASSESSMENT
346.	ROLE OF TECHNOLOGY AND SYSTEMS
347.	SETTING UP OF SOLAR POWER PLANT
348.	SMART JUNCTION BOX DEVELOPMENT PROCESS - QUOTE TO FINAL DELIVERY
349.	SPARE PARTS INVENTORY MANAGEMENT
350.	STANDARDIZATION OF RAW MATERIALS PROCUREMENT PROCESS TO MINIMIZE THE INVENTORY.
351.	STUDY AND IMPLEMENTATION OF LEAN: REDUCING MANPOWER BY WASTE ELIMINATION
352.	STUDY OF M BLOCK (PRODUCTION BLOCK) OPERATIONAL EFFICIENCY ROLE ON PLANT PROFIT /LOSS MARGIN IN CURRENT FINANCIAL YEAR AND ITS ROLE IN FUTURE GROWTH OF PLANT
353.	SUPPLY CHAIN MANAGEMENT AND THE CONCEPT OF LOGISTICS IN AUTOMOTIVE PRODUCTION
354.	TATA ACE GOLD-CHASSIS KNOCK DOWN MIGRATION

S.No.	DISSERTATION TITLE
355.	TO ELIMINATE WATER PUMP HOUSING LEAKAGE ISSUE
356.	TO IMPLEMENT LEAN CONCEPT IN SUPPLY CHAIN
357.	TO REDUCE THE FREQUENCY OF DRUM MOTOR FAILURE IN TRUCK LOADERS AT PACKING PLANT BY USING TQM TOOLS AND TECHNIQUES
358.	TOTAL PRODUCTIVE MAINTENANCE (TPM) IMPLEMENTATION
359.	TRANSFORMATION OF OPHTHALMIC LENS PACKING OPERATION BY LEAN MANUFACTURING APPROACH
360.	USE OF DIGITAL TECHNOLOGIES TO ENHANCE SUPPLY CHAIN RESPONSE
361.	UTILIZATION OF EXISTING MAE'S TO MANUFACTURE FDB COMPONENT TO MEET THE CUSTOMER DEMAND.
362.	VALIDATION PROCESS METHOD & TECHNIQUES OF SILENCER
363.	VALUE- STREAM STUDY: ANALYSIS OF THE CURRENT STATE AND DEVELOPING LEAN MANUFACTURING KAIZEN PROCESSES.
M.B.A. Quality Management	
364.	A STUDY ON EFFECTIVENESS OF TRAINING AND DEVELOPMENT IN ANEXAS CONSULTANCY PVT LTD
365.	AMAZON EXPORTS DEFECT REDUCTION
366.	AN ANALYSIS INTO THE CORRELATION BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION THROUGH QUALITY MANAGEMENT SYSTEM IN OIL AND GAS INDUSTRY
367.	AN APPROACH OF SOFTWARE PRODUCT LIFE CYCLE METHODOLOGY ON COMMERCIALIZATION OF CONSUMER ELECTRONIC PRODUCTS
368.	ANALYSIS & IMPLEMENTATION OF QMS PROCEDURES
369.	ASSESSMENT OF PROJECT MANAGEMENT PROCESS
370.	CHANGE IN KAM APPROACH - INDIVIDUAL TO INTEGRATED
371.	CONTINUOUS INTEGRATION WITH JENKINS
372.	D STORE " A QUALITY DOCUMENT UPLOADING SOFTWARE FOR KSB MIL CONTROLS LTD
373.	DATA ANALYTICS FOR A TELECOMMUNICATION CLIENT- PROVIDING AUTOMATION/PROCESS RECOMMENDATION
374.	DATA SCIENCE - SOLUTIONING FOR HEALTHCARE DATA
375.	DATA WAREHOUSE - AN APPROACH TO EFFICACY
376.	DEVELOPING THE HARDWARE PROCESS ASSURANCE PLAN WITH REFERENCE TO AEROSPACE GUIDANCE DO254
377.	DISTORTION CONTROL IN HEAT TREATMENT PROCESS OF BEARING RINGS
378.	EFFORT VARIANCE: QUALITY METRICS IN PROJECT MANAGEMENT
379.	ENERGY MANAGEMENT IN DRILLING RIGS
380.	ENHANCE QUALITY OF DIAGNOSTIC ASSISTANCE USING DIGITAL TOOLS
381.	ENVIRONMENTAL ASPECTS AND IMPACTS AND THEIR MITIGATION AS PER ISO 14001:2015 AT MARUTI
382.	ESTABLISHING QUALITY ASSURANCE PLAN FOR START-UP PROJECT IN TRUCK INDUSTRY
383.	EVALUATION AND CONTROL OF OCCUPATIONAL HEALTH AND SAFETY HAZARDS DURING MAINTENANCE OF MILITARY HELICOPTERS
384.	FASTER RESOLUTION OF CUSTOMER COMPLAINTS THROUGH FAILED PRODUCT & MARKET CONDITION ANALYSIS
385.	HOW THE QUALITY CAN BE IMPROVE THROUGH PRODUCTIVITY
386.	IMPACT OF PROJECT MANAGEMENT IN ON-BOARDING A NEW CLIENT
387.	IMPLEMENTATION & LEVERAGING INDUSTRY 4.0 FRAMEWORK FOR WORLD CLASS MANUFACTURING
388.	IMPLEMENTATION OF QUALITY SYSTEMS IN NON-REGULATED RESEARCH LABORATORIES
389.	IMPLEMENTATION OF TOTAL PRODUCTIVE MAINTENANCE (AUTONOMOUS MAINTENANCE AND PREVENTIVE MAINTENANCE PILLAR)
390.	IMPLEMENTATION OF TQM IN SOFTWARE INDUSTRY
391.	IMPLEMENTATION OF TQM PRINCIPLES IN AVIATION MAINTENANCE : A CASE STUDY
392.	IMPLEMENTING ISO13485:2016 QMS INTO DEVELOPMENT OF MEDICAL DEVICE ILLUMINATEÂ® V2.0
393.	IMPROVEMENT IN PROJECT MONITORING AND CONTROLLING
394.	IMPROVEMENT OF CUSTOMER SATISFACTION INDEX ON PRODUCT INSTALLATION QUALITY FROM AVERAGE 60% TO 80% WITHIN 3 MONTHS•
395.	IMPROVING THE OPERATIONAL EFFICIENCY OF STORES
396.	INSTALLATION OF BOOSTER PUMP STATION-UNDER THE ISO 9001 CLAUSES.
397.	LEADERSHIP AND MANAGING CHANGE - ORGANISATIONAL ALIGNMENT FOR DATA DRIVEN QUALITY MANAGEMENT
398.	LOAN MANAGEMENT SYSTEM PRODUCT LIFE CYCLE

S.No.	DISSERTATION TITLE
399.	MANAGING THE PROCESS OF CRUSHING THE BASALT STONE
400.	MANUFACTURING PROCESS UNIFORMITY
401.	METHODS OF EVALUATING AND MAINTAINING EFFECTIVENESS OF QMS IN AN INDUSTRY
402.	MINIMIZING ERRORS IN QUALITY CONTROL PROJECT BY TQM
403.	OPTIMIZATION OF INSTRUMENT USAGE IN THE ANALYTICAL LAB
404.	POTENTIAL IMPACT OF HYPER AUTOMATION ON SOFTWARE QUALITY.
405.	PROCESS CONTROL AND IMPROVISATION OF PRODUCTIVITY USING DATA ANALYSIS BY SETTING SOP
406.	PROCESS IMPROVEMENT AND PAPERLESS VALIDATION FOR GXP PROJECTS
407.	PROCESS IMPROVEMENT AND QUALITY CONTROL IN AUTOMOTIVE HOMOLOGATION DIVISION
408.	PROCESS IMPROVEMENT IN FINANCIAL CLAIM REPORT
409.	PROCESS TRACEABILITY IMPROVEMENT
410.	PROCESS WASTE REDUCTION/PRODUCTIVITY ENHANCEMENT THROUGH LEAN METHODOLOGY
411.	PRODUCT LIFECYCLE MANAGEMENT TO COMPETE WITH TODAY™S MARKET PRESSURES TO LOWER COSTS, IMPROVE QUALITY AND INCREASE SPEED TO MARKET.
412.	PROJECT CLOSING OF 99 MW SINGOLI BHATWARI HYDRO PROJECT
413.	PROJECT MANAGEMENT IN HIGH EFFICIENCY MODULAR DATA CENTERS
414.	PROJECT MANAGEMENT THROUGH TQM
415.	QUALITY ASSURANCE IN AGILE MODEL
416.	QUALITY ASSURANCE IN SALESFORCE PROJECTS
417.	QUALITY CONTROL UPDATES
418.	QUALITY FUNCTION DEPLOYMENT IN RAZOR BLADE MANUFACTURING INDUSTRY
419.	QUALITY IMPROVEMENT THROUGH SIX SIGMA METHODOLOGY
420.	QUALITY IMPROVEMENT USING SIX SIGMA METHODOLOGY
421.	QUALITY MANAGEMENT SYSTEM IN VIRTUAL LABS
422.	REDUCTION IN CUSTOMER COMPLAINTS OF BLOOD ANALYZERS BY USING DMAIC QUALITY TOOL.
423.	REDUCTION OF COST OF POOR QUALITY FOR EPG NON FOCUSED SUPPLIER
424.	REDUCTION OF SOFTWARE DEFECT REJECTION RATIO USING SIX SIGMA
425.	SEARCH ENGINE OPTIMIZATION (SEO) : ACCELERATING ECOMMERCE BUSINESS
426.	SIX SIGMA APPROACH TO HEALTHCARE QUALITY AND PRODUCTIVITY MANAGEMENT
427.	SOFTWARE PRODUCT QUALITY IMPROVEMENT BY UPGRADING THE SYSTEM INTEGRATION AND TESTING PROCESS
428.	SOFTWARE QUALITY MANAGEMENT IN SYSTEM BIOS DEVELOPMENT
429.	SOFTWARE TESTING -PROCESS IMPLEMENTATION - V&V TO AGILE:TMMI WAY
430.	STANDARDIZATION OF DOCUMENTS
431.	STUDY ON MANAGING CHANGE IN AGILE METHODOLOGY
432.	STUDY ON TOOLS FOR EFFECTIVE PROJECT MANAGEMENT
433.	THE ROLE OF MARKETING IN INCREASING THE CUSTOMER BASE
434.	TO STUDY THE ESTIMATION METHOD FOR SOFTWARE DEVELOPMENT IN PUBLICIS SAPIENT
435.	TOTAL QUALITY MANAGEMENT FOR MESSAGING ON CLOUD
436.	TOTAL QUALITY MANAGEMENT METHODOLOGY TO ENSURE THE QUALITY OF PRODUCTS AND SERVICES HAVE EVOLVED CONTINUOUSLY
437.	TQM- OPPORTUNITIES AND CHALLENGES IN THE BANKING SERVICE SECTOR
438.	TRAINING EFFECTIVENESS : KEY PERFORMANCE INDICATOR
439.	TRANSPORT DEFECTS MINIMIZATION
440.	TRENDS AND RELATED FACTORS AFFECTING PATIENT SATISFACTION BEFORE AND AFTER THE AUTOMATION PROCESS IN A TERTIARY CARE HOSPITAL IN DELHI
441.	USING QUALITY TOOL AND MOTIVATIONAL FACTOR AND ITS IMPACT ON PRODUCTIVITY IN PHARMACEUTICALS INDUSTRY
442.	VALUE OF LABORATORY ACCREDITATION IN INDIA
M.Tech. Automotive Engineering	
443.	5G IMPACT ON AUTONOMOUS VEHICLES
444.	ADVANCE VEHICLE DIAGNOSTICS - USING OSCILLOSCOPE & LIVE DATA INFORMATION
445.	AUTOMOTIVE PARKING BRAKE SYSTEM DESIGN
446.	BATTERY MANAGEMENT SYSTEM MODELLING - SIMULINK

S.No.	DISSERTATION TITLE
447.	BUMPER BEAM SUPPORT DESIGN FOR PEDESTRIAN REQUIREMENT
448.	CAE DRIVEN SPOT WELD OPTIMIZATION OF BODY STRUCTURES THROUGH A COMBINATION OF PARAMETRIC AND NON-PARAMETRIC METHODS
449.	CONNECTED MACHINES - AUTOMOTIVE IOT FUTURE
450.	CONVERSION OF IC ENGINE SCOOTER TO E-SCOOTER
451.	DESIGN & DEVELOPMENT OF MODULAR THIRD ROW SEATS FOR PASSENGER CAR (SUV/MPV)
452.	DESIGN OF BUMPER ARMATURE BEAM
453.	DEVELOPMENT OF CAE METHOD TO PREDICT CHILD RESTRAINT ANCHORAGE STRENGTH
454.	DIESEL ENGINE DIAGNOSTICS AT WORKSHOP- A SYMPTOM BASED APPROACH
455.	DRIVING PROFILE CONTROLLER FOR ELECTRIC VEHICLES
456.	EFFECT OF APLI LOWER LEG IMPACTOR ON COUNTERMEASURE STUDY
457.	EFFECT ON PERFORMANCE OF ELECTRIFIED VEHICLE DUE TO INDIAN CLIMATIC CONDITIONS
458.	FIRMWARE OVER-THE-AIR (FOTA) FOR THE NODES ON CAN NETWORKS
459.	FUEL EFFICIENCY AND ELECTRIC RANGE IMPROVEMENT OF PLUG-IN HYBRID VEHICLE BY IMPROVING ENGINE-ELECTRIC MACHINE TORQUE SPLIT AND GEAR SHIFT OPTIMIZATION.
460.	FUEL EFFICIENCY DEGRADATION INFORMATION SYSTEM
461.	IMPROVEMENT IN IN-CABIN PERFORMANCE OF VEHICLE AGAINST EXTERNAL NOISE SOURCES
462.	IMPROVEMENT OF OVERALL EFFICIENCY OF ASSEMBLY PROCESS (OUTSIDE REAR VIEW MIRROR)
463.	INTRODUCTION OF BS6 VARIANT TRANSMISSION IN EXISTING ASSEMBLY LINE OF BS4
464.	NATURAL FIBERS UTILIZATION FOR INTERIOR PARTS OF RENAULT VEHICLES
465.	NOISE IMPROVEMENT IN PASSENGER CAR HVAC SYSTEM
466.	OPTIMAL POWER TRAIN DESIGN BASED ON VEHICLE APPLICATION AND BEST MOTOR SELECTION
467.	PERFORMANCE ANALYSIS AND PARAMETER CALCULATION WITH SIMULATION MODEL OF ELECTRIC TRACTOR DRIVE SYSTEM.
468.	PLANT MODEL DEVELOPMENT OF LITHIUM ION BATTERY PACK FOR ELECTRIC VEHICLE APPLICATION
469.	REDUCTION IN OBSERVED ENGINE NOISE IN PASSENGER COMPARTMENT OF A CAR.
470.	SEMI-AUTONOMOUS REAL-TIME HEADLIGHT BEAM CONTROL SYSTEM WITH DRIVER GLARE DETECTION TECHNOLOGY
471.	SPECIFIC ENERGY CONSUMPTION IMPROVEMENT OF ASHOK LEYLAND EV BUS
472.	STEERING FEEL EVALUATION OF COMPACT SUV ELECTRIC POWER STEERING SYSTEM USING HARDWARE IN THE LOOP SIMULATION
473.	STRUCTURAL PERFORMANCE ENHANCEMENT OF RAILWAY BOGIE COMPONENT USING FINITE ELEMENT SIMULATION
474.	VISIBLE LIGHT COMMUNICATION (VLC) NETWORKS IN CONNECTED VEHICLE APPLICATIONS
475.	WIRING HARNESS DESIGN FOR DCT VEHICLE
M.Tech. Computing Systems & Infrastructure	
476.	5G IMPLEMENTATION AND CLOUD TECHNOLOGY
477.	A CRITIQUE OF ARTIFICIAL GENERAL INTELLIGENCE (AGI) A.K.A. STRONG AI.
478.	A NETWORK DESIGN TO PROVIDE SECURE, RELIABLE & COST-EFFECTIVE CONNECTIVITY TO THE INCREASING REMOTE WORKFORCE IN THE POST-PANDEMIC ERA & COMPARISON WITH OTHER ENTERPRISE SOLUTIONS
479.	A NEXT GENERATION LEARNING MANAGEMENT SYSTEM
480.	A STUDY ON THE EFFECTIVENESS ON IMPROVED MANAGEMENT INFORMATION SYSTEM AT PACIFIC ARCHITECTS & ENGINEERS INC.
481.	AN EFFECTIVE DEVSECOPS INDUCTION TECHNIQUE FOR PROCESS MATURED/OLD ORGANISATIONS
482.	AN EFFICIENT AUTHENTICATION SCHEME FOR RFID IN A SMART CLASSROOM ENVIRONMENT
483.	APP DEPLOYMENT ON KUBERNETES WITH PERSISTENT STORAGE
484.	APPLICATION LIFE CYCLE MANAGEMENT
485.	APPLICATION SECURITY TESTING FOR CONNECTED DEVICES
486.	APPLICATION TRACKING SYSTEM
487.	ARCHITECTING SECURE, SCALABLE AND ROBUST INFRASTRUCTURE FOR GOVERNMENT ON AZURE CLOUD
488.	ARTIFICIAL INTELLIGENCE FOR IT INFRASTRUCTURE OPERATIONS [AIOPS]
489.	ASSESSING THE CLOUD STORAGE SECURITY
490.	AUTOMATIC NUMBER PLATE RECOGNITION USING ML

S.No.	DISSERTATION TITLE
491.	AUTOMATIC TROUBLESHOOTING OF DELL EMC UNITY REPLICATION
492.	AUTOMATING IDENTIFICATION OF PHYSICAL DEVICES CONNECTED TO DATA CENTER SWITCHES
493.	AUTOMATING PUPPET CONFIGURATION MANAGEMENT USING PORTAL AND API
494.	AUTOMATING WAYS : JENKINS WITH ARTIFICIAL INTELLIGENCE
495.	AUTOMATION OF VIRTUAL SERVER INSTALLATION IN CLOUD ENVIRONMENT
496.	BI AND ANALYTICS IN MAJOR CLOUDS
497.	BIG DATA ANALYTICS AND ITS IMPORTANCE IN HEALTH CARE INFORMATION SYSTEM
498.	CENTRALIZED LOGGING AND METRICS
499.	CI/CD FOR CLOUD NATIVE APPLICATIONS USING JENKINSX
500.	CLOUD AGNOSTIC INFRASTRUCTURE PROVISIONING
501.	CLOUD BASED R&D LAB MANAGEMENT SYSTEM
502.	CLOUD BASED SELF HEALING SYSTEMS FOR IOT DEVICES
503.	CLOUD COMPUTING FOR ANALYTICS
504.	CLOUD COMPUTING FOR RURAL AREA
505.	CLOUD NATIVE APPLICATION WITH IOT ACCELERATOR
506.	CLOUD ORCHESTRATION SOLUTIONS TO ACCELERATE DELIVERY
507.	CLOUD SECURITY
508.	COMMUNICATIVE CHATBOT FOR DEVOPS PIPELINE
509.	COMPLETE DEVOPS LIFECYCLE MANAGEMENT WITH SINGLE APPLICATION
510.	CONTAINER BASED SSL CERTIFICATE EXPIRY NOTIFIER TOOL IN CLOUD
511.	CONTAINERIZATION OF JIRA FOR REGRESSION TESTING
512.	CONTAINERIZE BITBUCKET DATA CENTER
513.	COREDNS PORTAL WITH API AND AUTOSCALING
514.	CREATING A CI/CD PIPELINE ON AWS USING VARIOUS DEVOPS TOOLS
515.	DASHBOARD FOR CENTRALISED DATACENTER MONITORING
516.	DATA CENTER DESIGN FOR AI WITH SECURITY BEST PRACTICES AND PROTECTION AGAINST RANSOMWARE
517.	DATA CENTER MIGRATION AND CLOUD COMPUTING ASSESSMENT
518.	DATA SECURITY IN CLOUD COMPUTING
519.	DATA VISUALIZATION WITH R AND POWER BI
520.	DATABASE
521.	DEPLOYMENT OF DEVOPS PRACTICES FOR CORPORATE BUSINESS APPLICATION DEVELOPMENT
522.	DEPLOYMENT OF DEVOPS PRACTICES FOR CORPORATE BUSINESS APPLICATION DEVELOPMENT
523.	DESIGN AND APPROACH TOWARDS COLOCATION DATA CENTER
524.	DESIGN AND IMPLEMENTATION OF DATA SECURITY IN CLOUD COMPUTING CONTAINERS
525.	DESIGN AND IMPLEMENTATION OF STATISTICAL DASHBOARD FOR ENTERPRISE CYBERSECURITY TOOLS
526.	DESIGN AND OPERATION OF DATA CENTER
527.	DESIGN OF A BUILD MODEL FOR HETEROGENEOUS MICRO-SERVICES BASED PRODUCTS
528.	DESIGN OF CPE-SDN AND NFV ENABLED NETWORK FOR SMALL AND MEDIUM SIZED BUSINESS
529.	DEVELOPING AN AUGMENTED REALITY BASED LOCATIONING SYSTEM USING RTLS AND ANDROID AR CORE
530.	DEVELOPMENT OF ENHANCED INFORMATION RETRIEVAL SYSTEM FOR ARMY OWNED NETWORK
531.	DEVOPS - CI-CD PIPELINE
532.	DEVOPS ON DWH
533.	DEVOPS ORIENTATION TO LEGACY MODERNIZATION
534.	DEVOPS PLATFORM FOR EFFICIENT DELIVERY USING 6"C" OF UNINTERRUPTED "CONTINUITY"
535.	DIGITAL WORKPLACE TECHNOLOGY/ACCELERATING USER ADOPTION IN DIGITAL WORKPLACE USING OFFICE 365 CLOUD
536.	DR. DINGO: AI POWERED BOT FOR MEDICAL PRACTITIONER
537.	EARNING CONSISTENT INCOME FROM STOCK MARKET
538.	EDGE CLOUD COMPUTING IN 5G
539.	EFFECTIVE MONITORING OF NETWORK GEARS
540.	EFFECTIVE POWER UTILIZATION AND SAVING IN DATA CENTERS USING ENERGY AWARE SCHEDULING
541.	EFFICIENT CLOUD ARCHITECURE FOR HEALTHCARE

S.No.	DISSERTATION TITLE
542.	ELECTION MANAGEMENT SYSTEM, KODERMA
543.	E-MAIL INFRASTRUCTURE MANAGEMENT: FLEXIBLE SOLUTIONS FOR BULK CONFIDENTIAL E-MAILS
544.	EMAIL THREAT PROTECTION
545.	EMPLOYEE ENGAGEMENT AND TRAINING MANAGEMENT SYSTEM
546.	END POINT SECURITY IN CLOUD COMPUTING
547.	END-TO-END ORCHESTRATION AND SELF-HEALING IN 5G NETWORKS
548.	ENHANCEMENT AND OPTIMIZATION OF THE DATABASES OF THE RISK MANAGEMENT SYSTEM.
549.	ENHANCEMENT IN SECURE AD-HOC NETWORKS FOR WIRELESS SENSOR NETWORKS
550.	ENTERPRISE ARCHITECTURE IN AWS CLOUD COMPUTING
551.	EVALUATION AND IMPLEMENTATION OF EVENT DRIVEN AUTOMATION USING DEVOPS TOOLS
552.	EVALUATION OF THROUGHPUT PERFORMANCE: USING TCP CONGESTION CONTROL ALGORITHMS (TCP BBR VZ CUBIC TCP) FOR SATELLITE NETWORKS
553.	EVENT CORRELATION WITH PHYTHON
554.	FACE MASK DETECTION SYSTEM & ALERTING
555.	FAULT DETECTION IN DELL EMC UNITY STORAGE ARRAYS
556.	GRAIN QUALITY DETERMINATION FOR GOVERNMENT PROCUREMENT
557.	GRAPH TO TEXT: NATURAL LANGUAGE GENERATION FROM GRAPHS AND CHARTS
558.	GRAY AND BLACK HOLE ATTACK IDENTIFICATION USING CONTROL PACKETS IN MANETS
559.	HIGH AVAILABLE SECURED APPLICATION DEPLOYMENT USING SERVICE MESH WITH KUBERNETES CLUSTER IN MULTI CLOUD ENVIRONMENT
560.	HOSTED UNIFIED COMMUNICATION AND COLLABORATION SOLUTIONS
561.	IMPLEMENTATION OF ATS AUTOMATION REMOTE SYSTEM BY INTEGRATING SURVEILLANCE SENSORS(RADAR/ADS-B) FOR APPROACH AIR TRAFFIC CONTROLLING AT GOA AIRPORT
562.	IMPLEMENTATION OF AUTOMATION & INTERNET OF THINGS (IOT) TECHNOLOGY IN DEFENSE FORCES
563.	IMPLEMENTING ADVANCED ZERO-DAY PROTECTION FOR ENTERPRISES
564.	IMPLEMENTING GRPC BASED MICROSERVICES ECOSYSTEM FOR CLOUD DEPLOYMENTS
565.	IMPLEMENTING IMMUTABLE INFRASTRUCTURE IN CLOUD USING DEVOPS
566.	IMPLEMENTING INFRASTRUCTURE AS CODE IN A MULTI-CLOUD ENVIRONMENT
567.	IMPLEMENTING ZERO TRUST ARCHITECTURE - MICROSEGMENTATION AND NAC SOLUTION
568.	INFRASTRUCTURE MONITORING/MANAGEMENT USING SPLUNK APP FOR INFRASTRUCTURE (SAI)
569.	INFRASTRUCTURE SETUP OF IGP AND EGP FOR A CLIENT
570.	INNOVARE " A PORTAL TO HANDLE INNOVATION IDEAS
571.	INTEGRATION OF SNOW WITH PRIVATE CLOUD
572.	INTELLIGENT COMPUTING AND NETWORKING THROUGH HYBRID INFRASTRUCTURE
573.	IT INFRASTRUCTURE MANAGEMENT
574.	JENKINS ECS SLAVE FOR CICD
575.	MALWARE ANALYSIS
576.	MANAGEMENT OF CLOUD MIGRATION PROJECT
577.	MERIT COOKIES: PEER TO PEER RECOGNITION SYSTEM
578.	MIGRATE DEVELOPMENT TO CLOUD
579.	MIGRATION IN CLOUD COUMPUTING
580.	MIGRATION OF INTERNET AND LAN -CUM- C-DAC UNIFIED LAN SERVICES DATA CENTER NETWORKS TO A GEOGRAPHICALLY DIFFERENT LOCATION WITH MINIMUM DOWNTIME BY CAPITALIZING ON EXISTING RESOURCES AND INTER-NETWORKING TECHNOLOGIES
581.	MIGRATION OF ON-PREMISES CRM APPLICATION TO THE CLOUD
582.	MOBILE NETWORK DATA HYGIENE MANAGEMENT & OPTIMIZATION USING SON
583.	MOBILE SECURITY MANAGEMENT IN CLOUD
584.	MONITORING ENTERPRISE IT INFRASTRUCTURE
585.	NETWORK LOGS MANAGEMENT
586.	NETWORK SECURITY
587.	NETWORK SECURITY AND FIREWALL
588.	NEW DC STORAGE MIGRATION WITH REPLICATION AND VIRTUALIZATION.
589.	NEXT GENERATION DATA CENTER & IP MPLS CLOUD
590.	NEXTGEN DATA CENTER NETWORKING TECHNOLOGIES (EVPN - VXLAN)

S.No.	DISSERTATION TITLE
591.	NON INVASIVE REALTIME IOT BASED MONITORING OF COVID 19 INFECTED SUBJECTS USING IOT WEARABLE SENSORS.
592.	OBJECT STORAGE
593.	OBLIVIOUS ROUTING IN MPLS TE BASED NETWORK
594.	ONCALL IN SERVICENOW AND SLACK INTEGRATION
595.	OPEN ENTERPRISE WAN / SDWAN
596.	OPTIMIZATION MODELS AND METHODS FOR TELECOMMUNICATION NETWORKS USING OSPF
597.	OPTIMIZATION OF MIDDLEWARE LANDSCAPE
598.	ORGANISATION CAPABILITY MANAGEMENT SYSTEM
599.	PARADIGM SHIFT IN DESIGN AND BUILD OF DATA CENTER SUSTAINABILITY
600.	PASSWORD LESS MODERNIZE AUTHENTICATION " GETTING TO A WORLD WITHOUT PASSWORDS
601.	PRIVILEGED ACCESS MANAGEMENT
602.	PRODUCT REUSE WEB APP - ZERO COST SHOPPING
603.	RASPBERRY PI BASED ROBOTIC CAR CONTROLED THROUGH FIREBASE CLOUD INTERFACED WITH ANDROID DEVICE
604.	REAL TIME MONITORING OF DC IT ACCESS POLICY NON COMPLIANCE AND RECOMMENDATION SYSTEM
605.	REGISTRATION & CALL ESTABLISHMENT TIME REDUCTION IN IMS NETWORK
606.	REMOTE MONITORING OF REAL TIME DATA USING MIDDLEWARE: VIBRATION SENSING
607.	SATYA-256 SYMMETRIC KEY ENCRYPTION SCHEME
608.	SCALABLE CACHING IMPLEMENTATION FOR MICRO SERVICES
609.	SECURE FILE STORAGE ON CLOUD USING HYBRID CRYPTOGRAPHY
610.	SECURING WORK FROM HOME USERS WITH PI
611.	SECURITY FOR IOT DEVICES USING SOFTWARE DEFINED NETWORKING
612.	SERVER BUILD AUTOMATION USING ANSIBLE TOWER
613.	SERVICE ROBOT FOR RESTAURANTS
614.	SILENT APPLICATION DEPLOYMENT USING DOCKER AND KUBERNETES - A HOISTIC APPROACH
615.	SMART AGRICULTURE SYSTEM USING IOT
616.	SMART PROJECT MANAGEMENT SYSTEM FOR SYSTEM INTEGRATORS
617.	SOFTWARE DEFINED WIDE AREA NETWORK FOR SBI CARD
618.	STANDARDIZING NETWORK DATA CENTER BUILD & OPERATIONS THROUGH AUTOMATION
619.	STRATEGIZING A COST OPTIMIZATION MODEL FOR DYNAMIC CLOUD RESOURCE UTILIZATION
620.	SURVELLIANCE AND DATA PROTECTION USING FILECLOUD
621.	SUSTAINABLE DATA CENTERS
622.	SYSTEMS(SERVERS/DATABASES/SERVICES) MONITORING & ALERTING
623.	TELECOM SWITCHING SYSTEMS & NETWORKS - IMS BASED COMMUNICATION SYSTEM USING IP-MPLS IN BACKBONE AND MSAN, GPON OLT, MER SWITCH, SBC, IAD, AMG IN ACCESS AND SIP PHONES, ONT AND ADSL CPE AT END POINTS
624.	THE RESILIENCE PROJECT
625.	THREAT HUNTING AND INCIDENT RESPONSE IN COMPROMISED ENVIRONMENT
626.	UC LOG ANALYSIS AND REPORTING DASHBOARD
627.	UI AUTOMATION USING SELENIUM AND PYTHON
628.	USAGE OF CYBER PHYSICAL SYSTEM IN STEEL MANUFACTURING
629.	USE OF CONTAINERS & ANALYTICS FOR EVENT MANAGEMENT
630.	USE OF SERVICE ORIENTED ARCHITECTURE : A REDESIGN OF DATA FEED MECHANISM
631.	VDI TRANSITION AND PROVISIONING: THE JOURNEY TO VDI MATURITY
632.	VIRTUAL TO CLOUD - CLOUD MIGRATION OF LEGACY APPLICATIONS AND SYSTEMS
633.	VOICE OVER WIFI
634.	VULNERABILITY MANAGEMENT OF MESSAGES AND MALWARE DETECTION ON ANDROID
635.	WEB APPLICATION PORTAL FOR SUGAR DEVELOPMENT FUND
636.	WEB BASED CRM FOR OIL RIGS WITH PREDICTIVE MODELLING
637.	X509 CERTIFICATE BASED AUTHORIZATION
M.Tech. Design Engineering	
638.	A COMPACT AND SAFE DESIGN OF PACKAGED SUBSTATION FOR SECONDARY DISTRIBUTION SYSTEMS
639.	A STUDY OF FACTORS CAUSING CONDENSATION IN SPEEDOMETERS AND OPTIMIZATION TO REDUCE THE

