

BITS Pilani  
**annual  
report** 2016



**BITS Pilani**  
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Appendix 'Q': Ref. BG Agenda Item No.70.10  
Appendix 'G': Ref. GB Agenda Item No.56.08

**ANNUAL REPORT  
2016**

**REPORT OF THE BOARD OF GOVERNORS AS TO  
THE STATE AND CONDITION OF THE INSTITUTE FOR  
THE PERIOD 1ST JANUARY 2016 TO 31ST DECEMBER 2016**



**BITS Pilani**  
Pilani | Dubai | Goa | Hyderabad

# ANNUAL REPORT 2016

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**BITS Pilani**

# **annual report** 2016

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**Part A: A quick glance**

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## GOVERNANCE AND MANAGEMENT



**Chancellor**  
Dr. Kumar Mangalam Birla



**Pro-Chancellor**  
Smt. Shobhana Bhartia



**Vice-Chancellor**  
Prof. Souvik Bhattacharyya

## OTHER SENIOR OFFICERS OF THE INSTITUTE

Prof. Ashoke Kumar Sarkar  
*Director, Pilani Campus*

Mr. Arun Khetan  
*Chief Financial Officer (on-deputation)*

Prof. G Raghurama  
*Director, K.K. Birla Goa Campus*

Prof. Sanjay Kumar Verma  
*Dean, Academic Research (PhD Programme)*

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

Prof. S. Balasubramaniam  
*Dean, Academic and Resource Planning*

Prof. Ranendra N. Saha  
*Director, Dubai Campus*

Prof. R. Mahesh  
*Dean, Faculty Affairs*

Prof. Ashwin Srinivasan  
*Deputy Director, K.K. Birla Goa Campus*

Prof. Niranjan Swain  
*Dean, Practice School*

Prof. S.C. Sivasubramanian  
*Acting Registrar*

Prof. S. Gurunarayanan  
*Dean, Admissions and Work Integrated Learning Programmes*

Prof. Sunil Bhand  
*Dean, Sponsored Research and Consulting*

Prof. Suman Kapur  
*Dean, International Programmes and Collaboration*

## DISTINGUISHED ALUMNUS AWARD 2016

**‘BITS Pilani Distinguished Alumnus Award’ in 2016 to the following alumni:**

### **Prof. Alok Choudhary**



Prof. Alok Choudhary received his BE (Hons) in Electrical and Electronics Engineering degree from BITS Pilani in 1982. He obtained his Masters in Computer Engineering degree from University of Massachusetts, USA in 1986. He received his Doctoral Degree in Electrical and Computer Engineering in 1989 from University of Illinois, Urbana-Champaign, USA.

At Northwestern University, USA, Prof. Choudhary is currently the Henry and Isabella Dever Professor at Department of Electrical Engineering and Computer Science, McCormick School of Engineering and Applied Sciences; Professor at technology Industry Management and Marketing, Kellogg School of Management and Director for Center for Ultra-Scale Computing and Information Security (CUCIS). He is also the Founder,

Chairman and Chief Scientist of 4 Cinsights, a big-data science and social media analytics company.

Prof. Choudhary was a co-founder and VP of Technology of Accelchip Inc., in 2000, which was eventually acquired by Xilinx. He also served as the chair of Electrical Engineering and Computer Science department from 2007 to 2011. From 1989 to 1996, he was on the faculty of the Electrical and Computer Engineering Department at Syracuse University. He served as a Member of the National Academy of Science's committee on "Impact of High-End Computing on Sciences", which was formed on behalf of the office of Science of the U.S. government and various federal agencies to identify critical areas of HEC for solving most important scientific problems.

Prof. Choudhary has consulted for many companies including Intel, IBM, ZS Associates, Microsoft, Sun, Microsystems, Southwest Airlines, Publics Groupe, etc. He has served on the board/TABs of many companies and his work has appeared in New York Times, Chicago Tribune, The Telegraph and many international media outlets all over the world. He is a fellow of the IEEE (Institute of Electrical and Electronics Engineers), ACM (Association of Computing Machinery) and AAAS (American Academy of Advancement of Science).

Prof. Choudhary has published more than 400 papers in various journals and conferences, holds multiple patents and has graduated 35+ PhD students. He has received numerous awards including Excellence in Research, Teaching and Service Award, McCormick School of Engineering, Northwestern University in 2006, IBM Faculty Development Award in 1994 & 2005, Intel Research Council Award for the years 1993-1997 & 2003-2005.

The Distinguished Alumnus Award in the Category of Academic Teaching and Research is awarded to Prof. Alok Choudhary in recognition of his outstanding contributions to dissemination and creation of knowledge and his services to his profession and the society at large. Through his achievements, Prof. Alok Choudhary has brought glory to the name of institute.

### **Prof. G Ravindra Kumar**



Prof. Gattamraju Ravindra Kumar received his BE (Hons.) in Mechanical Engineering and MSc (Hons.) in Physics from BITS Pilani in 1983. He obtained his Doctoral degree in Physics from IIT Kanpur in 1990. He is currently a Senior Professor at the Department of Nuclear and Atomic Physics, Tata Institute of Fundamental Research (TIFR), Mumbai.

Prof. Kumar has established a strong laboratory for studying the physics of hot dense matter produced by ultra-short laser pulses at TIFR, where his studies span different areas of nonlinear optics and interaction of very intense light beams with matter. His notable findings include the first demonstration of ultra-short, giant magnetic pulses in dense solid plasmas, enhancement of hard X-ray emission from nanostructured surfaces, real-time demonstration of wave breaking in plasmas, and demonstration of novel experimental strategies for in situ monitoring of transport of fast electrons in dense, hot matter.

Prof. Kumar has been instrumental in setting up a highly competitive, internationally visible experimental research programme in India. His laboratory at TIFR was the first to observe and quantify turbulent magnetic fields created by instabilities of high current electron beams driven by the laser pulse. His research has significant implications for laboratory testing of astrophysical scenarios like supernova explosions and high energy particle production.

Prof. Kumar has over 150 publications in peer reviewed international journals, three review articles and a book chapter to his credit and has also mentored a dozen PhD students so far. He received the BM Birla Prize for Physics in 2000, the Shanti Swarup Bhatnagar Prize for Physics in 2003, a Salute Mumbai Award in 2005, a DAE-SRC Outstanding Research Investigator Award in 2006 and the Infosys Prize in Physical sciences in 2015.

Prof. Kumar has been a J.C. Bose Fellow since 2010. He was elected a Fellow of the Indian Academy of Sciences in 2004 and of the Indian National Science Academy in 2008. He is Life Member of Indian Laser Association, the Plasma Science Society of India, the Indian Society of Atomic and Molecular Physics and the American Physical Society and member of the Optical Society of America. He is on the Executive Committee of the International Committee on Ultra Intense Lasers (ICUIL) and co-chaired the biennial ICUIL conference in 2014.

The Distinguished Alumnus Award in the Category of Academic Teaching and Research is awarded to Prof. Ravindra Kumar in recognition of his outstanding contributions to dissemination and creation of knowledge and his services to his profession and the society at large. Through his achievements, Prof. G. Ravindra Kumar has brought glory to the name of institute.



## **Mr. Mathew Cherian**



Mr. Mathew Cherian received his BE in Civil Engineering degree from BITS Pilani in 1980. He obtained his Post Graduate in Rural Management from IRMA, Gujrat. He is currently the CEO of HelpAge India which works for the cause and care of disadvantaged older persons to improve their quality of life. he is also a fellow from the Advocacy Institute, Washington DC.

Inspired by Baba Amte, Mr. Cherian started his journey as a social worker and worked in rural areas. He was soon approached by Oxfam, a UK charity fighting global poverty, to take charge as its director of central India. He worked in tribal areas and became the International Director of Oxfam. It was then that the President of HelpAge India wanted him to head the non-profit organization for the aged, following which he joined as the CEO of the organization in 2004.

As a CEO, Mr. Cherian has impacted 24 million elderly in the last 10 years and has also built up an Age Care Centre in Pilani. he has worked in the area of rural development with cooperatives, in association with the National Dairy Development Board. He was a consultant to voluntary agencies and to the National Wastelands Development Board. He is the Founder of Association of Third Sector researchers in India, Resource Mobilization Network in India, Campaign for Human Rights (Dalits and Tribals), Credibility Alliance and Charities Aid Foundation in India.

Mr. Cherian has spoken at BITS Global Meet and World Economic Forum on Ageing and many international/national conferences on ageing. His further assignments include the post of Director, Oxfam, UK and India, Programme Director, South Asia, Plan International, and Country Representative, Charities Aid Foundation. He serves on the international boards of HelpAge International and Guide Star International, He also serves on the Indian boards of CARE India, Royal Commonwealth Society of the Blind and with the National Foundation of Communal Harmony. He is a member of the National Council of Senior citizens, the highest policy making body for the elderly.

Mr. Cherian has written a book: "A million missions" on the nonprofit sector and has been instrumental in creating approximately 1000 jobs for elderly post retired people. He provides health care to more than 1.25 million destitute elderly every year and has created accountability standards. He was awarded "Vayoshreshta Samman" for providing services to the senior citizens by the Ministry of Social Justice and Empowerment, received Times of India "Social Impact Award" for extensive work in Mobile Medicare, received "Global CDR Excellence Leadership Award" from ABP News.

The Distinguished Alumnus Award in the Category of Social Entrepreneurship is awarded to Mr. Mathew Cherian in recognition of his outstanding contributions to the society. Through his achievement Mr. Mathew Cherian has brought glory to the name of the institute.

## **Mr. N.S. Parthasarathy**



Mr. N.S. Parthasarathy received his Masters in Mathematics degree from BITS Pilani in 1983. He obtained his MTech in Computer Science degree from IIT Kharagpur, India in 1984. He has done an Advanced Management Program in 2010 from Harvard Business School. He is the Co-founder, President, COO and Board Member of Mindtree Limited, a new generation IT Services Company.

Mr. Parthasarathy Started his career in Wipro's R&D where he handled various technical roles. After a long stint of 15 years in Wipro, he along with a few others started Mindtree Limited. In a short span of 16 years, Mindtree has achieved a coveted spot as seen from many angles:

Revenues rose from zero to approximately US \$715 million (approx. INR 4,755 Crores), Created direct jobs for over 16,000 globally, with a majority of them in India, was ranked as the 7th largest IT Services Company and was well known for the high standards of Corporate governance and transparency.

Mindtree was listed on the stock market in March-2007 and its current market cap is approx. US \$1.7 billion. He strongly believes that the engineers of tomorrow need to have a different mindset and to achieve that he has personally been involved in setting a Global Learning Centre for Mindtree in Bhubaneswar which is a one of its kind in terms of creating the Engineers of tomorrow. In addition he has been actively involved in Mindtree Foundation, the CSR arm of Mindtree which has been focusing on specific areas and has already made a significant impact. The focus areas of Mindtree foundation are: primary education, livelihood and helping differently-abled people.

Mr. Parthasarathy is passionate about education, sports and IT services Industry. He serves on the NASSCOM IT services Council and is a Founder Trustee of India Amateurs Runners Trust to promote runners from underprivileged parts of society. He is also on the Board of WhiteSwan Foundation to create awareness on Mental Health Issues which works along with Mana Mali in BITS Pilani campuses to create awareness of mental health among students.

Mindtree was named in Forbes India's first ever Super 50 list based on consistent shareholder returns, sales growth and return on equity, was ranked #1 under the categories "Best Managed IT/Software/Technology Company in Asia" and "Best Managed Company in India" for 2013 by Euromoney's Annual Asia Company Ranking, won "Most Promising Company of the Year" Award from CNBC TV18 in 2013, was selected by Forbes Asia as one of the "200 Best Under A Billion companies" of 2012, was positioned as the third leading semiconductor R&D service provider in a survey conducted by Zinnov Management Consulting that covered India, China, Russia and Eastern Europe and Texas Instruments 2008 Supplier Excellence Award - the first Indian company to win this award.

The Distinguished Alumnus Award in the Category of Entrepreneurship is awarded to Mr. N.S. Parthasarathy in recognition of his outstanding contributions to the society. Through his achievement Mr. N.S. Parthasarathy has brought glory to the name of the institute.

## **A.1 HIGHLIGHTS OF ACHIEVEMENTS DURING THE YEAR 2016**

### **1. Convocation 2016**

#### **Pilani Campus**

The Convocation 2016 ceremony was held on Sunday, July 24, 2016 at Pilani campus for the graduating students who have completed the eligibility requirements in the academic year 2015-16 for 822 First Degree, 268 Higher Degree and 57 PhD Programmes from BITS Pilani, Pilani Campus. Dr. Vijay Chandru, the Chief Guest in Convocation Ceremony, was a Co-Founder, and currently Chairman and Managing Director of Strand Life Sciences, a pioneer in Computational Biology and Clinical Genomics in India. During this mega event, Mr. Prakhar Kumar, Ms. Meghna Bansal and Mr. Rahul Ranjan were respectively awarded Gold, Silver and Bronze medals.

#### **K.K. Birla Goa Campus**

Convocation 2016 ceremony was held on August 7, 2016 at K.K. Birla Goa Campus for the graduating students who completed the eligibility requirements in the academic year 2015-16. Shri Manohar Parrikar, the Honorable Minister of Defence was the Chief Guest. Degrees were awarded to 464 First Degree, 24 Higher Degree and 11 PhD Degree students from BITS Pilani, K.K. Birla Goa Campus. Four students from Bachelor's degree programmes were awarded Medals: Gold medal - Ms. Vishakha Gupta; Silver medal - Mr. Shah Ujash Dipakbhai; and Bronze medals Ms Dave Mihika Himanshu and Ms Vasundhara Bhargava.

#### **Hyderabad Campus**

Hyderabad Campus Convocation was conducted on August 14, 2016, The Chief Guest Dr. S. Christopher, Secretary, Department of Defence Research and Development & Director General, DRDO, Vice Chancellor Prof. Souvik Bhattacharyya have participated in the Fifth Convocation of the campus for award of various degrees [First Degree (675 Students), Higher Degree (60 Students) and PhD (30 Students)] who have qualified at the end of II Semester 2015-16. Mr. Aditya Chandrasekar, Mr. A Sai Darshan and Ms. P Sarguna Janani were the winners of the gold, silver and bronze medal.

#### **Dubai Campus**

On September 3, 2016, the "Convocation 2016" was held at BITS Pilani, Dubai Campus. Amidst great pride and honor, 421 students of the 13th batch of BITS Pilani, Dubai Campus, with Engineering Degrees in a magnanimous ceremony filled with professors, students and parents who cheered the occasion with thundering applause. The occasion was graced by the Chief Guest Mohammad Abdullah, Managing Director of the Dubai Knowledge Park and Dubai International Academic City at TECOM Group. During this prestigious event the degrees were conferred on 368 First Degree Graduates, 51 Higher Degree Graduates and two scholars, who completed their PhDs Mr. Shreyas Shrish Patwardhan, Mr. Vishank Bhatia and Mr. Rohit Ravishankar were respectively awarded gold, silver and bronze medals.

2. A total of 178100 candidates, including 44372 girls, from all over the country applied for BITSAT 2016 test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during 14th May to 28th May, 2016.
3. 10 Board toppers of Class XII of 2016 have joined three campuses of BITS Pilani this year.
4. Campus placement improved during the year. Four campuses put together, number of companies visiting our campuses for recruitment rose from 510 in 2015 to 594 in 2016.
5. During the year 2016, 62 new faculties (25 in Pilani, 09 in Goa, 16 in Hyderabad and 12 in Dubai) joined. 81 faculties members (35 in Pilani, 19 in Goa, 17 in Hyderabad and 10 in Dubai) left the Institute for several reasons such as planned/forced separation, resignation, expiry of term and retirement. Details are given in '**Annexure A-6**'.
6. BITS-Pilani student Avidipto Chakraborty scores perfect 100 percentile in CAT 2016 .
7. The university signed MOUs with 19 globally reputed organizations during the year. They are listed in Section A.7 of the Quick Glance Section.

8. BITS- Pilani has signed a MOU with Tel Aviv University Israel. The MOU provides opportunities for a wide ranging academic and research collaboration between the two universities. For the start, as a part of the efforts to formulate the research collaboration under the first area of research namely, Food Security and safety, a two-day work shop is being held on November 21-22<sup>nd</sup>, 2016. The workshop is also meant to be a template for the exploration of more areas of collaboration in near future.
9. International admissions to any University brings in the perspective of integrating an international, intercultural, and global dimension to the teaching/learning, and research functions of an University. Towards this objective, BITS-Pilani, commenced admissions to International students in the year 2015-16 and admitted 28 students in various Science, and Engineering branches at its' Hyderabad campus. The plan to internationalize academic programs at BITS, Pilani and its' campuses is an effort to bring students from other nationalities to experience the vibrant academic environment prevailing at BITS, Pilani. In the year 2016-17, BITS, Pilani has expanded this scheme to its' Goa campus as well.
10. BITS Pilani received Dataquest - CMR Top T School Award. BITS Pilani has topped the chart in the private T-School ranking, with high scores in almost all the parameters. BITS Pilani has scored high on parameters such as top institute, human resources, and alumni. Dataquest-CMR Top T School Survey is India's premier survey of engineering colleges. The T School Rankings are a benchmark in the industry and is used by students and recruiters alike. BITS Pilani has been ranked No. 1 under India's top-Tech Schools 2016 based on DQ-CMR survey of colleges, employers and Alumni.

#### RANKING OF BITS PILANI BY VARIOUS MAGAZINES IN 2016

Magazines	Year	Heading	Ranking
Dataquest	June 2016	Top 25 Private Institutes 2016	
		Top 10 Institutes Based on HR Scores 2016 HR Rank	1
		Top 10 Institutes Based on Institute Scores 2016	1
		Top 10 Institutes Based on Student Scores 2016	1
		Zone-Wise Top Private T-School - North Zone	1
		Top 100 Private T-Schools 2016	1
		Top 10 Private T-Schools 2016	1
India Today	May 2016	Top 25 Engineering Colleges	3
		Top 5 Private Colleges	1
		Zone-Wise Top 5 Engineering Colleges - North Zone	2
Education World	May 2016	Top 10 Universities	2
		Top 10 Engineering Colleges	1
		Private Universities - State (Rajasthan) Ranking	1
		<b>Parameter Excellence Top 10 Private Universities</b>	
		Parameter Excellence - Faculty Welfare & Development	2
		Industry Interface	2
		Competence of Faculty	3

		Infrastructure and facilities	2
		Pedagogic system and process	4
		Placement	1
		Research and Innovation	2
		India's Best Private Engineering Colleges in Country	1
		State Ranking BITS Pilani, Pilani Campus	1
		State Ranking BITS Pilani, Hyderabad Campus	2
		<b>Parameter Excellence Top 10 Private Engineering Colleges</b>	
		Faculty Welfare & Development	1
		Competence of Faculty	1
		Placement	1
		Pedagogic system and process	5
		Research and Innovation	1
		Industry Interface	1
		Infrastructure and facilities	1
<b>The Week-Hansa</b>	May 2016	Top Technical Universities - Zone wise	5
		Best Universities All India	7
		Top Non-Government Technical Universities All India	1
		Top Non-Government Technical Universities Zone wise	1
<b>Outlook</b>	July 2016	Top 10 Private Colleges	1
		Top 100 Engineering Colleges	7
		Top 10 RoI in Private Engineering Colleges	4
		Top 10 in Academic Excellence	7
		Top 10 in Selection Process	8
		Top 10 in Placement	2
		Top 10 in Industry Interface	4
		Top 10 in Infrastructure	6

11. Around 100 Alumni of BITS 1970-75 batch visited BITS Pilani, Pilani Campus during 29<sup>th</sup> Jan-1<sup>st</sup> Feb, 2016 to celebrate 40 years of their graduation. A few of them have come from abroad. The batch includes senior government officers, educationist, entrepreneur, venture capitalists, investment bankers, working for NGO's etc. The batch is the founder of 'BITS 75' Charitable Trust. In this program the batch honored their 'Gurus' namely Prof H.L. Kundu, Prof P.D. Chaturvedi, Prof R.P. Arora, Prof H.S. Moondra, Prof J.L. Arora and Prof M.S. Radhakrishnan for their priceless contribution to them.
12. The 65<sup>th</sup> Founder's Day was celebrated at the Pilani campus on Basant Panchami, Saturday, 24<sup>th</sup> January, 2016. Gala, jollity and revelry marked the occasion. Down the memory lane, the Pilani campus was inaugurated on Basant Panchami Day in 1951 by the First President of India, Dr. Rajendra Prasad. On this occasion, Prof. A.K. Sarkar felicitated six retiring non-teaching staff members. He also presented Best Performance Awards to fourteen non-teaching staff members and Certificates of Appreciation to nine non-teaching staff members.
13. The three day event, BITS Conference on Gene and Genome Regulation (BCGGR - 2016), organized by the Department of Biological Sciences, BITS Pilani-Pilani Campus, concluded on 20<sup>th</sup> February, 2016. It was an intensive event where eminent researchers of international repute delivered scientifically-stimulating lectures on diverse topics pertaining to scope and impact of gene and genome-based research in agriculture, health and environment; oral and poster sessions were also part of the event which gave an opportunity to the young research scholars to present their research work before the scientific community.
14. In the memory of Chitrarth Dagar, a 2011 batch student of BITS Pilani, a formal gathering was organized by the Mechanical Engineering Department along with Mechanical Engineering Association on 22<sup>nd</sup> April, 2016. The parents of Chitrarth were also present to reward the meritorious students with 'Chitrarth Dagar Scholarship'. This is a noble activity which they have been doing since the past few years. Prof. A.K. Sarkar, Director of BITS Pilani, Pilani campus and many faculty members of Mechanical Engineering Department were present to grace the occasion.
15. The 35<sup>th</sup> Annual Blood donation camp 2016, jointly organized by NSS BITS Pilani and the Indian Red Cross Society, was held during 6<sup>th</sup> and 7<sup>th</sup> February, 2016 at the SAC Pilani Campus. The event received an overwhelming response from faculty members and the student community. 731 units of blood were collected in this 2 day camp (6<sup>th</sup> and 7<sup>th</sup> Feb). It was inaugurated by the director, Prof A.K. Sarkar. A team of 21 doctors had come from IRCS, Delhi. This year, in order to create awareness about organ donation, forms were brought from AIIMS and interested people filled it. A grub was organized in the end to celebrate the success of the camp
16. NSS, BITS Pilani, in collaboration with Sports Council, organized the fifth edition of Junoon-a two day sports fest for the specially-abled on 10<sup>th</sup> September and 11<sup>th</sup> September, 2016. NSS BITS Pilani is proud to have hosted Dr. Malathi Krishnamoorthy Holla, an acclaimed international para-athlete, recipient of the Arjuna award and has also been conferred with the Padma Shri was the chief guest for the event.
17. To mark the occasion of International Day of Yoga on 21<sup>st</sup> June, BITS Pilani organized a Yoga session by Mr Dinesh Kumar, a PhD scholar and a well-known On-campus trainer of Yoga, from 6:30 AM to 7:30 AM on Tuesday 21<sup>st</sup> June 2016 in Students Activities Centre (SAC) at BITS Pilani.
18. Prof. L.K. Maheshwari Distinguished Alumnus Award-2015 giving ceremony was held on the 5<sup>th</sup> January 2017 at the BITS Pilani Campus, Rajasthan. This award was presented to Prof. Mohan Manubhai Trivedi, Department of Electrical and Computer Engineering at University of California, San Diego for his outstanding contribution in the field of Electrical & Instrumentation Engineering. Prof. S. C. Sivasubramanian, Dean Administration and Acting Registrar of BITS-Pilani, Pilani Campus was the Chief Guest of the ceremony.
19. To commemorate the World Book and Copyright Day 2016, the BITS Pilani library had taken the initiative of promoting reading habits among the community in the BITS Pilani campus. As a part of this initiative, the library had put up an interesting display of books on William Shakespeare and works of literature by well known authors from 23-26 April 2016. The students, faculty members and staff were cordially invited to borrow these books on the spot. The World Book and Copyright Day is the most important event organized annually by the UNESCO in order to promote the reading, publishing and copyright among the public worldwide.

20. The BITS Library in association with Department of Humanities and Social Sciences had conducted a two weeks training programme for Library staff on Communication and Behavioral Skills on July 26, 2016. The main objective of this training programme was to train the library support staff members as to how to communicate in English as well as behave with a right kind of attitude with the library users.
21. The BITS Pilani Library inaugurated its new state of the art self-service kiosk "SmartServe" at the Pilani Campus on Friday, the 12<sup>th</sup> of August 2016 to celebrate the Librarians' Day in the memory of Padmashri Dr. S. R. Ranganathan, the father of Library Science in India. The SmartServe was put to action by Prof. Souvik Bhattacharyya, the Vice-Chancellor. Along with this, many renovated spaces in the library such as E-Zone, Circulation Desk, Text Book Counter and Reference Section were also made available to the library users.
22. The Celebration of Teachers Day at BITS Pilani Library held on 5th September 2016 which was inaugurated by Prof. Chandrasekhar, Senior Professor Emeritus. The programme was also graced by the presence of Prof. B.R. Natarajan. The event included the display of Faculty Favorites and Speaking Bookmarks designed by BITS Pilani students along with the an exhibition of of books on Teaching and Great Teachers such as Dr. S. Radhakrishnan. Many BITS Pilani faculty members, staff, students and also teachers and students from Birla Balika Vidyapeeth attended this programme.
23. BITS Pilani, Pilani campus celebrated the 49<sup>th</sup> Engineers' Day to commemorate the birthday of the legendary Engineer Sir Mokshagundam Visvesvaraya on 15th September 2016.
24. The 4<sup>th</sup> Indo-German Workshop on Sustainable Engineering was organized by the Indo-German centre for sustainable manufacturing during 17-18 September 2016 at BITS Pilani, Pilani Campus. Dr. Reinhard Pittschellis, Global Development Research Head of FESTO Didactic SE, Germany was the guest of honour for the 4<sup>th</sup> edition of the Indo-German workshop. He emphasized the need of learning factories for the skill development of engineering graduates.
25. A two-day national convention on Current Practices and Future of Classroom Teaching at Higher Education Level was held at BITS, Pilani-Pilani Campus during 30 September-01 October 2016. The Convention was inaugurated by Justice (Rtd.) Dharnidhar Jha of Patna and Allahabad High Court. Justice Jha in his inaugural remarks raised the questions of dropouts in the premier higher education institutions of the country. He also suggested that there was a need for serious discussion on allowing Indian languages to be the medium of instructions in higher education.
26. BITS Pilani had conducted a 5 day Nurturance programme, sponsored by NCERT, New Delhi, for National Talent Search awardees during 16<sup>th</sup> to 20<sup>th</sup> November 2016. Objectives of the programme was to expose the awardees to recent developments in the field of basic sciences and technology. The programme consisted of presentations by BITS Pilani faculty and visits to its teaching and research laboratories. Participants also have availed the opportunity for a late night sky watch session. A visit to Central Electronics Engineering Research Institute, Pilani forms a key attraction of the programme.
27. Avery Dennison Foundation has selected 10 students from five colleges for the Avery Dennison Foundation InvEnt Scholarship Program, in which six students of BITS Pilani, Pilani Campus have been selected for the 2016 Spirit of Invention (InvEnt) Scholarship Awards. The selected Spirit of Invention (InvEnt) scholars will receive US \$1,300 scholarship to be used in their second year of study. A significant number of students of BITS Pilani, Pilani Campus have also won these awards in the past.

The winning BITS Pilani Campus students are:

1. Alankrit Jain(2015A8PS327P) (1st Year, Electronics and Instrumentation Engineering)
  2. Vaibhav Sunilkumar Agarwal (2015A4PS220P) (1st Year, Mechanical Engineering)
  3. Anmol Gupta (2015A2PS635P)(1st Year, Chemical Engineering)
  4. Aakriti Agrawal(2015A3PS276P) (1st Year, Electrical and Electronics Engineering)
  5. Anirudh Tusnial(2015ABPS715P) (1st Year, Manufacturing Engineering)
  6. Neeraj Gadi(2015A4PS314P) (1st Year, Mechanical Engineering).
28. In the first week of February 2016, the Centre for Entrepreneurial Leadership, BITS Pilani organised E-week to encourage the entrepreneur in every engineer. The pre E-week event 'Facebook ASAP' shot down two birds with one arrow, it publicized E-week along with raising awareness about the start-up world. The highlight of E-week was Bedrock where the participants experience the actual running of a

business with the finalists getting to run Connaught restaurants for one day. With over 1300 students participating in various events spread across the week, CEL surely was a success.

29. With a dream to make BITS Pilani's first indigenously built nanosatellite, a group of passionate undergraduates came together and laid the foundations of Team Anant in January 2013. It is an ambitious project which promises great learning opportunities for students of the institute. Being an interdisciplinary project, it provides a platform to build skills in the areas of space-flight mechanics, computing, algorithms, embedded systems etc . After spending a substantial time researching its payload, Anant has chosen a hyper spectral imager as its experimental payload. In addition, ten faculty members, including Prof Chandra Shekhar, Senior Professor Emeritus, EEE Department, are guiding the students on various subsystems of the nanosatellite. Dr Kaushar Vaidya is the overall faculty coordinator for the project.
30. The Table Tennis team of BITS Pilani, consisting of 4 students (Abhinav Jain, Neel Joshi, Gaurav, Kaushal Nahata) participated in the annual sports fest DESPORTIVOS'16 of LNM Institute of Information Technology, Jaipur, held during January 14-17, 2016 and brought laurels to the institute by winning Gold in both the Individuals (Neel Joshi) and Doubles (Neel Joshi & Abhinav Jain) categories. Also, Neel Joshi was awarded the 'Best Player of the Tournament'.
31. Eight students of the Swimming team, BITS Pilani had gone to participate at the "Ranbhoomi 2016", an annual sports festival held at IIM INDORE during February 5-7, 2016. All the members of the Swimming team have made the Institute proud by winning the Team Championship under the captain Mr. Harsh Sharma. The team bagged 15 Medals in total consisting of 5 Gold, 5 Silver and 5 Bronze. Mr. Purunjay Singh was also awarded the Individual Championship.
32. The student editors and journalists from BITS-Pilani campuses in Pilani, Goa, Dubai and Hyderabad have come together to produce an all-campus student newsletter, called THE BITS BEAT. This is a monthly student journal and presents important news from all four BITS campuses.
33. Joy Mukherjee, a second year student of Physics and Computer Science of Birla Institute of Technology and Science, Pilani, Pilani Campus has won the Second Prize (stood 5<sup>th</sup>) in an international competition "Design for Space Challenge" in designing a 3D cube satellite using Autodesk Fusion 360. More than 1800 students from all over the world participated in the competition. Joy won a cash prize of \$750 USD. His design would feature on the Autodesk Design Academy website. Joy is also a member of Team Anant a Student Satellite Team of BITS Pilani.
34. Three students from BITS, Pilani - one each from Pilani Campus, Goa Campus and Hyderabad Campus are selected for the 18th Aditya Birla Scholarship Programme – Class of 2016-17. The students are the following:
  1. 2016A7PS019P Mr. Tanay Sharma (Pilani Campus)
  2. 2016A7PS004G Mr. Dinku Sarmah (Goa Campus)
  3. 2016A7PS001H Ms. Sandhya Biksham Preethi Sharma (Hyderabad Campus)
35. Department of Pharmacy, BITS Pilani, Pilani campus organized Prof. B M Mithal Memorial Lecture and award ceremony on 18 Nov'2016. Prof. BM Mithal Gold medals for the best B. Pharm graduate of the year 2014-2015 and 2015-2016 were awarded to Mr. Shreyansh Jain and Mr. Priyank Raj, respectively. Mr. CNVHB Gupta Gold medals for the best M. Pharm. Graduate of the year 2014-2015 and 2015-2016 were awarded to Mr. Amol Darandale and Mr. Sahil Sama, respectively.
36. Prof Ian Underwood from School of Engineering at The University of Edinburgh visited BITS Pilani Campus on 22nd November 2016. During this visit he interacted with Prof. Bhattacharyya, Vice Chancellor BITS, Prof. Chandrasekhar, Prof. Suman Kapur, Prof. Rahul Bannerjee, Prof. Navneet Goel, Prof. Raghurama and Prof. Bhand from the Goa campus and Prof. Srinivas and Prof Swain from the Hyderabad campus. Prof. Underwood shared that University of Edinburgh is keen to develop close academic relations with BITS and very soon the Director of International Relations at The University of Edinburgh will visit BITS to formalize and kick-start the collaborative activities.
37. The Teaching Learning Centre, BITS Pilani, Pilani Campus organized a Two day National Workshop On "Outcome Based Learning Using Pedagogy Framework Model" in collaboration with Centre for Educational Technology, Indian Institute of Technology (IIT), Kharagpur, under the MHRD government of



India funded project "Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning (Main Phase)" at BITS Pilani during 28-29 November, 2016.

38. A team of 20 students from BITS Pilani, Dubai, designed UAE's first Formula 1 car, student race car. Recently the team also won at the Innovator Show 2016 in Abu Dhabi. Dh 200,000 was spent in total for designing and manufacturing the car. The team is also going to show case their latest car at Formula SAE in Germany next year.
39. Six students from BITS Pilani, i.e. Tushar Dhalwani (Pilani Campus), Rishabh Garg (Pilani Campus), Bhuvan Gupta (Goa Campus), Akanksha Pandey (Hyderabad Campus), Shrey Bansal (Hyderabad Campus), Rahul Mittal (Hyderabad Campus) have created India's Official First Aid Mobile Application as their summer internship project from 23rd May -16th July, 2016 at Indian Red Cross Society, NHQ, New Delhi. The Ceremonial Session was presided over by the President of IRCS and the President of India Hon'ble Shri Pranab Mukherjee at Rashtrapati Bhavan, New Delhi. The user friendly App empowers one to take care of some of the basic medical emergencies.
40. Five students from BITS, Pilani have won OPJEM scholarships- 2016, worth Rs. 80,000 each. They are Harsh Sharma (2014A4PS405P), Sishir Suresh Mohammed (2015A4PS136P), Pragyan Trivedi Priyamedh (2013A4PS063P), Prithu Mitash (2013A4PS392P) and Prateek Arora (2014A2PS556P).
41. Prof Dalip Kumar, Department of Chemistry, has been selected for the CRSI Bronze Medal-2017 by the Chemical Research Society of India (CRSI) for his contributions to research in Chemistry. CRSI was founded by Bharat Ratna Prof C. N. R. Rao and is the largest chemical society in India.
42. Prof M. S. Dasgupta, Department of Mechanical Engineering, was given the best paper award in January 2016 for his paper titled "Smart Control of Electric Lamp using Artificial Intelligence based Controller" at the 12<sup>th</sup> IEEE India International Conference Electronics, Energy, Environment, Communication, Computer, Control, (E<sup>3</sup>-C<sup>3</sup>) held at Jamia Millia Islamia, New Delhi, during December 17-20, 2015.
43. Prof K. S. Sangwan, Department of Mechanical Engineering, has been awarded a project worth 369,455.36 Euros by DAAD and FESTO Didactic, Germany with Professor Christoph Herrmann, TU Braunschweig, on the establishment of a "Learning Factory" at BITS Pilani.
44. Prof Jitendra Panwar, Department of Biological Sciences, has been awarded a visiting professorship under INSA-CAS International Bilateral Exchange/ Collaboration Programme-2016.
45. Dr Arnab Hazra, Department of Electrical and Electronics Engineering, received the "Early Career Research Award" by Science and Engineering Research Board (SERB), India on March 4, 2016.
46. Prof Navneet Gupta, Department of Electrical and Electronics Engineering, was the "Guest of Honor" at the National Conference on Emerging Trends in Computer Science and Electronics Engineering (ETCSEE-2016) organised by RPS Group of Institutions, Mahendragarh (Haryana) during April 9-10, 2016.
47. Prof Ravi Kant Mittal, Department of Civil Engineering, and his students Gaurav Tyagi and Gourav Gill, have been awarded the best paper award for "Liquefaction Screening Criteria For Earth Dams" presented at International Conference on Advances in Civil Engineering and Sustainable Construction-ACESC'16 organised by Department of Civil Engineering, SRM University, Chennai, India during March 30 to April 1, 2016.

#### **K.K. Birla Goa Campus**

1. Goa State Pollution Control Board appointed Prof S.D. Manjare as a Member of expert appraisal committee to assess the environmental impacts of the proposed project on marina facilities at north of Zuari river, near village Nauxin, Goa 22<sup>nd</sup> January 2016.
2. Prof S.D. Manjare is appointed as the distinguished scientist for the Scientific Advisory Board of the Conference on Sustainable Development of Energy, Water and Environment Systems, which is the 12th in this series of conferences, October 2016.
3. Dr. Jegatha Nambi Krishnan and Dr. Asima Shaukat has been awarded 'Early Career Research Award 2016', DST-SERB, Govt. of India

4. Mr. G. Surendranand Prof. Saroj Sundar Baral have won 'Best Poster Award 'for "Kinetics, Isotherm and Mechanism Study for Treatment of Cr(VI) Contaminated waste water using Sorghastrum Nutans(L) Nash-Natural grass" at 11th SDEWES Conference, Lisbon Portugal September 4-9, 2016.
5. Ms. Parul Sahu and Prof. Srinivas K - Awarded 1<sup>st</sup> place in poster presentation in the category 'Heat Transfer' for 'Study of U-tube Scraped Crystallizer for Desalination' at 69<sup>th</sup> Annual Session of IChE, CHEMCON 2016, Chennai December 27-30 2016
6. Mr. G. Surendranand Prof. Saroj Sundar Baral - Awarded 1<sup>st</sup> place in paper presentation in the category 'Adsorption' for 'process technology for removal of Chromium by using sludge from pig iron industry ' at 69<sup>th</sup> Annual Session of IChE, CHEMCON 2016, Chennai December 27-30 2016
7. During the period (Jan.2016 –Dec. 2016), the campus has total 70 ongoing sponsored research and consultancy projects worth Rs. 2206 lakh funded by various national and International funding agencies. This includes 9 industry projects worth Rs. 813 lakh, and 3 consultancy projects worth Rs. 76.4 lakh.
8. During this period 24 new sponsored projects worth Rs. 925 lakh were approved. This includes 7 industry sponsored worth Rs. 244.85 lakh. The funding agencies being Indo French water network, Department of Science and Technology, DST N. Delhi, Department of Science Technology and Environment Goa, Indian Space Research Organization ISRO, Council of Scientific and Industrial Research CSIR, Ministry of Mines, UGC-DAE Collaborative Research Scheme, Board of Research in Nuclear Sciences BRNS, Bill and Mellinda Gates Foundation, R.D. Tata Trust, Indian Council of Social Science Research ICSSR, German Technical Cooperation GIZ, Hitachi India Pvt. Ltd., Cipla Biotech Ltd., and PNB Metlife.
9. Biotechnology Industry Research Assistance Council, BIRAC has approved funding of Rs. 304 lakh for setting up a world class Bio incubation centre named BIO-NEST (Bio incubators nurturing Entrepreneurship at K.K. Birla Goa Campus. The focus of the bio-incubator will be on health and environment.
10. During the period major infrastructure support under DST- FIST scheme was ongoing for the following departments (Chemistry, Chemical Engineering, EEE, Mechanical Engineering and Mathematics worth Rs. 292.5 lakh (50:50 sharing).
11. Bill and Mellinda Gates Foundation Grant of USD 135,000 to Prof. M Sirkanth (Biological Sciences) and Dr Nitin Sharma (EEE) in partnership with Cranfield University U.K. in the area of sensor analytics kit.
12. Bill and Mellinda Gates Foundation Grant of USD to Prof Srikanth (Biological Sciences) in partnership with Caltech USA on wastewater treatment technology.
13. SERB-DST grant of Rs. 56.11 to Prof. Srinivas Krishnaswamy (Chemical Engineering) in collaboration with ICT, Mumbai in the area of hydrogen production.
14. Dr Asima Shaikat (Chemical Engineering) received a grant of Rs. 54.67 lakh under DST Young Scientist award scheme in the area of tribology.
15. R.D. Tata Trust grant to Prof Sunil Bhand (Chemistry) within the consortia of BITS Pilani K.K. Birla Goa Campus, CDAC Kolkata and Jadavpur University Kolkata Rs. 212 lakh in the area of Vegetable and Fruit Sensing (BITS share Rs. 53.2 lakh).
16. Dr. Nitin Sharma (EEE) from ISRO Rs. 33 lakh and Dr Malabika Biswas (Biological Sciences) Rs. 20.46 lakh, Dr. Jagath Krishnan (Chemical Engg.) Rs. 31.74 lakh, Prof Mainak Banerjee (Chemistry) Rs. 30.57 lakh, Prof P Bhavana (Chemistry) Rs. 28.22 lakh, Dr. Debasis Das (computer Science) Rs. 19.11 lakh from SERB-DST. Dr. Kinjal Banerjee (Physics) Rs. 3.18 lakh.
17. Mr. Hardk Hingorani's ( 2012B2A1636G) research paper co-authored with Prof. Ranjan Dey won the first position in the Alumni Affairs scholarship and awarded a scholarship of Rs. 10,000/-.
18. Student start up Project Mudra , led by Ms. Sanskriti Dawle and Mr. Aman Srivastava won the Great Tech Rocketship award by UK Trade and Investment (UKTI) in March 2016. They also won Conquest 2016, an international startup conclave organised by BITS Pilani in September 2016. Conquest 2016 had 1200 start ups competing for the prize.
19. 25 students from BITS Pilani, K.K. Birla Goa Campus have been selected for Google Summer of Code for the year 2016. The campus had the second highest number of selections in India.

20. Avidipto Chakraborty selected for Business Analyst profile in McKinsey and Company. McKinsey and Company selects only 10-12 BA's from the country every year.
21. Shivendu Shivam was the country's top scorer in the Autumn Alphathon conducted by Worldquant Research (India) Private Limited.
22. Kartik Satyanarayanan (2013A7PS037) secured an internship at INRIA, Rennes in France. It's a research organization which specializes in Computer Science research. He was one among the 25 selected in India for the Charpak Research Internship Scholarship funded by the French Government.
23. Sumit Jain (2013A4PS385G) and his team participated in a competition SAE-SUPRA India held at Buddh International Circuit, Noida from 4th-9th July. They designed and manufactured a formula one type car in a budget of 9 lakhs. The event witnessed the participation of 180 teams from various engineering colleges all over India.
24. Parth Madan(2014B1A4787G), Kartik Aggarwal (2014A3PS333G), Sagar Bildani (2014B5A3459G) and Shourya Bose (2014B4A3692G) were selected for the final round of the global social enterprise business model challenge, the HULT Prize supported by the Clinton Global Initiative. They were invited to pitch their business idea at the regional finals in Dubai held during 11-12 March 2016 in Hult Business School, Dubai.
25. Varsheeth Talluri (2013A7PS045G) completed his Summer Research Internship at the University of Southern California, Los Angeles, under the Viterbi-India Program, 2016. This program is a fully funded internship organised by Indo-US Science and Technology Forum (IUSSTF), wherein 20 students from all over India are selected.
26. Rachit Gupta (2013A3PS201G) from Dept. of Electrical and Electronics Engineering received Mitacs Globalink Scholarship (2016) for his internship at the University of Manitoba.
27. Ambareesh Rathi (2012B4A4412G) underwent a six month research internship at TU Delft, Netherlands. He worked on the EU H2020 project FALCON, which consists of 12 partners from 8 European countries. He was the only intern from India selected for this role. He worked in the Design Engineering department under project leader Dr. Wilfred van der Vegte, Assistant Professor, Industrial Design Engineering, TU Delft.
28. K.K. Birla Goa Campus Basketball Girls Team won the KJ Somaiya sports festival in Girls basketball tournament Beating IIT Bombay Girls Basketball team in the finals, February 2016
29. Siddhartha Mohan and Chirag Ramdas won the all Goa doubles Badminton championship April 2016.
30. Rachit Aiyappa won the all Goa Tennis Tournament Organised by Goa Tennis Association at Cidade Goa, Panjim April 2016.
31. K.K. Birla Goa Campus has commenced admissions to International students in the year 2016-17 and admitted 18 students in various Science and Engineering branches.
32. The Department conducted a Training Programme in Technical Writing for the 35 frontline officers and managers of CIPLA Biotec, Verna, Goa during 12 July- 05 October 2016.
33. The Department organized (i) a three-day workshop on Film making and Script Writing during 18-20 March 2016 and (ii) a national Symposium on Digital Humanities : Perspectives and Challenges on 09 September 2016.
34. Formation of Socio-cultural Association along with first two highly successful events "Sangam" and "Fun Fair"
35. Prof. Horst Koppel, University of Heidelberg, Germany (December 12, 2016).
36. Dr. Srini Kaveri, Director, Bureau CNRS, New Delhi, India, Gave a talk on 'Antibodies: The story of Good and Bad Samaritans' on 19<sup>th</sup> September, 2016.
37. Prof Paul Bishop, Dean of Engineering Sciences at University of Rhode Island, delivered Talk on 'The Future of Environmental Micro sensing' and 'The Impact of the Water: Energy Nexus on Water and Energy in the Near Future' on 21<sup>st</sup> and 23<sup>rd</sup> November, 2016 respectively.
38. Prof. Florent Chazarenc, Ecole des Mines de Nantes, France Gave Talk on 'Use of treatment wetland systems for water pollution control design and implementation' and 'Treatment wetlands for domestic

wastewater treatment : Intensification vs Extensification what are the trends for the future?' On 23<sup>st</sup> and 25<sup>rd</sup> November, 2016 respectively.

39. Prof. B.V.R Chowdari, Senior Executive Director, President's office, Nanyang Technological University (NTU), Singapore and Prof. Bo Liedberg, Dean, Interdisciplinary Graduate School, NTU addressed the Faculties and Students on 29<sup>th</sup> September, 2016.
40. Prof. Philip Jaeger, Managing Director of Eurotechnica GmbH, Germany has visited the department on 5<sup>th</sup>-6<sup>th</sup> October 2016. During his visit, he delivered invited talk on: Interfacial properties at elevated pressures in processes of enhanced oil and gas recovery and Production of Antibactericidal Biomaterials by a combined supercritical extraction and impregnation process.
41. Professor M. M. Sharma, Padma Vibhushan, Padma Bhushan, FRS, Emeritus Professor of Eminence, Institute of Chemical Technology Mumbai, was the Chief Guest in the inauguration of IChE Goa Regional Chapter on 6<sup>th</sup> April 2016. During the event, he delivered a talk on "Cleaner and Greener is Smarter; Conversion of Liabilities into Assets".
42. 2<sup>nd</sup> Indo- UK International Workshop on Advanced Materials and their Applications in Nanotechnology (AMAN 2016) in collaboration with University of Leeds, UK at BITS Pilani, K.K. Birla Goa campus January 11- 12, 2016.
43. The 4<sup>th</sup> International Conference on Advanced Oxidation Processes (AOP-2016) was held at BITS Pilani, K.K. Birla Goa Campus, from 17-20 December 2016. AOP-2016 conference was organized by BITS Goa campus in association with the Society of Environmental Chemistry and Allied Sciences (SECAS).

#### Hyderabad Campus

1. Prof. Jayanty Subbalakshmi was Invited as judge for the "Annual research awards 2015-2016" held on 19<sup>th</sup> March , 2016 by Dr. K. V. Rao Scientific Society (KVRSS).
2. Synthesis and Characterization of Oxalate Bridged Ni-Cu Bimetallic Complex, Krishnan Rangan and S.M.K. Praneeth and Manjeeth Kolli Venkata, 17<sup>th</sup> National Workshop on Challenges in Catalysis Science and Technology (CCST-2016), June 23-25, 2016, CSIR-IICT, Hyderabad
3. Prof. M.B. Srinivas received Stanford Medical School Award on 14 October 2016.
4. K. Naveen obtained 2<sup>nd</sup> rank in ECE stream and J Shashank obtained 28<sup>th</sup> rank in Instrumentation stream in GATE-2016
5. Shirin Fathima received DAAD fellowship for summer internship at Germany.
6. Dr. Durgesh Chandra Pathak: Invited speaker for a Technical session in the 'International Carbon Credit Conference' (UGC sponsored) at the Post Graduate Department of Commerce and Research Centre of the Bharat Mata College, Kochi (29/08/2016 to 31/08/2016). The topic of talk was 'Carbon Credits: Efficiency versus Ethics'.
7. Prof. Uday Bhate, managing partner and co-founder of a consultancy company delivered lectures in the workshop on "Business Analytics" which was organized by the Department of Economics and Finance on 12<sup>th</sup> November 2016.
8. Invited talk by Dr. Sujith R on the topic "Non-destructive evaluation for damage tolerant design" at Vizag Steel Plant, Vishakapatnam, on 25<sup>th</sup> & 26<sup>th</sup> February 2016.
9. Invited talk by Dr. Sabareesh G R on the topic "Understanding stationary and translating vortex flows and challenges in its laboratory simulation" at Iowa State University, USA, on 13<sup>th</sup> June 2016.
10. Prof. A. Ramu delivered a talk entitled "Innovative Pedagogy for Teaching and Learning Engineering Mathematics" at JNTUH, Hyderabad during 29<sup>th</sup> - 30<sup>th</sup>, June 2016.
11. Prof. B. Mishra delivered a talk entitled "Anisotropic Dark Energy Cosmological Models" in National Conference on Recent Trends in Mathematics 2016 at Tata Institute of Social Sciences, Tuljapur during 15<sup>th</sup> -16<sup>th</sup> July, 2016.
12. Prof. P. K. Sahoo delivered a talk entitled "Big Rip singularity of LRS Bianchi type-I universe in f(R, T) gravity" in Frontiers in High Energy Physics at Institute of Mathematical Sciences, Chennai during 22<sup>nd</sup> - 25<sup>th</sup> March, 2016.
13. Dr. Manish Kumar delivered a talk entitled "Vector Calculus and its Applications in Engineering" at Department of Mathematics, School of Advance Sciences, VIT University, Vellore on 05<sup>th</sup> November, 2016.

14. Dr. Kishore Kumar N. delivered a talk entitled "Finite element methods" in Advanced Training Programme on Partial Differential Equations at BITS - Pilani Hyderabad Campus during 25<sup>th</sup> May – 14<sup>th</sup> June, 2016.
15. Dr. Anil Nemili delivered a talk entitled "Accurate and robust adjoint approach for aerodynamic optimization of unsteady turbulent flows" in 18<sup>th</sup> Aeronautical Society of India (AeSI) CFD Annual Symposium at National Aerospace Laboratory, Bengaluru, India during 10<sup>th</sup> – 11<sup>th</sup> August, 2016.
16. Prof. Dario Darji, University of Louisville, USA, delivered a talk entitled "Dynamics on Cantor Set" on 7<sup>th</sup> November, 2016.
17. Dr. Debasis Chakraborty, Technology Director, DRDL, Hyderabad, delivered a talk entitled "Numerical Simulation for Aero Propulsive Characterization of Missiles" on 4<sup>th</sup> March, 2016.
18. Prof. B. Mishra has been selected as a Visiting Associate of IUCAA (Inter University Centre for Astronomy and Astrophysics) for a period of three years (01.08.2016 - 31.07.2019).
19. Dr. T. S. L. Radhika visited Department of Bio - Medical Engineering, University of Wisconsin, Madison, USA for collaborative work on Mathematical Models for Arterial Stiffness in Small / Large Animals during 3<sup>rd</sup> June – 15<sup>th</sup> July, 2016. This visit was funded by BITS Pilani, Hyderabad under University Immersion Scheme.

There are many social organizations actively working on campus like NIRMAAN, SCIO, YUVA (Youth under visionary action), HOPE and ENACTUS and National Service Scheme (NSS). Besides, we have various events/camps organized on campus like Govt. school adoption, Swach Bharat, Cloth Donation, Tree Plantation, Blood Donation, Campus Clean Up programs, Career Planning, Medical Camps, Campus Tour for School Students.

ARENA, the annual sports festival of BITS-Pilani Hyderabad campus was formally inaugurated on 28 January 2016 by Dr. Tripuraneni Hanuman Chowdary, The former IT Advisor to Government of Andhra Pradesh. Acting Vice-Chancellor Prof. V S Rao presided over the function. Arena'16 witnessed over 3000 participants from all across the nation participating in many indoor and outdoor sports events, held for both boys and girls.

For the first time, An Inter Bhawan Cultural Competition was conducted from 4<sup>th</sup> November to 11<sup>th</sup> November. With a huge participation, the competitive spirit was evident from the enthusiasm from the students. The Cultural ensured that the extracurricular factor was well covered with the academics on campus.

Shangri-La 2016 gave an opportunity for the students to show case their skills and this three day cultural extravaganza started with the Theatre Night, followed by the Music Night and the Dance Night on three different days. The trailers of Verba Maximus, the Annual Literary Festival and the Theme of Pearl'2017, the Annual Cultural Festival were revealed on the last day of Shangri-La.

### **Dubai Campus**

1. On 28th January 2016, BPDC Library Staff organized "EBSCO Online Database (e-journals) Orientation and Live Demo Training. The training was handled by Mr. Ghais Najjar, Information Specialist.
2. On 18th February 2016, the CHIMERA, the Biotech Association of BPDC organized an Interactive session on "MTAI Master Co-regulator in Cancer and Beyond" by Dr. Rakesh Kumar, Professor, School of Medicine and Health Sciences, George Washington University and on "Facts and fiction in modern biology : Membrane biology as a case in point by Prof. Sitaraman, Consultant, Formerly Dept. of Biotechnology (Retired), University of Pune.
3. Centre for Innovation, Incubation & Entrepreneurship), BPDC, on 22nd February 2016, organized an interactive session on "Indian School of Business - Young Leader's Programme" by Mr. Sanjay Dhingra, Associate Director, Admissions and Financial Aid, Indian School of Business.
4. On 28th February 2016, Department of Computer Science, BPDC a Seminar and Live Demonstration on "Embedded Linux" by Keshav Peswani & Neil Peswani, VPL Infotech & Consultants, Preet Vihar, Delhi.
5. On 29th February 2016, Centre for Innovation, Incubation & Entrepreneurship), BPDC, organized an interactive session on "Virtue based Compatibility of Business and Profession" by Dr. Kumar Neeraj Sachdev, Associate Professor, Department of Humanities and Social Sciences, BITS Pilani.
6. On 9th March 2016, Chemical Engineering Students Association (ChESA) and the CHIMERA, the Biotech Association of BPDC organized an interactive talk on "Recent advances in computational drug design and Computational Biologics design" by Mr. R. Raghu, Vice President, Schrodinger Inc, USA.

7. On 13th March 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "From Mind to the Market place: Innovation through Global Collaboration" by Prof. Suresh Bhargava, FTSE, FNA, KIA Laureate, Distinguished Professor, DPVC(International Research), College of Science, Engineering & Health, Director - Centre for Advanced Materials and Industrial Chemistry (CAMIC), RMIT University, Melbourne, VIC.
8. From 15th-17th March, 2016 BPDC hosted ENGINuity '2016. 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. Campus Director Prof. R. N. Saha inaugurated the event by lighting the lamp.
9. On 30th March 2016, ACM Student Chapter of BPDC organized an interactive talk "Machine Vision and Artificial Intelligence : will you be driving a car in your 30s? " by Mr. Saurabh Bodas, Research Scientist at NexusTec GmbH, an Alumnus of BITS Pilani, Goa Campus.
10. From 30th-31st March, 2016, SHADES, the art club of BPDC hosted ARTEX' 16, the inter-college art exhibition. ARTEX comprises of Doodle God, Rangoli, Logo Design, Henna, Bling Art, Illusion D' Optica, Face Painting and exhibition of Kalakriti paintings. Campus Director Prof. R. N. Saha inaugurated the event by lighting the lamp.
11. On 4th April 2016 A free session on "Stress Free Living' was conducted from Art of Living team at BPDC G07 on Monday between 3.45 to 4.45 pm. The session included "Life skills to overcome stress, Yoga and Exercise and Meditation"
12. On 5th April 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "The Simulation of Light Olefin Selectivity from FCC Unit (Lab to Pilot to Commercial) by Dr. Srikanta Dinda, Associate Professor, BITS Pilani, Hyderabad Campus, India.
13. On 12th April 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "Particle Based Simulations for Studying Molecular Systems" by Dr. Eldhose Iype, Assistant Professor, Chemical Engineering Department, BPDC.
14. From 15th and 16th April 2016, AOEE of EEE department, BPDC organized an ARDUINO workshop on "Building Smarter Homes". The workshop session was conducted by Mr. Talal Shaikh, Heriot-Watt University, Dubai.
15. From 19th-21st April, 2016, BPDC students hosted JASHN '16, the inter-college competition. JASHN, the annual inter-university cultural episode comprises of music, literary, photography, dance, drama fashion, War of DJs. The highlight of JASHN ' 16 was the performance of Arjun Kanungo is an Indian famous singer and composer.
16. On 3rd and 4th May 2016, BPDC Library Staff organized "Book Display" CBS Publishers and Distributors Pvt. Ltd, Delhi. The students visited the book display and few students purchased books for their personal use and faculty visited the book display and recommended books for the BPDC Library.
17. On 3rd May 2016, Director, BPDC Prof R. N. Saha inaugurated a new Petroleum Lab.
18. On 4th May 2016, The Social & Environment Club of BPDC organized a blood donation campaign in association with Al Wasl Hospital at our Campus.
19. On 10th May 2016, AOEE of EEE department organized a lecture on "Industrial Automation with SCADA DEMONSTRATION (Bridging the gap between the theory & practical application)" by Mr. Chandradhar Prasad & Ms. Kriti Saxena, Sr. Engineers - Automation Projects, L & T Electrical and Automation FZE.
20. On 11th May 2016, the Annual Sports Day and Boxing Championship held at BPDC auditorium. The inter year boxing championship was held and the annual sports award were presented to students, staff and faculty by the Director, BPDC, Prof. R. N. Saha.
21. On 19<sup>th</sup> May, Student Welfare Division of BPDC organized Diro's Tea Party, the farewell to the final year students on 19th May 2016 at our campus
22. On 16th August 2016, department of CSE organized an interaction with Prof. Venkatesh Srinivasan, Dept. of CSE, University of Victoria, Canada.
23. On 4th September 2016, Department of EEE & CSE organized a lecture on "Accelerating discoveries with Big Data & Supercomputing" by Prof. Alok N. Choudhary, Henry and Isabelle Dever Professor, EECS Dept., Northwestern University, USA and Founder, Chairman and Chief Scientist, 4cinsights Inc.