S.No.	DISSERTATION TITLE
	PHENOMENA USING CFD SIMULATION TECHNIQUES
640.	A STUDY ON PERFORMANCE OF LOW SPECIFIC SPEED DOMESTIC CENTRIFUGAL PUMP WITH DIFFERENT VOLUTE CONFIGURATIONS.
641.	ACOUSTIC MATERIAL IN GENSET
642.	ADJUSTABLE POSITIVE PARALLEL FACES WITH CENTRIFUGAL HYDRO-PADS
643.	AERODYNAMIC DESIGN OF CENTRIFUGAL COMPRESSOR
644.	ANALYSIS AND IMPLEMENTATION OF CRYO COOLER FOR THERMO-VACUUM PERFORMANCE TEST OF METEOROLOGICAL PAYLOADS IN CATVAC
645.	ANALYSIS OF HEAT LOSS FROM WATER COOLED CHILLER TEST BED PIPING AND RECOMMENDATIONS TO CONTROL IT.
646.	ANALYSIS ON AIR FRAME SECTION
647.	APERTURE DESIGN OPTIMISATION IN NON-PNEUMATIC TIRE
648.	APP (APPLICATION) BUILDING FOR ESTIMATING THE ACOUSTIC FREQUENCY RESPONSE FOR A CAR CABIN
649.	APPLICATION OF BIM (BUILDING INFORMATION MODELLING) FOR EPC OIL AND GAS PROJECTS
650.	APPLICATION OF FINITE ELEMENT METHOD IN DESIGNING OF ELASTOMERIC PRODUCTS
651.	ASSESSMENT OF SUPPORT STRENGTH THROUGH FINITE ELEMENT METHODS
652.	AUTO COLLISION DETECTION AND RECOVERY OF ROBOT MANIPULATOR
653.	AUTOMATIC STEERING LOCK FOR TWO WHEELER
654.	AUTOMATION LINE FOR BATTERY STACKING
655.	BEHAVIORAL ANALYSIS OF SINGLE AXIS LINEAR MOTION FLEXURAL NANOPOSITIONING STAGE
656.	BLADE ROOT SELECTION, STRESS CALCULATION & FINALIZATION BY USING FEA TECHNIQUE
657.	CAD, ANALYSIS AND DEVELOPMENT OF MACHINING FIXTURE FOR LHB BOGIE FRAME
658.	CATHETER DESIGN AND OPTIMIZATION
659.	CENTRALIZED AUTOMATIC IRRIGATION SYSTEM
660.	CFD ANALYSIS OF SOLAR CHARGE CONTROLLER TO ESTIMATE THE EFFECTIVE HEAT VENTILATION
661.	COMBINATION OF PRESS-UP AND ROUGH STRAIGHTENING OPERATIONS OF PROPELLER SHAFT THROUGH SINGLE MACHINE
662.	COMPARATIVE ANALYSIS AND DESIGN OF CONNECTING ROD
663.	COMPARATIVE EVALUATION OF FRICTIONAL TORQUE DETERMINED BY GRAPHICAL WILLIAN'S LINE METHOD AND A PATENTED RETARDATION METHOD FOR A DIESEL ENGINE
664.	COMPARISON OF DESIGN METHODOLOGIES FOR PRESSURE VESSEL COMPONENTS IN CREEP RANGE
665.	COMPARISON OF STRESSES GENERATED DUE TO SUPPORT SADDLES OF PRESSURE VESSEL USING ANALYTICAL AND FINITE ELEMENT ANALYSIS
666.	CONDITION MONITORING OF ROLLING ELEMENTS BEARING IN CEMENT PLANT.
667.	COST REDUCTION IN BRAKE RUBBER PARTS MANUFACTURING BY CARRYING OUT DESIGN OF EXPERIMENTS
668.	CUTOUT SHAPE OPTIMIZATION OF A FLAT PLATE BASED ON CRITICAL CRACK GROWTH LIFE PREDICTION UNDER IN-PLANE LOADING CONDITION
669.	DESIGN & ANALYSIS OF CONFORMAL COATING DRYING CABINET FOR PRINTED CIRCUIT BOARDS
670.	DESIGN & ANALYSIS OF GANTRY TRUSS GALLERY USING STAAD PRO.
671.	DESIGN & ANALYSIS OF OVERHEAD POWER SYSTEM FOR HEAVY COMMERCIAL VEHICLES
672.	DESIGN & AUTOMATION OF MANUAL HAND-PRESS
673.	DESIGN & FABRICATION OF HYDRAULIC GRAB SUITABLE FOR LIFTING SCRAP IN STEEL MILL
674.	DESIGN & OPTIMIZATION OF DASHBOARD HOLDING FIXTURE
675.	DESIGN , ANALYSIS AND DEVELOPMENT OF SPACECRAFT MOUNTING INTERFACE FIXTURE FOR I2K AND I3K CLASS SPACECRAFT FOR THERMO- VACUUM TESTING
676.	DESIGN AND ANALYSIS OF ALUMINIUM DRIVESHAFT (WEIGHT SAVING PROJECT)
677.	DESIGN AND ANALYSIS OF BRACKET STRUCTURE FOR FUEL CELL SYSTEM MOUNTING ON A TRUCK USING ANSYS
678.	DESIGN AND ANALYSIS OF FRONT AXLE COMPONENT OF COMMERCIAL VEHICLE SUBJECTED TO VARIOUS LOAD CONDITIONS
679.	DESIGN AND ANALYSIS OF INFLATABLE TUBES IN SOLID TYRE FOR AGRICULTURE MACHINES.
680.	DESIGN AND ANALYSIS OF NOTCHING DIE FOR REAR SUB-FRAME LOWER TUBE
681.	DESIGN AND ANALYSIS OF RUNNING FRESH WATER GENERATOR SYSTEM WITHOUT USING THE HEAT OF MAIN ENGINE OF SHIP AT TMI
682.	DESIGN AND DEVELOPMENT OF AUTO LEVELLING HANDLING FIXTURE

S.No.	DISSERTATION TITLE
683.	DESIGN AND DEVELOPMENT OF BI-DIRECTIONAL SPRING CAGE ASSEMBLY FOR ELECTRO-MECHANICAL LOCKS
684.	DESIGN AND IMPLEMENTATION OF FACT BASED SOURCING LEVERS
685.	DESIGN AND INSTALLATION OF ELECTRONIC CONTROL SYSTEM OF CONTROLLABLE PITCH PROPELLER OF T.S. PRABHIVIDYA
686.	DESIGN AND OPTIMIZATION OF CRUSH CAN FOR PASSENGER VEHICLE
687.	DESIGN AND OPTIMIZATION OF MATERIAL HANDLING TROLLEY
688.	DESIGN AND OPTIMIZATION OF ROLL OVER PROTECTION STRUCTURE
689.	DESIGN AND VALIDATION OF MECHANICAL COMPONENTS OF MUD MOTORS FOR OIL AND GAS EXPLORATION
690.	DESIGN AUTOMATION OF HEAVY COMMERCIAL CONTAINERS
691.	DESIGN EVALUATION FOR WIND TURBINE MAIN SHAFT BEARING
692.	DESIGN FOR AUTOMATION FOR CAM CHAIN TRANSFERING INTO END RIVETING MACHINE
693.	DESIGN FOR FOUR STATION INDEXING TABLE USING PNEUMATICS
694.	DESIGN IMPROVEMENT TO INCREASE THE INITIAL FIELD ADJUSTMENT PERIOD OF YOKE CLEARANCE IN RACK & PINION STEERING GEAR
695.	DESIGN OF A 6 X 20 QUARTER DECK VIBRATING SCREEN
696.	DESIGN OF A HYDRAULIC PUMP USING ANALYTICAL AND NUMERICAL TECHNIQUES
697.	DESIGN OF AC PIPES & PLASTIC PARTS
698.	DESIGN OF AUTOMATED SPRING ASSEMBLY AND INSPECTION MACHINE FOR OIL SEALS
699.	DESIGN OF BATTERY OPERATED PALLET TRUCK (BOPT) OF 10 TON CAPACITY
700.	DESIGN OF CARBON STEEL RAILINGS
701.	DESIGN OF EXPERIMENT (DOE) STUDY TO OPTIMIZE THE LABORATORY PIPETTE TUBE DESIGN WITH FINITE ELEMENT METHOD APPROACH (USING ANSYS)
702.	DESIGN OF FLUSH SYRINGE WITH CONTROLLED INJECTION
703.	DESIGN OF ISOLATION PODS FOR COVID 19 PATIENTS
704.	DESIGN OF LOW-COST GAP-HIDER FOR CARGO AREA
705.	DESIGN OF MODULAR HYDRAULIC SPACERS CUM STILLAGES & COST BENEFIT ANALYSIS.
706.	DESIGN OF MUCK REMOVAL PLATFORM WITH A ROBOTIC MANIPULATOR FOR THE CONSTRUCTION OF PRESSURE SHAFT IN A DAM PROJECT
707.	DESIGN OF MUCK REMOVAL PLATFORM WITH A ROBOTIC MANIPULATOR FOR THE CONSTRUCTION OF PRESSURE SHAFT IN A DAM PROJECT
708.	DESIGN OF SAFETY NEEDLE SYRINGE TO PREVENT INJURY TO HEALTHCARE WORKERS
709.	DESIGN OF SPECIAL HYDRAULIC VALVE FOR TRACTOR
710.	DESIGN OF STEAM JACKETED PIPING SYSTEM IN PROCESS PLANTS
711.	DESIGN OF STRAIN RELIEF BACK-SHELLS IN POLYMER MATRIX COMPOSITE AND COMPARATIVE STUDY AGAINST ALUMINIUM ALLOY BACK-SHELLS
712.	DESIGN OF SUSPENSION SYSTEM FOR AN AGV TO ACHIEVE PAYLOAD STABILITY WITH AN FM-2 GRADE WAREHOUSE FLOOR
713.	DESIGN OPTIMISATION OF INSTRUMENT PANEL FOR PASSENGER AIRBAG DEPLOYMENT
714.	DESIGN OPTIMIZATION FOR PIPELINE FACILITIES IN OIL & GAS CROSS COUNTRY PIPELINE TRANSPORTATION SYSTEM
715.	DESIGN OPTIMIZATION OF AIR PLENUM IN AIR EXCHANGER UNIT
716.	DESIGN OPTIMIZATION OF GEAR SELECTOR FORK
717.	DESIGN OPTIMIZATION OF HYPERBOLOID ELECTRICAL CONTACTS
718.	DESIGN OPTIMIZATION OF ROTARY COMPONENTS IN SINGLE AXIS SOLAR TRACKER TO ACHIEVE COST SAVING AND ASSEMBLY ERROR PROOFING
719.	DESIGN OPTIMIZATION OF SHOCK AND VIBRATION ISOLATION SYSTEMS
720.	DESIGNING AND PROTOTYPING OF OUTDOOR LEARNING KIOSK
721.	DESIGNING OF FLEXIBLE WELDING CELL FOR BODY-IN-WHITE (BIW) ASSEMBLY
722.	DEVELOPMENT OF CRUSH BOX & REINFORCEMENTS FOR A HEAVY DUTY TRUCK CABIN & VIRTUAL VALIDATION AS PER AIS 029
723.	DEVELOPMENT OF FLYWHEEL
724.	DEVELOPMENT OF MULTIBODY DYNAMIC SIMULATIONS FOR TOP LOADER WASHING MACHINE AND USING SIMULATION TECHNIQUES FOR DESIGN PERFORMANCE STUDY.
725.	DEVELOPMENT OF NEW BUMP STOPPER TO IMPROVE RIDE, HANDLING AND ELIMINATE NOISE IN VEHICLE

S.No.	DISSERTATION TITLE
726.	DEVELOPMENT OF SEALED PTO(POWER TAKE-OFF) BALL COLLAR WITH END YOKE.
727.	DFMA IMPLEMENTATION IN RAIL CAB AC , RCF
728.	DIMENSIONING AND OPTIMIZATION OF GRADING RING FOR HIGH VOLTAGE SURGE ARRESTER USING FINITE ELEMENT METHOD
729.	DUAL DRIVE WIND TURBINE
730.	EFFECT OF POOL VOLUME ON EFFICIENCY OF WET BALL MILL
731.	EFFECT OF SPIGOT TIP THICKNESS ON TAPER ADHESIVE BONDED JOINT (FRP PIPING SYSTEM)
732.	EFFECT OF TEMPERATURE ON HR COIL SADDLE DESIGN
733.	EFFECTIVENESS IMPROVEMENT IN DE-NOX SYSTEM BASED ON SCR THROUGH CFD ANALYSIS TO REDUCE REAGENT CONSUMPTION
734.	EFFICIENCY OPTIMISATION OF BREATHER CHAMBER BY CHANGING THE NUMBER OF NOZZLES
735.	ELECTRONIC COOLING
736.	ENERGY CONSERVATION IN BUILDING AIRCONDITIONING & CONTROL SYSTEM
737.	ENHANCEMENT OF TRIBOLOGICAL PROPERTIES OF LIGHT WEIGHT METALS THROUGH PLASMA ELECTROLYTIC OXIDE (PEO) COATING FOR LINEAR GUIDE APPLICATION
738.	ENHANCING THE WEAR RESISTANCE OF AUTOMOTIVE ROLLER CHAIN WITH SELF LUBRICATION COATING ON METAL PIN
739.	EVALUATION AND IMPROVEMENT OF TRIMMED FRAME VEHICLE AT NVH CAE LEVEL
740.	EVALUATION OF DIFFERENT DISPOSABLE CONNECTOLOGY USED IN DIALYSIS EQUIPMENT
741.	EVOLVING AN OPTIMUM APPROACH TO REDUCE THE FLIGHT TEST DURATION OF PROTOTYPE AIRCRAFTS
742.	EXPERIMENTAL STUDY ON TESTING OF ALUMINIUM ALLOYS USED IN AEROSPACE INDUSTRY USING ACOUSTIC EMISSION (AE) TECHNIQUE
743.	FAILURE ANALYSIS OF UNDERGROUND GRP PIPELINES USING ANSYS
744.	FAILURE ANALYSIS OF VERTICAL CENTRIFUGAL PUMPS USING FMEA ANALYSIS
745.	FAILURE INVESTIGATION OF STEAM STOP VALVE CONTROL DEVICE AT HIGH STEAM TEMPERATURE FOR INDUSTRIAL STEAM TURBINES
746.	FAILURE STUDY OF AIRCRAFT FLOOR PANELS (HONEYCOMB STRUCTURES) UNDER DIFFERENT LOADING SCENARIOS
747.	FATIGUE DAMAGE ANALYSIS DUE TO RANDOM VIBRATION BY FEM
748.	FATIGUE LIFE ESTIMATION OF ELECTRONIC COMPONENTS FOR SPACE APPLICATIONS UNDER VIBRATION ENVIRONMENT
749.	FAULT TOLERANT CONTROL FOR ADAS
750.	FEA IN PIPING SUPPORT IN OIL AND GAS INDUSTRIES
751.	FEASIBILITY STUDY OF INTEGRATING ARTICULATED ARM ROBOT WITH AGV
752.	FEM BASED SEISMIC ANALYSIS OF OUTDOOR GIS
753.	FINITE ELEMENT ANALYSIS APPROACH TO STUDY THE EFFECT OF TEMPERATURE PROFILE ON ELECTRONIC PACKAGES DURING RE FLOW SOLDERING PROCESS.
754.	FINITE ELEMENT ANALYSIS OF MELT POOL IN ADDITIVE MANUFACTURING USING SELECTIVE LASER MELTING PROCESS
755.	FITNESS FOR SERVICE EVALUATION AND REMAINING LIFE EXPECTANCY OF LIQUID TRANSPORTATION AGEING PIPELINE
756.	FIXTURE DESIGN FOR LVDT CALIBRATION OF HYDRAULIC ACTUATORS
757.	FLOW ANALYSIS OF GAS TURBINE COMPARTMENT VENTILATION SYSTEM
758.	FLOW RATE PREDICTION AND ANALYSIS USING MATHEMATICAL MODEL IN GASOLINE DISPENSER
759.	FUEL ECONOMY IMPROVEMENT WITH LOW ROLLING RESISTANCE TIRES
760.	GUIDELINES FOR BONNET DESIGN USING FEA METHODOLOGY
761.	HYDRAULIC IMPROVEMENT IN MIXED FLOW IMPELLER LEADING TO CENTRIFUGAL PUMP EFFICIENCY IMPROVEMENT
762.	ICE LOAD ON SHIP HULL
763.	IMPLEMENTATION OF AIRBAG MODULAR IGNITER PART MERGED WITH SQUIB RETAINER TO REPLACE RETAINER CLIP ASSEMBLY
764.	IMPROVING WEAR PERFORMANCE OF THE ROLLER CHAIN BY SELF ALIGNED SEAL RING
765.	IMPROVISED SPRAY PAINING SYSTEM USING MEMS
766.	INCREASING THE RANGE OF ELECTRICAL CAR BY NON-CONVENTIONAL ENERGY (SOLAR PANEL)
767.	INDUSTRY DISTRIBUTION BUSINESS & STRATEGY PLAN
768.	INNOVATIVE COOLING SOLUTION FOR MODULAR DATA CENTRE WHICH HELPS FOR UTILIZING 100% SERVER MOUNTING U - SPACE

S.No.	DISSERTATION TITLE
769.	INTEGRATED STRUCTURE USING COMPOSITES IN RAIL VEHICLES
770.	INTELLIGENT TRANSFER SYSTEM: HIGH SPEED INFEED PRODUCT HANDLING
771.	INVESTIGATION INTO LATERAL ROTORDYNAMICS OF GEARED SYSTEM
772.	KEEP IT FRESH FOOD SAVER IN REFRIGERATOR
773.	LOCALIZATION & CAPACITY REUSE
774.	MATERIAL SELECTION IN PRODUCT DEVELOPMENT USING MACHINE LEARNING
775.	MATHEMATICAL MODELLING AND VALIDATION OF LOCOMOTIVE DYNAMIC MODEL
776.	MATHEMATICAL MODELLING OF A DAMPER
777.	MECHANICAL ASSESSMENT- GAS TURBINE COMPRESSOR (STRUCTURAL ANALYSIS,CRACK INITIATION & PROPOGATION, DESIGN IMPROVEMENT)
778.	MECHANICAL CONCEPT DESIGN OF PUSH TYPE SWITCH
779.	MECHANICAL SYSTEMS DESIGN OF SOLAR ULTRA-VIOLET IMAGING TELESCOPE (SUIT) ON-BOARD ADITYA-L1 MISSION
780.	MECHANISM DESIGN
781.	METHODOLOGY DEVELOPMENT FOR MEASURING THE VEHICLE AXLE SHAFT DEFLECTION UNDER VARIOUS DYNAMIC LOADS
782.	MINIMALISTIC DESIGN OF DIGITALLY CONNECTED SMART CONTROL DEVICES AND SENSORS, DEVELOPED FOR EASE IN PORTABILITY AND NON-INVASIVE ACCESS TO CONSERVE ENERGY IN A CONVENTIONAL HOME THROUGH DATA ANALYTICS AND PREDICTION.
783.	MODAL ANALYSIS OF DAVIT GEAR BOX CASING
784.	MODULAR PROGRAMMABLE EDUCATIONAL ROBOT FOR KIDS
785.	MULTI-DISCIPLINARY OPTIMIZATION OF REAR SEAT OF PASSENGER CAR USING DIRECT DESIGN OF EXPERIMENTS (DOE)
786.	NEXT GENERATION BRAKE SYSTEM
787.	NON LINEAR DEAD BEAT CONTROL: AN ALGORITHMIC APPROACH
788.	NUMERICAL VALIDATION OF PELTON RUNNER WHEEL WITH EXPERIMENTAL RESULTS DUE PRESSURE INDUCED BY FRICTIONAL COUPLING
789.	NVH OPTIMIZATION OF TRACTION MOTORS IN ELECTRIC VEHICLE
790.	OPTIMIZATION AND STRUCTURAL ANALYSIS OF DIFFERENTIAL CASING IN POWERTRAIN ASSEMBLY
791.	OPTIMIZATION FOR ELECTRICAL SYSTEM INSTALLATION
792.	OPTIMIZATION OF BONE CUTTING COVERAGE FOR A ROBOTIC KNEE SURGERY USING COMPUTER AIDED ANALYSIS AND STATISTICAL METHODS
793.	OPTIMIZATION OF CURE CYCLE AND TREAD COMPOUND FOR ROLLING RESISTANCE REDUCTION OF TRUCK BUS BIAS TIRES
794.	OPTIMIZATION OF DESIGN OF HUB-MS BOLTED JOINT
795.	OPTIMIZATION OF HEAT EXCHANGER
796.	OPTIMIZATION OF INTERIOR TRIMS FOR OCCUPANT PROTECTION
797.	OPTIMIZATION OF QUALITY PARAMETERS OF TIG WELDING USING TAUGCHI OF ALUMINIUM ALLOY 65032
798.	OPTIMIZATION OF TIRE DESIGN AND CONSTRUCTION PARAMETERS FOR CORNERING STIFFNESS OF TEMPORARY SPARE TIRES IN PASSENGER CAR VEHICLE CATEGORY
799.	PERFORMANCE IMPROVEMENT OF HYDRAULIC CIRCUITS IN BACKHOE LOADER
800.	PINION TORQUE VARIATION ANALYSIS IN RACK AND PINION GEAR ASSEMBLY
801.	POWER OPTIMIZATION IN PROCESS COOLING
802.	PREDICTIVE MAINTENANCE OF A MACHINE AND FAULT ANALYSIS USING MACHINE LEARNING
803.	PRESCRIPTIVE PREDICTION OF THREE-DIMENSIONAL MODEL AND PRODUCT DEVELOPMENT OF MEASUREMENTS OF AEROSPACE COMPONENT REDUCING COST AND TIME ON INSPECTION
804.	PROCESS IMPROVEMENT IN BH60M FRONT AXLE ASSEMBLY
805.	PRODUCT DESIGN
806.	PRODUCT DESIGN -MODULE IMPROVEMENT: HEAT SHIELD AND LOAD SENSOR
807.	PRODUCT DESIGN OPTIMIZATION BY WEIGHT REDUCTION FOR CLUTCH BOOSTER PISTON ASSEMBLY.
808.	PROJECT SCHEDULING
809.	PROJECT SCHEDULING SYSTEM FOR CONSTRUCTION OF RENEWABLE ENERGY PLANTS USING CRITICAL PATH METHOD
810.	PROVISION OF AUTONOMOUS BRAKING IN TRACTORS
811.	PSD SIMULATION COMPARISON WITH FEA AND MBS
812.	QUICH OIL CHANGE TRAILER PLATFORM

S.No.	DISSERTATION TITLE
813.	REDUCING THE GAS SUCTION PRESSURE PROBLEM IN A CNG COMPRESSOR
814.	REGEN DUTY CYCLE MAPPING IN ELECTRIC VEHICLE AT DIFFERENT LOAD AND DRIVE CONDITIONS CONDITIONS IN E-DRIVE UNIT
815.	REPORT AUTOMATION USING PYTHON IN POST PROCESSING SOFTWARE
816.	SAND CASTING MOLD AUTO TURNOVER SYSTEM
817.	SCARA ROBOT : ARTICULATED ARM DEVELOPMENT, ANALYSIS AND SIMULATION
818.	SHIFTER IMPACT CORRELATION AND DESIGN IMPROVEMENT
819.	SIMULATION OF HEAT VENTILATION INSIDE A SOLAR CHARGE CONTROLLER USING CFD
820.	SIMULATION OF SLUG PROFILE IN TWO PHASE FLOW
821.	SINGLE HOOK STICK TRIGGER MECHANISM FOR FAULT CIRCUIT INDICATOR
822.	SOLAR TRACKING SYSTEM WITH CLEANING MECHANISM
823.	SPHERICAL PRESSURE VESSEL: ANALYSIS OF DISCONTINUITY STRESSES AT JUNCTION OF SHELL & SELF-REINFORCED NOZZLES (WITH DIFFERENT HUB THICKNESSES) UNDER INTERNAL PRESSURE & EXTERNAL LOADS
824.	STATIC AND DYNAMIC ANALYSIS OF BICYCLE FRAME IN ANSYS AND VERIFICATION THROUGH MATLAB CODE
825.	STRUCTURAL ANALYSIS OF CARBON/EPOXY COMPOSITE FAN BLADE FOR AERO ENGINE
826.	STRUCTURE ANALYSIS OF TRANSFORMER TANK
827.	STUDY OF DIFFERENT CRACK GROWTH ANALYSIS METHODS FOR TURBINE BLADES
828.	STUDY OF FINITE ELEMENT ANALYSIS AND ACTIVE VIBRATION CONTROL OF ROTATING COMPOSITE SHAFT SYSTEM UNDER UNBALANCE FORCES USING THREE NODDED BEAM ELEMENT
829.	STUDY OF HEAT FLOW AND THERMAL MAPPING OF WHEEL SPEED SENSOR INSTALLATION VICINITY AREA DURING BRAKING & DESIGN OF THERMAL BARRIER TO PROTECT THE WHEEL SPEED SENSOR FROM HEAT DURING BRAKING
830.	STUDY OF HUMIDITY EFFECT ON WIND TURBINE BLADE AND ITS PERFORMANCE
831.	STUDY ON BEHAVIOR OF SEMI-RIGID CONNECTIONS IN COLD-FORMED STEEL PALLET RACKS
832.	STUDY ON EPC PROJECTS IN TERMS OF TIME & COST OVERRUNS
833.	SULPHUR CONDENSER TUBESHEET FINITE ELEMENT ANALYSIS BASED ON ELASTIC ANALYSIS AS PER ASME CODE
834.	SUSTAINABLE DESIGN CONCEPT FOR MECHANICAL SYSTEMS INSIDE BUILDINGS
835.	TEMPERATURE MONITORING & TEMPERATURE DISPLAY OF DRUM BRAKES IN A COMMERCIAL TRUCK
836.	THEORETICAL AND EXPERIMENTAL STUDIES OF IMPACT ATTENUATOR
837.	THERMAL BUCKLING ANALYSIS OF CROSS-PLY AND ANGLE-PLY LAMINATED COMPOSITE PLATE WITH CIRCULAR CUTOUT
838.	THERMAL EFFICIENCY ENHANCEMENT OF 2.5" ENTERPRISE SSD
839.	THERMAL PERFORMANCE ANALYSIS OF COUNTERFLOW COOLING TOWER BY KAV/L & L/G METHOD
840.	TO DEVELOP THE PROCESS OF FATIGUE ANALYSIS AND LIFE ESTIMATION OF DRIVER INFORMATION SYSTEM USING FEA & ANALYTICAL CALCULATIONS
841.	TO STUDY & OPTIMIZE THE BOIL-OFF GENERATION IN LNG STORAGE TANKS SO AS TO IMPROVE THE OVERALL EFFICIENCY OF RE-GAS TERMINAL.
842.	TOP SIDE FACILITIES FOR A JETTY
843.	USE OF DATA ANALYTICS FOR DIRECT MATERIAL SPEND REDUCTION
844.	USE OF REAL TIME SYSTEMS IN ULTRASONIC WELDING MACHINE TO IMPROVE MACHINE PERFORMANCE
845.	VALIDATION OF FINITE ELEMENT ANALYSIS OF TEMPORARY STRUCTURAL SUPPORT FOR REPLACEMENT OF CORRODED SECTION OF FLARE RISER STACK WITH EXPERIMENTAL MODEL
846.	VALUE ENGINEERING OF CRYOGENIC CHILLER
847.	VARIATION STUDY OF HEAD IMPACT SIMULATION ON INSTRUMENT PANEL USING LS DYNA
848.	VRF CLEANROOM INDOOR UNIT
849.	WIND TURBINE-BEARING LUBRICATION SYSTEM
850.	WITH A CFD SIMULATION APPROACH, DESIGN A HVAC VRV SYSTEM & VENTILATION SYSTEM FOR A COMMERCIAL BUILDING FOR GENERATION OF A BETTER INDOOR AIR QUALITY & ENERGY EFFICIENT MODULE.
M.Tech. Embedded Systems	
851.	5G BASED EFFICIENT AVIONICS COMMUNICATION SYSTEM
852.	5G ENABLED SERVICES FOR URBAN AIR MOBILITY
853.	A FRAMEWORK FOR SECURING EMBEDDED LINUX BY MANAGING INTEGRITY OF APPLICATION AND DATA
854.	A LOOP-BACK MECHANISM TO PERFORM AUDIO MEASUREMENTS AT THE PRODUCTION LINE USING A

S.No.	DISSERTATION TITLE
	SOFTWARE SOLUTION REPLACING H/W EQUIPMENT
855.	A NOVEL APPROACH TO DESIGN , MODEL AND BUILD ROBOT THROUGH STATE FLOW IN MATLAB SIMULINK WITH HARDWARE IMPLEMENTATION USING NODE-MCU
856.	A STUDY OF AUDIO/LIGHT BASED INDOOR LOCALIZATION TECHNIQUES: IMPLEMENTATION AND ITS CHALLENGES
857.	ACOUSTIC NOISE AND ECHO CANCELLATION FOR SMART ASSISTANCE DEVICES IN SIMULINK USING LMS ALGORITHMS
858.	ADVANCE MANAGEMENT OF ENERGY STORAGE SYSTEM
859.	ADVANCED 8 LAYERED PCB, IMPROVISED VERSION OF MOBILEYE-EYEQ4 BASED FRONT CAMERA MOTHER BOARD
860.	ADVANCED THERMAL MANAGEMENT IN THE ELECTRONIC DEVICES USING ADAPTIVE METHODS
861.	AG-ROVER : EMPOWERING PRECISION FARMING
862.	AIRBAGS - EVENT DATA RECORDER
863.	AN ANALYTICAL STUDY AND DESIGN FOR THE CONTROL OF HUMIDITY AND PRESSURE OF AN ISOLATED PRESSURIZED CLOSED CHAMBER (VALVE HALL) FOR AN HVDC CONVERTER STATION.
864.	ANALYSIS OF STATE OF ART ALGORITHMS FOR SUCCESSIVE CANCELLATION DECODER FOR POLAR CODES IN 5G MODEM
865.	APPLICATION OF FORMAL METHODS IN FLIGHT PHASE TRANSITION LOGIC FOR AIRCRAFT USING SLDV ON STATEFLOWS
866.	APPLICATION OF PARAMETRIC REPRESENTATION IN EMBEDDED SYSTEM FOR A PAIN RELIEF PRODUCT
867.	AUTOMATED TEST EXECUTION OF EMBEDDED FIELD INSTRUMENTS
868.	AUTOMATED TESTING FOR CAN BASED VEHICLES VIA CAPL AND PYTHON
869.	AUTOMATED TESTING OF IOS IN MARSHALLING CABINETS
870.	AUTOMATION OF DIAGNOSTICS FAILURES LOG ANALYSIS IN AUTOMOTIVE EMBEDDED SYSTEMS
871.	AUTOMOTIVE CAM
872.	AUTOMOTIVE CONTROL USING GEO FENCING
873.	AUTOMOTIVE GRADE CAR INTERIOR AIR QUALITY CHECK & PURIFICATION SYSTEM
874.	BATTERY MONITORING SYSTEM FOR ELECTRIC FLEET VEHICLES
875.	BIOMETRIC FINGERPRINT AUTHENTICATION SYSTEMS
876.	BLE MESH CONNECTED DOOR LOCKS
877.	BLUETOOTH EXTENDER FOR CAAVO WITH IR CONTROL
878.	CHASSIS MANAGEMENT AND CONFIGURATION OF SAS SWITCH BY A FLAVOR OF IPMI
879.	COMBINATION OF IOT AND AR FOR INDUSTRY 4.0
880.	COMPUTER VISION BASED SYSTEM FOR DETECTION OF OBSTACLE FOR INDIAN SPECIFIC TRAFFIC SCENARIO: A NEW ERA OF ROAD ACCIDENT REDUCTION FOR INDIA
881.	CONNECTED CARS
882.	CONTROLLING HOME APPLIANCES USING ANDROID APPLICATION
883.	COOKING ROBOT
884.	CORRELATED SENSOR PLATFORM WITH EDGE COMPUTING (IOT)
885.	COUNTER UAV RF INTERFERENCE: HARDWARE ARCHITECTURE, IMPLEMENTATION AND CHALLENGES
886.	CUSTOM PCMCIA CARD READ/WRITE APPLICATION USING DEVELOPMENT BOARD
887.	CUSTOMIZED TEST AUTOMATION FRAMEWORK: MERGER OF DESKTOP AND MOBILE APPLICATIONS AUTOMATION
888.	CYBER SECURITY ENABLED AUTOMOTIVE VEHICLE
889.	CYBER SECURITY IN AN AUTOMOTIVE DOMAIN
890.	DATA COMMUNICATION BETWEEN HEAD UNIT AND INSTRUMENT CLUSTER VIA BROADREACH ETHERNET USING SCALABLE SERVICE-ORIENTED MIDDLE-WARE OVER IP (SOME/IP) PROTOCOL
891.	DATA ENCODING CUM ENCRYPTION SCHEMES (DECES): A NEW CRYPTOGRAPHIC APPROACH FOR NETWORK DATA
892.	DATA ENGINEERING
893.	DEBUG IP MODELING FOR PRE-SILICON SOFTWARE DEVELOPMENT
894.	DEEP LEARNING ON THE EDGE: SOCIAL DISTANCING DURING THE PANDEMIC
895.	DESIGN AN ELECTRIC VEHICLE REMOTE CHARGE SCHEDULER DURING LOW TARIFF PERIOD
896.	DESIGN AND CHARACTERIZATION OF CONDUCTIVITY SENSOR TO DETECT INLET CHEMICALS IN MEDICAL DEVICE
897.	DESIGN AND DEVELOPMENT OF EMERGENCY INFORMATION SYSTEM FOR HEAVY WATER PLANT (MANUGURU)

S.No.	DISSERTATION TITLE
898.	DESIGN AND DEVELOPMENT OF INTELLIGENT REAL TIME FISH DETECTION AND BIOMASS ESTIMATION SYSTEM
899.	DESIGN AND DEVELOPMENT OF LORAWAN ON EMBEDDED PLATFORM FOR NODES AND CLOUD APPLICATION
900.	DESIGN AND DEVELOPMENT OF LOW COST, USER FRIENDLY HART COMMUNICATOR
901.	DESIGN AND DEVELOPMENT OF ROBUST IOT GATEWAY FOR INDUSTRIAL APPLICATIONS
902.	DESIGN AND DEVELOPMENT OF SFP BASED PROTOTYPE TIMING SYSTEM FOR STEADY STATE SUPERCONDUCTING TOKAMAK (SST-1)
903.	DESIGN AND DEVELOPMENT OF ZONE SELECTIVE INTERLOCKING MODULE OF MCCB WITH ACB COMPATIBILITY
904.	DESIGN AND IMPLEMENTATION OF LOW COST MULTIPLICITY LOGIC UNIT USING FPGA
905.	DESIGN AND IMPLEMENTATION OF MICROCONTROLLER BASED 200 W INVERTER
906.	DESIGN AND IMPLEMENTATION OF OPTIMIZED RPC IN ARM BASED CPU™S
907.	DESIGN METHODOLOGIES FOR REAL TIME SAFETY- CRITICAL APPLICATIONS IN AUTOMOTIVE
908.	DESIGN OF AVIONICS DISPLAY SYSTEM USING MODEL BASED DESIGN, IN A SAFETY CRITICAL ENVIRONMENT
909.	DESIGN OF DDR4 ECC RDIMM BASED ON STACK TECHNOLOGY USING CAVITY PCB
910.	DETONATION WINDOW AND FREQUENCY SWEEP TEST USING HARDWARE-IN-THE-LOOP VALIDATION
911.	DEVELOP FREERTOS FOR POWERPC E200 MULTICORE PLATFORM
912.	DEVELOPMENT OF SINGLE BOARD COMPUTER (SBC) FOR DIGITAL MULTI CHANNEL DATA RECORDER
913.	DRIVER AUTOMATIC DROWSINESS DETECTION SYSTEM
914.	DYNAMIC KEY GENERATION
915.	ECPRI IMPLEMENTATION FOR 4G/5G NETWORK
916.	ELECTRIC VEHICLES BATTERY PERFORMANCE MONITORING USING MATLAB
917.	ELEVATOR DIAGNOSTICS & PREDICTIVE MAINTENANCE SYSTEM
918.	ENABLING REMOTE ACCESSIBILITY FOR DISPLAY SOFTWARE
919.	ENFORCEMENT OF REWORK COMPLIANCE IN THE PLATFORM FIRMWARE (BIOS) LAYER ON INTEL REFERENCE VALIDATION PLATFORM(RVP) USING THE PSS CHIP
920.	ENHANCE AUTOMOTIVE EXPERIENCE USING OCCUPANCY SENSORS AND BLUETOOTH
921.	ENHANCED VEHICLE CONTROL & COMFORT SYSTEM:DESIGN AND PERFORMANCE ANALYSIS
922.	ENHANCEMENT OF CHILD IN CAR ALERT SYSTEM THROUGH SOFTWARE SOLUTION
923.	ENHANCEMENT OF OSCILLOSCOPE WITH REAL TIME DATA LOGGING
924.	ENHANCEMENT OF SAFETY AND RELIABILITY OF ACTUATOR CONTROL ELECTRONICS USING FAULT TOLERANT CAPABILITIES IN AIRCRAFT
925.	ENHANCEMENT OF TEST COVERAGE AND QUALITY IN MANUFACTURING FOR JUNIPER EDGE ROUTER LINE CARD
926.	EPITAXY PROCESS LAMP MEASUREMENT SYSTEM USING MATLAB IMAGE PROCESSING
927.	EV CHARGING PROTOCOL VALIDATION
928.	EVENT DATA RECORDER: RECORDING IMAGES AND DATA IN RESPONSE TO MULTIPLE CRASH TRIGGER EVENTS
929.	EXHAUST GAS SOOT SENSOR DEVELOPMENT AND TESTING
930.	EXPLORING THE USE OF FPGAS WITH BETTER INTER-CONNECTIVITY OF RESOURCES WHILE IMPLEMENTING DEEP NEURAL NETWORKS.
931.	FACE RECOGNITION BASED DOOR LOCK
932.	FIELD DIAGNOSTICS TOOL
933.	FLEXIBLE DATARATES AND DATARATE SWITCHING IN AUTOMOTIVE EMBEDDED SYSTEMS
934.	FOUNTAIN DISPATCHING SYSTEM
935.	FPGA BASED HARDWARE FOR DISTRIBUTION OF TIME AND POSITION OVER NETWORK
936.	HAND TREMOR CANCELLATION FOR HUMAN-MACHINE TELE-OPERATION APPLICATIONS USING MATLAB
937.	IDENTIFICATION OF ACCESSORIES OF MEDICAL DEVICES USING NFC-RFID
938.	IEEE 802.15.4 ZIGBEE BASED SMART HOME AUTOMATION FOR DEVICES AND SENSORS
939.	IMPLEMENTATION OF CONNECTING THE UPS TO CLOUD VIA ETHERNET
940.	IMPLEMENTATION OF NTP/PTP ON THE VPX BOARDS WITH 10G ETHERNET
941.	IMPLEMENTATION OF WIRELESS TORQUE WRENCH SYSTEM USING INTEGRATED AUTOMATION PLC AND OPC
942.	IMPROVEMENT IN INERTIAL NAVIGATION SYSTEM PERFORMANCE

S.No.	DISSERTATION TITLE
943.	IMPROVISING MOBILITY ASSISTANCE AT AIRPORTS BY USE OF BLUETOOTH BEACONS
944.	INDUSTRIAL AUTOMATION OF WASTE WATER TREATMENT PLANT. (BY USING PLC & SCADA SYSTEM)
945.	INTEGRATING PLATFORM DEVICE DEVICER DRIVER IN LINUX KERNEL
946.	INTELLIGENT CHILD LOCK SYSTEM IN AUTOMOBILE
947.	INTELLIGENT DRIVER ASSISTANT SYSTEM (IDAS)
948.	INTERNET OF THINGS- CONTROL HOME APPLIANCES FROM YOUR PHONE
949.	INTRODUCTION OF GIGABIT ETHERNET TO AUTOMOTIVE ETHERNET BOOTLOADER
950.	INTRUSION DETECTION AND FIRE ALARM SYSTEM IN WEAPON STORAGE AREA
951.	IOT BASED AUTOMATION FOR EMBEDDED SYSTEM
952.	IOT BASED BILLING SYSTEM
953.	IOT BASED CROP MONITORING & IRRIGATION SYSTEM
954.	IOT BASED INDUSTRIAL ENERGY MONITORING SYSTEM
955.	IOT BASED PATIENT MONITORING SYSTEM
956.	IOT BASED RTU FOR DISTRIBUTION SUB STATION FOR FEEDER DATA INTEGRATION WITH SCADA
957.	IOT BASED SECURE AND SMART HEALTHCARE MONITORING SYSTEM
958.	IOT IN AGRICULTURE
959.	IOT VEHICLE TRACKING SYSTEM
960.	IOT/ANALYTICS ENABLING INNOVATION IN SUPPLY CHAIN
961.	LIGHT WEIGHT TAUT WIRE: DESIGN UPDATE
962.	LORA BASED INTER VEHICLE INFRASTRUCTURE COMMUNICATION
963.	MANAGING NETWORK SECURITY CHALLENGES IN THE ERA OF COVID-19
964.	MATLAB BASED MODEL DEVELOPMENT FOR DETECTING AIR QUALITY AND CONTROLLING POWER WINDOW OF A CAR AND ALSO ILLUSTRATION WITH HARDWARE MODEL OF A CAR
965.	MATLAB BASED MODEL OF FAILSAFE DEGRADATION STRATEGY IN SAFETY SYSTEMS OF A CAR
966.	MATLAB SIMULATION MODEL FOR FALLBACK LEVELS IN BRAKING SYSTEM OF A CAR
967.	MATLAB-BASED SIMULATION AND VERIFICATION OF SENSOR HARDWARE FUNCTIONS USED IN AUTOMOTIVE DOMAIN
968.	MDAS (METER DATA ACQUISITION SYSTEM)
969.	MICROCONTROLLER BASED DEVICE HOT-PLUG STRESS SCENARIOS AUTOMATION USING TYPE-C BASED THUNDERBOLT SWITCH
970.	MODEL DESIGN FOR NO-LOAD LOSS ESTIMATION OF TRANSFORMER USING SURFACE TEMPERATURE MEASUREMENT AND DEVELOPMENT OF REMOTE MONITORING SOLUTIONS
971.	MODELLING AND CONTROL OF POWER CONVERTER FOR CRITICAL LOADS
972.	MULTI AXIS MOTOR CONTROLLER WITH FIELD ORIENTED OPTIMIZATION
973.	MULTICORE BASED SAFETY CRITICAL AUTOMOTIVE ARCHITECTURE
974.	MULTI-PROTOCOL BASED HOME AUTOMATION SYSTEM
975.	MULTIPURPOSE IOT NODE ARCHITECTURE AND DESIGN (HARDWARE) USING LOW POWER ARM SOC
976.	MUSIC SERVER
977.	NATIVE FLOATING-POINT IMPLEMENTATION OF ADAPTIVE WEIGHT CALCULATION (AWC) WITH RECURSIVE LEAST SQUARES (RLS) ALGORITHM
978.	ON LINE ENGINE HEALTH MONITORING AND FAULT DIAGNOSTICS (IOT BASED)
979.	OPTIMAL STUDY AND PRESENT ON IEEE 802.11AX: HIGH-EFFICIENCY WLANS
980.	OVERCOMING AUTOMOTIVE CYBERSECURITY ATTACKS USING AUTOSAR SOFTWARE FRAMEWORK
981.	PAYLOAD MEASUREMENT IN AN AUTOMATED GUIDED VEHICLE USING MOTOR ELECTRICAL PARAMETERS AND ITS CORRELATION WITH CONVENTIONAL MEASUREMENTS.
982.	PERFORMANCE AND EFFICIENCY IMPROVEMENTS COMPARISON OF PMSM MOTOR USING DIFFERENT CONTROL ALGORITHM
983.	PORTING OF U-BOOT AND REAL TIME LINUX IN NXP P1013 BASED CPU CARD AND IMPLEMENTATION OF MODBUS SERVER PROTOCOL IN IT
984.	POWER ESTIMATION ALGORITHM TO DYNAMICALLY CALCULATE POWER CONSUMPTION ON MOBILE SEMICONDUCTOR DEVICES (SMART PHONE/ IOT BASED DEVICES) FROM NETWORK LOGS(4G/5G)
985.	QUICK LOADER
986.	REAL TIME HEALTH MONITORING OF PANTOGRAPH SYSTEM
987.	REAL TIME MONITORING OF ELECTRIC LOAD FORECASTING FOR THE CAMPUS
988.	REAL-TIME MONITORING OF SOLAR HOME SYSTEMS

S.No.	DISSERTATION TITLE
989.	RE-CONFIGURABLE FUNCTIONAL SAFETY STACK FOR AUTOMOTIVE INSTRUMENT CLUSTER
990.	RELATED INVERTER CIRCUIT IN HYBRID ELECTRICAL VEHICLES
991.	REMOTE RADIATION SURVEY BY ROVER
992.	RF POWER MONITORING SYSTEM OVER IP NETWORK
993.	ROBOTIC CHESS PLAYER
994.	RTDS MODELLING & TESTING FOR HVDC SYSTEM
995.	SAFETY BANDS FOR INDIVIDUAL
996.	SAFETY IN EMBEDDED SYSTEMS DESIGN
997.	SAFETY ISOLATION FOR TIME CRITICAL SOFTWARE THROUGH HARDWARE ASSISTANCE
998.	SCALABLE DRIVER DEVELOPMENT
999.	SECURE BOOT STUDY AND DESIGN
1000.	SECURE QUERY-RESPONSE MECHANISM FOR BUIDING MANAGEMENT SYSTEM(BMS) INDUSTRY
1001.	SECURITY ALGORITHM IMPLEMENTATION FOR SOLVING SECURITY AND TRUST ISSUES IN NETWORKED EMBEDDED DEVICES
1002.	SECURITY MODEL FOR IOT DEVICES AND POSSIBLE VULNERABILITIES
1003.	SMART ENERGY METER
1004.	SMART SUBSTATION FEEDER MONITORING SYSTEM
1005.	SMART SWITCHES
1006.	SMART THERMAL COMFORT CONTROL IN BUILDINGS BASED ON AUTO SCHEDULE
1007.	SMART TRANSFORMER " A STEP TOWARDS SMART GRID
1008.	SOFTWARE DEFINED RADIO
1009.	SOFTWARE IN LOOP SIMULATOR FOR SPACECRAFT CLOSED LOOP PERFORMANCE ANALYSIS WITH ARTIFICIAL INTELLIGENCE ENABLED SELF VALIDATING MODELS
1010.	SOFTWARE SECURITY IN NEXT GENERATION WIFI CHIPSETS
1011.	SOUND CLASSIFICATION USING MACHINE LEARNING
1012.	SQA & IV&V APPROACH TOWARDS SAFETY CRITICAL EMBEDDED SYSTEM SOFTWARE
1013.	STUDY AND ANALYSIS OF PCIE FOR NEXT GEN EMBEDDED PLATFORM
1014.	STUDY AND ANAYLSIS OF POWER DISTRIBUITON NETWORK FOR NEXT GENERATION SERVER PLATFORM
1015.	STUDY OF FUTURE EMBEDDED SYSTEMS FOR ELECTRIC VEHICLES(EV)
1016.	SYNCHRONIZATION IN 5G NR CELL SEARCH IN UE
1017.	SYNCHRONOUS DC - DC CONVERTER FOR 48V MILD HYBRID ELECTRIC VEHICLE
1018.	SYNTHETIC APERTURE RADAR IMAGING AND SENSOR DEVELOPMENT
1019.	SYSTEM DESIGN AND PERFORMANCE ANALYSIS FOR COLLISION MITIGATION SYSTEM THROUGH SIMULATION TOOL
1020.	SYSTEM FRAMEWORK FOR CONTEXT AWARE AND PRIVACY-PRESERVED VEHICULAR ENVIRONMENT MONITORING VIA CONNECTED VEHICLES
1021.	SYSTEM INTEGRATION IN ENABLING ALTERNATIVE FIRE LANDING REMOTELY FOR GROUP ELEVATORS
1022.	TCG OPAL PROTOCOL DEVELOPMENT FOR SSD DRIVES (SLC AND TLC NAND)
1023.	THERMAL IMAGING BASED MONITORING SYSTEM
1024.	TINYVCAS (TINY VIDEO CAMERA ANALYTICS SYSTEM) USING ML ON MICRO CONTROLLER
1025.	TO STUDY/RESEARCH ABOUT FREEDOM FROM INTERFERENCE
1026.	TUNABLE DIODE LASER ABSORPTION SPECTROSCOPY BASED OXYGEN SENSOR CONTROL BOARD
1027.	UAV DETECTION AND ALERTING SYSTEM, USING RF FINGERPRINT
1028.	UPGRADATION OF HARDWARE AND SOFTWARE OF PLC SYSTEM FOR CAR PUSHER
1029.	USB AS AN INTERFACE FOR DEBUG AND FIRMWARE UPGRADE: REALIZING USB'S "ONE CONNECTOR FOR ALL" IDEA
1030.	USB-C ALT MODE ENABLEMENT ON NEXT GEN. INTEL PROCESSOR WITH INTEGRATED MUX
1031.	VOICE OPERATED TRANSMISSION SYSTEM
1032.	WIFI BASED PASSENGER BAGGAGE MONITORING SYSTEM AT AIRPORT
1033.	WIRELESS FIRMWARE UPGRADE
1034.	ZIGBEE BASED POWER TOOL AUTOMATION SYSTEM
M.Tech. Manufacturing Management	
1035.	556 CAPACITY ENHANCEMENT
1036.	A DETAILED STUDY ON THE APPLICATION OF EOQ MODEL EFFECTIVENESS ON INVENTORY MANAGEMENT

S.No.	DISSERTATION TITLE
	IN A PRODUCTION PROCESS AT VESTAS WIND TECHNOLOGY
1037.	ADVANTAGES OF CAD/CAM IN PIPE SPOOL FABRICATION FOR PACKAGE MANUFACTURING.
1038.	AGILE THINKING IN MANUFACTURING ORGANIZATION AND MANAGEMENT: REDUCING LEAD TIME USING GEMBA
1039.	ANALYSIS AND IMPROVEMENT OF PROJECT MANAGEMENT IN COVID 19 PANDEMIC PERIOD
1040.	APPLICATION OF MODERN & IMPROVED SAFETY PRACTICES DURING PLANT MAINTENANCE
1041.	APPLICATION OF QUALITY CIRCLE AT ASSEMBLY STATION IN MANUFACTURING INDUSTRY
1042.	APPLICATION OF TAPER CHEMICAL MILLING IN AEROSPACE PARTS
1043.	APPLYING LEAN PRINCIPLES TO SINGLE PIECE FLOW IN SETTING UP A HEAVY FABRICATION MANUFACTURING UNIT.
1044.	ASSEMBLY LAYOUT OPTIMIZATION USING SYSTEMATIC LAYOUT PLANNING TECHNIQUE
1045.	AUTOMATIC ASSEMBLY CONCEPT IMPLEMENTATION
1046.	AUTOMATION OF DRILLING SYSTEM AND GROUND WATER MANAGEMENT
1047.	BUSINESS FEASIBILITY OF MANUFACTURING - PREMIX, FORTIFICATION AND SPECIALIZED FOOD
1048.	CAPACITY ENHANCEMENT AT SUPPLIER TO MEET THE CUSTOMER VOLUME.
1049.	CAPACITY ENHANCEMENT OF CAT LINE THROUGH LEAN IMPLEMENTATION
1050.	CAPACITY ENHANCEMENT WITH FRUGAL APPROACH
1051.	COEFFICIENT OF THERMAL EXPANSION OF CONCRETE
1052.	CONVERSION OF HYDRAULIC TO PNEUMATIC OPERATED DIVERTER
1053.	COST REDUCTION BY OPTIMIZING PAINT CONSUMPTION BY 7% (FROM 6.25 LIT/CAR TO 5.80 LIT/CAR) IN CAR PAINTING PROCESS
1054.	CPC REDUCTION: OPTIMIZING CYCLE TIME & CUTTING TOOL COST
1055.	CUTTING TOOL OPTIMIZATION (COST REDUCTION, LIFE ENHANCEMENT, CYCLE TIME REDUCTION), MANAGEMENT AND INVENTORY CONTROL.
1056.	CYCLE TIME AND PROCESS TIME REDUCTION USING LEAN IN HEAVY INDUSTRY
1057.	CYCLE TIME OPTIMIZATION THROUGH TPS CONCEPTS
1058.	CYCLE TIME REDUCTION AND VALUE ADDITION IN REVERSE OSMOSIS SKID THROUGH IN HOUSE MANUFACTURING
1059.	CYCLE TIME REDUCTION THROUGH PROCESS OPTIMISATION
1060.	DESIGN & ANALYSIS OF A HIGHLY-EFFICIENT MR DAMPER FOR A MINIBUS SUSPENSION
1061.	DESIGN AND ANALYSIS OF CRANKSHAFT FOR VARIOUS CARBON STEEL GRADES IN V8 AND V12 TYPE ENGINE
1062.	DESIGN AND DEVELOPMENT OF CREEP FEED GRINDING MACHINE FOR CARBIDE INDUSTRY
1063.	DESIGN AND DEVELOPMENT OF DRY FOG SPRAY NOZZLES FOR SUPPRESSING COAL DUST IN NTPC POWER PLANTS
1064.	DESIGN AND DEVELOPMENT OF DYNAMIC BACKLASH TESTING MACHINE FOR AUTOMOTIVE INDUSTRY
1065.	DESIGN AND DEVELOPMENT OF SEMICONDUCTOR EQUIPMENT MODULES
1066.	DESIGN AND DEVELOPMENT OF STEAM GENERATOR ASSEMBLY WELDING DISTORTION CONTROL.
1067.	DESIGN AND DYNAMIC ANALYSIS ON ELECTRICAL DRIVE MOTORCYCLE
1068.	DESIGN AND MANUFACTURING OF MULTI SPINDLE GANG DRILLING ATTACHMENT
1069.	DESIGN OF FACILITY LAYOUT OF PIPE SHOP
1070.	DESIGN, DEVELOP AND INTEGRATE VARIOUS ENERGY SYSTEMS AND RECOVER THE INDUSTRIAL WASTE ENERGY AND MANAGE ASSETS USING COST EFFECTIVE AUTOMATION, SYSTEM INTEGRATION CONCEPTS AND ENERGY RECOVERY METHODS
1071.	DESIGNING OF EDGER ROLL PROFILE FOR MINIMISING SEAM LINE DEFECT IN 300 SERIES STAINLESS STEEL HOT ROLLED COILS
1072.	DETERMINATION OF DIFFERENT CUTTING PROCESS OUTCOME ON PROPERTIES OF BORATED STAINLESS STEEL 304B4 (UNS S30464) AND 304B7 (UNS S30467)
1073.	DEVELOPMENT OF AUTOMOTIVE ELECTRONIC HORN INCLUDING PROCESS DESIGN
1074.	DEVELOPMENT OF BRAKE PEDAL FEEL CHARACTERIZATION AND OPTIMIZATION PROCESS
1075.	DEVELOPMENT OF HYDRO TEST FIXTURE FOR HEADER NOZZLE OF A HEAT EXCHANGER
1076.	DEVELOPMENT OF OBJECTIVE METHODOLOGY TO EVALUATE RETAINED NEWNESS A CUSTOMER CENTRIC ATTRIBUTE OF PASSENGER CAR•
1077.	DIGITAL EVALUATION OF SQUEAK AND RATTLE ISSUES IN PASSENGER CAR INTERIORS
1078.	EBITDA IMPROVEMENT USING SIX SIGMA CONCEPT
1079.	EFEECT OF HIGH SPEED MACHINING "INDUCED RESIDUAL STRESS ON THE DISTORTION OF ALUMINIUM ALLOY