24. On 5th September 2016, The ACM Students Chapter of BPDC conducted an event "'ACMonday' with 'Cheap Thrills' for your entertainment. Confused?'. Various competition like Rapid Code: A simple coding event to prove your mettle, Photo Scavenger- Take pictures with 20 tasks to win, Cheap Thrills-Fun games that test your team's coordination skills were conducted.
25. On 17th September 2016, Department of Humanities and Social Sciences, BPDC organized a workshop on "Effective Communication to Professional Success" for industry professionals.
26. On 20<sup>th</sup> September 2016, Placement division in association with AOEE of EEE department has been organized a training program on VERILOG Programming language which for final year students of EEE/EIE/ECE/CS who are interested in core electronics career. The training program has been scheduled on every Tuesday.
27. On 20th September 2016, Chemical Engineering Students Association (ChESA), BPDC organized an interactive session on "Recent techniques in Precipitated Calcium Carbonate (PCC)" by Mr. Hitesh Agarwal, Director, Jindal Saw Gulf/Super Cement Manufacturing, Abu Dhabi, UAE.
28. On 25<sup>th</sup> September, AOEE of EEE department, BPDC organized an interactive talk on "Innovation and Pathways in Nano electronics" by Dr Brajesh Kumar Kaushik, IIT Roorkee.
29. From 18<sup>th</sup>-19<sup>th</sup> October 2016, The SPARKS16, the annual Intra collegiate cultural festival of BITS Pilani Dubai Campus held. The event started with opening ceremony at the lobby Nukkad Natak, Eastern Singing, Mr. and Ms. Sparks, Battle of The Bands, Western Singing and Instrumental, Drape, Dancing Doubles, Impulse and Group Dance.
30. On 3rd November 2016, the CHIMERA, the Biotech Association of BPDC organized an Interactive session on "Biotechnology in Mental Health" by Dr. Sridhar Natesan, Sn. Researcher, Psychosis Studies Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, United Kingdom.
31. On 3rd November, SPIC MACAY Heritage Club, organized an entertaining classical dance live performance programme of Ms. Deepti Parol.
32. On 14th November 2016, Association of Electronic Engineers presented Demonstration on "Power system Analysis and Simulation (Industry Needs and Requirements)" by Dr. Faraz Zafar Khan, Manager, R & D, ASAS Engineering and Project Management Consultancy.
33. On 20th November 2016, Association of Electronic Engineers presented guest lecture on "Design and Debug of Embedded Systems" by Mr. Hareesh Janakiraman, Electronic Engineer, Houston, Texas.
34. On 21st November 2016, Association of Electronic Engineers presented guest lecture on "Clinical Utility of Point of Care Analyzer in Healthcare Setup" by Mr. Bharath Kamath, Product Manager, Abbott Laboratories S.A.

## **A.2 ADMINISTRATIVE APPOINTMENTS**

**The following administrative appointments were made during the year:**

- A. Prof. Souvik Bhattacharyya has been appointed as Vice Chancellor of the Institute with effect from 13<sup>th</sup> June 2016 for a term of 5 years.
- B. Prof. G. Sundar, Senior Professor and Director Off Campus Programmes & Industry Engagement has been appointed as Director – Hyderabad Campus with effect from 17<sup>th</sup> July 2016 for a term of 3 years.
- C. Prof. S.C. Sivasubramanian has been appointed as Acting Registrar with effect 18<sup>th</sup> July 2016 until further orders.
- D. Prof. Ranendra N. Saha, Director – Dubai Campus has been appointed as Acting Director – K.K. Birla Goa Campus with effect from 11<sup>th</sup> August 2016 until further orders.
- E. Prof. G. Raghurama, Senior Professor has been appointed as Director – K.K. Birla Goa Campus with effect from 1<sup>st</sup> November 2016 for a term of 5 years.
- F. Prof. G. Raghurama, Director, K.K. Birla Goa Campus has been appointed as Chairman, Alumni Affairs with effect from 22<sup>nd</sup> December 2016 until further orders.

G. The following have been appointed as Associate Deans as per details given below:

S.No.	Name	Administrative Function	Period
<b>Pilani Campus</b>			
1.	Prof. Hemant R Jadhav	Sponsored Research & Consulting (Officiating)	23/08/2016 until further orders
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Sutapa Roy Ramanan	Faculty Affairs Division	06/06/2016 to 15-01-2017
2.	Dr. C.K. Ramesha	Student Welfare Division	22/12/2016 until further orders

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

S.No.	Name	Department	Period
<b>(a) Pilani Campus</b>			
1	Prof. Prabhat Nath Jha	Biological Sciences	01/09/2016 to 31/08/2018
2	Prof. Hare Krishna Mohanta	Chemical Engineering	01/09/2016 to 31/08/2018
3	Prof. Bharti Khungar	Chemistry	01/09/2016 to 31/08/2018
4	Prof. Ravi Kant Mittal	Civil Engineering	01/09/2016 to 31/08/2018
5	Prof. Rahul Banerjee	Computer Science & Information System	01/09/2016 to 31/08/2018
6	Dr. Arun Kumar Vaish	Economics and Finance	01/09/2016 to 31/08/2018
7	Prof. Navneet Gupta	Electrical & Electronics Engineering	01/09/2016 to 31/08/2018
8	Prof. Gajendra Singh Chauhan	Humanities and Social Sciences	01/09/2016 to 31/08/2018
9	Dr.(Mrs.) Leela Rani	Management	01/09/2016 to 31/08/2018
10	Prof. Balram Dubey	Mathematics	01/09/2016 to 31/08/2018
11	Prof. P Srinivasan	Mechanical Engineering	01/09/2016 to 31/08/2018
12	Dr. Anil Gaikwad Bhanudas	Pharmacy	01/09/2016 to 31/08/2018
13	Prof. Anshuman Dalvi	Physics	01/09/2016 to 31/08/2018
<b>(b) Hyderabad Campus</b>			
1.	Dr. Sudatta Banerjee	Economics & Finance	01/10/2016 to 30/09/2018
2.	Prof. Naga Mohan Kommu	Biological Sciences	01/10/2016 to 30/09/2018
3.	Prof. Srikanta Dinda	Chemical Engineering	01/10/2016 to 30/09/2018
4.	Prof. Manab Chakravarty	Chemistry	01/10/2016 to 30/09/2018
5.	Prof. Sridhar Raju	Civil Engineering	01/10/2016 to 30/09/2018
6.	Prof. N L Bhanu Murthy	Computer Science and Inf. Systems	01/10/2016 to 30/09/2018
7.	Dr. Sudatta Banerjee	Economics and Finance	20/04/2016 to 30/09/2018
8.	Prof. Y Yoganandam	Electrical & Electronics Engineering	01/10/2016 to 30/09/2018
9.	Prof. Sunny Jose Gosman	Humanities and Social Sciences	01/10/2016 to 30/09/2018
10.	Prof. Dipak Kumar Satpathi	Mathematics	01/10/2016 to 30/09/2018
11.	Prof. Amit Kumar Gupta	Mechanical Engineering	01/10/2016 to 30/09/2018
12.	Prof. D Sriram	Pharmacy	01/10/2016 to 30/09/2018
13.	Prof. P K Thiruvikraman	Physics	01/10/2016 to 30/09/2018



<b>(c) Dubai Campus</b>			
1.	Dr. Ramachandran Subramanian	Biotechnology	01/06/2016 to 31/05/2018
2.	Dr. Nishant Harishbhai Pandya	Chemical Engineering	01/06/2016 to 31/05/2018
3.	Dr. Santhosh Kumar Vasudevan	Computer Science	01/06/2016 to 31/05/2018
4.	Dr. Abdul Razak Abdul Ravoof	Electrical & Electronics Engineering	01/06/2016 to 31/05/2018
5.	Dr. Tapan Kumar Datta	General Sciences	01/06/2016 to 31/05/2018
6.	Dr. Lajwanti Kishnani	Humanities and Social Sciences	01/06/2016 to 31/05/2018
7.	Dr. Mullapudi Venkata Nagasankaram	Mechanical Engineering	01/06/2016 to 31/05/2018
8.	Dr. Ajit Pratap Singh	Civil Engineering	01/06/2016 to 29/08/2017

I. The following have been appointed as Professor-in-charges (University wide):

S.No.	Name & Campus	Name of Centre	Period
<b>Pilani Campus</b>			
1.	Prof. Rahul Banerjee	Teaching Learning Centre (TLC)	01/09/2016 to 31/08/2017
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Srinivas Krishnaswamy	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	01/09/2016 to 31/08/2017
<b>Hyderabad Campus</b>			
2.	Prof. Chittaranjan Hota	BITS Entrance Examinations	13/12/2016 to 12/12/2017

J. The following have been appointed as Faculty-in-charges (Campus wise):

S.No.	Name & Campus	Name of Centre	Period
<b>Pilani Campus</b>			
1.	Prof. S.K. Choudhary	Teaching Learning Centre (TLC)	01/09/2016 to 31/08/2017
2.	Prof. Hari Om Bansal	First Degree Admissions Tests	13/12/2016 to 12/12/2017
3.	Prof. Hitesh Dutt Mathur	Higher Degree Admissions Tests	13/12/2016 to 12/12/2017
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Mridula Goel	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	01/09/2016 to 31/08/2017
2.	Dr. K.R. Biju	Computer Centre	01/01/2016 to till further notice
3.	Prof. Radhika Vatsan	Community Welfare	01/01/2016 to till further notice
4.	Dr. A Amalin Prince	Placement	01/01/2016 to till further notice
5.	Prof. Meenal Kowshik	Media & Publicity	09/08/2016 to 31-Jul-2018
<b>Hyderabad Campus</b>			
1.	Prof. Aravinda N Raghavan	Teaching Learning Centre (TLC)	25/10/2016 to 31/08/2017
2.	Dr. Chandu Parimi	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	25/10/2016 to 31/08/2017
<b>Dubai Campus</b>			
1.	Prof. Maneesha	Teaching Learning Centre (TLC)	01/09/2016 to 31/08/2017
2.	Prof. Gokhale Trupti Swarup	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01/09/2016 to 31/08/2017

K. Prof. Angshuman Sarkar, K.K. Birla Goa Campus is appointed as Chief Warden with effect from 22nd December 2016 for a period upto 31st December 2017.

L. The following faculty members have been appointed as Resident Warden of the hostels as per details given below:

S.No.	Name	Hostel	w.e.f.
<b>K.K. Birla Goa Campus</b>			
1.	Angshuman Sarkar	CH1	1-Jan-2016
2.	C.K. Ramesha	AH8	1-Jan-2016
3.	P. Bhavana	CH4	1-Jan-2016
4.	Arnab Banerjee	CH2	1-Jan-2016
5.	Ravi Prasad Aduri	AH7	1-Jan-2016
6.	Ranjit S. Patil	AH6	1-Jan-2016
7.	Alpeshkumar M. Dhorajia	AH1	1-Jan-2016
8.	Sanjay K. Sahay	CH6	1-Jan-2016
9.	Mainak Banerjee	CH3	1-Jan-2016
10.	Ch.V.V.S.N.V. Prasad	AH4	1-Jan-2016
11.	Vikas V. Chaudhari	AH3	1-Jan-2016
12.	Saroj S. Baral	AH2	1-Jan-2016
13.	Halan Prakash	AH5	1-Jan-2016
14.	K.A. Geetha	CH5	16-Jan-2016
<b>Hyderabad Campus</b>			
15.	Dr. Sounak Roy	Vyas Bhawan, Warden	28-01-2016

The names and designations of senior officers of different campuses are given in Annexure (Pilani Campus, 'Annexure B1-14'; 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 55th Meeting on 19th March, 2016 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 69th Meeting on 19th March, 2016 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 55th Meeting on 19th March, 2016 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

#### Senate

The Senate of the Institute met four times during the year. It held its 176<sup>th</sup>, 177<sup>th</sup>, 178<sup>th</sup> and 179<sup>th</sup> meetings on 7<sup>th</sup> March, 2016, 16<sup>th</sup> May, 2016, 14<sup>th</sup> July, 2016 and 23<sup>rd</sup> December, 2016 respectively.

#### Examination Committee

The Examination Committee met 5 times during the year for analysis and declaration of grades; approval of PhD thesis reports; approval of award of degrees/medals for eligible students; deciding cases of scrutiny, unfair means and related matters.

## A.4 ADMISSIONS

### BITSAT 2016

A total of 178100 candidates, including 44372 girls, from all over the country applied for BITSAT 2016 test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during 14th May to 28th May, 2016.

In addition to this 145 applications are also received for admissions under International students scheme.

#### BITSAT 2016 Highlights are

- Computer-based objective type online test, conducted from 14th May to 28th May, 2016 in 58 centers across India and in Dubai.
- 149113 candidates appeared in BITSAT-2016 for 2217 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. 10 board toppers joined BITS in 2016.

46 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 2016 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 2015-2016	I Semester 2016-2017
<b>1. BITS Pilani, Pilani Campus</b>		
Integrated First Degree Programmes		953(134)
Higher Degree Programmes		253(75)
Doctoral Programmes	24(13)	36(12)
<b>Total</b>	<b>24(13)</b>	<b>1242(221)</b>
<b>2. BITS Pilani, K.K. Birla Goa Campus</b>		
Integrated First Degree Programmes	-	605(65)
Higher Degree Programmes	-	39(16)
Doctoral Programmes	10(06)	26(10)
<b>Total</b>	<b>10(06)</b>	<b>670(91)</b>

	II Semester 2015-2016	I Semester 2016-2017
<b>3. BITS Pilani, Hyderabad Campus</b>		
Integrated First Degree Programmes	-	659(100)
Higher Degree Programmes	-	66(28)
Higher Degree (3 year Integrated Programmes)	-	11(06)
Doctoral Programmes	33(11)	45(18)
<b>Total</b>	<b>33(11)</b>	<b>781(152)</b>
<b>4. BITS Pilani, Dubai Campus</b>		
Integrated First Degree Programmes	10(05)	322(126)
Higher Degree Programmes	06 (02)	27(04)
Doctoral Programmes	02 (01)	05(01)
<b>Total</b>	<b>18 (08)</b>	<b>354 (131)</b>
<b>5. Work-Integrated Learning Programmes</b>		
Integrated First Degree Programmes	468 (89)	502 (12)
Higher Degree Programmes	3766 (1627)	2545 (522)
<b>Total</b>	<b>4234 (1716)</b>	<b>3047 (534)</b>
<b>GRAND TOTAL</b>	<b>4319 (1765)</b>	<b>6095 (929)</b>

## A.5 FLEXIBILITIES: DUAL DEGREE ADMISSIONS

During the academic year 2016-2017, 626 students (260 at Pilani, 220 at Goa and 144 at Hyderabad and 2 at Dubai) 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 11481(3547) degrees were awarded. The details on the award of degrees are given below. The numbers in brackets indicate number of female students.

	Number of degrees awarded				
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	WILP
78th Award (vide Board of Governors approval on 19.03.2016)	86(26)	47(09)	31(7)	49(14)	5574(2206)
79th Award (vide Board of Governors approval on 15.07.2016)	1267(273)	757 (151)	910(271)	373(132)	2387(458)
<b>Total</b>	<b>1353(299)</b>	<b>804(160)</b>	<b>941(278)</b>	<b>422(146)</b>	<b>7961(2664)</b>

**(b) Award of Medals for Academic Year 2015-2016****BITS Pilani, Pilani Campus**

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 2015-2016 is given in the following table:

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 822)</b>						
1.	2012A3TS133P	Prakhar Kumar	M	9.95	FIRST	GOLD
2.	2012A7PS054P	Meghna Bansal	F	9.90	SECOND	SILVER
3.	2012A3PS720P	Rahul Ranjan	M	9.89	THIRD	BRONZE

**BITS Pilani, K.K. Birla Goa Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 602)</b>						
1.	2011B5A3258G	Vishakha Gupta	F	9.76	FIRST	GOLD
2.	2012A4TS134G	Shah Ujash Dipakbhai	M	9.66	SECOND	SILVER
3.	2012A3TS163G	Dave Mihika Himanshu	F	9.60	THIRD	BRONZE
4.	2012A7PS487G	Vasundhara Bhargava	F	9.60	THIRD	

**BITS Pilani, Hyderabad Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 650)</b>						
1.	2012A7PS278H	Aditya Chandrasekar	M	9.93	FIRST	GOLD
2.	2012A1PS487H	A Sai Darshan	M	9.73	SECOND	SILVER
3.	2012A7PS148H	P Sarguna Janani	F	9.68	THIRD	BRONZE

**BITS Pilani - Dubai Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 368)</b>						
1.	2012A1PS036U	Shreyas Shirish Patwardhan	M	10.00	FIRST	GOLD
2.	2012A4PS060U	Vishank Bhatia	M	9.94	SECOND	SILVER
3.	2012A7PS064U	Rohit Ravishankar	M	9.86	THIRD	BRONZE

## A.7 MoUs

The Institute has signed Memoranda of Understanding with the following reputed organizations during 2016:

1. Tunghai University, Taichung, Taiwan
2. Carleton University, Ottawa, Canada
3. University of Leeds, United Kingdom
4. School of Mechanical Engineering, Kyungpook National University, Republic of Korea
5. Biocon Academy, Bangalore
6. JSW Steel Limited, Mumbai
7. Premier Explosives Ltd., Secunderabad
8. Mahindra Vehicle Manufacturers Limited, Pune
9. Public Works Department, Goa
10. The Medical Device Development Center of Daegu-Gyeongbuk Medical Innovation Foundation, Korea
11. The Technische Universitat Braunschweig, Germany
12. The University of South Florida, Florida, USA
13. Oracle India Private Limited, New Delhi
14. Tel Aviv University, Israel
15. Maruti Suzuki India Limited, New Delhi
16. Semiconductor laboratory Department of space, government of India, SAS Nagar
17. Sapience Consulting, Bangalore
18. Cardiff University, Cardiff, U.K.
19. Maktoum Bin Hamdan Dental University College, Dubai

## A.8 NUMBER OF STUDENTS REGISTERED

	No. of Students Registered					Total
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Work-Integrated Learning Programs	
Second Semester 2015-2016	4496	2812	3279	1714	19177	<b>31478</b>
First Semester 2016-2017	4637	2879	3322	1667	19020	<b>31525</b>
Summer Term 2015-2016	908	621	897	455	-	<b>2881</b>
<b>GRAND TOTAL</b>						<b>65884</b>

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

### Category-wise Distribution of PhD Students

During Second Semester 2015-2016, a total of 806 PhD students were on-rolls, while a total of 825 PhD students were on-rolls during First Semester 2016-2017.

S.No.	CATEGORY	No. of PhD Students on Rolls							
		II Sem 2015-2016				I Sem 2016-2017			
		Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
1	Research Scholars (FT+PT)	290	144	205	28	291	167	227	32
2	Lectures and Staff	41	29	16	4	25	29	15	2
3	PhD Aspirants	37	2	7	3	24	3	8	3
<b>TOTAL</b>		<b>368</b>	<b>175</b>	<b>204</b>	<b>35</b>	<b>340</b>	<b>185</b>	<b>246</b>	<b>36</b>
<b>GRAND TOTAL</b>		<b>806</b>				<b>825</b>			

## A.9 COURSES OFFERED

Semester/ Summer Term	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Work-Integrated Learning Programmes
II Semester 2015-2016	424	289	348	202	711
I Semester 2016-2017	487	279	342	212	702
Summer Term 2015-2016	9	8	31	14	–

## A.10 DEGREES OFFERED AT DIFFERENT CAMPUSES

### Pilani Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b>            Chemical            Civil            Electrical &amp; Electronics Engineering            Mechanical            Computer Science            Electronics &amp; Instrumentation            Manufacturing Engineering</p> <p><b>B.Pharm.</b></p> <p><b>M.Sc.</b>            Biological Sciences            Chemistry            Economics            Mathematics            Physics</p> <p><b>M.Sc.</b>            General Studies</p>	<p><b>M.E.</b>            Chemical            Chemical with Specialization in Petroleum Engineering.            Civil with Specialization in Structural Engineering.            Civil with Specialization in Transportation Engineering.            Civil with Specialization in Infrastructure Engineering &amp; Management</p> <p>Computer Science            Mechanical            Design Engineering            Manufacturing Systems Engineering.            Microelectronics            Embedded Systems            Communication Engineering            Software Systems            Biotechnology</p> <p><b>M.Pharm.</b>  <b>M.Pharm.</b> (with Specialization in Pharmaceutics)  <b>M.Pharm.</b> (with Specialization in Pharmaceutical Chemistry)  <b>Master of Business Administration (M.B.A.)</b></p>
<b>C. PhD</b>	

### K.K. Birla Goa Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b>            Chemical            Computer Science            Electrical &amp; Electronics Engineering.            Electronics &amp; Instrumentation            Mechanical</p> <p><b>M.Sc.</b>            Biological Sciences            Chemistry            Economics            Mathematics            Physics</p>	<p><b>M.E.</b>            Biotechnology            Chemical Engineering            Design Engineering            Embedded Systems            Microelectronics            Software Systems</p>
<b>C. PhD</b>	

## Hyderabad Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Chemical</li> <li>Civil</li> <li>Computer Science</li> <li>Electrical and Electronics</li> <li>Electronics &amp; Communication</li> <li>Electronics &amp; Instrumentation</li> <li>Mechanical</li> <li>Manufacturing Engineering</li> </ul> <p><b>B. Pharm.</b></p> <p><b>M.Sc.</b></p> <ul style="list-style-type: none"> <li>Biological Sciences</li> <li>Chemistry</li> <li>Economics</li> <li>Mathematics</li> <li>Physics</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Civil with Specialization in Structural Engineering.</li> <li>Computer Science</li> <li>Computer Science (with specialization in Information Security)</li> <li>Design Engineering</li> <li>Mechanical with Specialization in Thermal Engg.</li> <li>Embedded Systems</li> </ul> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutics)</p> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutical Chemistry)</p>
<b>C. PhD</b>	

## Dubai Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Chemical</li> <li>Computer Science</li> <li>Electrical and Electronics</li> <li>Electronics and Communication</li> <li>Electronics and Instrumentation</li> <li>Mechanical</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Design Engineering</li> <li>Microelectronics</li> <li>Software Systems</li> </ul> <p><b>Master of Business Administration (M.B.A.)</b></p>
<b>C. PhD</b>	

### A.11 PLACEMENT

	Pilani	Goa	Hyderabad	Dubai
Number of companies which conducted campus interviews	186	136	170	102
Number of offers made	865	527	528	109



## A.12 FACULTY DATA

As on January 1, 2017, the number of faculty members in each campus is given below:

Designation	Pilani		Goa	Hyderabad	Dubai	Total
	On Campus	Off Campus				
<b>Tenured</b>						
Senior Professors	5	-	3	2	1	11
Professors	30	-	12	16	18	76
Associate Professors	51	11	31	42	13	148
Assistant Professors	132	22	75	87	30	346
<b>Non-Tenured</b>						
Sr. Professor Emeritus	1	-	-	-	-	1
Professors on Contract	-	-	1	-	-	1
Visiting Professors	-	-	-	-	-	0
Assistant Professors on Contract	-	-	-	-	-	0
Visiting Assistant Professors	3	-	3	-	1	7
Sr. Lecturers	-	-	-	-	1	1
Lecturers	11	20	37	15	2	85
Visiting Faculty	2	1	2	4	1	10
Adjunct Faculty	-	1	-	-	-	1
Instructors	-	2	-	-	-	2
Professor Emeritus	-	-	1	-	-	1
Visiting Associate Professor	-	-	1	-	-	1
<b>Total</b>	<b>235</b>	<b>57</b>	<b>166</b>	<b>166</b>	<b>67</b>	<b>691</b>

During the year 2016, 62 new faculty members (25 in Pilani, 09 in Goa, 16 in Hyderabad and 12 in Dubai) joined. 81 faculty members (35 in Pilani, 19 in Goa, 17 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 PhD

## 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 2016 the Practice School programme was operated at 443 stations, with 12 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4255 students and 160 faculty members. Categorization of PS stations is given below:

Sr.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	18 (25)	2 (3)
2.	Design, Development, Consultancy and Software Organization.	175 (155)	45 (49)
3.	National Research Laboratories and other Research centers	21 (32)	32 (29)
4.	Production, Manufacturing and Public Work Units	46 (43)	98 (94)
5.	Publishing Houses, News Agencies and Museums	1 (1)	5 (7)
<b>Total</b>		<b>261 (256)</b>	<b>182 (182)</b>

In 2016, an integrated practice school allotment for 4255 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 break up of students who were registered in PS-I, PS-II & PS for Higher Degree:**

PS-I	Summer Term 2015-2016	(2096)	2184
PS-II	II Semester 2015-2016	(860)	762
<b>PS for Higher Degree</b>			
	II Semester 2015-2016	(246)	237
	I Semester 2016-201	(03)	00
<b>Total</b>		<b>(4280)</b>	<b>4255</b>

**Note:-**The figures shown in brackets relate to the year 2016.

## Dubai Campus

During the calendar year 2016, the Practice School Programme was operated at 141 stations, with 32 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 726 students and 50 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.	00 (00)	01 (00)
2.	Design, Development, Consultancy and Software Organization.	23 (30)	33 (29)
3	Trading	11 (08)	07 (04)
4	Production, Manufacturing and Maintenance	35 (34)	48 (45)
5	Other	07 (00)	08 (11)
<b>Total</b>		<b>76 (72)</b>	<b>97 (89)</b>

With the present annual PS intake of 728 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.

Following is the breakup of students who were registered in PS-I, PS-II. (Note: The data pertaining to the calendar year 2015 is given in parenthesis.)

PS-I	Summer Term 2016	(324) 404
PS-II	II Semester 2015-2016	(148) 182
PS-II	I Semester 2016-2017	(168) 140
<b>Total</b>		<b>(640) 726</b>

#### **A.14 WORK INTEGRATED LEARNING PROGRAMMES (WILP)**

Since 1979, the Institute has been participating in the human resource development needs of the industries. The Institute has evolved several degree programmes by integrating the working environment of the employees with the learning environment required by the Institute. These programmes were first started as M.E. (Collaborative) programmes in 1979. Later, from 1988, the Institute ventured into Off-campus Work-Integrated Learning Programmes in Science and Technology areas. These programmes:

- (a) are targeted to meet the needs of continuing education of employed professionals;
- (b) are based on Science & Technology approach and operate disciplines that are non-conventional and Science & Technology oriented;
- (c) are designed for the purposeful acquisition of scientific methods, modern skills and involvement in open-ended experiments;
- (d) judiciously combine the flexibility and ingenuity of the off-campus system with all the regular features of the on-campus system; and
- (e) allow the employed professionals to pursue a meaningful and relevant university degree with minimum dislocation from their work environment.

#### **SALIENT FEATURES**

All programmes offered under the Work-Integrated Learning Programmes are characterized by a person-centered approach where the rigour and standard are maintained as in the institute's on-campus programmes. While a number of on-campus programmes are also available under off-campus, the Institute interacts with various organizations like industries, hospitals and national laboratories with a view to designing and offering specialized programmes. Many organizations sponsor their employees for various programmes, in order to prepare their human resources to meet the challenges posed by the growth of industries and rapid advancement of technology in India and abroad.

#### **COURSES OFFERED**

The number of courses, offered during the year 2016 is as follows:

<b>Semester</b>	<b>Number of Courses offered</b>
Second Semester 2015-2016	711
First Semester 2016-2017	702

## PROGRAMMES OFFERED

Table 1: Currently Operative Off-Campus Work-Integrated-Learning Programmes at a Glance

Programmes	Collaborating / Sponsoring Organization
<b>Post Graduate Diploma in Finance</b>	- Designed for the HRD needs of Business organizations
<b><u>B.Tech. Programmes</u></b>	
1. Engineering Design	- Eaton Technologies, Pune; L&T, Vadodara, Cluster, Pune
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
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
5. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
6. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; DRL, Hyderabad; Vedanta, Jharsuguda
<b><u>M.Sc. Programme</u></b>	
1. Business Analytics	- Genpact, Gurgaon, 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
<b><u>M.B.A. Programmes</u></b>	
1. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of consulting firms
2. Finance	- Designed for the HRD needs of Business organizations
3. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
4. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b><u>M.Tech. Programmes</u></b>	
1. Automotive Engineering	- Tata Technologies, Tata Motors, Pune
2. Design Engineering	- John Deere, Pune; Cluster Programme, Pune
3. Embedded Systems	- UTC, Bangalore, Hyderabad; L&T, Vadodara; Cluster programme, Pune, Bangalore
4. Environmental Engineering	- Goa State Pollution Control Board, Goa
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, Sesa Sterlite, Jharsuguda
6. Microelectronics	- Cypress, Qualcomm, Texas Instruments, Cluster, Bangalore
7. Pharmaceutical Operations and Management	- Lupin, Mumbai; Cipla, Mumbai
8. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
9. Science Communication	- National Council of Science Museums, Kolkata
10. Software Engineering	- EMC, Bangalore; Tech Mahindra, Pune; iGate, Mumbai; Qualcomm, Hyderabad; SAP Labs, Sabre, Bangalore; Persistent, Pune; Cybage, Pune; CTS, Chennai; TCS, Hyderabad; Virtusa, Chennai; Wipro Technologies, Bangalore; Hexaware, Mumbai; Verizon, Chennai
11. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad, Verizone, Chennai
12. Structural Engineering	- PWD, Goa
13. Systems Engineering	- Wipro Infotech, Bangalore
14. Telecommunications and Software Engineering	- Avaya, Pune, Tech Mahindra, Pune
15. Transportation Engineering	- PWD, Goa
<b><u>M.Phil.</u></b>	
1. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
2. Hospital and Health Systems Management	- CMC, Vellore; Bombay Hospital, Mumbai

**Table 2: The following Off-Campus Work-Integrated-Learning Programmes are also operated for old registered students**

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
<b><u>B.S. Programmes</u></b>	
1. Engineering Design	- Eaton Technologies, Pune; L&Ties, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Infotech, Mumbai
4. Manufacturing Engineering	- Bharath Forge, TACO, Kirloskar Oil Engines, Pune
5. Physician Assistant	- Madras Medical Mission, Chennai
6. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
7. Process Engineering	- Aditya Birla Group; Hindalco Industries, Dahej; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b><u>B.Tech.</u></b>	
1. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
2. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
<b><u>B.Optom. Programme</u></b>	
1. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
<b><u>M.S. Programmes</u></b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Consultancy Management	- Consultancy Development Centre, New Delhi
3. Design Engineering	- Eaton Technologies, Pune, L&T, Vadodara; SKF, Pune
4. Embedded Systems	- John Deere, iGate, Pune; L&T, Vadodara
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
6. Microelectronics	- Wipro Technologies, Cypress, Qualcomm, IBM, Bangalore
7. Pharmaceutical Operations & Management	- Lupin, Mumbai
8. Software Engineering	- Wipro Technologies, EMC, SAP Labs - Bangalore; CTS, Virtusa, Chennai; Tech Mahindra, Pune ; Cybage, Persistent, iGATE, Mumbai, TCS, Hyderabad, Qualcomm, Hyderabad
9. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries
10. Systems Engineering	- Wipro Infotech - Bangalore
11. Telecommunications & Software Engineering	- Tech Mahindra, Avaya - Pune

## ADMISSIONS

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

Programmes	II Semester 2015-16	I Semester 2016-17	Total
Integrated First Degree Programmes	468(089)	502(012)	970(0101)
Higher Degree Programmes	3766 (1627)	2545(522)	6311(2149)
<b>Total</b>	<b>4234(1716)</b>	<b>3047(534)</b>	<b>7281(2250)</b>

The programme-wise details are given in 'Annexure B5-1'.

## NUMBER OF STUDENTS REGISTERED

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

Semester	Number of students registered
Second Semester 2015-2016	19177
First Semester 2016-2017	19020

Details of Registration of students for the First Semester 2015-2016 are given in 'Annexure B5-2'.

## AWARD OF DEGREES

During the year, a total of 6660 students graduated. The details on the award of degrees are given below.

Award	78 <sup>th</sup> Award	79 <sup>th</sup> Award	Total
Integrated First Degrees	938(0113)	475(056)	1413(0169)
Higher Degrees	4636(2093)	1912(402)	6548(2495)
<b>Total</b>	<b>5574(2206)</b>	<b>2387(458)</b>	<b>7961(2664)</b>

Statistical details of these degrees are given in Annexure B5-6.

## A.15 ALUMNI AFFAIRS DIVISION (AAD) ACTIVITIES

### Distinguished Alumnus Award 2016:

"BITS Pilani Distinguished Alumnus Award" in 2016 to the following alumni:

Prof. Alok Choudhary	John G. Searle Professor, Dept. of Electrical Engineering & Computer Science, Northwestern University - for <b>Academic Teaching and/or Research</b>
Prof. G Ravindra Kumar	Senior Professor, Tata Institute of Fundamental Research (TIFR), Mumbai - for <b>Academic Teaching and/or Research</b>
Mr. N S Parthasarathy	Co-Founder, President & COO, Mindtree Limited -for <b>Entrepreneurship</b>
Mr. Mathew Cherian	CEO, HelpAge India - for <b>Social Entrepreneurship</b>

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research.

### **BITSians Day:**

The third edition of 'BITSians Day' was celebrated on 5<sup>th</sup> of August, 2016.

### **Alumni Affairs Cell, Pilani campus**

During the year, a number of alumni related events were organized including Silver Jubilee Reunion, Golden Jubilee Reunion, Farewell parties to passing out graduates. More than 210 Alumni of 1987-91 batch participated in a Silver Jubilee Reunion which was organized between 4th and 6th November 2016. More than 100 Alumni of 1966-71 batch with a total number of more than 180 participants including family members participated in a Reunion organized between 12th and 13th November, 2016. Around 20 Alumni of 1966-71 pharmacy batch visited the campus during 14th to 16th October 2016. 1961-66 batch celebrated their golden Jubilee reunion during 21st March to 23rd March, 2016 with more than 30 alumni along with their family members. The 1970-75 Batch was on campus to celebrate their Reunion for four days – 29<sup>th</sup> Jan to 1<sup>st</sup> February 2016. This batch runs BITS 75 Charitable Trust and organize Gurudakshina program every year. This is special program in which they honor their 'Gurus'. This year, 7<sup>th</sup> edition of the program was organized at BITS Pilani – Pilani campus on 30th January 2016 and they honored their 6 'Gurus' namely Prof HL Kundu, Prof PD Chaturvedi, Prof RP Arora, Prof HS Moondra, Prof JL Arora and Prof MS Radhakrishna.

Graduating student tea parties were organized on 27th April, 2016 and on 26th November, 2016.

A series of talks by leading academicians and entrepreneurs were organized in collaboration with Campus Mentoring Network, BITSAA International for the benefit of students.

Various scholarships were awarded to the students through BITSAA international.

### **K.K. Birla GOA Campus**

#### **Embryo & On-campus Lectures:**

Alumni Affairs Division of BITS Pilani K.K. Birla Goa Campus has organized various Embryo & On-campus talks from January – December, 2016

#### **Alumni Summit:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, BITS Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 28th of August, 2016. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Seven speakers who were invited for BITS Alumni Summit 2.0 are:

- Mr. Kartik Aneja, CEO and Co-Founder at Nayi Disha Studios.
- Mr. Rishabh Goel, Associate Relationship Manager at Prodigy Finance
- Mr. Ankit Taparia, Co-Founder of Teramatrix Technologies
- Mr. Sanchit Sethi, CEO and Founder of StayUncle
- Mr. Prakhar Bindal, CEO & founder of NameCart(formerly Axiom)
- Mr. Bhaskar E V, Under-Secretary to Ministry of Finance, Government of India
- Mr. Nikhil Tavora, Former Match Coordinator & Operations Executive at FC Goa

#### **Prof. Suresh Ramasamy Memorial Award 2016:**

The project idea 'Cosmic Ray Flux Measurement & Analysis' done by the students: Sanket Deshpande, Lucky Kapoor, Pankaj Tiple and Vibhav Joshi was selected for Prof. Suresh Ramaswamy Memorial Award 2016-17.

#### **Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani and Dhruv Shekhawat as recognition to their research work.

#### **Regular Activities:**

- Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

## A.16 FINANCE AND FUND SUPPORT

The accounts of the Institute for the financial year 2015-2016 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 2015-2016

**Investments :** As on 31st October, 2016, 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. 24031.91 lakhs.

**Expenditure :** The excess of expenditure over income as per Income & Expenditure Account was Rs.1.96 lakhs.

**Pension to Staff :** As on 31<sup>st</sup> October 2016, thirty six members of the staff were receiving pension. During the financial year 2015-2016, the Institute spent Rs. 39.48 lakhs on pension.

**Gratuity to Staff :** Institute has paid Rs. 170.83 lakhs to 47 staff members who left the institute.

**Medical Facilities :** During the financial year 2015-2016, the Institute spent Rs. 264.08 lakhs net for providing medical facilities to the students and staff of the Institute. The expenditure included contribution to Birla Sarvajanic 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. 653.18 lakhs on scholarships to staff children/spouse/self to cover the fees for education at the Institute and local schools. Further, 2798 students received financial assistance of Rs. 1932.85 lakhs from different sources, details of which are given below:

S. No.	Particulars	No. of Students	Amount in Rs.
1.	UGC PG Scholarship	181	24452498
2.	Students Aid Fund	145	2121460
3.	Other States Scholarship	4	441650
4.	Institute Merit Scholarship	369	31001590
5.	Institute Merit-cum-Need Scholarship	2099	135267892
<b>Total</b>		<b>2798</b>	<b>193285090</b>

### A. SAP-DRS

UGC has selected four groups of the Institute under Special Assistance Programme (SAP) at the level of Departmental Research Scheme (DRS)

S. No.	Name of Department	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Pharmacy phase II	5 Years	71.50	63.33
2.	Biological Science	5 Years	31.50	27.02
3.	Chemistry	5 Years	35.00	30.05
4.	Mechanical Engineering	5 Years	38.00	36.64
5.	Mathematics	5 Years	51.50	23.70
6.	Physics	5 years	51.50	46.50
7.	Chemical Engineering	5 Years	48.00	38.67
8.	Civil	5 Years	67.30	54.36
9.	Biological Science Phase II	5 Years	70.75	5.65
10.	Chemistry Phase II	5 Years	70.00	0
<b>Total</b>			<b>535.05</b>	<b>331.57</b>



**B. UGC Infrastructure Development Grant**

S. No.	Department	Period in Years	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Mathematics	1 Year	20.00	20.00
2.	Physics	1 Year	20.00	20.00
3.	Civil	1 Year	20.00	20.00
<b>Total</b>			<b>60.00</b>	<b>60.00</b>

**C. UGC Innovative Program (UGC Master Programme in Public Health)**

UGC has granted a project for establishing a Public Health Program under the scheme of UGC Innovative Programmes.

Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
5 Years	Non Recurring 18.00; Recurring: 11.00 ; <b>Total: 29.00</b>	<b>22.81</b>

**D. UGC Funded Centre for Women Studies**

UGC has granted a project for establishing a Centre for Women Studies under the scheme of Development of Women's Studies in Indian Universities and Colleges.

Period	Amount Sanctioned (Rs. In Lakhs)	Amount Released (Rs. in Lakhs)
5 Years	Non Recurring 20.00; Recurring: 21.00; Others (3.00 p.a.): 9.00 <b>Total: 50.00</b>	<b>35.08</b>

**Financial Details of Department of Science & Technology Grants:****A. DST Funded Technology Business Incubator**

DST has granted a project for establishing Technology Business Incubator at BITS, Pilani.

S. No.	Co-coordinator & Name of Group	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Dr. Arya Kumar and Dr. Anu Gupta	6 Years	Non Recurring: 138.35 Recurring: 53.00 for 5 years <b>Total: 191.35</b>	140.32

**B. Grants under DST- FIST:**

S. No.	Department	Period	Amount Sanctioned (Rs. in Lakhs) (50:50 Basis)	Amount Released (Rs. in Lakhs)
1	Physics	5	58.00	23.44
2.	Chemical Engineering	5	80.50	36.8
3.	Civil Engineering	5	80.00	32.00
4.	Pharmacy	5	135.00	62.50
5.	Chemistry Level I	5	87.00	35.5
6.	Computer Science	5	53.00	24.00
7.	Mathematics	5	100.00	37.50
8.	EEE & I	5	138.00	36.50
9.	Mechanical Engineering	5	163.00	68.00
10	Biological Science	5	55.00	25.25
11	Chemistry Level II	5	165.00	76.00
<b>Total</b>			<b>1109.50</b>	<b>457.49</b>

**Financial Details of Department of Electronics and Information Technology: TIDE Scheme**

S. No.	Co-coordinator& Name of Group	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Dr. Arya Kumar and Dr. Anu Gupta	3 Years	155.00	146.15

**BITS Pilani, Dubai Campus****SCHOLARSHIPS****Financial Assistance to Students**

773 students received financial assistance of AED:5,400,464/- under different categories for the Academic Year 2015-16, the details of which are given below:-

S.No	Particulars	Students Nos	Amount in AED
1	Institute Merit Scholarship	674	3,913,250
2	Higher Degree and Doctoral Scholarship	32	573,214
3	Need - Based Scholarship ( Physically Challenged, Bereaved Family discount )	2	30,625
4	Others ( Staff , Siblings, Sports , Special Concessions )	66	883,375
<b>Total</b>		<b>773</b>	<b>5,400,464</b>

**A.17 OBITUARIES**

The Institute deeply mourns the sad demise of the following during the year:

1. Shri Nikhil Dixit, GPSRN 505, Public Relation Officer at Goa Campus died on 25<sup>th</sup> February 2016 due to cardiac arrest.
2. Mr. Gourav Appikonda, ID No. 2012A4PS205P, a student of Pilani Campus died on 5<sup>th</sup> August 2016 at Mahendragarh (Haryana) due to accident.

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

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## GENERAL BODY

The 55<sup>th</sup> meeting of the General Body of the institute held 19<sup>th</sup> March 2016 under 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 overall enrolment grew marginally in FY'16 over FY'15. New admissions were constrained by hostel capacity. Students admitted to our First Degree Bachelor's Programme increased marginally from 2239 to 2250. Regulatory approvals for the construction of planned new student hostels at our Hyderabad and Goa Campuses are obtained. The approvals have since been obtained and construction has commenced, the effect will be seen in 2017 admissions.

Admission to our Higher Degree (Master's Programme) and PhD Programmes was at 512 (378 Master's and 134 PhD) students compared to 459 (363 Master's and 96 PhD) during the previous year. The focus on admissions to our Master's and PhD Programmes continues.

However, the number of applicants registering for our BITSAT entrance test recorded a decline in 2015-16. As against 1,86,000 and 1,95,000 applicants who registered for the 2014 and 2015 Tests respectively, 1,78,000 students registered in 2016. The reasons for this are being assessed. The IIT JEE also saw a drop of around 10% in registrations.

The Chancellor also apprised the members that the Student Placement Office continued to deliver improvements. For the period April to March, the number of recruiters visiting the Indian campuses increased from 480 in 2014-15, to 517 in the current year. Key first-time recruiters included a number of reputed companies such as Rolls Royce, Nestle, Reckitt Benckiser, Visa International, Works Applications (a Tokyo headquartered ERP system manufacturer), and Saint-Gobain. Additionally, existing, sought after recruiters like McKinsey & Co., BCG, Diamond Consulting, ICICI Bank, Tata Communications, Citibank, Barclays Technology, JP Morgan, Credit Suisse, Morgan Stanley, Walmart Labs, Amazon, Intuit, Bank of America continued to hire from BITS. 80% of our Bachelor's students have been placed. The median annual salary increased from Rs. 7 lacs to Rs. 8.5 lacs.

The Chancellor informed the members that Our Work Integrated Learning Programmes (WILP) continues to be a very important and integral part of BITS. Close to 20,000 working professionals are enrolled in these programmes. The focus as regards WILP is to address companies' and working professionals' needs for technical programmes that reskill, enhance employability, and enable employee retention. A roadmap to improve operations across the value chain is under implementation.

A new team has been put in place to manage the business and operations side of the organization which Chief Operations Officer and managers. Overall, new admissions grew by 20%. A pilot implementation of cluster programmes in Pune and Bangalore has indicated good potential and resulted in 122 new admissions in industry specific domains. Many new measures such as lead generation activities, induction of regional business development teams, industry engagement for need assessment of new programs, and development of clusters are initiated. New capabilities have been added for digital asset management, student feedback, and guest faculty data management. There significant progress in the adoption of ERP. Initiatives including an integrated learning portal, migration of applications to the cloud, and electronic assessment will lead to greater scalability and reliability, and enhanced learner experience. Standardization of a number of processes has begun to show results. Digital content was created and deployed for 21 courses; 136 guest faculty members have been recruited and a common program assessment framework for all the WILP has been put in place.

He also informed the members that at Dubai campus admission of First Degree students in AY15-16 increased to 453 and enrolment increased from 1,668 to 17,77. The percentage of girls in First Degree increased from 32% to 37% in AY 15-16. A number of improvement initiatives have been initiated during the year. 2014-15 recorded higher placements rates, higher recruiters' participation, and higher median salary offered than in previous years.

The Chancellor apprised that Institute's efforts to hire high quality faculty continues. The focus is on entry-level positions (Assistant Professors) and on those who have earned their PhDs from reputed Universities in India

and overseas. 365 new faculty have been hired in the past 4 years. Attracting and retaining quality faculty will and must remain a priority, and will continue to receive high attention.

The Chancellor informed that BITS's focus on Research and Entrepreneurship is yielding results. Sponsored Research Grant approvals are expected to cross Rs 20 Cr.

The Chancellor told the members that the Modernisation and Expansion plans at the three Indian campuses are in full swing. The goal is to complete these, an investment of Rs. 1,450 Cr., in three years from 2016. Of this, Rs. 225 Cr. of works has been completed in the last three years. On Pilani campus construction has commenced at multiple sites. Renovation and augmentation of three existing hostels will yield an additional 400 beds, New Courtyard Building, which will add 50 new faculty rooms, accommodation for families of 60 married PhD students. At the Hyderabad Campus, 644 beds is targeted to be added before the 2017 admissions. Similarly, 750 beds are planned to be added at the Goa Campus by 2017.

The Chancellor informed the members that the engagement with alumni continues to strengthen, with alumni participating and supporting BITS in many ways. The next Alumni Global meet will be held in December 2016 at Dubai.

The Chancellor mentioned that the income for 2015-16 is estimated at 10.7% growth at Rs. 431.5 Cr. compared to last year at Rs. 389.9 Cr. On-campus income at Rs. 300.4 Cr. has increased by 15.1% over last year. Off-campus income from fees, at Rs. 131.1 Cr., has increased 1.6% over last year. Off-campus fee constitutes 30.4% of total fees. Total income is expected to be at Rs. 431.5 Cr., and is 2% lower than the budgeted income of Rs. 440.2 Cr.

He told that Expenses (Rs. 282.5 Cr.) are estimated to have increased by 15.4% over last year but are estimated to be lower than budget by 2%. Employees' and related cost (Rs. 147.7 Cr.) increased by 11.7% over last year. However, this was 2.8% higher than budget mainly due to gratuity provision.

As a consequence, Earnings before Interest, Depreciation and Tax (EBIDTA) are estimated to be at Rs. 149.0 Cr. (34.5% of Income), marginally lower than budget of Rs. 152.0 Cr. (34.5% of income). Net Earnings is estimated at Rs. 110.7 Cr. compared to Rs. 127.7 Cr. of last year. Last year included Rs. 28.6 Cr. on account of profit on sale of Mutual Funds. Capital Expenditure during the year are estimated at Rs. 101.7 Cr., lower than the Budget of Rs. 176.9 Cr. mainly due to delay in obtaining regulatory approvals for the Hyderabad and Goa Campuses.

Cash and Cash equivalents as on March 31, 2016 is estimated at Rs. 286.0 Cr. Total Debt as on 31st March 2015 was at Rs. 9.0 Cr. Entire debt was repaid during Q1 of FY'16. With this Indian campuses are now debt free.

Financials are healthy and meeting budgeted targets. Income and Expenditure have been as budgeted, and BITS Dubai continues to generate surplus adequate to repay the loans. BITS Dubai continues to generate surplus adequate to repay the loans. Out of total loan amount of US\$ 27.8 Mn, total amount repaid is US\$ 9.7mn. There is plan to increase the fees from AY 2017 onwards. Fees have remained unchanged for last 5 years.

The Chancellor informed the members that total income is budgeted at Rs. 475.5 Cr., which is a 10.2% increase over last year. On-campus enrolment is expected to increase by 2.5% (at 10,968), off-campus enrolment to decrease by 3.0% (at 19,015). On-campus fee at Rs. 335.5 Cr., an increase of 11.7% over last year. Off-campus fee at Rs 139.9 Cr., an increase of 6.7% over last year. Intake and enrolments are under pressure, and will continue to be for another two years till our business development efforts take root and show results.

An increase in employee and related cost at 18.8% has been budgeted at Rs. 175.4 Cr. A net increase of 75 on-campus faculty members is planned in line with the targeted faculty/student ratios and requirement in WILP. Expenses (Rs. 325.3 Cr.) are budgeted to increase by overall 15.1%. EBIDTA is budgeted at Rs. 150.2 Cr. (31.6% of revenues), a nominal growth of 0.8 % as compared to previous year. Low growth in EBITDA is mainly due to delay in execution of expansion plans, change in on-campus/off-campus revenue mix, and expenses for various initiatives (Rs. 6.9 Cr.). Total EBITDA from WILP is budgeted at Rs. 98.4 Cr. Lower EBITDA is mainly due to investment in business development and marketing efforts. Net Income/Surplus is budgeted at Rs. 88.9 Cr. compared to Rs. 110.7 Cr. this year. Drop is mainly on account of higher depreciation and lower net interest income.

Capex commitments are budgeted at Rs. 432.2 Cr. during FY'17. A significant share of this is on the Project Parivartan at Pilani, and the Expansion of Goa and Hyderabad campuses. Rs. 379.5 Cr. Equipment and Central Instrumentation facilities is budgeted at Rs. 29.5 Cr. with other routine Capex at Rs. 23.2 Cr. Cash generation and Borrowings – To fund our capex during FY'17 in all the campuses beyond the cash generated from our

operations, an additional borrowing of Rs. 50 Cr. has been budgeted. The net cash position at March 31, 2017 is estimated to be at Rs. 25.74 Cr. Market value of balance Mutual Funds is Rs. 20 Cr.

The members unanimously appreciated the same.

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

- (a) Re-admission of the following as members of the General Body for the term ending on 29th April 2019:
1. Smt. Manjushree Khaitan
  2. Shri Sidharth Birla
  3. Prof. Asis Datta
  4. Shri K.C. Jain
  5. Shri Hemant Kumar
  6. Prof. L.K. Maheshwari
  7. Shri Arvind Singh
- (b) Nomination of Shri Raju Reddy, Executive Vice-President, Hitachi Consulting, USA and Prof. D. Balasubramanian, Director of Research, LV Prasad Eye Institute, Hyderabad as alumni term members of the General Body for the term ending on 27th July 2019.
- (c) Resolution for authorized persons to act as representative to attend and vote for and on behalf of BITS Society at the 3rd Annual General Meeting of Birla Institute of Technology & Science Company, Kolkata.
- (d) Resignation of resignation of Shri Arvind Singh and Shri K. C. Jain from membership of General Body with effect from 9th March 2016 and 10th March 2016 respectively. Members appreciated their cooperation and effective involvement in the growth and development of the Institute.
- (e) Noted that Dr. Santanu Chaudhury, Director, CEERI, Pilani, has been nominated by the Council of Scientific & Industrial Research on the General Body under the constituency "A representative of the Council of Scientific & Industrial Research".
- (f) Noted that the Chancellor has admitted Shri Tridib Kumar Das, Chief Financial Officer, Kesoram Industries Limited, Kolkata and Shri Enrico Malerba, Chief Business Officer, Kesoram Industries Limited, Kolkata as members of the General Body with effect from 30th April 2016 for the term ending on 29th April 2019.
- (g) 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 1<sup>st</sup> January 2015 to 31<sup>st</sup> December 2015. 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 31<sup>st</sup> March 2015 and approved the Budget Estimates of the Institute for the financial year 2016-2017 as recommended by Finance Committee and Board of Governors.

## BOARD OF GOVERNORS

The Board of Governors of the institute held its 69<sup>th</sup> Meeting on 19<sup>th</sup> March 2016 under 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 overall enrolment grew marginally in FY'16 over FY'15. New admissions were constrained by hostel capacity. Students admitted to our First Degree Bachelor's Programme increased marginally from 2239 to 2250. Regulatory approvals for the construction of planned new student hostels at our Hyderabad and Goa Campuses are obtained. The approvals have since been obtained and construction has commenced, the effect will be seen in 2017 admissions.

Admission to our Higher Degree (Master's Programme) and PhD Programmes was at 512 (378 Master's and 134 PhD) students compared to 459 (363 Master's and 96 PhD) during the previous year. The focus on admissions to our Master's and PhD Programmes continues.

However, the number of applicants registering for our BITSAT entrance test recorded a decline in 2015-16. As against 1,86,000 and 1,95,000 applicants who registered for the 2014 and 2015 Tests respectively, 1,78,000 students registered in 2016. The reasons for this are being assessed. The IIT JEE also saw a drop of around 10% in registrations.

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The members unanimously appreciated the same.

The Board of Governors noted the actions of the Chancellor approving the following:



- (a) Re-nomination of the following members under the constituency "Four Nominees of the Birla Education Trust" for a term of three years with effect from 3rd September 2015:
  1. Shri B.K. Birla
  2. Shri Sidharth Birla
  3. Shri Hemant Kumar
- (b) Re-co-option of the following members under the constituency "Four Members co-opted by the Board of Governors of the Institute" for a term of three years with effect from 30th April 2015:
  1. Smt. Manjushree Khaitan
  2. Shri Kris Ramachandran
- (c) Nomination of Prof. G. Sundar, Director (Off-Campus Programmes and Industry Engagement) under the constituency "One Director by rotation from out of the Directors of Campuses of the Institute" for a term of three years with effect from 28th July 2015.
- (d) Writing-off of Rs. 2.57 Crores under "Grant receivables" received from government agencies (UGC, DST, AICTE) and ratification of Rs. 1.78 Crores for the Financial Year 2013-2014.
- (e) Standard Operating Procedure (SOP) for approving expenses beyond budget for Indian Campuses.
- (f) The expenditure of Rs. 3.75 Lacs for one time fees of preparation for Standard Operating Procedure (SOP) and Rs. 9.00 Lacs for the fees of detailed audit for project capex and project activities of Indian Campuses to M/s Aneja Associates, Mumbai for the Financial Year 2014-2015.
- (g) Modification in resolution for authorized signatories for operation of various bank accounts, etc. at Pilani and Hyderabad campuses.
- (h) Resolution of authorized signatories for operation of new bank account with RBL Bank Limited, Mumbai for placing fixed deposits.
- (i) Resolution of authorization to act as Institute's representative at the meetings, sign proxies or vote through e-voting, etc.
- (j) Resolution for authorized persons to act as representative to attend and vote for and on behalf of BITS Society at the 3rd Annual General Meeting of Birla Institute of Technology & Science Company, Kolkata.
- (k) Revision of Special Allowance to the faculty members with administrative responsibilities with effect from 1st June 2015.
- (l) Performance-linked Variable Pay to the Directors of the Institute for the Academic Year 2014-15.
- (m) Special Award of Rs. 1,50,000 to Prof. G. Rahurama in recognition of his contribution to 'Project Parivartan'.
- (n) Fee of Rs. 22 Lacs (extra budgetary expenditure for Financial Year 2015-16) to IBM for a "Study on BITS Pilani's ERP Implementation and Usage Effectiveness including a Roadmap for Corrective Actions".
- (o) Recommendations of the Review Committee for non-teaching staff members of the Institute.

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

The Board adopted the Report of the Board of Governors as to the state and condition of the Institute for the period from 1st January 2015 to 31st December 2015 and resolved to recommend the same to the General Body for adoption. While adopting the report the members expressed their happiness and satisfaction over the functioning of the Institute. The Board of Governors also approved the Balance Sheet and Income & Expenditure Account for the year ended on 31st March 2015 and recommended the same to the General Body for adoption.

The Board also recommended to the General Body the Budget Estimates of the Institute for the financial year 2016-2017 for its approval.

The Board of Governors, through its Circulatory Resolution dated 17th July 2015 has approved the conferment of 5629 degrees (77th Award) on the students who have graduated since the last meeting of the Board and also approved 5768 Degrees (78th Award) on the students who have graduated since the Circulatory Resolution dated 17th July 2015 and 13 medals to eligible students for the academic year 2014-15.

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2016**

**(A) On-Campus Programmes:  
Second Semester 2015-2016**

***BITS Pilani, Dubai Campus***

PROGRAMMES	No. of students joined
<b>1. Integrated First Degree Programmes:</b>	
B.E.	
Biotechnology	01 (01)
Chemical Engineering	00 (00)
Electrical and Electronics Engineering	02 (00)
Mechanical Engineering	03 (00)
Electronics and Instrumentation Engineering	00 (00)
Computer Science	03 (03)
Electronics and Communication Engineering	01 (01)
<b>Total</b>	<b>10 (05)</b>
<b>2. Higher Degree Programmes:</b>	
M.E.	
Microelectronics	00 (00)
Design Engineering	02 (00)
Software Systems	00 (00)
Biotechnology	00 (00)
M.B.A	04 (02)
<b>Total</b>	<b>06 (02)</b>
<b>Grand Total</b>	<b>16 (07)</b>

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

<b>BITS Pilani, Pilani Campus</b>	24 (13)
<b>BITS Pilani, K.K. Birla Goa Campus</b>	10 (06)
<b>BITS Pilani, Hyderabad Campus</b>	33 (11)
<b>BITS Pilani, Dubai Campus</b>	02 (01)
<b>Total</b>	<b>69 (31)</b>

First Semester 2016-2017

PROGRAMMES	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>1. Integrated First Degree Programmes</b>			
<b>(a) Pilani Campus</b>			
<b>Group A</b>			
B.E.			
Chemical	69(12)	351	319
Civil	69(3)	354	314
EEE	99(12)	389	362
Mechanical	89(5)	372	346
Computer Science	121(13)	423	384
Electronics & Instrumentation	68(10)	382	345
Manufacturing	36(4)	345	311
B. Pharm.	55(24)	309	240
	<b>606(83)</b>		
<b>Group B</b>			
M.Sc.			
Biological Sciences	59(7)	331	304
Chemistry	71(10)	333	308
Economics	67(10)	357	335
Mathematics	69(11)	378	330
Physics	70(10)	402	324
	<b>336(48)</b>		
<b>Group C</b>			
M.Sc.			
Gen. Studies	11(3)		
	11(3)		
<b>Total :</b>	<b>953(134)</b>		
<b>(b) K.K. Birla Goa Campus:</b>			
<b>Group A</b>			
B.E.			
Chemical	56(10)	317	301
Electrical & Electronics	83(9)	358	331
Mechanical	69(3)	369	322
Computer Science	101(9)	385	358
Electronics & Instrumentation	80(10)	357	312
	<b>389(41)</b>		
<b>Group B</b>			
M.Sc.			
Biological Sciences	43(6)	305	297
Chemistry	43(2)	309	300
Economics	44(8)	339	315
Mathematics	44(5)	350	310
Physics	42(3)	354	307
	<b>216(24)</b>		
<b>Total :</b>	<b>605(65)</b>		

(c) Hyderabad Campus:

**Group A**

B.E.

Chemical	45(12)	314	298
Civil	49(6)	314	303
EEE	71(11)	346	324
Mechanical	60(2)	343	316
Computer Science	122(13)	396	347
Electronics and Instrumentation	39(5)	323	313
Electronics & Communication	78(15)	360	332
Manufacturing	25(4)	309	298
B. Pharm.	23(13)	369	224
	<b>512(81)</b>		

**Group B**

M.Sc.

Biological Sciences	25(1)	304	296
Chemistry	28(6)	306	299
Economics	34(7)	345	310
Mathematics	31(2)	324	307
Physics	29(3)	325	304
	<b>147(18)</b>		
Total :	<b>659(100)</b>		

**Note:**

- (i) The above list consists of 46(18) students who are admitted under 'International students admissions' at Hyderabad 28(13) and Goa 18(5).
- (ii) The above list consists of 10 students who are First rank holders from different central/ state boards admitted under 'direct admission of board toppers' scheme.
- (iii) The above numbers also include 35 admissions of staff children and of BET school students, made under special dispensation consisting of 1 in Bio Sciences, 2 in Chemistry, 8 in Economics, 7 in Mathematics, 6 in Physics and 11 in General Studies.

**(d) Dubai Campus:**

***Admission to Integrated First Degree Programmes***

**B.E.**

Chemical Engineering	29 (16)
Civil	14 (03)
Electrical and Electronics Engineering	19 (08)
Mechanical Engineering	72 (08)
Computer Science	138 (62)
Electronics and Instrumentation Engineering	02 (00)
Biotechnology	18 (16)
Electronics and Communication Engineering	30 (13)

**Total** 322(126)

**2. Higher Degree Programmes :**

**(a) Pilani Campus**

**M.E.**

Biotechnology	11(10)
Chemical Engineering	14(4)
Civil (Structural Engineering)	11(03)
Civil (Transportation Engineering)	10(03)
Civil (Infrastructure Engineering)	6(02)
Computer Science	21(06)
Communication Engineering	11(03)
Design Engineering	10( 0)
Embedded Systems	10(04)
Manufacturing Systems Engineering	10(01 )
Mechanical Engineering	16(01)
Microelectronics	14(00)
Software Systems	24(10)
MBA	63(19)
M.Pharm.	6(04)
M.Pharm. (Pharmaceutics)	10(03)
M.Pharm. (Pharmaceutical Chemistry)	6(02)

**Total** 253(75)

**(b) Goa Campus**

**M.E.**

Biotechnology	7(07)
Chemical Engineering	5(02)
Microelectronics	12(03)
Embedded Systems	7(04)
Computer Science	8(00)

**Total** 39(16)

**(c) Hyderabad Campus**

M.E.

Biotechnology	7(04)
Chemical	6(05)
Computer Science	9(04)
Communication	8(03)
Civil (Structural)	8(01)
Embedded Systems	0(00)
Thermal	9(01)
Design	8(01)
M.Pharm. (Pharmaceutics)	11(09)

**Total** 66(28)

Higher Degree (3 year Integrated) Programme

11(06)

**Total** 77(34)

**(d) Dubai Campus**

M. E.

Microelectronics	03 (00)
Design Engineering	07 (00)
Software Systems	05 (02)
Biotechnology	00 (00)

M.B.A

12 (02)

**Total** 27 (04)

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

<b>(a) Pilani Campus</b>	36 (12)
<b>(b) K.K. Birla Goa Campus</b>	26 (10)
<b>(c) Hyderabad Campus</b>	45 (18)
<b>(d) Dubai Campus</b>	05 (01)

**Total** 112 (41)

**(B) Work-integrated Learning Programmes**

(A) Second Semester 2015-2016 .

(A) Second Semester 2015-2016 .

<b>PROGRAMMES</b>	<b>No. of students joined</b>
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech</b>	
Engineering Technology	165(005)
Information Systems	223(083)
Power Engineering	30(000)
Process Engineering	50(001)
<b>Sub Total</b>	<b>468(089)</b>
<b>2. Higher Degree Programme:</b>	
<b>M.Tech</b>	
Design Engineering	27(0003)
Manufacturing Management	156(0008)
Integrated Software Systems	22(0003)
Microelectronics	56(0010)
Quality Management	86(0014)
Science Communication	13(0002)
Software Engineering	2547(1358)
Software Systems	549(0143)
System Engineering	158(0060)
Transportation Engineering	36(0003)
<b>MBA</b>	
Consultancy Management	48(0009)
Manufacturing Management	40(0003)
Quality Management	28(0011)
<b>Sub total</b>	<b>3766 (1627)</b>
<b>Total</b>	<b>4234(1716)</b>

**(B) First Semester 2016-2017**

<b>PROGRAMMES</b>	<b>No. of students joined</b>
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech</b>	
Engineering Technology	264(009)
Manufacturing Technology	208(003)
Process Engineering	30(000)
<b>Sub total</b>	<b>502(012)</b>
<b>2. Higher Degree Programmes:</b>	
<b>M.Tech</b>	
Design Engineering	204(011)
Embedded Systems	146(024)
Integrated Software Systems	47(021)
Manufacturing Management	228(014)
Microelectronics	60(009)
Pharmaceutical Operations & Management	76(007)
Quality Management	140(025)
Software Engineering	172(067)
Software Systems	1123(262)
<b>M.B.A.</b>	
Consultancy Management	66(019)
Finance	24(004)
Manufacturing Management	82(004)
Quality Management	68(023)
<b>M.Phil.</b>	
Hospital and Health Systems Management	36(013)
<b>M.Sc.</b>	
Business Analytics	63(019)
<b>Sub total</b>	<b>2545(522)</b>
<b>Total</b>	<b>3047(534)</b>



## SUMMARY

	II Semester 2015-2016	I Semester 2016-2017	
<b>1. BITS, Pilani – Pilani Campus</b>			
Integrated First Degree Programmes	-	953(134)	
Higher Degree Programmes	-	253(75)	
Doctoral Programmes	24(13)	36( 12)	
<b>Total</b>	<b>24(13)</b>	<b>1242(221)</b>	
<b>2. BITS, Pilani – K.K. Birla Goa Campus</b>			
Integrated First Degree Programmes	-	605(65)	
Higher Degree Programmes	-	39(16)	
Doctoral Programmes	10(06)	26 (10 )	
<b>Total</b>	<b>10(06)</b>	<b>670(91)</b>	
<b>3. BITS, Pilani – Hyderabad Campus</b>			
Integrated First Degree Programmes	-	659(100)	
Higher Degree Programmes	-	66(28 )	
Higher Degree (3 year Integrated Programmes)	-	11( 06)	
Doctoral Programmes	33(11)	45 (18)	
<b>Total</b>	<b>33(11)</b>	<b>781(152)</b>	
<b>4. BITS, Pilani – Dubai Campus</b>			
Integrated First Degree Programmes	10 (05)	322(126)	
Higher Degree Programmes	06 (02)	27(04)	
Doctoral Programmes	02 (01)	05(01)	
<b>Total</b>	<b>18 (08)</b>	<b>354 (131)</b>	
<b>5. Work-Integrated Learning Programmes</b>			
	<b>II Semester 2015-16</b>	<b>I Semester 2016-17</b>	<b>Total</b>
Integrated First Degree Programmes	468 (0089)	502 (0012)	970 (0101)
Higher Degree Programmes	3766 (1627)	2545(0522)	6311 (2149)
<b>Total</b>	<b>4234 (1716)</b>	<b>3047 (534)</b>	<b>7281 (2250)</b>

### 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 admissions 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

Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1986-87	II Sem.	99.04	85.56
	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

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2016-2017 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	5	9	9	7	-	7	6	3
B2	9	7	8	11	-	8	6	4	53
B3	9	4	9	11	-	16	9	4	62
B4	6	5	10	3	-	17	6	4	51
B5	5	7	12	11	-	9	3	1	48
<b>Total</b>	<b>34</b>	<b>32</b>	<b>48</b>	<b>43</b>	<b>-</b>	<b>57</b>	<b>30</b>	<b>16</b>	<b>260</b>

**OTHER PRIORITIES : NIL**

**(ii) Transfer within same tier:**

Programmes* From ↓ To →	A3	A7	A8	Total
A1	1	-	-	1
A3	-	3		3
A4	-	1		1
A8	-		1	1
B3	-	1		1
<b>Total</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>07</b>

(iii) Transfer within B to B

Programmes* From ↓ To →	B1	B3	B4	B5	Total
B1		1	2	1	4
B2	1		2		3
B4		1			1
B5		1			1
Total	1	3	4	1	9

(iv) Vertical Transfers:

From	To	No. of Students
M.Sc. Mathematics B.E. Computer Science	M.E. Computer Science	1
B.E. Electrical & Electronics	M.E. Communication Engg.	1
M.E. Civil with Specialization in Transportation Engg.	Ph.D in Civil Engg	1

(ii) K.K. Birla Goa Campus:

**FIRST PRIORITY**

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

Programmes* From ↓ To →	A1	A3	A4	A7	A8	Total
B1	12	6	10	2	14	44
B2	10	7	7	5	9	38
B3	3	12	7	19	6	47
B4	7	9	7	16	7	46
B5	2	9	11	8	6	36
Total	34	43	42	50	42	211

**OTHER PRIORITIES**

Programmes* From ↓ To →	A1	A7	B3	B5	Total
A1			2		2
A3	2	1			3
B4		2		1	3
B5		1			1
Total	2	4	2	1	9

(iii) Hyderabad Campus:

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

Programmes* From ↓ To →	A1	A2	A3	A4	A7	A8	AA	AB	Total
	B1	3	4	4	3	3	1	4	-
B2	5	5	2	3	9	2	1	1	28
B3	2	3	6	3	8	2	3	4	31
B4	1	1	4	4	10	4	6	2	32
B5	1	-	4	5	7	2	5	3	27
<b>Total</b>	<b>12</b>	<b>13</b>	<b>20</b>	<b>18</b>	<b>37</b>	<b>11</b>	<b>19</b>	<b>10</b>	<b>140</b>

**OTHER PRIORITIES**

Programmes* From ↓ To →	A4	B1	B3	B5	Total
A2	1	-			1
A3	-		1		1
A4				1	1
A7		1			1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>

(iv) Dubai Campus:

Programmes* From ↓ To →	A4	AA	TOTAL
A1	1	-	1
A7	-	1	1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>2</b>

\*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 01-01-2016 to 31-12-2016.

PSRN	Name of the faculty member	Designation	Department	Date of Joining
1.	Jahagirdar Ankush Chandrakant	Lecturer	EEE	21-01-2016
2.	Archana Kulkarni	Assistant Professor	ECOF	01-02-2016
3.	Prateek Kala	Assistant Professor	ME	25-01-2016
4.	Kuldeep Kumar	Assistant Professor	CSIS	26-02-2016
5.	Krishnendra Shekhawat	Assistant Professor	MATH	01-04-2016
6.	Kamlesh Tiwari	Assistant Professor	CSIS	08-04-2016
7.	Shekhar Rajagopalan	Associate Professor (OC)	WILP	16-05-2016
8.	Souvik Bhattacharyya	Senior Professor	ME	13-06-2016
9.	Ashutosh Bhatia	Assistant Professor	CSIS	13-06-2016
10.	Sonika Chandrakant Rathi	Lecturer (OC)	WILP	20-06-2016
11.	Raja Vadhana P	Lecturer (OC)	WILP	22-06-2016
12.	Durgesh Vikram	Assistant Professor	CE	04-07-2016
13.	Nikhil Saboo	Assistant Professor	CE	05-07-2016
14.	Monika Gupta	Visiting Faculty	ECOF	05-07-2016
15.	Vishakha Vijay Sakhare	Assistant Professor	CE	07-07-2016
16.	Chennupati R Prasanna	Lecturer (OC)	WILP	06-07-2016
17.	Annapoorna Gopal	Assistant Professor (OC)	WILP	11-07-2016
18.	Amit Dua	Assistant Professor	CSIS	01-08-2016
19.	Manoj Subhash Kakade	Lecturer (OC)	WILP	26-07-2016
20.	Satyabrata Sahoo	Assistant Professor	ME	04-08-2016
21.	Varsha Mamidi	Assistant Professor (OC)	WILP	08-08-2016
22.	Dhanashree N P	Lecturer (OC)	WILP	10-08-2016
23.	Mudliar Mahalakshmi Rajan	Associate Professor (OC)	WILP	22-08-2016
24.	Rajendra Narayan Paramanik	Assistant Professor	ECOF	12-09-2016
25.	Nilanjan Chattaraj	Assistant Professor	EEE	01-10-2016

List of Faculty members who left the Institute between 01-01-2016 to 31-12-2016

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Remica Aggarwal	Assistant Professor	06-01-2016	Resigned
2.	Manoj Kannan	Visiting Faculty	05-03-2016	Resigned
3.	Siju C R	Lecturer	05-05-2016	Resigned
4.	Sonal Mazumder	Assistant Professor	30-05-2016	Resigned
5.	Parikshit Kishor Singh	Lecturer	15-06-2016	Resigned
6.	A Ananda Kumar	Lecturer	25-06-2016	Resigned
7.	S K Hafizul Islam	Assistant Professor	30-06-2016	Resigned



S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
8.	Utkarsh Maheshwari	Lecturer	17-07-2016	Term Expired
9.	Anil Jindal	Lecturer	17-07-2016	Term Expired
10.	Shyamapada Mukherjee	Assistant Professor	17-07-2016	Resigned
11.	Subhajit Majumder	Lecturer	17-07-2016	Term Expired
12.	Srinivasa Reddy K	Lecturer	17-07-2016	Term Expired
13.	Sunita Singhal	Lecturer	17-07-2016	Term Expired
14.	Omvir Chaudhry	Assistant Professor	17-07-2016	Retired
15.	Man Mohan Singh Anand	Professor	17-07-2016	Retired
16.	Pradyumn Chaturvedi	Assistant Professor	19-07-2016	Resigned
17.	Tathagato Chakraborty	Lecturer	30-07-2016	Resigned
18.	Dinesh Yadav	Assistant Professor	13-08-2016	Resigned
19.	Snehlata Deepak Kabra	Lecturer	13-08-2016	Resigned
20.	Lalita Gupta	Associate Professor	22-08-2016	Resigned
21.	Sanjeev Kumar	Associate Professor	22-08-2016	Resigned
22.	Niti Nipun Sharma	Professor	30-11-2016	Resigned
23.	Ashish Runthala	Visiting Faculty	13-12-2016	Resigned
24.	Sandeep Dhar	Assistant Professor	15-12-2016	Resigned
25.	Asma Rani	Lecturer	15-12-2016	Resigned
26.	Mayuri A Digalwar	Lecturer	31-12-2016	Term Expired
27.	Meenakshi Sundaram G.	Lecturer	31-12-2016	Term Expired
28.	Vinita Tiwari	Lecturer	31-12-2016	Term Expired
29.	Lucky Sharan	Lecturer	31-12-2016	Term Expired
30.	Vineet Kumar	Lecturer	31-12-2016	Term Expired
31.	Mahesh Angira	Lecturer	31-12-2016	Term Expired
32.	Ruchika Sharma	Visiting Faculty	31-12-2016	Term Expired
33.	Priti Jain	Visiting Faculty	31-12-2016	Term Expired
34.	Ashish Misra	Lecturer	31-12-2016	Term Expired
35.	Mahaveer Singh	Lecturer	31-12-2016	Term Expired

### K.K. Birla Goa Campus

#### List of Faculty Members Joined for the period from 01-Jan-2016 to 31-Dec-2016

S.No	Name	Designation	Department	Date of Joining
1	Abhilash Kumar Tilak	Lecturer	Mechanical Engineering	28-Jan-2016
2	Ravindra Singh Saluja	Lecturer	Mechanical Engineering	13-Apr-2016
3	Chembiyan Thambidurai	Lecturer	EEE	25-Jul-2016
4	Sudeep Baudha	Assistant Professor	EEE	30-Jul-2016
5	Amal Siju	Lecturer	Mechanical Engineering	8-Aug-2016
6	Ruma Ghosh	Assistant Professor	EEE	8-Aug-2016
7	Debasis Das	Assistant Professor	CS & IS	17-Aug-2016
8	Hemant Rathore	Lecturer	CS & IS	9-Sep-2016
9	Shilpa Gondhali	Assistant Professor	Mathematics	1-Nov-2016

**List of Faculty Members left between 01-Jan-2016 to 31-Dec-2016**

S.No	Name	Designation	Department	Date of Exit
1	Priyanka Desai Kakade	Assistant Professor	EEE	17-May-2016
2	Meghanand Bhamare	Lecturer	EEE	16-Jul-2016
3	Sandesh Chougule	Visiting Assistant Professor	Mechanical	16-Jul-2016
4	Varun Kumar	Lecturer	CS & IS	18-Jul-2016
5	Madhvi Gupta	Visiting Assistant Professor	Hum. & Soc. Sci.	18-Jul-2016
6	Layla Mascarenhas	Visiting Faculty	Hum. & Soc. Sci.	18-Jul-2016
7	Vinay Budhreja	Assistant Professor	EEE	22-Jul-2016
8	Sasikumar Punnekkat	Sr. Professor	CS & IS	10-Aug-2016
9	Gavax Joshi	Lecturer	EEE	25-Aug-2016
10	Venkatesan Thimmakonda	Assistant Professor	Chemistry	27-Aug-2016
11	Neethu Robinson	Assistant Professor	EEE	12-Sep-2016
12	K. Chandram	Assistant Professor	EEE	26-Oct-2016
13	Pushker	Assistant Professor	Hum. & Soc. Sci.	18-Dec-2016
14	C. Balakrishna Moorthy	Lecturer	EEE	20-Dec-2016
15	P.L. Ramkumar	Visiting Faculty	Mechanical	20-Dec-2016
16	Anant C. Kulkarni	Lecturer	Mechanical	31-Dec-2016
17	Vaishnavi Unde	Lecturer	Chemical Engineering	31-Dec-2016
18	Aruna Govada	Lecturer	CS & IS	31-Dec-2016
19	Anoop George	Visiting Assistant Professor	Hum. & Soc. Sci.	31-Dec-2016

**Hyderabad Campus**

**List of Faculty members who joined between 01-01-2016 to 31-12-2016.**

S.No.	Name of Faculty	Desig.	Discipline	Date of Joining
1	Thota Nagaraju	Assistant Professor-I	Economics & Finance	15-Jan-16
2	Ramakant	Lecturer	EEE	3-Feb-16
3	Sandeep Kumar	Lecturer	EEE	19-Feb-16
4	B. Yegnanarayana	Professor Emeritus	EEE	29-Feb-16
5	Rishi Kumar	Assistant Professor-I	Economics & Finance	29-Apr-16
6	Barsha Mitra	Assistant Professor-I	CS & IS	3-May-16
7	Balasubramanian M	Lecturer	EEE	14-Jul-16
8	A V Ravi Teja	Assistant Professor-I	EEE	21-Jul-16
9	Pavan Kumar Penumakala	Assistant Professor-I	Mechanical	25-Jul-16
10	Dr. Dushyant Kumar	Assistant Professor-I	Economics & Finance	1-Aug-16
11	Prof Vijaya Bhaskar Marisetty	Professor	Economics & Finance	8-Aug-16
12	Dr Abdul Quadir	Assistant Professor-I	Economics & Finance	10-Aug-16
13	Dr Suvadip Batabyal	Assistant Professor-I	CS & IS	16-Aug-16
14	Dr Mini Thomas P	Assistant Professor-I	Economics & Finance	22-Aug-16
15	Dr Subhrakanta Panda	Assistant Professor-I	CS & IS	1-Sep-16
16	Dr Siva Prasad A V S	Assistant Professor-I	Mechanical	21-Nov-16

**List of Faculty members who Left the Institute between 01-01-2016 to 31-12-2016**

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1	Dr. P V D Somasekar Rao	VPROF	12-Jan-16	Resigned
2	Ms Subha Mada	Lecturer	18-May-16	Resigned
3	Prof Ramana Sonti	Associate Professor	18-May-16	Resigned
4	Ms Sunita Singh	Lecturer	18-May-16	Resigned
5	Prof Parthapratim De	Associate Professor	18-May-16	Resigned
6	Dr. Naveen James	Assistant Professor-I	20-Jun-16	Resigned
7	Dr Debdas Ghosh	Assistant Professor-I	5-Jul-16	Resigned
8	Prof V S Rao	Director & Sr. Professor	17-Jul-16	Resigned
9	Mr S Hanumantha Rao	VFAC	18-Jul-16	Resigned
10	Mr Sivarama Krishna Kodali	VFAC	15-Jul-16	Resigned
11	Prof G Bhuvanewari	VPROF	17-Jul-16	Resigned
12	Dr Veerendra Vikram Awasthi	Assistant Professor-I	18-Jul-16	Resigned
13	Dr. Shrivishal Tripathi	Assistant Professor-I	23-Jul-16	Resigned
14	Mr Povar Digambar	Lecturer	30-Nov-16	Resigned
15	Dr Srinivas Sajja	Assistant Professor-II	31-Dec-16	Term End
16	Ms. Madhuri Bayya	Lecturer	31-Dec-16	Term End
17	B. Yegnanarayana	Professor Emeritus	31-Dec-16	Term End

**Dubai Campus**

**List of Faculty members who joined between 01-01-2016 to 31-12-2016**

S.No.	Name of Faculty	Desig.	Discipline	Date of Joining
1.	Dr. Amritesh	Visiting Assistant Professor	Humanities & Social Sciences	1-Mar-16
2.	Dr. Shilpee Srivastava Saxena	Assistant Professor	General Science	1-Mar-16
3.	Mr. Manoj Kannan	Visiting Assistant Professor	Biotechnology	6-Mar-16
4.	Dr. Eldhose Iype	Assistant Professor	Chemical	15-Mar-16
5.	Dr. Priyank Upadhyaya	Assistant Professor	Mechanical	15-Mar-16
6.	Dr. Rajib Ghosh Chaudhuri	Assistant Professor	Chemical	20-Mar-16
7.	Dr. Shashank Khurana	Assistant Professor	Mechanical	31-Mar-16
8.	Ms. Sreelakshmi Babu	Lecturer	Civil	24-Jul-16
9.	Dr. Aiyaswami Natesa Prasad	Visiting Professor	Humanities & Social Sciences	8-Aug-16
10.	Dr. Gudipadu Venkatesh	Assistant Professor	Mechanical	28-Aug-16
11	Dr. Meghana Charde	Assistant Professor	Civil	12-Oct-16
12	Dr. Naveen Kumar Shrivastava	Assistant Professor	Mechanical	26-Dec-16

**List of Faculty members who Left the Institute between 01-01-2016 to 31-12-2016**

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Ms. Alamelu Mangai	Sr. Lecturer	14-01-16	Resignation
2.	Dr. Miller Jothi	Assistant Professor	14-01-16	Resignation
3.	Dr. Mallika Parveen	Assistant Professor	21-01-16	Resignation
4.	Dr. Nidhi Bhandari	Associate Professor	14-01-16	Resignation
5.	Dr. S. Jeyalatha	Sr. Lecturer	31-01-16	Term End
6.	Dr. Aqila Begum	Lecturer	31-01-16	Term End
7.	Ms. S. Susila	Sr. Lecturer	03-08-16	Term End
8.	Ms. Susanna Henry	Sr. Lecturer	03-08-16	Term End
9.	Dr. M. Madiyajagin	Assistant Professor	11-08-16	Resignation
10.	Dr. Amritesh	Visiting Assistant Professor	28-12-16	Resignation

**DETAILS OF DISTRIBUTION OF PS-I STUDENTS AND FACULTY OVER PRACTICE SCHOOL - I STATIONS DURING THE SUMMER 2016**

SR.NO	CENTER_NAME	STATION_NAME	NO. OF STUDENT	NO. OF FACULTY
1	AHMEDABAD	ADANI POWER	7	1*
		ELITECORE TECHNOLOGIES PVT. LTD.	5	1*
		HELPAE INDIA	13	1*
		INFIBEAM	15	1*
2	ALUVA (KERALA)	THE FERTILIZERS AND CHEMICALS TRAVANCORE LTD.	16	1*
3	AMRELI	PIPAVAV DEFENCE AND OFFSHORE ENGINEERING COMPANY LIMITED	3	1*
4	ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED - SMELTER PLANT	19	1*
		NATIONAL ALUMINIUM COMPANY LTD - POWER PLANT	16	1*
5	AURANGABAD	AURANGABAD ELECTRICALS	14	1
6	BADARPUR(DELHI)	NATIONAL THERMAL POWER CORPORATION	18	1*
7	BANGALORE	ETHNUS	10	1**
		H.M.T. MACHINE TOOLS DIVISION	20	1**
		HINDUSTAN AERONAUTICS LIMITED ROTARY WING RESEARCH & DESIGN CENTER	7	1**
		HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.	10	1**
		INDIAN INSTITUTE OF SCIENCE	29	1**
		JANAAGRAHA CENTRE FOR CITIZENSHIP AND DEMOCRACY	10	1**
		SEN SEI TECHNOLOGIES	5	1**
		SUNPLUS SYSTEM SOLUTIONS PVT. LTD.	4	1**
		TEJAS NETWORKS	5	1**
YUKEN INDIA LTD.	5	1**		
8	BARRACKPORE	HINDUSTAN AERONAUTICAL DIVISION BARRACKPORE DIVISION	5	1*
9	BHILAI	BHILAI STEEL PLANT	45	1
10	BHOPAL	AIIMS	21	1
11	BUDAWADA	JAYPEE BALAJI CEMENT PLANT	10	1*
12	BHUBANESHWAR	THE INSTITUTE OF MINERALS AND MATERIALS TECHNOLOGY	16	1*
13	CHENNAI	CARBORUNDUM UNIVERSAL LTD.	15	1**
		CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE	14	1*
		CENTRAL LEATHER RESEARCH INSTITUTE <sup>+</sup>	28	1*
		CENTRAL SCIENTIFIC INSTRUMENTS ORGANIZATION	6	1*
		INDIAN BANK	11	1**
		MEDICAL RESEARCH FOUNDATION	10	1**
		NATIONAL METALLURGICAL LABORATORY	5	1*
		STRUCTURAL ENGINEERING RESEARCH CENTRE <sup>+</sup>	4	1*
		TAMIL NADU EGOVERNANCE AGENCY	14	1**
		TAMIL NADU SCIENCE AND TECHNOLOGY CENTRE	8	1*
		THE MADRAS MEDICAL MISSION	10	1**
WHEELS INDIA LTD	6	1*		
14	COCHIN	H.M.T. MACHINE TOOLS DIVISION	11	1*
		HELPAE INDIA	5	1*
		KOCHI METRO RAIL	6	1*

SR.NO	CENTER_NAME	STATION_NAME	NO. OF STUDENT	NO. OF FACULTY
15	DEHRADUN	INDIAN INSTITUTE OF REMOTE SENSING	15	1*
		WADIA INSTITUTE OF HIMALAYAN GEOLOGY	19	1*
16	DELHI	DELHI METRO RAIL CORPORATION	9	1*
		DRDO-CFEES	4	1*
		DRDO-SSPL	10	1*
		HINDUSTAN PETROLEUM CORPORATION LTD.	5	1*
		TATA POWER DISTRIBUTION	6	1*
17	DHANBAD	CIMFR	16	1
18	FARIDABAD	ESCORTS	10	1*
		SUPERSEALS INDIA LTD.	4	1*
19	GANDHINAGAR	BHASKARACHARYA INSTITUTE FOR SPACE APPLICATIONS AND GEOINFORMATIC	19	1*
		GUJARAT ENVIRONMENT MANAGEMENT INSTITUTE	14	1*
20	GAUHATI	GAUHATI REFINERY	13	1
21	GOA	ABBOTT INDIA LTD.	4	1*
		CARTINI INDIA LTD.	9	1*
		CG PPI ADHENSIVE PRODUCTS LTD	5	1*
		ENCUBE ETHICALS PVT	5	1*
		GOA STATE INFRASTRUCTURE DEVELOPMENT CORP LTD (GSIDC)	10	1*
		HELIX TECH.	5	1*
		HELPAGE INDIA	10	1*
		MORMUGAO PORT TRUST	13	1*
		NATIONAL CENTRE FOR ANTARTIC AND OCEAN RESEARCH	8	1*
		ORCHID BIO MEDICAL SYSTEMS	24	1
		PENTAIR WATER INDIA PVT. LTD.	5	1*
		PUTZMEISTER	5	1*
		SMART LINK NETWORK SYSTEMS	5	1*
		STARFLEX SEALING INDIA PVT. LTD.	5	1*
22	GURGAON	CONVERGENT TECHNOLOGIES	5	1**
		VALUE FIRST DIGITAL MEDIA PVT. LTD.	10	1*
23	HOSUR	ASHOK LEYLAND	4	1*
		CARBORUNDUM UNIVERSAL LTD.	10	1*
24	HYDERABAD	BEVCON WAYORS	2	1*
		BHARAT DYNAMICS LTD <sup>+</sup>	4	1**
		DECIBELS ELECTRONICS PRIVATE LIMITED	4	1**
		G.M.R. VARALAKSHMI FOUNDATION	17	1**
		H.B.L. POWER SYSTEMS LTD.	12	1*
		H.M.T. BEARINGS LTD.	9	1*
		L.V.PRASAD EYE INSTITUTE	10	1**
		LANDMARK IT SOLUTIONS	15	1**
		NATIONAL GEOPHYSICAL RESEARCH INSTITUTE	16	1*
		NCCCM	11	1**
		PENSIO SOFTWARE TECHNOLOGIES PVT LIMITED	11	1*
25	JABALPUR	WEST CENTRAL RAILWAY	11	1
26	JAFFERABAD	ULTRATECH CEMENT LIMITED	6	1*
27	JAGGAYAPET	THE RAMCO CEMENTS LTD.	19	1
28	JAIPUR	AMOL PHARMACEUTICALS PVT LTD	11	1*
		JAIPUR DEVELOPMENT AUTHORITY	15	1*
		JAIPUR METRO RAIL CORPORATION	10	1*
		KEC INTERNATIONAL LTD.	5	1*
29	JAMNAGAR	ESSAR POWER	30	1
30	JHARSUGUDA	SESA STERLITE LTD. (VEDANTA	28	1*

SR.NO	CENTER_NAME	STATION_NAME	NO. OF STUDENT	NO. OF FACULTY
		ALUMINIUM & POWER)		
31	JODHPUR	BIRLA WHITE CEMENTS	11	1*
		DRDO	4	1*
32	KALPAKKAM	INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH (IGCAR)	51	1
		DELTA STEP LEARNING PVT. LTD	8	1*
		HEDGE QUANTS ADVISORY LLP <sup>+</sup>	5	1*
		HELPAAGE INDIA	5	1*
33	KOLKATA	IRRIGATION AND WASTE WATER DEPARTMENT	8	1*
		TEXMACO LTD. <sup>+</sup>	5	1*
		TIRUMALA SEVEN HILLS (P) LTD.	5	1**
34	KOTA	RAJASTHAN ATOMIC POWER STATION	25	1
35	KOVAYA	ULTRATECH CEMENT LIMITED	4	1*
36	LUCKNOW	CENTRE OF SCIENCE & TECHNOLOGY	15	1*
		TATA PROJECTS LTD.	5	1*
37	MAHAPE	L & T INFOTECH	10	1*
38	MALKHED (MAHARASHTRA)	RAJSHREE CEMENT	13	1
39	MANESAR	HONDA MOTORS	10	1*
40	MEDAK	ASTRA MICROWAVE PRODUCTS LTD	10	1
41	MOHALI	SEMI- CONDUCTOR LABS MOHALI	6	1*
		ASTECH SYSTEMS	6	1*
		ATOMIC ENERGY REGULATORY BOARD	5	1*
		BEN LINE AGENCIES (INDIA) PVT. LTD.	6	1*
		CENTURY RAYON	23	1*
		HINDUSTAN PETROLEUM CORPORATION LIMITED	5	1*
		HOMI BHABHA CENTRE FOR SCIENCE EDUCATION	15	1*
		LENEST	11	1*
		MUMBAI RAIL VIKAS CORPORATION LTD.	11	1*
		ORIENT ENTERPRISES	10	1*
		PRAMA INSTRUMENTS PRIVATE LIMITED	10	1*
		PRS PERMACEL PVT LTD	5	1*
		RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	5	1*
		TATA CONSULTANCY SERVICES	6	1*
		TOY BANK	6	1**
		VALVE-TECH INDUSTRIES	6	1*
		WATCONSULT	7	1*
		YRALS DIGITAL INDIA PVT LTD	6	1**
43	MYSORE	TRITON VALVES LTD	5	1**
44	NAGDA	GRASIM CHEMICALS	11	1*
		GRASIM INDUSTRIES <sup>+</sup>	24	1*
		GLOBAL LOGIC	5	1*
45	NAGPUR	METAL FAB HIGH TECH PVT LTD.	11	1*
		SUSTAINABLE RESEARCH & DEVELOPMENT PVT. LTD.	5	1*
46	NASHIK	SIEMENS	6	1**
47	NAVI MUMBAI	TIRUMALA SEVEN HILLS (P) LTD.	5	1*
		505 ARMY BASE WORKSHOP	19	1*
		CENTRE FOR DEVELOPMENT OF TELEMETICS (CDOT)	4	1*
		G.M.R. VARALAKSHMI FOUNDATION	5	1**
48	NEW DELHI	INDIAN RED CROSS SOCIETY BLOOD BANK	28	1
		TATA MOTORS	10	1**
		TELECOM CENTER OF EXCELLENCE	8	1**
49	NOIDA	EXCELITY	5	1*
		QA INFOTECH	14	1*
50	PILANI	BIRLA MUSEUM	7	1**
		CENTRAL ELECTRONICS ENGINEERING	37	

SR.NO	CENTER_NAME	STATION_NAME	NO. OF STUDENT	NO. OF FACULTY
		RESEARCH INSTITUTE <sup>+</sup>		1**
51	PINJORE	HMT TRACTORS LTD.	21	1*
52	PITHAMPUR	MAHLE ENGINE COMPONENTS INDIA PVT. LTD.	8	1*
53	PUNE	BHARAT FORGE LTD <sup>+</sup>	12	1**
		ENDURANCE TECHNOLOGY PVT. LTD.	5	1**
		INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS (IUCCA)	5	1**
		LIVEWEAVER INDIA PVT.LTD	9	1**
		NATIONAL CHEMICAL LABORATORY <sup>+</sup>	4	1**
		TATA COMMUNICATIONS LTD.	5	1**
		TATA TECHNOLOGIES LIMITED <sup>+</sup>	8	1**
		TATA AUTOCOMP <sup>+</sup>	5	1**
		YAZAKI INDIA LTD.	5	1**
54	RAIPUR	RAWAN CEMENT WORKS	4	1*
55	RENUKOOT	HINDALCO INDUSTRIES LIMITED	10	1*
56	RENUSAGAR	HINDALCO INDUSTRIES LIMITED	9	1*
57	ROURKELA	ROURKELA STEEL PLANT	194	1
58	SHAMBUPURA	ADITYA CEMENTS WORKS	15	1*
59	SIMGA	HIRMI CEMENTS WORKS	11	1*
60	SINGRAULI	NTPC	10	1
61	TADPATHRI	ULTRATECH CEMENT LIMITED	14	1
62	THANE	ECLIPSE INSTRUMENTATION PVT. LTD.	6	1*
63	TIRORA (MH)	ADANI POWER	14	1*
64	TRICHY	BHARAT HEAVY ELECTRICALS LTD	14	1
65	TRIVANDRAM	CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY <sup>+</sup>	21	1*
		KSEDC	5	1*
66	UDAIPUR	VINAYAK BUILDTECH	6	1*
		ZIGSAW CONSULTANCY SERVICES	10	1*
67	VIJAYAWADA	EFFTRONICS SYSTEMS PVT. LTD.	12	1*
		NAVATA ROAD TRANSPORT	10	1*
68	VIJAYANAGAR	JSW ENERGY	15	1*
		JSW STEEL	30	1*
69	VISAKHAPATNAM	SARDA METALS & ALLOYS	4	1*
		VASUDHA PHARMA CHEM LIMITED	6	1*
		VIZAG PROFILES PRIVATE LIMITED	10	1*
		VISHAKAPATNAM STEEL PLANT	68	1
		HINDUSTAN PETROLEUM CORPORATION LIMITED	5	1*
		BHABHA ATOMIC RESEARCH CENTRE (VISAKHAPATNAM)	10	1*
70	VIZIANAGARAM	VIZAG PROFILES PRIVATE LIMITED	10	1*
			<b>2184</b>	<b>100</b>

\* 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 2016**

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Ahmedabad</b>						
1	VMS (Vakil Mehta Seth) Consultants Private Limited	3	1*	-	-	3
<b>Ajmer</b>						
2	Toshniwal Industries Pvt.Ltd.	2	1*	-	-	2
<b>Aurangabad</b>						
3	Skoda Auto India Pvt. Ltd.	2	1*	2	1*	4
<b>Bangalore</b>						
4	[24]7 iLabs	11	1*	-	-	11
5	Aditya Auto products & Engg (I) .Pvt.Ltd.	3	1*	-	-	3
6	Adobe Systems	2	1*	-	-	2
7	Akira Consultancy Private Limited	4	1*	-	-	4
8	Altair Engineering India Pvt. Ltd.	3	1*	-	-	3
9	Amazon Development Center	38	1	18	1*	56
10	Analog Devices	8	1*	7	1*	15
11	Apollo Tyres Ltd.	-	-	4	1*	4
12	ARM Embedded Technologies Private Limited	6	1*	15	1*	21
13	Aurigo Software	3	1*	-	-	3
14	Azul Systems	-	-	2	1*	2
15	Beckman Coulter (formerly Rea Metrix India Pvt.Ltd.)	2	1*	2	1*	4
16	Belong Technologies India Pvt. Ltd.	2	1*	3	1	5
17	Biocon India Pvt. Ltd.	3	1*	-	-	3
18	Blue Jeans Network India Pvt. Ltd.	8	1*	4	1*	12
19	Broadcom India Pvt. Ltd.	5	1*	-	-	5
20	Bundl Technologies Private Limited (Swiggy)	2	1*	2	1*	4
21	Capital One India Pvt. Ltd.	2	1*	6	1*	8
22	Centre For Artificial Intelligence & Robotics	8	1*	11	1*	19
23	Cerner	-	-	5	1*	5
24	Cisco Systems (India) Pvt. Ltd.	25	1	3	1*	28
25	Cypress Semiconductor India Pvt. Ltd.	7	1*	-	-	7
26	Dell India R&D center	4	1*	-	-	4
27	DreamWorks Animation	5	1*	2	1*	7
28	EBay India Development Centre	1	1*	-	-	1
29	EMC	12	1*	14	1*	26
30	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	-	-	3	1*	3
31	Ernst & Young Global Delivery Services	-	-	2	1	2
32	Ernst & Young L.L.P.	-	-	3	1	3
33	Ericsson Global India Pvt. Ltd.	1	1*	-	-	1
34	Flipkart Internet Services Pvt. Ltd	5	1*	-	-	5



S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
35	Genpact	5	1*	2	1	7
36	GiftXOXO	-	-	6	1	6
37	Goldman Sachs India Pvt. Ltd.	7	1*	-	-	7
38	Hindustan Unilever Research Centre	9	1*	13	1	22
39	Hortonworks	-	-	2	1	2
40	HolidayIQ.com	4	1*	-	-	4
41	Infinera	4	1*	10	-	14
42	Informatica Business Solutions Pvt. Ltd.	3	1*	-	-	3
43	InMobi	-	-	9	1	9
44	Innovation Labs	-	-	5	1*	5
45	Intel India Technology Pvt. Ltd.	26	1	25	1	51
46	J P Morgan CIB-RFT	3	1*	2	1	5
47	J.P. Morgan Chase	6	1*	27	1*	33
48	JDA Software Solutions	8	1*	7	1*	15
49	John F Welch Technology Center (GE)	5	1*	9	1	14
50	KPMG	5	1*	4	1	9
51	Math Works India Private Limited	2	1*	-	-	2
52	Media Iq Digital	12	1	23	1	35
53	Mercedes Benz	3	1*	5	1	8
54	Myntra.com	5	1*	5	1	10
55	National Aerospace Laboratories	5	1*	5	1*	10
56	National Centre for Biological Sciences	2	1*	2	1	4
57	National Entrepreneurship Network	10	1*	13	1	23
58	National Instruments Systems (India) Pvt. Ltd.	5	1*	-	-	5
59	NetApp	8	1*	-	-	8
60	NextGen PMS Pvt. Ltd.	5	1*	9	1	14
61	Nutanix Technologies India Pvt. Ltd.	3	1*	-	-	3
62	Nvidia Graphics	36	1	16	1	52
63	Nvidia Graphics -Software division	-	-	10	1	10
64	Oracle Financial Services Software Ltd. ( OFSS)	2	1*	4	1	6
65	Oracle India Pvt.Ltd.	2	1*	25	1	24
66	Paypal	7	1*	-	-	7
67	Pilani Experts Technology Labs Pvt Ltd	-	-	4	1	4
68	Practo Technologies Pvt. Ltd.	2	1*	-	-	2
69	Price water house Coopers (PWC)	1	1*	-	-	1
70	Probe Equity Research	2	1*	-	-	2
71	Qualcomm India Private Limited	16	1*	-	-	16
72	Qubole	4	1*	4	1	8
73	Rovi Corporation	1	1*	-	-	1
74	Sabre Holdings(Formely Sabre Travels)	9	1*	15	1	24
75	Samsung R&D Institute	6	1*	11	1	17
76	Shell Technology Center	-	-	2	1	2
77	Sellerwork Online Services Pvt.Ltd.	1	1*	-	-	1
78	SmartLivez Technologies India Private Limited	5	1*	-	-	5

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
79	Skoda Auto India Pvt. Ltd.	-	-	2	1*	2
80	Symantec Software Solutions Pvt. Ltd.	10	1*	6	1	16
81	Tangoe India Softek Pvt Ltd	-	-	3	1	3
82	TAS Analytic Services	3	1*	-	-	3
83	Tata Advanced Materials Ltd	2	1*	-	-	2
84	Tata Consultancy Services	-	-	2	1*	2
85	TESCO Hindustan Service Centre	2	1*	2	1	4
86	Texas Instruments (I) Pvt. Ltd.	20	1*	22	1	42
87	Think and Learn Pvt.Ltd.	3	1*	-	-	3
88	Tonbo Imaging Pvt.Ltd..	6	1*	7	1*	13
89	Tyco International Ltd	3	1*	-	-	3
90	Vitacloud	-	-	2	1*	2
91	VMware Software India Pvt. Ltd.	2	1*	-	-	2
92	Vymo Solutions Pvt.Ltd.	3	1*	-	-	3
93	Walmart Global Technology Services	15	1*	13	1*	28
94	Zinnov Management Consulting Pvt. Ltd.	4	1*	6	1	10
95	Zoomcar India Pvt. Ltd.	2	1*	2	1	4
<b>Bhubaneshwar</b>						
96	Aditya Birla Skills Foundation-( part of Aditya Birla Group)	-	-	2	1*	2
97	Mindfire Solutions	-	-	6	1*	6
98	Verse consulting Pvt.Ltd.	2	1*	-	-	2
<b>Chandigarh</b>						
99	Parexel	7	1*	-	-	7
<b>Chennai</b>						
100	Amazon Development Center	2	1*	-	-	2
101	Bundl Technologies Private Limited (Swiggy)	-	-	2	1*	2
102	Central Leather Research Institute (CLRI)*	1	1*	-	-	1
103	Ernst & Young L.L.P.	-	-	9	1	9
104	HCL Technologies	-	-	9	1*	9
105	Healthcare Technology Innovation Centre (HTIC)	-	-	4	1	4
106	Paypal	3	1*	-	-	3
107	Price Waterhouse Coopers (PWC)	1	1*	-	-	1
108	Structural Engineering Research Centre*	3	1*	4	1	7
109	Tata Chemical Innovation Center	-	-	2	1*	2
110	Tube Investments of India Limited	-	-	2	1*	2
111	VestasTechnology Ltd.	2	1*	-	-	2
112	ZOHO corporation	4	1*	-	-	4
<b>Delhi</b>						
113	Amazon Development Center	2	1*	11	1	13
114	Cubical Laboratories	-	-	2	1	2
115	Price Waterhouse Coopers (PWC)	1	1*	-	-	1
116	Quality Council of India	3	1*	3	1	4
<b>Dharwad</b>						
117	Tata Motors	2	1*	3	1	5

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Goa</b>						
118	Cipla Ltd	4	1	8	1	12
119	IFB Industries	5	1	-	-	5
<b>Greater Noida</b>						
120	ST Microelectronics(I) Pvt.Ltd.	-	-	5	1	5
<b>Gurgaon</b>						
121	American Express India	-	-	4	1	4
122	Bain Capability Center Pvt. Ltd	-	-	5	1*	5
123	Bundl Technologies Private Limited (Swiggy)	-	-	2	1*	2
124	Busigence	-	-	3	1	3
125	Ernst & Young L.L.P.	-	-	3	1	3
126	DB Mudra Group	2	1*	-	-	2
127	Decision Resources Group	3	1*	-	-	3
128	Gabrel India Ltd	2	1*	2	1	4
129	Genpact	5	1*	1	1	6
130	Hike	3	1*	-	-	3
131	KPMG	5	1*	5	1	10
132	Lama Capital Management	2	1*	-	-	2
133	Lexinnova	12	1*	4	1	16
134	Mahle Filters India Ltd	2	1*	4	1	6
135	Mediology Software Pvt. Ltd.	-	-	2	-	2
136	Pluss Advanced Technologies Pvt. Ltd.	2	1*	2	1	4
137	Skoda Auto India Pvt. Ltd.	-	-	2	1*	2
138	SRF Ltd.	3	1*	3	1	6
139	Urbanclap Technologies India Pvt. Ltd	2	1*	-	-	2
140	Zinnov Management Consulting Pvt. Ltd.	-	-	3	1	3
<b>Hosur</b>						
141	Faiveley Transport Rail Technologies India Ltd (FTRTIL)	5	1*	-	-	
142	Gabrel India Ltd	2	1*	2	-	7
<b>Hyderabad</b>						
143	Adaequire	2	1*	2	1	4
144	Amazon Development Center	19	1*	16	1	35
145	Bundl Technologies Private Limited (Swiggy)	-	-	2	1*	2
146	Bharat Dynamics Ltd <sup>+</sup>	2	1*	-	-	2
147	Centre for DNA Fingerprinting and Diagnostics	3	1*	-	-	3
148	Cognitive Scale	4	1*	-	-	4
149	Endless Robotics Pvt. Ltd.	2	1*	4	1	6
150	Freescale Semiconductor India Pvt. Ltd.	4	1*	-	-	4
151	GGK Technologies.	-	-	9	1	9
152	Hyderabad Eye Research Foundation (HERF), The Research Arm of LV Prasad Eye Institute	2	1*	-	-	2
153	IMI Mobile	10	1*	8	1	18
154	IndustryARC	-	-	14	1	14
155	Indian Institute of Chemical Technology	1	1*	-	-	1

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
156	InsideView Technologies (India) Pvt. Ltd.	3	1*	-	-	3
157	JDA Software Solutions	6	1*	7	1	13
158	John F Welch Technology Center (GE)	2	1*	9	-	11
159	Market Forecast	-	-	3	1*	3
160	Microsoft Pvt.Ltd.	10	1*	-	-	10
161	Mordor Intelligence	5	1*	21	1	26
162	My Smart Price	5	1*	2	1	7
163	Nvidia Graphics	2	1*	6	1	8
164	Oracle India Pvt. Ltd.	4	1*	15	1	19
165	Price Waterhouse Coopers (PWC)	1	1*	-	-	1
166	Purpletalk	2	1*	4	1	6
167	ReportGarden Technologies Pvt. LTd.	-	-	5	1*	5
168	Qualcomm India Private Limited	8	1*	-	-	8
169	Smartrak	11	1*	-	-	11
170	Stellar Software Technologies Pvt.Ltd.	2	1*	-	-	2
171	Worley Parsons India	1	1*	-	-	1
172	Yupptv India Pvt. Ltd.	6	1*	-	-	6
<b>Jaipur</b>						
173	CEG Limited	2	1*	-	-	2
174	NBC Bearings Pvt .Ltd.	1	1	-	-	1
175	Rajputana Construction Pvt.Ltd.	2	1*	2	-	4
<b>Jodalli</b>						
176	Spicer India Ltd	2	1*	-	-	2
<b>Jamshedpur</b>						
177	Tata Motors	-	-	12	1	12
<b>Kolkata</b>						
178	Bundl Technologies Private Limited (Swiggy)	-	-	2	1*	2
179	HedgeQuants Capital Advisory LLP	-	-	2	1	2
180	Tega Industries	2	1*	-	-	2
181	Texmaco Ltd.*	2	1*	-	-	2
<b>Lucknow</b>						
182	Tata Motors	2	1*	15		17
<b>Mumbai</b>						
183	Aditya Birla Corporate IT	2	1*	-	-	2
184	Aditya Birla Science & Technology Company Ltd	4	1*	3	1	7
185	Bundl Technologies Private Limited (Swiggy)	2	1*	2	1*	4
186	Carwale (Automotive Exchange Pvt. Ltd.)	3	1*	-	-	3
187	Century Rayon +	3	1*	3	1	6
188	Credit Suisse Ltd	32	1*	38	1	70
189	DBOI (Deutsche Bank)	7	1*	13	1	20
190	Development Consultants Pvt. Ltd. (DCPL)	4	1*	4	1	8
191	Dorsch Consult (India) Pvt. Ltd.	1	1*	-	-	1
192	Ernst & Young L.L.P.	-	-	3	1	3
193	Exponentia Data Labs Pvt. Ltd.	3	1*	-	-	3

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
194	Geometric Limited	2	1*	2	1*	4
195	HDFC Bank	3	1*	-	-	3
196	Henkel India Ltd	4	1*	1	1	5
197	Here Maps - A Nokia Company	5	1*	14	1	19
198	Hourglass Research	3	1*	3	1	6
199	J P Morgan -CIB	2	1*	-	-	2
200	J.P. Morgan Chase	15	1*	40	1*	55
201	J.P. Morgan Services India Pvt. Ltd	16	1*	24	1	40
202	KPMG	3	1*	5	1	8
203	Morningstar India Pvt. Ltd.	7	1*	5	1*	15
204	MSCI Barra, Quantitative Equity Research	5	1*	3	1*	8
205	Nomura Global Markets & Global Finance Analyst Division	6	-	5	1	11
206	Nomura Information Technology Division	-	-	1	1	1
207	Oracle Financial Services Software Ltd. ( OFSS)	2	1*	6	1	6
208	Price Waterhouse Coopers (PWC)	1	1*	-	-	1
209	Skoda Auto India Pvt. Ltd.	3	1*	11	1*	14
210	Skumars Online Ltd.	2	1*	-	-	2
211	VMS (Vakil Mehta Seth) Consultants Private Limited	3	1*	2	1	5
<b>Nagda</b>						
212	Grasim Industries Ltd.*	2	1*	1	1	3
<b>Nagpur</b>						
213	Techture Structures Pvt. Ltd.	-	-	2	1	2
<b>Navi Mumbai</b>						
214	Hindalco Innovation Centre - Semifab Talaja	-	-	2	1	2
<b>New Delhi</b>						
215	Central Road Research Institute	2	1*	2	1	4
216	Grey Orange Robotics Pvt. Ltd.	5	1*	-	-	5
217	LEA Associates	3	1*	-	-	3
218	National Institute of Science and Tech. Dev. Studies (NISTADS)	4	1*	3	1	7
219	Value Edge India	6	1*	-	-	6
<b>Noida</b>						
220	Adobe Systems	3	1*	-	-	3
221	ARM Embedded Technologies Private Limited	2	1*	-	-	2
222	Edcil India Ltd	3	1*	2	1	5
223	HCL Technologies	-	-	2	1	2
224	Nucleus Software Export Ltd	-	-	12	1	12
225	Opera Solutions	3	1*	-	-	3
226	Tolexo Online Pvt.Ltd.	3	1*	-	-	3
<b>Pantnagar</b>						
227	Tata Motors	-	-	15	1	15
<b>Patiala</b>						
228	Rajputana Constructions	-	-	2	1	2
<b>Pilani</b>						
229	Central Electronics Engineering Research Institute*	1	1*	-	-	1