S.No.	DISSERTATION TITLE
1080.	EFFECT OF MICROSTRUCTURE, MECHANICAL AND WEAR BEHAVIOR OF FLYASH REINFORCED 7068 ALUMINUM ALLOY
1081.	EFFICIENCY IMPROVEMENT OF FINISHED GOODS HANDLING
1082.	ELIMINATION OF BLACK TRACE IN NOZZLE GALLERY FORMATION IN ECM
1083.	EMISSION REDUCTION IN CEMENT PLANT
1084.	EMPIRICAL INVESTIGATION OF DRIVERS AND BARRIERS TO THE ADOPTION OF ENERGY CONSERVATION MEASURES AND ENERGY EFFICIENCY SERVICES IN THE INDIAN CHLOR-ALKAI SECTOR
1085.	ENABLING GROWTH THROUGH LEAN MANUFACTURING
1086.	ENERGY COST SAVING
1087.	ENERGY EFFICIENT FAN COIL UNIT DEVELOPMENT USING SOLAR ENERGY
1088.	ENERGY MANAGEMENT BY IMPLEMENTING ENERGY SAVING MEASURES
1089.	ENGINE MRO ORGANISATION IN INDUSTRY 4.0
1090.	ENHANCEMENT OF PRODUCT TRACEABILITY AND TECHNICAL DATA ACCESSIBILITY WITH DIGITIZATION
1091.	ESTABLISHING HEAVY FORGING AND MACHINING PROCESS FOR CHOKE VALVE BODY AND BONNETS
1092.	FAILURE ANALYSIS OF A HELICAL COMPRESSION SPRING FOR ELECTRIC LOCOMOTIVE
1093.	FIRE FIGHTING HELMET - NEW PRODUCT DEVELOPMENT
1094.	FLEXIBLE AND EFFICIENT MANUFACTURING SYSTEM IN ELECTRONICS MANUFACTURING INDUSTRY
1095.	GREENFIELD PROJECT /STRATEGIC PLAN
1096.	GRINDING PROCESS IMPROVEMENT IN CRANKSHAFT MANUFACTURING PROCESS
1097.	HRM-PANA
1098.	IMPLEMENT PRODUCTION & PLANNING SYSTEM
1099.	IMPLEMENTATION OF ADVANCE TECHNIQUE IN SUPPLY CHAIN MANAGEMENT TO ENHANCE PRODUCTIVITY
1100.	IMPLEMENTATION OF INTEGRATED MANAGEMENT SYSTEMS IN ENOC SUPPLY & TRADING COMPANY
1101.	IMPLEMENTATION OF LEAN MANUFACTURING PRINCIPALS IN MANUFACTURING SHOP
1102.	IMPLEMENTATION OF PROGRAM WORK TRANSITION GATED PROCESS FOR MAJOR WORK TRANSFERS
1103.	IMPLEMENTATION OF ROBOTIC PROCESS AUTOMATION FOR CONTROLLING EMPLOYEES MOVEMENT ON TRAINING / TASK OVERDUES
1104.	IMPLEMENTATION OF SYSTEM DRIVEN MATERIAL REQUIREMENT PLANNING IN TLMAL PLANT
1105.	IMPLEMENTATION OF WHILE FRAME WORK ON CHASSIS COMPONENTS DESIGN AND DEVELOPMENT
1106.	IMPROVE SUPPLY CHAIN PREDICTABILITY IN MOBILE INDUSTRY (MANUFACTURING)
1107.	IMPROVED PRODUCTIVITY BY REDUCING MATERIAL HANDLING THROUGH SIMULATING & ANALYSING THE MANUFACTURING LAYOUT
1108.	IMPROVEMENT IN EXISTING DESIGN
1109.	IMPROVEMENT IN OPERATIONAL EFFICIENCY OF SPECIAL PROCESS LINE
1110.	IMPROVEMENT IN OPERATOR SAFETY AND OPTIMIZATION OF CYCLE TIME AND MANPOWER REQUIREMENT FOR BATH POURING ACTIVITY IN ALUMINIUM SMELTER
1111.	IMPROVEMENT OF PRODUCTION EFFICIENCY AT ATC TIRES PVT LTD BY REDUCING NO GREEN TYRE(NGT) LOSS.
1112.	INCREASE EFFECTIVE MAINTENANCE MANPOWER UTILIZATION AT SHOP FLOOR
1113.	INNOVATION IN QUALITY MANAGEMENT SYSTEMS AND TECHINQUES
1114.	INSTRUMENTATION COST OPTIMIZATION IN CAP-PROJECT
1115.	INTELLIGENT SUPPLY CHAIN & TRACEABILITY TECHNOLOGY
1116.	INTERNET OF THINGS - MACHINE CONNECTIVITY
1117.	INVENTORY MANAGEMENT USING TOC AND SAP MRP INTEGRATION
1118.	INVENTORY REDUCTION AND KPI OF OTIF (ON TIME IN FULL DELIVERY) IMPROVEMENT BY DOING MANUFACTURING PROCESS IMPROVEMENT AND WASTE ELIMINATION.
1119.	INVENTORY REDUCTION THROUGH EFFECTIVE PURCHASE AND STORES PROCEDURES IN MONOLITHIC GOVT. ORGANISATIONS
1120.	JIT MANUFACTURING BY REDUCING BOTTLENECK CYCLE TIME OF ASSEMBLY LINE
1121.	JIT MANUFACTURING SYSTEM, ITS IMPACT ON MANUFACTURING EXCELLENCE
1122.	LEAD TIME REDUCTION FOR NEW MACHINE & EQUIPMENT INSTALLATION THROUGH PROJECT MANAGEMENT.
1123.	LEAN IMPLEMENTATION IN THE STARTUP
1124.	LEAN LAYOUT IMPLEMENTATION AND PAPERLESS MANUFACTURING SYNCHRONISATION
1125.	LEAN SUPPLY CHAIN MANAGEMENT: IMPACT ASSESSMENT OF IMPLEMENTING A BUSINESS SHARED

S.No.	DISSERTATION TITLE
	SERVICE CENTRE
1126.	LIGHT WEIGHT CROSS CAR BEAM BY FRUGAL ENGINEERING
1127.	MANAGEMENT OF ENERGY
1128.	MANUFACTURING AND SELECTION OF PIPE MATERIALS USED IN WATER SUPPLY PROJECTS CONSIDERING ENVIRONMENT SUSTAINABILITY
1129.	MANUFACTURING COST REDUCTION FOR AIRCRAFT BUSINESS CLASS DOOR ASSEMBLY
1130.	MANUFACTURING EXECUTION SYSTEM
1131.	MAPPING, ASSESSING AND BUILDING DIGITAL COMPETENCIES IN A CORPORATE ENTERPRISE TO ENABLE VALUE CREATION THROUGH DIGITAL TRANSFORMATION OF EXISTING PROCESSES AND BUSINESS MODELS
1132.	MEASUREMENT OF CORROSION INHIBITION EFFICIENCY OF CHEMICALS FOR ACID CLEANING OF CONDENSER TUBES
1133.	METHOD ANALYSIS OF "RETURN BOX" (CAST IRON CASTING) TO PRODUCE DEFECT FREE CASTINGS
1134.	MFG STRATEGY TRANS AXLE ASSEMBLY FOR MANAGE GROWTH & DE-RISKING
1135.	MONITORING REAL TIME UTILIZATION OF MCB PRODCUTION LINE USING IOT TO ENABLE FOR SMART FACTORY
1136.	NEED ASSESSMENT AND DEVELOPMENT OF DIGITAL COMPETENCIES AT BOSCH INDIA, IN ORDER TO ENABLE DIGITAL TRANSFORMATION OF PROCESSES AND DIGITALIZATION OF BUSINESS MODELS
1137.	NEW FORM OF CEMENT
1138.	NEW PRODUCT DEVELOPMENT
1139.	NEW PRODUCT DEVELOPMENT FOR HEAVY COMMERCIAL VEHICLE
1140.	OPERATION COST OPTIMIZATION / CHEMICAL MANAGEMENT IN OIL AND GAS INDUSTRY
1141.	OPIMIZAION OF PROCESS PARAMETERS TO REDUCE PRODUCT REJECION
1142.	OPTIMIZATION OF INVENTORY THROUGH SUPPLY CHAIN MANAGEMENT
1143.	OPTMIZATION OF GALVANIZED STEEL SHEET MANUFACTURING PROCESSES BY APPLICATION OF MANAGEMENT, PRODUCTION PALANNING , PRODUCT DEVELOPMENT AND CONTROL TECHNIQUES AT AL GHURAIR IRON AND STEEL LLC.
1144.	PERFORMANCE THROUGH QUALITY MANAGEMENT INCLUDES SUPPLY CHAIN MANAGEMENT
1145.	PRESERVATION OF THE AERO-ENGINES
1146.	PREVENTION OF COUNTERFEIT PARTS
1147.	PROCESS ENHANCEMENT BY OPTIMIZATION
1148.	PROCESS IMPROVEMENT OF AEROSPACE FLUID CELL SHEET METAL FORMING
1149.	PRODUCTION OPTIMIZATION AND EXPLOIT THE BOTTLENECKS IN THE SUPPLY CHAIN
1150.	PRODUCTION PLANNING AND CONTROL IN MANUFACTURING AND ITS IMPORTANCE -A CASE STUDY OF BOMBARDIER PPC(VADODARA) DIVISION
1151.	PRODUCTION SYSTEM, PLANNING AND CONTROL
1152.	PRODUCTIVITY ENHANCEMENT OF WELD BUFFER STOCK STORAGE SYSTEM THROUGH PROCESS IMPROVEMENT
1153.	PRODUCTIVITY IMPROVEMENT AND OEE STUDY
1154.	PRODUCTIVITY IMPROVEMENT IN FBC BOILER FURNACE WATER WALL PANELS MANUFACTURING
1155.	PRODUCTIVITY IMPROVEMENT OF SLEEVE MANUFACTURING LINE
1156.	PRODUCTIVITY IMPROVEMENT OF SULPHURIC ACID PLANT
1157.	PRODUCTIVITY IMPROVEMENT ON TRUCK CRANE ASSEMBLY LINE
1158.	PRODUCTIVITY IMPROVEMENT USING VISION SYSTEM
1159.	PROJECT MANAGEMENT - IMPORTANCE OF LEADERSHIP
1160.	PROJECT MANAGEMENT OF HQV EMBLEMS DEVELOPMENT FOR BAJAJ AUTO LTD
1161.	PROJECT MANAGEMENT TO IMPLEMENT MES IN MANUFACTURING
1162.	PROJECTS MANAGEMENT (COST OUT)
1163.	QUALITY IMPROVEMENT IN AUTOMOBILE VEHICLE BY ELIMINATING THE DEFECTS CAUSED BY PROCESS MACHINES THROUGH SYSTEMATIC "PROCESS POINT ANALYSIS"
1164.	REAL-TIME OPERATIONAL INTELLIGENCE USING SAP MANUFACTURING AND IIOT SOLUTION
1165.	REDUCTION IN ENERGY CONSUMPTION IN HEAT TREATMENT PROCESS
1166.	REDUCTION IN INVENTORY TURN BY IMPLEMENTATION OF KANBAN SYSTEMS
1167.	REDUCTION OF FE CONTENT IN ALUMINA TO PRODUCE PRIMARY FOUNDRY ALLOY (ALUMINIUM)
1168.	REDUCTION OF PROCESS DEFECTS IN TRACTOR ASSEMBLY
1169.	REGENERATIVE BRAKING SYSTEM

S.No.	DISSERTATION TITLE
1170.	REJECTION ANALYSIS AND REDUCTION OF INTERNAL REJECTION
1171.	REJECTION REDUCTION IN PANTHER VALVES FROM 4.10 % TO 3.80 %.
1172.	RELIABILITY IMPROVEMENT BY IMPLEMENTATION OF CONDITION MONITORING TECHNIQUES IN SMELTER AREA
1173.	REPAIR PROCESS FOR FAN CASE FOR LP COMPRESSOR FRONT FAN CASE FOR GAS TURBINE ENGINES
1174.	RESOURCE LEVELING / OPTIMIZATION BY STREAMLINING THE INSIDE SALES TECHNICAL AND COMMERCIAL PROCESSES
1175.	REVENUE GENERATION THROUGH SPARE CAPACITY UTILISATION
1176.	REVIVAL OF CONVENTIONAL MINING COMPANY
1177.	ROBUST AUTOMOTIVE HOOD DESIGN FOR MULTIDISCIPLINARY PERFORMANCE REQUIREMENTS USING CAE
1178.	SETTING UP SUPPLY CHAIN NETWORK FOR AN AYURVEDIC COSMETIC COMPANY
1179.	SEWERAGE WATER TREATMENT - USAGE OF TREATED WATER
1180.	SHORTAGE REPORT MANAGEMENT OF EMS
1181.	SMART METERING SYSTEM-ENERGY METER
1182.	SOLAR PLANT IMPLEMENTATION - ALTERNATIVE ENERGY
1183.	STEP TOWARDS SUSTAINABLE PRODUCT
1184.	STRIKE POINT PROGRESSION AT WORKSTATION
1185.	SUPPLY CHAIN MANAGEMENT AND ITS IMPORTANCE IN BUSINESS-A CASE STUDY OF JK LAKSHMI CEMENT
1186.	SUPPLY CHAIN MANAGEMENT IN SELECT SOFTWARE COMPANIES
1187.	SURFACE ENHANCEMENT: PARAMETER AND IMPACT
1188.	TBM ELECTRICAL PROJECT MANAGEMENT
1189.	THE ROLE OF TRACEABILITY IN SUSTAINABLE SUPPLY CHAIN MANAGEMENT
1190.	TO ACHIEVE CONSISTENCY IN QUALITY OF VISCOSE STAPLE FIBRE
1191.	TO ELIMINATE THE ELEMENTS CAUSING DEFECTS IN PRODUCT
1192.	TO IMPROVE DPR (DIRECT PASS RATIO) AT ASSEMBLY LINE FROM 0.93 TO 0.96 BY 30.11.2020
1193.	TO IMPROVE THE OEE OF THE 300T HYD. PRESS
1194.	TOTAL EMPLOYEE INVOLVEMENT AT GLM SOLUTION PRIVATE LIMITED
1195.	USE OF FINITE ELEMENT ANALYSIS TECHNIQUES FOR DEVELOPING FIRST TIME RIGHT• HEAT-TREATMENT PROCESS IN AUTOMOTIVE OR NON-AUTOMOTIVE COMPONENTS
1196.	VERTICAL SCALE IN MOTHER HUB
1197.	VSM ON SOURCING ACTIVITY
1198.	WELDING QUALITY IMPROVEMENT THROUGH EFFECTIVE SIMULTANEOUS ENGINEERING IN DESTRUCTIVE TESTING (BODY SHOP)
M.Tech. Microelectronics	
1199.	2 STAGE OPAMP DESIGN
1200.	3D INTEGRATED CIRCUITS
1201.	40GHZ VCO DESIGN
1202.	A NOVEL DESIGN OF A PASSIVE INERTIAL SWITCH TO IMPROVE RELIABILITY
1203.	A STUDY OF SAR ADC AND IMPLEMENTATION OF LOW POWER 2MSPS 7-BIT SAR ADC IN 28NM FDSOI TECHNOLOGY
1204.	A STUDY OF SAR ADC AND IMPLEMENTATION OF ULTRA-LOW POWER 5MSPS 7-BIT ASYNCHRONOUS SAR ADC IN 28NM FDSOI TECHNOLOGY
1205.	ACCELERATED CONFIGURABLE VALIDATION SETUP FOR PCIE BASED CONTROLLERS
1206.	ACCELERATING ECO TIMING CLOSURE WITH ADVANCED TECHNOLOGIES
1207.	ADVANCED LOW POWER VERIFICATION METHODOLOGY
1208.	AN AUTOMATED DESIGN METHODOLOGY TO CONTROL TURN ON SEQUENCE OF POWER SWITCHES FOR A LOW POWER ASIC DESIGN
1209.	AN INTEGRATED APPROACH IN PNR(FROM-PLACEMENT TO ROUTE) FLOW TO IMPROVE IR-DROP
1210.	ANALYSIS AND IMPLEMENTATION OF CAPACITORLESS FAST TRANSIENT RESPONSE LOW DROPOUT REGULATOR
1211.	ANALYSIS OF CONSTRAINT DRIVEN LAYOUT APPROACH FOR ANALOG CIRCUITS
1212.	ANAYSIS AND DESIGN OF ENGINE CONTROLLER USING SOC FOR AERO ENGINE
1213.	ARITHMETIC IP: RTL IMPLEMENTATION WITH TIMING, AREA AND POWER ANALYSIS
1214.	AUTOMATED CLOCK POWER CONVERGENCE TECHNIQUES IN HIGH SPEED DESIGNS WITHOUT IMPACTING

S.No.	DISSERTATION TITLE
	QOR
1215.	AUTOMATIC MULTI-SITE IC DESIGN PROJECT SETUP INTERFACING WITH TOOLS METHODICS, PERFORCE, JIRA, CONFLUENCE
1216.	AUTOMATION OF STA POST PROCESSING SCRIPTS - CHECK_TIMING AND UNTESTED ENDPOINTS QUALITY CHECKS
1217.	AUTOMATION OF VOLTAGE MARKERS ADDITION FOR HIGH VOLTAGE DRC CHECKING
1218.	AVANTGARDE APPROACH TOWARDS AC CHARACTERIZATION AND TEST CONTROL OF GPIOS USING LABVIEW
1219.	BATTERY LIFE IMPROVEMENT CHALLENGES FOR CONNECTED SMART LOCKS
1220.	BEHAVIOR OF ADIABATIC LOGIC IN SUB AND NEAR THRESHOLD FOR REGIME FOR ULTRA-LOW POWER APPLICATION
1221.	BRANCH PREDICTION IN RISC BASED PROCESSOR
1222.	CHARACTERIZATION OF RF TRANSCEIVERS FOR RADAR APPLICATIONS
1223.	CIRCUITS FOR AGING CHARACTERIZATION: CONNECTING DISCRETE DEVICES TO CIRCUITS
1224.	CLOUD BASED CONDITION MONITORING SYSTEM
1225.	COMPREHENSIVE MECHANISM FOR AGGRESSIVE LEAKAGE RECOVERY ECO IMPLEMENTATION
1226.	COMPUTE VISION USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AIML)
1227.	CONFIGURABLE & EFFICIENT VERIFICATION METHODOLOGY FOR ANALOG MIXED SIGNAL ICS
1228.	CONGESTION AND TIMING AT LOWER TECHNOLOGY NODES
1229.	CONVERGENCE OF THE MULTIMILLION GATES WITH 2GHZ CLOCK FREQUENCY WITH ECO TECHNIQUES IN PHYSICAL DESIGN
1230.	CURRENT MIRROR BASED BANDGAP VOLTAGE REFERENCE DESIGN AND IMPLEMENTATION
1231.	DESIGN & IMPLEMENTATION OF 5MV DELTA VBG BANDGAP REFERENCE CIRCUIT
1232.	DESIGN AND ANALYSIS OF HIGH FREQUENCY, RAIL-TO-RAIL, CLASS AB AMPLIFIER
1233.	DESIGN AND ANALYSIS OF INCREMENTAL ADC USING MODULATED REFERENCE SIGNAL
1234.	DESIGN AND ANALYSIS OF VARIOUS BLOCKS OF AN ADVANCED PHASE LOCKED LOOP
1235.	DESIGN AND DEVELOPMENT OF 32-BIT MIPS PROCESSOR WITH DYNAMIC SCHEDULING SUPPORT
1236.	DESIGN AND DEVELOPMENT OF UVM BASED VERIFICATION ENVIRONMENT FOR AXI APB BRIDGE
1237.	DESIGN AND DEVELOPMENT OF UVM VERIFICATION ENVIRONMENT FOR 4X4 ROUTER
1238.	DESIGN AND IMPLEMENTATION OF A PROGRAMMABLE FILTER HARDWARE ACCELERATOR CHIP
1239.	DESIGN AND NOISE ANALYSIS OF SWITCHED CAPACITOR BASED TRANSIMPEDANCE AMPLIFIER
1240.	DESIGN AND SIMULATION OF BAND GAP REFERENCE
1241.	DESIGN AND STUDY OF GM/ID DESIGN METHODOLOGY AND ITS APPLICATION IN DESIGN OF LOW POWER, HIGH GAIN OP-AMP
1242.	DESIGN AND VERIFICATION OF A ON-CHIP BUS COMMUNICATION ARBITER
1243.	DESIGN AND VERIFICATION OF DIGITAL DELAY LOCKED LOOP (DLL) IP
1244.	DESIGN FOR TESTABILITY (DFT) FOR SYSTEM ON CHIP USING SCAN
1245.	DESIGN OF LDO REGULATOR FOR IO CIRCUITS
1246.	DESIGN OF PEAK THROUGHPUT TEST SCENARIOS IN 5G NEW RADIO
1247.	DESIGN OF POWER AMPLIFIER
1248.	DESIGN OPTIMAL KEEPER FOR DOMINO BASED REGISTER FILES
1249.	DESIGN VERIFICATION OF VIDEO CODEC FOR VR APPLICATION
1250.	DESIGNING LOW-PASS AND HIGH-PASS FIR FILTER USING DIFFERENT WINDOW FUNCTIONS IN MATLAB
1251.	DMA MODELLING
1252.	DVFS - DYNAMIC VOLTAGE AND FREQUENCY SCALING
1253.	EFFECTIVE BUS PLANNING TO EASE DESIGN CLOSER
1254.	EFFICIENT TIMING CLOSURE IN SOC THROUGH TIMING QUALITY CHECKS AND ENGINEERING CHANGE ORDER
1255.	ENHANCEMENT OF HIGH SPEED CORE FOR POWER REDUCTION USING P&R TOOL
1256.	EXPLORATION OF HIGH-PERFORMANCE FLIP-FLOP FOR ADVANCED TECHNOLOGY NODES
1257.	FACIAL RECOGNITION AND SEGMENTATION
1258.	FACING THE FILL CHALLENGES - BELOW AND BEYOND THE SUB10NM NODES
1259.	FLIP-CHIP DESIGN IMPLEMENTATION FOR MODERN INTEGRATED CIRCUITS
1260.	FLOATING POINT IMPLEMENTATION USING INTEL STRATIX10 DSP
1261.	FLOOR PLAN AND LAYOUT OF SYNCHRONOUS BUCK REGULATOR

S.No.	DISSERTATION TITLE
1262.	HARDWARE BASED TRUST ANCHORS FOR SECURE IDENTITIES ON ARUBA NEXT-GEN GATEWAYS
1263.	HARDWARE DESIGN AND DEVELOPMENT FOR ˘CLOSED CELL PROLIFERATION DEVICE™
1264.	HARDWARE SOLUTION FOR REAL TIME COLOR GAMUT MAPPING TO IMPROVE DISPLAY QUALITY OF HIGH DEFINITION TELEVISION
1265.	HBM IP PHYSICAL DESIGN IMPLEMENTATION
1266.	HIERARCHICAL STA WITH HYPERSCALE
1267.	HIGH TOLERANCE PRESSURE CONTROLLED BRAKE SYSTEM
1268.	IMPACT OF TECHNOLOGY NODE ADVANCEMENT ON 6T SRAM BIT CELL PERFORMANCE
1269.	IMPLEMENTATION AND OPTIMIZATION OF GATED INTEGRATED CIRCUIT DEVICE BY IMPROVING ITS DESIGN FROM FLOOPLAN TO GDSII
1270.	IMPLEMENTATION OF ECC ALGORITHM BASED POWER AND AREA EFFICIENT CRYPTOGRAPHIC UNIT WITH ALPHA-PARTICLE STRIKE TOLERANCE
1271.	IMPLEMENTATION OF ERROR DETECTOR FOR CONCURRENT TESTING OF MULTI-LANE FOR 1GBPS SERDES
1272.	IMPROVED VIDEO CODING QUANTIZATION USING VARIANCE
1273.	IMPROVING DIE POWER INTEGRITY BY OPTIMIZING ON-DIE DECAP PLACEMENT
1274.	INTER-PROCESSOR COMMUNICATION LINK OVER A TDM LINE
1275.	LAYOUT DESIGN OF HIGH VOLTAGE AND HIGH SPEED PGA
1276.	LAYOUT EFFECTS AND SOLUTIONS IN LOWER TECHNOLOGIES (
1277.	LOGIC BIST FOR ANALOG MIXED SIGNAL IP
1278.	LOW POWER & AREA ANALOG RECEIVER WITH HYSTERESI
1279.	LOW POWER & AREA ANALOG RECEIVER WITH HYSTERESIS
1280.	LOW POWER AND WIDE BAND PSRR LDO
1281.	LOW POWER DESIGN TECHNIQUE FOR 22NM DESIGN
1282.	LOW POWER ERROR CORRECTING MECHANISMS USED IN FLASH MEMORIES
1283.	LOW POWER WIDE COMMON MODE VOLTAGE RANGE COMPARATOR FOR RECEIVERS' APPLICATION
1284.	L-SHAPED STREAM ROUTING AND DELAY REDUCTION STRATEGY IN BUSSED NETS TO ACHIEVE HIGH FREQUENCY TIMING IN ADVANCED ASIC
1285.	MEMORY LEAKAGE SENSING WITH LESS DETECTION TIME
1286.	METHODOLOGIES TO ACHIEVE ULTRA LOW POWER IN WIRELESS SOC'S
1287.	MODELING, ANALYSIS AND SIMULATION OF DIGITAL SUBSYSTEM FOR POWER SUPPLY SBC IN AUTOMOTIVE APPLICATION
1288.	MULTISOURCE CLOCK TREE SYNTHESIS USING H-TREE
1289.	NEXT GENERATION AUDIO INTERFACE USING SOUNDWIRE
1290.	OPAMP DESIGN
1291.	PERFORMANCE IMPROVEMENT OF FLEXIBLE PRINTED ANTENNA
1292.	PLACEMENT AND ROUTING FLOW & CHALLENGES
1293.	PPA OPTIMIZATION FOR A DIGITAL DESIGN USING ISPATIAL FLOW
1294.	PROCESS VARIATION IMPACT OF TECHNOLOGY NODE ADVANCEMENT FOR SRANDARD CELLS
1295.	QUALITY AND PERFORMANCE EVALUATION OF 3DIC POWER INTEGRITY ANALYSIS USING DIFFERENT ABSTACT MODELS.
1296.	QUALITY OF RESULTS CONVERGENCE IN NETLIST TO GDSII FLOW FOR ADVANCED NODE
1297.	REDUCTION IN CLOCK TREE INSERTION DELAY USING H-TREE
1298.	RFID BASED SMART PARCEL DELIVERY SYSTEM
1299.	SCHEDULING PREVENTIVE MAINTENANCE FOR WAFER HANDLER ROBOT BASED ON DATA DRIVEN APPROACH
1300.	SHUTTER LESS CALIBRATION FOR RADIOMETRIC THERMOGRAPHY
1301.	STRUCTURAL IMPLEMENTATION OF SOC PARTITION FROM SYNTHESIS TO GDS II
1302.	STRUCTURAL TEST METHODOLOGIES FOR SAFETY CRITICAL SOCS
1303.	STUDY OF CLOUD COMPUTING: SERVERLESS COMPUTING, IOT CLOUD, ANALYTICS & DATA MANAGEMENT
1304.	TEST TIME OPTIMIZATION BY TEST INSTRUMANTATION AUTOMATION AND IMPROVED TEST DATA ANALYSIS METHODOLOGIES
1305.	ULTRA LOW POWER BANDGAP DESIGN
1306.	UPF BASED DESIGN AND SYNTHESIS OF LOW POWER TECHNIQUES FOR MOBILE SOC
1307.	USEFUL SKEW ENHANCEMENT FOR TIMING CLOSURE

S.No.	DISSERTATION TITLE
1308.	VERIFICATION OF ARM BASED SERVER SOC USING SV-C METHODOLOGY
1309.	VERIFICATION OF MEMORY MANAGEMENT UNIT IN A COMPLEX SOC ARCHITECTURE USING AUTOMATED TEST GENERATION
M.Tech. Pharmaceutical Operations & Management	
1310.	A COMPREHENSIVE STUDY ON REGULATORY REQUIREMENTS FOR COMBINATION PRODUCTS IN US AND EU - A COMPARATIVE ANALYSIS
1311.	A STUDY ON IMPROVEMENT OF DISSOLUTION PROFILE FOR DROSPIRENONE TABLET
1312.	A STUDY ON TECHNOLOGICAL AND CAPACITY ENHANCEMENT OF PFIZER GOA TABLET MANUFACTURING FACILITY
1313.	AN EFFECTIVE PROJECT MANAGEMENT STRATEGY FOR INTERNATIONAL PROJECTS" IN-VIEW OF A PANDEMIC SITUATION ACROSS THE GLOBE.
1314.	API PRODUCTION AND OPERATIONS MANAGEMENT
1315.	APPLICATION OF STATISTICAL PROCESS CONTROL TO DETERMINE THE CLEAN ROOM CONDITIONS IN VACCINE MANUFACTURING BY USING SIX SIGMA.
1316.	AUTOMATING QUALITY METRICS REPORTING & DECISION MAKING THROUGH INFORMATION TECHNOLOGY TOOLS
1317.	AUTOMATION OF PACKING OPERATION WITH HIGH SPEED TECHNOLOGIES.
1318.	CHALLENGES FACED IN POST APPROVAL CHANGES GLOBALLY
1319.	CLOSED-LOOP FOR CONTINUOUS PRODUCTION (GRANULATION)
1320.	CONTINUED PROCESS VERIFICATION AND PROCESS IMPROVEMENT - ORAL SOLID DOSAGE FORM
1321.	CONTINUES IMPROVEMENT IN QUALITY MANAGEMENT SYSTEM (QMS) FOR EFFECTIVE REGULATORY COMPLIANCE
1322.	DEVELOPMENT AND VALIDATION OF NEW RP- HPLC METHOD FOR THE DETERMINATION OF LEVOCETRIZINE DI HYDROGENCHLORID AND ESCITALOPRAM OXALATE IN BULK AND PHARMACEUTICAL DOSAGE FORMS
1323.	EDQM REVIEW PROCESS FOR CEP (CERTIFICATE OF SUITABILITY)
1324.	EXTRACTION OF IMPURITY-G IN CETRIZINE PROCESS USING A COUNTER CURRENT EXTRACTION EQUIPMENT
1325.	FORMULATION, EVALUATION AND OPTIMIZATION OF IMMEDIATE RELEASE SILYMARIN PELLETS PREPARED BY WURSTER PROCESS.
1326.	GLOBAL REGULATORY REQUIREMENTS FOR GENERIC DRUGS
1327.	HEALTH INSURANCE POST COVID 19 OUTBREAK
1328.	IMPACT OF THE GLASS DELAMINATION ON THE PH OF THE BUFFERED AND UNBUFFERED PRODUCT
1329.	IMPLEMENTATION OF QUALITY IMPROVEMENT GLOBALLY AT SUPPLIER & GMP SERVICE PROVIDER: BY MEASURING NEW WAY OF AUDIT TRENDS.
1330.	IMPORTANCE,SIGNIFICANCE OR LIFE CYCLE APPROACH OF TECHNOLOGY TRANSFER IN API (PHARMA) INDUSTRY
1331.	IMPROVEMENT IN EFFICIENCY OF VACUUM DISTILLATION UNIT
1332.	IMPROVING THE RANITIDINE (API) MANUFACTURING PROCESS BY USING/DEPLOYING THE DOE (DESIGN OF EXPERIMENT TOOL) TO CONSISTENTLY ACHIEVE THE DESIRED PARTICLE SIZE DISTRIBUTION AND INTERN REDUCE THE FLOW-ABILITY PROBLEM AT SECONDARY FORMULATION STAGE
1333.	IMPROVISATION OF YIELD IN CARTRIDGE FILLING PROCESS
1334.	INFLUENCE OF LEAN MANUFACTURING TECHNIQUE IN OPERATION MANAGEMENT
1335.	INORGANIC GROWTH STRATEGIES OF PHARMACEUTICAL COMPANIES
1336.	PHARMACEUTICAL PRODUCT DEVELOPMENT AND SCALE UP: A SCIENCE BASED APPROACH WHICH LEADS TO STABLE PHARMACEUTICAL PRODUCT WITH REDUCED COMMERCIAL BURDEN IN PHARMACEUTICAL INDUSTRY
1337.	PRODUCT ROBUSTNESS EVALUATION AND IMPROVEMENT FOR DISTAMYCIN FOR INJECTION
1338.	REGULATORY ASSESSMENT OF IMMEDIATE RELEASE TABLET DOSAGE FORM
1339.	REGULATORY OPERATIONAL EXCELLENCE: ORGANIZATIONAL STRATEGY & SYSTEMIC TRANSFORMATIONAL CHANGE
1340.	ROLE OF REGULATORY AFFAIRS IN PHARMACEUTICAL PRODUCTS EXPORTS
1341.	SCALE UP FROM R&D TO PLANT
1342.	SCALE-UP IN PHARMACEUTICAL FORMULATION
1343.	SCALING UP OF COMPLEX INJECTABLE MOLECULES: SCALE UP CHALLENGES DURING DIFFERENT UNIT OPERATIONS COMPOUNDING, ASEPTIC FILTRATION, FILLING ,LYOPHILIZATION , IMPROVE YIELD & RS
1344.	SCREENING OF HPLC COLUMNS FOR PRODUCT 'A'
1345.	SINGLE FLUID HEATING AND COOLING SYSTEMS (REACTOR TEMPERATURE CONTROLLER)