S.No	Stations	Second Semester 15-16 (12.01.2016-17.06.2016)		First Semester 16-17 (04.07.2016-14.12.2016)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Pune</b>						
230	Alfa Laval (India) Limited	2	1*	-	-	2
231	Avaya India Private Limited	6	1*	12	1	18
232	B.G.Shirke Construction Technology Pvt. Ltd.	-	-	2	1	
233	Bharat Forge Ltd*	2	1*	2	1	4
234	Bundl Technologies Private Limited (Swiggy)	-	-	2	1*	2
235	Cadence Design Systems India Pvt Ltd.	-	-	2	1	
236	Credit Suisse India Pvt. Ltd.	21	1*	27	1	48
237	Divgi Warner Pvt. Ltd.	2	1*	-	-	2
238	Gabrel India Ltd	2	1*	-	-	2
239	Halliburton Technologies	-	-	2	1	2
240	Ideas India (A Sas Company) Private Limited	5	1*	4	1	9
241	Mahle Beher India Pvt. Ltd.	2	1*	6	1	8
242	Mahle Behr India Engineering Services	-	-	2	1	2
243	Mahle Filters India Ltd	-	-	3	1	3
244	National Chemical Laboratory*	-	-	2	1	2
245	Nvidia Graphics	4	1*	9	1	13
246	Oracle Financial Services Software Ltd. ( OFSS)	-	-	2	1	2
247	Reflexis Systems India Pvt. Ltd.	6	1*	4	1	10
248	Skoda Auto India Pvt. Ltd. (Chakan)	1	1*	-	-	1
249	Sokrati Technologies Pvt. Ltd.	6	1*	5	1	11
250	Symantec Software Solutions Pvt. Ltd.	4	1*	6	1	10
251	Tata Autocomp Systems Ltd.*	5	1*	9	1	14
252	Tata Chemical Innovation Center	2	1*	3	1	5
253	Tata Motors Ltd	5	1*	15	1	20
254	Tata Technologies Ltd *	8	1*	4	1	12
255	Thermax India Pvt. Ltd.	3	1*	-	-	3
256	vConstruct Private Limited	2	1*	-	-	2
257	ZS associates India private limited	5	1*	-	-	5
<b>Trivandrum</b>						
258	Centre For Development Of Imaging Technology*	4	1*	-	-	4
259	Klientas	2	1*	1	1	3
260	Leap Consulting	5	1*	2	1	7
<b>USA</b>						
261	Knox Payments	2	1*	-	-	2
<b>Total</b>		<b>999</b>	<b>53</b>	<b>1072</b>	<b>57</b>	<b>2071</b>

+Stations hosting PS-I also

\*Faculty looking after more than one PS-II Station

**PRACTICE SCHOOL GROWTH STATISTICS**

**PRACTICE SCHOOL-I**

<b>Session</b>	<b>No. of students who attended PS-I</b>	<b>No. of faculty who supervised PS-I</b>	<b>No. of PS-I stations</b>
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

**PRACTICE SCHOOL-II FOR INTEGRATED FIRST DEGREE**

<b>Semesters</b>	<b>No. of students who attended PS-II</b>	<b>No. of faculty who supervised PS-II</b>	<b>No. of PS-II stations</b>
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



Semesters	No. of students who attended PS-II	No. of faculty who supervised PS-II	No. of PS-II stations
Second Sem. 2001-2002	349	36	84
First Sem. 2002-2003	400	40	99
Second Sem. 2002-2003	406	43	93
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	999	53	202
First Sem 2016-2017	1072	58	162

#### 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
Second Sem. 2002-2003	46	20	22
First Sem. 2003-2004	02	02	02
Second Sem. 2003-2004	59	22	27

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
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	237	42	84
First Sem 2016-2017	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 2016**

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>AHMEDABAD</b>				
1	VMS (Vakil Mehta Seth) Consultants Private Limited, Ahmedabad	Rs.6000/- p.m.	No	No
<b>AJMER</b>				
2	Toshniwal Industries Private Ltd., Industrial	Rs.14000/- p.m.	Yes	Free Lunch
<b>AURANGABAD</b>				
3	Skoda Auto India Private Ltd.	Rs.8000/- p.m.	No	Free Lunch & Subsidised Breakfast
<b>BANGALORE</b>				
4	[24]7 iLabs	Rs.40000/- p.m.	No	III AC Train Fare on one side. Free company bus. 3rd AC train fare will be provided re-location to Bangalore (One way). Gym facility is available. Some assistance may be provided to arrange the accommodation. Flexible work timings.
5	Aditya Auto products & Engg (I). Private Ltd. ,Bangalore	Rs. 12000/- p.m.	No	No
6	Adobe Systems	Rs.30000/- p.m.	14 day accommodation at the time of joining.	Free Lunch Reimbursement of Cheapest Mode of transportation. Field TA First Class Rail Fare.
7	Akira Consultancy Private Limited	Rs.20000/- p.m.	No	Students preferred with knowledge of data warehousing.
8	Altair Engineering India Pvt. Ltd.	Rs.15100/- p.m.	No	Company bus at cost
9	Amazon Development Center	Rs.30000/- p.m.	7 days of Accommodation.	To & Fro Air Fare & Free Transport Free food coupons worth Rs.1250 p.m. Medical: First Aid. Company Bus at Cost. Conveyance To Office: Free company Bus. Meal Vouchers are given Monthly Cab facility-Home-Office-Home Relocation Benefit Two way flight tickets only for student from base location to the location of Joining
10	Analog Devices	Rs.20000/- p.m.	No	III AC Train Fare To & Fro. Subsidized canteen facilities. Total No. of students required: Nine. Discipline wise breakup: ECE / EEE / Instrumentation Sodexo Food Coupons worth Rs.1000 provided per month
11	Apollo Tyres Ltd	Rs.25000/- p.m	No	No
12	ARM Embedded Technologies Private Limited	Rs.20000/- p.m.	No	Fully Subsidized lunch & snacks
13	Aurigo Software	Rs.35000/- p.m.	No	For B.E. Computer Science/M.E. (Computer Science) Stipend: INR 35,000 per month For B.E. Civil Engineering M.E.(Civil - Structural Engineering) M.E.(Civil -

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				Infrastructure Systems) M.E.(Civil - Transportation Engineering) Stipend: 30000
14	Azul Systems	Rs.25000/- p.m	No	No
15	Beckman Coulter (formerly ReaMetrix India Pvt.Ltd)	Rs.15000/- p.m.	No	Free Breakfast & Lunch. Company Bus at Cost
16	Belong.co	Rs.20000/- p.m.	No	Fully Subsidized Lunch & Snacks. Challenging and start up work environment. Present students found it very challenging and overall a very fruitful experience.
17	Biocon ,Bangalore	Rs.7000/- p.m.	No	No
18	Blue Jeans Network India Pvt. Ltd.	Rs.50000/- p.m.	No	To & Fro air Fare & Free Transport. Free lunch. Medical : First Aid
19	Broadcom India Pvt Ltd	Rs.24000/- p.m.	No	Company Bus at Cost. Subsidized canteen facilities.
20	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	Operates in Gurgaon, Mumbai and Hyderabad apart for H.O.
21	Capital One, Bangalore	Rs.50000/- p.m	Accommodation for 1 Month at Crest hotel with pick up and drop off to the Office	Travel expenses reimbursed (to and fro Bangalore) , Breakfast
22	Centre for Artificial Intelligence & Robotics	Rs. 12000/-p.m. as scholarship	No	No
23	Cerner	Rs.22000/- p.m	No	No
24	Cisco Systems (India) Pvt. Ltd.	Rs.34000/- p.m.	No	No
25	Cypress Semiconductors Tech. India Pvt. Ltd.	Rs.25000/- p.m.	No	Free Lunch
26	Dell R&D	Rs.25000/- p.m.	No	No
27	DreamWorks Animation	Rs.35000/- p.m.	No	Free Breakfast Air Fare Company bus
28	EBay India Development Centre	Rs.45000/- p.m.	Yes	Free lunch. Free company bus.
29	EMC	Rs.25000/- p.m.	No	Doctor at Company Subsidized food @ Rs.200 p.m Company bus at cost.
30	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	Rs.10000/- p.m.	No	No
31	Ericsson Global India Pvt. Ltd.	Rs.20000/- p.m.	No	No
32	Ernst & Young Global Delivery Services	Rs.15000/- p.m.	No	No
33	Ernst & Young L.L.P.	Rs.15100/- p.m.	No	No
34	Flipkart Internet Services Pvt. Ltd	Rs.25000/- p.m.	No	Free canteen Facilities.
35	Genpact	Rs.15000/- p.m.	No	No
36	GiftXOXO	Rs.5000/- p.m.	No	No
37	Goldman Sachs India Pvt. Ltd.	Rs.15500/- p.m.	Outstation candidates will be provided initial 7 days accommodation, one	Subsidized food. Company bus at cost. One time to & from economy airfare to Bangalore
38	Hindustan Unilever Research Centre	Rs.20000/- p.m.	No	Subsidized lunch & breakfast
39	HolidayIQ.com	Rs.18000/- p.m.	No	No

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
40	Hortonworks	Rs.35000/- p.m.	No	No
41	Infinera	Rs.30000/- p.m.	No	No
42	Informatica Business Solutions Pvt Ltd	Rs.30000/- p.m.	Yes	Free lunch Rs.25,000 relocation expenses , free lunch and snacks, subsidized commute can be availed
43	InMobi	Rs.25000/- p.m.	No	No
44	Innovation Labs	Rs.30000/- p.m.	No	No
45	Intel India Technology Pvt. Ltd.	Rs.22000/- p.m.	No	To & fro air fare. Subsidised Lunch & Breakfast Free Company Bus
46	J P Morgan CIB-RFT	Rs.60000/- p.m.	No	Subsidised Canteen Facilities Company Bus at Cost
47	J.P. Morgan Chase	Rs.15000/- p.m.	No	Subsidized breakfast, Lunch & dinner. Free company bus.
48	JDA Software Solutions	Rs.18000/- p.m.	No	Subsidized canteen facilities. Company bus at cost.
49	John F Welch Technology Center (GE)	Rs.20000/- p.m.	No	Subsidised Lunch & Breakfast
50	KPMG	Rs.15000/- p.m.	No	No
51	MathWorks India Private Limited	Rs.30000/- p.m.	No	No
52	Media Iq Digital	Rs.20000/- p.m.	No	No
53	Mercedes Benz	Rs.12000/- p.m.	No	Subsidized lunch & Breakfast free company bus.
54	Myntra.com	Rs.25000/- p.m.	One week accommodation	To and fro airfare
55	National Aerospace Laboratories	Rs.12000/- p.m.	Accommodation provided for maximum six (3 boys &3 Girls) person only.	Subsidized canteen facilities
56	National Centre for Biological Sciences	Rs.12000/- p.m.	Yes	No
57	National Entrepreneurship Network	Rs.15000/- p.m.	No	Free company bus.
58	National Instruments Systems (India) Pvt. Ltd.	Rs.20000/- p.m.	No	Subsidized breakfast, lunch & dinner
59	NetApp	Rs.30000/- p.m.	No	Free lunch. Company bus.
60	NextGen PMS Pvt. Ltd	Rs.41000/- p.m.	No	No
61	Nutanix Technologies India Pvt. Ltd.	Rs.65000/- p.m.	No	Free breakfast, lunch & dinner. First class to and fro train fare from hometown to PS-II station while joining
62	Nvidia Graphics	Rs.25000/- p.m.	Company provided accommodation for initial 14 days	One-way airfare from hometown to PS-II station will be reimbursed. Free lunch and Subsidized breakfast Company bus
63	Nvidia Graphics – Software division	Rs.30000/-p.m	Accommodation will be provided for initial 14 days.	Free Lunch & Subsidised Breakfast
64	Oracle Financial Services Software Ltd. (OFSS)	Rs.25000/- p.m.	No	Subsidised Breakfast, Lunch & Dinner
65	Oracle India Pvt Ltd.	Rs.25000/- p.m.	No	Free lunch.
66	Paypal	Rs.50000/- p.m.	No	Subsidised Lunch & Breakfast
67	Pilani Experts Technology Labs Pvt Ltd	Rs.10000/- p.m.	No	No
68	Practo Technologies Pvt. Ltd.	Rs.40000/- p.m.	No	No
69	Price waterhouse Coopers	Rs.25000/- p.m.	No	No

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
	(PWC)			
70	Probe Equity Research	Rs.15000/- p.m.	No	No
71	Qualcomm India Private Limited	Rs.30000/- p.m.	Accommodation for 14 day At no cost	Subsidised Breakfast, Lunch & Dinner, Air Fair, Free Company Bus, oneway airfare
72	Qubole	Rs.35000/- p.m.	No	No
73	Rovi Corporation	Rs.40000/- p.m.	Temporary accommodation provided in first Week	Free Breakfast & Lunch
74	Sabre Holdings(Formely Sabre Travels)	Rs.25000/- p.m.	Accommodation provided for initial 2 weeks.	No
75	Samsung R &D Institute	Rs.35000/- p.m.	One week initial accommodation( Only for non-local students)	Free Lunch & Subsidised Breakfast. Two-way economy air fare from Home town/College. Free office transportation & food
76	Sellerworx Online Services Limited	Rs.15000/- p.m.	No	No
77	Shell Technology Center	Rs.20000/- p.m.	No	No
78	Skoda Auto India Pvt. Ltd.	Rs.14000/- p.m.	No	No
79	SmartLivez	Rs.25000/- p.m.	No	No
80	Symantec Software Solutions Pvt. Ltd.	Rs.40000/- p.m.	No	Subsidized canteen facilities for breakfast, lunch and tea/snacks.
81	Tangoe India Softek Pvt Ltd	Rs.25000/- p.m.	No	No
82	TAS Analytic Services	Rs.15500/- p.m.	No	No
83	Tata Advanced Materials Ltd	Rs.10000/- p.m.	No	Subsidised Canteen Facilities, Lunch Rs. 300 which will be deducted from stipend
84	Tata Consultancy Services	Rs.20000/- p.m.	No	No
85	TESCO Hindustan Service Centre	Rs.25000/- p.m.	No	No
86	Texas Instruments (I) Pvt. Ltd.	Rs.25000/- p.m.	No	Food coupons worth Rs.735/-p.m. Air fare. Free company bus. Treatment by Company Doctor
87	Think and learn	Rs.40000/- p.m.	No	No
88	Tonbo Imaging Pvt Ltd.	Mechanical students: Rs.12000/- p.m. Other students: Rs.28000/- p.m.	No	No
89	TYCO International Ltd	Rs.12000/- p.m.	No, Rs. 5000 will be provided for accommodation addition to stipend	Medical Insurance, Subsidised Canteen Facilities Company Bus at Cost
90	Vitacloud	Rs.22000/- p.m.	No	No
91	VMware Software India Pvt. Ltd.	Rs.30000/- p.m.	No	First Class Rail Fare, Company bus available @1000/- per month.
92	Vymo	Rs.20000/- p.m.	No	We provide one way third AC train fare (or equivalent/less flight fare) from source to destination for students.
93	Walmart Global Technology Services	Rs.30000/- p.m.	No	Free lunch & subsidized breakfast Free company bus
94	Zinnov Management Consulting Pvt. Ltd.	Rs.15000/- p.m.	No	Free Lunch
95	Zoomcar India Pvt. Ltd.	Rs.25000/- p.m.	No	No

**BHUBANESHWAR**

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
96	Aditya Birla Skills Foundation-(part of Aditya Birla Group)	Rs.20000/- p.m.	Will be intimated accordingly	Project related travel allowance will be given as per company rules.
97	Mindfire Solutions	Rs.21000/- p.m.	No	No
98	Verve Consulting Pvt Ltd.	Rs.10000/- p.m.	No	Management studies -2 EEE -2 Others -1S
<b>CHANDIGARH</b>				
99	HERON A Parexel Company	Rs.15000/- p.m.	No	No
<b>CHENNAI</b>				
100	Amazon Development Center	Rs.30000/- p.m.	Yes	Free food coupons worth Rs.1250 p.m Airfare, Free Food, coupons worth Rs.1250 p.m. Monthly Cab facility- Home-Office- Home Relocation Benefit Two way flight tickets only for student from base location to the location of Joining along with 7 days of accommodation.
101	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
102	Central Leather Research Institute (CLRI)	Rs.12000/- p.m. (Scholarship)	No	No
103	Ernst & Young L.L.P.	Rs.15100/- p.m.	No	No
104	HCL Technologies	Rs.18000/- p.m.	No	No
105	Healthcare Technology Innovation Centre (HTIC)	Rs.10000/- p.m.	No	Food court available within the building.
106	Paypal	Rs.50000/- p.m.	1 Week accommodation provided	To & Fro II Class AC Train Fare. Subsidised Lunch & Breakfast, free Company Bus
107	Price waterhouse Coopers (PWC)	Rs.25000/- p.m.	No	No
108	Structural Engineering Research Centre	Rs.12000/- p.m. (Scholarship)	No	No
109	Tata Chemical Innovation Center	Rs.10000/- p.m.	No	Six days a week. Working hours 9:00 AM & 5:30 PM. Sunday and Company declared holidays Off day The company is located in sriperembudur.
110	Tube Investments of India Limited	Rs.8000/- p.m.	No	No
111	Vestas Technology Ltd.	Rs.15000/- p.m.	No	subsidised food, transport facility
112	ZOHO corporation	Rs.18000/- p.m.	No	Free Breakfast , Lunch & Dinner
<b>DELHI</b>				
113	Amazon Development Centre	Rs.30000/- p.m.	7 days of Accommodation.	To & Fro air fare & free transport. free food, coupons worth Rs.1250 p.m.
114	Cubical Laboratories	Rs.12000/- p.m.	No	No
115	Price waterhouse Coopers (PWC)	Rs.25000/- p.m.	No	No
116	Quality Council of India	Rs.25000/- p.m.	No	No
<b>DHARWAD</b>				
117	Tata Motors	Rs.18000/- p.m.	No	Free canteen facility Free company bus, Subsidized food
<b>GOA</b>				
118	CIPLA Ltd.	Rs.14000/- p.m.	No	Subsidised Lunch & Breakfast
119	IFB Industries	Rs.15000/- p.m.	Arranged by Institute.	II Class rail fare, Fully Subsidized Lunch & Snacks
<b>GREATER NOIDA</b>				
120	ST Microelectronics(I) Pvt Ltd.	Rs.18000/- p.m.	No	Free Dinner
<b>GURGAON</b>				

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
121	American Express India	Rs.30000/- p.m.	No	Initial 7 days accommodation
122	Bain Capability Center Pvt Ltd	Rs.25000/- p.m.	No	No
123	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
124	Busigence	Rs.20000/- p.m.	No	Candidate is required to bring his/her laptop at workplace
125	DB MUdra Group	Rs.10000/- p.m.	No	No
126	Decision resources group ,Gurgaon	No	No	No
127	Ernst & Young L.L.P.	Rs.15100/- p.m.	No	No
128	Gabrel India Ltd	Rs.8000/- p.m.	No	Fully Subsidized Lunch & Snacks Free Company Bus
129	Genpact	Rs.15000/- p.m.	No	No
130	Hike	Rs.30000/- p.m.	No	Free lunch
131	KPMG	Rs.15000/- p.m.	No	Subsidized lunch. Company bus at cost
132	Lama Capital Management	Rs.5000/- p.m.+ Additional performance based bonus	No	No
133	LEXINNOVA	Rs.20040/- p.m.	No	Free canteenfacility Airfare, Free Boarding & Lodging
134	Mahle Filters India Ltd	Rs.8000/- p.m.	No	No
135	Mediology Software Pvt. Ltd	Rs.20000/- p.m.	No	No
136	Pluss Advanced Technologies Pvt. Ltd.	Rs.15000/- p.m.	PG accommodation (up to Rs. 5000/month)	No
137	Skoda Auto India Pvt. Ltd	Rs.14000/- p.m.	No	No
138	SRF Ltd.	Rs.12000/- p.m.	No	Company bus
139	Urban Clap	Rs.50000/- p.m.	No	Only students who have already worked in projects INAngular JS, Node JS etc. The student should be one of the Top 20 in CS.
140	Zinnov Management Consulting Pvt. Ltd.	Rs.18000/- p.m.	No	No
<b>HOSUR</b>				
141	Faiveley Transport Rail Technologies India Ltd (FTRTIL)	Rs.10000/- p.m.	Yes	Free breakfast &Lunch. Free company bus.
142	Gabrel India Ltd	Rs.8000/- p.m.	No	Fully Subsidized Lunch & Snacks, Free Company Bus
<b>HYDERABAD</b>				
143	Adaequre	Rs.15000/- p.m.	No	No
144	Amazon Development Center	Rs.30000/- p.m.	7 days of Accommodation.	Free company bus
145	Bharat Dynamics Ltd	Rs.5000/- p.m.	No	Subsidized lunch
146	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
147	Centre for DNA Fingerprinting and Diagnostics	Rs.12000/- p.m. (Scholarship).	Yes	Company Shuttle is available from the hostel to the organization.
148	Cognitive Scale	Rs.30000/- p.m.	No	Free Lunch
149	Endless Robotics Pvt. Ltd.	Rs.5000/- p.m.	No	No
150	Freescale Semiconductor India Pvt. Ltd.	Rs.20000/- p.m.	No	No
151	GGK Technologies.	Rs.20000/- p.m.	No	Student work space and computer provided Snacks provided in the evenings everyday.
152	Hyderabad Eye Research	No	provide hostel	Company Bus at Cost



Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
	Foundation (HERF), the research arm of LV Prasad Eye Institute		accommodation at our BLSO School of Optometry campus (20 km away, but with shuttle bus service)	
153	IMI Mobile	Rs.18000/- p.m.	No	Free Lunch
154	Indian Institute of Chemical Technology	Rs.12000/- p.m. (Scholarship)	Hostel @ICT available at Subsidized rates.	No
155	IndustryARC	Rs.12000/- p.m.	No	No
156	InsideView Technologies (India) Pvt. Ltd.	Rs.35000/- p.m.	Will provide accommodation for few days(~2 weeks) initially for the students at no cost.	First Class Rail Fare, Free Company Bus
157	JDA Software Solutions	Rs.18000/- p.m.	No	Subsidized canteen facilities.
158	John F Welch Technology Center (GE)	Rs.20000/-p.m.	No	No
159	Market Forecast	Rs.18000/- p.m.	No	No
160	Microsoft	Rs.35000/- p.m.	No	No
161	Mordor Intelligence	Rs.14000/- p.m.	No	No
162	My smart price	Rs.25000/- p.m.	No	Free lunch.
163	Nvidia Graphics	Rs.25000/- p.m.	No	No
164	Oracle India Pvt Ltd.	Rs.25000/- p.m.	No	Subsidized canteen facilities.
165	Price waterhouse Coopers (PWC)	Rs.25000/- p.m.	No	No
166	Purpletalk	Rs.15000/- p.m.	No	No
167	Qualcomm India Private Ltd.	Rs.30000/- p.m.	Accommodation for 14 day At no cost One way airfare	Subsidised Canteen Facilities, Free Company Bus
168	Report Garden Technologies Pvt. Ltd.	Rs.20000/- p.m.	No	No
169	Smartrak	Rs.20000/- p.m.	No	No
170	Stellar Software Technologies Pvt Ltd	Rs.10000/- p.m.	No	No
171	Worley Parsons India	Rs.16000/- p.m.	No	Subsidized lunch ,free company bus
172	YUPPTV	Rs.25000/- p.m.	No	No
<b>JAIPUR</b>				
173	CEG Limited	Rs.10000/- p.m.	No	No
174	NBC Bearings	Rs.4000/- p.m.	Yes	Subsidised Lunch
175	Rajputana Constructions	Rs.15000/- p.m.	No	2 Students in Jaipur, 2 students in Patiala.
<b>JAMSHEDPUR</b>				
176	Tata Motors	Rs.18000/- p.m.	Ge Hostel Telco Colony Jamshedpur	Students have to pay for the accommodation as per company rules.
<b>JODALLI</b>				
177	Spicer India Ltd.	Rs.8000/- p.m.	No	Free Company Bus
<b>KOLKATA</b>				
178	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
179	HedgeQuants Capital Advisory LLP	Rs.50000/- p.m.	No	No
180	Tega Industries	Rs.15000/- p.m.	Yes, Payment for accommodation needs to be done as	Subsidized canteen facilities

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
			decided by the company from time to time.	
181	Texmaco Ltd.	Rs.3000/- p.m.	No	Free Breakfast , Lunch & Dinner
<b>LUCKNOW</b>				
182	Tata Motors	Rs.18000/- p.m.	No	Free lunch, Snacks are provided during office hours
<b>MUMBAI</b>				
183	Aditya Birla Corporate IT	Rs.15000/- p.m.	No	Free Canteen Facility, Sundays, 2nd & 4th Saturday off
184	Aditya Birla Science & Technology Company Ltd.	Rs.8500/- p.m.	Yes	Medical Insurance Official local conveyance paid Subsidized canteen facilities, Free Company Bus
185	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	Air fare
186	Carwale (Automotive Exchange Pvt. Ltd.)	Rs.15000/- p.m.	No	Subsidized lunch & breakfast
187	Century Rayon	Rs.6000/- p.m.	Accommodation provided only for boys	Subsidized breakfast, lunch & dinner
188	Credit Suisse	Rs.25000/- p.m.	No	No
189	DBOI (Deutsche Bank)	Rs.15000/- p.m.	No	Subsidized canteen facilities.
190	Development Consultants Pvt. Ltd. (DCPL)	Rs.8000/- p.m.	Accommodation only for Boys @Rs.200 per day	Free lunch, The Organization deducts Rs 200/- towards house rent and Rs 100/- towards the cost of food.
191	Dorsch Consult (India) Pvt. Ltd.	Rs.12000/- p.m.	Provided by the organization	On Saturdays, the organization timings are from 9.30am to 4.30pm.
192	Ernst & Young L.L.P.	Rs.15100/- p.m.	No	No
193	Exponentia data	Rs.25000/- p.m.	No	No
194	Geometric Limited	Rs.12000/- p.m.	No	Fully subsidized lunch & snacks.
195	HDFC Bank	Rs.20000/- p.m.	No	No
196	HENKEL	Rs.20000/- p.m.	No	No
197	Here Maps - A Nokia Company	Rs.20000/- p.m.	No	Subsidized canteen facilities. Free company bus.
198	Hourglass Research	Rs.15000/- p.m.	No	Subsidised Canteen Facilities
199	J P MORGAN -CIB	Rs.60000/- p.m.	No	No
200	J.P. Morgan Chase	Rs.26250/- p.m.	No	Subsidized canteen facilities. Company Bus at Cost
201	J.P. Morgan Services India Pvt. Ltd	Rs.40000/- p.m.	No	Subsidized canteen facilities.
202	KPMG	Rs.15000/- p.m.	No	No
203	Morningstar	Rs.30000/- p.m.	No	Company bus at cost
204	MSCI Barra, Quantitative Equity Research	Rs.40000/- p.m.	No	No
205	Nomura Information Technology Division	Rs.25000/- p.m.	No	No
206	Nomura Global Markets & Global Finance Analyst Division	Rs.35000/-p.m.	No	No
207	Oracle Financial Services Software Ltd. (OFSS)	Rs.25000/- p.m.	No	Free transport
208	Price water house Coopers (PWC)	Rs.25000/- p.m.	No	No
209	Skoda Auto India Pvt. Ltd.	Rs.14000/- p.m.	No	Subsidised Canteen Facilities
210	Skumars Online	Rs.10000/- p.m.	No	No
211	VMS (Vakil Mehta Seth) Consultants Private Limited	Rs.8000/- p.m.	No	No

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>NAGDA</b>				
212	Grasim Industries Ltd.	Rs.5000/- p.m.	Yes	Subsidized breakfast, lunch & dinner. Official local conveyance paid
<b>NAGPUR</b>				
213	Techture Structures Pvt Ltd.	Rs.7000/- p.m.	Yes	Tea/ Snacks are provided free of cost. The stipend is the same for UG/PG students.
<b>NAVI MUMBAI</b>				
214	Hindalco Innovation Centre - Semifab Taloja	Rs.8000/- p.m.	Yes	The stipend amount would be Rs. 10000/- (student without Institute scholarship) or Rs. 8000/- (student with Institute scholarship). Additional Rs. 3000 for HRA purposes would be provided if required (non local student).
<b>NEW DELHI</b>				
215	Central Road Research Institute	Rs.12000/- p.m. (Scholarship)	No	Subsidized canteen facilities
216	Grey Orange Robotics Pvt. Ltd.	A3, A4, A8: Rs.25000/- p.m.A7,C6:Rs.35000 /- p.m.	No	Subsidized canteen facilities.
217	LEA Associates	Rs.8000/- p.m.	No	No
218	National Institute of Science and Tech. Dev. Studies (NISTADS)	Rs.3000/- p.m.	No	Subsidized Lunch
219	Value Edge India	Rs.15000/- p.m.	No	No
<b>NOIDA</b>				
220	Adobe Systems	Rs.40000/- p.m.	Accommodation provided for 14 days by the organization	Free Lunch, Free Company Bus
221	ARM Embedded Technologies Private Ltd	Rs.20000/- p.m.	No	No
222	EDCIL India Ltd.	Rs.10000/- p.m.	No	No
223	HCL Technologies	Rs.18000/- p.m.	No	No
224	Nucleus Software Export Ltd	Rs.25000/- p.m.	No	First 7 days acco. provided by company including breakfast and assistance for finding house
225	Opera Solutions	Rs.40000/- p.m.	Accommodation for initial one week	No
226	Tolexo Online Pvt Ltd	Rs.20000/- p.m.	No	No
<b>PANTNAGAR</b>				
227	Tata Motors	Rs.18000/- p.m.	No	No
<b>PATIALA</b>				
228	Rajputana Constructions	Rs.17000/- p.m.	No	No
<b>PILANI</b>				
229	Central Electronics Engineering Research Institute	Rs.12000/- p.m. (Scholarship)	No	Subsidized canteen facilities
<b>PUNE</b>				
230	Alfa Laval (India) Limited	Rs.5000/- p.m.	No	No
231	Avaya India Private Limited	Rs.18000/- p.m.	No	First class rail fare free company bus, fully Subsidized Lunch & Snacks, company Bus at Cost
232	B.G.Shirke Construction Technology Pvt. Ltd.	Rs.9000/- p.m.	No	No
233	Bharat Forge Ltd	Rs.5000/- p.m.	No	Free breakfast & lunch
234	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No

Sr. No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
235	Cadence Design Systems India Pvt Ltd.	Rs.20000/- p.m.	No	No
236	Credit Suisse	Rs.25000/- p.m.	No	Subsidised Canteen Facilities, Free Company Bus
237	Divgi Warner Pvt Ltd	Rs.10500/- p.m.	No	Reimbursement on conveyance on cheapest mode, free company Bus
238	Gabrel India Ltd	Rs.8000/- p.m.	No	Fully Subsidized Lunch & Snacks, Free Company Bus
239	Halliburton Technologies	Rs.10000/- p.m.	No	No
240	IDeaS – SAS	Rs.25000/- p.m.	No	Free lunch. Company bus at cost.
241	MahleBeher India Pvt Ltd	Rs.8000/- p.m.	No	No
242	Mahle Behr India Engineering Services	Rs.8000/-p.m.	No	No
243	Mahle Filters India Ltd	Rs.8000/-p.m.	No	No
244	National Chemical Laboratory	Rs.12000/- p.m.	Treatment by Company Doctor	No
245	Nvidia Graphics	Rs.25000/- p.m.	14 days of initial hotel accommodation will be provided by the organisation	Free breakfast, lunch & dinner, free company bus. One sided travel of first class train fare between hometown and PS-II Station is reimbursed.
246	Oracle Financial Services Software Ltd. (OFSS)	Rs.25000/- p.m.	No	No
247	Reflexis Systems India Pvt Ltd.	Rs.20000/- p.m.	No	Subsidized canteen facilities. Second class rail Fare. Company bus at cost.
248	Skoda Auto India Pvt. Ltd. (Chakan)	Rs.12000/- p.m.	No	Subsidised Canteen Facilities, Free Company Bus
249	Sokrati Technologies Pvt. Ltd.	Business analyst: Rs.15000/- p.m. Others: Rs.20000/- p.m.	No	No
250	Symantec Software Solutions Pvt. Ltd.	Rs.40000/- p.m.	No	Subsidised Lunch & Breakfast, Company Bus at Cost.
251	Tata Autocomp Systems Ltd.	Rs.12000/- p.m.	No	Subsidized lunch & breakfast. Free company bus.
252	Tata Chemical Innovation Center	Rs.10000/- p.m.	Yes	Free Company bus, First Class Rail Fare
253	Tata Motors	Rs.12000/- p.m.	No	Fully subsidized Lunch & snacks. Free company bus
254	Tata Technologies	Rs.12000/- p.m.	No	Subsidized canteen facilities. Company bus at cost.
255	Thermax India	Rs.5000/- p.m.	No	Subsidized breakfast, lunch & dinner
256	vConstruct Private Limited	Rs.15000/- p.m.	No	The stipend may get revised
257	ZS Associates	Rs.25000/- p.m.	No	Free breakfast, lunch & dinner
<b>TRIVANDRUM</b>				
258	Centre For Development Of Imaging Technology	Rs.5000/- p.m.	No	Subsidized lunch, Free company bus
259	Klientas	Rs.12500/- p.m.	No	No
260	Leap Consulting	Rs.10000/- p.m.	No	No
<b>USA</b>				
261	Knox Payments	\$500	Yes	Food will be provided. Travel and VISA allowances will not be provided.

**LIST OF PROJECT ASSIGNMENTS FOR SECOND SEMESTER 2015-2016**

<b>1.</b>	<b>TOSHNIWAL INDUSTRIES PVT. LTD, AJMER</b>
	1. PREPARATION OF DETAILED PLAN FOR MANUFACTURING & TESTING FACILITY FOR PRESSURE TRANSMITTER
	2. SETTING UP OF PRODUCTION LINE AND LAUNCH STRATEGY FOR LEVEL TRANSMITTERS.
<b>2.</b>	<b>SKODA AUTO INDIA PVT. LTD, AURANGABAD</b>
	3. DAILY DISS ALARM DATA DOCUMENTATION (RECORDING, DATA ANALYSIS, MONITORING AND UPDATING OF STATUS)
	4. DAILY PARTS VERIFICATION AND DATA DOCUMENTATION FOR CONFIRMITY OF PRODUCTION
<b>3.</b>	<b>[24]7 ILABS, BANGALORE</b>
	5.A STATEFUL PREDICTION ENGINE FOR USER PROFILE BASED PREDICTIONS
	6. ACTIONABLE ALERTS FOR NOC DASHBOARD
	7.ADVERTISEMENT TECH AND PERSONALIZATION ANALYSES
	8. CONFIGURING AND OPTIMIZATION OF DATA FOR BATCH AND REAL TIME PROCESSING
	9. DISPOSITION FORM CREATOR
	10. DYNAMIC MONITORING OF CLUSTER BASED CLOUD INFRASTRUCTURE
	11. MONITORING DASHBOARD AND AUTOMATION
	12. QUALITY ASSURANCE OF FLOW
	13. SCALABLE OLAP SOLUTION FOR HADOOP: A PROOF OF CONCEPT
	14. SPEECH MANAGEMENT SYSTEM DESIGN
	15. WEB INTERFACING FOR DYNAMIC MONITORING OF DISTRIBUTED SERVICES CLUSTER IN CLOUD
<b>4.</b>	<b>ADITYA AUTO PRODUCTS &amp; ENGG (I) .P.LTD, BANGALORE</b>
	16. PERFORMANCE ANALYSIS OF SWITCHED RELUCTANCE MOTOR AND AUTOMATION
	17. STUDY AND DYNAMIC MODELING OF SWITCHED RELUCTANCE MOTOR
<b>5.</b>	<b>ADOBE SYSTEMS, BANGALORE</b>
	18.ADOBE COLDFUSION
	19.ENHANCEMENT OF API MANAGER AND COLDFUSION 16 Å€ PORTAL CUSTOMIZATION
<b>6.</b>	<b>AKIRA CONSULTANCY PRIVATE LIMITED, BANGALORE</b>
	20. AUTOMATION TESTING OF TOOLS OF HYPERWORKS
	24. BUSINESS INTELLIGENCE ETL, DATABASE DEVELOPMENT & DASHBOARD DEVELOPMENT IN QLIKVIEW
	25. DEVELOPMENT OF NOISE, VIBRATION AND HARSHNESS DIRECTOR
	26. GUI MODIFICATION AND AUTOMATION OF TUBE BENDING MODULE OF HYPERFORM
	27. MOBILE DATA ANALYTICS FOR APP DEVELOPED BY AKIRA LABS
	28. MOBILE OPERATOR PLAN DATA EXTRACTION AND CLASSIFICATION
<b>7.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	29.BUILDING AN INTERNAL TOOL, AND UCI MIGRATION FOR INDIA GIFT CARDS
	30.PPU AUTOMATION AND HATS IMPROVEMENTS
	31.A PLATFORM FOR DEEP HEALTH CHECKS OF AMAZON SERVICES
	32.AMPP - INCENTIVES PLATFORM PORTAL
	33.ANOMALY DETECTION FRAMEWORK
	34.BUYBACK MARKET PLACE
	35.CLIENT-SIDE METRICS AND ADMIN FUNCTIONALITIES FOR SELLER REWARDS PORTAL
	36.CLOUDSYNC
	37.COMPLIANCE FORM GENERATION FOR AMAZON SELLERS IN INDIA
	38.CONFIGURATION MANAGEMENT
	39.CONSOLIDATED TRANSACTION REPORTS
	40.CRAWL MANAGEMENT SERVICE & SPARK TASK LIBRARY
	41.DELIVERY EXPERIENCE AND REGIONALIZATION AT AMAZON INDIA
	42.DESIGN AND IMPLEMENTATION OF RANKED TITLE AUTHORITY DEBUGGER
	43.DESKTOP APPLICATION FOR EASYSHIP REGISTRATION SETTINGS
	44.IMMERSIVE SHARE AND BOLT
	45.IMPROVEMENTS IN DIGITAL CONTENT CLASSIFICATION
	46.IMPROVING CX ON AMAZON INDIA SHOPPING APP
	47.INDIA DELIVERY EXPERINCE
	48.JUNGLEE P2P SHOPPING EXPERIENCE ENHANCEMENTS
	49.LABOR TRACKING FOR PICKING
	50. MIGRATION OF STUDENT GRADUATION APPEAL FORM TO HORIZONTE/MS3, DEVELOPMENT OF CANADA LANDING PAGE FOR AMAZON STUDENT.
	51.MYI LISTINGS IMPROVEMENT
	52.OPTIMIZATION AND GLOBALIZATION OF EXPORT AND IMPORT OF EXCEL FOR THE SELLER CENTRAL PORTAL OF AMAZON
	53.PERSONAL ORDER DETECTOR
	54.PRODUCT TEST REVIEW INTERFACE
	55.REARCHITECTURE OF INVENTORY MANAGEMENT SYSTEMS FOR FUFILLMENT CENTERS

	56.REDESIGN OF GRADUATION APPROVAL WORKFLOW
	57.SEARCH ENGINE OPTIMAZTION (AMAZON.IN TRAFFIC)
	58.SENTIMENT ANALYSIS OF AMAZON ADS ON SOCIAL NETWORKING SITES
	59.SERVICE PROVIDER NETWORK
	60.SHIP COMPLETE TRIGGER MIGRATION, SHIPMENT DEPARTED NOTIFICATION
	61.SIZE CHART COVERAGE ANALYTICS
	62.SORT TOTE DENSITY ENHANCEMENTS IN UNIVERSAL RECEIVE AND RECEIVE SORT
<b>8.</b>	<b>ANALOG DEVICES, BANGALORE</b>
	64.DESIGN OF INPUT OUTPUT BLOCK OF ADC AND ANALYSIS OF SCHMITT TRIGGER
	65.DEVELOPMENT AND VALIDATION OF BOOT KERNEL FOR A LOW-POWER MICROCONTROLLER
	66.EMBEDDED VISION SENSING ON BLACKFIN LOW POWER IMAGING PLATFORM
	67.FEASIBILITY ANALYSIS OF TEST TIME REDUCTION
	68.FPGA PROTOTYPING OF ARC-EM PROCESSOR
	69.PROJECT 1: DESIGN AND VERIFICATION OF AMBA 3 APB PROTOCOL PROJECT2: FUNCTIONAL AND CODE COVERAGE OF JESD204B PROTOCOL
	70.SIGNAL AND POWER INTEGRITY VERIFICATION IN DOUBLE DATA RATE INTERFACES
	71.VALIDATION OF ANALOG MIXED SIGNAL BEHAVIORAL MODELING BLOCKS
	72.VALIDATION OF SERIAL COMMUNICATION PROTOCOLS ON ADUCM302X
	73.VIRTUAL GROUND COMMON MODE CORRECTION CIRCUIT
<b>9.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	74. ANALYSIS AND TUNING OF TIMING PARAMETERS IN COMPILER BASED MEMORY INSTANCES TO MEET SOC PPA NEEDS.
	75.CONSTRAINED RANDOM TUNER AND COVERAGE DRIVEN TESTS GENERATION FOR PROCESSOR VERIFICATION
	76.DETERMINATION OF ACCESS DISTURB MARGIN & WRITE DISTURB MARGIN IN 6T SRAM BITCELL & PERFORMANCE GAIN ANALYSIS OF 16NM COMPARED TO 28NM COMPILERS
	77.DEVELOPMENT OF FAST MODEL PLUGINS TO CAPTURE DESIRED TRACES AND COMPILE FLOW OPTIMIZATION
	78.OS(LINUX) BASED VALIDATION OF ARM SYSTEM
	79.PERFORMANCE ANALYSIS AND BENCHMARKING OF MOBILE AND SERVER CLASS DEVICES
<b>10.</b>	<b>AURIGO SOFTWARE, BANGALORE</b>
	80.BUSINESS ANALYSIS ON CDMS AND DEVELOPMENT OF TRAINING REPOSITORY FOR AURIGO MASTERWORKS
	81.BUSINESS ANALYSIS AT AURIGO
	82.DEVELOPMENT OF INTRANET WEBSITE AND ANALYSIS OF BIG DATA USING HADOOP FRAMEWORK
<b>11.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD), BANGALORE</b>
	83.DEVELOPMENT OF METHODOLOGIES FOR ANALYSIS OF MICROPARTICLES IN THE BIOLOGICAL SAMPLES
	84.THE DEVELOPMENT OF A UNIVERSAL COMPENSATION SOLUTION FOR MULTICOLOR PANELS IN FLOW CYTOMETRY AND THE DEVELOPMENT OF A BEAD BASED CELL COUNTING ASSAY FOR THE DURACLONE LINE OF REAGENTS
<b>12.</b>	<b>BELONG.CO, BANGALORE</b>
	85. METADATA -- DATA AGGREGATION, INFORMATION EXTRACTION AND PROVISIONING, DRIVING INSIGHTS AND SEARCH RELEVANCE.
	86.PRODUCT ANALYTICS
<b>13.</b>	<b>BIOCON, BANGALORE</b>
	87.COMPLETE ANALYSIS OF THE SYNTHESISED NEW DRUG MOLECULE
	88.COMPLETE ANALYSIS OF PEPTIDE DRUG MOLECULE
	89.PREPARATION AND EVALUATION OF IMMEDIATE RELEASE SOLID ORAL DOSAGE FORM OF CANDIDATE DRUG
<b>14.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	90.ATARI VOD PLAYER
	91.DATA MIGRATION FROM MYSQL TO CASSANDRA
	92.DENIM AUTOMATION
	93.INDIGO STATISTICS FOR BROWSER EXTENSIONS AND SPECTOR FEATURE ENHANCEMENTS AND BUG FIXES
	94.INTELLIGENT REPORTING
	95.VIDEO QUALITY IMPROVEMENT
	96.WEB SERVICES AND API DEVELOPMENT
	97.WEBSOCKET AUTOMATION
<b>15.</b>	<b>BROADCOM INDIA PVT LTD, BANGALORE</b>
	98.AUDIOVERIFICATION
	99.COEXISTENCE OF WIRELESS DEVICES
	100.GRAPHICS IP V ERIFICATION
	101.PERFORMANCE ANALYSIS OF CABLE AND SATELLITE SYSTEMS
	102.PHYSICAL BLOCK IMPLEMENTATION AT 16NM TECHNOLOGY NODE
<b>16.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY) , BANGALORE</b>
	103.AUTOMATED ORDER PROCESSING SYSTEM OF SWIGGY

	104.CONTENT MARKETING MANAGEMENT
<b>17.</b>	<b>CAPITAL ONE, BANGALORE</b>
	105.DEVELOPING AN APPROACH TO IDENTIFY CUSTOMER NEEDS FROM FREQUENT PATTERNS OF CUSTOMER TOUCH-POINTS/INTERACTIONS
	106.DRIVE TO DIGITAL
<b>18.</b>	<b>CENTRE FOR ARTIFICIAL INTELLIGENCE &amp; ROBOTICS, BANGALORE</b>
	107.AUTONOMOUS ROBOT NAVIGATION
	108.CONTROL OF 5 DEGREE OF FREEDOM MANIPULATOR
	109.MULTIPLE CAMERA, MULTIPLE OBJECT TRACKING
	110.OBJECT RECOGNITION USING PCL LIBRARY
	111.PATH PLANNING USING INFORMED SEARCH ALGORITHMS IN URBAN BUILDINGS FOR AN AUTONOMOUS GROUND ROBOT
	112.SEMANTIC ORIENTED ARCHITECTURE USING JADE AND JENA
	113.STEREO VISION BASED NAVIGATION
	114.TORQUE ANALYSIS AND MINIMIZATION FOR A QUADRUPEL ROBOT
<b>19.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	115.PROTOTYPE FOR WEB BASED VERSION OF PET
	116.1. IDENTIFICATION OF POST COLLECTION HOOKS USING JAVA REFLECTION 2. STUDY & IMPLEMENTATION OF DISTRIBUTED CACHING USING EHCACHE & REDIS 3. IDENTIFICATION OF CLASS HIERARCHY INVOLVED IN DELETE DEVICE OPERATION IN CISCO PI 4. TRACKING ACTIVITIES PERFORMED BY PRIME INFRASTRUCTURE ON DEVICES
	117.1. SAHAKAAR 2. DISCOVERY PROTOCOL FOR THE UPCOMING CISCO SWITCH 3. IOT PROTOCOL BRIDGE 4.PRODUCT LIFE CYCLE MANAGEMENT
	118.ANALYSIS OF SOFTWARE BUG ASSIGNMENT
	119.ANALYTICS AND BIG DATA MINING
	120.AUTOMATED LOG ANALYSIS USING SUPERVISED LEARNING AND CLASSIFICATION
	121.AUTOMATION OF SKYFALL INSTALLATION
	122.AUTOMATION SCRIPT FOR VIRTUAL MACHINE HEALTH CHECK
	123.BENCHMARKING FOR PRESALES ENABLEMENT TOOL
	124.CISCO UCSPE TECHSUPPORT ANALYZER
	125.CREATE A WEB TOOL, AN APPLICATION AND A CLI (CLI TO BE RUN ON ROUTER) FOR DECODING 1) REGISTERS AND APPLICATION SPECIFIC INTEGRATED CIRCUITS COMPONENTS 2) SCP MESSAGES
	126.CROSS-FUNCTIONAL ASSESSMENT
	127.DEVELOPING A SITE VIEW LAYOUT FOR THE CISCO TRANSPORT PLANNER (CTP) TOOL USED IN DEPLOYING OPTICAL NETWORKS
	128.FRETTA AND ROSCO FAULT ANALYSIS USING ELK, GRAYLOG AND SUPERVISED LEARNING
	129.GDC IMPACT ON PROFITABILITY
	130.IN-BAND OAM
	1310INTEGRATED MICRO SEGMENTATION
	132.INTEGRATION OF BLOGGERD IN NEXUS 1000V
	133.IPV6 SUPPORT FOR GETVPN
	134.OPENATF AUTOMATION
	135.PET & BENCHMARKING
	136.RAMPUP
	137.SKYFALL - VIRTUAL MANAGED SERVICES
	138.SMART LAB INFORMATION MANAGEMENT
	139.TCO/ROI TOOL FOR COLLABORATION TEAM
	140.TRAIL TRACING
<b>20.</b>	<b>CYPRESS SEMICONDUCTOR INDIA PVT LTD, BANGALORE</b>
	141.DESIGN AND SYNTHESIS OF I/O SUBSYSTEM IP
	142.DESIGN OF A LOW VOLTAGE DETECTOR AND A LOW DROPOUT REGULATOR
	143.IMPROVEMENT OF WIP RATIO PROCESS
	144.OPTIMIZATION OF EXISTING PROCESS OF BACKEND BACKLOG PLANNING OF MCU
	145.QUADCOPTER PROJECT FOR STCON 2016
	146.USB TYPE-C POWER BANK REFERENCE DESIGN
	147.VERIFICATION OF PERI IP USING UVM
<b>21.</b>	<b>DELL R&amp;D, BANGALORE</b>
	148.INSIGHT INTO LIVE ACTION IN A DATACENTER
	149.PROVIDER DEVELOPMENT TO FIND VM INFORMATION

	150. SCALABILITY AND REMOTE MANAGEMENT OF DELL IDRAC SERVER VIA SIMULATION.
<b>22.</b>	<b>DREAMWORKS ANIMATION, BANGALORE</b>
	151.GENERAL STORE PLUS
	152.PRODUCTION SUPPORT AND PIPELINE DEVELOPMENT AS A SURFACING TECHNICAL DIRECTOR
	153.STUDIO PIPELINE DEVELOPMENT AND SUPPORT AS TECHNICAL DIRECTOR
	154.TECHNICAL SUPPORT AND SOFTWARE DEVELOPMENT FOR STUDIO PIPELINE
	155.WORKFLOW DEVELOPMENT FOR ANALYZING AND LOGGING UNSTRUCTURED DATA USING ELK STACK AND SUPPORT AS TECHNICAL DIRECTOR
<b>23.</b>	<b>EBAY INDIA DEVELOPMENT CENTRE, BANGALORE</b>
	156. ELASTICSEARCH DATA REPLICATION OVER OTHER DATA CENTER USING APACHE KAFKA AS MESSAGE
	157.STREAMING PIPELINE.
<b>24.</b>	<b>EMC, BANGALORE</b>
	158.AUTOMATING VIPR DEVICE DISCOVERY
	159.DOCKERIZING THE CONTENT SERVER
	160.ECS MESOS FRAMEWORK REST API IMPLEMENTATION
	161.IMPLEMENTATION OF SAVE SEARCH FEATURE FOR FACETED SEARCH OF MY DOCUMENTUM FOR MICROSOFT OUTLOOK
	162.LOG MANAGEMENT WITH ELK
	163.MONITORING KAFKA PERFORMANCE METRICS
	164.POWERPATH CONFIGURATION CHECKER A SERVICEABILITY TOOL INTEGRATION WITH VAPP
	165.POWERPATH MANAGEMENT APPLIANCE GUI REDESIGN
	166.PROVIDING SUPPORT OF VNX UNITY IN VIPR
	167.VIPR SRM SUPPORT FOR EMC SCALEIO - TESTING AND AUTOMATION
<b>25.</b>	<b>ERICSSON GLOBAL INDIA PVT. LTD, BANGALORE</b>
	168.ERROR LOGGING AND COLLECTION ON VIRTUALIZED APPLICATION SERVER
<b>26.</b>	<b>FLIPKART INTERNET SERVICES PVT. LTD, BANGALORE</b>
	169.AUDIT FRAMEWORK
	170.IMS ANALYTICS APPLICATION
	171.PBX, CTI AND ROUTING APP
	172.REVIEW CLASSIFICATION BASED INCIDENT CREATION
	173.SELECTION REGULATIONS AND APPROVAL POLICY MANAGEMENT
<b>27.</b>	<b>GENPACT, BANGALORE</b>
	174.DATA ANALYTICS IN PHARMA COMPANY
	175.MARKET ANALYSIS OF ALZHEIMER&APOS;S DISEASE
<b>28.</b>	<b>GOLDMAN SACHS INDIA PVT. LTD, BANGALORE</b>
	176.BENCHMARK ANALYSIS
	177.DEVELOPMENT OF PLANNING TOOL
	178.IMPLEMENTING AND ANALYSING THE AUTOMATION REQUESTS
	179.INVESTMENT GUIDELINES
	180.REGRESSION TESTING FOR REGULATORY REPORTING PURPOSES AND AUTOMATION
	181.OSTUDY OF THE RISK QUOTIENT OF PROCESSES UNDER SECURITISED PRODUCT SERVICING
<b>29.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE, BANGALORE</b>
	182.ADSORPTIVE REMOVAL OF ANIONIC SURFACTANT BY ACTIVATED CARBON
	183.AQUEOUS FOAM MEDIATED SYNTHESIS OF NOVEL CaCO <sub>3</sub> PARTICLES AND THEIR SUITABLE APPLICATION
	184.CFD MODELLING OF ROTATING DISK
	185.EFFECT OF ANIONS (SULFATES) ON PRECIPITATION OF ALUMINUM HYDROXIDE - SWEEP FLOCCULATION
	186.EFFECT OF SMALL CHAIN CO-ACTIVES ON FOAMABILITY
	187.ELECTROCHEMICAL BEHAVIOR OF POTASSIUM IODIDE
	188.EXTRACTION OF SERICIN PROTEIN FROM SILK COCOONS - INTERACTION OF SERICIN WITH ADDITIVES
	189.IN-SITU SILVER NANOPARTICLE SYNTHESIS USING HAIR AS TEMPLATE
	190.MODELLING THE INFLUENCE OF FARADAIC REACTIONS ON THE DOUBLE LAYER AT THE POROUS ELECTRODE-ELECTROLYTE INTERFACE
<b>30.</b>	<b>HOLIDAYIQ.COM, BANGALORE</b>
	191.ANALYSIS OF HOSPITALITY DOMAIN OF TOURISM IN ONLINE SPACE
	192.HUMAN RESOURCE MANAGEMENT
	193.PRODUCT MANAGEMENT
	194.UNIQUE PEGS FOR DESTINATIONS AND HOTELS
<b>31.</b>	<b>INFINERA, BANGALORE</b>