S.No.	DISSERTATION TITLE
1346.	STANDARD PACKAGED SOLUTION FOR CHROMATOGRAPHY SKID AUTOMATION
1347.	STERILIZATION OF MEDICAL DEVICES AND PHARMACEUTICALS
1348.	STRATEGIES TO SPEED-UP THE BIOSIMILAR PRODUCT DEVELOPMENT
1349.	STUDY OF TRANSITION ELEMENT CHELATES FORMED WITH METHIONINE AND ITS IMPACT ON ANIMAL NUTRITION AND GROWTH•
1350.	TO ESTABLISH ROBUST PROCESS FOR IBUPROFEN DIRECTLY COMPRESSIBLE GRANULES
1351.	YIELD IMPROVEMENT FOR THE DRUG PRODUCT MANUFACTURING PROCESS
M.Tech. Quality Management	
1352.	AGILE QUALITY MANAGEMENT
1353.	ANALYZING THE IMPACT OF RENEWABLE ENERGY TRANSITION FOR IMPROVEMENT OF QUALITY IN ENERGY SECTOR IN INDIA
1354.	APPLICATION OF STATISTICAL QUALITY CONTROL TECHNIQUES IN SUPPLIER PERFORMANCE MONITORING, EVALUATION AND MANAGEMENT
1355.	APPLICATION OF TQM IN PRE-ENGINEERED PREFABRICATED AND PRECAST CONSTRUCTION
1356.	ASSESSING PERFORMANCE WITH RESPECT TO QUALITY MANAGEMENT SYSTEM OF THE PRODUCTION PLANT FOR INSULIN MANUFACTURING AND CARRY OUT IMPROVEMENT ACTIVITIES
1357.	ASSESSING THE IMPACT OF INTEGRATING THE QUALITY MANAGEMENT SYSTEM AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM ON MANUFACTURING INDUSTRY
1358.	AUGMENTATION OF LEADERSHIP IN MANUFACTURING INDUSTRY AND REVAMPING ITS QUALITY
1359.	AUTOMATION OF RELIABILITY TEST SUITE
1360.	BELLOW LEVEL DETECTION DEVICE FOR EHV INSTRUMENT TRANSFORMERS.
1361.	CAPACITY ASSESSMENT AND STRATEGIES FOR CONTROLLING PRODUCTION CONSTRAINTS " AT SPECIALIST SERVICES, JEBEL ALI YARD, DUBAI, U.A.E
1362.	CHANGE MANAGEMENT IN IMPLEMENTATION OF INNOVATIVE MAINTENANCE PRACTICES IN DORNIER AIRCRAFT OF IAF
1363.	COMPARATIVE ANALYSIS AND OPTIMISATION OG GRINDING MEDIUM IN SAND MILL OPERATION FOR TIO2 SLURRY AND ESTIMATION OF GRINDING EFFICIENCY
1364.	COMPLETION OF PROJECTS IN TIME AND ANALYSIS OF DELAY
1365.	CONTINUOUS INTEGRATION AND DELIVERY WITH ANSIBLE
1366.	CONTINUOUS MONITORING FOR CAPACITY PLANNING
1367.	CONTINUOUS PROCESS IMPROVEMENT BASED ON SPC SYSTEM
1368.	COPQ INTERNAL FAILURE COST REDUCTION USING STATISTICAL METHODS
1369.	COST OF QUALITY VERSUS COST OF NON-QUALITY AND ITS CONSTRAINTS IN CONSTRUCTION PROJECTS
1370.	COST OPTIMIZATION OF CIVIL WORK IN CONSTRUCTION OF SWRO(SEA WATER REVERSE OSMOSIS) DESALINATION PLANT
1371.	COST REDUCTION OF HYDRAULIC POWER PACK USING VALUE ENGINEERING
1372.	COUNTERFEIT, FRAUDULENT & SUB-STANDARD MATERIALS (CFSM) IN SUPPLY CHAIN OF OIL & GAS INDUSTRY
1373.	CYCLE TIME REDUCTION FOR QUALITY INVESTIGATIONS CLOSURE
1374.	DESIGN A SINGLE QUALITY MANUAL FOR MULTIPLE STANDARDS FOR QUALITY MANAGEMENT SYSTEM FOR A ORGANIZATION
1375.	DESIGN AND FABRICATION OF ECONOMICAL HAND SANITIZER DISPENSER
1376.	DESIGN MINESWEEPER: PROACTIVE RISK ASSESSMENT AND MITIGATION TOOL
1377.	DEVELOPMENT AND IMPLEMENTATION OF "NDT SCHOOL" SYSTEM
1378.	DEVELOPMENT FOR QUALITY THROUGH GR IN INFRA PROJECTS: POWERFULLY ADDING VALUE TO THE KEY DELIVERABLE
1379.	DEVELOPMENT OF AGILE NEW PRODUCT DEVELOPMENT PROCESS TO REDUCE THE TIME TO MARKET• FOR AN AGRICULTURAL TRACTOR PROJECT
1380.	DEVELOPMENT OF EXHAUST SYSTEM OF CAR WITH DUE CONSIDERATION TO NOISE AND VIBRATION
1381.	DEVELOPMENT OF TECHNICAL COMPETENCY MANAGEMENT SYSTEM FOR OIL AND GAS ENGINEERING AND CONSULTING BUSINESS
1382.	DMAIC APPROACH TO INCREASE THE MECHANICAL INTEGRITY AND OPTIMIZE EQUIPMENT AVAILABILITY OF LUBEREF MAINTENANCE
1383.	DMAIC APPROACH TO REDUCE PIPING SPOOL DRAWING ERRORS
1384.	EFFECT OF CROSS HEAD SPEED ON TENSILE TESTING AND QUALITY CERTIFICATION OF REINFORCEMENT BAR
1385.	EFFICIENT RUNNING & OPTIMAL MAINTENANCE OF A MILITARY STATION BY MILITARY ENGINEER

S.No.	DISSERTATION TITLE
	SERVICES (MES)
1386.	ELIMINATION OF VARIAC BURNING ISSUE IN CUSTOMER END
1387.	ENGINEERING MEASUREMENT
1388.	ENHANCEMENTS IN QUALITY MANAGEMENT SYSTEM BY ADOPTING SOFTWARE APPLICATIONS
1389.	ENHANCING PROJECT MANAGEMENT EFFICIENCY USING LEAN CONCEPTS
1390.	ENSURING QUALITY DURING AND AFTER NETWORK DEPLOYMENT
1391.	ESTABLISH, STANDARDIZE AND DEPLOY SUPPLIER QUALITY ASSURANCE MANUAL
1392.	EVALUATING AN APT COMPOSITION FOR CONCRETE STRUCTURES USED IN CONSTRUCTION OF COMMUNICATION TOWER, NODES AND BARRACKS IN OPERATIONAL AREAS WITH OPTIMUM USE OF RESOURCE AND INGREDIENTS.
1393.	EXPLAINABLE AI
1394.	FACILITY LAYOUT REDESIGN FOR EFFICIENCY IMPROVEMENT AND COST REDUCTION IN HIGH MIX LOW VOLUME OPERATION
1395.	FAILRE ANALYSIS OF ELECTRICAL HORN
1396.	FUTURE TECHNOLOGIES IN PHARMACEUTICAL INDUSTRIES
1397.	FUZING / DEFUZING WORKING BENCH - ARMAMENT
1398.	GAP ANALYSIS FOR FIRST DEDICATED FREIGHT CORRIDOR PROJECT IN INDIA: IMPROVING DELIVERY TIME & GROSS MARGIN
1399.	HUMAN RESOURCE MANAGEMENT IN ARMED FORCES & TRANSITION FROM OLIVE GREEN TO CIVIL LIFE
1400.	IMPLEMENTATION OF "QMS BY BUILT ON ISO 9001:2015 FRAMEWORK BY MERGING EXISTING BEST PRACTICES AVAILABLE IN RNTBCI SYSTEMS FOR ELIMINATING REDUNDANCY AND DUPLICATIONS•
1401.	IMPLEMENTATION OF COST OF QUALITY AS A KEY PERFORMANCE INDICATOR (KPI) AT PLASCO LIMITED
1402.	IMPLEMENTATION OF HYUNDAI 5 STAR QUALITY MANAGEMENT SYSTEM
1403.	IMPLEMENTATION OF INTEGRATED QUALITY MANAGEMENT SYSTEM (IQMS)
1404.	IMPLEMENTATION OF ISO 17025
1405.	IMPLEMENTATION OF QMS IN CONVEYOR INDUSTRY
1406.	IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM
1407.	IMPLEMENTATION OF VARIOUS QC RULES
1408.	IMPROVE PRODUCT DELIVERY & ASSEMBLY PROCESS INTERNAL PPM REDUCTION FOR SMART SERIES TRACTOR
1409.	IMPROVE THE QUALITY OF RADIO BROADCAST TRANSMISSION AND ACHIEVE STRENGTH ˜5™ SIGNAL RECEPTION
1410.	IMPROVEMENT IN JEEP COMPASS INITIAL QUALITY SCORE KPI BY RESOLVING SEAT NOISE PROBLEM USING SIX SIGMA DMAIC APPROACH
1411.	IMPROVEMENT IN PRODUCTIVITY USING TOTAL QUALITY MANAGEMENT
1412.	IMPROVEMENT IN ROLLING MILL ROD PROPERTIES (UTS, CONDUCTIVITY & ELONGATION)
1413.	IMPROVEMENT OF ELEVATOR SYSTEM CUSTOMER COMFORT METRICS BY ADOPTING QUALITY TECHNIQUES
1414.	IMPROVEMENT OF MATERIAL AND EQUIPMENT PRESERVATION
1415.	IMPROVEMENT OF RAW MILK QUALITY FOR PROCESSING
1416.	IMPROVEMENT PLAN TO ENHANCE ON TIME CONFORMANCE AND ON TIME DELIVERY OF PROJECT
1417.	IMPROVING QUALITY OF INDIGENISED EQUIPMENT & SPARES IN DEFENCE SECTOR
1418.	IMPROVING QUALITY OF REFIT OF A WARSHIP BY USING QM TECHNIQUES
1419.	INCREASING THE PRODUCTION RATE OF CRUSHED COAL BY USING OPERATION MANAGEMENT TOOLS.
1420.	IN-HOUSE REWORK AND REJECTION CONTROL
1421.	INTEGRATED QMS IMPLEMENTATION IN AEROSPACE EMC TEST LABORATORY AT ISRO
1422.	INTERNAL REJECTION PPM IMPROVEMENT THROUGH QUALITY CULTURE.
1423.	KAIZEN APPLICATION TO REDUCE PPM COUNT AT SUPPLIER END
1424.	LEAN & AGILE TRANSFORMATION
1425.	MANAGING LOGISTICS IN COVID SCENARIO
1426.	OPERATION AND MANAGEMENT OF GOODS /FREIGHT TRAINS ON DEDICATED FREIGHT CORRIDORS
1427.	OPTIMISATION OF BULK MEDIA FOR QUALITY IN PROVISION OF OPERATIONAL COMMUNICATION BY ARMY AIR SUPPORT COMMUNICATION UNIT USING QI TOOLS AND VALUE STREAM MAPPING
1428.	OPTIMIZATION OF REGULATION ANALYSIS/MANAGEMENT PROCESS
1429.	OPTIMIZATION OF SOFTWARE APPLICATION TESTING WITH AUTOMATION
1430.	OPTIMIZE COST OF QUALITY ASSURANCE FUNCTION BY APPLYING QUALITY MANAGEMENT SYSTEM

S.No.	DISSERTATION TITLE
1431.	OPTIMIZE PPC
1432.	OPTIMIZED TEST APPROACH FOR EHR MOBILE SOLUTIONS
1433.	PERFORMANCE APPRAISAL AND ORGANIZATION DEVELOPMENT OF FARMER PRODUCER COMPANIES.
1434.	PILOT TO IMPLEMENT TESTING SOLUTION FOR ENHANCING CUSTOMER SATISFACTION
1435.	PLANT STATIC ASSETS QUALITY ASSURANCE THROUGH RISK BASED INSPECTION PROGRAM
1436.	POST IMPLEMENTATION DEFECTS REDUCTION: A PROACTIVE WAY TO ENSURE QUALITY
1437.	PROCESS FOR TESTING AND LINKING IT CUSTOMER ISSUES
1438.	PROCESS OPTIMIZATION IN PAPER HONEYCOMB COMPOSITE (PHC) TECHNOLOGY
1439.	PROCESS PARAMETER STUDY IN ROLL FORMING
1440.	PRODUCT QUALITY IMPROVEMENT THROUGH TQM APPROACH
1441.	PROJECT MANAGEMENT FOR NEW PRODUCT DEVELOPMENT WITH A CASE STUDY
1442.	PROJECT TRANSFER & NEW PROJECT IMPLEMENTATION
1443.	PROVIDE SOLUTION TO IMPROVE THE PRODUCTIVITY FOR SOAP PACKAGING AT CUSTOMER END
1444.	QMS APPLICATION IN ARMY
1445.	QUALITY CONTROL IN VSU UPDATE AND RELEASE
1446.	QUALITY IMPROVEMENTS IN THE PRODUCTION PROCESS OF CEMENT PLASTER AND REDUCTION OF WASTAGE
1447.	QUALITY MANAGEMENT SYSTEM IMPLEMENTATION
1448.	QUALITY MANAGEMENT SYSTEM IMPLEMENTATION FRAMEWORK FOR CONSTRUCTION INDUSTRIES AND IMPROVING WELDING QUALITY AND PRODUCTIVITY
1449.	QUALITY MANAGEMENT SYSTEMS
1450.	QUALITY TOOLS AND THEIR INTEGRATION FOR COUNTERING COVID 19 CHALLENGES
1451.	REDUCING OVERALL REJECTION RATE OF ANODES FROM CURRENT LEVEL OF 6.8% TO 2%
1452.	REDUCING THE QUALITY REJECTION (PHYSICAL AND CHEMICAL) OF LEAD AND ZINC FINAL PRODUCTS AND IMPROVE THE PRODUCTIVITY
1453.	REDUCTION AND CONTROL OF TRANSFORMER FAILURES IN ELEVATOR PRODUCT
1454.	REDUCTION IN CYCLE TIME OF RADAR SCHEDULED SERVICING THROUGH STATISTICAL ANALYSIS AND CONTROL
1455.	REDUCTION OF COST OVERRUN AND DELAYS IN PROJECTS DUE TO ELIMINATION OF EXTRA ITEMS IN CONTRACTS
1456.	REDUCTION OF LEAD TIME AND COST IN TEST SPECIMEN MANUFACTURING PROCESS
1457.	REDUCTION OF MACHINE RELATED CENTER TO EDGE DISTANCE (CED) SCRAP IN FINISHING LINE
1458.	REDUCTION OF RE-HEATING FURNACE FUEL OIL CONSUMPTION THROUGH EFFECTIVE HEATING
1459.	RELIABILITY IMPROVEMENT OF HYPO CHLORINATION PLANT
1460.	RELIABILITY IMPROVEMENT OF PSA SKID VALVES IN AROMATICS PLANT
1461.	RESCHEDULING OF PREVENTIVE MAINTENANCE FOR MAINTENANCE ORGANISATION OF INDIAN AIR FORCE
1462.	RESOURCE UTILIZATION OF INDIVIDUAL SECTIONS
1463.	RFQ (REQUEST FOR QUOTE) CYCLE TIME IMPROVEMENT(5 DAYS TO 2 DAYS) IN OVERHEAD CONDUCTORS BUSINESS
1464.	RISK MANAGEMENT FOR VARIOUS INDUSTRIAL OCCUPANCIES ADHERING TO QMS
1465.	RISK MANAGEMENT IN PHARMACEUTICALS
1466.	RISKS OF COMBINING THE FAST-TRACKING TECHNOLOGY WITH CONVENTIONAL CONSTRUCTION
1467.	ROOT CAUSE ANALYSIS FOR FAILURES IN COACHING STOCK
1468.	ROOT CAUSE ANALYSIS THROUGH 4Q TOOLS/TECHNIQUE FOR BUDGET OVER RUN OF APPOX 60% OF ELECTRO-MECHANICAL ENGINEERING FOR A UHV SUBSTATION PROJECT.
1469.	SETTING UP OF BIODEGRADABILITY TESTING FACILITY
1470.	SETTING UP PROCESS FOR PRECISION AND ONBOARD STABILITY OF REAGENTS
1471.	SPC MONITORING IMPLEMENTATION AT SUPPLIERS TO IMPROVE QUALITY MONITORING
1472.	STATISTICAL PROCESS CONTROL AND PERFORMANCE IMPROVEMENT BY RETROSPECTIVE DATA ANALYSIS
1473.	STRATEGIC MANAGEMENT AND MARKETING ANALYTICS
1474.	STREAMLINE OF NEW BUSINESS OPPORTUNITY FIBER BUSINESS
1475.	STRONG ROOT CAUSE ANALYSIS TO IMPROVE QUALITY OF PRODUCT AND SECURE CUSTOMER SATISFACTION
1476.	STRUCTURED METHODOLOGY (DMAIC) TO OPTIMIZE THE AVAILABILITY OF PDO GAS CENTRAL

S.No.	DISSERTATION TITLE
	PROCESSING PLANT
1477.	STUDY OF EFFECTIVE IMPLEMENTATION OF OUTSOURCING STRATEGY BASED ON KEY PRINCIPLES OF QUALITY MANAGEMENT SYSTEM & DECISION ANALYSIS
1478.	STUDY ON REPLACEMENT OF SOFTWOOD FIBER WITH HIGHLY REFINED HARD WOOD (GLUE PULP) PULP WITHOUT AFFECTING FUNCTIONAL PROPERTIES OF THE PAPERBOARD
1479.	SUPPLY CHAIN MANAGEMENT IN IAF
1480.	TELECOM INSTALLATION QUALITY IMPROVEMENT IN INDIA
1481.	TEST AUTOMATION - SEAMLESSLY GO GREEN (S2G)
1482.	THERMAL IMAGER FIRE CONTROLLER SYSTEM IN TANK T-72
1483.	TO REDUCE THE QUANTITY OF CLEANING SOLVENTS (METHANOL) USED FOR CLEANING OF EQUIPMENT (ACTIVE PHARMACEUTICAL INGREDIENTS)
1484.	TRACTOR SPARE PARTS ORDER EXECUTION IMPROVEMENT
1485.	TRAINING OF PERSONNEL ON NEW ONLINE MAINTENANCE MANAGEMENT SYSTEM
1486.	TRANSFORMING TRADITIONAL IC ENGINE VEHICLES TO GREEN VEHICLES: PRODUCTION OF LITHIUM-ION BATTERIES FOR EV AND OTHER APPLICATIONS
1487.	USE OF PROJECT MANAGEMENT TECHNIQUES FOR CONSTRUCTION OF SWARNKAR SHICHA SADAN, JAIPUR
1488.	USING TECHNOLOGY IN LOGISTICS AND SCM THEREBY INCREASING THE EFFICIENCY OF THE OVERALL SYSTEM AND REDUCING THE OVERALL COST
1489.	VENDOR COMPREHENSIVE EXCELLENCE
1490.	WASTE MANAGEMENT THROUGH QUALITY TOOLS: CIVIL ENGINEERING SOLUTIONS AGAINST INDUSTRIAL WASTE
1491.	WINTER OPERATIONS OF DIESEL ENGINE VEHICLES AT GLACIERS
1492.	XEV LI-ION BATTERY PACK AND BATTERY MANAGEMENT SYSTEM
1493.	ZERO DEFECT- A CUSTOMER FOCUSED APPROACH
M.Tech. Software Systems	
1494.	360 DEGREE COMPLIANCE
1495.	3RD PARTY PROVIDER BILLING FOR US HOSPITALS
1496.	5G NR SCANNER
1497.	A CLOUD BASED DATA ANALYTICS TOOL FOR PLM CHANGE MANAGEMENT MODULE
1498.	A COMPREHENSIVE STUDY OF HUMAN RESOURCE ANALYTICS ON TRAINING AND DEVELOPMENT STRATEGIES USING CLASSIFICATION TECHNIQUES
1499.	A CROSS-PLATFORM IPHONE & ANDROID MOBILE APPLICATION TO REMOTELY MONITOR A SMART INFUSION PUMP WITH FIND MY DEVICE FEATURE
1500.	A DATA SCIENCE APPROACH FOR OPTIMIZING OPERATIONAL EFFICIENCY IN A TECHNICAL CUSTOMER SUPPORT BUSINESS
1501.	A RECOMMENDER SYSTEM FOR TOURISM INDUSTRY USING MACHINE LEARNING TECHNIQUES
1502.	A SEARCH SYSTEM FOR CYBER SITUATIONAL AWARENESS
1503.	A SECURITY FRAMEWORK FOR APPLICATION ON INFRASTRUCTURE BASED WIRELESS SENSOR NETWORK
1504.	A THREE-LAYER PRIVACY PRESERVING CLOUD STORAGE SCHEME BASED ON COMPUTATIONAL INTELLIGENCE IN FOG COMPUTING
1505.	A WEB SERVICE TO GENERATE INTELLIGENT PREVIEWS OF WEB LINKS
1506.	ABSTRACTIVE SUMMARIZATION OF TECH DOCUMENTS IN SYNTHESIS OF TLDR PAGES
1507.	ACCELERATING INTELLIGENCE IN API ECOSYSTEM FOR BUSINESSES
1508.	ACCELERATING MACHINE LEARNING ALGORITHM WITH HETEROGENOUS SYSTEM BY UTILIZING FPGA
1509.	ACCESS MANAGEMENT & MFA
1510.	ACCOUNT MANAGEMENT SYSTEM AND INFORMATION RETRIEVAL
1511.	ACCUMULATOR LOG (A-LOG) ON AMAZON CLOUD (AWS) PLATFORM
1512.	ACTIVE ONLINE LEARNING FOR SOCIAL MEDIA ANALYSIS TO SUPPORT CRISIS MANAGEMENT
1513.	ADAPTIVE & AFFORDABLE VEHICLE COLLISION WARNING SYSTEM BASED ON BLIND SPOT DETECTION
1514.	ADDING CLUSTER-API FOR KVM
1515.	ADDITION OF AI POWERED GUIDED SEARCH AND PRODUCT SUGGESTION CAPABILITIES TO MARKET INTELLIGENCE SYSTEM
1516.	AGENT CALL PARKING IN CLOUD BASED CALL CENTER SOLUTION
1517.	AI ASSISTANT INSTRUMENTATION VALIDATOR
1518.	AI BASED FINANCIAL MODELLING FOR PORTFOLIO MANAGEMENT

S.No.	DISSERTATION TITLE
1519.	AI BOTS AND ITS APPLICATION IN INDUSTRY
1520.	AI ENABLED IVV PLATFORM FOR SATELLITE ON-BOARD SOFTWARE QUALITY ASSURANCE
1521.	AI POWERED TEST AUTOMATION
1522.	AI-POWERED CHAT BOTS USING SNOWFLAKE DATABASE
1523.	AIR QUALITY FORECASTING
1524.	AIR QUALITY INDEX PREDICTION USING MACHINE LEARNING
1525.	AIRCRAFT PITCH ANGLE CONTROL USING RADIAL BASIS FUNCTION BASED NEURAL NETWORK
1526.	AIRFARE SEARCH ORDER EVOLUTION USING TAXES AND FEES ESTIMATION
1527.	ALARM MANAGEMENT SYSTEM FOR TELECOM NETWORKS
1528.	ALGORITHMIC TRADING STRATEGY
1529.	AML TRANSACTION FILTERING USING MACHINE LEARNING
1530.	AN EFFICIENT AND SECURE HYBRID STORAGE MECHANISM IN CLOUD COMPUTING
1531.	AN HOSPITAL APPLICATION INVOLVING DEEP LEARNING METHODOLOGY FOR SIX DIFFERENT TYPES OF THYROID DISEASES.
1532.	AN INTEGRATED LOGGING INTERFACE
1533.	AN INTELLIGENT CLINICAL DECISION MAKING SYSTEM FOR HEART DISEASE PREDICTION USING MACHINE LEARNING
1534.	AN INTERACTIVE APPLICATION FOR REAL TIME CAPITAL MARKETS DATA PROCESSING
1535.	AN ML-BASED FLEET MANAGEMENT SYSTEM FOR ELECTRIC VEHICLES
1536.	ANALYSIS OF DATA COLLECTED FROM NETWORKING EQUIPMENT
1537.	ANALYSIS OF DATA IN APPLICATION AND REPORT GENERATION
1538.	ANALYSIS OF IOT DATA IN CLOUD
1539.	ANALYSIS OF IPSEC PROTOCOL'S PACKET PROCESSING PERFORMANCE ON THE 5G NETWORK.
1540.	ANALYSIS OF SOCIAL MEDIA AND SPEECHES IN INDIAN POLITICS
1541.	ANALYSIS OF SURVEYS TO UNDERSTAND THE IMPACT ON CUSTOMER JOURNEY
1542.	ANALYSIS OF USER OPINIONS FOR PRIVATE INSTITUTES
1543.	ANALYSIS OF VEHICLE DIAGNOSTICS DATA FOR PREDICTIVE MAINTENANCE AND MANUFACTURING
1544.	ANALYSIS ON FACTORS AFFECTING RENEWALS AND REVENUE
1545.	ANALYSIS ON KEYWORDS EXTRACTION
1546.	ANALYTICAL GRAPHICAL REPRESENTATION OF WORK CORRELATIONS
1547.	ANALYZE EMPLOYEE PERFORMANCE IN AN ORGANIZATION USING MACHINE LEARNING
1548.	ANALYZING PERFORMANCE WITH OBJECT/IMAGE RECOGNITION: ARTIFICIAL INTELLIGENCE
1549.	ANALYZING THE IMPACT OF PSYCHOSOCIAL STRESSORS ON PROJECT MANAGER PERFORMANCE. THE MEDIATING EFFECT OF ORGANIZATIONAL CULTURE•
1550.	ANANLYTICAL STUDY OF WEARABLE DEVICE DATA USING MACHINE LEARNING
1551.	ANDROID MULTIMEDIA PLAYBACK APPLICATION
1552.	ANNEXA - IOT ENABLED INFORMATION CAPTOR
1553.	ANOMALY ANALYSIS & DETECTION IN A DISTRIBUTED INFRASTRUCTURE MANAGEMENT SOLUTION " STUDY AND IMPLEMENTATION
1554.	ANOMALY DETECTION ON X-RAY DATA
1555.	ANOMALY DETECTION USING MACHINE LEARNING
1556.	ANOMALY DETECTION USING STATISTICAL AND MACHINE LEARNING TECHNIQUES
1557.	API FRAMEWORK CREATION AND END TO END INTEGRATION ENVIRONMENT WITH MOCKING
1558.	API TEST AUTOMATION WITH TEST DATA GENERATOR
1559.	APISERO GLOBAL INTEGRATION SOLUTIONS, NOIDA
1560.	APPLICATION FOR STUDENT ATTENDANCE MANAGEMENT SYSTEM.
1561.	APPLICATION MODERNIZATION AND CLOUD ADOPTION
1562.	APPLICATION MONITORING SOLUTIONS
1563.	APPLICATION OF ARTIFICIAL INTELLIGENCE IN AIRCRAFT MAINTENANCE - A CASE STUDY ON IAF AIRCRAFT/ AEROENGINE DEFECT ANALYSIS/ TROUBLESHOOTING
1564.	APPLICATION OF MODEL BASED ENGINEERING ON AVIONICS POWER SUPPLY MODULE.
1565.	APPLICATION OF NATURAL LANGUAGE PROCESSING FOR SEMANTICS-BASED KEY PHRASE EXTRACTION IN THE CONTEXT OF SKILLS MANAGEMENT
1566.	APPLICATION TO CLASSIFY DEFECTS OF PRINTED CIRCUIT BOARDS
1567.	APPLICATION TO DOWNLOAD AND VALIDATE MULTIPLE IMAGES ON NETWORK SWITCHES

S.No.	DISSERTATION TITLE
1568.	APPLYING MACHINE LEARNING TECHNIQUES IN SOFTWARE ENGINEERING
1569.	APPLYING TEXT CLASSIFICATION, TEXT SUMMARIZATION TECHNIQUES FOR INTELLIGENT AUTOMATION USING NLP & DEEP LEARNING
1570.	APPRECIATING PEERS USING FACE RECOGNITION AND A TRANSFORMER BASED MODEL
1571.	ARCHITECT BATCH-ORIENTED DATA PROCESSING AS A REAL-TIME EVENT BASED APPLICATION
1572.	ARCHITECTING MACHINE LEARNING APPLICATION USING KUBERNETES CLUSTER
1573.	ARCHITECTURE DESIGN FOR DISPLAY DEVICES
1574.	ARCHITECTURE EXPLORATION BY EXTENDING RISC-V ISA WITH DOMAIN SPECIFIC INSTRUCTIONS AND SIMULATION ON GEM5
1575.	ARCHIVING DATA IN CLOUD
1576.	AREA CALCULATION IN PLANT LAYOUT
1577.	ARMY CYBER AUDIT SOFTWARE
1578.	ARTIFICIAL INTELLIGENCE : CHATBOT WITH SOCIAL NETWORK.
1579.	ARTIFICIAL INTELLIGENCE APPLICATION IN (ATC)AIR TRAFFIC CONTROL SYSTEMS
1580.	ARTIFICIAL INTELLIGENCE FOR FINANCIAL SYSTEMS
1581.	ARTIFICIAL INTELLIGENCE IN INDIAN AIR FORCE
1582.	ARTIFICIAL INTELLIGENCE: IMAGE CLASSIFICATION USING DEEP NEURAL NETS
1583.	ARTIFICIAL INTELLIGENCE: NEW ERA OF COMMUNITY ON CLOUD
1584.	ASSETMON- ALTERNATIVE ASSET MANAGEMENT SYSTEM
1585.	ATISAR (ASSURING TECHNICAL INNOVATION, THROUGH SYSTEMS, ACCESSIBILITY & RESPONSIVENESS)
1586.	AUSCULTATION OF RESPIRATORY SOUNDS FOR DIAGNOSTICS WITH MACHINE LEARNING
1587.	AUTHORISATION SERVICE FOR MICROSERVICE AND CLOUD BASED SYSTEM
1588.	AUTO LOAD BALANCING IN MULTI FCF ENVIRONMENT WITHIN A FABRIC
1589.	AUTO MEDICAL CLAIMS INVESTIGATION SYSTEM
1590.	AUTO MODEL
1591.	AUTO REPORT GENERATION WEEKLY/MONTHLY
1592.	AUTO ROOT CAUSE ANALYSIS OF DAILY ERRORS (ARCADE)
1593.	AUTO SCALING BASED ON CUSTOM METRICS
1594.	AUTO-DISCOVERY OF NVME DEVICES OVER FABRICS USING INTERNET STORAGE NAME SERVICE(ISNS)
1595.	AUTODISCOVERY OF OPENAPIS IN MICROSERVICES ARCHITECTURE
1596.	AUTOMATED DETECTION OF GENDER AND AGE WITH MASK ON HUMAN IMAGE
1597.	AUTOMATED INVESTMENT PORTFOLIO ANALYSIS
1598.	AUTOMATED TEST CASE GENERATION FOR UNIT TESTS USING UML DESIGN
1599.	AUTOMATED TEST DATA GENERATION
1600.	AUTOMATED TOPIC ANALYSIS TO IDENTIFY TRENDS AND TO INTERPRET SENTIMENT
1601.	AUTOMATED VALIDATION TECHNIQUE FOR IMAGE BASED SCADA HMI SCREEN
1602.	AUTOMATIC ASSIGNMENT OF TICKETS TO THE CORRECT TEAM USING MACHINE LEARNING
1603.	AUTOMATIC DETECTION OF FAKE PROFILES IN ONLINE SOCIAL NETWORKS
1604.	AUTOMATIC FRAUD DETECTION
1605.	AUTOMATING AND OPTIMISING RECOMMENDATION OF SOFTWARE VERSIONS FOR NETWORK DEVICES
1606.	AUTOMATION DEPLOYMENT AND TESTING OF CONTAINER
1607.	AUTOMATION DEVELOPMENT ON SMART HOME ROUTER
1608.	AUTOMATION FRAMEWORK USING SELENIUM
1609.	AUTOMATION IN DATA CRAWLING
1610.	AUTOMATION IN IDENTITY SYSTEMS
1611.	AUTOMATION IN RESOLUTION OF TICKETS IN TELECOM USING RPA
1612.	AUTOMATION IN RISK ANALYTICS
1613.	AUTOMATION OF CLOUD INFRASTRUCTURE AND APPLICATION DEPLOYMENT
1614.	AUTOMATION OF DEPLOYMENT PROCESS
1615.	AUTOMATION OF INTEL IMAGE QUALITY TOOL WITH CODED UI
1616.	AUTOMATION OF REGRESSION TEST SUITE RUNS FOR A DISASTER RECOVERY PRODUCT
1617.	AUTOMATION OF TRACE PROCESSING AND PROVIDE RECOMMENDATION FOR ACTION
1618.	AUTOMATION OF VARIABLE PAY (OVERTIME, SHIFT & ONCALL)

S.No.	DISSERTATION TITLE
1619.	AUTOMATION TESTING USING SELENIUM
1620.	AUTOMATION-DEVELOPMENT OF ACTIVE SYNC SIMULATOR
1621.	AUTONOMOUS FRAMEWORK ON MIDDLE-WARE
1622.	AUTOSCALING FOR HANDLING PERFORMANCE ISSUES
1623.	AUTOSCALING OF AZURE COSMOS DB THROUGHPUT BY ANALYZING KEY METRICS
1624.	BAG-OF-DISCRIMINATIVE-WORDS (BODW) REPRESENTATION VIA TOPIC MODELING
1625.	BATCHMATE - SIMPLIFIES BATCH SUPPORT
1626.	BEHAVIOR DRIVEN DEVELOPMENT FRAMEWORK
1627.	BEHAVIORAL PATTERN IDENTIFICATION FROM SMART METERS(IOT DEVICES) LOG REPOSITORY (CLOUD) FOR DEFECT PREVENTION
1628.	BEHAVIORAL TRACKING AND PREDICTIVE MODELLING
1629.	BFSI - LOAN DEFAULTER PREDICTION ANALYSIS
1630.	BICEGIT(BI COMPONENTAL EXPONENTIAL GENETIC INFORMATION TRANSFER) EVOLUTIONARY SEARCH ALGORITHM
1631.	BIG DATA ANALYTICS
1632.	BIG GEOSPATIAL DATA SAMPLING & VISUALIZATION USING GPU
1633.	BILL AND CLAIM ESTIMATION
1634.	BITISAM - BRINGING INFORMATION TECHNOLOGY DEEPER INTO SAM
1635.	BLEISURE - ADDING LEISURE TO YOUR BUSINESS TRAVEL
1636.	BOSCH-IOT-CLOUD CONFIGURATIONS INFORMATION AND CI RELATIONS, PEOPLE RELATIONS
1637.	BSS LOYALTY MANAGEMENT
1638.	BUGS ANALYZER : A WAY TO REDUCE BUGS BY PROVIDING THE PROBABLE SOLUTIONS GIVEN IN PAST FOR SUCH SIMILAR BUGS WHEN SUPPORTS LOGS THEM FOR DEVELOPMENT.
1639.	BUILD A MACHINE LEARNING MODEL FOR SMART CITY SERVICES
1640.	BUILD EFFICIENT MODEL FOR PREDICTING PRICE USING ML ALGORITHMS.
1641.	BUILD MACHINE LEARNING MODEL FOR A DEFINITIVE PROBLEM DATA SET
1642.	BUILD MACHINE LEARNING MODEL FOR CUSTOMER SEGMENTATION IN THE NVOCC BUSINESS
1643.	BUILDING & APPLYING MACHINE LEARNING MODEL USING AWS CLOUD PLATFORM
1644.	BUILDING A MODEL TO IDENTIFY FAKE NEWS
1645.	BUILDING A RECOMMENDER APPLICATION FOR RECOMMENDING ALTERNATIVE CIGARATTE PRODUCTS TO USERS BASED ON THEIR CURRENT CHOICE OF CIGARRETES USING PYTHON
1646.	BUILDING AND QUERYING AN ENTERPRISE KNOWLEDGE GRAPH
1647.	BUILDING CLASSIFICATION MODEL FOR DIABETES DIAGNOSIS
1648.	BUILDING CONTINOUS INTEGRATION/CONTINOUS DEPLOYMENT PIPELINE ON AWS WITH JENKINS
1649.	BUILDING CONVERSATIONAL USER INTERFACES
1650.	BUILDING ML BASED INTELLIGENT SYSTEM TO ANALYZE PRODUCTION LSI (LIVE SITE INCIDENTS)
1651.	BUSINESS ENTITY RECOGNITION
1652.	BUSINESS INTELLIGENCE PLATFORM WITH VISUALIZATION MODULES SUPPORTING PREDICTIVE AND ADVANCED ANALYTICS BASED ON REAL-TIME DATA STREAM
1653.	CAMPAIGN NEWSLETTER USING AEM
1654.	CARDIAC ARRHYTHMIA DETECTION
1655.	CART PREDICTION & IMPROVEMENTS IN E-COMMERCE
1656.	CASE ASSIGNMENTS SYSTEM
1657.	CATASTROPHIC TWEET ANALYSIS
1658.	CATEGORIZATION OF SOFTWARE PRODUCT INCOMING DATA IN CUSTOMER SUPPORT THROUGH ML APPLICATION
1659.	CAUSAL ANALYSIS OF USED CARS PRICE PREDICTION
1660.	CDC BASED REALTIME ANALYTICS IN ELASTICSEARCH
1661.	CERTILIT : INFRASTRUCTURE FOR ACADEMIC RECORDS
1662.	CHALANGES FROM MOEVING FROM AGILE TO DEVOPS
1663.	CHAT BOT APPLICATION USING ARTIFICIAL NEURAL NETWORKS
1664.	CHATBOT : A SMART WAY OF ANSWERING QUESTIONS ABOUT A PASSAGE
1665.	CHATBOT FOR APPLICATION/INFRASTRUCTURE SUPPORT
1666.	CHATBOT FOR PRODUCT FINDER USING AMAZON LEX
1667.	CHATBOT FOR WINDCHILL TECHNICAL SUPPORT

S.No.	DISSERTATION TITLE
1668.	CHATBOT PLATFORM BY INSURANCE PROVIDER TO CHOOSE THE RIGHT MEDICAL SERVICE PROVIDER AND TO BOOK APPOINTMENT
1669.	CHATBOT SOLUTION FOR CONTINUOUS INTEGRATION
1670.	CHATBOT-RISK&COMPLIANCE PLATFORM
1671.	CHEST X-RAY ANALYSIS WITH ARTIFICIAL INTELLIGENCE
1672.	CHILD LOCATOR MOBILE APPLICATION
1673.	CICD IMPLEMENTATION IN SOFTWARE ENGINEERING AND BENEFITS
1674.	CLASSIFICATION AND EXTRACTION OF LEGAL EVIDENCE DOCUMENTS
1675.	CLASSIFICATION AND VISUALIZATION OF FIELD COMPLAINTS
1676.	CLASSIFICATION FOR ENTITY EXTRACTION
1677.	CLASSIFICATION OF COMMUNAL POSTS USING CLASSIFIERS IN DISASTER EVENT DATASETS.
1678.	CLASSIFYING CUSTOMERS TO IDENTIFY DELIVERY SERVICES
1679.	CLIENT NOTIFICATION SERVICE
1680.	CLOSE LOOP CORRECTIVE ACTION (CLCA) OF FIELD DEFECTS
1681.	CLOUD AGNOSTIC INFRASTRUCTURE MANAGEMENT USING TERRAFORM
1682.	CLOUD AGNOSTIC SELF SERVICE PORTAL FOR IT SERVICE MANAGEMENT
1683.	CLOUD BASED HEALTHCARE FACILITIES
1684.	CLOUD BASED OMNI CHANNEL PLATFORM FOR MARKETING AND E-COMMERCE ENTERPRISES
1685.	CLOUD BASED OTT STREAMING VIA CDN - PERFORMANCE ANALYSIS
1686.	CLOUD BASED QUANTUM COMPUTING IN LOGISTICS AND SUPPLY CHAIN
1687.	CLOUD BASED RESOURCE SCHEDULER
1688.	CLOUD BASED SOLUTION FOR FOOD DELIVERY SYSTEM
1689.	CLOUD COMPUTING
1690.	CLOUD COMPUTING AND COMPARISON OF NETWORKING TOOLS
1691.	CLOUD COMPUTING FOR LARGE SCALE DATA ENGINEERING AND BUSINESS INTELLIGENCE
1692.	CLOUD DEPLOYMENT MODELS
1693.	CLOUD INTEGRATED MANAGED FILE TRANSFERS
1694.	CLOUD-FOCUSSED PERFORMANCE TESTING STRATEGY AND SOLUTIONS FOR DATA MANAGEMENT APPLICATIONS
1695.	CODE ANALYZER FOR IQUERYABLE TO IENUMERABLE JOINS USING ROSLYN COMPILER
1696.	CODE RECOMMENDATION VIA STRUCTURAL SEARCH
1697.	COLLABORATION IN BUSINESS SCENARIOS USING WORKFLOWS
1698.	COMMON PLATFORM TO VOICE OPERATE ANY APPLICATION
1699.	COMMON PRODUCT INSTALLER FOR SDS
1700.	COMPARATIVE ANALYSIS OF MONOLITHIC AND MICROSERVICES BASED ARCHITECTURAL DESIGN
1701.	COMPARING DIFFERENT MACHINE LEARNING TECHNIQUES FOR SALES FORECASTING OF VEHICLES
1702.	COMPARING STREAMS OF STRUCTURED DATA
1703.	COMPETITION BASED FRAMEWORK FOR HOSTING AND EVALUATING MACHINE LEARNING/AI CHALLENGES
1704.	COMPONENT HEALTH ANALYZER " INCIDENT-FREE RELEASE CYCLES
1705.	COMPUTATIONAL FRAMEWORK FOR LEVERAGING MACHINE LEARNING MODELS FOR TRIGGERING TACTICAL PLANNING ACTIONS/RANGE BOUND SECURED TRANSACTIONS
1706.	COMPUTER VISION: A MODEL FOR VISUAL BOTS USING IMAGE SEGMENTATION
1707.	CONDITION BASED ASSET MAINTENANCE PLANNING
1708.	CONNECTING APPLICATIONS ACROSS PRIVATE NETWORKS
1709.	CONSULTANT ON-BOARDING AND STATUS TRACKING SYSTEM
1710.	CONTACT CENTRE HEALTH DASHBOARD
1711.	CONTAINER ORCHESTRATION USING KUBERNETES AND ITS INTEGRATION WITH ADC
1712.	CONTAINERIZATION OF KLARF /IMAGE LOADING AND IMAGE DELETION SERVICES WITH KUBERNETES
1713.	CONTAINERIZING SAP CLOUD PLATFORM DOCUMENT MANAGEMENT FOR MULTI CLOUD DEPLOYMENT
1714.	CONTENT AND ROI BASED HEVC ENCODING OPTIMIZATION FOR SECURITY CAMERA
1715.	CONTENT OPTIMIZATION WITH REINFORCEMENT LEARNING
1716.	CONTEXT BASED INTELLIGENT SEARCH
1717.	CONTEXT IDENTIFICATION OF SCIENTIFIC PAPERS USING NLP PROCESSING
1718.	CONTEXTUAL AWARE ASSISTANT

S.No.	DISSERTATION TITLE
1719.	CONTINUOUS IMPROVEMENT PORTAL
1720.	CONTRACT MANAGEMENT SYSTEM-(CMS)
1721.	CONTROL TOWER: CONSTRUCTION PROJECT SCHEDULE MANAGEMENT TOOL
1722.	CORE SECURITY PRODUCT ENGINE CONVERSION DATA ANALYTICS
1723.	CORONA TRACKER
1724.	COST EFFECTIVENESS & OPTIMIZATION OF INFRASTRUCTURE IN AZURE CLOUD
1725.	CREATING AN API AUTOMATION FRAMEWORK AND CREATING CUSTOM REPORTING
1726.	CREATION OF COHORT USER PROFILES BASED ON USAGE PATTERNS IN A SOCIAL NETWORK
1727.	CREDIT CARD FRAUD DETECTION SYSTEM USING BIG DATA
1728.	CREDIT FRAUD ANALYSIS
1729.	CREDIT RISK PREDICTION USING ML
1730.	CROSS FORMAT BASED RECOMMENDATION SYSTEM BASED ON USER PURCHASE PATTERNS
1731.	CURELIFE - A CLOUD COMPUTING PROJECT
1732.	CUSTOMER CARE: AN INTEGRATED SOLUTION
1733.	CUSTOMER ENGAGEMENT TRACKER - A CRM MONITOR TO BUILD A 360 DEGREE VIEW OF THE RELATIONSHIP.
1734.	CUSTOMER EXPERIENCE ANALYSIS FOR NORTON SECURITY
1735.	CUSTOMER EXPERIENCE ANALYSIS TOOL FOR NORTON FAMILY
1736.	CUSTOMER INSIGHT AND HYPER-PERSONALIZATION IN RETAIL BANKING
1737.	CUSTOMER PROFILING USING PYTHON
1738.	CUSTOMER SALES AND DEPOT DEMAND FORECASTING AND MODEL AUTOMATION
1739.	CUSTOMER SEGMENTATION IMPLEMENTATION IN A LEADING BANK
1740.	CUSTOMIZED JENKINS SUITE
1741.	CUSTOMIZING MULTI-TENANT SAAS BY MICROSERVICES: A REFERENCE ARCHITECTURE
1742.	CYBERSECURITY IN SMART GRIDS " CHALLENGES, VULNERABILITIES AND MITIGATION STRATEGY
1743.	DATA ANALYSIS ON CR METRICS AND PREDICTION EVALUATION
1744.	DATA ANALYSIS UTILISING NATURAL LANGUAGE PROCESSING AND BIG DATA FRAMEWORK
1745.	DATA ANALYST OF ONLINE FEEDBACK FOR HIGHER EDUCATION INSTITUTES/COLLEGES/UNIVERSITIES
1746.	DATA ANALYTICS AND PREDICTION FOR SOCIETAL APPLICATIONS
1747.	DATA ANALYTICS ON COVID- 19
1748.	DATA CENTER CENTRIC SMART NETWORK PACKET CAPTURE FRAMEWORK
1749.	DATA CENTRE NETWORK
1750.	DATA CLASSIFICATION USING ML
1751.	DATA GOVERNANCE IN ENTERPRISE DATA ARCHITECTURE
1752.	DATA MANAGEMENT AND DATA INTEGRATIONS BY USING SALESFORCE(SAAS)
1753.	DATA MANAGEMENT OPERATION CHATBOT
1754.	DATA MINING APPROACH FOR EXPLORATIVE DATA ANALYSIS OF TRADING DATA
1755.	DATA MOVEMENT MONITOR AND UTILITY IN A HETOROGENOUS SOLUTION
1756.	DATA PROCESSING ACCELERATOR: ADD ANALYTICS TO YOUR PRODUCTS WITH EASE
1757.	DATA QUALITY IN OPERATIONAL DATA STORE
1758.	DATA RETRIEVAL PROCESS
1759.	DATA WAREHOUSE/MINING
1760.	DATABASE EXPLORATION AND ANALYSIS FOR BUSINESS INTELLIGENCE
1761.	DATABASE PERFORMANCE OPTIMISATION IN ANDROID APP
1762.	DATABASE QUERY TUNNING THROUGH DEEP LEARNING
1763.	DATABASES MONITORING AND ALERT SERVICES
1764.	DDOS PROTECTION SOLUTION
1765.	DEEP LEARNING AND NATURAL LANGUAGE PROCESSING - AUTOMATIC TEXT SUMMARIZATION USING ENCODER-DECODER RECURRENT NEURAL NETWORKS AND MULTI-CHANNEL CONVOLUTIONAL NEURAL NETWORK
1766.	DEFECT PREDICTOR & FALSE POSITIVE SCANNER FOR INCIDENTS
1767.	DEIDENTIFICATION SYSTEM ON THE CLOUD USING CLOUD FOUNDRY SERVICE AND DOCKER.
1768.	DELIVERY COLLABORATION - PORTAL RESOURCE MANAGEMENT
1769.	DENOISING OF AGENT SPEECH IN A NOISY CONTACT CENTER ENVIRONMENT

S.No.	DISSERTATION TITLE
1770.	DEPLOYING & AUTOMATING SCALABLE WEB APPLICATION WITH CONTAINER ORCHESTRATION
1771.	DEPLOYING DATA CENTER, STORAGE AREA NETWORK (SAN) AND NETWORK ATTACHED STORAGE (NAS), TO CLOUD
1772.	DEPLOYMENT AND PERFORMANCE ENGINEERING FOR CLOUD BASED APPLICATIONS
1773.	DEPLOYMENT TOOL
1774.	DESIGN & DEVELOPMENT OF WEB PROVISIONING PORTAL TO MANAGE ENTERPRISE CONTACTS & DOCUMENTS AUTHORING USING HYBRID CLOUD DESIGN.
1775.	DESIGN AND DEVELOPMENT OF A DATABASE MODEL FOR CYBER SECURITY THREAT
1776.	DESIGN AND IMPLEMENTATION OF ENTERPRISE CAMPUS NETWORK INFRASTRUCTURE
1777.	DESIGN AND RECOMMEND DATA ARCHIVAL STRATEGY FOR A LARGE DATA WAREHOUSE APPLICATION IN SQL SERVER
1778.	DESIGN OF 5G MOBILE ACCESS AND DIMENSIONING
1779.	DESIGN OF INVERSE PARTIAL RESPONSE SHAPING FILTER AND EQUALIZER FOR PAM SIGNALS AT RECEIVER TO REMOVE INTER SYMBOL INTERFERENCE
1780.	DESIGN OPTIMISATION IN NETWORK OPERATING SYSTEM
1781.	DESIGNING REPORTS FOR COMMUNITY HEALTH WORKER
1782.	DETECTING FRAUDULENT CLAIMS IN INSURANCE INDUSTRY USING MACHINE LEARNING
1783.	DETECTING INTERMITTENT HIGH CPU IN SWITCHES
1784.	DETECTION AND TRACKING MOVING OBJECT WITH DYNAMIC BACKGROUND FRAME SUBTRACTION
1785.	DEVELOP A QUANTITATIVE MODEL FOR USE IN PREDICTIVE ANALYTICS THAT HELPS PREDICT THE EFFECTIVENESS OF KEY TECHNICAL ANALYSIS RULES FOR STOCKS ACROSS MULTIPLE SECTORS IN THE INDIAN STOCK MARKET AND PROPOSE THE USAGE OF TECHNICAL ANALYSIS FOR HELP IN PREDICTIVE ANALYTICS FOR GLOBALLOGIC CUSTOMERS IN THE INVESTMENT/REGULATORY SECTOR
1786.	DEVELOPER CAPABILITY BASED TASK ASSIGNMENT
1787.	DEVELOPING A DASHBOARD FOR REAL-TIME MONITORING
1788.	DEVELOPING SEARCH OPEN API ON BIGDATA FOR INFORMATION RETRIEVAL IN SAP ARIBA CLM SUITE
1789.	DEVELOPMENT OF ONLINE SHOPPING CONTAINERIZED APPLICATION ON CLOUD
1790.	DEVELOPMENT OF VULNERABILITY ASSESSMENT TOOL FOR IOT DEVICES
1791.	DEVICE INTEGRATION WITH IOT PLATFORM AND APPLYING MACHINE LEARNING ON IOT DATA
1792.	DEVICE RISK REPUTATION SERVICES
1793.	DIAGNOSIS OF CANCER BASED ON PATHOLOGICAL HISTORY
1794.	DIARY WEB APP FOR DAY-TO-DAY LIFE
1795.	DIGITAL MOBILE PAYMENTS USING NFC
1796.	DIGITAL SOLUTIONS CHAT BOT: CONNECTING CLIENTS TO CUSTOMER SERVICES
1797.	DIGITAL TWIN - IOT SOLUTION TO POWER PLANT
1798.	DIGITALLY ENABLED,NON-INVASIVE METHOD TO DETECT AND PREDICT HUMAN AILMENTS WITH FOREWARNING CAPABILITY
1799.	DISASTER RECOVERY
1800.	DISASTER RECOVERY AND DATA-REPLICATION SETUP
1801.	DISEASE TRACKER
1802.	DISTRIBUTED TRACING AND LOG AGGREGATION ON MICRO-SERVICES
1803.	DREAM CASTLE PROJECTION
1804.	DTC (DELL TECHNOLOGIES CLOUD) MIGRATION
1805.	DUPLICATE, SIMILAR AND BLURRY IMAGE CLEANUP ON MOBILE DEVICE USING AI
1806.	DYNAMIC IDENTITY-BASED DETERMINISTIC MULTI-COPY INFORMATION CUSTODY IN MULTI-CLOUD REPOSITORY
1807.	DYNAMIC PRICING
1808.	DYNAMIC QUERY & FINANCIAL ANALYZER
1809.	DYNAMIC TEST PLANNING USING TEST CASE PRIORITIZATION FOR STORAGE DEVICES
1810.	DYNAMIC USER INTERFACE GENERATION USING JSON SCHEMA
1811.	E"BUSINESS ONLINE APPLICATION DEVELOPMENT
1812.	EFFECTIVE DATA WAREHOUSING FOR EFFORTLESS ANALYTICS
1813.	EFFECTIVE SCALING OF REAL TIME SYSTEMS USING CLOUD COMPUTING
1814.	EFFECTIVE SOURCING AND MAPPING OF CANDIDATES WITH JOB DESCRIPTION.
1815.	EFFECTIVELY MANAGING LEGACY SYSTEMS

S.No.	DISSERTATION TITLE
1816.	EFFECTS OF QUANTIZATION AWARE TRAINING ON MODEL PERFORMANCE AND ACCURACY
1817.	EFFICIENT DEPLOYMENT IN SINGLE CHANNEL ARCHITECTURE.
1818.	E-LEARNING PLATFORM ON CLOUD COMPUTING
1819.	EMAIL SENTIMENTAL ANALYSIS AND ESCALATION PREDICTION
1820.	EMERGENCY MEDICAL SERVICES
1821.	EMPIRICAL & THEORETICAL ANALYSIS OF COHESION
1822.	EMPLOYEE ACTIVITY TRACKER AT A LARGE SCALE USING DYNAMICS PLATFORM.
1823.	EMPLOYEE APPRAISAL APPLICATION
1824.	EMPLOYEE ATTRITION ANALYSIS AND FORECASTING
1825.	EMPLOYEE PROFILE MANAGEMENT
1826.	EMPLOYEE RECOMMENDATION SYSTEM BASED ON THE SKILL-SET
1827.	EMPLOYEE SELF SERVICE PORTAL - ANDROID APP
1828.	EMPLOYEE'S STATUS TRACKING SYSTEM
1829.	EMPOWERING PRODUCT OWNERS IN TAKING MORE DATA-DRIVEN AND CUSTOMER-DRIVEN DECISIONS
1830.	ENABLE DIGITAL TRANSFORMATION IN INVESTMENT BANKING
1831.	ENERGY AWARE CLUSTERING FOR WIRELESS SENSOR NETWORKS
1832.	ENERGY MANAGEMENT+ SPECIAL PROTECTION SYSTEM
1833.	ENGINEERING AIRCRAFT SIMULATOR RESEARCH AND DEVELOPMENT
1834.	ENHANCED SECURITY FOR SMART ENERGY SYSTEMS
1835.	ENHANCEMENT OF SECURITIES CLEARING AND SETTLEMENT USING BLOCKCHAIN
1836.	ENHANCING AIR TRAVEL EXPERIENCE WITH ANCILLARY SERVICES USING MOBILE TECHNOLOGIES
1837.	ENHANCING PACKET SCHEDULING BASED ON WEIGHTS
1838.	ENHANCING USER EXPERIENCE OF ORACLE INTEGRATION CLOUD SERVICE
1839.	ENTERPRISE CHANGE REQUEST DASHBOARD
1840.	ENTERPRISE CLOUD COMPUTING RESOURCE MONITORING
1841.	ENTERPRISE INTEGRATION HUB FOR HETEROGENEOUS SYSTEMS
1842.	ENTERPRISE LEARNING MANAGEMENT SYSTEM ARCHITECTURE
1843.	ENTERPRISE WIDE EMPLOYEE SURVEY LEVERAGING DATA ANALYTICS / DATA SCIENCE
1844.	ENTITY INFORMATION EXTRACTION FROM INVOICES
1845.	ERROR LOG ANALYSIS AND PREDICTION
1846.	ERRORMEMORY CONCEPT FOR CONVERGENCE INFOTAINMENT ECU - RH850 AS VEHICLE PROCESSOR
1847.	ESTABLISH GOVERNANCE CONTROLS ON MACHINE LEARNING MODELS TO IDENTIFY THE DRIFT ISSUES POST DEPLOYMENT AND TO MITIGATE THE SECURITY VULNERABILITIES.
1848.	ETHERNET DRIVER WITH AUDIO STANDALONE USECASE.
1849.	ETL PROCESS STANDARDISATION USING PYTHON, BIG DATA AND AIRFLOW ORCHESTRATION
1850.	EVALUATING QUANTITATIVE METHODS FOR FORECASTING VEHICLE SALES
1851.	EVALUATION OF SOFTWARE UNDERSTANDABILITY USING SOFTWARE METRICS
1852.	EVENT DRIVEN ARCHITECTURE IN CLOUD USING KAFKA
1853.	EVENTS ENTROPY
1854.	E-WASH
1855.	EXPLORATION OF NEW FEATURE FOR MOBILE ENVIRONMENT
1856.	EXPLORATIVE DATA ANALYSIS AND INGRESS PATH IN APPTIO
1857.	EXPLORING ROBOTIC PROCESS AUTOMATION IN AUTOMATING PROCESSES OF THE PLANVIEW EPM SYSTEM
1858.	FACE DETECTION AND RECOGNITION SYSTEM
1859.	FACE RECOGNITION
1860.	FACIAL EMOTION DETECTION USING MACHINE LEARNING
1861.	FAILURE ANALYSIS
1862.	FAKE CANDIDATE DETECTION
1863.	FAKE NEWS DETECTION ON SOCIAL MEDIA : A LEANING BASED APPROACH
1864.	FCAPS : FAULT MANAGEMENT IN EMS/NMS
1865.	FIELD SERVICE AGENT SCHEDULE OPTIMIZATION
1866.	FINANCE EXPENSE ANALYTICS