	195.28G CLOCK AND DATA RECOVERY DESIGN VALIDATION
	196.DATA RETRIEVAL FROM COVERITY WEB SERVICES USING PERL
	197.DESIGN & VERIFICATION OF DATA RE-TIMING LOGIC USED IN INFINERA FPGA
	198.DEVELOPMENT AND IMPROVEMENTS OF INFINERA RESOURCE MANAGEMENT SYSTEM
<b>32.</b>	<b>INFORMATICA BUSINESS SOLUTIONS PVT. LTD, BANGALORE</b>
	199.A REPORT ON INFORMATICA DEVELOPER TOOL : MERCURY
	200.INTELLIGENT DATA LAKE
	201.SMART SEARCH APPLICATION
<b>33.</b>	<b>INTEL INDIA TECHNOLOGY PVT. LTD, BANGALORE</b>
	202.ANALYSIS AND FUNCTIONALITY ENHANCEMENT OF DIGITAL OBJECT ARCHITECTURE
	203.AUTOMATION OF HSPICE TEMPLATES AND POWER ANALYSIS
	204.COMPRESSIVE SAMPLING IN WIRELESS SENSOR NETWORKS
	205.COMPRESSIVE SENSING FOR IOT APPLICATIONS
	206.DESIGNING AN OVERCLOCKING TOOL FOR HIGH END DESKTOP APPLICATIONS
	207.DEVELOP TECHNOLOGY FOR CUFF-LESS BLOOD PRESSURE MEASUREMENT
	208.DEVELOPING TECHNOLOGY FOR ESTIMATING BLOOD PRESSURE WITHOUT A CUFF
	209.DEVELOPMENT OF OVM BASED VERIFICATION ENVIRONMENT FOR DISPLAY PHY VALIDATION
	210.DFT ENABLEMENT IN SERVER IPS
	211.DICTIONARY LEARNING: LITERATURE SURVEY & IMPLEMENTATION
	212.HARDENING DOCKER CONTAINERS
	213.HIGH SPEED RF ANTENNA AND SYSTEM HARDWARE DESIGN
	214.IMPROVE OPTICAL ZOOM USING MULTI-FOCUS DUAL CAMERA
	215.LATE STAGE POWER-AWARE ENGINEERING CHANGE ORDER METHODOLOGY AND FLOW TARGETED TOWARDS LOW TIME-TO-MARKET
	216.LIGHT AMPLITUDE MODULATION DOCKING ADAPTER BOARD DESIGN AND TESTING
	217.MODULAR MULTI-PROTOCOL PHY FROM BASE BUILDING BLOCKS
	218.OVM-VAL PRE SILICON TEST BENCH
	219.PATH PLANNING BASED OBSTACLE AVOIDANCE FOR AUTONOMOUS ROBOT
	220.PORTING SILENT LAKE ONTO YOCTO
	221.PRE-SI VERIFICATION OF LOW SPEED I/O PERIPHERALS USING UVM VERIFICATION METHODOLOGY
	222.RECONFIGURABLE HARDWARE ACCELERATOR
	223.STANDARD CELLS BASED SOC ANALYTICS FOR PRODUCT QUALITY (PPA) ANALYSIS
	224.SYSTEM LEVEL MODELING OF HIGH SPEED SERIAL LINKS
	225.TUI ON TEE FOR ANDROID
	226.WIRELESS SENSING
	227.WIRELESS SENSING-A LITERATURE SURVEY
<b>34.</b>	<b>J P MORGAN CIB-RFT, BANGALORE</b>
	228.APPLICATION OF APACHE SPARK IN BIG DATA
<b>35.</b>	<b>J.P. MORGAN CHASE, BANGALORE</b>
	229.USER DRIVEN RECONCILIATION INTERFACE
	230.BLOTTER AUTOMATION FOR FUND SERVICES TRADES
	231.CALIBRATION TESTING
	232.STANDARDIZATION OF PROCESSES OVERDRAFTING AND REPORTING
	233.PROCESS IMPROVEMENTS IN RECONCILIATIONS
	234.TRADE FINANCE AT J P MORGAN CHASE & CO.
<b>36.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	235.DEVELOPMENT OF CITRIX APP & HEALTH MONITOR DASHBOARD
	236.IMPLEMENTING UI TESTCASE FOR THE FACTORY PLANNER TEAM
	237.IMPLEMENTING UI TESTCASES FOR THE ORDER PROMISER TEAM
	238.NEXT-GEN WEB-UI FOR WAREHOUSE MANAGEMENT SYSTEM
	239.PERFORMANCE TESTING OF SUPPLY CHAIN STRATEGIST
	240.SERVICE MANAGEMENT PORTAL
	241.SOFTWARE DEVELOPMENT AND MAINTENANCE FOR SUPPLY CHAIN
	242.TRANSPORT MANAGEMENT ADAPTER
<b>37.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE), BANGALORE</b>
	243.ANALYSIS OF PISTON SECONDARY MOTION
	244.AUTOMATING THE INSTRUMENT CODE SELECTION PROCESS
	245.AUTOMATION OF FOUNDATION LOADING CALCULATIONS OF STEAM TURBINE TO REDUCE COST AND

	CYCLE ESTIMATE TIME
	246.STUDYING THE RAINFLOW CYCLE COUNTING AND FATIGUE LIFE ESTIMATION METHODS
	247.THERMAL ANALYSIS OF GAS TURBINE BEARING COMPARTMENT
<b>38.</b>	<b>KPMG, BANGALORE</b>
	248.FORMULATING STRATEGIES AND DPR FOR SETTING UP HEALTHCARE SERVICES IN GUJARAT
	249.NAMMA BENGALURU AWARDS, PROJECT NEW HORIZON
	250.PROJECT NEW HORIZON, E-COM SETUP, NAMMA BENGALURU AWARDS VALIDATION
	251.RESEARCH ON PROSPECTIVE CLIENTS OF KPMG
<b>39.</b>	<b>MATHWORKS INDIA PRIVATE LIMITED, BANGALORE</b>
	252.MATLAB AND SIMULINK IMPLEMENTATION OF DIRECTION-OF-ARRIVAL ESTIMATION TECHNIQUES
	253.MODULARIZATION OF SIMULINK MASK EDITOR
<b>40.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	254.CAMPAIGN ANALYSIS IN DIGITAL ADVERTISING FIELD
	255.CAMPAIGN ANALYST
	256.DIGITAL ADVERTISING - CAMPAIGN ANALYSIS
	257.DIGITAL ADVERTISING & MARKETING - CAMPAIGN ANALYSIS & RETARGETING STRATEGIES
	258.DIGITAL ADVERTISING AND MARKETING - BUSINESS INTELLIGENCE
	259.DIGITAL MARKETING
	260.DISPLAY ADVERTISEMENT CAMPAIGN ANALYSIS
	261.PRE-CAMPAIGN ANALYSIS IN DIGITAL ADVERTISING
	262.SALES AND MARKETING IN DIGITAL ADVERTISING FIELD
	263.TECHNICAL DEVELOPMENT IN THE FIELD OF DIGITAL ADVERTISING
<b>41.</b>	<b>MYNTRA.COM, BANGALORE</b>
	264.DESIGN OF VIRTUAL ASSISTANTS
	265.QWERTY BASED ERROR CORRECTION AND MULTIPLE INDEXING PIPELINE
	266.SOFTWARE DEVELOPMENT - BACKEND (PAYMENTS AND SEARCH)
	267.SPAM CLASSIFIER USING NODE.JS, IBM WATSON, CLARIFAI & REACT
	268.TOPIC ANALYSIS DASHBOARD FOR MYNTRA FEED
<b>42.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	269.CHARACTERISATION OF MESH FREE METHOD BASED STORE SEPARATION SUIT & ITS APPLICATION
	270. DEPOSITION OF REDUCED GRAPHENE OXIDE BY SPUTTERING FOR OPTICAL APPLICATIONS.
	271.DESIGN AND FABRICATION OF REVERSIBLE SOLID OXIDE FUEL CELL
	272.EXPERIMENTAL ANALYSIS AND ASSESSMENT OF A VACUUM ENCLOSED CONCENTRATED SOLAR THERMOELECTRIC GENERATOR COUPLED WITH A SPECTRALLY SELECTIVE ABSORBER COATING
	273.OPTIMISATION OF PLASMA ELECTROLYTIC OXIDATION (PEO) COATING ON 6061 ALUMINIUM ALLOY AND ITS EVALUATION
<b>43.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	274.ALTERATIONS IN THE POLARITY OF HEPATOCYTES IN A CHEMICAL SCREEN
	275.ROLE OF MICRORNAS IN THE HAIR FOLLICLE STEM CELL COMPARTMENT
<b>44.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	276.CONTENT CURATION FOR SME AND STARTUP ENTREPRENEURS
	277.E-CONTENT DEVELOPMENT
	278.E-CONTENT GENERATION AND DELIVERY MANAGEMENT FOR ENTREPRENEURS
	279.ENTREPRENEURSHIP GROWTH IN GLOBAL MARKET
	280.EWEEK- 2016 AND IMPACT ASSESSMENT
	281.IMPACT ASSESSMENT AND PROJECT MANAGEMENT
	282.IMPACT MEASUREMENT
	283.MARKETING RESEARCH
	284.MARKETING RESEARCH IN WADHWANI FOUNDATION
	285.NEW BUSINESS MENTOR ENROLMENT IN NEN NETWORK
<b>45.</b>	<b>NATIONAL INSTRUMENTS SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	286.CONVERSION REPORT MANAGEMENT FOR PLACEHOLDER NODE
	287.DEVELOPMENT OF SUPPORT FOR ETHERNET STEPPER DRIVES IN NI SOFTMOTION MODULE
	288.ENHANCING THE MEASUREMENT EXPERIENCE OF MODULAR INSTRUMENTS
	289.FIFO IMPLEMENTATION USING IP BUILDER
	290.GPU UTILIZATION FOR PARALLELIZATION ALONG WITH CPU TO IMPROVE PERFORMANCE OF ALGORITHMS
	291.PEER TO PEER COMMUNICATION BETWEEN FPGAS

<b>46.</b>	<b>NETAPP, BANGALORE</b>
	292.BUILDING SINGLE PAGE APPLICATION USING ANGULARJS
	293.CLUSTER ON THE MOVE: CONFIGURE REPLICATION
	294.CONVERSION FROM LREP TO LRSE
	295.HARDWARE INVENTORY MANAGEMENT SYSTEM
	296.LONG TERM PREDICTIVE CACHE WARMING
	297.MS-SQL - DEPLOY, EXECUTE AND ANALYZE
	298.SECURE DATA MOVEMENT TO MULTIPLE CLOUDS
	299.STORAGE SERVER AUTHORIZATION SIMPLICITY
	300.UI/UX DESIGN USING EXTJS AND D3JS
<b>47.</b>	<b>NEXTGEN PMS PVT. LTD</b>
	301.CONFIGURABLE DASHBOARDS FOR CSR MANAGEMENT
	302.PROJECT MANAGEMENT OF CSR INITIATIVES
	303.DEVELOPMENT OF P3 PLATFORM FOR MONITORING CSR ACTIVITIES
	304.PS 2 ENGAGEMENT WITH NEXTGEN PMS
	305.PLANNING AND IMPLEMENTING CSR INITIATIVES AND THEIR COMPONENTS
<b>48.</b>	<b>NUTANIX TECHNOLOGIES INDIA PVT. LTD,BANGALORE</b>
	306.ANOMALY DETECTION AND CAPACITY PLANNING
	307.JANUS AND CLOD CONNECT
	308.ROLLING FIRMWARE UPGRADE, SSD BREAKFIX AND SATADOM BREAKFIX ON NUTANIX CLUSTERS
<b>49.</b>	<b>NVIDIA GRAPHICS,BANGALORE</b>
	309.AUDIO IN EMBEDDED SYSTEMS
	310.AUTO GENERATION OF GPMU HEADER AND CORRESPONDING DEVICE'S BINARY FILE AND FECS CRASH DUMP
	311.CELL AWARE TEST MODEL GENERATION
	312.CLOCKS CONTROLLABILITY RTL-NA CHECK
	313.CONVERSION OF SOC VERIFICATION TESTS
	314.COVERAGE ANALYSIS ON PCIE SETUPS AND ASSUME-GUARANTEE VERIFICATION ON PCIE INTERFACES
	315.CUDA ACCELERATION IN NVIDIA SDK FOR H.264 STREAM PLAYBACK
	316.DEADLOCK DETECTION IN AN NVIDIA GPU
	317.DESIGN FOR DEBUG
	318.DEVELOPMENT OF CAD TOOLS FOR DESIGN FOR TESTABILITY
	319.DEVELOPMENT OF SOFTWARE TOOL FOR IDENTIFICATION OF BOTTLENECKS IN THE CODE BASE
	320.FABRIC FLOW AUTOMATION
	321.FINFET DEVICE CHARACTERIZATION AND ANALYSIS OF REGISTERFILE BUILDING BLOCKS FOR HIGH PERFORMANCE CPU
	322.FRAMEWORK FOR VERIFICATION REQUIREMENT TRACEABILITY & FUNCTIONAL COVERAGE OF AMBA BUS PROTOCOLS
	323.FUNCTIONAL COVERAGE AND REGRESSION MANAGEMENT OF HIGH SPEED IOS
	324.FUNCTIONAL VERIFICATION OF CACHE MEMORY
	325.FUNCTIONAL VERIFICATION OF MEMORY QUALIFICATION BLOCK
	326.GPU MEMORY SUBSYSTEM PERFORMANCE VERIFICATION
	327.GRAPHICS & DISPLAY CONCURRENCIES ON AUTOMOTIVE FRAMEWORKS
	328.IMPLEMENTATION OF OFFLINE MODE IN POWER ESTIMATION TOOL
	329.IMPLEMENTATION OF REUSABLE WAIVER FLOW FOR RTL CODE COVERAGE
	330.IMPLEMENTING A UVM BASED TEST BENCH
	331.INFRASTRUCTURE IMPROVEMENT FOR MEMORY CONTROLLER
	332.INFRASTRUCTURE TO EXPLORE S/W PERFORMANCE OPTIMIZATIONS AND STUDY A FEW OPTIMIZATIONS
	333.IP COMPARTMENTALIZATION AND SEMI-FORMAL VERIFICATION OF CLOCK GATING IN SUBUNITS OF GPU PIPELINE
	334.NVME C MODEL DEVELOPMENT
	335.PCI EXPRESS SPECIFICATIONS AND FEATURE STUDY
	336.PCIE VERIFICATION
	337.POWER AUTOMATION AND POWER REDUCTION TECHNIQUES
	338.POWER OPTIMIZATION IN PLACEMENT AND ROUTE FLOW
	339.PERFORMANCE ANALYSIS OF HARDWARE & SOFTWARE VIDEO ENCODERS
	340.SOC DESIGN PROJECTS FOR TEGRA CHIPS
	341.STIMULUS GENERATION FOR CPU MEMORY SUBSYSTEM VERIFICATION

	342.UPF FOR LOW POWER INTENT
	343.VALIDATING NVIDIA&APOS;S PROCESSOR FOR ARM COMPLIANCE
	344.VERIFICATION AND COVERAGE ANALYSIS OF GPU MULTI ENGINES
	345.VERIFICATION OF GPU MEMORY SUBSYSTEM
<b>50.</b>	<b>ORACLE FINANCIAL SERVICES SOFTWARE LTD. ( OFSS ),BANGALORE</b>
	346.DEVELOPMENT ACTIVITY IN OFSAA
	347.OBP LIMITS & COLLATERAL MANAGEMENT
<b>51.</b>	<b>ORACLE INDIA PVT LTD,BANGALORE</b>
	348.AUTOMATE DOCUMENTATION FOR REST
	349.AUTOMATE UPLOAD AND DEPLOY FUNCTIONS FOR APAAS
	350.PARSER, INDEXER AND WEB SEARCH INTERFACE FOR CRASH LOG FILES INFORMATION FOR PHONE-HOME
	351.SUBMITTER INFORMATION
	352.UNINSTALL FEEDBACK EMAIL TRANSFER MODULE
<b>52.</b>	<b>PAYPAL,BANGALORE</b>
	353.BUILDING A MOBILE APPLICATION FOR GRR(GLOBAL RESTRICTION REVAMP)
	354.CREATING AN ELASTICSEARCH DATA STORE AND SEARCH API FOR OFFER MANAGEMENT TOOL OF PAYPAL
	355.INTEGRATION AND REAL-TIME ANALYSIS OF MERCHANTS PAYMENTS API
	356.MEMBER-GET-MEMBER (REFERRAL SYSTEM)
	357.PARALLELIZING SERVICE CALLS IN GET STATUS API
	358. REBUILDING PAYPAL ÅS EXISTING ADAPTIVE ACCOUNTS CREATE ACCOUNT FUNCTIONALITY USING THE LATEST TECHNOLOGY.
	359. REMOTE SERVICE OPERATOR- A FRAMEWORK TO EASE CONTROL COMMAND EXECUTION ON SERVICES.
<b>53.</b>	<b>PRACTO TECHNOLOGIES PVT. LTD,BANGALORE</b>
	360.AUTOMATION AND AUTOBOT
	361.SHARE FEATURE USING PYTHON FLASK
<b>54.</b>	<b>PRICE WATERHOUSE COOPERS (PWC) ,BANGALORE</b>
	362.URBANIZATION CHALLENGES IN INDIA- BENCHMARKING AND GOAL SETTING
<b>55.</b>	<b>PROBE EQUITY RESEARCH,BANGALORE</b>
	363.GENERATION AND AUTOMATION OF MIS REPORTS FOR PROBE42
	364.MIS REPORT GENERATION AND AUTOMATION
<b>56.</b>	<b>QUALCOMM INDIA PRIVATE LIMITED,BANGALORE</b>
	365.ANALYSIS OF PERFORMANCE/AREA TRADE-OFFS IN TEXTURE PROCESSORS OF ADVANCED GPUS
	366.HARD MACRO PHYSICAL DESIGN (MODEM)
	367.PHYSICAL DESIGN OF AN LTE MODEM CHIP IN 10 NM TECHNOLOGY
	368.PHYSICAL DESIGN: PROCESS FLOW AUTOMATIONS
	369.ENHANCED STANDARDIZED FPU COVERAGE & JTAG LESS FRAMEWORK
	370.POWER ESTIMATION
	371. AUTOMATION OF SELF CHECKER FOR PLLS, HSIOS AND INTERFACE FAULT COVERAGE.
	372.IMPROVING SOC POWER CONSUMPTION
	373.INRUSH ANALYSIS METHODOLOGY
	374.MEMORY BUILT IN SELF TEST(MBIST)
	375.MEMORY COMPILER DESIGN AUTOMATION
	376.IP VERIFICATION BY COMPARISION OF LEF DIRECTORIES
	377.LEAKAGE POWER ANALYSIS AND DESIGN VERIFICATION
	378.TIMING ANALYSIS OF SNAPDRAGON 400 AND 600 SERIES
	379.TIING VALIDATION
	389.SIMULATION AND STUDY OF CHANNEL FILTERING TECHNIQUES - IEEE 802.11AC PERSPECTIVE
<b>57.</b>	<b>QUBOLE,BANGALORE</b>
	390.EXPORT DBTAPS TO PRESTO
	391.HADOOP HIGH AVAILABILITY
	392.PRESTO RUBY CLIENT
	393.PROVIDING SUPPORT FOR SPARK
<b>58.</b>	<b>ROVI CORPORATION,BANGALORE</b>
	394.EXTRACTION OF FEATURES FROM UNSTRUCTURED TEXT AND ENTERTAINMENT DISCOVERY THROUGH VIRTUAL ASSISTANTS
<b>59.</b>	<b>SABRE HOLDINGS(FORMELY SABRE TRAVELS) ,BANGALORE</b>

	395.AUTOMATED TESTING OF SELF SERVICE CHECK-IN JSON SERVICES
	396.AUTOMATION TESTING USING CUCUMBER FRAMEWORK AND SELENIUM WEBDRIVER INTERACTIONS API
	397.DEVELOPMENT OF A RELEVANCE ENGINE FOR THE CORPORATE BOOKING TOOL, GETTHERE OF SABRE
	398.DEVELOPMENT OF BASE PROTOTYPE FOR DATA ANALYTICS
	399.DEVELOPMENT OF RELEVANCE ENNGINE FOR GETTHERE
	400.EXECUTION AND REPORTING DASHBOARD DEVELOPMENT
	401.PAYMENT WEB SERVICES AUTOMATION AND PAYMENT ADMIN PORTAL TESTING USING SELENIUM
	402.PREVENTIVE HEALTH CHECK REVENUE INTEGRITY
	403.UI / UX DEVELOPMENT IN INTERACT
<b>60.</b>	<b>SAMSUNG R &amp; D INSTITUTE,BANGALORE</b>
	404.CONTEXT SENSITIVE NEXT-WORK PREDICITION KEYPAD DESIGN
	405.INTENT DETERMINATION FOR S-VOICE
	406.IOT: TI SENSOR FEATURE
	407.MOBILE APPLICATION USAGE ANALYTICS
	408.ON-BOARDING OF ACCESSORY TO IOT ECOSYSTEM USING SAP
	409.SMART SWITCH APPLICATION
<b>61.</b>	<b>SELLERWORX ONLINE SERVICES LIMITED,BANGALORE</b>
	410.SNAPDEAL API INTEGRATION
<b>62.</b>	<b>SMARTLIVEZ,BANGALORE</b>
	411.GESTURE RECOGNITION USING IMU SENSORS
	412.LOW POWER BLUETOOTH LOW ENERGY GOLF ANALYTICS SENSORS
	413.POSITION TRACKING IN SPORTS USING INERTIAL SENSORS
<b>63.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD,BANGALORE</b>
	414.VIP ADVANCED MITM MITIGATION SOLUTION AND MOTION SENSOR FOR AUTHENTICATION
	415.WEBSITE SECURITY- INDIRECT UTILITIES
	416.INCREASING THROUGHPUT OF CERTIFICATE BATCH FOR MANUFACTURER ECOSYSTEM
	417.STANDALONE CODE SIGNING UTILITY
	418.APPLICATION FOR USER LIFE-CYCLE MANAGEMENT IN THE CONTEXT OF LDAPSYNC
	419.CERTIFICATE DISCOVERY & VULNERABILITIES DETECTION & BIG DATA & ORACLE IN-MEMORY
	420.ARTIFACT DISCOVERY FROM BUILD TOOL&APOS;S BUILD FILE AND BUILD FILE MODIFICATION FOR CODE SIGNING
	421.CRL GENERATION IN JAVA
	422.PERFORMANCE ENHANCEMENT OF SYMANTEC CERTIFICATE INTELLIGENCE CENTER WITH HTTP/2
	423.JAVA HASH SIGNING
<b>64.</b>	<b>TAS ANALYTIC SERVICES,BANGALORE</b>
	424.CENTRALIZED DISTRIBUTION MANAGEMENT (CDM) FOR CLIENT MAGAZINES ACROSS US
	425.PERFORMANCE ANALYSIS OF US MAGAZINE INDUSTRY : ISSUE LEVEL TREND ANALYSIS AND IDEA GENERATION FOR EFFECTIVE COVER SUBJECTS
	426.RETAIL RESEARCH AND ANALYTICS
<b>65.</b>	<b>TATA ADVANCED MATERIALS LTD,BANGALORE</b>
	427.DESIGNING & COST ESTIMATION OF PROCESS DISTILLATION UNIT FOR BATCH PRODUCTION OF VARNISH MAKERS & PAINTER&APOS;S NAPHTHA, PYROLYSIS GASOINE, WHITE SPIRIT AND GLYCOL
	428.MATERIAL CHARACTERISATION AND THERMAL ANALYSIS TO OPTIMIZE CURE PARAMETERS IN MANUFACTURING SANDWICH COMPONENTS
<b>66.</b>	<b>TESCO HINDUSTAN SERVICE CENTRE,BANGALORE</b>
	429.ANALYSIS OF INCREASED DELIVERY CHARGES FOR THE GHS (GROCERY HOME SHOPPING) VERTICAL OF TESCO
	430.CUSTOMER ANALYSIS FOR TESCO F&F BUSINESS
<b>67.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD,BANGALORE</b>
	431.ACCURATE CURRENT SENSING TECHNIQUE IN DCDC CONVERTERS
	432.ACTIVE THYRISTOR GATE CONTROL FOR MOTOR DRIVES
	433.ARCHITECTURAL ANALYSIS OF 20 BIT PRECISION DAC
	434.AUTOMATION OF TIMING CHARACTERISTIC MEASUREMENTS FOR COMMUNICATION PROTOCOL IN AUDIO DEVICES
	435.CHARGE PUMP DESIGN FOR RS232 INTERFACE
	436.DESIGN AND IMPLEMENTATION OF STEREO WIDENING ALGORITHM FOR TI DSP
	437.DESIGN AND VALIDATION OF AN AUTOMATIC TESTING CHARACTERIZATION BOARD FOR IOLINK
	438.DESIGN OF AREA EFFICIENT DAC
	439.DESIGN OF SAR ADC BOARD AND CHARACTERIZATION OF SAR ADC

	440.DESIGN VERIFICATION OF WCS AGAMA
	441.EFFICIENCY ESTIMATION AND OPTIMIZATION OF A CLASS-D AMPLIFIER
	442.EFUSE MODULE DESIGN AND VERIFICATION
	443.EVALUATING IMPACT OF SOFT ERRORS ON EMBEDDED SYSTEMS
	444.FUNCTIONAL SIMULATION BASED FAULT GRADING FOR DIGITAL FIR FILTER
	445.IMPLEMENTATION OF A LOW POWER POST-VCO FREQUENCY DIVIDER FOR FREQUENCY SYNTHESIZERS
	446.IMPLEMENTATION OF ERROR DETECTION FOR ON CHIP COMMUNICATION OF AUTORADAR 16XX
	447.MODELLING AND DESIGN OF LM358- A DUAL OPERATIONAL AMPLIFIER
	448.PSEUDO RANDOM BIT SEQUENCE SERIAL COMMUNICATION ANALYZER (PSCAN)
	449.STACKED MEMORY IMPLEMENTATION & TESTCHIP VALIDATION
	450.TEST AND VALIDATION OF THE EFUSE CHIP
<b>68.</b>	<b>THINK AND LEARN,BANGALORE</b>
	451.TESTING AUTOMATION IN ANDROID APP USING APPIUM, PROCESS EXCELLENCE, USER DATA ANALYSIS &
	452.DEVELOPING THE NEW TECHNIQUES TO INCREASE USER DATABASE
	453.DATA ANALYSIS & DEVELOPING THE NEW TECHNIQUES TO INCREASE USER DATABASE
	454.TESTING AUTOMATION IN ANDROID APP USING APPIUM, PROCESS EXCELLENCE, USER DATA ANALYSIS &
	455.DEVELOPING THE NEW TECHNIQUES TO INCREASE USER DATABASE
<b>69.</b>	<b>TONBO IMAGING PVT LTD,BANGALORE</b>
	455.MESSAGE QUEUING IN ROS, TESTING FRAMEWORK FOR A FUSION CAMERA, RTL DESIGN FOR A SHARPENING FILTER
	456.BT.656 VIDEO OUTPUT ON OLED AND FIRMWARE UPGRADE
	457.DESIGN OF QUALITY AND RELIABILITY TESTS
	458. DESIGNING THERMAL MANAGEMENT SYSTEMS FOR EFFECTIVE HEAT DISSIPATION.
	459.FIRMWARE AND SOFTWARE FOR TONBO-ARAGO DIGITAL MEDIA PROCESSORS
	460.NON UNIFORMITY CORRECTION & REMOVAL OF MOTION BLUR FROM IR IMAGES, TRACKING OF OBJECTS IN MOTION
<b>70.</b>	<b>TYCO INTERNATIONAL LTD,BANGALORE</b>
	461.REDESIGN OF FIRE EXTINGUISHER CARTRIDGE GUARD
	462.REDESIGN OF FIRE EXTINGUISHER NOZZLE
	463.OBJECT RECOGNITION AND OBJECT TRACKING
<b>71.</b>	<b>VMWARE SOFTWARE INDIA PVT. LTD,BANGALORE</b>
	464.SISENSE INTEGRATION WITH VREALIZE IT BUSINESS ENTERPRISE MANAGEMENT (ITBM)
	465.MICROSEGMENTATION ANALYSIS BASED ON NETFLOW DATA
	466.MONITORING OF ENDPOINTS USING MICROSERVICE ARCHITECTURE BROAD PROJECT AREA
<b>72.</b>	<b>VYMO,BANGALORE</b>
	467.ANALYZING CLIENTS ADOPTION METRICS AND DRIVING ADOPTION IN TERMS OF APPLICATION USAGE
	468.ENABLING IOS PUSH NOTIFICATIONS FOR THE VYMO APPLICATION
	469.MARKET RESEARCH & BUSINESS DEVELOPMENT
<b>73.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES,BANGALORE</b>
	470.(I) WEBSITE FEEDBACK OVERLAY (II) &DOUBLE;GUIDE ME&DOUBLE;-AN INTERACTIVE WALKTHROUGH
	471.DEVELOPING VALIDATION FRAMEWORK FOR THE CUSTOM REPORT SCHEDULER AND IMPLEMENTING DISTRIBUTED CACHE USING HAZELCAST
	472.EAI(ENTERPRISE APPLICATION INTEGRATION) LOGGER & ORDER MANAGER DB UTILITY
	473.ENTERPRISE EVENT AGGREGATION AND PROCESSING
	474.GIF FRONT END WEBSITE CUSTOMIZATION BY
	475.GSCOPE ANALYTICS
	476.GUIDE ME- TOOLTIP DRIVEN NAVIGATION
	477.NEON BASED SUPPLIER DASHBOARD
	478.NEXT GENERATION SUPPLY CHAIN
	479.SALES MONITOR SERVICE AND HEALTH MONITOR APPLICATION
	480.SERVER SIDE DEVELOPMENT IN JAVA
	481.SMART SUBSTITUTION
	482.USER INTERFACE DEVELOPMENT AND PERFORMANCE METRICS
	483.WALMART FEED NOTIFICATION CENTRE
	484.WEB APPLICATIONS DEVELOPMENT USING RESTFUL APIS
<b>74.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD,BANGALORE</b>
	485.ACQUISITION IN A NEW GEOGRAPHY; PRODUCT MODULE DEVELOPMENT; BENCH MARKING COMPETITORS FOR A CLIENT

	486.CAPTIVES: ACQUISITION TARGET IDENTIFICATION
	487.EFFECTIVE CUSTOMER SEGMENTATION WHICH IS A PART OF COMPREHENSIVE STRATEGY PLAN FOR ONE OF THE FORTUNE 500 CLIENTS THAT WILL HELP THEM ACHIEVE RAPID GROWTH IN INDIAN MARKET
	488.INDIA FINTECH STARTUPS LANDSCAPE
	489.MARKET EXPANSION STRATEGY FOR A FORTUNE 500 COMPANY
	490.UNDERSTANDING THE PRODUCT ENGINEERING SERVICES LANDSCAPE OF INDIA AND SUGGESTING A GROWTH STRATEGY FOR ONE OF THE FORTUNE 500 CLIENTS
<b>75.</b>	<b>ZOOMCAR INDIA PVT. LTD,BANGALORE</b>
	491.IOS APP DEVELOPEMENT
	492.ZOOM CHAUFFUER
<b>76.</b>	<b>VERVE CONSULTING PVT LTD, BHUBANESHWAR</b>
	493.IMPLEMENTATION STRATEGY AND MARKETING PLAN FOR BROOKHAVEN COUNTRY CLUB
<b>77.</b>	<b>HERON A PAREXEL COMPANY, CHANDIGARH</b>
	494.DRUG REIMBURSEMENT ACTIVITY IN INDIA
	495.EPIDEMIOLOGY- CURRENT DATASETS (US/ASIA-PACIFIC)
	496.PRESCRIPTION TO OTC TRENDS- GLOBAL
	497.REIMBURSEMENT ENVIRONMENT IN US AND CANADA
	498.RELEVANCE OF PATIENT REPORTED OUTCOMES (PROS) IN ONCOLOGY
<b>78.</b>	<b>AMAZON DEVELOPMENT CENTER, CHENNAI</b>
	499.PROOF OF CONCEPT FOR KINDLE READ FOR FREE, AND FOR DIGITAL GIFT FINDER
	500.PROJECT LUMOS
<b>79.</b>	<b>CENTRAL LEATHER RESEARCH INSTITUTE (CLRI), CHENNAI</b>
	501.MODELING OF EXO-INULINASE BIOSYNTHESIS BY KLUYVEROMYCES MARXIANUS IN FED-BATCH MODE: CORRELATING PRODUCTION KINETICS AND METABOLIC HEAT FLUXES, AND CONTROL STRATEGY
<b>80.</b>	<b>PAYPAL, CHENNAI</b>
	502.DATA STORAGE AND RETRIEVAL FROM DATA WAREHOUSE
	503.IMPROVING DEVELOPER EXPERIENCE THROUGH DOCKER PDLC
	504.JIRA BASED RELEASE STATUS TOOL
<b>81.</b>	<b>PRICE WATERHOUSE COOPERS (PWC) , CHENNAI</b>
	505.INTEGRATED INFRASTRUCTURE AND ECONOMIC DEVELOPMENT OF TAMIL NADU COASTLINE
<b>82.</b>	<b>STRUCTURAL ENGINEERING RESEARCH CENTRE, CHENNAI</b>
	506.ANALYSIS AND DESIGN OF FORGING IMPACT HAMMER SYSTEM FOR VIBRATION ABSORPTION AND ISOLATION
	507.DAMAGE IDENTIFICATION IN STRUCTURAL HEALTH MONITORING USING COMPRESSIVE SENSING
	508.IMPACT LOAD IDENTIFICATION USING COMPRESSIVE SENSING TECHNIQUES
<b>83.</b>	<b>VESTAS TECHNOLOGY LTD, CHENNAI</b>
	509.DESIGN VALIDATION AND OPTIMIZATION OF WIND TURBINE
	510.IMPROVEMENT OF POWER PRODUCTION CHARACTERISTICS AND THEIR INFLUENCE ON WIND TURBINE LOADS AND FATIGUE LIFE
<b>84.</b>	<b>ZOHO CORPORATION, CHENNAI</b>
	511.ANALYSIS OF PLATFORM AS A SERVICE(PAAS)
	512.COMPETITIVE INTELLIGENCE AND CRM PLUGINS & INTEGRATIONS FOR ZOHO CRM
	513.DEVELOPMENT OF ONLINE ADVERTISING AND SALES READINESS AT ZOHO CORP.
	514. ZOHO CRM & CRMPLUS SALES ENABLEMENT USING COMPETITIVE INTELLIGENCE, CAMPAIGN MANAGEMENT AND APPLICATION MANAGEMENT.
<b>85.</b>	<b>AMAZON DEVELOPMENT CENTER, DELHI</b>
	515.AURORA GRAPHS DEPLOYMENT AUTOMATION ON HERD (WORKFLOW MANAGEMENT ENGINE)
	516.SELF SERVICE ONBOARDING
<b>86.</b>	<b>PRICE WATERHOUSE COOPERS (PWC) , DELHI</b>
	517.TIMUM RAIL-ROAD MIX TO MINIMIZE LOGISTICS COST IN INDIA, AND REFORMS REQUIRED IN RAILWAYS TO ACHIEVE IT
<b>87.</b>	<b>QUALITY COUNCIL OF INDIA, DELHI</b>
	518.SWACHH&SURVEKSHAN&2016
<b>88.</b>	<b>TATA MOTORS, DHARWAD</b>
	519.MOST(MAYNARD OPERATION SEQUENCE TECHNIQUE)
	520.STANDARDIZATION IN PRODUCTION OF FES AT VENDOR END AND KAIZEN FOR LCV LOGISTICS PLANNING
<b>89.</b>	<b>CIPLA LTD, GOA</b>
	521.EVALUATION OF STERILIZING GRADE FILTERS FOR FILTERABILITY STUDY OF MAMMALIAN CELL CULTURE MEDIA AND FEED & ALTERNATIVE APPROACH TO PROTEIN A AFFINITY CHROMATOGRAPHY

	522.FILTERABILITY TRIALS FOR SELECTION OF STERILE GRADE FILTERS AND R-PROTEIN A CHROMATOGRAPHY RESIN SHELF LIFE EVALUATION
	523.FILTERABILITY STUDY FOR EVALUATION OF STERILIZING GRADE FILTERS AND ALTERNATIVE APPROACH TO R-PROTEIN A AFFINITY CHROMATOGRAPHY
	524.STUDY OF FILTERABILITY TRIALS FOR DS AND R-PROTEIN A RESIN LIFETIME STUDY
<b>90.</b>	<b>IFB INDUSTRIES, GOA</b>
	525.AUTOMATIC CLOTH-TYPE DETECTION
	526.INDUSTRIAL INTERNET OF THINGS ON IFB Å€ INJECTION MOLDING MACHINES
	527.INTEGRATION OF TURBIDITY SENSORS INTO WASHING MACHINES
	528.MARKET RESEARCH AND MARKETING STRATEGY DEVELOPMENT
	529.UNIVERSAL WIFI REMOTE
<b>91.</b>	<b>DB MUDRA GROUP, GURGAON</b>
	530.MANAGED MARKETING SERVICES
	531.OUT OF HOME ADVERTISING
<b>92.</b>	<b>DECISIONRESOURCESGROUP, GURGAON</b>
	532.SECONDARY RESEARCH FOR BIOPHARMA RESEARCH AND OPERATIONS
	533.SECONDARY RESEARCH IN BIOPHARMA INSIGHTS
	534. SECONDARY RESEARCH FOR BIO PHARMA RESEARCH & OPERATIONS IN ONCOLOGY THERAPY AREA.
<b>93.</b>	<b>GABREL INDIA LTD, GURGAON</b>
	535.OPTIMIZATION OF MANPOWER DEPLOYMENT DIRECTLY OR INDIRECTLY USING SWC AND LINE BALANCING TECHNIQUES
	536. TO INCREASE THE PRODUCTIVITY OF THE ROD CELL BY 30%.
<b>94.</b>	<b>GENPACT, GURGAON</b>
	537.AVIATION REMEDIATION PROJECT
	538.CREDIT RISK ANALYSIS
<b>95.</b>	<b>HIKE, GURGAON</b>
	539.DEVELOPING ANDROID FEATURES FOR GROWTH
	540.STICKER PACKS MANAGEMENT AND PROMOTION
	541.USING DATA SCIENCE TO INCREASE EXPRESSION VOLUME ON HIKE
<b>96.</b>	<b>KPMG, GURGAON</b>
	542.ADVISORY SERVICES FOR TECHNICAL EVALUATION OF BID
	543.ANTI-PIRACY PROJECT UNDER SOFTWARE VENDOR TO IMPROVE COMPLIANCE IN THE INDIAN SMB MARKET
	544.DATA ANALYSIS AND PROFILING
	545.SOFTWARE ASSET MANAGEMENT
	546.SOFTWARE CONTRACT COMPLIANCE SERVICES FOR CLIENTS
<b>97.</b>	<b>LAMA CAPITAL MANAGEMENT, GURGAON</b>
	547.DERIVATIVES TRADING
	548.OPTION TRADING AND STATISTICAL ARBITRAGE
<b>98.</b>	<b>LEXINNOVA, GURGAON</b>
	549.DEVELOPMENT OF DATA INTENSIVE WEB APPLICATIONS(C#, PHP, JAVASCRIPT)
	550.INTELLECTUAL PROPERTY INDUSTRY AND SCOPE
	551.INTELLECTUAL PROPERTY RIGHTS
	552.INTELLECTUAL PROPERTY RIGHTS AND LANDSCAPE
	553.MARKETING & SALES INTELLIGENCE
	554. PATENT ANALYTICS ACROSS VARIOUS TECHNOLOGY DOMAINS.
	555.PATENT AND LANDSCAPE ANALYSIS
	556.PATENT PORTFOLIO ANALYSIS ON MARKET APPLICABILITY AND DETECTABILITY
	557.WEB CRAWLER (JAVA APIS)
<b>99.</b>	<b>MAHLE FILTERS INDIA LTD, GURGAON</b>
	558.PRODUCTIVITY IMPROVEMENT AT KB LINE
	559.STANDARDIZATION OF DATA ON TWO AND THREE WHEELERS FOR MAHLE INDIA
<b>100.</b>	<b>SRF LTD, GURGAON</b>
	560.DESIGN AND SIMULATION OF UNIT OPERATIONS INVOLVING ENGINEERING CALCULATIONS AND PROCESS DEVELOPMENT
	561.PROJECTS ON PROCESS DESIGN
	562.PROCESS DESIGN OF EQUIPMENT AND PROCESS DELIVERABLES TO CAMPAIGN A PROCESS PLANT
<b>101.</b>	<b>URBAN CLAP, GURGAON</b>
	563.FEATURE DEVELOPMENT FOR URBANCLAPS ANDROID APP



<b>102.</b>	<b>FAIVELEY TRANSPORT RAIL TECHNOLOGIES INDIA LTD (FTRTIL), HOSUR</b>
	564.ANALYSIS OF PERFORMANCE CHARACTERISTICS OF AXLE MOUNTED BRAKE DISC USING FINITE ELEMENT METHOD
	565.ASSISTANCE AND OBSERVATION IN THE VARIOUS PROCESSES OF THE PURCHASE (AND TRANSFER OF TECHNOLOGY) DEPARTMENT
	566.DESIGN TO COST OF &DOUBLE;UNLOADER PANEL ASSEMBLY&DOUBLE;
	567.IMPLEMENTATION OF PROJECT MANAGEMENT PROCEDURE FOR NEW PRODUCT DEVELOPMENT
	568.PRODUCTIVITY IMPROVEMENT IN RS10 DOOR PROJECT
<b>103.</b>	<b>GABREL INDIA LTD, HOSUR</b>
	569.APPLICATION OF DESIGN OF EXPERIMENT(DOE) METHODOLOGY BY USING TAGUCHI&#x2122;S METHOD TO IMPROVE THE PERFORMANCE OF TWO WHEELER TWIN-TUBE REAR SHOCKERS
	570.USE STATISTICAL PROCESS CONTROL TO IDENTIFY CONTROL FACTORS AND IMPROVE CAPABILITY OF MANUFACTURING PROCESS
<b>104.</b>	<b>ADAEQUARE, HYDERABAD</b>
	571.CROSS DOMAIN JAVASCRIPT AUTHENTICATION
	572.USING APACHE FLINK FOR ETL OPERATIONS
<b>105.</b>	<b>AMAZON DEVELOPMENT CENTER, HYDERABAD</b>
	573.1) DOMAIN DATA SERVICE DEPRECATION, 2) THROTTLING IMPLEMENTATION IN A DB SERVICE, 3) DATA HANDLER TO PERFORM VALIDATION OF DIGITAL ITEMS IN CART , 4) STATUS TRACKING OF A PURCHASE
	574.ADMIN PORTAL FOR ALEXANDRIA
	575.AUDITTOOLS ONBOARDING SETUP
	576.AUI LOOK AND CM VALIDATION
	577.AUTOMATIC SCHEDULER FOR EMR JOBS
	578.BACKFILLING AND AUGMENT STRATEGIES FOR CONTACT DATA
	589.CREATING AND MANAGING CERTIFICATE CHAINS FOR SSL/TLS
	590.D2CS PROJECT
	591.DEVELOPING A GLOBAL NOTIFICATION SERVICE FOR AMAZON GLOBAL SELLING
	592.DW DATA ENGINEERING PIPELINETOOLKIT AND DELAY AGAINST SLA IN FORESIGHT ORCHESTRATOR
	593.IMPROVE THE WAY CUSTOMERS INTERACT WITH THE SCHEDULING INTERFACE WHILE ORDERING SERVICES ON AMAZON PLATFORM
	594.INTEGRATION TESTS AND SEARCH ENGINES FOR UNIVERSAL SEARCH SERVICE
	595.MAKING PHT OPERATIONALLY ROBUST AND PROTOTYPING PHTV2
	596.MIGRATION OF APPLICATIONS FROM ORACLE RELATIONAL DB TO NOSQL DYANMO DB
	597.MIGRATION OF DATA FROM DYNAMO DB TO DATA WAREHOUSE
	598.PARIS SELF SERVICE TOOL AND BUILDING OF OAS FEATURES
	599. REMOVING SUPER ADMIN STATUS TO CONDUIT ADMINS.
	600.REPORT MANAGEMENT SERVICE TO PROVIDE INFORMATION ABOUT OPERATIONAL & NON-OPERATIONAL TASKS&#x2122; STATUS FOR REGISTERED TEAMS
	601.TRACK TILL STOW & PSLIP PUTTY TOOL DEPRECATION
<b>106.</b>	<b>BHARAT DYNAMICS LTD, HYDERABAD</b>
	602.ENHANCEMENT OF MONITORING UNIT CONSOLE AND DEVELOPMENT OF PROCESS VIRTUAL MACHINE
	603.STATIC STRUCTURAL ANALYSIS OF ROCKET MOTOR BODY OF ATGM
<b>107.</b>	<b>CENTRE FOR DNA FINGERPRINTING AND DIAGNOSTICS, HYDERABAD</b>
	604. GENE EDITING OF THE MAMMALIAN HISTONE H3 USING THE CRISPR-CAS9 MACHINERY.
	605.FUNCTIONAL CHARACTERIZATION OF HSA-MIR-4466 IN PANCREATIC CANCER
	606. REACTIVE OXYGEN SPECIES INHIBITION IN ACTIVATED MACROPHAGES BY PPE2 PROTEIN OF MYCOBACTERIUM TUBERCULOSIS.
<b>108.</b>	<b>COGNITIVE SCALE, HYDERABAD</b>
	607.COGNITIVE INSIGHTS ENGINE
	608.GUIDED HELP DESK
	609.UI/UI DESIGN AND DEVELOPMENT
<b>109.</b>	<b>ENDLESS ROBOTICS PVT. LTD, HYDERABAD</b>
	610.DETERMINATION OF POSITION,DISTANCE AND DESIGN OF BATTERY BACKUP CIRCUIT IN A WALL PAINTING ROBOT
	611.MECHANICAL DESIGN OF INTERIOR WALL PAINTING MOBILE ROBOT
<b>110.</b>	<b>FREESCALE SEMICONDUCTOR INDIA PVT. LTD, HYDERABAD</b>
	612.AUTOMATION OF TESCASES FOR IP PACKET FOWARDING MODULE
	613. SOFTWARE DEFINED NETWORKING (SDN) AND OPENFLOW HAVE EMERGED AS A NEW PARADIGM OF NETWORKING. SOFTWARE DEFINED NETWORKING (SDN) IS CHANGING HOW WE DESIGN, BUILD, AND OPERATE NETWORKS TO ACHIEVE BUSINESS AGILITY.

	614.TEST AUTOMATION FOR ACCELERATED OPENFLOW DATAPATH
	615.VIRTUAL CUSTOMER PREMISES EQUIPMENT (VCPE)
<b>111.</b>	<b>HYDERABAD EYE RESEARCH FOUNDATION (HERF) THE RESEARCH ARM OF LV PRASAD EYE INSTITUTE, HYDERABAD</b>
	616. CONSTRUCTION, PURIFICATION & CHARACTERIZATION OF HUMAN GAMMA CRYSTALLIN MUTANTS Q101X & E135X.
	617.HUMAN RB1 GENE KNOCKOUT USING CRISPR/CAS9 SYSTEM
<b>112.</b>	<b>IMI MOBILE, HYDERABAD</b>
	618.ARTIFICIAL INTELLIGENCE CHAT
	619.BI & MIS REPORTING
	620.DATA COLLECTION, ENRICHMENT, ANALYTICS VISUALIZATION SOLUTIONS
	621.MANAGEMENT INFORMATION SYSTEM REPORTS
	622.MOBILE BASED MARKETING AND PRODUCT SOLUTIONS IN RURAL AND ENERGY SECTORS
	623.PRODUCT MANAGEMENT AND ANALYTICS OF TELECOM CLIENTS
	624.REPORT ANALYSIS, FLOWCHART PREPARATION AND SOW DOCUMENTATION
	625.SOLUTIONS & MARKETING - DIGITAL MARKETING FOR MOBILE COMMUNICATION SOLUTIONS OF IMIMOBIE
	626.STRUCTURING, ANALYZING AND VISUALIZING DATA OF TELECOMMUNICATION CLIENTS
	627.TWITTER DATA ANALYTICS AND AUTOMATION OF DATA EXTRACTION
<b>113.</b>	<b>INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY, HYDERABAD</b>
	628.PROCESS OPTIMIZATION OF CANDIDA ANTARCTICA LIPASE B PRODUCTION BY BATCH FERMENTATION USING CLASSICAL DESIGN OF EXPERIMENTS
<b>114.</b>	<b>INSIDEVIEW TECHNOLOGIES (INDIA) PVT LTD, HYDERABAD</b>
	629.BUILDING REST SERVICES WITH SPRING
	630.REWRITING THE INDEXING CODE FOR INSIDEVIEW AND EXPLORING THE POSSIBILITY OF DEPLOYING IT ON SPARK
	631.SECURITY AUTOMATION
<b>115.</b>	<b>JDA SOFTWARE SOLUTIONS, HYDERABAD</b>
	632.CONFIGURATION MANAGEMENT
	633.E3 PRODUCT DEVELOPMENT
	634.MANUAL UI TESTING & CORE QA ACTIVITIES
	635.QUALITY ASSURANCE OF JDA-PLATFORM
	636.SECURITY TESTING FOR PRODUVT IN DEMAND & UI AUTOMATION SELENIUM
	637.WORKFORCE MANAGEMENT & PRODUCT DEVELOPMENT IN AN END TO END SUPPLY CHAIN MANAGEMENT FIRM
<b>116.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE), HYDERABAD</b>
	638.CFD AND EXPERIMENTAL ANALYSIS OF MCCB FOR VARIOUS LOADING CONDITIONS
	639.DESIGN AND ANALYSIS OF ACCESSORIES IN CIRCUIT BREAKERS
<b>117.</b>	<b>MICROSOFT, HYDERABAD</b>
	640.CLOUD IDENTITY AND DIGITAL INDIA
	641.DIGITAL INDIA AND CLOUD IDENTITY
	642.ENHANCING READING EXPERIENCE IN EDGE
	643.ENHANCING READING EXPERIENCE IN MICROSOFT EDGE
	644.IMPLEMENTATION OF MULTITENANCY, OFFICE 365 AND SKYPE CALLING INTEGRATION IN A NATIVE CLIENT APPLICATION
	645.IMPLEMENTATION OF OFFICE 365 FEATURES IN A NATIVE APPLICATION
	646.INTEGRATING OFFICE 365 IN NATIVE CLIENT APPLICATION, DIGITAL INDIA
	647.PROJECT 1: VISION GUARDIAN A TELE-OPHTHALMOLOGY APPLICATION AND PROJECT 2: AD FRAMEWORK FOR WINDOWS OS
<b>118.</b>	<b>MORDOR INTELLIGENCE, HYDERABAD</b>
	648.BUSINESS DEVELOPMENT AND CLIENT RELATIONS
	649.MARKET RESEARCH - QUALITATIVE AND QUANTITATIVE ANALYSIS
	650.QUALITATIVE AND QUANTITATIVE MARKET RESEARCH
<b>119.</b>	<b>MY SMART PRICE, HYDERABAD</b>
	651.BREADCRUMB EXTRACTION AND MAPPING TO FIND MYSMARTPRICES CATEGORY AND SUBCATEGORY FOR A GIVEN PRODUCT URL AND EMAIL MARKETING
	652. CHROME EXTENSION ADDITIONAL "MEME GENERATOR" FEATURE DEVELOPED, AND TESTED.
	653.CONVERSION FUNNEL
	654.E COMMERCE MARKETING ANALYTICS

	655. INTEGRATING OF THE DFP(DOUBLECLICK FOR PUBLISHERS) ACCOUNT TO INCLUDE ADSENSE AND OTHER 3RD PARTY SERVICES. SELECTIVE TARGETING OF THE AD AUDIENCES AND DEVELOPING METHODS TO INCREASE THE REVENUE OBTAINED FROM LEASING SPACES ON THE WEBSITE. REPORTS GENERATION OF THE ADSENSE AFFILIATE AD UNITS WITH THE REQUISITE PARAMETER CHANGES.
	656.INTEGRATION OF THE TRANSACTION DATA ONTO THE GOOGLE ANALYTICS ACCOUNT
<b>120.</b>	<b>NVIDIA GRAPHICS, HYDERABAD</b>
	657.MODULARISING GAMESTREAM CODE ARCHITECTURE
	658.USB AUTOMATION SET UP AND DEBUGFS ENHANCEMENT TO PINMUX DRIVER
<b>121.</b>	<b>ORACLE INDIA PVT LTD, HYDERABAD</b>
	659.AUTOMATING FMPL (FUSION MASTER PRODUCT LIST) UPLOAD APPLICATION
	660.AUTOMATING FMPL UPLOAD
	661.FUSION DEVELOPMENT PLATFORM AS A SERVICE
	662.ORACLE APEX APPLICATIONS
<b>122.</b>	<b>PRICE WATERHOUSE COOPERS (PWC) , HYDERABAD</b>
	663.CONSULTANCY WORK UNDERTAKEN AT PWC
<b>123.</b>	<b>PURPLE TALK, HYDERABAD</b>
	664.JAVASCRIPT WEB SDK
	665.POC FOR EMAIL NOTIFICATION MODULE IN MOBILE APP ENGAGEMENT PLATFORM
<b>124.</b>	<b>QUALCOMM INDIA PRIVATE LIMITED, HYDERABAD</b>
	666.DEVELOPING THE WIRELESS ONE AUTOMATION FRAMEWORK FOR 4G MOBILE HANDSET VALIDATION
	667.DEVELOPMENT OF ADAPTATION LAYER TO SUPPORT MULTIPLE BLUETOOTH STACKS CONCURRENTLY IN AUTOMATION TESTING
	668.ENHANCEMENT OF POLARIS AUTOMATION TO INCLUDE NEGATIVE SCENARIOS
	669.GSM INTERWORKING : WORKING WITH THE IQ ANALYZER
	670.KERNEL MODE LOGGING SUPPORT REGRESSION TOOL FOR CPU UTILIZATION AND
	671.MODULE TEST FRAMEWORK (MTF)
	672.POWER OPTIMIZATION IN USER EQUIPMENT IN 4G LTE MODE
	673.REPRODUCTION OF CPU MALFUNCTION
<b>125.</b>	<b>SMARTRAK, HYDERABAD</b>
	674.ANALYSIS , DESIGN AND EXECUTION OF SOLAR TRACKING SYSTEMS
	675.ANALYSIS AND DESIGN OF SOLAR TRACKING AND NON-TRACKING SYSTEM
	676.ANALYSIS AND DESIGN OF T10 POLAR AXIS SOLAR TRACKING SYSTEM
	677.ANALYSIS AND DESIGN OF TILT SINGLE AXIS TRACKER
	678.ANALYSIS, DESIGN AND EXECUTION OF SOLAR TRACKERS
	679.DESIGN AND ANALYSIS OF BEARINGS FOR SINGLE AXIS SOLAR TRACKER
	680.PROCUREMENT OF RAW MATERIAL FOR SOLAR TRACKERS AND DESIGN ANALYSIS
	681.PROJECT MANAGEMENT AND BUSINESS DEVELOPMENT
	682.SELF POWERED BATTERY CHARGER & BOOST CONVERTER
	683.WORKING AS MECHANICAL DESIGN ENGINEER IN SMARTTRAK SOLAR SYSTEM
<b>126.</b>	<b>STELLAR SOFTWARE TECHNOLOGIES PVT LTD, HYDERABAD</b>
	684.FULL STACK DEVELOPMENT - ANGULARJS, PYTHON-DJANGO, MYSQL
	685.UI/UX DEVELOPMENT
<b>127.</b>	<b>WORLEY PARSONS INDIA, HYDERABAD</b>
	686.PROCESS DESIGN IN UPSTREAM OIL AND GAS OFFSHORE PRODUCTION
<b>128.</b>	<b>YUPPTV, HYDERABAD</b>
	687.ANDROID DEVELOPER
	688.BUSINESS ANALYTICS
	689.FRONT END WEB DEVELOPMENT
	690.WEB APPLICATIONS DEVELOPMENT
	691.YUPPFLIX IOS APP DEVELOPMENT
<b>129.</b>	<b>CEG LIMITED, JAIPUR</b>
	692.ANALYSIS AND DESIGN OF PSC BOX-GIRDER BRIDGE
	693.ANALYSIS AND DESIGN OF COMPOSITE PLATE-GIRDER BRIDGE
<b>130.</b>	<b>RAJPUTANA CONSTRUCTIONS, JAIPUR</b>
	694.ESTIMATION AND COSTING- CONCEPTS AND CALCULATIONS
	695.MATERIAL CONSUMPTION AND PREPARATION OF ESTIMATION
<b>131.</b>	<b>SPICER INDIA LTD, JODALLI</b>
	696.INCREASE IN PRODUCTIVITY OF DOMESTIC TARIFF AREA OF SPICER INDIA - JODALLI PLANT