S.No.	DISSERTATION TITLE
1867.	FINANCIAL FRAUD DETECTION AND PREVENTION USING MACHINE LEARNING AND GRAPH DATABASE
1868.	FINANCIAL SECURITY MANAGEMENT SYSTEM
1869.	FINDING SIMILAR CONTENT IN THE MOS KNOWLEDGE DATABASE FOR CUSTOMER QUERIES
1870.	FINDING SIMILAR IDEAS IN IDEA MANAGEMENT APPLICATION USING MACHINE LEARNING
1871.	FIRST NOTICE OF LOSS (FNOL) EVENT ANALYSIS AND CLASSIFICATION FOR INSURANCE CLAIM PROCESSING
1872.	FLEXIBLE CLOUD BASED PRODUCT CONFIGURATION ENGINE FOR EXISTING MONOLITHIC SYSTEM
1873.	FLEXIBLE/COST EFFECTIVE LEARNING ENGAGEMENT WITH PROMINENT ANALYTICS
1874.	FLIGHT DELAY ANALYSIS
1875.	FOG COMPUTING LEVERAGING CROWD SOURCED RESOURCES
1876.	FOOD PRICE FORECASTING
1877.	FOOD VALUE CHAIN ENHANCEMENT THROUGH DATA SCIENCE
1878.	FOR EACH VALIDATION CYCLE, TEST CASE SELECTION ON BASIS OF RESOLVED ISSUES AND CHANGES ADDED IN THE INGREDIENTS
1879.	FRAMEWORK AND DESIGN FOR PEGA APPLICATION
1880.	FRAUD DETECTION " DETECTION OF FRAUD IN CREDITCARD TRANSACTION BY CUSTOMERS
1881.	FRAUD DETECTION IN PAYMENT SYSTEM THROUGH DATA MINING
1882.	FRAUDULENT CLAIM DETECTION
1883.	FUNCTIONAL TEST FRAMEWORK FOR HORIZON REST APIS
1884.	GAME RECOMMENDATION SYSTEM FOR CASINOS
1885.	GAN : THE FUTURE OF ONLINE FASHION
1886.	GENERATING HUMAN MOTIONS FROM POSES USING VIDEO TO VIDEO SYNTHESIS
1887.	GENERIC DW UNIFIED DIMENSIONAL MODELING (SSAS CUBE) PROCESSING & AUTOMATION THROUGH SSIS & XMLA
1888.	GEOSPATIAL LOCATION MAPPING SYSTEM
1889.	GEO-TARGETING MESSAGES AND ALERTS: APPROACHES AND TECHNIQUES
1890.	GIZMO - A WIRELESS STORAGE MEDIA DRIVE
1891.	GOBGP BASED ROUTE PROGRAMMING TO ENHANCE THE SPEED AND PERFORMANCE.
1892.	GOOGLE ASSISTANT INTEGRATION WITH BLOOMREACH CMS
1893.	GOOGLE CLOUD DATAFLOW IMPLEMENTATION OF PUB/SUB TO DYNAMIC BIG QUERY TABLE INGESTION
1894.	GOOGLE CLOUD STORAGE: MANAGING BUCKETS, ACCESS CONTROL & ARCHIVING
1895.	GPU-ACCELERATED DATA ANALYTICS
1896.	GRADIENT DESCENT FOR NON-CONVEX PROBLEM OPTIMIZATION
1897.	GROCERIES DETECTION & ANALYSIS USING YOLO IN DEEP LEARNING
1898.	GROWTH ANALYSIS OF ERP SYSTEMS USING POWERBI
1899.	HAND SIGN DETECTION USING AI
1900.	HANDLING SKEWS IN DISTRIBUTED MESSAGING SYSTEMS
1901.	HANDWRITTEN RECOGNITION
1902.	HEALTHCARE SUPPLY CHAIN INTEGRATION USING BOOMI
1903.	HEAVY MACHINERY ACTION RECOGNITION USING MACHINE LEARNING
1904.	HELP DESK FOR IT INFRASTRUCTURE SERVICES
1905.	HOLOLENS DYNAMICS 365 " REMOTE ASSIST (MIXED REALITY FOR YOUR BUSINESS)
1906.	HOPONBOT: CHAT BOT FOR NEW JOINERS
1907.	HOUSE PRICES PREDICTION AND ANALYSIS
1908.	HOUSING SOCIETY OR BUSINESS PARK MAINTENANCE APPLICATION
1909.	HR ANALYTICS TO PREDICT EMPLOYEE ATTRITION
1910.	HR RECRUITMENT & ON-BOARDING PROCESS AUTOMATION USING RPA
1911.	HRBOT : CHAT BOT FOR HR OPERATIONS
1912.	HUMAN MACHINE INTERFACE FOR UNDERGROUND MINING
1913.	HUMAN RESOURCES DATA ANALYSIS
1914.	HVAC EQUIPMENT NOISE ANALYSIS USING AUDIO TO DETECT ANOMALIES IN BUILDING
1915.	IBM INTEGRATION BUS MONITORING WITH APPDYNAMICS FOR PERFORMANCE IMPROVEMENT AND AUTOMATION
1916.	IDENTIFICATION OF CONSUMER WATER USAGE PATTERNS USING MACHINE LEARNING

S.No.	DISSERTATION TITLE
1917.	IDENTIFICATION OF FRAUDULENT RETURNS USING DATA MINING
1918.	IDENTIFY AND FILL PROJECT MANAGEMENT GAPS OF SCRUM METHODOLOGY FULFILLED BY OTHER INDUSTRY LEADING METHODOLOGIES BY PMBOK/SCALED AGILE/PRINCE2/DEVOPS
1919.	IDENTIFY PROBLEM TYPE AND SEVERITY AND SET COURSE OF RESOLUTION.
1920.	IDENTIFYING RELATIONSHIPS BETWEEN ENTITIES IN INDIAN EPICS
1921.	IDENTIFYING STRAY RESOURCES FOR OPTIMISING COST IN CLOUD COMPUTING ENVIRONMENT
1922.	I-ETL: INTELLIGENT ASSISTANT FOR ETL MANAGEMENT
1923.	IGMP SNOOPING DOCKER SUPPORT FOR AZURE/SONIC SWITCH
1924.	IGNITE AND RPA - INTELLIGENT AUTOMATION TESTING IS THE FUTURE
1925.	IMAGE CAPTION GENERATOR FOR VISUALLY IMPAIRED USING DEEP LEARNING
1926.	IMAGE CLASSIFICATION ON STM32 MICROCONTROLLER
1927.	IMAGE DEHAZING USING DEEP LEARNING
1928.	IMAGE RECOGNIZE CLASSIFICATION & PREDICTION
1929.	IMPLEMENT OBSERVABILITY INTO A DISTRIBUTED APPLICATION USING TRACING
1930.	IMPLEMENTATION OF "PRODUCT BUILDER" TOOL IN PLM.
1931.	IMPLEMENTATION OF CAN (CONTROLLER AREA NETWORK) BETWEEN THE ECUS (ELECTRONIC CONTROL UNIT)
1932.	IMPLEMENTATION OF COMPLIANCE DASHBOARD IN FILECLOUD
1933.	IMPLEMENTATION OF FEDERATED ORACLE HOME
1934.	IMPLEMENTATION OF MICRO-SERVICE FOR BANKING PRODUCT : MIGRATION OF TIGHTLY COUPLED ARCHITECTURE TO MICRO-SERVICES ARCHITECTURE
1935.	IMPLEMENTATION OF REAL - TIME RECOMMENDER SYSTEMS FOR BLOG POST
1936.	IMPLEMENTATION OF RING BUFFER IN LOW LATENCY HIGH THROUGHPUT SYSTEM FOR PERFORMANCE ENHANCEMENT
1937.	IMPLEMENTATION OF SOFTWARE TESTING AND QUALITY ASSURANCE IN AGILE METHODOLOGY
1938.	IMPLEMENTATION OF TRANSCATIONS IN MICROSERVICE ARCHITECTURE
1939.	IMPLEMENTING BLOCKCHAIN TECHNOLOGY APPLICATIONS ON BANKING TRANSACTIONS RECORDED USING MINING AND ACHIEVING ROOT CAUSE ANALYSIS (RCA) ON INTERNET OF THINGS (IOT).
1940.	IMPLEMENTING HR AND PAYROLL MODULE
1941.	IMPLEMENTING NEARSHORING
1942.	IMPROVE THE HYPER COLLABORATION USING AGILE PRODUCT MANAGEMENT
1943.	IMPROVED PANOPTIC SEGMENTATION FOR AUTONOMOUS DRIVING ON INDIAN ROAD SCENARIOS
1944.	IMPROVEMENT IN 5G RADIO RESOURCE MANAGEMENT OVER 4G
1945.	IMPROVEMENT OF CUSTOMER SATISFACTION THE SIX SIGMA WAY USING ROBOTIC PROCESS AUTOMATION
1946.	IMPROVING ACCURACY IN ETA CALCULATION
1947.	IMPROVING ATM SECURITY USING FACE DETECTION, OTP AND VIRTUAL KEYPAD
1948.	IMPROVING COMPUTATION PERFORMANCE AND DATA VISUALIZATION BY LEVERAGING GPU AND SPATIAL SEARCH ALGORITHMS
1949.	IMPROVING CUSTOMER SUPPORT USING RECOMMENDER SYSTEM
1950.	IMPROVING DEVICE SECURITY OF SMART DEVICES USING MACHINE LEARNING
1951.	IMPROVING FAULT TOLERANCE OF SAFETY CRITICAL AUTOMOTIVE SYSTEM USING CUSTOMIZED MONITORING SOFTWARE
1952.	IMPROVING SNAG DATA ANALYSIS USING MACHINE LEARNING
1953.	IMPROVING TARGETED ADVERTISING USING MACHINE LEARNING TECHNIQUES
1954.	INCREDIBLE INDIA - 5 TRILLION ECONOMY!
1955.	INCREMENTAL BACKUP OF NAS SHARES IN NETBACKUP USING CHANGED FILES INFORMATION
1956.	INDUSTRIAL INTELLIGENCE
1957.	INFORMATICA WORKFLOW INVENTORY
1958.	INFORMATION RETRIEVAL CUSTOMER SERVICE AUTOMATED MONITORING
1959.	INFORMATION RETRIEVAL USING DOMAIN SPECIFIC DICTIONARY
1960.	INGESTION FRAMEWORK USING CLOUD RESOURCES
1961.	INNOVATIVE IDEA PORTAL
1962.	INSIGHTS AND SOLUTIONS TO DRONE ATTACKS
1963.	INSURANCE NEWBUSINESS APPLICATION

S.No.	DISSERTATION TITLE
1964.	INTEGRATED CHATOPS
1965.	INTEGRATED COMMUNICATION SYSTEM FOR OPERATIONAL FORCES
1966.	INTEGRATED TEST AUTOMATION FRAMEWORK USING KATALON STUDIO
1967.	INTEGRATION OF LEGACY AND IP NETWORKS FOR TACTICAL COMMUNICATION
1968.	INTEGRATIONS HUB FOR PRODUCT PLATFORM
1969.	INTELLIGENT CHAT BOT
1970.	INTELLIGENT DELEGATION SYSTEM
1971.	INTELLIGENT DERMOSCOPY APPLICATION
1972.	INTELLIGENT FINANCE
1973.	INTELLIGENT MERCHANT OUTLOOK USING MACHINE LEARNING
1974.	INTELLIGENT PACKET PROCESSING
1975.	INTELLIGENT ROAD TRAFFIC ROUTING SYSTEM
1976.	INTELLIGENT TEXT SUMMARIZER USING ONLINE AND OFFLINE DATA
1977.	INTELLIGENT UPSKILLING, CAREER PLANNING AND COMPETENCE IDENTIFICATION.
1978.	INTELLIGENT VIDEO SURVEILLANCE WITH DEEP LEARNING
1979.	INTELLIGENT VOICE ASSISTANT FOR MONITORING APPLICATIONS USING ALEXA
1980.	INTELLIGENT KUBERNETES ORCHESTRATION OF MULTI TENANT APPLICATION
1981.	INTRODUCING ML TO IMPROVE USER EXPERIENCE BY GIVING UPFRONT SEARCH SUGGESTIONS
1982.	INVESTIGATION AND ANALYSIS OF VARIOUS ALGORITHMS FOR PATTERN RECOGNITION IN DISEASE DETECTION OF HUMAN BEINGS
1983.	INVOICE TO CASH
1984.	IOT BASED CRADLE SYSTEM FOR CHILD CARE
1985.	IOT CONNECTED CARS USER DATA EVALUATION - NAIVE BAYES CLASSIFIER VS LOGISTIC REGRESSION ON OPENSHIFT
1986.	IPL WIN PREDICTOR USING REGRESSION, CLASSIFICATION AND ANN TECHNIQUES
1987.	ISRO/DOS PFMS WEB SERVICES INTERFACE SYSTEM (IPWS)
1988.	IT TICKET CLUSTERING AND AUTO ASSIGNMENT
1989.	JIRA SOLUTION CHATBOT: USER FRIENDLY TROUBLESHOOTER
1990.	JUNOS BASED NFX FIPS CERTIFICATION
1991.	KNOWLEDGE BASE BASED ON INFORMATION RETRIEVAL
1992.	KNOWLEGE GRAPH AND PATH FINDER
1993.	KUBERNETES FOR CONTAINERIZED APPLICATIONS
1994.	LABORATORY REAGENT INVENTORY MANAGEMENT BY DEMAND FORECASTING
1995.	LARGE DATA FILE PROCESSING WITH REAL TIME APPLICATION PERFORMANCE TUNER
1996.	LEAD SCORE PREDICTOR
1997.	LEARNING BASED ANALYSIS OF GPU PERFORMANCE AND BOTTLENECKS
1998.	LEARNING DEEP FEATURES FOR SCENE RECOGNITION USING PLACES DATABASE
1999.	LEARNING MANAGEMENT SYSTEM DATA MIGRATION THROUGH HADOOP ENTERPRISE DATA HUB
2000.	LED LIGHT COLOR SENSING USING CAMERA
2001.	LEGACY SOFTWARE MODERNIZATION USING CLOUD COMPUTING AND MICROSERVICES
2002.	LEVERAGING THE HARDWARE ACCELERATION WITH PARTIALLY FROZEN NEURAL NETWORKS FOR EFFICIENT COMPUTER VISION SYSTEMS
2003.	LEVERAGING THREAT INTELLIGENCE FOR PREVENTING CYBER ATTACKS
2004.	LISTINGS SEARCH EXPERIENCE
2005.	LOAN CREDIT ANALYSIS
2006.	LOAN CREDIT SYSTEM
2007.	LOCALIZATION OF SAAS SOLUTION
2008.	LOG BASED RESILIENT REPORTING
2009.	LOW POWER IN ANDROID WEAR DEVICE
2010.	LUNG CANCER DETECTION USING X-RAY IMAGE
2011.	MACHINE LEARNING & INFORMATION RETRIEVAL IN IT SERVICE MANAGEMENT
2012.	MACHINE LEARNING APPROACH FOR PREDICTING SUICIDAL BEHAVIOR IN SOCIETY
2013.	MACHINE LEARNING BASED APPROACH FOR LITHIUM ION BATTERY AGING PREDICTION
2014.	MACHINE LEARNING BASED EMPLOYEE PERFORMANCE EVALUATION

S.No.	DISSERTATION TITLE
2015.	MACHINE LEARNING BASED ENSEMBLE MODEL FOR PREDICTION OF HEART DISEASE
2016.	MACHINE LEARNING BASED TEST SEQUENCER
2017.	MACHINE LEARNING FOR HIGH SPEED SIMULATIONS
2018.	MACHINE LEARNING IN AUTOMOBILE
2019.	MACHINE LEARNING USE CASE
2020.	MACHINE LEARNING USE CASES IN ENTERPRISE PROCUREMENT/ MATERIALS MANAGEMENT/ SUPPLY CHAIN BUSINESS PROCESSES
2021.	MACHINE LEARNING USING LOGISTIC REGRESSION
2022.	MACHINE-LEARNING BASED CONVERSATIONAL DIALOG ENGINE
2023.	MAGENTO BASED ECOMMERCE WEBSITE CUSTOMIZATION
2024.	MAINFRAME BATCH WORKLOAD MIGRATION TO CLOUD BASED DISTRIBUTED PROCESSING FRAMEWORK
2025.	MAINFRAME MODERNIZATION - USING TECHNOLOGIES LIKE APIS, KAFKA, CHAT BOT -
2026.	MAKING INSURANCE APPLICATION IN CLOUD
2027.	MALARIAL DRUG BIOACTIVITY PREDICTION USING MACHINE LEARNING APPROACH
2028.	MANAGED CDN WITH PLATFORM AS A SERVICE
2029.	MANAGING INFRASTRUCTURE MIGRATION FOR ACQUISITIONS AND MERGERS IN IT
2030.	MANAGING THE MESSAGE LOGS FROM SAP CLOUD PLATFORM INTEGRATION
2031.	MANAGING WORLD-WIDE LARGE CHAIN OF HOTELS AND ERP DATABASE PERFORMANCE, BACKUP AND RECOVERY & SECURITY IN CLOUD
2032.	MANUFACTURING PROCESS TRACKING SYSTEM
2033.	MAXIM-GUN:- PERFORMANCE AS A SERVICE
2034.	M-DIFF TOOL (MODEM CONFIGURATION DIFFERENCE REPORT TOOL.)
2035.	MEASURING SUCCESS OF MULTIPLE PROJECTS DYNAMICALLY
2036.	MECHANISM TO IMPROVE THE CREATION OF BUILDING'S ASSET KNOWLEDGE GRAPH FROM RAW SENSOR NAMES.
2037.	MEDIA PLAYER AND ANALYZER FOR TRANSPORT STREAMS AND ELEMENTARY STREAMS
2038.	MEDIA PROJECT MANAGEMENT SYSTEM ARCHITECTURE
2039.	MEDIBOT - THE CLINICIANS VIRTUAL ASSISTANT
2040.	MEETING SCHEDULAR MANAGEMENT
2041.	MEMBER EXPERIENCE PRODUCTIZATION
2042.	MEMBER PORTAL MANAGEMENT USING SITECORE HOSTED ON AWS PLATFORM
2043.	MERCAHANT AID
2044.	MESSAGE LOADBALANCER WITH SOAP-REST CONVERTER
2045.	MESSAGING ENHANCEMENTS IN RCS APPLICATION USING NATURAL LANGUAGE PROCESSING
2046.	METRIC DEVELOPMENT KIT (MDK)
2047.	METROLOGY DATA IMPORT AUTOMATION
2048.	MICROSOFT DYNAMICS WEB EXTENSION: AN ERP TO WEB APPLICATION INTEGRATION
2049.	MIDDLEWARE INTEGRATION
2050.	MIDDLEWARE PLUGIN DEVELOPMENT FOR SNOWFLAKE
2051.	MIGRATION OF BANKING DOCUMENT MANAGER• TO CLOUD
2052.	MILITARY STRATEGIC SIMULATION AND TRAINING APPLICATION
2053.	MINING USER LOGS TO PREDICT AND ISOLATE BUGS IN AN AUTOMATED WAY
2054.	ML BASED GPU DYNAMIC CLOCK AND VOLTAGE SCALING FOR HANDHELD DEVICES
2055.	ML BASED LEARNING FOR GPU MEMORY BANDWIDTH AND PERFORMANCE OPTIMIZATION
2056.	MOBILE APP SOLUTION DEVELOPMENT
2057.	MOBILE APPLICATION FOR HOTEL MANAGEMENT SYSTEM
2058.	MOBILE EDGE COMPUTING
2059.	MODEL QUALITY MONITOR
2060.	MODELLING ASTRONOMICAL SPECTRA: FEATURE EXTRACTION TO STUDY THE PHYSICS OF CELESTIAL SOURCES.
2061.	MONITORING OF TELEPHONY DEVICES TO REDUCE MTTD AND MTTR USING C1A MONITORING PLATFORM
2062.	MONOLITH TO MICROSERVICES - MODERN WAY OF SOFTWARE DEVELOPMENT
2063.	MOVIE RECOMMENDATION SYSTEM USING MACHINE LEARNING
2064.	MOVIE RECOMMENDER SYSTEM

S.No.	DISSERTATION TITLE
2065.	MOVING ACCOUNT CENTRIC APPLICATIONS TO CLIENT CENTRIC
2066.	MOVING APPLICATIONS TO CLOUD USING DOCKER AND KUBERNETES
2067.	MULTI RATE SCHEDULER FOR REAL TIME SYSTEMS
2068.	MULTIMEDIA CAMERA SOFTWARE DEVELOPMENT
2069.	MULTI-TOOL INTEGRATION FOR AUTOMATION
2070.	MUR READ UPLOAD TOOL
2071.	NAMED ENTITY RECOGNITION
2072.	NATURAL LANGUAGE PROCESSING
2073.	NCAT - COLLECT ANALYSE TRAIN
2074.	NER SEARCH AND REPORTING API
2075.	NETSPAM: A NETWORK-BASED SPAM DETECTION FRAMEWORK FOR REVIEWS IN ONLINE SOCIAL MEDIA
2076.	NETWORK CHANGE APPROVAL MANAGEMENT
2077.	NETWORK CONFIG TRANSLATION: A VENDOR AGNOSTIC APPROACH
2078.	NETWORK LOGGING MANAGEMENT
2079.	NETWORK MANAGEMENT & ACCESS CONTROL
2080.	NETWORK MANAGEMENT TOOL
2081.	NETWORK PRIORITIZATION IN 5G HETEROGENEOUS NETWORKS
2082.	NETWORK PRIORITIZATION IN 5G HETEROGENEOUS NETWORKS
2083.	NETWORK SECURITY AT ORGANISATIONAL LEVEL FOR SECURITY FORCES
2084.	NETWORK SIMULATION USING GNS3
2085.	NEW ERA DATA VISUALIZATION IN IN-MEMORY APPS
2086.	NFS V4 PERFORMANCE IMPROVEMENT ON HP-UX OS
2087.	NLP BASED Q&A SYSTEM
2088.	NON DISCLOSURE AGREEMENT PROCESS TOOL
2089.	OBJECT DETECTION FROM SATELLITE/AERIAL IMAGERY
2090.	OBJECT DETECTION ON ELECTRONIC PCB
2091.	OBJECT REPOSITORY SUPPORT TO HANDLE MULTIPLE LOCATORS FOR CATCHING NO SUCH ELEMENT EXCEPTION -XFRAMIUM
2092.	OFFICE AUTOMATION SYSTEM HOSTED ON AZURE CLOUD
2093.	ON THE DESIGN OF AN E HEALTH SYSTEM FOR MANAGEMENT OF PATIENTS IN OUT-OF-HOSPITAL CARE
2094.	ONLINE COMPUTER LAB SOFTWARE MANAGEMENT SYSTEM FOR FACULTY AND RESEARCH SCHOLARS
2095.	ONLINE RECRUITMENT PROCESS
2096.	OOAD BASED INTERACTIVE UI PLATFORM TO STRESS AND ANALYZE WINDOWS COMPUTE DEVICES
2097.	OPENWRT BASED WIFI EXTENDER & LOAD BALANCING IN MULTI-WAN
2098.	OPERATIONAL MAINTENANCE AND BILLING AUTOMATION OF SENIOR CARE APARTMENTS
2099.	OPPORTUNITY MANAGEMENT AND CUSTOMER CARE LIFECYCLE DESIGN AND DEVELOPMENT IN SALESFORCE
2100.	OPTICAL CHARACTER RECOGNITION
2101.	OPTIMAL RECONSTRUCTION PARAMETERS FOR SKULL UNFOLDING
2102.	OPTIMISED SHIPMENT PICKER FOR WAREHOUSE
2103.	OPTIMIZATION OF COMPLEXYOLO FOR REAL TIME OBJECT DETECTION AND DEVELOPMENT OF REAL TIME OBJECT TRACKING
2104.	OPTIMIZATION OF DATA IMPUTATION TECHNIQUES
2105.	OPTIMIZATION OF LEADERBOARD OF FANTASY CRICKETÂ APPLICATION
2106.	OPTIMIZATION OF MC(METHYLENE CHLORIDE) ANALYZER PERFORMANCE IN TREATMENT OF DRAINAGE WATER
2107.	ORACLE E-BUSINESS SUITE AND DATABASE SETUP ON VIRTUAL MACHINE AND NETWORK CONNECTIVITY
2108.	ORACLE PEOPLESOFT TO ORACLE HCM CLOUD INCREMENTAL LOAD INTEGRATOR
2109.	ORT AUTOMATION
2110.	OUR FUTURE IN THE CLOUD
2111.	OUTPUT FORM COMPARATOR
2112.	PARKING LOT RESERVATION SYSTEM
2113.	PATIENT DATABASE SYSTEM WITH RISK PREDICTION
2114.	PATIENT POPULATION POOLING

S.No.	DISSERTATION TITLE
2115.	PATTERN BASED SOFTWARE ARCHITECTURE: A AUTOMATION SOFTWARE
2116.	PAYMENT REVERSAL AUTOMATION
2117.	PEER TO PEER ROUTING.
2118.	PERFORMANCE AND USER EXPERIENCE METRICS, MONITORING, ALERTING AND ANALYTICS TOOL
2119.	PERFORMANCE ENHANCEMENT OF LEVEL 2 PROCESS CONTROL IN NEW PLATE MILL PLANT, ROURKELA STEEL PLANT
2120.	PERFORMANCE IMPROVEMENT IN BROADBAND NETWORK SUBSCRIBER MANAGEMENT
2121.	PERFORMANCE METRIC EVALUATION IN ORDER PROCESSING
2122.	PERSONALIZED E-COMMERCE THROUGH ML
2123.	PHILIPS B2B CUSTOMER SHOULD BE ABLE TO RECEIVE TRACK & TRACE INFORMATION WHEN ORDERED GOODS ARE SHIPPED
2124.	PLANT INFORMATION AND MANAGEMENT SYSTEM
2125.	PLAYSCHOOL WORK MANAGEMENT SYSTEM (USING BPMN2.0, NODE.JS, REACT AND MONGODB)
2126.	PORTFOLIO AND LOAN RISK ANALYTICS
2127.	PORTFOLIO OF IMPROVED AND UN-INTERRUPTED COMMUNICATION SERVICE
2128.	POS DATA ANALYTICS
2129.	POST SYNTHESIS DEBUG CORE INSERTION FLOW
2130.	POWER BI DATA SET REFRESH AUTOMATION
2131.	POWER THEFT IDENTIFICATION USING PREDICTIVE ANALYTICS
2132.	POWERACTIONSÂ„¢ FOR MOBILEMETRICSÂ® - AN INTELLIGENT AI-BASED ACTIVITY RECOMMENDATION ENGINE FOR ASSISTING EXPERIENCED USERS OF THE APPLICATION
2133.	PREDICT MERCHANTS OPEN FOR BUSINESS BASED ON REAL TIME TRANSACTION DATA
2134.	PREDICT STOCK PRICES USING MACHINE LEARNING
2135.	PREDICTING CPB(CUSTOMER PURCHASE BEHAVIOR) SCORE FOR NEW VENDOR RECOMMENDATION
2136.	PREDICTING DEVICE ALERT POLICY USING AI/ML
2137.	PREDICTING EMPLOYEE CHURN
2138.	PREDICTING SOLUTIONS FOR COMMON ERRORS - A CLASSIFIER MODEL
2139.	PREDICTION OF DIABETES BY FINDING ACCURACY USING MACHINE LEARNING APPROACH
2140.	PREDICTIVE ANALYSIS OF COVID CASES
2141.	PREDICTIVE ANALYSIS ON MISSION CRITICAL NETWORK LINKS
2142.	PREDICTIVE ANALYTICS AT THE EDGE
2143.	PREDICTIVE ANALYTICS OF MOVIE REVIEW USING MACHINE LEARNING AGAINST TWITTER FEED
2144.	PREDICTIVE ANALYTICS USING MACHINE LEARNING
2145.	PREDICTIVE MAINTENANCE
2146.	PREDICTIVE MAINTENANCE OF ATM USING MACHINE LEARNING
2147.	PREDICTIVE PATIENT CARE USING DATA MINING
2148.	PREDICTIVE SYSTEM FOR ECOMMERCE BUSINESS USING MACHINE LEARNING ALGORITHM
2149.	PREDICTIVE TREATMENT FOR CHRONIC DISEASE MANAGEMENT
2150.	PRELIMINARY CLASSIFICATION OF CUSTOMER SERVICE REQUESTS FROM NETWORKING DEVICE LOG THROUGH APPLICATION OF MACHINE LEARNING AND DATA MINING ALGORITHMS
2151.	PREVENTING STRANGERS ACCESSING SYSTEM USING ARTIFICIAL NEURAL NETWORK
2152.	PREVENTIVE MAINTENANCE IN INDUSTRIAL AUTOMATION WITH AI/ML
2153.	PRIVACY AND CONSENT MANAGEMENT WITH BLOCKCHAIN
2154.	PRIVATE BIGDATA CLOUD, LIVE DATA MIGRATION: USING HADOOP DISTRIBUTION
2155.	PRODUCT CLASSIFIER
2156.	PRODUCT HEALTH ANALYSIS " DETECTION OF HATE FEEDBACK POSTED BY CUSTOMERS
2157.	PRODUCT LIFECYCLE MANAGEMENT - ORGANISATIONAL PERSPECTIVES
2158.	PRODUCT RECOMMENDATIONS USING COLLABORATIVE FILTERING
2159.	PRODUCTION OPTIMIZATION - OPTIMIZING CONTROL PARAMETERS USING MACHINE LEARNING
2160.	PRODUCTION SUPPORT CHAT BOT
2161.	PRODUCTIVITY IMPROVEMENT FOR DATA ENGINE COMPONENT OF ALBRIDGE WEALTH REPORTING
2162.	PROJECT ABHI (ARTIFICIAL BRAIN WITH HUMAN INTELLIGENCE)
2163.	PROJECT COST ESTIMATION TECHNIQUES
2164.	PROJECT MANAGEMENT REPORTING TOOL

S.No.	DISSERTATION TITLE
2165.	PROJECT RELATED TO EDUCATION PORTAL DEPLOYED ON CLOUD.
2166.	PROMOTIONAL SALES UPLIFT ANALYSIS USING DATA ANALYTICS TECHNIQUES
2167.	PRONTO - MINI SEARCH ENGINE
2168.	PROPENSITY TO BUY A MACHINE LEARNING PREDICTIVE DATA MODEL
2169.	PROPOSING CLOUD COMPUTING METHODOLOGIES IN SAP HR MODULE OF NHAI
2170.	PROPOSING RIGHT UPDATES FOR THE ORGANIZATION BASED ON SIMILARITY NEEDS
2171.	PROTECTED BANKING VERIFICATION BY FIGURE PIXEL COMPARISON AND BIT COIN TRANSACTION
2172.	PROVIDING INTELLIGENCE TO THE DOCUMENT UPLOADED TO EIM SYSTEM FROM CONTENT USING THE ML MODELS GENERATED FROM THE GOOGLE CLOUD
2173.	PUBLIC SAFETY AND PROPERTY MANAGEMENT
2174.	PURCHASE AUTOMATION FOR NIPER GUWAHATI
2175.	PYTHON TEST AUTOMATION FRAMEWORK
2176.	QUALITY DASHBOARD
2177.	QUALITY OF SERVICE IN IP NETWORKS
2178.	QUANTITATIVE ANALYSIS OF CLOUD FAILURES IN THE HYPERSCALE CLOUD ENVIRONMENT
2179.	QUEST MARINE HULL
2180.	QUICK SLIP (CLOUD BASED APPLICATION)
2181.	RADIO ACCESS NETWORK ELEMENTS PERFORMANCE PREDICTION USING MACHINE LEARNING
2182.	RANDOM FOREST ALGORITHM - DECISION TREES
2183.	RANKED SEARCH FOR ENTERPRISE DOCUMENTS
2184.	REAL TIME ANALYSIS OF LEARNER ENROLLMENTS AND SEARCH PATTERN ON LEARNING PLATFORM
2185.	REAL TIME CUSTOMER FEEDBACK SYSTEM
2186.	REAL TIME DRIVER DROWSINESS DETECTION SYSTEM BRING-UP ON A MULTI-CORE EMBEDDED PLATFORM (TDA2X EVM)
2187.	REAL TIME FACE-MASK DETECTION USING CONVOLUTIONAL NEURAL NETWORK FOR COVID-19 PROTECTION.
2188.	REAL TIME FRAUD DETECTION ON CLOUD COMPUTING PLATFORM USING AZURE
2189.	REAL TIME MONITORING DATA AGGREGATION SYSTEM
2190.	REAL TIME TRAFFIC MONITORING & DATA VISUALIZATION
2191.	REALIZATION OF PRODUCT LIFE CYCLE AND PRICE MANAGEMENT FOR ENTERPRISE COMPONENT ENGINEERING DATA
2192.	REAL-TIME INTELLIGENT CREDIT DECISIONING USING SAS IN-MEMORY ANALYTICS
2193.	REAL-TIME OBJECT DETECTION AND FEATURE RECOGNITION USING COMPUTER VISION AND DEEP LEARNING TECHNIQUES.
2194.	REAL-TIME OPERATIONAL REPORTING USING STREAMING & DISTRIBUTED SYSTEMS, IN A ON-PREMISE CLOUD, USING FOSS
2195.	REAL-TIME STREAM DATA PROCESSING: AN IMPLEMENTATION OF DISTRIBUTED COMPUTATION OF REAL-TIME STREAM DATA
2196.	RECOMMENDATION ENGINE FOR MOVIE RECOMMENDATION USING MACHINE LEARNING
2197.	RECOMMENDATION ENGINE TO PROVIDE PARTS RECOMMENDATION BASED ON USER PROFILE AND ERROR CODE
2198.	RECOMMENDATION SYSTEM- CLIENT PAYMENT DEFAULTS
2199.	RECOMMENDING SOLUTIONS FOR BUSINESS QUERIES USING KDD
2200.	REDUCING ORACLE'S SIEBEL CRM APPLICATION CRASHES - APPLIED ANALYTICS SOLUTION
2201.	REDUCING THE LICENSE COST OF THE 'BIOMETRIC ENGINE' WITHOUT COMPROMISING ITS BEHAVIOUR BY USING AI/ML TECHNIQUES
2202.	REINTERPRETING CORONA AS CODED SENTIMENTS
2203.	RELEVANT DOCUMENT RETRIEVAL ENABLED SEARCH WITH SENTIMENT ANALYSIS
2204.	RELIABLE FILE TRANSFER SERVER OVER UDP
2205.	REMOTE ACCESS AND CONTROL OF IOT ENABLED EDUCATIONAL AND ENTERTAINMENT GADGETS
2206.	REMOTE MANAGEMENT OF REAL-TIME AIRPLANE DATA
2207.	REMOTE TERMINAL UNIT
2208.	RESEARCH OCTANE NUMBER (RON) PREDICTION OF FUEL USING NIR SPECTROSCOPY DATA
2209.	RESEARCH ON ARTIFICIAL INTELLIGENCE IN SOFTWARE TESTING AND QUALITY ASSURANCE
2210.	RESERVATION SYSTEM

S.No.	DISSERTATION TITLE
2211.	RESIDUAL SIDE BAND IMAGE SUPPRESSION AT RECEIVERS: SW IMPLEMENTATION.
2212.	RESIDUAL SIDEBAND IMAGE SUPPRESSION FOR SU6GHZ TRANSMITTERS
2213.	RESILIENT DATA DEDUPLICATION SOLUTION AGAINST STORAGE, NETWORK AND NODE FAILURES FOR LONG TERM RETENTION AND ARCHIVAL.
2214.	RESOURCE MANAGEMENT USING MACHINE LEARNING MODEL
2215.	RESTFUL SERVICE BASED SYSTEM FOR AUTOMATED NOTIFICATION DELIVERY
2216.	RESUME ANALYSIS: UNDERSTANDING A PROFILE BY EXTRACTING INFORMATION
2217.	REVENUE MAXIMIZATION FOR IT DISTRIBUTION BUSINESS IN MIDDLE EAST AND AFRICA REGION
2218.	REVIEW ANALYSER FRAMEWORK
2219.	REVIEW ANALYSIS USING SENTIMENT CLASSIFIER AND NLP
2220.	REVIEW ANALYZER
2221.	REVOCABLE IDENTITY BASED BROADCAST PROXY RE-ENCRYPTION FOR DATA SHARING IN CLOUD
2222.	RIG ACTIVITY IDENTIFICATION USING MACHINE LEARNING AND ASSOCIATED CHALLENGES
2223.	RISK MANAGEMENT SYSTEM
2224.	ROAD ACCIDENT ANALYSIS OF INDIA USING MACHINE LEARNING
2225.	ROBOTIC PROCESS AUTOMATION (RPA):- SCOPE OF DEVELOPMENT IN EXISTING PROCESSES
2226.	ROBOTIC PROCESS AUTOMATION FOR WAREHOUSING OPERATIONS
2227.	ROLE OF DEVOPS IN AUTOMATION SOFTWARE TESTING USING BDD
2228.	ROOT CAUSE FACTORS CAUSING ABNORMALITIES IN INCOMING LOSS PRESSURE
2229.	ROSTER CO-STAR USING NEURAL NETWORKS
2230.	ROUTE MANAGEMENT FOR LASTMILE CONSUMER DELIVERY
2231.	ROUTE OPTIMIZATION
2232.	RTL CO-SIMULATION VERIFICATION OF TLM IP
2233.	SAFETY FEATURES IN PATIENT MONITORING SYSTEM
2234.	SALARY RANGE PREDICTOR
2235.	SALES ANALYSIS
2236.	SALES ANALYTICS WORKBENCH: ENABLING SALES DECISIONS FOR BUSINESS LEADERS
2237.	SALES PREDICTION IN NEW BUSINESS AREA OF T-MOBILE
2238.	SALES PROPENSITY-PREDICTIVE DATA MODEL (MACHINE LEARNING)
2239.	SAP CLOUD MIGRATION: A NEW ERA OF WAREHOUSING AND MIGRATION ON CLOUD PLATFORM
2240.	SAP PROCESS INTEGRATION AND THE MANAGEMENT OF INTEGRATION IN PHARMA COMPANIES
2241.	SAP RESPONSIVE CROSS FILTER DASH-BOARD
2242.	SCALABLE MACHINE LEARNING INFERENCE FRAMEWORK FOR ARTIFICIAL INTELLIGENCE SYSTEM
2243.	SCALING THE AUTOMATION TESTING PROCESS
2244.	SCOPE OF AUTOMATION IN SOFTWARE TESTING
2245.	SCOPE OF AUTOMATION IN SOFTWARE TESTING OF WEB APPLICATIONS
2246.	SEAMLESS AUDIO PLAYBACK THROUGH MUSIC GENRE CLASSIFICATION TO MATCH LISTENERS PREFERENCE
2247.	SEAMLESS UPI TRANSACTIONS IN COMMERCIAL ENVIRONMENT
2248.	SEARCH ENGINE FOR WAN NETWORKS
2249.	SEARCHING AND MINING TEXT DOCUMENT USING UNSUPERVISED LEARNING
2250.	SECRET MANAGER (VAULT)
2251.	SECURE BOOTLOADER AND APPLICATION FOR EMBEDDED SYSTEMS
2252.	SECURE DATA
2253.	SECURING ACCESS APPLIANCE USING STIG
2254.	SECURING CLOUD WORKLOADS LEVERAGING SOFTWARE DEFINED POLICIES OF COLORTOKENS SECURITY PLATFORM
2255.	SECURITY IN CLOUD COMPUTING
2256.	SECURITY IN EMBEDDED ANDROID OS DEVICES
2257.	SEGMENTATION & PERSONALIZING OF ECOMMERCE WEBSITES USING AEM
2258.	SELENIUM AUTOMATION FOR ONLINE RETAIL STORE
2259.	SEMANTIC SIMILARITY BETWEEN PHRASES USING SIAMESE GATED RECURRENT UNITS
2260.	SEMENTIC ANALYSIS
2261.	SENTI-EXTRACT MOBILE APPLICATION

S.No.	DISSERTATION TITLE
2262.	SENTIMENT ANALYSIS AGAINST STREAMING DATA
2263.	SENTIMENT ANALYSIS BASED ON SOCIAL MEDIA POST
2264.	SENTIMENT ANALYSIS IN THE AREA OF SOFTWARE ENGINEERING
2265.	SENTIMENT ANALYSIS OF RATINGS AND REVIEWS FOR ALL THE PROPOSITIONS
2266.	SENTIMENT ANALYSIS OF REAL TIME DATA
2267.	SENTIMENT ANALYSIS OF YOUTUBE COMMENTS
2268.	SENTIMENT ANALYSIS ON CONSUMER REVIEWS
2269.	SENTIMENT ANALYSIS USING MACHINE LEARNING CLASSIFIERS EVALUATION OF PERFORMANCE
2270.	SENTIMENTAL ANALYSIS
2271.	SEO AND SCHEMA MANAGEMENT SOFTWARE
2272.	SERVER HEALTH REPORT DASHBOARD AND REMOTE MANAGEMENT
2273.	SERVER-LESS APPLICATION DEPLOYED IN AWS(CLOUD)
2274.	SERVERLESS MACHINE LEARNING DEPLOYMENT FRAMEWORK ON AWS
2275.	SERVICE TICKET CLASSIFICATION AND PRIORITIZATION
2276.	SERVICE-BASED ARCHITECTURE FRAMEWORK FOR AUTOMOTIVE HMI
2277.	SERVICENOW CLOUD PROJECT
2278.	SFP MIGRATION
2279.	SHORT FORM CONTENT READING
2280.	SHOULD WE CELEBRATE FAILURES?
2281.	SIMILARITY SEARCH ON INDUSTRIAL EQUIPMENT™S TIME SERIES PROCESS DATA
2282.	SIMPLIFIED BACKUP AND RESTORE SOLUTION FOR CRITICAL SYSTEM
2283.	SINGLE AXIS SOLAR TRACKER
2284.	SITEMINDER POLICY CREATION AUTOMATION
2285.	SIX SIGMA ANALYSIS OF CLOUD BASED TECHNOLOGY ADAPTION IN IT INDUSTRY
2286.	SKILL DATABASE
2287.	SKILLS-BASED JOB-CANDIDATE MATCHING SYSTEM
2288.	SKYWISE CUSTOM APPLICATION ACCELERATOR
2289.	SMART ASSISTANT FOR TELECOM PROVIDER
2290.	SMART BOT FOR ALERTING SYSTEMS
2291.	SMART CITY: OPTIMIZE SCHEDULING FOR GARBAGE COLLECTION USING MACHINE LEARNING
2292.	SMART CONTROL ASSESSMENT IN GRC
2293.	SMART DATA CATALOG TO DISCOVER AND ORGANIZE ENTERPRISE DATA ASSETS
2294.	SMART DEFECT AND FEATURE ALLOTMENT SYSTEM FOR TEAM PRODUCTIVITY AND TEAM EXPERTISE BUILDING
2295.	SMART DISEASE PREDICTION SYSTEM
2296.	SMART ERROR DETECTOR
2297.	SMART PRIVATE CLOUD FOR DATA STORAGE
2298.	SMART RECRUITER
2299.	SMART SPEAKERS
2300.	SMART SURVEILLANCE - REALTIME DATA LOADING TRENDS, PATTERNS & ALERT SYSTEM
2301.	SMART TRAFFIC MANAGEMENT
2302.	SMART VALIDATION METHODOLOGY FOR REGRESSION TESTING
2303.	SMNE WEBCLIENT AUTOMATION(SELENIUM WEBDRIVER WITH TESTNG)
2304.	SNAPSHOT REPORTING FOR PLANVIEW EPM APPLICATION USING SAS VA
2305.	SOCIAL MEDIA BASED CONSUMER SENTIMENT ANALYSIS ON OWNED BRANDS & COMPETITORS
2306.	SOCIAL MEDIA EMOTION ANALYSIS IN PANDEMIC SITUATION
2307.	SOFTWARE ALGORITHM TO HARDWARE IMPLEMENTATION USING HIGH LEVEL SYNTHESIS
2308.	SOFTWARE ARCHITECTURE AND IOT TBD
2309.	SOFTWARE DEFECT PREDICTION BY OPTIMIZING FEATURES WEIGHT WITH A MACHINE LEARNING APPROACH
2310.	SOFTWARE DESIGN OF INTERFACE PROCESS BETWEEN SNMP AGENTS AND OTHER APPLICATION PROCESSES FOR LINE CARD
2311.	SOFTWARE DESIGN: CHANGE FOSS COMPETITION TO OPPORTUNITY
2312.	SOFTWARE ENGINEER

S.No.	DISSERTATION TITLE
2313.	SOFTWARE PROJECT MANAGEMENT FOR IMPLEMENTING FIELD SERVICES INTEGRATION USING AGILE AND SIX SIGMA
2314.	SOFTWARE QUALITY IMPROVEMENT USING SOFTWARE DESIGN RELIABILITY TECHNIQUES
2315.	SOFTWARE TESTING IN AGILE DEVELOPMENT TECHNOLOGICAL AND ORGANISATIONAL CHALLENGES
2316.	SOFTWARE TOOL FOR IMPLEMENTATION OF OBJECT-ORIENTED CODING STRUCTURE
2317.	SOFTWARE TRACTABILITY MATRIX MANAGER
2318.	SOLUTION TO REAL-ESTATE BUSINESS DEVELOPMENT
2319.	SPEECH RECOGNITION WITH PYTHON
2320.	SPENDING ANALYSIS
2321.	SPOKE-HUB DISTRIBUTION OF TRIMBLE INDIA EMPLOYEES ADDRESSES
2322.	SPORTS APPLICATION
2323.	STAFFING RECOMMENDATION SYSTEM
2324.	STATE-OF-THE-ART TRAINING SIMULATOR FOR DEFENCE
2325.	STOCK MARKET ANALYSIS AND PREDICTION
2326.	STOCK MARKET FORECASTING
2327.	STOCK MARKET PREDICTION USING LSTM
2328.	STOCK MARKET PREDICTION VIA MACHINE LEARNING
2329.	STOCKS PRICE PREDICTOR
2330.	STRATEGIC VERSIONING OF APIS
2331.	STRESS DETECTION IN AUTOMOBILE DRIVERS USING PHYSIOLOGICAL FEATURES
2332.	STUDENT CAREER GUIDANCE AND ASSISTANCE AUTOMATED ADVISER
2333.	STUDY AND DESIGN OF MACHINE LEARNING BASED PREDICTION SYSTEM
2334.	STUDY ON ASSISTIVE TECHNOLOGY TOOLS TO ENHANCE WEB ACCESSIBILITY FOR VISUALLY IMPAIRED, INCLUDING DESIGN IMPLEMENTATION OF A ACCESSIBLE WEB PORTAL
2335.	STUDY ON GAME ENGINE DEVELOPMENT
2336.	STUDY, DESIGN AND TOOLING OF INDURSTRY STANDARD DEVSECOPS PIPELINE
2337.	SUPERVISION OF MULTIMEDIA CONTENT FOR COMPLIANCE AND REGULATIONS
2338.	SUPPLIER QUALIFICATION SCRUTINY ON CONTRACT LIFE CYCLE PHASES IN SAP ARIBA CLM SUITE
2339.	SUPPORT ECODED FILESYSTEM IN ACCESS
2340.	SUPPORTING ISC DHCPV6 CLIENT IN NETWORKING SWITCH
2341.	SURFACE IDENTIFICATION FOR ROBOTS
2342.	SURVIVAL ANALYSIS AND LIFE CYCLE OPTIMIZATION: SERVER HARDWARE
2343.	SYMMETRIC BRAKE TORQUE OVERSLIP TO OPTIMALLY ACCELERATE THE VEHICLE UP.
2344.	SYSTEM AND METHOD OF GENERATING BRIGHTNESS VARYING VARIABLE WHICH CAN BE USED TO VARY DISPLAY BRIGHTNESS
2345.	SYSTEM ATTRIBUTE IMPROVEMENT USING OPTIMIZATION ALGORITHM
2346.	TAKING UP THE ISSUE WITH XML FILES PARSING INTO A READABLE EXCEL FORMAT
2347.	TASK PLANNER - A WEB APP BUILT USING NODEJS
2348.	TAXI ASSIST : GUIDE FOR A TAXI DRIVER
2349.	TDD IMPLEMENTATION IN SOFTWARE ENGINEERING AND BENEFITS
2350.	TEALIUM STATUS TRACKING
2351.	TECHNOLOGIES TO ACHIEVE NETWORK CENTRIC WARFARE CAPABILITIES IN TRI SERVICE ENVIRONMENT TO IMPROVE SYNERGY AMONG FORCES
2352.	TELECOM BILL DATA ANALYSIS
2353.	TELECOM CHURN PREDICTION USING ML
2354.	TEST AUTOMATION OF SURGICAL IMAGING SYSTEM
2355.	TEST AUTOMATION ON CLOUD
2356.	TEST AUTOMATION SOLUTION FOR HEALTH CARE PRODUCT
2357.	TEST CASE PRIORITIZATION FOR IMPROVED SOFTWARE QUALITY ASSURANCE
2358.	TEST CASE PRIORITIZATION USING DATA ANALYTICS AND NEURAL NETWORK
2359.	TEST DATA AUTOMATION
2360.	TEST DATA QUALITY MANAGEMENT
2361.	TEST INTERFACE LIBRARY
2362.	TEST SPECIMEN PROTECTION SYSTEM

S.No.	DISSERTATION TITLE
2363.	TESTBUDDY-EASE THE AUTOMATION
2364.	TESTING AS A CLOUD SERVICE
2365.	TEXT MINING FOR PRODUCT ANALYSIS TO CHECK MOST AFFECTED MODULES
2366.	TEXT SUMMARIZATION
2367.	TEXT SUMMARIZATION USING DEEP LEARNING
2368.	THIN CLIENTS MANAGEMENT SYSTEM
2369.	TICKET ANALYZER
2370.	TO STUDY THE CLASSIFICATION OF WORK ORDERS IN TELECOM MANAGED OPERATIONS BY USING DATA ANALYTICS AND MACHINE LEARNING METHODS
2371.	TOPIC MODELLING AND CUSTOMER SENTIMENT ANALYSIS
2372.	TRADING SERVICE CHATBOT
2373.	TRAFFIC SIGNS DETECTION
2374.	TRAFFIC VEHICLE ANALYTICS SYSTEM
2375.	TRANSACTION DATA MONITORING FROM THE PAYMENT TERMINAL AND CAPTURING THE USER EXPERIENCE
2376.	TRANSFORMATION APPROACH: FROM MONOLITHIC ECOMMERCE PLATFORM TO MICROSERVICES OMNI COMMERCE
2377.	TRANSFORMING MONOLITHIC APPLICATION INTO CLOUD BASED MICROSERVICES
2378.	TRANSFORMING UNHAPPY CUSTOMERS INTO VALUABLE CUSTOMERS USING BIG DATA AND DATA MINING
2379.	TRUST-BASED PRIVACY-PRESERVING PHOTO SHARING IN ONLINE SOCIAL NETWORKS
2380.	TUENUP FOR APACHE SPARK
2381.	TWITTER BASED PARCEL DELIVERY SERVICE ANALYSIS
2382.	TWITTER SENTIMENT ANALYSIS
2383.	TWITTER SENTIMENTAL ANALYSIS
2384.	ULTRASOUND SYSTEM UTILIZATION TRACKER
2385.	UNIFIED DATA WAREHOUSE
2386.	UNIFIED MONITORING PLATFORM FOR MULTI CLOUD MESSAGING SOLUTION
2387.	UNMASKING MIST OF UNCERTAINTY OVER VERIFICATION OF ETHERNET IN AUTOMOTIVE AND INDUSTRIAL DOMAIN
2388.	UPDATE ANALYTICS BEST PRACTICES MINING
2389.	USE OF DISTRIBUTED SYSTEMS FOR GOVERNMENT APPLICATIONS
2390.	USE OF MACHINE LEARNING IN DROUGHT PREDICTION IN INDIAN SCENARIO
2391.	USE OF MOBILE DATA COLLECTION TOOLS TO MONITOR & GPS TRACK WASTE IN THE NEIGHBORHOOD
2392.	USED GA TO CHECK RESOURCE FITMENT IN A PROJECT TEAM
2393.	USER BEHAVIOR PATTERN ANALYZER AND PREDICTION SYSTEM
2394.	USER IDENTIFICATION USING FACIAL RECOGNITION TECHNOLOGY
2395.	USER PRIVACY THROUGH AI IN A VIDEO
2396.	USER WORK LOG MINING " ANALYSIS OF LOG DATA OF OPERATIONS TEAM TO IDENTIFY SCOPE FOR AUTOMATION
2397.	USER-LEVEL PREDICTIVE CACHING FRAMEWORK
2398.	USING EMBEDDED KAFKA IN HADOOP
2399.	USING MACHINE LEARNING TO IMPROVE CODING QUALITY
2400.	VALIDATING FAB MONITORING SYSTEM BY AUTOMATION
2401.	VEHICLE MONITORING SYSTEM (VMS)
2402.	VIDEO ADVERTISEMENT ANALYTICS
2403.	VIRTUAL COMPUTING FOR AIRBUS INDIA
2404.	VIRTUAL MACHINE CLASSIFICATION-BASED APPROACH TO ENHANCE WORKLOAD BALANCING FOR CLOUD COMPUTING APPLICATIONS
2405.	VIRTUAL STORE ASSISTANT FOR ONLINE SHOPPING
2406.	VIRTUAL SUPPORT CHATBOT LEVERAGING AI
2407.	VIRTULAL ASSISTANT OR CHATBOT
2408.	VOICE ADVISORY BASED TRAINING FOR SINGLE ENGINE MALFUNCTION SCENARIO
2409.	VOICE BASED INDUSTRIOUS ASSISTANT
2410.	VOICE INTEGRATION IN MOBILE BANKING AND OTHER BANKING SERVICES
2411.	WAYLAND/WESTON DISPLAY FRAMEWORK ON IOT PLATFORM

S.No.	DISSERTATION TITLE
2412.	WEALTH MANAGEMENT & FRAUD RECOVERY
2413.	WEB APPLICATION WITH REAL TIME DATA OPERATIONS IN CLOUD
2414.	WEB BASED APPLICATION FOR PROJECT MANAGEMENT
2415.	WEB BASED SHOPPING SYSTEM FOR REGIMENTAL SHOP
2416.	WEB-BASED HEALTH SURVEILLANCE AND TEXT MINING
2417.	WEBLEX AUTOMATION
2418.	WEBSITE DESIGN FOR DR SHARMA HOMOEOATHIC CLINIC
2419.	WEBSOCKET BASED REAL-TIME NOTIFICATION SERVICE FOR COMMUNICATION
2420.	WEBSOCKET FOR IOT CORE
2421.	WEIGHTED DEPENDENCY GRAPH BASED FAULT LOCALIZATION
2422.	WINDCHILL PLM MIGRATION LOADER
2423.	WIRELESS AUDIO STERO SYNC
2424.	WORKERS COMPENSATION SYSTEM
2425.	WORKFLOW MANAGEMENT SYSTEM
2426.	WORKFLOW VALIDATION AND PERFOMANCE/STATICTICS GENERATION ON DIFFERENT RAID CONFIGURATIONS, OVER PETABYTE SCALE BACKUP APPLIANCE.
2427.	X-CLOUD NATIVE APPS: CLOUD NATIVE APPS WITH IMPROVED PERFORMANCE AND TIGHTENED SECURITY

STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	
	86th Award (20.03.2020)	87th Award (08.09.2020)
A. Integrated First Degrees		
B.S.		
B.Optom	13(9)	1(0)
Engineering Technology	7(0)	1(0)
Information Systems	1(1)	1(0)
Nautical Technology	2(0)	-
B.Tech.		
Engineering Technology	197(5)	208(11)
Information Systems	210(79)	-
Manufacturing Technology	45(0)	150(3)
Marine Engineering	219(2)	23(0)
Nautical Technology	41(1)	23(0)
Power Engineering	-	27(0)
Process Engineering	1(0)	78(1)
M.Sc.		
Business Analytics	86(14)	54(12)
Sub Total	**822(111)**	**566(27)**
B. Higher Degrees		
M.S.		
Software Engineering	1(1)	-
Software Systems	2(0)	-
MBA		
Consultancy Management	23(8)	60(20)
Finance	16(4)	36(9)
Manufacturing Management	52(5)	59(8)
Quality Management	22(6)	51(24)
Hospital & Health Systems Management	36(16)	44(24)

Degrees	No. of degrees	
	84th Award (22.03.2019)	85th Award (16.07.2019)

B. Higher Degrees

  M.Tech.

Automotive Engineering	-	35(0)
Computing Systems & Infrastructure	70(14)	94(15)
Design Engineering	110(7)	231(27)
Embedded Systems	77(17)	150(33)
Environmental Engineering	37(9)	-
Manufacturing Management	47(3)	96(9)
Microelectronics	55(14)	84(22)
Pharmaceutical Operations & Management	103(17)	79(9)
Quality Management	54(7)	84(9)
Software Engineering	2164(1164)	109(43)
Software Systems	446(110	659(170)
Transportation engineering	1(0)	-
M.Phil.		
Hospital and Health Systems Management	1(0)	-
Post Graduate Diploma		
Finance	4(1)	5(1)
Manufacturing Management	25(2)	-
Sub Total	**3346(1405)**	**1876(423)**
Total	**4168(1516)**	**2442(450)**

Note: The numbers in brackets indicate number of female students.

SUMMARY

Award	86th	87th	Total
Integrated First Degrees	822(111)	566(27)	1388(138)
Higher Degrees	3346(1405)	1876(423)	5222(1828)
Total	**4168(1516)**	**2442(450)**	**6610(1966)**

Note: The numbers in brackets indicate number of female students.

Annexure 'B5-7'
(1 Page)
Ref. AR 2020
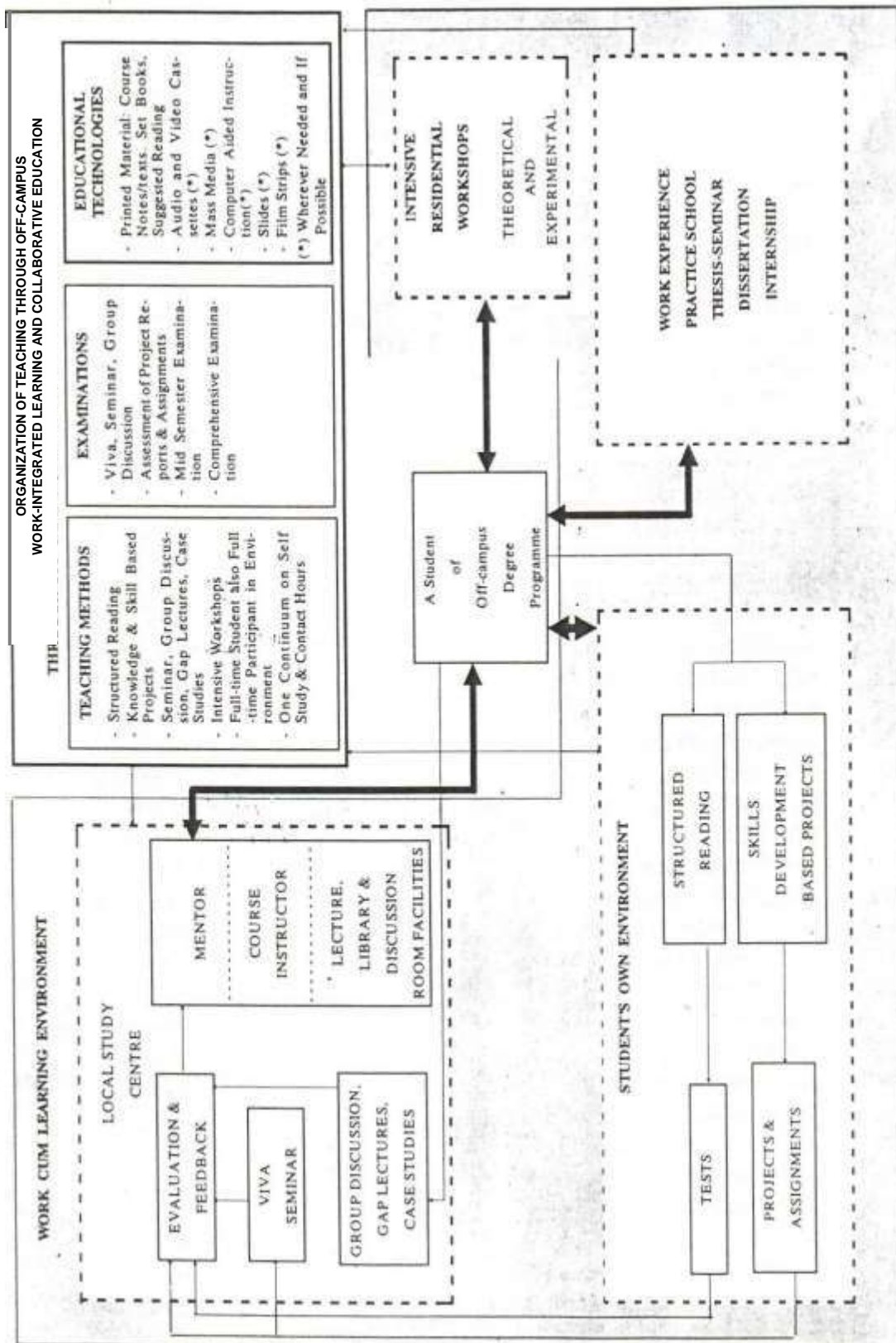
A Schematic depicting Person-centred Approach to a Student's Programme of Study in the Off-campus, Education System under Work Integrated Learning Program viewed from the Student's stand-point

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Off-Campus Programmes and Industry Engagement

Prof. Ranendra N. Saha
Dubai Campus

ACTING REGISTRAR
Prof. Bijay Kumar Rout

DEANS

Prof. Arya Kumar
Alumni Relations

Prof. Ajit Pratap Singh
Academic–undergraduate Studies

Prof. Srinivasa Prakash Regalla
Practice School

Prof. S. Gurunarayanan
Work Integrated Learning Programmes

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