	697.SCRAP COST REDUCTION IN EXPORT ORIENTATED UNIT OF SPICER INDIA, JODALLI BY 50%
<b>132.</b>	<b>TEGA INDUSTRIES, KOLKATA</b>
	698.MOLD MANAGEMENT SYSTEM IN PU SHOP BY 5S STRATEGY
	699.STORE MANAGEMENT SYSTEM WITH FIFO
<b>133.</b>	<b>TEXMACO LTD, KOLKATA</b>
	700.STUDY OF LAYOUTS FOR EXPANSION AND CARRY OUT OF 5S
<b>134.</b>	<b>TATA MOTORS, LUCKNOW</b>
	701.IMPLEMENTATION OF STANDARDIZED WORK ON TCF LINE 3
	702.IMPLEMENTATION OF STANDARDIZED WORK ON ASSEMBLY LINE 2
<b>135.</b>	<b>ADITYA BIRLA CORPORATE IT, MUMBAI</b>
	703.SYMPHONY SUMMIT: PROJECT MANAGEMENT TOOL, IMPLEMENTATION AT ABC
<b>136.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
	704.BENCH SCALE STUDY OF CARBON BLACK REACTOR
	705.MIXING PERFORMANCE EVALUATION OF SLURRY PREPARATION STEP IN PILOT SCALE SET-UP FOR LATEX-CARBON BLACK MASTERBATCH PRODUCTION
	706.PROCESS IMPROVEMENT FOR THE PRODUCTION OF TRICHLOROISOCYANURIC ACID FROM CYANURIC ACID
	707.STUDY OF FLOW OF POLYMER THROUGH PIPING NETWORK
<b>137.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY) , MUMBAI</b>
	708.IMPROVING OPERATIONAL EFFICIENCY IN A FOOD-DELIVERY STARTUP
	709.TRANSFORMING VENDOR MANAGEMENT THROUGH ADVANCED ANALYTICS AND AUTOMATION
<b>138.</b>	<b>CARWALE (AUTOMOTIVE EXCHANGE PVT. LTD), MUMBAI</b>
	710.AUTOBIZ ANDROID APP DEVELOPMENT
	711.IOS MOBILE APPLICATION DEVELOPMENT
	712.MODIFICATION OF CARWALE ANDROID APPLICATION
<b>139.</b>	<b>CENTURY RAYON, MUMBAI</b>
	713.IDENTIFYING THE CAUSES OF JET HAIRY YARN AND REDUCTION OF CS2 AND H2S LOAD ON THE CHIMNEYS
<b>140.</b>	<b>CREDIT SUISSE, MUMBAI</b>
	714.AUTOMATION OF BAU PROCESSES USING VBA MACROS
	715.BASEL III: BANKING FINANCIAL AND INSURANCE REGULATIONS
	716.COUNTERPARTY CREDIT RISK, CAPITAL CALCULATION AND EXPOSURE MODELLING IN RISK MANAGEMENT AT CREDIT SUISSE
	717DELTA ONE PRODUCTS, PRIME SERVICES
	718.DESIGNING/AUTOMATING PROCESSES TO BRING EFFICIENCY IN THE SYSTEM
	719. DEVELOPING ALTERNATE METHODOLOGY FOR FINDING OUT LOSS GIVEN DEFAULT (LGD) AT OBLIGOR LEVEL.
	720.DIVIDEND FORECASTING
	721.ERC TRADED RISK ANNUALIZATION
	722.FINANCIAL RISK MANAGEMENT
	723.IMPACT ANALYSIS, CREDIT RISK
	724.MACROECONOMIC RESEARCH - CREDIT SUISSE PRIVATE BANKING AND WEALTH MANAGEMENT
	725.MARKET LIQUIDITY AND RISK MANAGEMENT
	726.MARKET RISK MODELS & RISK MANAGEMENT
	727.MEASURES OF RISK AND GREEK SENSITIVITIES
	728.PREPARATION OF PACKS AND UPDATE OF DASHBOARD
	729.PRICING MODEL VALIDATION
	730.PRICING MODEL VALIDATION
	731.PRODUCT RISK CLASSIFICATION
	732.RISK AND FINANCIAL DATA ANALYST AND REPORTING
	733.RISK MANAGEMENT AND VAR MODEL
	734.RISK REPORTING FOR ICAAP 2B
	735.ROLE OF ECONOMIC RISK CAPITAL IN RISK MANAGEMENT AT CREDIT SUISSE
	736.SCENARIO ANALYSIS OF MARKET RISKS
	737.SCENARIO AND IMPACT ANALYSIS
	738.STRESS TESTING, ENTERPRISE RISK MANAGEMENT
	739.THE CALCULATION OF VALUE AT RISK (VAR) IN THE EVENT OF COUNTERPARTY CREDIT DEFAULT
	740.VALUE AT RISK (VAR)
	741.VALUE AT RISK AND GREEKS IN FINANCIAL WORLD

	742.VAR AND PE CALCULATIONS FOR RISK REPORTING
	743.WRONG WAY RISK METHODOLOGY FRAMEWORK AND ANNUAL ROUTING REVIEW
<b>141.</b>	<b>DBOI (DEUTSCHE BANK), MUMBAI</b>
	744.ANALYSIS OF CREDIT RISK MANAGEMNET
	745.CREDIT RATING
	746.HISTORICAL SIMULATION AND EXPOSURE MANAGEMENT
	747.MAKING MONTHLY REPORTS FOR BACKTESTING
	748.PRODUCT CONTROL
	749.RISK AND PNL RECONCILIATION METHODOLOGY
<b>142.</b>	<b>DEVELOPMENT CONSULTANTS PVT. LTD (DCPL) , MUMBAI</b>
	750.ANALYSIS AND DESIGN OF COMPONENTS OF STEEL TURBINE GENERATOR (STG) BUILDING
	751.ANALYSIS AND DESIGN OF ONGOING PROJECTS
<b>143.</b>	<b>DORSCH CONSULT (INDIA) PVT. LTD, MUMBAI</b>
	752. PROFESSIONAL WORK OF THE ORGANIZATION Å€ DORSCH CONSULT.
<b>144.</b>	<b>EXPONENTIA DATA, MUMBAI</b>
	753.CUSTOMER ANALYSIS
	754.DATA VISUALISATION USING BI TOOLS
	755.TEXT MINING
<b>145.</b>	<b>GEOMETRIC LIMITED, MUMBAI</b>
	756.INCLUSION OF A SEARCH OPTION FACILITY AND FILTERS IN THE DFMPRO RULE MANAGER
	757. MERGING AND UPDATION OF DATABASES.
<b>146.</b>	<b>HDFC BANK, MUMBAI</b>
	758.CREDIT RISK SCORECARD VALIDATION AND MONITORING
	759.DEVELOPMENT OF APPLICATION SCORECARD FOR AUTO LOANS AND MONITORING OF DEVELOPED SCORECARDS-AML, CTG
	780.DEVELOPMENT OF APPLICATION SCORECARD FOR TWO WHEELER LOANS
<b>147.</b>	<b>HENKEL, MUMBAI</b>
	781.LAYOUT DESIGN FOR PROJECT GANESHA
	782.MARKET RESEARCH & ANALYSIS OF ADHESIVES WITH TECHNICAL INNOVATIONS
	783.PREPARATION OF PROCESS FLOW FOR THIRD PARTY LOGISTICS IN A WAREHOUSE
	784.PROJECT GANESHA - OPERATIONS
<b>148.</b>	<b>HERE MAPS - A NOKIA COMPANY, MUMBAI</b>
	789.A GENERIC XML COMPARATOR TOOL FOR PRODUCT COMPARISON, MAPREDUCE JOBS TO SCALE UP THE
	790.INGESTION FROM NAVTEQ BULK SOURCE & EXTRACTING POIS FROM WEB-SCRAPE DATA
	791.CREATE AN APPLICATION BASED ON SCALA AND ANGULARJS
	792.DEVELOPMENT OF A FULLSTACK WEB APPLICATION
	793.GDF ANALYZER
	794.MAKE UI FOR ROADS WITH LANES AND PREDICT LANE TRAVERSAL FOR VEHICLES FOR EACH LANE
<b>149.</b>	<b>HOURLASS RESEARCH, MUMBAI</b>
	795.PATENT ANALYTICS
	796.PRIOR ART SEARCH AND INFRINGEMENT ANALYSIS
<b>150.</b>	<b>J P MORGAN -CIB, MUMBAI</b>
	797.DEVELOPING MODULES FOR FINTECH APPLICATIONS
	798.USER INTERFACE DEVELOPMENT
<b>151.</b>	<b>J.P. MORGAN CHASE, MUMBAI</b>
	799.AUTOMATION IN INVOICES CAPTURE AND PROCESSING
	800.AUTOMATION OF FINANCIAL REPORTS
	801.COMPARATIVE ANALYSIS OF THE PAYMENT SYSTEMS TO SUGGEST MODIFICATIONS THAT COULD BE INCORPORATED IN THE FUTURE
	802.CORPORATE INVESTMENT BANKING AND RECONCILIATIONS
	803.DATA ANANLYSIS FOR CORPORATE ACTION STP ENHANCEMENT APPLICATION DEVELOPMENT AND INCOME INTUITIVE DASHBOARD
	804.FINANCIAL REPORTING
	805.INCOME INTUITIVE DASHBOARD, STP ENHANCEMENTS AND CONTROL SPECS
	806.PROCESS IMPROVEMENT
	807.PROJECT EXCELLENCE IN CASH OPS
	808.ROBOTICS PROCESS AUTOMATION
	809.ROBOTICS PROCESS AUTOMATION - BUSINESS ANALYSIS

	810.SERVICE DIFFERENTIATION
<b>152.</b>	<b>J.P. MORGAN SERVICES INDIA PVT. LTD, MUMBAI</b>
	811.BIG DATA INDUSTRY
	812.EQUITY LINKED FINANCING IDEAS
	813.OUTLOOK OF AUTOMOBILE SECTOR & CAPITAL GOODS SECTOR IN EUROPE
	814.SPECIALTY CHEMICALS-TRENDS AND OPPORTUNITIES
<b>153.</b>	<b>KPMG, MUMBAI</b>
	815.A REPORT ON IDENTIFICATION OF PROCESS AND CONTROL GAPS IN A CAPTIVE NON BANKING FINANCE COMPANY
	816.CONSULTING ON MANUFACTURING EXCELLENCE AT CONTRACT MANUFACTURING PHARMACEUTICAL FIRM
	817.SOFTWARE ASSET MANAGEMENT
<b>154.</b>	<b>MORNINGSTAR, MUMBAI</b>
	818.SINGLE FAMILY RENTAL AND RESIDENTIAL MORTGAGE BACKED SECURITIES (RMBS) SECURITIZATION
	819.DASHBOARD DEVELOPMENT FOR FILE MONITORING
	820.LAUNCHING NEW INDEXES AND OVERSEEING DELIVERY OF INDEX LEVELS AND PORTFOLIOS
	821.MANAGEMENT OF NEW INDEX LAUNCHES AND TO ENSURE DAILY CONTROLS AND CHECKS OF INDEX LEVELS AND PORTFOLIOS
	822.PASSIVE INVESTING AND INDEX MANAGEMENT
	823.SINGLE FAMILY RENTAL AND RESIDENTIAL MORTGAGE BACKED SECURITIES SECURITIZATION
	824.UI AUTOMATION USING WIREMOCK
<b>155.</b>	<b>MSCI BARRA QUANTITATIVE EQUITY RESEARCH, MUMBAI</b>
	825.MSCI CLIENT SERVICE - EMEA
	826.MSCI HIGH DIVIDEND YIELD INDEXES METHODOLOGY
	827.NEW PRODUCT DEVELOPMENT AND BENCHMARK INDEXES - MSCI QER
<b>156.</b>	<b>NOMURA GLOBAL MARKETS &amp; GLOBAL FINANCE ANALYST DIVISION, MUMBAI</b>
	828.CREDIT RISK AND CREDIT DERIVATIVES
	829.CREDIT RISK MANAGEMENT
	830.DAILY PROCESSES OF THE FINANCIAL CONTROL DIVISION AT NOMURA SERVICES, INDIA
	831.FINANCIAL RISK MANAGEMENT
	832.PRODUCT CONTROL P/L
	833.TOOL INTEGRATION FOR TEAM HMDG AT NOMURA
<b>157.</b>	<b>ORACLE FINANCIAL SERVICES SOFTWARE LTD. ( OFSS ) , MUMBAI</b>
	834.AUTOMATION OF INSTALLER FOR CLOUD SERVICES
<b>158.</b>	<b>PRICE WATERHOUSE COOPERS (PWC) , MUMBAI</b>
	835.STUDY OF CHANGING TRADEFLOWS AND IMPLICATIONS ON TRANSPORT INFRASTRUCTURE
<b>159.</b>	<b>SKODA AUTO INDIA PVT. LTD, MUMBAI</b>
	836.AFTER SALES BUSINESS IMPLEMENTATION
	837.ANALYSIS OF SALES VS MARKETING EXPENSE
	838.MEASUREMENT OF PR AND COMMUNICATIONS ACTIVITIES
<b>160.</b>	<b>SKUMARS ONLINE, MUMBAI</b>
	839.AFFORDABLE CONSTRUCTION USING LOW COST MATERIALS
<b>161.</b>	<b>VMS (VAKIL MEHTA SETH) CONSULTANTS PRIVATE LIMITED, MUMBAI</b>
	840.ANALYSIS AND DESIGN OF MULTI-STOREY STRUCTURES
<b>162.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	841. COMPARATIVE STUDY OF VARIOUS PARAMETERS AND WORKING PRINCIPLES BEING EMPLOYED BY THE TWO VISCOSE DIVISIONS.
<b>163.</b>	<b>CENTRAL ROAD RESEARCH INSTITUTE, NEW DELHI</b>
	842.SUGGEST MITIGATION MEASURES TO REDUCE IDLING EMISSIONS AND FUEL LOSSES AT SIGNALIZED INTERSECTIONS
	843. TRANSPORTATION SUSTAINABILITY INDEX ANALYSIS USING DEMPSTER SHAFER THEORY.
<b>164.</b>	<b>GREY ORANGE ROBOTICS PVT. LTD, NEW DELHI</b>
	844.CROSS-BELT SORTER SIMULATOR
	845.DEVELOPING INVENTORY REPLENISHMENT SIMULATOR
	846.MANAGER DASHBOARD DEVELOPMENT AND GPMS_V2 IMPLEMENTATION FOR BUTLER 1.5
	847.MOTOR TEST JIG
	848.UI/UX DESIGN AT GREYORANGE
<b>165.</b>	<b>LEA ASSOCIATES, NEW DELHI</b>
	849.A PROJECT REPORT ON PAVEMENT CONDITION SURVEY, STRIP MAPPING, AND TRAFFIC SURVEY

	850.ANALYSIS AND DESIGN OF BRIDGE&APOS;S & CULVERTS
	851.CONULTANCY SERVICES FOR THE ÅœUPGRADATION OF NATIONAL AND STATE HIGHWAYS ESPECIALLY BACKWARD, RELIGIOUS AND TOURIST (BRT) PLACES
<b>166.</b>	<b>NATIONAL INSTITUTE OF SCIENCE AND TECH. DEV. STUDIES (NISTADS), NEW DELHI</b>
	852.MEAT & DAIRY PROCESSING IN INDIA: S&T POLICY AND SKILL DEVELOPMENT ISSUES
	853.SMART CITY PLANNING & PROJECT MANAGEMENT SYSTEM
<b>167.</b>	<b>VALUE EDGE INDIA, NEW DELHI</b>
	854.CANCER IMMUNOTHERAPY APPROACH IN RECENT PHARMA MARKET
	855.CHANGES IN DYNAMICS OF INFECTIOUS DISEASES
	856.DATA ANALYSIS PROJECTS(ROCHE ACCESS CASE STUDIES , CRM MONITORING , BIOGEN DASHBOARD PROJECT)
	857.OPPORTUNITY ASSESSMENT FOR A DRUG IN DEVELOPMENT FOR AN ORPHAN DISEASE: IDIOPATHIC PULMONARY FIBROSIS (IPF)
	858.REIMBURSEMENT SCENARIO OF HEALTHCARE PRODUCT IN USA INCLUDING MEDICAL DEVICES
	859.SECONDARY COMPETITIVE INTELLIGENCE IN ALZHEIMER&APOS;S DISEASE
<b>168.</b>	<b>ADOBE SYSTEMS, NOIDA</b>
	860.FILE COMPATIBILITY IN INDESIGN
	861.INTELLIGENT MERGE OF REIMPORTED TEXT IN ADOBE INDESIGN
	862.OPTIMIZATION AND ENHANCEMENT IN ILLUSTRATOR FEATURES
<b>169.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, NOIDA</b>
	863.AN ALTERNATIVE METHODOLOGY TO DETERMINE ACCESS DISTURB MARGIN IN 6T SRAM CELL
	864.ALTERNATIVE APPROACH FOR CALCULATING THE WRM (WRITE MARGIN) OF 6T BITCELL
<b>170.</b>	<b>EDCIL INDIA LTD, NOIDA</b>
	865. STRATEGY AND FEEDBACK OF DETAILED PROJECT REPORTS INCLUDING METHODOLOGY FOR EMPANELMENT OF EXPERTS AND PROCESS FLOW FOR BUSINESS DEVELOPMENT.
<b>171.</b>	<b>OPERA SOLUTIONS, NOIDA</b>
	866.AIRLINES - TRIP NARRATIVE
	867.PROJECT DEVELOPMENT
	868.VUE
<b>172.</b>	<b>TOLEXO ONLINE PVT LTD, NOIDA</b>
	869.DIGITAL MARKETING: STRATEGY & ANALYTICS IN EMAIL
	870.MONITORING AND CONTROLLING OF RTO
	871.OPTIMIZE COST PER ACQUISITION OF RESPECTIVE MARKETING CAMPAIGNS
<b>173.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI</b>
	872.DESIGN AND DEVELOPMENT OF ADAPTIVE PITCH CONTROLLER
<b>174.</b>	<b>ALFA LAVAL (INDIA) LIMITED, PUNE</b>
	873.AUTOMATION TESTING
	874.DOCUMENTATION PROJECTS: P&ID TAGGING, BREWERY STANDARDISATION
	875.GUI BASED MONITORING TOOL TO CHECK SERVER STATISTICS
	876.PERFORMANCE TESTING USING JMETER
	877.PRODUCT MASTER - EVAPORATOR
<b>175.</b>	<b>AVAYA INDIA PRIVATE LIMITED,PUNE</b>
	878.SENTIMENT ANALYSIS SNAP-IN USING NATURAL LANGUAGE PROCESSING
	879.SOCIAL MEDIA GATEWAY
	880.TEST DRIVE DEVELOPMENT
	881.UNIT TESTING FOR AVAYA CLIENT SERVICES
<b>176.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	882.EXPERIMENT AND CFD ANALYSIS OF EXISTING BOGIE HEARTH FURNACE
	883.LEARNING AT BHARAT FORGE LIMITED
<b>177.</b>	<b>CREDIT SUISSE, PUNE</b>
	884.COUTNERPARTY CREDIT RISK MANAGEMENT
	885.CREDIT VALUATIONS CONTROL
	886.DATA SOURCING THROUGH LOADER AND SA-CCR CALCULATOR
	887.EXPOSURE ANALYSIS AND VALIDATION
	888.FOBO RECONCILIATION
	889.INDEPENDENT PRICE VERIFICATION AND INVENTORY VALUATION REVIEW
	890.INVESTMENT BANKING – CLIENT FINANCE
	891.MARKET RISK CHANGE MANAGEMENT

	892.MARKET RISK REPORTING CLUSTERNET APPLICATION
	893.ONBOARDING THE TRADE DATA INTO MYRIAD
	894.P&L STATEMENT PRODUCTION AND REPORTING (APAC LD)
	895.PRODUCT CONTROL ALIGNED FINANCE CHANGE PROJECTS
	896.PRODUCT CONTROL- ASIAN ENTITIES - SWAPS OVER FUTURES
	897.PRODUCT CONTROL: LINE CONTROL (DAILY DELIVERABLE OF PNL AND RECONCILIATION )
	898.PROFIT AND LOSS ATTRIBUTION
	899.PROJECT REPORT ON DATA SOURCING THROUGH LOADER
	900.QUALITY CONTROL- INVESTMENT BANKING CLIENT FINANCE (IBCF)
	901.RISK ANALYSIS AND MONITORING
	902.TRS PRICE TESTING, US GAAP ADJUSTMENT, STRUCTURED TRADE REVIEW, OPA, & CDB
	903.VALIDATION OF NETTING AND COLLATERAL DATA AND EXCEPTION MANAGEMENT
	904.VALUATION CONTROL: CREDIT VALUATION AND STR EXECUTION
<b>178.</b>	<b>DIVGI WARNER PVT LTD, PUNE</b>
	905.DESIGN VERIFICATION FOR THE PARTS OF HEAVY DUTY TRANSFER CASES
	906.PRODUCTIVITY IMPROVEMENT USING VSM
<b>179.</b>	<b>GABREL INDIA LTD, PUNE</b>
	907. DESIGN OF NEW REBOUND VALVING SYSTEM FOR TWIN TUBE SHOCK ABSORBER.
	908.REDUCTION OF RUN OUT AND REDUCTION OF CONTAMINATION LEVEL IN OUTER TUBE CLEANING(STUDY)
<b>180.</b>	<b>IDEAS - SAS, PUNE</b>
	909.IMPROVING G3 TEST AUTOMATION
	910.APPLICATION OF OBJECT ORIENTED TECHNIQUES FOR DEVELOPMENT OF WEB APPLICATIONS
	911. DESIGN & DEVELOPMENT OF REVENUE OPTIMIZATION ANDROID APPLICATION.
	912.PRICING AS A SERVICE AND ENHANCEMENTS TO THE SWB - SUPPORT WORKBENCH
	913.RECRUITMENT PORTAL
<b>181.</b>	<b>MAHLE BEHER INDIA PVT LTD, PUNE</b>
	914.OPTIMIZATION OF SPACE IN ASSEMBLY LINE
	915. PARAMETRIC OPTIMIZATION OF WELDING PROCESS USING RESPONSE SURFACE METHODOLOGY AND EVOLUTIONARY ALGORITHM.
<b>182.</b>	<b>NVIDIA GRAPHICS, PUNE</b>
	916. COVERITY AND REGRESSION BUG FIXING.
	917.DESIGN AND IMPLEMENTATION OF A UNIT TESTING APPLICATION FOR NVIDIA GAME RECORDING PIPELINE
	918.DEVELOPING NEW GAMING FEATURES FOR NVIDIA GEFORCE EXPERIENCE
	919.MANAGING USER PREFERENCES FOR GEFORCE EXPERIENCE
<b>183.</b>	<b>REFLEXIS SYSTEMS INDIA PVT LTD, PUNE</b>
	920.APPLICATION TO AUTOMATE PROCESSING OF THE IT SUPPORT SERVICES
	921.BUILD AUTOMATION USING GRADLE
	922.BUILD AUTOMATION USING GRADLE, JSON FILES CREATION MULTI-LANG SUPPORT DESIGN
	923.DEVELOPMENT OF COGNOS REPORTS AND KREGISTRY
	924.DEVELOPMENT OF COGNOS REPORTS AND K-REGISTRY
	925.LOCALIZATION OF REFLEXIS WORKFORCE SCHEDULER
<b>184.</b>	<b>SKODA AUTO INDIA PVT. LTD. (CHAKAN) , PUNE</b>
	926.LOCALISATION OF CHILD PARTS FOR AFTER SALES & SERVICE
<b>185.</b>	<b>SOKRATI TECHNOLOGIES PVT. LTD, PUNE</b>
	927.ANALYSIS OF DIGITAL MARKETING CAMPAIGNS
	928.E-MAIL REMARKETING APPLICATION MODULE IN PYTHON
	929.GOOGLE ADWORDS AND FACEBOOK BUSINESS EXPERIMENTATION
	930. INBOUND MARKETING FOCUSING ON SEARCH ENGINE OPTIMIZATION (SEO), SOCIAL MEDIA MARKETING (SMM), CONTENT DISTRIBUTION, PAID MARKETING (SEM AND SOCIAL) - MARKETING STRATEGIES.
	931.OPTIMIZING COLD EMAIL & IMPORTANCE OF CRM SOFTWARE
	932.OUTBOUND MARKETING AND OPTIMIZATION OF DIGITAL CAMPAIGNS
<b>186.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD, PUNE</b>
	933.BUILDING INTELLIGENCE OVER YARN RESOURCE TO MAINTAIN HEALTH OF HADOOP CLUSTER
	934.DEVELOPMENT & AUTOMATION OF DATA INSIGHTS SOLUTIONS
	935.ENHANCING HYPERVISOR BASED MALWARE ANALYSIS USING DRAKVUF
	936.REPRESENTING DYNAMIC BEHAVIOR OF EXECUTABLE AS IMAGE AND USING THE IMAGE FOR IMAGE CLASSIFICATION ALGORITHM



<b>187.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	937.ANALYSIS STREAMLINING AND SUPPORTING IN CENTRAL PURCHASING - SOURCING
	938.CHANGE OF RAW MATERIAL IN MEMBER SUPPORTS FROM COLD-ROLLED STEEL TO HOT-ROLLED STEEL
	939.INCREASING THE OPERATIONAL EFFICIENCY OF THE AFTERMARKET DIVISION
	940.MARKET RESEARCH & ANALYSIS OF AUTOMOTIVE PRODUCTS FOR BUSINESS DEVELOPMENT
	941.PLANNING FOR MARKETING AND BUSINESS DEVELOPMENT OF IEDGE LEARNING & IMPLEMENTATION OF INTERNET OF THINGS(IOT)
<b>188.</b>	<b>TATA CHEMICAL INNOVATION CENTER, PUNE</b>
	942.SCREENING OF MOLECULES THROUGH BIOTECHNOLOGY ROUTE
	943.SOLUBILISATION OF SILICA FROM NATURAL SOURCES USING BIOLOGICAL ROUTE
<b>189.</b>	<b>TATA MOTORS, PUNE</b>
	944.IINCREASING THE PRODUCTIVITY OF STEERING GEAR BOX AND METAL BODY ASSEMBLY LINES
	945.IMPLEMENTATION OF MAYNARD OPERATION SEQUENCE TECHNIQUE
	946.IMPLEMENTATION OF MAYNARD OPERATIONS SEQUENCING TECHNIQUE IN ALUMINUM FOUNDRY
	947.PROJECT SANKALP
	948.RESOLUTION OF TOP INDIGO WARRANTY & HIGH PPM PART ISSUES AT CAR PLANT TML PUNE FROM M/S ELECTRICA ENGINEERS (INDIA) PVT LTD
<b>190.</b>	<b>TATA TECHNOLOGIES, PUNE</b>
	949.AUTOMATIC UNDER-FLOOR BATTERY SWAPPING MECHANISM FOR AN ELECTRIC VEHICLE
	950.DESIGN OF PROCESS FLOW OF BODY-IN-WHITE SHOP
	951.FIELD OF VIEW ANALYSIS OF IRVM AND ORVM IN PASSENGER CARS
	952.NUMERICAL MODELING OF A MULTIZONE CABIN AND IT&APOS;S EFFECT ON PASSENGER THERMAL COMFORT PREDICTION
	953.SIMULATION OF VEHICLE CREATION IN H3 ASSEMBLY LINE USING CATIA COMPOSER
	954.STATIC AND MODAL ANALYSIS OF REAR DOOR OF A PASSENGER CAR USING FEM
	955.STRUCTURAL OPTIMIZATION OF FRONT END ASSEMBLY UNDER RECOVERY LOAD USING OPTISTRUCT
	956.SUSPENSION DESIGN MODIFICATION TO IMPROVE EFFICIENCY AND FOR WEIGHT AND COST REDUCTION
<b>191.</b>	<b>THERMAX INDIA, PUNE</b>
	957.A VIDEO DOCUMENTARY ON A GRATE ASSEMBLY OF A BOILER TO BE USED AS TRAINING MODULE.
	958.COAL COMBUSTION ANALYSIS IN BOILER FURNACE
	959.COMBUSTION MODELING OF RECIPROCATING GRATE FURNACE WITH APPLICATION OF COMPUTATIONAL FLUID DYNAMICS (CFD)
<b>192.</b>	<b>VCONSTRUCT PRIVATE LIMITED, PUNE</b>
	960.BIM (BUILDING INFORMATION MODELLING)
<b>193.</b>	<b>ZS ASSOCIATES, PUNE</b>
	961.COMMERCIAL FORECASTING AND REPORTING
	962.DATA VISUALIZATION USING QLIK SENSE
	963.DIFFERENT AREAS OF BUSINESS ANALYTICS
	964.QUANTIFYING THE IMPACT OF PHARMACIES ON THE SALES OF A DRUG
	965.UNDERSTANDING INCENTIVE COMPENSATION AND OPTIMIZING PROJECT OPERATIONS TO IMPROVE QUALITY AND DEVELOPING A TOOL FOR MONTHLY GENERATION OF EMPLOYEE PERFORMANCE REPORT
<b>194.</b>	<b>CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY, TRIVANDRUM</b>
	966.REDESIGNING OF WEBSITES OF GOVERNMENT INSTITUTIONS
	967.REDESIGNING OF WEBSITES OF VARIOUS DEPARTMENTS, GOVT. OF KERALA
	968.VISUAL MEDIA PRODUCTION
<b>195.</b>	<b>KLIENTAS, TRIVANDRUM</b>
	969.DEVELOPMENT OF P & ID&APOS;S
	970.INTELLIGENCE AND TRENDS IN LEGAL RECRUITMENT IN INDIA
<b>196.</b>	<b>LEAP CONSULTING, TRIVANDRUM</b>
	971.ASSISTING ERP IMPLEMENTATION AND OTHER RESEARCH WORKS
	972.CREATING A PLATFORM FOR FACILITATING E-WASTE MANGEMENT
	973.DATABASES AND MARKET RESEARCH
	974.MARKET RESEARCH AND ANALYSIS
	975.PRIMARY AND SECONDARY RESEARCH
<b>197.</b>	<b>KNOX PAYMENTS, USA</b>
	976.RISK MANAGEMENT IN AUTOMATED CLEARING HOUSE TRANSACTIONS
	977.STUDY ON RISK MANAGEMENT THROUGH AUTOMATED CLEARING HOUSE TRANSACTIONS IN KNOX PAYMENTS

**LIST OF PROJECT ASSIGNMENTS FOR FIRST SEMESTER 2016-2017**

<b>1.</b>	<b>SKODA AUTO INDIA PVT. LTD, AURANGABAD</b>
	1.DAILY COP ACTIVITIES, DAILY DISS DATA DOCUMENTATION
	2.NEW CAR PROJECT : VOLKSWAGEN PASSAT
	3.TECHNOLOGY PLANNING : SEAT MANIPULATOR
<b>2.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	4. AD FRAUD DETECTION DATA ANALYTICS PLATFORM AND PIPELINE VISUALIZATION TOOL
	5. AUTOMATION TOOL AND API DEVELOPMENT FOR ML MODEL TRAINING PLATFORM
	6.CENTRALIZED LOG ANALYTICS TOOL AND API DEVELOPMENT FOR REDIS PROVISIONING PLATFORM
	7.CLASSIFY ASINS INTO THEIR CORRESPONDING SUBCATEGORIES
	8.COMMUNITYDISCOVERYRAILS UPGRADE FOR AMAZON
	9.CUSTOMER CLUSTERING SERVICE SCALING BY INTRODUCING THROTTLING, CACHING AND A NEW SELF- SERVICE CLIENT UTILITIES
	10.DATABASE ARCHITECTURE MIGRATION
	11.FPS2PC MIGRATION
	12.IFSC AUTOMATION & API'S FOR AMAZON PAY
	13.IMPROVEMENTS IN AUTOMATED CONTENT CORRECTION AND VALIDATION ENGINE LEVERAGING MACHINE LEARNT MODELS, NATURAL LANGUAGE PROCESSING, AND RULE BASED CLASSIFICATION
	14.IMPROVEMENTS IN AUTOMATED CONTENT CORRECTION AND VALIDATION ENGINE LEVERAGING MACHINE LEARNT MODELS, NATURAL LANGUAGE PROCESSING, AND RULE BASED CLASSIFICATION
	15.METRICA- A QUALITY METRICS DASHBOARD CREATION
	16.PLATFORM DEVELOPMENT FOR SERVICE PROVIDER NETWORK
	17.QUERY SERVICE FOR MOBILE RECHARGE PLAN AND SECURE CUSTOMER INFORMATION INJECTION SERVICE PAY FOR AMAZON PAY
	18.SPN AND PLATFORM SERVICES
	19.STYLING TOOL FOR AMAZON VIDEO
	20.STYLING TOOL FOR AV BLAST
<b>3.</b>	<b>ANALOG DEVICES, BANGALORE</b>
	21.AD9361 TRANSCIEVER IN MACRO BASE STATION FOR 4G-LTE
	22.ANALYSIS AND EVALUATION OF PARKING LOT OCCUPANCY DETECTION ALGORITHM USING DEEP LEARNING FOR BLACKFIN PROCESSORS
	23.DIGITAL VERIFICATION FOR PROJECT DIGIMMIC
	24.ELECTROMAGNETIC COMPATIBILITY ON SHARC PROCESSORS
	25.SIMULATING A LINEAR VOLTAGE TO CURRENT CONVERTER ON CADENCE.
	26.SIMULATION OF AUTOZERO COMPARATOR FOR 14-BIT SAR ADC
	27.VERIFICATION FOR ADXL261 USING SYSTEM VERILOG AND UVM
<b>4.</b>	<b>APOLLO TYRES LTD, BANGALORE</b>
	28.ANDROID APPLICATION FOR MOULD-SHOP MANAGEMENT
	29.MOULD MANAGEMENT SYSTEM WEB APPLICATION DEVELOPMENT
	30.VIRTUAL COMPOUNDING
	31.WEB APPLICATION FOR MOULD SHOP MANAGEMENT
	32.WEB DEVELOPMENT
<b>5.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	33.AN AUTOMATIC TEST GENERATOR TO TEST MEMORY CONSISTENCY
	34.CONSolidation of AVS CONFIGURATION FILES AND FIXING AAPCS VIOLATION IN AVS SUITE
	35.DESIGN OF VARIOUS POSSIBLE ARM CLUSTER LEVEL IMPLEMENTATION FLOORPLANS 28NM TECHNOLOGY BASED OCTA CORE PROCESSOR
	36.DESIGN OF VARIOUS POSSIBLE ARM CLUSTER LEVEL IMPLEMENTATION FLOORPLANS OF A 10NM & 16NM TECHNOLOGY BASED OCTA CORE PROCESSOR
	37.EDA SOURCE CREATION FOR VALIDATION OF I/O LIBRARIES
	38.FAST PAGE TABLE GENERATION TOOL DEPLOYMENT FOR V8.X ARCHITECTURE VALIDATION SUITES
	39.IMPROVED CPU CONFIGURATION INTERFACE
	40.IP VALIDATION
	41.MEMORY DESIGN TECHNIQUES
	42.MOBILE KIT PERFORMANCE ANALYSIS
	43.OPTIMISING THE PERFORMANCE OF COVERAGE MODEL WITH C/C++ USING DPI
	44.STATISTICAL COVERAGE ANALYSIS FOR SYSTEM LEVEL VALIDATION
	45.TRANSACTION DEBUGGER
	46.UNIFIED VERILOG SIMULATION MODELS
	47.VALIDATION OF ARM GICV3
<b>6.</b>	<b>AZUL SYSTEMS, BANGALORE</b>
	48.BUILDING A JVMTI TEST SUITE FOR ZING
<b>7.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD), BANGALORE</b>

	49.DEVELOPMENT OF A GLUCOSE MONITORING SYSTEM USING HBA1C MEASUREMENT/ HEMOCUE@ CD4 COUNTING
	50.EVALUATION OF SINGLE COLOR ANTIBODY CONJUGATES FOR CONVERSION TO CE-IVD TO ENABLE ITS APPLICABILITY FOR LEUKEMIA, LYMPHOMA SCREENING AND IMMUNE MONITORING
<b>8.</b>	<b>BELONG.CO, BANGALORE</b>
	51.DEVELOPMENT OF A CUSTOMER HEALTH SCORE FRAMEWORK & BUSINESS INTELLIGENCE AUTOMATION
	RABBITMQ CLUSTER
	52.TWITTER USER CLASSIFICATION, GITHUB NED, SENTIMENT ANALYSIS
<b>9.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	53.DEVELOPMENT OF COMMAND CENTRE FOR HUDDLE
	54.MAYA DEVELOPMENT IN PRIMETIME SERVICE AND DEVELOPMENT OF A STREAM MONITORING APP ID NO./
	55.NEW RELIC MONITOR
	56.USING WEBRTC FOR VIDEO CONFERENCING SOLUTIONS
<b>10</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), BANGALORE</b>
	57.DATA ANALYSIS AND INFORMATION COLLECTION
<b>11.</b>	<b>CAPITAL ONE, BANGALORE</b>
	58.COMMERCIAL CARD DIGITAL CONTRACTS TOOL
	59.DATA QUALITY IMPROVEMENT TOOLS AT CAPITAL ONE
	60.DESIGN ON TAP
	61.DRIVE TO DIGITAL
	62.RWA ATTRIBUTION
	63.TEXT MODELING
<b>12.</b>	<b>CENTRE FOR ARTIFICIAL INTELLIGENCE &amp; ROBOTICS, BANGALORE</b>
	64.CALCULATION OF ACCURACY AND PRECISION OF MULTIPLE OBJECT TRACKERS USING CLEAR MOT STATISTICS
	65.CALCULATION OF PRECISION AND ACCURACY OF OBJECT TRACKERS USING CLEAR MOT STATISTICS
	HEADING ANGLE CONTROLLERS FOR AUTONOMOUS GROUND VEHICLES
	66.LOCALIZATION IN HAND DRAWN MAPS FOR AUTONOMOUS ROBOTS
	67.OBJECT AND ACTION RECOGNITION USING DEEP NEURAL NETWORKS
	68.REAL TIME APPEARANCE BASED MAPPING
	69.RENDERING OF 3D SPATIAL DATA AS WEB SERVICE
	70.SIMULATING THE MOTION OF A SNAKE ROBOT
	71.SIMULATION OF HEADING ANGLE CONTROLLER FOR AUTONOMOUS GROUND VEHICLES
	72.SNAKE ROBOT
	73.TOOL DEVELOPMENT FOR CDR ANALYSIS USING MATLAB GUIDE PLATFORM
<b>13.</b>	<b>CERNER, BANGALORE</b>
	74.CERNER SMART HEALTH APP
	75.PROJECT SMARTHEALTH
<b>14.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	76.ANYCONNECT NVM DATA ANALYSIS
	77.CONTEXT AWARE NETWORKS AS A SERVICE
<b>15.</b>	<b>DREAMWORKS ANIMATION, BANGALORE</b>
	78.DEVELOPMENT OF INTERNAL STUDIO TOOLS
	79.DEVELOPMENT OF LUNA
<b>16.</b>	<b>EMC, BANGALORE</b>
	80.CHANGE VDM SYNC FROM MAPPED POOL TO USER DEFINED POOL.
	81.CONTINUOUS INTEGRATION FOR BLOCK BASED BACKUP MODULE OF NETWORKER
	82.CREATING A CONTINUOUS INTEGRATION PIPELINE USING GOCD.
	83.CUSTOM TYPE FEATURE INTEGRATION IN DFS AND CMIS
	84.CUSTOM TYPE IMPLEMENTATION FOR DFS AND CMIS
	85.DISABLING APPLICATION DISCOVERY AND MAPPING FROM SERVICE PLANS IN APPSYNC
	86.DOCKERIZED SOFTWARE DEVELOPMENT
	87.END TO END TEST AUTOMATION FRAMEWORK FOR DOCUMENTUM TASKSPACE
	88.INTEGRATION OF ECM PRODUCTS WITH MICROSOFT O365
	89.NETWORKER AUTOMATION FRAMEWORK
	90.NON-DISRUPTIVE INSERTION OF VPLEX
	91.PROOF OF CONCEPTS TO IMPROVE PERFORMANCE IN ENAS
	92.TESTING AUTOMATION AND HTML APPLICATION FOR PROPERTY FILES OF AUTOMATION
<b>17.</b>	<b>ENSCI - A UNIT OF WEIR MINERALS INDIA PVT. LTD,BANGALORE</b>
	93.AUTOMATION OF COMPACT SAND WASHING PLANT
	94.SCREW PUMP IMPELLER DESIGN, PROTOTYPING AND TESTING
	95.STUDY OF HYDROCYCLONE SELECTION PROCESS; AUTOMATION OF SAND WASHING PLANT
<b>18.</b>	<b>ERNST &amp; YOUNG GLOBAL DELIVERY SERVICES,BANGALORE</b>
	96.DERIVATIVES VALUATION CENTER PROCESS AUTOMATION

	97.VALUATION OF DERIVATIVE PRODUCTS AND AUTOMATION OF DVC PROCESSES
<b>19.</b>	<b>ERNST &amp; YOUNG L.L.P,BANGALORE</b>
	98.DATA ANALYTICS – AUDIT
	99.WEB BASED VISUALIZATION
<b>20.</b>	<b>GENPACT,BANGALORE</b>
	100.DATA VALIDATION ON RDIAX SERVER
	101.SPM TESTING
<b>21.</b>	<b>GIFTXOXO,BANGALORE</b>
	102.BUSINESS DEVELOPMENT AT GIFTXOXO
	103.CUSTOMER CARE IMPROVEMENT
	104.GIFTXOXO ENTERPRISE SITE DEVELOPMENT
	105.GIFTXOXO FOR MIDDLE EAST
	106.MAKING OF E-COMMERCE WEBSITE ON REACT JS
	107.WEB DEVELOPMENT
<b>22.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE,BANGALORE</b>
	108.ANALYSIS AND MANIPULATION OF FOAMS
	109.DEVELOP SCREENING TOOL TO IDENTIFY BEST SUBSTRATE TO DELIVER SOLVENT BASED FORMULATION
	110.DETERMINATION OF SUBSTANCES CHARACTERISTIC OF GREEN AND BLACK TEA (GALIC ACID FREE TEA)
	111.ENHANCED DEPOSITION WITH POLYMER/SURFACTANT AIDS
	112.EVALUATION OF RO MEMBRANES FOR REMOVAL OF SURFACTANT FROM WATER
	113.LITERATURE STUDY ON ANTI-REDEPOSITION AGENTS
	114.MEMBRANE FABRICATION BY PHASE INVERSION: THEORETICAL BACKGROUND AND STUDY OF SELECTED SYNTHETIC PARAMETERS
	115.MOLECULAR UNDERSTANDING OF SERICIN PROTEIN USING COMPUTATIONAL METHODS
	116.PARTITIONING OF TEA VOLATILES INTO INFUSION AS A FUNCTION OF GRADES OF BLACK TEA
	117.SYNTHESIS AND CHARACTERIZATION OF MAGNESIUM OXIDE PARTICLES OF VARYING MORPHOLOGIES AND THE EFFECT OF MORPHOLOGY ON SURFACTANT REMOVAL
	118.SYNTHESIS AND STUDY OF STRUCTURE-PROPERTY RELATIONSHIP OF POLYBETAINES
	119.SYNTHESIS OF SERICIN MICROCAPSULES
	120.UNDERSTANDING OF OILY SOIL REMOVAL FROM FABRIC THROUGH SOLVENT
	121.UNDERSTANDING PHYSICAL AND STRUCTURAL PROPERTIES OF SERICIN
<b>23.</b>	<b>HORTONWORKS,BANGALORE</b>
	122.HORTONWORKS SUPPORT RUNBOOK
	123.SMARTSENSE RUNBACK
<b>24.</b>	<b>INFINERA,BANGALORE</b>
	124.AUTOMATION AND IMPROVEMENT OF CLI TESTING
	125.AUTOMATION OF BUILD RELEASE SCRIPTS
	126.CHARACTERISATION OF 28 GB SERDES
	127.DATABASE COMPARISON TOOL
	128.DESIGN VERIFICATION OF COMMUNICATION CABLE USING UVM AND SYSTEMVERILOG
	129.DIAGNOSTIC TEST AUTOMATION FRAMEWORK DEVELOPMENT
	130.FIELD SERVICEABILITY SUITE LOG ANALYSIS TOOL
	131.GEN5 ASIC VERIFICATION PROCESS -PERFORMANCE OPTIMIZATION AND AUTOMATION
	132.USAGE MONITORING TOOL
	133.VERIFICATION AND VALIDATION FLOW IMPROVEMENT WITH CREATION OF RFC COMPLIANT MAC TESTER APIS
<b>25.</b>	<b>INMOBI,BANGALORE</b>
	134.ADVERTISING THROUGH MOBILE MEDIUM
	135.AFFILIATE PARTNER STRATEGY & OPERATIONS À WADOGO
	136.BUSINESS DEVELOPEMENT - STRATEGY AND OPERATIONS
	137.DEVELOPMENT AND AUTOMATION OF TOOLS
	138.MOBILE ADVERTISING
	139.UNDERSTANDING DIGITAL MARKETING ECOSYSTEM AND DELIVERY MANAGEMENT
<b>26.</b>	<b>INNOVATION LABS,BANGALORE</b>
	140.BUILDING AN OFFICE SUITE AND AN APPLICATION THAT MAKES DECISIONS EASIER
	141.CLOUD OFFICE APPLICATIONS
	142.DEVELOPMENT OF KROWD À A HYPER PERSONALIZATION APP
	143.DEVELOPMENT OF TRKR, A GEOMAPPING ANDROID APPLICATION & SOUL, A WEBRTC BASED ANDROID APPLICATION.
	144.KROWD, CLOUD OFFICE APPLICATION, WEB DEVELOPMENT
	145.WEB SCRAPING USING JAVASCRIPT AND NODE. JS FRAMEWORK.
<b>27.</b>	<b>INTEL INDIA TECHNOLOGY PVT. LTD,BANGALORE</b>
	146.NON-LINE-OF-SIGHT MODEL FOR UWB BASED LOCALIZATION USING EXTENDED KALMAN FILTER (EKF)
	147.ANALOG MIXED SIGNAL SIMULATION OF SOC SUB SYSTEM LEVEL, VERIFICATION OF LDO

	148.APPLICATION OF COMPRESSIVE SENSING (CS) FOR WSN IN ASSET TRACKING
	149.AUTOMATION OF FRONTEND TOOLS/FLOW EXECUTION
	150.COMPRESSIVE SENSING APPLICATIONS
	151.DESIGN OF A PVT INDEPENDENT LOW IQ LOW AREA BANDGAP REFERENCE
	152.DESIGNING 3D MODELS
	153.DEVELOP ADAPTIVE NOISE CANCELLATION FOR BIOSIGNALS IN MOTION
	154.DEVELOPMENT OF MODEL FOR CUFFLESS BP ESTIMATION
	155.DP & HDMI 1.4 COMPLIANCE AUTOMATION
	156.EFFECTS ON AREA, UTILIZATION, TIMING AND DRCS ON CHANGING WIDTH AND HEIGHT OF A FLOORPLAN OF A FUNCTIONAL BLOCK IN A MICROPROCESSOR & HIERARCHICAL DESIGN PLANNING OF COMPLEX SOCS
	157.EFFECTS ON POWER, PEFORMANCE AND AREA ON CHANGING FREQUENCY, OPTIMIZING POWER AND AREA OF A FUNCTIONAL SYNTHESIS BLOCK IN A SOC
	158.FORMAL VERIFICATION USING JASPER TOOL
	159.INTEGRATION OF RTL BLOCKS
	160.JITTER ANALYSIS AND DESIGN AND MODELLING OF VCO BASED CDR
	161.LOW POWER TECHNIQUES AND ROLE OF POWER ANALYSIS IN CHIP DEVELOPMENT.
	162.OPPORTUNITIES FOR TUNABLE DESIGN FLOWS.
	163.POWER OPTIMIZATION OF CUFF-LESS BLOOD PRESSURE MONITOR
	164.POWER OPTIMIZATION USING POWER ARTIST & FORMAL VERIFICATION USING JASPER TOOL
	165.PRE-SILICON VERIFICATION IN MODEM DEBUGGING
	166.PROCESS AUTOMATION IN PRE-SILICON VERIFICATION VEHICLES FOR MODEM DEBUGGING
	167.QT AND NOISE SHAPER SUBSYSTEMS
	168.SCAN ANALYSIS & COVERAGE IMPROVEMENT FOR SOC DESIGN IN LEADING PROCESS TECHNOLOGY
	169.SYSTEM VERILOG, VOLTAGE REGULATORS AND DYNAMIC COMPARATORS
	170.THERMAL ANOMALY PREDICTION
	171.UNIVERSAL METHODOLOGY FOR EASY INTEGRATION, REUSABILITY AND SCALABILITY OF PERIPHERAL VIPS
<b>28.</b>	<b>J. P MORGAN CIB-RFT,BANGALORE</b>
	172.SOCRATES WEB UI DEVELOPMENT
<b>29.</b>	<b>J.P. MORGAN CHASE,BANGALORE</b>
	173.4-WAY HEADCOUNT RECONCILIATION ACROSS ALTS, CRD AND CMO
	174.AUTMATION OF ANALYTICS REPORTS
	175.AUTOMATION OF REPORTS
	176.AUTOMATION USING MACROS IN MS EXCEL
	177.BROKER SCORE CARD
	178.DATA COE AND ROBOTICS
	179.DATA WAREHOUSING AND REPORTING
	180.EFP TRADES WRITE OFF
	181.ENTITLEMENT REVIEW PROGRAM
	182.FALSE POSITIVES FOR HIT MITIGATION
	183.GLOBAL TRADE FIANANCE
	184.IMPROVING THE STRAIGHT THROUGH PROCESSING(STP) RATE OF CASH RECONCILIATIONS
	185.INVESTOR RELATIONS SERVICES
	186.MIDDLE OFFICE STRATEGY PROJECTS
	187.PROPOSING AUTO-MATCHING RULES TO INCREASE THE STP RATE
	188.QLIKVIEW- A BI TOOL
	189.RECONCILIATION MANAGEMENT DASHBOARD
	190.ROBOTICS PROCESS AUTOMATION
	191.SCRIPTING IN ROBOTICS PROCESS AUTOMATION
	192.SCRIPTING IN RPA
	193.STRATEGIC MARKET INFRASTRUCUTRE
	194.STRATEGIC SOLUTION FOR FINANCIAL REPORTING
	195.TECHNOLOGICAL IMPLEMENTATION FOR CUSTODY MIDDLE OFFICE
	196.TRADE FINANCE
	197.UNDERSTANDING PRIVATE EQUITY AND AUTOMATION OF PROCESSES USED IN IT
	198.WORK FLOW MANAGEMENT
<b>30.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	199.AUTOMATION AND DEVELOPMENT
	200.AUTOMATION OF REGRESSION TESTING OF ACT UI
	201.AUTOMATION TESTING
	202.AUTOMATION TESTING FOR JDA CONNECT
	203.BUILDING AN AUTOMATION TESTING SUITE
	204.DATA MANAGEMENT
<b>31.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE), BANGALORE</b>
	205.BOP SIMULATION

	206.CHART OF ACCOUNTS IMPLEMENTATION
	207.COMPUTATIONAL METHODS TO CALCULATE PITTING PROBABILITY IN ENGINES
	208.DATA DRIVEN NATIVE APPLICATION DEVELOPMENT
	209.DEVELOPMENT OF EXECUTIVE DASHBOARDS-BUSINESS INTELLIGENCE
	210.DIAPHRAGM WEIGHT CALCULATION PROGRAM UPDATE
	211.EQUATION BASED DATA RECONCILIATION APPLIED TO A FOSSIL FUEL POWER PLANT
	212.INTERFACE MIGRATION
	213.THE CFD MODELLING OF HEAT RECOVERY STEAM GENERATOR (HRSG) INLET DUCT DESIGN
<b>32.</b>	<b>KPMG, BANGALORE</b>
	214.CORPORATE ADVISORY SERVICES
	215.CORPORATE GROWTH STRATEGY
	216.CORPORATE STRATEGY
	217.PROJECTS IN THE FORENSICS - CONTRACT COMPLIANCE SERVICES
<b>33.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	218.AD CAMPAIGN OPTIMISATION
	219.AMAP USING REACT
	220.ANALYSIS AND DATA PRODUCT DEVELOPMENT
	221.ANALYSIS MODELLING AND ACTIONING PLATFORM.
	222.BUILDING AN OPTIMISATION DASHBOARD USING SHINYAPP
	223.CAMPAIGN ANALYSIS
	224.CAMPAIGN OPTIMISATION AND ANALYSIS
	225.DATA ANALYSIS USING HIVE
	226.DATA PROVIDER INSIGHT
	227.DIGITAL ADVERTISING & MARKETING - RESEARCH, IMPLEMENTATION, ANALYSIS & BUSINESS INNOVATIONS
	228.DIGITAL ADVERTISING & MARKETING " CAMPAIGN ANALYSIS & RETARGETING STRATEGIES
	229.DIGITAL ADVERTISING & MARKETING " CAMPAIGN ANALYSIS, MARKET RESEARCH, IMPLEMENTATION & RETARGETING STRATEGIES
	230.DIGITAL ADVERTISING & MARKETING.
	231.DIGITAL ADVERTISING & MARKETING-RESEARCH, IMPLEMENTATION & ANALYSIS
	232.OPTIMISING DASHBOARDS AND AUTO PROGRAMMABLE BIDDER
	233.RETARGETTING STRATEGIES AND BUSINESS INTELLIGENCE
	234.SALES & MARKETING ANALYSIS
	235.TRADING-CENTER PIPELINE AND LEADS MANAGEMENT TOOL
	236.UI DEVELOPMENT
<b>34.</b>	<b>MERCEDES BENZ, BANGALORE</b>
	237.AUTOMATION OF FINITE ELEMENT MODELLING IN SIMLAB
	238.EXERGY ANALYSIS OF AUTOMOTIVE AIR CONDITIONING SYSTEMS
	239.JOINT STIFFNESS EVALUATION AND OPTIMIZATION
	240.LEAF SPRING AUTOMATION IN ANSA USING PYTHON AND VERIFICATION THROUGH GUI IN EXCEL VBA
	241.VALIDATION OF 5TH PERCENTILE FEMALE HUMAN BODY MODEL USING ISO 9790 LOAD CASES
<b>35.</b>	<b>MYNTRA.COM, BANGALORE</b>
	242.AB TESTING AND PERSONALISED COUPONS CAMPAIGN
	243.DOCKINS
	244.FIRST MILE LOGISTICS
	245.MYNTRA ROADSHOW APP
<b>36.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	246.DEVELOPMENT OF TRANSPARENT AND CONDUCTING SILVER NANOWIRES
	247.INVESTIGATION OF SELF ADAPTIVE FLAPS ON LOW ASPECT RATIO CAMBERED WING
	248.MODELING AND SIMULATION STUDIES ON CARBURIZATION OF ANODE IN SOFC
	249.NANO CRYSTALLINE NI-B ALLOY DEPOSITION AND ITS EVALUATION
	250.NOVEL STRUCTURAL DESIGN CONCEPT FOR VTOL BASED UAV
<b>37.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	251.CHARACTERISATION OF GROWTH CURVES AROUND MIC OFKANAMYCIN IN E. COLI
	252.ENHANCING PHAGOCYTTIC UPTAKE OF MUTANT DROSOPHILA MELANOGASTER HEMOCYTES
<b>38.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	253.COMPETENCY MAPPING, PRODUCT CATALOGUING AND MARKET RESEARCH
	254.MANAGEMENT OF THE WORKSHOPS AND PROGRAMS CONDUCTED BY WADHWANI FOUNDATION IN MALAYSIA AND INDONESIA
	255.MARKET RESEARCH FOR EXPANSION OF WADHWANI FOUNDATION IN SOUTH EAST ASIAN COUNTRIES
	256.NEUROSCIENCES OF MARKETING
	257.ORIENTATION PROGRAM IN ENTREPRENEURSHIP
	258.RESEARCH ON UPCOMING JOB SECTORS
	259.SDN
	260.SECONDARY MARKET RESEARCH ON INVESTMENT IN INDIAN MANUFACTURING SECTOR AND

	MATCHING OF IT-ITES COURSES FROM SDN WEBSITE
	261.SELECTION, BRIEFING, CURATION AND POSTING OF STARTUP ECOSYSTEM NEWS
	262.SKILLS DEVELOPMENT NETWORK
	263.STUDENT ENTREPRENURSHIP DEVELOPMENT
<b>39.</b>	<b>NEXTGEN PMS PVT. LTD, BANGALORE</b>
	264.BUILDING DIGITAL DASHBOARDS
	265.CSR MANAGEMENT & DASHBOARD STANDARDIZATION -PS2 ENGAGEMENT WITH NEXTGEN PMS
	266.DASHBOARDS AND P3 PATFORM
	267.DEVELOPMENT OF P3 PLATFORM FOR MONITORING CSR ACTIVITIES
	268.P3 PLATFORM AND BUILDING DASHBOARDS
	269.P3 SOFTWARE
	270.PS2 ENGAGEMENT WITH NEXTGEN
	271.THE INTERSECTION OF CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE IMPACT
<b>40.</b>	<b>NVIDIA GRAPHICS, BANGALORE</b>
	272.AUTOMATING REGRESSION TRIAGE AND LATENCY-SPECIFICATION SIGN-OFF
	273.BACKDOOR READ TO COMPRESSED SURFACES
	274.CPU ARCHITECTURE VALIDATION
	275.DESIGN FOR TEST
	276.DEVICE STUDY AND VERIFICATION OF REGISTER FILES
	277.FAULT OPTIMIZATION FOR HIGH ATPG COVERAGE AND REDUCED CYCLE COUNT
	278.FUNCTIONAL SAFETY VERIFICATION
	279.LOW POWER ASIC IMPLEMENTATION & VERIFICATION FOR TEGRA SOC
	280.PARTITION WORK IN PLACE AND ROUTE AND POWER OPTIMISATION
	281.SYNTHESIS FOR MSS AND ASSERTIONS FOR INTERFACES FOR TEGRA AT NVIDIA
	282.SYSTEM VERILOG ASSERTIONS AND EQUALIZATION CHECKERS
	283.TEGRA SOC BOOT PERFORMANCE MODELLING AND MULTIMEDIA POWER PERFORMANCE TRADE-OFF ANALYSIS
	284.UNIT LEVEL VERIFICATION
	285.VERIFICATION OF DESIGN FOR DEBUG UNIT IN A TEGRA SOC
	286.VERIFICATION OF DVM TRANSACTIONS IN ARM MULTI-CLUSTER CPU SYSTEMS
	287.VERIFICATION OF SATA UNIT USING AN EXISTING TESTBENCH
<b>41.</b>	<b>NVIDIA GRAPHICS -SOFTWARE DIVISION, BANGALORE</b>
	288.ADDING SUBTITLE SUPPORT TO NVIDIA GSTREAMER PLUGINS
	289.ADVANCED DRIVER ASSISTANCE SYSTEMS - ALGORITHMS AND TOOLS
	290.CERTIFYING DISPLAY AND GPU DRIVERS FOR FUNCTIONAL SAFETY IN AUTOMOTIVE ROAD VEHICLES
	291.DOUBLE;TEGRA GOLDEN VALUE&DOUBLE; - PHASE 2 TOOL
	292.DRIVER DROWSINESS DETECTION SYSTEM & ADDING FUNCTIONALITIES TO QNX CAN DRIVER
	293.GENIVI LINUX FRAMEWORK FOR DRIVE-CX
	294.IMAGE AND VIDEO POST PROCESSING
	295.MISRA COMPLIANCE USING COVERTY AND SAFETY DIAGNOSTIC SOFTWARE
	296.OPTIMISING BUILD SYSTEM FOR TESTING GPU AND DISPLAY DRIVERS ON AN RTOS
	297.OPTIMIZING IMAGE CREATION
<b>42.</b>	<b>ORACLE FINANCIAL SERVICES SOFTWARE LTD ( OFSS), BANGALORE</b>
	298.MULTIBROWSER SUPPORT FOR ORACLE FINANCIAL SERVICES ANALYTICAL APPLICATIONS
	299.CLIENT AND SERVER SIDE SCRIPTING AND MULTI-BROWSER SUPPORT FOR DATA MANAGEMENT TOOLS
	300.USE OF ALTERNATIVE LEARNING MODELS IN FINANCIAL DOMAIN
	301.CONNECTOR DEFINITION APPLICATION
<b>43.</b>	<b>ORACLE INDIA PVT LTD, BANGALORE</b>
	302.AUTOMATIC DETECTION OF AN OBJECT&APOS;S ATTRIBUTES USING NLP
	303.AUTOMATIC DETECTION OF OBJECT&APOS;S ATTRIBUTES USING OPEN NLP
	304.DESIGNING A UI FOR A MONITORING TOOL
	305.ENHANCEMENT OF INTERNATIONALIZATION (I18N) AND DEVELOPMENT OF A DEMO APPLICATION DEMONSTRATING I18N FEATURES
	306.ENHANCEMENT OF THE CONFIGURATION TOOL FOR THE PROXY SERVER AND VALIDATION OF ITS FUNCTIONALITIES
	307.EUS CERTIFICATION AND IMPLEMENTING SCIM REST SERVICES
	308.FUSION APPLICATIONS DEVELOPMENT USING ORACLE ADF
	309.GENERATION OF METADATA FROM DEFINITION TYPESCRIPT FILES
	310.GRANULATION OF ORACLE DATABASE EXADATA CLOUD SERVICE PROVISIONING
	311.HDFSFILESYSTEMPROVIDER AND EDQP DATA LENS TOOLS FOR EXCEL
	312.JAVAFX APPLICATION ENHANCEMENT & PROFILING (JAVAFX.WEBVIEW API)
	313.JET ADOPTION FOR PBCS
	314.JET ADOPTION FOR PBCS DASHBOARDS
	315.MARATHON APP USING MOBILE CLOUD SERVICES

	316.NAMED ENTITY RECOGNITION IN UNSTRUCTURED DATA
	317.ORACLE MANAGEMENT CLOUD: DATA MODEL PLATFORM - PERFORMANCE ENHANCEMENT THROUGH TRANSFORMING JPA TO NATIVE QUERIES.
	318.PERFORMANCE ANALYZING AND INTERCEPTING TOOL
	319.POD MANAGER FOR CLOUD SERVICES
	320.PODMANAGER - ORACLE CLOUD AUTOMATION FRAMEWORK
	321.SMART CONFERENCE APPLICATION BASED ON ORACLE IOT CLOUD SERVICE
	322.STACK PSM
	323.SWAGGER DOCUMENTATION
	324.SYNTHETIC MONITORING-PUBLIC EXECUTION OF SELENIUM TESTS USING DOCKER CONTAINERS AND ORACLE CONTAINER CLOUD SERVICE
	325.VOICE-BASED NATURAL LANGUAGE QUERY GENERATOR FOR IOT BASED BUSINESS ANALYTICS
<b>44.</b>	<b>PILANI EXPERTS TECHNOLOGY LABS PVT LTD, BANGALORE</b>
	326.BUSINESS DEVELOPMENT FOR TAPCHIEF&APOS;S CORPORATE OUTREACH PROGRAM
	327.DIGITAL MARKETING & OPERATIONAL FUNCTIONALITY AT AN EARLY-STAGE STARTUP
	328.EARLY STAGE STARTUP GROWTH
<b>45.</b>	<b>QUBOLE, BANGALORE</b>
	329.CONTINUOUS INTEGRATION
	330.MIDDLEWARE TOOLS FOR SUPPORT TEAM
	331.RUBIX- CACHING FRAMEWORK FOR BIG DATA SYSTEMS
<b>46.</b>	<b>SABRE HOLDINGS(FORMELY SABRE TRAVELS), BANGALORE</b>
	332.AUTOMATION IN GDS TICKETING
	333.AUTOMATION TESTING OF GDS TICKETING AND AUTOMATED REFUNDS & EXCHANGES
	334.AUTOMATION THROUGH CONTINUOUS INTEGRATION TOOL TEAMCITY
	335.DEVELOPING AIRVISION MARKET INTELLIGENCE FOR SABRE
	336.DEVELOPMENT OF INTELLIGENT REPORTER TOOL
	337.EARLY REVENUE RECOGINTION
	338.FITNESSE FIXTURES
	339.FRONT END DEVELOPMENT OF PMS V4
	340.FUNCTIONAL TESTING AND AUTOMATION FOR AIR VISION FARESMANAGER
	341.GUEST CONNECT QUALITY ASSURANCE AUTOMATION
	342.PASSWORD ENCRYPTION AND JASPER REPORTS
	343.PNR-DISPLAY OFFLOAD; BRND SSR
	344.QUALITY ASSURANCE OF GETTHERE PRODUCT
	345.TEST AUTOMATION IN GDS AND AIRLINE TICKETING
	346.VCMP DEVELOPMENT
<b>47.</b>	<b>SAMSUNG R &amp; D INSTITUTE, BANGALORE</b>
	347.BRAIN CONTROLLED HUMAN-MACHINE INTERFACE
	348.BRAIN CONTROLLED HUMAN-MACHINE INTERFACE AND RESPONSE
	349.DISPLAY PORT IP VERIFICATION
	350.DISPLAY PORT V1.4 IP VERIFICATION
	351.EFFICIENT ALGORITHM FOR IMAGE STITCHING
	352.MOTION ESTIMATION BY REDUCTION IN SAD COMPUTATION AND ADAPTIVE REFINEMENT IN SEARCHRANGE
	353.PATIENT BROWSER
	354.SOC DESIGN
	355.TCP/IP STACK OPTIMIZATION OF IOT DEVICES
<b>48.</b>	<b>SHELL TECHNOLOGY CENTER, BANGALORE</b>
	356.IMPACT OF SALINITY ON WATER IN OIL EMULSIONS
	357.PRODUCED WATER TREATMENT USING CROSS FLOW TECHNOLOGY
<b>49.</b>	<b>SKODA AUTO INDIA PVT. LTD, BANGALORE</b>
	358.ARRESTING GAPS IN THE SALES FUNNEL
	359.PROJECT DELIGHT: IMPROVING SERVICE QUALITY AND CUSTOMER SATISFACTION
<b>50.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD, BANGALORE</b>
	360.AUTOMATION OF CERTIFICATE LIFECYCLE MANAGEMENT, BROWSER EXTENSION
	361.CERTIFICATE LIFECYCLE MANAGEMENT, BROWSER EXTENSION
	362.EVALUATION OF FACE AND TYPING BEHAVIOR BIOMETRICS AS AUTHENTICATION FACTORS
	363.INTEGRATING CIC ON AWS.
	364.INTEGRATION OF WEB SERVICES USING API GATEWAY AND UPSSELL ENGINE
	365.LIFE CYCLE MANAGEMENT OF A CERTIFICATE USING WEBCRYPTOGRAPHY API
<b>51.</b>	<b>TANGOE INDIA SOFTEK PVT LTD, BANGALORE</b>
	366.FRAMEWORK FOR PARSING AND TESTING CODE GENERATION
	367.AUTOMATION OF I18N LABEL MANAGER
	368.MATRIX
<b>52.</b>	<b>TATA CONSULTANCY SERVICES, BANGALORE</b>



	369.APPLICATION FRAMEWORK FOR IOT
	370.HOME AUTOMATION USING ZIGBEE
<b>53.</b>	<b>TESCO HINDUSTAN SERVICE CENTRE, BANGALORE</b>
	371.TRADE ANALYSIS FOR TESCO&APOS;S GHS BUSINESS
<b>54.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD, BANGALORE</b>
	372.18-BIT SETTling TIME OF FULLY DIFFERENTIAL AMPLIFIER
	373.ANALYSIS AND DESIGN OF A CURRENT LIMITER FOR A BATTERY CHARGER
	374.AUTOMATION OF INTERCONNECT SUBSYSTEM RTL GENERATION
	375.BEHAVIORAL MODELLING OF FOC ALGORITHM BLOCKS
	376.CONFIGURATION OF A FPGA USING JTAG INTERFACE
	377.CREATING A DJANGO-PYTHON BASED WEB APP
	378.CYCLE TIME REDUCTION FOR LEGACY SILICON REDESIGN
	379.DESIGN OF A COMPACT ISOLATED DC-DC CONVERTER
	380.DEVELOPMENT OF DIGITAL VERIFICATION ENVIRONMENT BUILDER
	381.DIGITAL DESIGN SETUP AND FLOW AUTOMATION
	382.EDA VALIDATION OF MODEL PARAMETERS
	383.HIGH Q, DIFFERENTIAL, BANDPASS FILTER FOR INSTRUMENTATION PURPOSE
	384.LOAD SWITCH - FINAL TEST SOLUTION AND COMPLETE TEST ANALYSIS
	385.LOW VOLTAGE BOOST CONVERTER
	386.MATLAB MODELLING OF CURRENT MIRROR TOPOLOGIES AND ITS IMPLEMENTATION IN DESIGNING UNTRIMMED BIAS CURRENT BLOCK IN LBC9.
	387.MEASUREMENT OF SETTling TIME OF 20-BIT PRECISION DAC
	388.MINIMIZING TURN-ON DELAY DURING SOFT START OF E-FUSE
	389.PIPELINED FLOATING POINT ALU
	390.POWER BANK DESIGN
	391.USB IMPLEMENTATION
	392.USB TYPE-C/PD SYSTEM VERIFICATION
	393.VALIDATION OF DIGITAL LIBRARIES
<b>55.</b>	<b>TONBO IMAGING PVT LTD, BANGALORE</b>
	394.DESIGN AND DEVELOPMENT OF SEALED ENCLOSURE FOR OPTICAL DEVICES
	395.DEVELOPING AN OSD DISPLAY MANAGER FOR A THERMAL IMAGING CAMERA
	396.DISTRIBUTION OF HARDWARE RESOURCES WITH SOFTWARE AND SERIAL TO ETHERNET CONVERTERS
	397.IMAGE STITCHING AND IMAGE FUSION ON NVIDIA TX1 GPU
	398.IMPLEMENTATION OF SHARPENING FILTER AND CALCULATION OF NOISE
	399.IMPLEMENTATION OF STATE MACHINE IN ASYNCHRONOUS COMMUNICATION.
	400.IMPROVEMENT OF SYSTEM SOFTWARE FOR DAVINCI DM365 PROCESSOR
	401.VEHICLE COUNTING AND CLASSIFICATION AT TOLL BOOTH.
<b>56.</b>	<b>VITACLOUD, BANGALORE</b>
	402.A DATA DRIVEN APPROACH TO HEALTHCARE
	403.DEVELOPMENT OF ANDROID APP FOR THE VITACLOUD PLATFORM.
<b>57.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES, BANGALORE</b>
	404.BUSINESS INTELLIGENCE REPORTING
	405.CUSTOMER RESPONSE COLLECTION
	406.DEVELOPMENT OF FRAMEWORK BASED ON MICROSERVICES ARCHITECTURE
	407.DYNAMIC WEB SERVICES
	408.EXPLORING AND ADDING SEARCH REFINEMENTS FOR ASDA GROCERIES
	409.LOG SEARCH IN DISTRIBUTED SYSTEMS & TESTING LOG COLLECTOR
	410.NEXT GEN DECISION SUPPORT SYSTEM AND INTERNATIONAL FREE THE DATA
	411.NEXT GENERATION DECISION SUPPORT SYSTEM
	412.PREDICTION OF SHIPPING METHOD FOR CUSTOMER TRANSACTIONS
	413.PRICE INVESTMENT
	414.RAVEN
	415.SKP BEST QUALITY
	416.TNA - WEB AND MOBILE APPLICATION DEVELOPMENT
	417.WEBSITE RENDERING PERFORMANCE
<b>58.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, BANGALORE</b>
	418.GLOBAL ENGINEERING INSIGHTS PLATFORM
<b>59.</b>	<b>ZOOMCAR INDIA PVT. LTD, BANGALORE</b>
	419.ANALYTICS AT ZOOMCAR
	420.E-MAIL AND PN MARKETING : CONTENT AND ANALYTICS
<b>60.</b>	<b>ADITYA BIRLA SKILLS FOUNDATION-( PART OF ADITYA BIRLA GROUP), BHUBANESHWAR</b>
	421.SKILLS-GAP ANALYSIS OF 5 SMART CITIES OF INDIA
	422.SKILLS-GAP SURVEY OF FIVE CITIES IN INDIA
<b>61.</b>	<b>MINDFIRE SOLUTIONS, BHUBANESHWAR</b>
	423.ANDROID APPLICATION DEVELOPMENT

	424.DEVELOPING A WEB APPLICATION FOR VOICE ENABLED ONLINE FORM FILL UP
	425.IMPLEMENTATION OF NFC CHIPS FOR GARMENT TRACKING AND INVENTORY MANAGEMENT
<b>62.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), CHENNAI</b>
	426.ANALYSIS OF CUSTOMER DATA OF SWIGGY CHENNAI BY USING COMPETITIVE INTELLIGENCE,
	427.ANALYSIS OF ORDER CANCELLATIONS OF SWIGGY CHENNAI DUE TO THE REASONS OF CHANGE OF MIND BY CUSTOMER AND CLOSING OF RESTAURANTS DURING THE OPERATING HOURS.
	428.COMPETITIVE ANALYSIS (DEMAND), EXPANSION OF CLIENT BASE AND IMPROVING THE SCOPE OF BUSINESS.
	429.COMPETITIVE ANALYSIS OF MARKETING AND SALES OF ONLINE FOOD ORDERING MARKET SPACE IN CHENNAI AND
	430.SOURCING AND SOURCING CHANNELS, COMPETITIVE ANALYSIS (SUPPLY), DE ENGAGEMENT & RETENTION, DE TRENDS.
<b>63.</b>	<b>ERNST &amp; YOUNG L.L.P, CHENNAI</b>
	431.DEVELOPMENT OF A WEB APPLICATION IN DJANGO ENVIRONMENT
	432.GLOBAL ANALYTICS TOOL AND TRAINING TRACKER TOOL
	433.NETWORK DIAGRAMS
	434.REVENUE ASSURANCE FOR TELECOM SECTOR
	435.SEARCH TOOL IN HBASE
	436.TREASURY ANALYTICS METHODS AND TESTS INVOLVING BIG DATA
	437.WEB DEVELOPMENT BY DJANGO FRAMEWORK
<b>64.</b>	<b>HCL TECHNOLOGIES, CHENNAI</b>
	438.ARCHITECTURAL DESIGN OF ARINC-818 TRANSMITTER
	439.ARCHITECTURE OF ADVB 818 TRANSMITTER PROTOCOL
	440.DESIGN OF ARINC-818 TRANSMITTER
	441.DRIVER APPLICATION AUTOMATION FOR MAC
	442.REDUCTION OF LABVIEW DEVELOPMENT AND OTHER ALTERNATIVES IN THE FIELD OF DATA ACQUISITION, INSTRUMENT CONTROL
	443.TRANSMITTER DESIGN USING ARINC-818
<b>65.</b>	<b>HEALTHCARE TECHNOLOGY INNOVATION CENTRE (HTIC) , CHENNAI</b>
	444.DEVELOPMENT OF AN E-DIETITIAN SOFTWARE
	445.DEVELOPMENT OF FLUORESCENCE LATERAL FLOW IMMUNOASSAY READER
	446.REVIEW OF STL FILE EDITING TOOLS USED IN ARTHROPLASTY
	447.KIOSK FOR MEASURING VARIOUS BODY PARAMETERS
<b>66.</b>	<b>STRUCTURAL ENGINEERING RESEARCH CENTRE, CHENNAI</b>
	448.MODELING OF LOW ENERGY IMPACTS ON TEXTILE REINFORCED CONCRETE BEAMS
	449.SEISMIC PERFORMANCE ENHANCEMENT OF A 20-STOREY STEEL MOMENT RESISTING FRAME WITH FRICTION DAMPERS.
	450.STRUCTURAL DAMAGE AND NONLINEARITY CHARACTERIZATION USING SUPPORT VECTOR MACHINES
<b>67.</b>	<b>TATA CHEMICAL INNOVATION CENTER, CHENNAI</b>
	451.CONSERVATION OF ENERGY THROUGH THE OPTIMIZATION OF MECHANICAL DRIVES AND MULTIPLE PROJECTS
	452.OPTIMIZATION OF SPRAY DRYING PROCESS OF FOS SOLUTION
<b>68.</b>	<b>TUBE INVESTMENTS OF INDIA LIMITED, CHENNAI</b>
	453.COMPARISON ANALYSIS AND PARAMETRIC STUDY OF ROLL SEPARATION FORCE IN TUBE MILLS
	454.STUDY OF METHODS TO IMPROVE COLD TUBE DRAWING
<b>69.</b>	<b>AMAZON DEVELOPMENT CENTER, DELHI</b>
	455.AMAZON MERCHANT REGISTRATION WORKFLOW MIGRATION PROJECT
	456.APPROVAL WORKFLOW AND FRONT-END DEVELOPMENT FOR PRODUCTONBOARDINGSERVICE
	457.DEVELOPMENT AND INTEGRATION OF PHONE VERIFICATION FRAGMENT WITH SWIPE PLATFORM.
	458.MERCHANT PORTAL V3
	459.MIGRATION OF IHS TO PAMS
	460.ONE CLICK PLATFORM GENERATION AND ENCRYPTED REST CALLS TO PLATFORM.
	461.PAYMENT INSTRUMENT AUTHENTICATION AND SELLER VERIFICATION FOR REGISTRATION IN EUROPEAN MARKETPLACES
	462.REDESIGN OF SELLER PROFILE AND SALES FORCE PROXY DEPRECATION
	463.SCHOLA SERVICE DEPRECATION
	464.SELF-SERVICE ONBOARDING
	465.SELLER ANALYTICS AND LEARNING ENGINE: REPORTING AND DESIGNING
<b>70.</b>	<b>CUBICAL LABORATORIES, DELHI</b>
	466.BUSINESS DEVELOPMENT AND MARKETING
	467.MARKETING AND OPERATIONS AT CUBICAL LABORATORIES
<b>71.</b>	<b>QUALITY COUNCIL OF INDIA, DELHI</b>

	468.ESTIMATION OF DEMAND AND SUPPLY GAP OF TEACHERS IN INDIA FOR NCTE
	469.SWACHH BHARAT MISSION-OPEN DEFECCATION FREE
	470.SWACHH BHARAT MISSION - GUJARAT AND ODF (OPEN DEFECCATION FREE)
<b>72.</b>	<b>TATA MOTORS, DHARWAD</b>
	471.BOM AND REPRO ANALYSIS OF LCV IN DHARWAD PLANT
	472.ESTIMATION AND REDUCTION OF MAN POWER USING MOST ANALYSIS AND LINE BALANCING
	473.MAKING ZERO SHOWER LEAKAGES FROM THE VEHICLES UNDERGOING SHOWER TEST
	474.STANDARDIZATION IN PRODUCTION OF FES AT VENDOR END
<b>73.</b>	<b>CIPLA LTD, GOA</b>
	475.AUTOMATION AND INTEGRATION OF AHU&APOS;S INTO BMS
	476.DOCUMENTATION IN PHARMACEUTICAL INDUSTRIES
	477.DOWNSTREAM PROCESS DEVELOPMENT FOR MONOCLONAL ANTIBODIES PRODUCTION
	478.EFFECT OF CHO CELL CULTURE PROCESS PARAMETERS ON QUALITY AND PRODUCTIVITY
	479.EFFECT OF PROCESS PARAMETERS ON CULTURE AND QUALITY ATTRIBUTES
	480.ENERGY SAVING AND EFFICIENCY IMPROVEMENTS IN DIRECT CONTACT HEAT EXCHANGING HOT WATER TANK FOR AHU UTILITIES
	481.LIFESPAN AND LOAD CAPACITY ESTIMATION OF NEW ADMIN BLOCK
	482.QUALITY METRICS: KEY PERFORMANCE INDICATORS AND WATER SAMPLING & QUALIFICATION
<b>74.</b>	<b>ST MICROELECTRONICS(I) PVT.LTD, GREATER NOIDA</b>
	483.ANALYSIS AND DESIGN OF LOW VOLTAGE ENABLEMENT OF SRAM
	484.DESIGN VALIDATION OF C2C ON FPGA
	485.ENHANCEMENTS IN FULL-CUSTOM FLOW TO MITIGATE POST-LAYOUT CHALLENGES IN ADVANCED TECHNOLOGY NODES
	486.SMART EMBEDDED SOLAR STREETLIGHT
<b>75.</b>	<b>AMERICAN EXPRESS INDIA, GURGAON</b>
	487.DESIGN AND DEVELOPMENT OF DEEP LEARNING BASED RESPONSE MODEL ON TRADE-LINE PROSPECTS DATA FOR FINDING PROBABLE CUSTOMERS AND BUILDING OFFERS STRATEGY FOR TRIGGER BASED PROSPECTS ACQUISITION MARKETING CAMPAIGN.
	488.REVAMPING MODEL VISUALIZATION CAPABILITY
<b>76.</b>	<b>BAIN CAPABILITY CENTER PVT. LTD, GURGAON</b>
	489.PRIVATE EQUITY GROUP :PERFORM MARKET ANALYSIS FOR THE VARIOUS TRENDS IN PRIVATE EQUITY SECTOR PERTAINING TO THE REGION OF NORTH AMERICA
	490.PRIVATE EQUITY GROUP- COMPANY & INDUSTRY ANALYSIS
	491.TOTAL SHAREHOLDER RETURN "€" CORPORATE FINANCE
	492.USING ORG NAVIGATOR TOOL TO ANALYZE THE ORGANIZATION'S PERFORMANCE
	493.ZERO BASED BUDGETING
<b>77.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), GURGAON</b>
	494.COMPETITOR ANALYSIS; SWIGGY SELECT; EXTRA-SLA MODEL
	495.EXCEL ANALYTICS, VBA, ANALYZING SALES PERFORMANCE.
<b>78.</b>	<b>BUSIGENCE, GURGAON</b>
	496.NBOUND MARKETING OPTIMIZATION HIRING STRATEGIES
	497.DATA SCIENCE
	498.EMPLOYING PYTHON FOR UNDERSTANDING DATA SCIENCE
<b>79.</b>	<b>ERNST &amp; YOUNG L.L.P, GURGAON</b>
	499.ENGAGEMENT TRACKER AUTOMATION
	500.ENGAGEMENT TRACKER DEVELOPMENT
	501.TRACKER DEVELOPMENT
<b>80.</b>	<b>GABRIEL INDIA LTD, GURGAON</b>
	502.STANDARD WROK CHARTS AND LAYOUTS
<b>81.</b>	<b>GENPACT, GURGAON</b>
	503.REGRESSION MODELING IN R
<b>82.</b>	<b>KPMG, GURGAON</b>
	504.ALL INDIA MANAGEMENT ASSOCIATION LOCAL MMANAGEMENT ASSOCIATION AWARDS EVALUATION; VIDEO SURVEILLANCE SYSTEM REQUEST FOR PROPOSAL FOR A1 A B CATEGORY RAILWAY STATIONS IN INDIA.
	505.INTELLECTUAL PROPERTY AND SALES EXCELLENCE
	506.INTELLECTUAL PROPERTY VALUATION TOOL
	507.PERFORMANCE IMPROVEMENT & ITS IMPLEMENTATION IN &DOUBLE;X&DOUBLE; (CLIENT IS REFERRED TO AS X BECAUSE OF THE NON - DISCLOSURE AGREEMENT SIGNED WITH KPMG)
	508.STRATEGY AND OPERATIONS IN MANAGEMENT CONSULTING
<b>83.</b>	<b>LEXINNOVA, GURGAON</b>
	509.LEXINSIGHT - ONLINE MARKETPLACE
	510.LEXINSIGHT
	511.PATENT LITIGATION SUPPORT AND IP SERVICES
<b>84.</b>	<b>MAHLE FILTERS INDIA LTD, GURGAON</b>
	512.BENCHMARKING OF COMPETITOR PRODUCTS

	513.COPQ REDUCTION AND OEE IMPROVEMENT
	514.DETAILED STUDY OF BURST PRESSURE TESTING MACHINE
	515.PU2 LINE SHIFTING;INVENTORY REDUCTION;NEW LEAK TESTING MACHINE
<b>85.</b>	<b>MEDIOLOGY SOFTWARE PVT. LTD, GURGAON</b>
	516.READWHERE.COM STORE REDESIGN
	517.READWHERE CONTENT MANAGEMENT SYSTEM
<b>86.</b>	<b>PLUSS ADVANCED TECHNOLOGIES PVT. LTD, GURGAON</b>
	518.PREPARATION AND OPTIMIZATION OF A FORM STABLE PHASE CHANGE MATERIAL (PCM) BASED ON EXPANDED VERMICULITE FOR ENERGY SAVING APPLICATIONS.
	519.PCM BASED SOLAR AIR DRYER.
<b>87.</b>	<b>SKODA AUTO INDIA PVT. LTD, GURGAON</b>
	520.SALES BUSINESS OF Å KODA AUTOMOBILES
	521.WORKSHOP BUSINESS ANALYSIS
<b>88.</b>	<b>SRF Ltd, GURGAON</b>
	522.PROCESS DEVELOPMENT AND SCALE-UP STUDIES OF A NEW PRODUCT
	523.R&D SCALE UP, PROCESS DESIGN AND MODELLING
	524.SCALE-UP STUDIES OF R&D STUDY OF TWO ONGOING PROJECTS (R&D SCALE UP, PROCESS DEVELOPMENT & MODELLING)
<b>89.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, GURGAON</b>
	525.DIGITAL MATURITY OF LARGE ENTERPRISES
	526.INDIA - MOBILE FIRST NATION
	527.INDIA FOR INVESTMENT
	528.OPPORTUNITIES FOR SMART CITIES
	529.POV ON PERFORMANCE OF MID-TIER SERVICE PROVIDERS, CLINICAL TRIALS PROVIDER PRODUCT ROADMAP/BOT SETUP, COMPETE ANALYSIS FOR AN ALM/PPM SOFTWARE PROVIDER, COMPETE ANALYSIS FOR APD SOFTWARE PROVIDER
<b>90.</b>	<b>ADAEQURE, HYDERABAD</b>
	530.ECOMMERCE PRODUCT
	531.MOVING DATABASE FROM STAGING SERVER TO PRODUCTION SERVER
<b>91.</b>	<b>AMAZON DEVELOPMENT CENTER, HYDERABAD</b>
	532.ADDING MULTI-CAPACITY COMPUTE CAPABILITY IN FLOW GRAPHS AND REMOVE DEPENDENCY ON VOLUME SEGMENTS.
	533.AMAZON FRESH
	534.BAD QUALITY DOCUMENT DETECTION.
	535.BUILDING OF DOCUMENT VERIFICATION SYSTEM FOR SHIP WITH AMAZON (SWA)
	536.CONFIGURATION OF TPS AND COOKIES
	537.GOLLUM DEPRECATION, CREATING BATCH MANIFEST GENERATION API AND DESIGNING DYNAMODB TO DATA WAREHOUSE DATAPIPELINE
	538.IMAGE CLASSIFICATION BASED ON TEMPLATE MATCHING
	539.INTER-SERVICE COMMUNICATION CHANNELS AND WORKFLOW AUTOMATION
	540.LAUNCH GTC DASHBOARD, CARRIER RESTRICTIONS ON GCPWEBSITE
	541.LOGMAGICK
	542.PUBLISHING SHIPMENT STATUS NOTIFICATIONS TO CUSTOMERS
	543.REDUCING TRANSACTIONS TO STS, FIXING DEPENDENCY ON GLCODE BUSINESS-TYPE MAPPING IN TCA, RE-DRIVING TFM MESSAGES
	544.SELLER DASHBOARD
	545.SLAM INTEGRATION WITH ATROPS
	546.SMART ADDRESS ASSISTANT
	547.STANDARDIZATIONS AND AUTOMATION OF MARKETPLACE CATEGORY EXPANSION
<b>92.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), HYDERABAD</b>
	548.EDITS AND CANCELLATIONS, AOV UNDERSTANDING- COMBOS STACKING,RESTAURANT CLOSURES AND ITEM LEVEL TIMINGS, PROCESS MANAGEMENT OF MRM (PROJECT MANAGEMENT)
	549.IMPROVEMENT OF RESTAURANT HEALTH INDEX AND REDUCING LOSS DUE TO ORDER CANCELLATION
<b>93.</b>	<b>ENDLESS ROBOTICS PVT. LTD, HYDERABAD</b>
	550.BUILDING 3D WORLDS USING UNREAL ENGINE
	551.IMPLEMENTATION OF CRM
	552.ROBOTIC MANIPULATORS AND ANDROID PROGRAMMING
<b>94.</b>	<b>GGK TECHNOLOGIES, HYDERABAD</b>
	553.APPLICATION DEVELOPMENT OF A BI TOOL AND HOSPITAL MANAGEMENT INFORMATION SYSTEMS
	554.ANGULAR 2 WITH SASS & MDL
	555.DATA SCIENCE POCS
	556.HIMS APPLICATION
	557.HOSTING A SCALABLE WEB APPLICATION ON CLOUD WITH ZERO DOWNTIME
	558.HUMAN RESOURCE MANAGEMENT SYSTEM

	559.REACTJS AND RUBY
	560.REMINDER APPLICATION DEVELOPMENT
	561.SEARCH AND RANK, CLINICAL NLP, AND RECOMMENDER SYSTEM POCS
<b>95.</b>	<b>IMI MOBILE, HYDERABAD</b>
	562.DATA AGGREGATION FOR CHATBOTS AND RESEARCH ON CLOUD PLATFORMS
	563.DATA ANALYTICS
	564.DATA VISUALIZATION, IMPROVEMENT OF EXISTING DATABASE, CREATING DATASETS FOR CHAT BOTS AND DIGITAL MARKETING
	565.DIGITAL MARKETING AND RESEARCH & DEVELOPMENT OF CHATBOTS ON MARKETING PLATFORM.
	566.INSIGHTS INTO WORK DONE IN IMMOBILE
	567.MANAGING ENTERPRISE CAMPAIGNS
	568.PREDICTIVE TEXTING AND DATA EXTRACTION
	569.PRODUCT MARKETING AT TEXTLOCAL
<b>96.</b>	<b>INDUSTRYARC, HYDERABAD</b>
	570.BUILDING INSULATION MATERIALS MARKET
	571.EXTENSIVE MARKET RESEARCH ANALYSIS ACROSS VARIOUS DOMAINS
	572.FILLING, CAPPING & SEALING EQUIPMENT MARKET
	573.GLOBAL EMOLLIENTS MARKET
	574.INBOUND SALES & MARKET RESEARCH FOR MARKET REPORTS
	575.MARKET RESEARCH
	576.MARKET RESEARCH AND ANALYTICS
	577.MARKET RESEARCH REPORT
	578.MARKET RESEARCH, ANALYTICS & CONSULTING
	579.PS2 - MARKET RESEARCH, ANALYTICS & CONSULTING @ INDUSTRYARC, HYDERABAD
	580.SYNDICATE REPORT
<b>97.</b>	<b>JDA SOFTWARE SOLUTIONSV, HYDERABAD</b>
	581.AUTOMATION
	582.CROSS-PLATFORM INSTALLER
	583.GENERATING FORECAST BY USING DEMAND WORKBENCH
	584.MIGRATION OF A PRODUCT PLATFORM FROM CLEARCASE TO GIT
	585.PRODUCT DEVELOPMENT FOR PROMOTIONS MANAGEMENT
	586.UI AUTOMATION
	587.UI AUTOMATION FOR WEB-APPLICATION
	588.UI AUTOMATION PLATFORM DEVELOPMENT
<b>98.</b>	<b>MARKET FORECAST, HYDERABAD</b>
	589.INDUSTRIAL RESEARCH ON COMPANIES IN HEALTHCARE, AGRICULTURE AND FOOD & BEVERAGES DOMAINS
	590.MARKET RESEARCH & CONSULTING OF THE GLOBAL HEALTHCARE AND AGRICULTURAL INDUSTRY
	591.MARKET RESEARCH & CONSULTING OF THE GLOBAL HEALTHCARE INDUSTRY
<b>99.</b>	<b>MORDOR INTELLIGENCE, HYDERABAD</b>
	592.GLOBAL CRANE MARKET
	593.MARKET ANALYSIS: HEALTHCARE DOMAIN AND SALES OUTBOUND
	594.MARKET RESEARCH
	595.MARKET RESEARCH QUALITATIVE AND QUANTITATIVE ANALYSIS
	596.MARKET RESEARCH AND ANALYSIS
	597.MARKET RESEARCH AND ANALYSIS - AUTOMOTIVE, AEROSPACE, DEFENCE AND FEED
	598.MARKETING RESEARCH AND ANALYSIS
	599.OUTBOUND PITCHING AND INBOUND SALES FOR MARKET RESEARCH REPORTS
	600.PREPARATION & PITCHING OF MARKET RESEARCH REPORTS TO POTENTIAL CLIENTS FROM ALL OVER THE WORLD (INCLUDING EXECUTIVES FROM FORTUNE500 COMPANIES) VIA PHONE OR EMAIL.
	601.QUALITATIVE AND QUANTITATIVE RESEARCH IN AGRICULTURE DOMAIN
	602.QUANTITATIVE AND QUALITATIVE ANALYSIS IN CHEMICAL & MATERIALS DOMAIN
	603.QUANTITATIVE AND QUALITATIVE RESEARCH IN CHEMICALS AND MATERIALS DOMAIN
	604.SEARCH ENGINE OPTIMIZATION, SALES PROMOTION AND MARKET RESEARCH ANALYSIS
<b>100.</b>	<b>MY SMART PRICE, HYDERABAD</b>
	605.MYSMARTPRICE DESKTOP APPLICATION
	606.PAGESPEED INSIGHTS, KEYWORD RANKING MAILER AND MUTUAL FUND COMPARISON.
<b>101.</b>	<b>NVIDIA GRAPHICS, HYDERABAD</b>
	607.ANDROID APPLICATION DEVELOPMENT
	608.AUXP DESIGN AND VERIFICATION
	609.IMPROVING THE STABILITY OF GAMESTREAM
	610.KERNEL I/O DRIVERS
	611.MISRA COMPLIANCE OF BOOTLOADER CODE
	612.VERIFICATION OF TEGRA CONTROLLERS

<b>102.</b>	<b>ORACLE INDIA PVT LTD, HYDERABAD</b>
	613.ACCESSING SERVICES THROUGH A CHATBOT FROM AN XMPP CLIENT
	614.AUTOMATION OF DOCUMENT-SET GENERATION USING ORACLE BUSINESS RULES AND VIB
	615.BUSINESS INTELLIGENCE TOOL - BUSINESS ACTIVITY MONITORING
	616.FILE BASED DATA IMPORT, HYBRID MOBILE APPLICATION, AUTOMATION
	617.FILE CONVERTER UTILITY
	618.FUSION SCM- ENHANCEMENT OF OTM DIAGNOSTIC FRAMEWORK
	619.HCM SPREADSHEET DATA LOADER AUTOMATION
	620.HUMAN CAPITAL MANAGEMENT DATA LOADER FILE GENERATION UTILITY
	621.HYBRID MOBILE APPLICATIONS & SOA AUTOMATION REPORTING TOOL
	622.MOBILE APPLICATION ( CREATE DYNAMIC GRAPHS) USING ORACLE MAF AND RESTFUL WEB SERVICES
	623.NOTIFYING ADF APPLICATIONS OF DATABASE CHANGES FAST AND LEAN USING DATABASE QUERY RESULT CHANGE NOTIFICATION.
	624.ORACLE COMMERCE CLOUD AND ENDPOINT DOCUMENTATION USING SWAGGER
	625.RELEASE JANGO
	626.UI DEVELOPMENT FOR SPREADSHEET DATA LOADER
	627.UNIT TESTING FOR HCM DATALOADER USING JUNIT FRAME WORK
<b>103.</b>	<b>PURPLE TALK, HYDERABAD</b>
	628.CREATING THE CLOUD-SERVER FOR A MESSENGER APP &APOS;PINGMATE&APOS;
	629.DEVELOPMENT OF WEEKLY STATUS MODULE (WSR) FOR UPSHOT
	630.NATURAL LANGUAGE PROCESSING AND ITS USAGE IN CHATBOTS
	631.UPSHOT AI REBRANDING
<b>104.</b>	<b>REPORTGARDEN TECHNOLOGIES PVT. LTD, HYDERABAD</b>
	632.IMPLEMENTATION OF FEATURES AND SERVICES TO ENHANCE THE USER EXPERIENCE
	633.MARKETING BY THE MEANS OF SOCIAL MEDIA AND CONTENT
	634.PERFORMANCE ANALYSIS OF OUTBOUND MARKET
	635.QUALITY ASSESSMENT AND SOFTWARE TESTING OF REPORTGARDEN APPLICATIONCUSTOM LOCALE AND DATE SUPPORT IN REPORTS
	636.REPRICING THE PRODUCT PLANS TO ACHIEVE OPTIMAL GROWTH
<b>105.</b>	<b>TATA MOTORS, JAMSHEDPUR</b>
	637.100% BILL OF MATERIALS COMPLIANCE TO DESIGN SPECIFICATION IN CAB AND COWL
	638.ACHIEVE WORLD CLASS QUALITY LEVEL 3 THROUGH SHORT LEAD TIME PRINCIPLE
	639.BENCHMARKING OF SIGNA TRUCKS
	640.DEPLOYMENT OF WCQ LEVEL 3 THROUGH CONTINUOUS IMPROVEMENT
	641.DIFTR METHODS IN TATA MOTORS
	642.MODIFICATIONS IN WIS FOR ACHIEVING WCQ LEVEL 3
	643.PRODUCTIVITY IMPROVEMENT IN CRANKSHAFT LINE
	644.PRODUCTIVITY IMPROVEMENT IN PRIMA TRIM LINE
	645.PRODUCTIVITY IMPROVEMENT OF CAB AND COWL WORKSHOP & PAINT SHOP
	646.STUDY AND ANALYZE PROCESSES FOR HEAVY CAB FITMENT LINE
	647.SUSTENANCE OF IMPLEMENTATION AND STANDARDIZATION
	648.TEARDOWN AND BENCHMARKING OF TATA SIGNA 49TON TRAILER AGAINST ASHOK LEYLAND TRAILER
<b>106.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), KOLKATA</b>
	649.PERFORMANCE ANALYSIS OF RESTAURANTS IN KOLKATA : ANALYZE THE RESTAURANTS METRICS AND CAKE DELIVERY INITIATION IN KOLKATA
	650.TO STUDY AND ANALYSE THE GAPS IN THE QUALITY OF SUPPLY (RESTAURANTS) AND HELP IN INITIATING STRATEGIC ROAD MAP FOR ACQUISITIONS AS WELL AS KEY ACCOUNT MANAGEMENT LEADING TO INCREASE IN ORDERS AND CREATING CUSTOMER DELIGHT FOR SWIGGY IN KOLKATA.
<b>107.</b>	<b>HEDGEQUANTS CAPITAL ADVISORY LLP, KOLKATA</b>
	651.DESIGN AND DEVELOPMENT OF A RISK ENGINE FOR LIVE STRATEGIES
	652.DESIGN AND DEVELOPMENT OF NLP SYSTEMS BASED ON SEC FILINGS BY FIRMS.
	653.END TO END ANALYZER TRADING FRAMEWORK3. MARKOWITZ MODEL OPTIMIZATION USING SEASONALITY PREDICTIONS FROM MACHINE LEARNING
	654.MEAN REVERSION TRADING SYSTEMS AND STRATEGIES
	655.RETRACEMENTS IN FUTURES MARKETS
	656.STUDY AND ANALYSIS OF GOOGLE TRENDS AS AN INDICATOR OF PRICE MOVEMENTS IN EQUITIES MARKETS
<b>108.</b>	<b>TATA MOTORS, LUCKNOW</b>
	657.DESIGN AND IMPLEMENTATION OF STANDARDIZATION ON AN ASSEMBLY LINE
	658.FITMENT ISSUE IN FUPD ASSEMBLY MOUNTING
	659.IMPLEMENTATION OF IMPROVEMENTS CAPTURED DURING PROCESS AUDITS
	660.IMPLEMENTATION OF JIDOKA AT TATA MOTORS, LUCKNOW.
	661.IMPLEMENTATION OF STANDARDIZED WORK ON TCF ASSEMBLY LINE 3
	662.IMPLEMENTATION OF STANDARDIZED WORK ON TCF LINE - 2

	663.IMPLEMENTATION OF STANDARDIZED WORK ON TCF LINE-1
	664.INVENTORY MANAGEMENT, DATA MANAGEMENT, RE-PPAP
	665.IPTV REDUCTION OF PRODUCT PARTS UNDER WARRANTY
	666.PLANT LAYOUT OPTIMIZATION FOR FINISHED GOODS STORAGE & MATERIAL FLOW PLANNING
	667.RECTIFYING THE DEFECTS AND IMPROVING THE QUALITY OF BUILD OF COMMERCIAL TRUCKS.
	668.SUPPLIER QUALITY IMPROVEMENT
	669.VENDOR CAPACITY ASSESSMENT AND KAIZEN FOR IMPROVED PRODUCTIVITY
	670.VENDOR CAPACITY ASSESSMENT AND KAIZEN FOR IMPROVED PRODUCTIVITY
<b>109.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
	671.ADDITION OF LIME IN BAYER PROCESS TO REDUCE SODA LOSS
	672.ANALYSE AIR QUALITY AND VELOCITY TO ENHANCE CONVECTIVE DRYER EFFICIENCY.
	673.SYNTHESISING ADMIXTURES TO ENHANCE PROPERTIES OF CEMENT.
<b>110.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), MUMBAI</b>
	674.ANALYSING BUSINESS OPPORTUNITIES AND DRIVING COMPANY GROWTH BY UNDERTAKING NEW INITIATIVES.
	675.INCREASING THE COMPLIANCE PERCENTAGE OF THE RESTAURANTS IN COLLABORATION WITH SWIGGY MUMBAI.
<b>111.</b>	<b>CENTURY RAYON, MUMBAI</b>
	676.DISPOSAL OF SOLID WASTE VISCOSE
	677.SYNTHESIS OF MICROCRYSTALLINE CELLULOSE
<b>112.</b>	<b>CREDIT SUISSE, MUMBAI</b>
	678.AUMTOMATION AND MODEL DEVELOPMENT
	679.BASEL III - CVA RWA
	680.COMPREHENSIVE RISK VALIDATION OF BOND FUTURES, EQUITY TOTAL RETURN OPTIONS AND EQUITY ASIAN OPTIONS PRICING MODELS
	681.COMPUTING COUNTERPARTY CREDIT RISK USING VALUE-AT-RISK (VAR) & MAINTENANCE AND ENHANCEMENT OF THE MANDATORY SENSITIVITIES FRAMEWORK
	682.DAILY MARKET RISK REPORTING OF PRIME SERIVES Â€ EMEA REGION
	683.ERM-SCENARIO PATH GENERATION AND SCENARIO MODELING
	684.ESTIMATING MARKET RISK IMPACT ON THE TRADING AND BANKING BOOKS IN A SEVERE FINANCIAL EVENT
	685.FIRM WIDE RISK ANALYSIS FOR VARIOUS SCENARIOS
	686.GOVERNANCE & REPORTING: GLOBAL MARKETS CONTROLS COMMITTEE REPORTING - IB RISK MITIGATION
	687.IMPACT ANALYSIS OF TRADE MIGRATIONS USING TECHNICAL ANALYSIS TOOLS
	688.IMPACT OF TRADE MIGRATIONS
	689.INDICATIVES GENERATOR, CVA PRICER FOR MULTIPLE SCENARIOS, MPOR METHODOLOGY FOR COLLATERAL HAIRCUTS
	690.INTEGRATED CAPITAL AND RISK ANALYSIS
	691.IRC METHODOLOGY
	692.LOSS GIVEN DEFAULT MODELLING
	693.MARKET LIQUIDITY & RISK MANAGEMENT
	694.MARKET RISK MANAGEMENT FOR EQUITY SCENARIOS
	695.MARKET RISK MANAGEMENT OF CASH, PRIME AND SMG CLUSTERS
	696.MARKET RISKS MODELS & CALCULATIONS DATA MANAGEMENT
	697.MEASURES OF RISK AND GREEK SENSITIVITIES
	698.MODEL
	699.MODEL VALIDATION-COMMODITIES CORRELATION RISK, BOND YIELD VEGA
	700.PRIME SERVICES DELTA1
	701.RISK CONTROL AND GREEK CALCULATION
	702.ROLE OF ECONOMIC RISK CAPITAL IN RISK MANAGEMENT
	703.SCENARIO DESIGN
	704.SCENARIO VAR
	705.SECURITIES LENDING BUSINESS
	706.SINGLE SECURITIES RESEARCH
	707.USE OF SCENARIOS FOR STRESS TESTING AND INTERNAL RISK REPORTING
	708.VALUE AT RISK ESTIMATION AND SENSITIVITY ANALYSIS FOR FOREIGN EXCHANGE RATES AND COMMODITIES
	709.VALUE AT RISK-SIGNIFICANCE IN MARKET RISK
	710.WORKING OF TIME SERIES REFERENCE DATA WITH REFERENCE TO RECUT PROCESS
	711.XVA RISK MANAGEMENT - CREDIT VALUATION ADJUSTMENTS, DEBT VALUATION ADJUSTMENTS, FUNDING VALUATION ADJUSTMENT
<b>113.</b>	<b>DBOI (DEUTSCHE BANK), MUMBAI</b>
	712.ANALYZING AND REPRICING THE TRADES GIVING VALUATION ERRORS WHILE FULL REVALUATION IN CCR AND REPORTING CREDIT EXPOSURE OF DB
	713.COUNTERPARTY CREDIT RATINGS

	714.CREDIT ANALYSIS
	715.CREDIT RATING OF FUNDS AND CORPORATES
	716.CREDIT RISK MANAGEMENT: CREDIT RATINGS AND RECENT TRENDS OF THE UTILITIES SECTOR.
	717.HISTORICAL SIMULATION FULL REVALUATION IN CCR AND REPORTING CREDIT EXPOSURE OF DB
	718.MARKET DATA AND EQUITY CLASS-SIGNOFF
	719.MARKET RISK CONTROL IN MRM MUMBAI, DBOI GS
	720.PRODUCT CONTROL, RATES FLOW
	721.PRODUCT CONTROL, RATES OFFICIAL P&L REPORTING
	722.PRODUCTION ORGANIZATION AND DAILY BASIS FUNCTIONALITY AS A PART OF THE PRODUCT CONTROL EMERGING MARKETS TEAM
	723.RATES PRODUCT CONTROL
<b>114.</b>	<b>DEVELOPMENT CONSULTANTS PVT. LTD. (DCPL), MUMBAI</b>
	724.PROJECT MANAGEMENT
	725.PROJECT MANAGEMENT OF ONGOING PROJECTS
	726.PROJECT MANAGEMENT AT DCPL
<b>115.</b>	<b>ERNST &amp; YOUNG L.L.P, MUMBAI</b>
	727.DESRIPTIVE ANALYTICS USING BUSINESS INTELLIGENCE TOOLS
<b>116.</b>	<b>GEOMETRIC LIMITED, MUMBAI</b>
	728.DEVELOPMENT AND IMPLEMENTATION RAY TAGGING ALGORITHM FOR FEATURE VOLUME COMPUTATION
	729.IMPROVEMENT IN EXISTING TIGHT BOX ALGORITHM
<b>117.</b>	<b>HENKEL, MUMBAI</b>
	730.PROJECT GANESHA - OPERATIONS
<b>118.</b>	<b>HERE MAPS, MUMBAI</b>
	731.AUTOMATION OF PROGRAMMING
	732.CONVERT PLACEPROTOS.PLACE TO PLACE.
	733.CUSTOMIZING ACTIVITI FOR PERFORMANCE OPTIMIZATION
	734.DEVELOP AN EMAIL TEMPLATE FOR INTEGRATION TEST RESULTS.
	735.DYNAMIC REPORTS
	736.EXTRACTION CODE GENERATOR
	737.FORWARD SYNC POI TO PLACE XML CONVERSION
	738.IDENTIFYING AND REPRESENTING VALIDATION ASSOCIATION RULES FOR MAP DATA
	739.LANE LAYER
	740.LOAD TESTING OF DI-SERVICE USING GATLING.
	741.MAPREDUCE JOB FOR TRANSFORMING POI XML TO PLACE XML
	742.NATURAL GUIDANCE USING IMAGE PROCESSING AND AUTOMATING THE NATURAL GUIDANCE TOOL.
	743.REPORTING TOOL
	744.SUPERSEDING WEBLOGIC IN APPTSTING (ODF)
	745.TESTCASE ASSERTION AUTOMATION USING PYTHON AND JAVA TO EASE WRITING OF TESTCASES AND DEPLOYMENT OF SERVICE ON CHICAGO SERVER.
	746.UNIT TESTING,INTEGRATION TESTING,UI
<b>119.</b>	<b>HOURLASS RESEARCH, MUMBAI</b>
	747.PATENT ANALYTICS
<b>120.</b>	<b>J.P. MORGAN CHASE, MUMBAI</b>
	748.ATHENA RATES MIGRATION PROJECT
	749.AUTOMATION IN BANKING
	750.AUTOMATION IN JP MORGAN
	751.AUTOMATION OF CFD TRADING PROCESS
	752.AUTOMATION OF DAILY REPORTS
	753.AUTOMATION OF FILES MADE THROUGH UDTs TO REDUCE DEPENDENCY ON OLD UDTs.
	754.AUTOMATION OF LOB PROCESSES
	755.AUTOMATION OF MANUAL EXTRACTION AND RECONCILIATION OF DETAILS FROM NON STANDARDIZED STATEMENTS
	756.AUTOMATION OF RECONCILLIATION PROCESS OF NON-STANDARDIZED BROKER STATEMENTS
	757.CONTINUOUS MONITORING FRAMEWORK FOR HIGH RISK MANUAL PROCESSES
	758.DATA-CAP PROJECT
	759.INVESTIGATION OF NON PERMITTED INVESTMENTS
	760.OPERATIONAL LINES OF DUTIES IN THE ORGANIZATION
	761.OPTIMIZATION AND AUTOMATION OF DAILY TASKS
	762.PROCESS AUTOMATION
	763.PROCESS AUTOMATION AND DATABASES CREATION
	764.PROGRAM GOVERNANCE OF ROBOTICS PROCESS AUTOMATION, PORTFOLIO RECONCILIATION



	765.PROJECT MANAGEMENT , ROBOTICS PROCESS AUTOMATION
	766.ROBOTICS
	767.ROBOTICS AND UNITY
	768.ROBOTICS AUTOMATION
	769.ROBOTICS PROCESS AUTOMATION
	770.ROBOTICS PROCESS AUTOMATION & CLIENT SERVICE PORTAL
	771.ROBOTICS PROCESS AUTOMATION (RPA)
	772.RPA AND DATACAP
	773.RPA PROJECT
	774.SUGGEST AND IMPLEMENT EXCEL AND ACESS BASED AUTOMATION TO STREAMLINE PROCESS AND INCREASE EFFICIENCY
	775.VP CHECKLIST USING ACCESS.
<b>121.</b>	<b>J.P. MORGAN SERVICES INDIA PVT. LTD, MUMBAI</b>
	776.ARTIFICIAL INTELLIGENCE
	777.AUGMENTED REALITY & VIRTUAL REALITY OPPORTUNITIES IN NORTH AMERICA
	778.CASH EQUITIES SPECIALIST SALES
	779.CTC CREDIT RISK MANAGEMENT
	780.DIAMOND PROJECT
	781.EFFECTIVE DISTRIBUTION POLICY IMPLEMENTATION
	782.EQUITY LINKED FINANCING
	783.EQUITY RESEARCH
	784.FINTECH OPPORTUNITIES IN ASIA
	785.HEATING, VENTILATION AND AIR CONDITIONING (HVAC) INDUSTRY OVERVIEW AND M&A IDEA PITCH
	786.INDEX STRUCTURING IN EQUITY AND DERIVATIVES MARKET
	787.INDIA EQUITY RESEARCH
	788.INTERNET OF THINGS
	789.LIABILITY MANAGEMENT IN MINING SECTOR
	790.M&A OPPORTUNITIES IN PERMIAN BASIN
	791.M&A OPPORTUNITY IN US AUTO DEALERSHIP SPACE
	792.OVERVIEW OF DEBT PURCHASING SECTOR IN EUROPE
	793.PRICING OF STRUCTURED PRODUCTS
	794.STRUCTURING AND PRODUCT DEVELOPMENT
	795.SUPPORTED THE EUROPEAN FOOD RETAIL AND US MID-CAP BANKS TEAM
<b>122.</b>	<b>KPMG, MUMBAI</b>
	796.FINANCIAL ANALYSIS OF INDIAN BANKS AND PROJECT LEAP
	797.MANAGEMENT CONSULTING PHARMACEUTICAL SECTOR
	798.MANAGEMENT CONSULTING, CIO ADVISORY
	799.SOFTWARE ASSET MANAGEMENT (SAM)
	800.SOURCING FOR COST OPTIMIZATION OF BANKING AND IT INDUSTRY
<b>123.</b>	<b>MORNINGSTAR, MUMBAI</b>
	801.AUTOMATE MORNINGSTAR INDEX PYTHON PLATFORM AND DESIGN OPTIMAL STRATEGIES FOR RESPONSIBLE INVESTING USING VARIOUS ESG FACTORS IN BOTH DEVELOPED AND DEVELOPING MARKETS
	802.DEVELOPMENT OF OPERATIONS DASHBOARD
	803.MARKET CLASSIFICATION OF 2016
	804.MORNINGSTAR INDEXES
	805.MORNINGSTAR INDEXES TECHNOLOGY OPERATIONS
<b>124.</b>	<b>MSCI, MUMBAI</b>
	806.INDEX RESEARCH - MSCI QER
	807.CREATING MARKET AND CUSTOM INDEXES
	808.MSCI QER: FACTOR AND THEMATIC INDEXES
<b>125.</b>	<b>NOMURA GLOBAL MARKETS &amp; GLOBAL FINANCE ANALYST DIVISION, MUMBAI</b>
	809.CREDIT STRUCTURING
	810.P&L REPORTING AT PRODUCT CONTROL DIVISION
	811.PRICING RATES AND EXOTIC STRUCTURES, AEJ
	812.PRIME BROKERAGE RISK MANAGEMENT AND FINANCING RISK MANAGEMENT
	813.PRODUCT CONTROL
<b>126.</b>	<b>NOMURA INFORMATION TECHNOLOGY DIVISION, MUMBAI</b>
	814.ENHANCEMENTS IN EMPLOYEE RECOGNITION APPLICATION (WEB APPLICATION).
<b>127.</b>	<b>ORACLE FINANCIAL SERVICES SOFTWARE LTD. ( OFSS), MUMBAI</b>
	815.DEVELOPMENT OF INSTALLER APPLICATION FOR THE ORACLE BANKING DIGITAL EXPERIENCE PLATFORM (OBDX)
	816.DEVELOPMENT OF PFM AND PAYMENTS MODULE FOR OBDX PLATFORM
	817.DYNAMIC REPORT GENERATION PROCESS AND FILE UPLOAD TEMPLATE PLUGIN
	818.INSTALLATION SOFTWARE FOR OBDX (ORACLE BANKING DIGITAL EXPERIENCE)
	819.OBIEE REPOSITORY AND DASHBOARD CREATION

	820.UI DEVELOPMENT FOR CREDIT MONITORING AND JDEVELOPER PLUG-IN FOR ADF TASKFLOW
<b>128.</b>	<b>SKODA AUTO INDIA PVT. LTD, MUMBAI</b>
	821.AFTER SALES BUSINESS ANALYTICS
	822.AFTERSALES BUSINESS ANALYTICS AND DEVELOPMENT OF VARIOUS KPI DASHBOARDS AND PROGRAMS TO AID THE SAME.
	823.ANALYSIS ON PRODUCT SEGMENTATION AND PRICING STRATEGIES.
	824.BACK ORDER ANALYSIS AND PARTS PRICING
	825.COMPIATION, ANALYSIS AND AUTOMATION OF GOODWILL REQUESTS
	826.COORDINATOR, EA 189 CAMPAIGN
	827.CORPORATE SALES
	828.DEALER CLAIM SETTLEMENT & DEALER SALES FUNNEL MONITORING
	829.DEALERSHIP SALES FUNNEL MONITORING
	830.NETWORK PLANNING, REBRANDING & ISO PROCESS
	831.PERFORMANCE TRACKING OF SKODA, AUTOMOBILE INDUSTRY AND CAR SEGMENTS IN THE MARKET.
	832.SALES FUNNEL MANAGEMENT AND STUDY OF DMS
	833.SALES FUNNEL MANAGEMENT, MARKET RESEARCH
	834.SKODA I-CONSULTANT CAMPAIGN
	835.STUDY OF DMS AND SALES FUNNEL MONITORING
	836.STUDY OF WHOLESALE PROCESS AND PREPARING WS PROCESS SOP
<b>129.</b>	<b>VMS (VAKIL MEHTA SETH) CONSULTANTS PRIVATE LIMITED, MUMBAI</b>
	837.ANALYSIS AND DESIGN OF MULTI-STORY RCC STRUCTURES
<b>130.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	838.DRYING OF VISCOSE STAPLE FIBER
<b>131.</b>	<b>TECHTURE STRUCTURES PVT LTD, NAGPUR</b>
	839.MODELLING OF ARCHITECTURAL ITEMS FOR BASE4, U.S.A., MODELLING OF BEEAH HEADQUARTERS, DUBAI
	840.MODELLING OF JEWEL, CHANGI AIRPORT, SINGAPORE
<b>132.</b>	<b>HINDALCO INNOVATION CENTRE - SEMIFAB TALOJA, NAVI MUMBAI</b>
	841.DESIGNING AN ALUMINIUM EXTRUSION USING FEM
	842.TO DO STATISTICAL ANALYSIS TO FIND THE FACTORS AFFECTING THE PROFILE OF A FLAT ROLLED ALUMINIUM PRODUCT.
<b>133.</b>	<b>CENTRAL ROAD RESEARCH INSTITUTE, NEW DELHI</b>
	843.PREDICTION OF PM2.5 ALONG AN URBAN HIGHWAY CORRIDOR USING CALINE4 MODEL
	844.TRANSIENT SEEPAGE AND SLOPE STABILITY ANALYSIS OF A RAINFALL INDUCED LANDSLIDE IN MAITHANA, UTTARAKHAND
<b>134.</b>	<b>NATIONAL INSTITUTE OF SCIENCE AND TECH. DEV. STUDIES (NISTADS), NEW DELHI</b>
	845.FUTURISTIC OPTIMIZATION OF SMART CITY MOBILITY
	846.SOCIAL NETWORK ANALYSIS OF RENEWABLE ENERGY RESEARCH IN INDIA
	847.TECHNOLOGY NAVIGATOR; RENEWABLE ENERGY IN BRICS
<b>135.</b>	<b>EDCIL INDIA LTD, NOIDA</b>
	848.PREPARATION OF DATABASE FOR COMPLETED CONSTRUCTION PROJECTS AND ASSISTANCE ON CURRENT PROJECT
	849.PREPARATION OF DATABASE FOR COMPLETED PROJECT (DESIGN), EMPANELMENT OF ARCHITECTS AND STUDY OF 20 PAST DPRS TO HIGHLIGHT AREAS OF IMPROVEMENT BY EDCIL
<b>136.</b>	<b>HCL TECHNOLOGIES, NOIDA</b>
	850.PMML DEVELOPMENT
<b>137.</b>	<b>NUCLEUS SOFTWARE EXPORT LTD, NOIDA</b>
	851.ARABIC LANGUAGE SUPPORT IN BIB PROJECT AS A PART OF MULTILINGUAL CAPABILITY EXTENSION
	852.CREATION OF MULTISELECT TAG
	853.ENTERPRISE CONTENT MANAGEMENT
	854.FINNONE LOAN MANAGEMENT SYSTEM
	855.FINNONE NEO LOAN MANAGEMENT SYSTEM
	856.PLATFORM FOR DYNAMIC DASHBOARD
	857.SIMULATORS FOR BANKING MESSAGES
	858.UI UPGRADATION
	859.UI UPGRADATION OF JQUERY AND BOOTSTRAP
<b>138.</b>	<b>TATA MOTORS, PANTNAGAR</b>
	860.ERGONOMIC ANALYSIS OF MANUFACTURING PROCESSES
	861.IMPLEMENTATION OF STANDARDISED WORK
	862.IMPLEMENTATION OF STANDARDIZATION WORK IN VEHICLE ASSEMBLY LINES AND OPTIMIZED MANPOWER CALCULATION
	863.OPTIMIZING PRODUCTION AND MANPOWER VOLUMES THEREBY GENERATING A PREDICTIVE MODEL CONSIDERING SHORT TERM BUSINESS CYCLES BY USING DATA ANALYTICS
	864.PRODUCTIVITY IMPROVEMENT & ERGONOMIC STUDY IN VEHICLE ASSEMBLY SHOP IN TCF-2A & TCF-2B

	865.PRODUCTIVITY IMPROVEMENT BY IMPLEMENTATION OF STANDARDIZED WORK IN MACHINE SHOP
	866.PRODUCTIVITY IMPROVEMENT BY IMPLEMENTING STANDARDIZED WORK
	867.PRODUCTIVITY IMPROVEMENT THROUGH IMPLEMENTATION OF MOST IN VEHICLE ASSEMBLY LINES AND OPTIMIZATION OF MANPOWER
	868.PRODUCTIVITY IMPROVEMENT THROUGH IMPLEMENTATION OF MOST IN VEHICLE ASSEMBLY LINES AND OPTIMIZED MANPOWER CALCULATION
	869.PRODUCTIVITY IMPROVEMENT THROUGH IMPLEMENTATION OF STANDARDIZED WORK IN VEHICLE ASSEMBLY LINES AND OPTIMIZATION OF MANPOWER
	870.REDUCTION IN THE FLUCTUATION OF PRODUCTION AND MAN POWER BY GENERATING A MODEL TO OPTIMIZE MAN POWER AND PRODUCTION QUALITY.
	871.STANDARDIZATION OF WORK
	872.STANDARIZATION OF PAINT SHOP
	873.TO STUDY THE PROCESS QUALITY, MINIMIZE FLUCTUATIONS IN 3M PARAMETER (MANUAL, MACHINE &METHOD) THEREBY RESULTING IN IMPROVEMENTS IN OVERALL PRODUCT QUALITY-REDUCTION IN OUTFLOW OF DEFECTS
<b>139.</b>	<b>RAJPUTANA CONSTRUCTIONS, PATIALA</b>
	874.RESTORATION OF QILA MUBARAK.
<b>140.</b>	<b>AVAYA INDIA PRIVATE LIMITED, PUNE</b>
	875.AVAYA AURA DEVICE SERVICES-UNIT TESTING
	876.CONFIGURING THE SBCE AND ENCODING AND DECODING THE USERS CALL DETAILS OVER VOIP. SMOOTH TRANSFER IF CALLS TRANSACTION USING COLLABORATIVE FILTERING TO DEAL WITH CALL&APOS;S
	877.PROBLEM.CHAT MESSENGER IN SBCE FOR ENTERPRISE
	878.DESIGN AND DEVELOPMENT OF ENCORE, CHATBOT AND SURVEY EDITOR
	879.GESTURE RECOGNITION TOOLKIT FOR AVAYA CLIENT SDK
	880.GOOGLE CLOUD MONITORING
	881.LOAD TESTING ON OCEANA
	882.PERFORMANCE TEST AUTOMATION OF AVAYA AURA SYSTEM MANAGER (SMGR) PRODUCT
	883.PERFORMANCE TESTING OF CO-BROWSE
	884.SIL ADMINISTRATION SYSTEM
	885.SKILLSMAP:RESOURCE
	886.VERSION AUTOMATION OF XML&APOS;S USING SAX PARSING
	887.VIDEO INTEGRATION INTO CONTACT CENTER USING WEBRTC
<b>141.</b>	<b>B.G.SHIRKE CONSTRUCTION TECHNOLOGY PVT. LTD, PUNE</b>
	888.DESIGN AND ANALYSIS OF PROPOSED ARAM NAGAR, ANDHERI, MUMBAI PROJECT.
	889.DESIGN AND STRUCTURAL ANALYSIS OF G+7 STOREY BUILDING AND SEWAGE TREATMENT PLANT
<b>142.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	890.LEAN MANUFACTURING
	891.MODELLING BHARAT 52 COMPONENTS IN SOLIDWORKS
<b>143.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), PUNE</b>
	892.ACQUISTION, UPSELLING OF RESTAURANTS (SALES DEPARTMENT), DATA ANALYSIS ON SLA COMPLIANCE FOR CLASSIFYING DELAYS USING SLA & CAPD DATA
	893.VENDOR RELATIONSHIP MANAGEMENT AND BUSINESS ANALYTICS TOOLS DEVELOPMENT USING EXCEL VBA
<b>144.</b>	<b>CADENCE DESIGN SYSTEMS INDIA PVT LTD, PUNE</b>
	894.BACK END VERIFICATION
	895.WAVEFORM-VIEWER
<b>145.</b>	<b>CREDIT SUISSE, PUNE</b>
	896.PRICE TESTING AND OPEN POSITION ADJUSTMENT
	897.BDC TRANSFORMATION STRATEGY
	898.BDC TRANSFORMATION STRATEGY
	899.BUSINESS DELIVERY CENTER TRANSFORMATION
	900.BUSINESS PERFORMANCE MANAGEMENT
	901.CREDIT DERIVATIVES VALUATION & PRICE TESTING
	902.CREDIT SCENARIO STRESS TESTING
	903.DATA SOURCING FOR OPERATIONAL RISK REPORTING IN BANKS
	904.EXPOSURE ANALYSIS AND VALIDATION
	905.FINANCE & HEADCOUNT MANAGEMENT
	906.FOBO RECONCILIATION
	907.INSIGHT C COUNTERPARTY CREDIT RISK EXPOSURE
	908.MARS GBM RECONCILIATION AND RISK FACTOR IDENTIFICATION
	909.PROFIT AND LOSS ATTRIBUTION AND RECONCILIATION
	910.PROFIT AND LOSS ATTRIBUTION OF SWAP OVER FUTURES.
	911.PROJECT P7 AND ITS VARIOUS COMPONENTS AND ROLLOUTS
	912.RFDAR COO FINANCE SUPPORT AND ITS VARIOUS COMPONENTS AND ROLLOUTS.
	913.RISK ANALYSIS & MONITORING
	914.RISK ANALYSIS AND MONITORING: LEVERAGE FOR SECURITIES FINANCIAL TRANSACTIONS

	915.SECURITY PRICING FOR HAIRCUT CALCULATION
	916.STRUCTURED TRADE REVIEW, AUTOMATION & REPORTING
	917.TRADE & SENSITIVITY DATA SYSTEM AND EXPOSURE ANALYSIS
	918.VALIDATION OF DAILY PNL OF INFLATION, PRIME-SERVICES & CVA/DVA.
	919.ZURICH DEPLOYMENT
<b>146.</b>	<b>HALLIBURTON TECHNOLOGIES, PUNE</b>
	920.COMPARATIVE STUDY OF STATIC AND DYNAMIC FLUID LOSS EQUIPMENT
	921.GRAVEL PACKING AND RESIN CONSOLIDATION FOR SAND CONTROL DURING OIL PRODUCTION.
<b>147.</b>	<b>IDEAS – SAS, PUNE</b>
	922.BANKING APPLICATION
	923.BUILDING A WEB APPLICATION SUING JAVA SERVLETS
	924.AUTOMATION OF CONFIGURATION MANAGEMENT TOOLS FOR G2 INTEGRATION
	925.TESTING ANALYTICAL SOFTWARE RELATED TO FUNCTION SPACE REVENUE MANAGEMENT RESEARCH
<b>148.</b>	<b>MAHLE BEHER INDIA PVT LTD, PUNE</b>
	926.AIR-QUALITY MANAGEMENT IN AUTOMOTIVE AIR-CONDITIONING IN INDIA
	927.DESIGN OF 16MM HEATER CORE
	928.IMPROVING DEMAND FORECAST ACCURACY
	929.MARKET RESEARCH FOR SHARE OF BUSINESS
	930.OPTIMIZATION OF CONDENSER DESIGN
	931.RAW MATERIAL LOT SIZING AND HANDLING UNIT QUANTITY PLANNING
<b>149.</b>	<b>MAHLE BEHR INDIA ENGINEERING SERVICES, PUNE</b>
	932.CO-ORDINATE POSITIONING
	933.DEVELOP STANDARD METHODOLOGY OF BIN SIZE & PACKAGING SELECTION FOR ASSEMBLY LINE
<b>150.</b>	<b>MAHLE FILTERS INDIA LTD, PUNE</b>
	934.MINIMIZATION OF CYCLE TIMES
	935.TOTAL PRODUCTIVE MAINTENANCE
	936.REDUCTION OF CUSTOMER PPM FROM 7875 TO 2000 BY NOV .2016
<b>151.</b>	<b>NATIONAL CHEMICAL LABORATORY, PUNE</b>
	937.SIMULATION OF CONTINUOUS DISTILLATION OF XYLENE/TOLUENE MIXTURE USING MATLABSIMULATION 938.OF CONTINUOUS DISTILLATION OF XYLENE/TOLUENE MIXTURE USING MATLAB
	939.QSPR MODELLING OF HEAT OF OF COMBUSTION OF ORGANIC MOLECULES USING PLS AND GENETIC PROGRAMMING
<b>152.</b>	<b>NVIDIA GRAPHICS, PUNE</b>
	940.ANGULARJS BASED GAMING AND SYSTEM APPLICATION DEVELOPMENT
	941.AUTOMATING RESOURCE MANAGER SANITY TRACKING AND STATIC CODE ANALYSIS USING COVERITY
	942.BUG FIXES & ENHANCEMENTS FOR THE NVIDIA UNIX DEVICE DRIVER
	943.COVERITY: AUTOMATION AND IMPROVEMENTS
	944.DEVELOPMENT OF LPWRTOOL.
	945.NVWATCH FOR RM DISPLAY
	946.PORTING OF NVAPI ON LINUX PLATFORM
	947.SIMULATION OF GPU ON VIRTUALISED PLATFORM
	948.VIDEO CODECS
<b>153.</b>	<b>ORACLE FINANCIAL SERVICES SOFTWARE LTD. ( OFSS), PUNE</b>
	949.OBP MODULE DEPENDENCY PARSER AND JAVA MESSAGING SERVICE
	950.PARTICIPATION IN OBP COLLECTIONS
<b>154.</b>	<b>REFLEXIS SYSTEMS INDIA PVT LTD, PUNE</b>
	951.CAB BOOKING AND SHARING + HIERARCHICAL DATABASE DESIGN
	952.DATA COMPARATOR
	953.DATA TRANSPORTER
	954.ETL VALIDATOR
	955.FILE COMPARISON
	956.HTML FOR DATA COMPARATOR AND DATA TRANSPORTER
	957.LEAVE REQUEST AND APPROVAL APPLICATION & AUTOMATION THROUGH SHELL SCRIPTING
	958.LOG ANALYZER
	959.QUERY RESULT TRANSPORTER
<b>155.</b>	<b>SOKRATI TECHNOLOGIES PVT. LTD, PUNE</b>
	960.CROSS-PLATFORM ADVERTISING AND INTEGRATION FOR E-COMMERCE CLIENTS
	961.DIGITAL ADVERTISING THROUGH VARIOUS CHANNELS(GOOGLE,FB,EBAY)
	962.DOUBLECLICK FOR PUBLISHERS
	963.LEAD GENERATION, MARKET RESEARCH, SOCIAL MEDIA MANAGEMENT
	964.OUTBOUND BUSINESS DEVELOPMENT
<b>156.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD, PUNE</b>

	965.2.5D ONLINE SECURITY GAME
	966.BCT & CA POLICY EDITOR
	967.CENTRALIZED APPLICATION PERFORMANCE MANAGEMENT AND MONITORING FOR BIG DATA SYSTEMS.
	968.CUSTOMER MIGRATION TOOL
	969.IPSOPS MALWARE REPLICATION SYSTEM(IMR). AUTOMATED FRAMEWORK TO PROVIDE IPS AND AV COVERAGE DETAILS ON ANY GIVEN SAMPLE AND URL AFTER DYNAMIC ANALYSIS.
<b>157.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	970.CENTRAL PURCHASE- SOURCING & PROCUREMENT
	971.COST SAVING IN THE SOURCING OF FASTENERS
	972.DESIGN AND DEVELOPMENT OF A PNEUMATIC TEST RIG FOR TESTING OF CROSSTUBE.
	973.DIGITAL MARKETING OF IEDGE LEARNING
	974.FABRICATION PART PROCESS ANALYSIS FOR POKA YOKE IMPLEMENTATION
	975.IMPLEMENTATION OF CR TO HR IN MEMBER SUPPORT
	976.REDUCTION IN REWORK OF BEAM ASSEMBLY
	977.SOURCING FOR CHAKAN PROJECT
	978.TO SUGGEST WAYS TO ELIMINATE OR REDUCE THE MUDAS TO INCREASE THE LIFT AXLE PRODUCTION FROM 23 KITS PER FIXTURE TO 35 KITS PER FIXTURE. - TO REDUCE THE MANUFACTURING COST BY ELIMINATING THE MUDA THROUGH VSM FOR XYZ KITTING AND PACKAGING.
<b>158.</b>	<b>TATA CHEMICAL INNOVATION CENTER, PUNE</b>
	979.BIODEGRADATION OF POLYURETHANE
	980.DEVELOPMENT OF COST EFFECTIVE MEMBRANE ELECTRODE ASSEMBLY FOR FUEL CELL APPLICATIONS
	981.EFFECTS OF THERMODYNAMIC AND KINETIC REGIMES ON CRYSTAL PROPERTIES
<b>159.</b>	<b>TATA MOTORS, PUNE</b>
	982.BLACK BELT PROJECT: REDUCE THE 6M IPTV FOR DEFECTIVE POWER STEERING GEAR BOX OF INDICA & INDIGO FROM 5.6 IPTV TO 1.2 IPTV
	983.COSTING OF ADHOC POS AND SUPPLIER QUALITY
	984.DEVELOPING SUPPLIER RATING SYSTEM FOR AUTOMOTIVE INDUSTRY
	985.ELIMINATION OF DEFECTS IN BLOWER CONTROL MODULE OF HVAC SYSTEM IN ORDER TO REDUCE THE 986.DIRECT RUN RATE OF SAFARI-STORME AND HEXA LINE
	987.IMPLEMENTATION OF STANDARDIZED WORK AT DD1 REAR AXLE SHOP AND H3 CHASSIS LINE
	988.IMPLEMENTATION OF TMWS IN MAVAL FOUNDRY TATA MOTORS
	987.IMPLEMENTATION OF TMWS IN MAVAL SGI FOUNDRY
	988.IMPLEMENTATION OF TMWS MOSTÁ@ IN MAVAL SGI FOUNDRY
	989.IMPLEMENTATION OF TORQUE MONITRING SYSTEM
	990.JOB SKILL MAPPING
	991.LEARNING AND DEVELOPMENT OF ENGINEERING DESIGN CHANGES AND EXECUTION TO ACHIEVE QUALITY IMPROVEMENT AND COST REDUCTION
	992.PREPARING TMPS SHOP FLOOR STANDARDS MANUAL
	993.TORQUE MONITORING SYSTEM,PICK TO LIGHT SYSTEM
<b>160.</b>	<b>TATA TECHNOLOGIES, PUNE</b>
	994.ANALYSIS OF GOOSENECK HINGE AND FOU BAR HINGE
	995.CAD TEMPLATE FOR BIW
	996.DESIGN OF AUTOMATIC BATTERY SWAPING MECHANISM
	997.PRE-PROCESSOR GUI DEVELOPMENT FOR OPENFOAM
<b>161.</b>	<b>KLIENTAS, TRIVANDRUM</b>
	998.EVENT MANAGEMENT AND MARKETING OF LEGAL COURSES FOR LAW PUNDIT
<b>162.</b>	<b>LEAP CONSULTING, TRIVANDRUM</b>
	999.ERP IMPLEMENTATION
	1000.MARKET RESEARCH IN TO ANALYZE THE PRESENT TRENDS AND ESTIMATE THE EFFECT THE FUTURE SALES



### Alumni Affairs Division

#### Distinguished Alumnus Award 2016:

"BITS Pilani Distinguished Alumnus Award" in 2016 to the following alumni:

Prof. Alok Choudhary	John G. Searle Professor, Dept. of Electrical Engineering & Computer Science, Northwestern University - for <b>Academic Teaching and/or Research</b>
Prof. G Ravindra Kumar	Senior Professor, Tata Institute of Fundamental Research (TIFR), Mumbai - for <b>Academic Teaching and/or Research</b>
Mr. N S Parthasarathy	Co-Founder, President & COO, Mindtree Limited -for <b>Entrepreneurship</b>
Mr. Mathew Cherian	CEO, HelpAge India - for <b>Social Entrepreneurship</b>

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research.

#### BITSians Day:

The third edition of 'BITSians Day' was celebrated on 5<sup>th</sup> of August, 2016.

#### Alumni Cell Pilani Campus

During the year, a number of Alumni related events were organized including Silver Jubilee Reunion, Golden Jubilee Reunion, Farewell parties to passing out graduates and scholarships to the students through BITSAA international. Brief about some of the prominent activities organized during the year are as under:

#### Visit by 1970-75 Batch Alumni

The 1970-75 Batch was on campus to celebrate their Reunion for four days – 29<sup>th</sup> Jan to 1<sup>st</sup> February 2016. There were more than 100 extra ordinary achievers in different walks of life who had come with their families to rejoice their past memories. This batch runs BITS 75 Charitable Trust and organize Gurudakshina program every year. This year, 7<sup>th</sup> edition of the program was organized at BITS Pilani –Pilani campus on 30 January 2016. This is special program in which they honored their 'Gurus' namely Prof HL Kundu, Prof PD Chaturvedi, Prof RP Arora, Prof HS Moondra, Prof JL Arora and Prof MS Radhakrishnan. During these four days, the batch visited different places such as museum, saraswati temple, library, institute research labs etc.

#### Golden Jubilee Reunion of 1961-1966 Batch

After 50 years of graduation, around 30 Alumni along with their family members from the Batch of 1961-66 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 21<sup>st</sup> March to 23<sup>rd</sup> March 2016. The batch interacted with senior students on specific topics like Opportunities in Various Sectors in the Industry. Economy and met faculty members. A presentation by students was made on student events/activities e.g. Junoon, Oasis, Interface, BITSMUN, Apogee, BOSM, Dramas and Publication etc. During interaction with senior faculty members Prof A K Sarkar, Director Pilani campus welcomed them and shared infrastructural developmental plans about the campus. Batch also showed his deep desire to be connected with the alma mater in possible ways.

#### Reunion of 1966-1971 Pharmacy Batch

After 50 years of their admission to BITS, around 105 Alumni along with their family members from the Batch of 1966-71 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 14<sup>th</sup> Oct to 16<sup>th</sup> Oct. 2016.

The batch organized a dinner with all the department faculty members and discussed the various avenues of collaborating. The batch organized interaction cum felicitation function, during this function Prof Souvik Bhattacharyya, the Vice-Chancellor, BITS Pilani shared his thoughts about future thrust areas and shared infrastructural developmental plans of the university. He also proposed a road map to get connected with Alumni.

#### Silver Jubilee Reunion of 1987-1991 Batch

After 25 years of graduation, around 210 Alumni from the Batch of 1986-90 came back to their Alma Mater between 4<sup>th</sup> and 6<sup>th</sup> November 2016 to celebrate their Silver Jubilee Reunion. More than 100 of them came from abroad – USA, UK, Canada, Hong Kong, Singapore, Malaysia etc. The batch includes senior IAS officers, Educationists, entrepreneurs, venture capitalists, investment bankers, NGO Founders, researchers etc. Other than taking part in multiple events such as career mentoring session for students they also met with faculty members. They felicitated the faculty members who had taught them in a special function and expressed their gratitude to their Alma mater. In the felicitation function on Friday 4<sup>th</sup> November Prof A K Sarkar, Director Pilani campus welcomed them and shared about future developmental plans about the institute. Prof Souvik

Bhattacharyya the Vice Chancellor, BITS Pilani admired them about their success in different fields and wished them a happy and fulfilling life in all sphere – be it professional, personal or spiritual. He also shared a road map and restructuring of the Alumni division for better connectivity with Alumni and sought their contribution in many ways for the growth of the institute. Batch has showed his deep desire to contribute to Alma mater for its growth. Prof Hari Om Bansal, FIC, BITS Alumni Affairs Cell, Pilani campus thanked them for all their support and having come for the Silver Jubilee Reunion

A campus walk, visit to Museum/Shivganga and grand Music Night is also organized during this visit.

#### **Reunion of 1966-1971 Batch Alumni**

After 50 years of their admission to BITS, around 100 Alumni along with their family members from the Batch of 1966-71 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 12<sup>th</sup> Nov to 13<sup>th</sup> Oct. 2016.

During interaction Prof Souvik Bhattacharyya, the Vice-Chancellor, BITS Pilani shared his thoughts on the various possibilities to work together for the development of the institute. He also discussed his ideas of better connectivity with Alumni and their role towards institute growth.

#### **Farewell to Graduating Students**

A high tea party was organized to bid a farewell to graduating students of class 2015. Farewell to graduating students of 2013-17 batch was held at the VFAST lawns on Wednesday, 27<sup>th</sup> April 2016. Speaking on the occasion, Director, Prof A K Sarkar, congratulated the students and called upon them to make their family and their institution proud. He also said that they should remember all those who helped them to reach the present level. Prof Surekha Bhanot, Prof KN Sachdev, Prof Shibashish and Prof H O Bansal shared their thoughts for the benefit of graduating students.

Similar farewell graduating party was organized on 26th November 2016 to bid farewell to graduating students of class 2017. Around 500 students of 2013-17 batch were present in the function. Vice Chancellor, Prof Souvik Bhattacharyya, Director, Prof A K Sarkar, and Prof Sibashish shared their thoughts with students and wish the student very best in their future endeavors and advised the students to be connected with their alma mater.

Several students spoke on these farewells and conveyed their gratitude to the Institute and the teachers for helping them learn and grow. They said that staying at BITS and facing the challenges has made them better human beings while building leadership qualities.

**Embryo & On-campus Lectures:** BITS Alumni Affairs Cell organized various lectures in collaboration with CMN (Campus Mentoring Network) and BITSAA International.

#### **Alumni Cell, K K Birla GOA Campus**

##### **Embryo & On-campus Lectures:**

Alumni Affairs Division of BITS Pilani K K Birla Goa Campus has organized 9 Embryo & On-campus talks from January – December, 2016. Details are as follows:

<b>S.No</b>	<b>Date</b>	<b>Title Of The Talk</b>	<b>Speaker's Name</b>
1	15 <sup>th</sup> Jan, 2016	BITS To Norway-Opportunities For Higher Studies In Chemical Engineering	Mr. Shareq Mohammed Nazir
2	2 <sup>nd</sup> Feb, 2016	Social Pressure	Mrs. Natalie Edwards
3	16 <sup>th</sup> Feb, 2016	CAT Champs	Abhishek Desai Siddharth Sridhar Arpit Sarda Kunal Konde
4	17 <sup>th</sup> Feb, 2016	Diversity And Demographics Of Distant Rock Worlds	Dr. Leslie Rodgers
5	7 <sup>th</sup> Mar, 2016	Entrepreneurship	Mr. Kartik Hosanagar
6	9 <sup>th</sup> Mar, 2016	CS: Competitive Coding & Machine Learning	Mr. Hari Prasad
7	15 <sup>th</sup> Mar, 2016	Why The Money That You Think Might Keep You Happy, Won't!!	Mr. Nishant Suri
8	8 <sup>th</sup> Apr, 2016	Opportunities In Aeronautical Industry - A Journey From Bits To HAL	Mr. Sanket Shah
9	9 <sup>th</sup> Apr, 2016	How To Build Awesome Things - An Intro To Product Management	Mr. Dalan Mendonca
10	6 <sup>th</sup> Aug, 2016	Distinguished Alumnus Awardee: N S Parthasarathy's Talk on Entrepreneurship	Mr. N S Parthasarathy



S.No	Date	Title Of The Talk	Speaker's Name
11	28 <sup>th</sup> Aug, 2016	Alumni summit 2.0	Mr. Kartik Aneja Mr. Rishabh Goel Mr. Ankit Taparia Mr. Sanchit Sethi Mr. Prakhar Bindal Mr. Bhaskar E V Mr. Nikhil Tavora
12	29 <sup>th</sup> Aug, 2016	How to finance your masters abroad?	Mr. Rishabh Goel
13	9 <sup>th</sup> Sep, 2016	Stand Out, Win Trust and Gain Credibility	Mr. Mark Bowden
14	10 <sup>th</sup> Sep, 2016	The Deoliwallahs	Mr. Dilip D'Souza
15	30 <sup>th</sup> Sep, 2016	Anchors weigh in on cytoplasmic dynein regulation	Ms. Vaishnavi Ananthanarayanan
16	6 <sup>th</sup> Oct, 2016	GRE Champs	Anmol Sahoo Priyanshi Vadalia Dharinee Bhandari and Rishabh Sethunathan
17	12 <sup>th</sup> Oct, 2016	BITS2MS/PhD	Vikas Goel Danish Khan Siddharth Gupta

#### Alumni Visits:

Name of the Alumnus	Batch	Profession	Purpose of visit
Aswini Kaarthik	1997	Analyst in Data Management Space	Personal Visit
Kaarthik Sivakumar	1993	Engineer	Personal Visit
Aditya Kambhampati	2004	Data Analytics Consultant	Campus Visit
R Ramanujam	1978	Theoretical Computer Scientist	Lectures
Vivek Ladha	1978	Industrialist	Casual
Smarajit Dey	1974	Executive/Academic	Campus Visit
Vaishnavi Ananthanarayanan	2004	Research Scientist	Delivering Lecture
Rishabh Goel	2009	Associate Relationship Manager	Alumni Summit 2.0 & Talk
Prakhar Bindal	2006	Entrepreneur	Alumni Summit 2.0
Sanchit Sethi	2008	Entrepreneur	
Nikhil Tavora	2010	Entrepreneur	
Ankit Taparia	2005	Entrepreneur	
Kartik Aneja	2008	Entrepreneur	
Bhaskar E V	1997	IRS	
Nithin Sebastian	2005	Pursuing MBA	Campus Visit
N S Parthasarathy	1978	Entrepreneur	DAA
Sanjay Singhai	1977	Founder & CEO	Exploring opportunities

Suresh Narasimhan	1979	Telecommunication executive	General
Sangamitra Kundu Narasimhan	1982	Museum Management	Travel
Sanket B shah	2005	Flight Test Engineer	Students Interaction
Vishrut Shukla	2005	Senior Product Manager	DAA meeting
Aditham G P	2006	IT	Campus Interviews

#### **Alumni Summit:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, BITS Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 28th of August, 2016. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Seven speakers who were invited for BITS Alumni Summit 2.0 are:

- Mr. Kartik Aneja, CEO and Co-Founder at Nayi Disha Studios.
- Mr. Rishabh Goel, Associate Relationship Manager at Prodigy Finance
- Mr. Ankit Taparia, Co-Founder of Teramatrix Technologies
- Mr. Sanchit Sethi, CEO and Founder of StayUncle
- Mr. Prakhar Bindal, CEO & founder of NameCart(formerly Axiom)
- Mr. Bhaskar E V, Under-Secretary to Ministry of Finance, Government of India
- Mr. Nikhil Tavora, Former Match Coordinator & Operations Executive at FC Goa

#### **Prof. Suresh Ramasamy Memorial Award 2016:**

The project idea 'Cosmic Ray Flux Measurement & Analysis' done by the students: Sanket Deshpande, Lucky Kapoor, Pankaj Tiple and Vibhav Joshi was selected for Prof. Suresh Ramaswamy Memorial Award 2016-17.

#### **Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani and Dhruv Shekhawat as recognition to their research work.

#### **Regular Activities:**

Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

## RESEARCH PROJECT GRANTS

### Pilani Campus

#### Ongoing projects:

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
1.	DBT project, "RNAi screening to study the role of <i>Aedes</i> ATP-binding cassette (ABC) transporters in immunity against blood-borne pathogens"	Sanjeev Kumar / Lalita Gupta)	DBT, Govt. of India, New Delhi	46.32 Lakhs, 3 Years
2.	Studying the impact of Anopheles gut microbial environment on immunity and Plasmodium development	Lalita Gupta	Indian Council of Medical Research (ICMR), Govt. of India	30 Lakh, 3 Years
3.	Mutant-p53 gain-of-function: its role in regulating lncRNA expression and associated chemoresistance in human cancer cells	Rajdeep Chowdhury/Sudeshna Mukherjee	DBT, Govt. of India, New Delhi	25 Lakhs; 3 Years
4.	Characterization of major components of (FeS) Cluster assembly pathway in <i>Plasmodium vivax</i>	Shilpi Garg	Department of Science and Technology (DST), Govt. of India, New Delhi	23 lakhs: 3 years
5.	Modeling immune response to Salmonella during typhoid	Sandhya Marathe	DST-SERB, Govt. of India, New Delhi	43.52 lakhs, 3 years
6.	Mechanistic studies on extracellular biosynthesis of metal nanoparticles	Jitendra Panwar	Department of Science & Technology (DST), Govt. of India, New Delhi	45.5 Lakh; 3 Years
7.	Investigation of the Effect of Carbonation on the Properties of Concrete	Dipendu Bhunia, S B Singh	DST, New Delhi	34.0
8.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	S. B. Singh	DST, New Delhi	25.93
9.	Impact of PMGSY Roads on Accessibility in Rural Areas	A. K. Sarkar, Ajit Pratap Singh	NRRDA, Ministry of Rural Development, Gov. of India	22.63
10.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99
11.	Strengthening of Local Soil using Fly Ash	Kamalesh Kumar	UGC, New Delhi	2.0
12.	Roof top Rainwater Harvesting for Safe, Potable and Healthy Drinking Water and Ground Water Replenishment for BITS Pilani, Pilani campus	Rajiv Gupta	BITS, Pilani, CoE-WWE	91.00
13.	Zinc Recovery from Industrial Waste using Bioleaching.	Suresh Gupta (CHE), S.K. verma (BIO), Anupam Singhal	BITS Pilani CoE-WWE	48.00
14.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal, S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
15.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman, Dipendu Bhunia	DST, New Delhi	28.38
16.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00
17.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
18.	Development of an Automated Non-	Amit Goel	Additional	9.45

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
	Destructive Test system for Condition Evaluation of Pavements		competitive Research Grant, BITS Pilani	
19.	Road Safety Audit for Ringus-Sikar stretch of NH-11 (43.887 km)	Prof. A K Sarkar, Prof. A. P. Singh, Dr. Amit Goel	National Highway Authority of India	18.11 lacs
20.	Zinc Recovery from Industrial Waste using Bioleaching	Dr. Suresh Gupta	BITS	48.00
21.	Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr Srinivas Appari	BITS	2.0
22.	Bioremediation of waste automobile engine oil	Dr Amit Jain	BITS	2.0
23.	DST-FIST Programme	Department of Chemistry	DST	87.00
24.	Development and Applications of Density Functional Reactivity Theory Based Modeling Techniques to Understand the Energetics of Reactive and Non-reactive Interactions	Prof. Ram Kinkar Roy	DST-SERB	31.55
25.	Investigation of unfolding and refolding of proteins by gemini surfactants with varying spacer groups using fluorescence spectroscopy and small-angle neutron scattering techniques	Prof. Subit Kumar Saha	UGC-DAE Consortium for Scientific Research, Mumbai Centre, BARC, Mumbai	6.63
26.	Effect of Chemical Nature of Spacer group, Headgroups and Counterions of Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarins in Aqueous Micelles	Prof. Subit Kumar Saha	Council of Scientific and Industrial Research, New Delhi	15.9
27.	Design and Synthesis of Multi-functional Smart Low Molecular Weight Gelators (LMWGs)	Rajeev Sakhuja	BITS Pilani, ACRG	4.5
28.	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for photocatalysis and electrocatalysis	Surojit Pande	BITS additional seed grant	6.95
29.	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	Indresh Kumar	ACRG, BITS	8.2
30.	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Application in Bio-imaging	Inamur R. Laskar	DST, SERB	35.9
31.	Competition between charge transfer and proton transfer processes in some newly designed schiff bases: Spectroscopic and theoretical investigation in condensed phase	Shamik Chakraborty	DST, SERB, Fast Track	24.98
32.	Study of Native Chemical Ligation at Tryptophan and Aspergine sites and its application in Peptide Synthesis.	Kiran Bajaj	DST, SERB, Fast Track	31.30
33.	Sustainable Catalytic Route to C <sub>4</sub> -C <sub>6</sub> Carboxylic acids/ hydroxyacids by Carbonylation of Polyols	Bibhas R. Sarkar	BITS Pilani, ACRG	5.5
34.	Novel synthesis of anti-HIV agents	Dr. Dalip Kumar and Dr. Anil Kumar	Ranbaxy	27.50
35.	The area of establishment of one of India's earliest Software-Defined Networking Research Testbed at the Centre for Excellence in SDN	Prof. Rahul Banerjee	Cisco Inc., San Francisco	1 Crore
36.	Soft Computing Framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting Fluoride as major parameter - Water Technology Initiatives (WTI -2016)	Dr. K K Gupta	DST	38.7 Lakhs, Two years.

37.	Experimental Investigation on CO2 Based Refrigeration System in Trans-critical Cycle	Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta	Department of Science and Technology (DST)	27.5 Lakhs
38.	Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST), 2012-17		Department of Science and Technology (DST)	Rs. 163 Lakhs
39.	Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions	Dr. Ravi Inder Singh	Department of Science and Technology (DST)	30.13 Lakhs
40.	Modelling immune response to salmonella during typhoid	PI: Amol M. Marathe	Department of Science and Technology (DST)	Rs. 43.52 Lakhs
41.	Developing suitable pedagogical methods for various classes (Energy Technology) intellectual calibers and research in e-learning - Anchored by IIT Kharagpur	Dr. ManojSoni	MHRD	Rs. 7 Lakhs
42.	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000
43.	Understanding Impact of Social Learns Forms on Environmentally Sustainable Behavior in Children	Dr Leela Rani	ICSSR	5,00,000
44.	Development and validation of service quality index in Indian Telecom & Banking Sector	Dr. Arun Agaria & Dr. Jyoti	ICSSR	4,00,000
45.	Modelling of Employee Performance and Human Capital, Assessment and Optimization of Productivity of Indian Manufacturing Industry	Dr. Udayan Chanda & Dr. Praveen Goyal	ICSSR	5,00,000
46.	Campus Sustainability in India: Issues and Challenges (A Study of Select Institutions of Higher Education)	Dr. Neetu Yadav	BITS Pilani RIG grant	2,00,000
47.	Empirical investigation of management practices in the Indian manufacturing sector	Dr. Jayshree Mahesh	BITS Pilani RIG grant	2,00,000
48.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd.	18.46
49.	To study the protective effects of Herbal formulation against Myocardial Ischemia-reperfusion injury in rats	Dr.Rajeev Taliyan & Dr. Sunil K Dubey	Industry-Etica- Clinpharm	4.0
50.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes	Dr. Anil Gaikwad	DST-SERB	39.66
51.	Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr. Anil Gaikwad	CSIR	32.85
52.	Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population	Dr. Atish T. Paul	DST-SYST	12.19
53.	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr. Atish T. Paul	DST SERB	27.30
54.	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	Additional Competitive Grant (BITS-Pilani)	9.9
55.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.2
56.	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of	Dr. Anupama Mittal	DST-SERB	26.90

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
	diabetes			
57.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
58.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45
59.	Rural women empowerment and sustainable growth MNIT , Jaipur , Monica Sharma	Sangeeta Sharma	DST	30 Lakhs
60.	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems.	Dr. D. D. Pant	DST Major Project	Rs. 53.01
61.	Detection of contaminants in water using functional ultrathin films (Sub Project of Rain Water Harvesting Prof Rajiv Gupta)	Dr. Raj Kumar Gupta (Co-PI) PI:Prof Rajiv Gupta	Waste Water Energy Programme of BITS Pilani	Rs 9.32 (Total Project fund:Rs 91 lacs)
62.	The study of post-reionization HI distribution using the redshifted 21-cm signal and Ly-alpha forest towards understanding cosmic acceleration	Dr. Tapomoy Guha Sarkar	DST fast track	Rs 10.38
63.	Study of laser interaction with atomic clusters and preformed plasmas	Dr. Amol Holkundkar	DST Fast Track (ongoing)	Rs. 15
64.	Preparation and Characterization Thin films of electrochromic polymer and fabrication of smart pixel display	Dr S. Sindhu	CSIR	Rs.14.1
65.	Thermodynamics studies on force induced unzipping DNA in crowded environment	Dr. Navin Singh	DST Major	Rs. 18.64
66.	Theoretical Study of Electron impact double ionization of atoms and molecules	Dr. R. Choubisa	DST	22.63

#### Projects sanctioned

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1.	Conjunctive use of rainwater and Groundwater to provide safe drinking water with intervention of Advanced Technology	Rajiv Gupta	DST, New Delhi	126.43(DST) 77.70 (Coll.)
2.	Development of Low carbon ternary cement for durable and sustainable concrete	Bahurudeen A	Additional competitive Research Grant, BITS Pilani	9.25
3.	"Assessment of pozzolanic performance of sugarcane bagasse ash from different disposal sites	Bahurudeen A	BITS Research Initiation Grant	2.0
4.	"Development of Freight Generation Model in Urban Areas: A Case study of Jaipur metropolitan Region"	Prasanta Kumar Sahu	BITS Research Initiation Grant	2.0
5.	"Use of copper slag as aggregate replacement in asphalt pavements"	Nikhil Saboo	BITS Research Initiation Grant	2.0
6.	"Modeling Pedestrian Flow Using a Continuum Model"	Durgesh Vikram	BITS Research Initiation Grant	2.0
7.	"Experimental investigation on Structural Performance of RC Frame with Deep Beams under Gravity loading"	G. Muthukumar	BITS Research Initiation Grant	2.0
8.	"Development of Geopolymer Mortar Using mustard husk Briquette Ash"	Vishakha V Sakhare	BITS Research Initiation Grant	2.0
9.	Investigating the role of Aryl	Uma Dubey	Department of	7.432 Lakhs;

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
	hydrocarbon receptors in mediating the anticancer properties associated to camel milk		Science & Technology (DST), Rajasthan	Duration: 3 years.
10.	Design and development of a novel biomass stove for cooking application	Dr Pratik N Sheth	BITS	9.00
11.	Non linear modeling and simulation of chemical processes	Dr Ajaya Kumar Pani	BITS	2
12.	Experimental studies on a bench-scale cold-flow FCC unit	Dr Priya C Sande	BITS	2
13.	Hydrogen Production from Ethanol by Low Temperature Reforming Methods Using Modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr Banasri Roy	DST	19.27
14.	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C-H functionalization reactions	Prof. Anil Kumar	DST-SERB	33.0
15.	Modeling and Analysis of the Dynamics of Diabetes Mellitus in Indian Population and Control Measures	Dr. Padma Murli	CSIR	Rs. 1790000.00, 3years
16.	Study of observational constraints on dark energy models of Universe using COSMOMC in a HPC system	Dr. Suresh Kumar	SERB-DST	Rs. 2629027.00, 3 years
17.	Earthquake Modelling from GPS Observations in Northwest Himalaya	Dr. Sumanta Pasari	BITS Pilani	Rs. 200000.00, May 2016-September 2017
18.	Joint indo-German Experience Lab	Prof. K. S. Sangwan	DAAD: JINGEL	Euro 346954, 2016-19
19.	Design of healthcare supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan	Prof. Srikanta Routroy	Department of Science and Technology (DST) Rajasthan	Rs. 5.88 Lakhs, 2016-19
20.	Development and validation of control oriented model for unbalanced rotating systems with soft suspensions	Dr.Sandip Dhar	RIG	Rs. 2 Lakhs, 2016-17
21.	Development and validation of a Finite Volume Method based flow solver for the compressible two-phase flows with phase change	Dr.Shyam S. Yadav	RIG	Rs. 1 Lakh, 2016-17
22.	A preliminary study on developing and investigating tungsten inert gas (TIG) welding process for producing free form metallic parts	Dr.Prateek Kala	RIG	Rs. 2 Lakhs, 2016-17
23.	Design and fabrication of a test rig to experimentally investigate propulsive characterisation of a wiggling elastic flagella	Dr. J. S. Rahore	RIG	Rs. 1 Lakh, 2016-17
24.	Electrical and thermal characterisation of nano-composites	Dr. SachinU	RIG	Rs. 1 Lakh, 2016-17
25.	Technology Intervention for Disabled and Elderly (TIDE) program: Design and Development of a Power Assistive Hybrid e- Trike for Differently Abled Person in Rural and Urban Regions of India, In collaboration with CEERI Pilan	Dr. Sachin U Belgamwar	Department of Science and Technology (DST)	Rs. 80 Lakhs, 2016-2018
26.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd	18.46
27.	Exploring the synergism of PPAR-Y agonist and HDAC inhibitor for reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment".	Dr.Rajeev Taliyan & Dr.Deepak Chitkara (Co-PI)	DST-Nanomission	34.0

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
28.	To Study the Protective Effects of Herbal formulation against Myocardial Ischemia- reperfusion Injury in Rats	Dr. Rajeev Taliyan & Dr. Sunil Kumar Dubey	Etica Clin Pharm	4.00
29.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
30.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45
31.	Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells	Dr. Aniruddha Roy	DST-SERB	33.86
32.	Fund for Improvement of S&T Infrastructure in Higher Educational Institutes (FIST)	Dr. Anshuman Dalvi	DST	135.00
33.	Fellowship to First Degree and Higher Degree Students of Department	Dr. Anshuman Dalvi	Sir Ratan Tata Trust	12.65
34.	EXAFS Investigations on Polymer nanocomposites for conductivity-structure correlation	Dr. Amol R. Holkundkar	DAE CRS	11
35.	Investigations on Li+ ion conducting glass-ceramics containing NASICON structured nano crystallites	Dr. J.N. Bandyopadhyay	DST SERB	40
36.	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	Dr. M. Mishra	DST	19.7
37.	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	Dr. R. Choubisa	DST	19.1
38.	Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	Dr. Anshuman Dalvi	DST	16.11
39.	Theoretical Study of Electron impact double ionization of atoms and molecules	Dr. Anshuman Dalvi	DST	22.63

**Projects completed**

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
1.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99
2.	Design, synthesis and validation of a dehydration stress responsive promoter in plants	Sandhya Mehrotra	University Grants Commission (UGC)	12.88 Lakhs Duration: 3 Years (2013-2016)
3.	Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis	Jitendra Panwar	University Grant Commission (UGC)	15.05800 Lakh; Duration: 3 Years (2013-2016)
4.	Molecular Characterization of Anopheles stephensi gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens	Sanjeev Kumar	(DST), Govt. of India, New Delhi	47.18 Lakhs; Duration: 3.5 Years (2012-2016)
5.	Identification of potential molecular inhibitors of Fatty acid synthase (FASN) at the enzyme activity and gene expression level	P R Deepa	DBT-COE R&D	33.67 Lakhs
6.	Characterization of Isoprenoid biosynthetic pathway enzymes from Plasmodium vivax	Vishal Saxena	University Grants Commission	7.88 lakhs Duration: 3 years (2013-2016)
7.	Role of Hippo Signaling Pathway Components in Autophagy Regulation in Hepatocellular Carcinoma	Rajdeep Chowdhury	DST-SERB, Govt. of India, New Delhi	24 Lakhs; Duration: 3 Years (2013-2016)



8.	A mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma	Sudeshna Mukherjee	DST FAST Track (Young Scientist)	17 Lakhs, Duration: 3 Years (2013-16)
9.	Removal of Heavy Metals from Industrial Wastewater using Metallic Nanoparticles as Adsorbents	Dr Suresh Gupta	DST	21.47
10.	Evaluation and Enhancement of Foam Stability of Ethanol based Aqueous Foam using Commercial Surfactant Sodium Lauryl Sulfate	Dr Pradipta Chattopadhyay	DST	25.0
11.	Production of hydrogen-rich fuel gas from Jatropha residue cake	Dr Pratik N Sheth	DST	27.06
12.	Recirculating fluidized bed for chemical looping	Dr Raman Sharma	BITS	2.0
13.	Design of Synthetically Tunable Azino-fused Chromene Conjugates as Potential Organogelators	Rajeev Sakhuja	DST-SERB	24.7
14.	Synthesis, characterization and application of novel ionic liquid supported metal complexes	Bharti Khungar	UGC	13.4
15.	Synthesis and Characterization of (Metal Oxide) <sub>core</sub> - Metal <sub>shell</sub> Nanoparticles in Quantum Dot Region and Their Application in Electrocatalysis	Surojit Pande	DST-SERB	24.93
16.	Synthesis, Metallochemistry and Reactivities of D-Glucose derived Glycoconjugates	Ajay K. Sah	UGC	9.13
17.	Exploration of Novel Ionic Liquid Supported Sulfonyl Reagents for Organic Synthesis	Anil Kumar	CSIR	16.65
18.	Synthesis of Novel N, O, S Containing Heterocycles and Evaluation of Their Anticancer Activities	Dalip Kumar	DBT	25.50
19.	Design and Synthesis of Porphyrin-based Photosensitizers as Anticancer Agents	Dalip Kumar	DST-JSPS S&T Programme	4.21
20.	Impact Assessment Study of Pradhan Mantri Gram Sadak Yojana (PMGSY) including Gender	Choudhary Sanjiv	funded by NRRDA, MoRD	4.92
21.	Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia	Nandigama, Sailaja	BITS RIG Project	1.00
22.	Dark Energy Modeling of Cosmic Acceleration with Observational Constraints in Einstein Gravity and Modified Theories	Dr. Suresh Kumar	DST	14.16
23.	Characterization of surface errors in machining of thin-walled curved geometries	Dr. T. C. Bera	DST	26.13
24.	Indo-German automotive life cycle engineering	Prof. K. S. Sangwan	DAAD	Euro 94423
25.	Development and validation of sustainability measurement framework for manufacturing industries	Prof. A. K. Digalwar	UGC	3.22
26.	Development of drivers, barriers and key performance indicators for implementation of green manufacturing in Indian micro, small and medium ceramic enterprises	Prof. K. S. Sangwan	UGC	9.90
27.	Design of supplier development implementation framework for Indian manufacturing industries	Prof. Srikanta Routroy	UGC	9.10

28.	Development and CFD modelling of ash cooler of circulating fluidized bed boilers	Dr. Ravi Inder Singh	RIG	2 Lakhs.
29.	Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment	Prof.B. K. Rout	Ministry of Information and Technology, (MIT)	45.00
30.	International malarial research consortium for the development of novel classes of antimalarials (BT/IN/ CANADA / 22/ AM/ 2009) (Indo-Canadian DBT Project)	Prof. R. Mahesh	DBT	21.86
31.	Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	Dr.Rajeev Taliyan	DST-SERB	26.98
32.	Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF-kB through AT1 or AT2 receptor in Type II diabetic nephropathy	Dr. Anil Gaikwad	SERB	19.41
33.	Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions	Dr. Anil Gaikwad	UGC	13.43
34.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal	BITS Pilani	2.0
35.	Nano-carriers for co-delivery of small molecules and oligonucleotides.	Dr. Deepak Chitkara	BITS-Pilani	2.0
36.	Development and Evaluation of Lipopolymeric Micelles For Drug Delivery	Dr. Anupama Mittal	BITS-Pilani	2.0
37.	Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Pilani	2.0
38.	Steady state measurements of Fluorescent molecules in restricted environments	Dr. D. D. Pant	UGC Major Project	Rs. 11.63
39.	Investigations on Quark-Gluon Plasma through quarkonia suppression in QCD matter.	Dr. Madhukar Mishra	DST	Rs. 11.40
40.	A multiple-scattering computing platform for nanomaterials	Dr. Rakesh Choubisa (Coordinator: Dr. D. Sebillieu, CNRS (France))	Marie Curie International Research Staff Exchange Scheme (IRSES) of the European Commission (EC) (7 <sup>th</sup> Framework Programme (FP-7))	€25,200
41.	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Method	Dr. Niladri Sarkar	BITS-PILANI- SEED GRANT SCHEME	R. 5.2

#### KK Birla Goa Campus:

#### Ongoing Sponsored Research Projects

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
1.	Synthesis of metal-organic-porous material based efficient chiral	Dr. Mainak Banerjee (PI) Co investigator:	CSIR	[22,25,580]	3 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
	heterogenous catalysts by post synthetic modification and their applications in asymmetric reactions	Dr. Rahul Banerjee (NCL, Pune) 02(0075)/12/EM-II			
2.	An Investigation on Derivatives of meso Tetrathienylporphyrin as dye sensitized Solar cells	Dr. P Bhavana (PI) 02(0076)/12/EMR-II	CSIR	[17,11,080]	3 years
3.	Protein-ranking and novel intervention strategies against mycobacterium tuberculosis using graph theory and bioinformatics resources	Dr Veeky Baths (PI) Dr. Utpal Roy (Co-PI) SR/FT/LS-83/2012	DST-FT	[8,60,000]	3 years
4.	Photoluminescence Studies on Undoped and Transition Metal Doped ZnO Nanoparticles	Dr. Teny Theresa John (PI) SR/FTP/PS-51/2009	DST-FT	[22,34,000]	3 years
5.	Probing New Physics at high energy colliders	Dr. Prasanta Das (PI) 03(1244)/12/EMR-II	CSIR	[15,66,800]	3 years
6.	Neutron stars as a source of potential continuous gravitational wave emitter	Dr. Tarun Kumar Jha (PI) Dr. S. K. Sahay (Co-PI) 2013/37P/5/BRNS	BRNS	[17,00,000]	3 years
7.	Development and characterization of nanomaterials for biosensors and biocatalysis	Dr. N. N. Ghosh (PI) Prof. Sunil Bhand (Co-PI) Dr. C. K. Mitra (Co-PI) UK counterpart Prof. Paul Antony Milner, University of Leeds INT/DST/INT/UK/P-41/2012	UKIERI-DST	[26,32,000]	2 years
8.	Role of environmental toxin in kidney related diseases in Canacona Taluk, Goa	Dr. Anasuya Ganguly (PI) Dr. M. Srikanth (Co-PI) Dr. J. P. Tiwari (Co-PI) GMC, Goa 27(0284)/13/EMR-II	CSIR	[11,99,400]	3 years
9.	Cloning and characterization of the promoters of Staphylococcus aureus Temperate bacteriophage, $\phi$ 11	Dr. Malabika Biswas (PI) 2013/37B19/BRNS	BRNS	[23,99,719]	3 years
10.	Analysis of metabolically active bacterial species in anaerobic digesters	Dr. M. Srikanth (PI) 37(1555)/12/EMR-II	CSIR	[21,10,800]	3 years
11.	Purification and characterization of a promising antifungal peptide (with special reference to Candida albicans and Cryptococcus neoformans) produced by a Wild-type Bacillus sp. and cloning of its structural gene	Dr. Utpal Roy (PI) Coinvestigator: Prof. Dibakar Chakrabarthy SB/SO/HS/015/2013	DST	[10,00,000]	2 years
12.	Studies in neighborhood magic graphs	Dr. Tarkeswar Singh (PI) SR/S4/MS:734/11	DST (Major)	[12,69,360]	3 years
13.	Identification and characterization of abiotic stress responsive With No Lysine (WNL) kinase in rice (Oryza sativa L.)	Dr. Kundan Kumar (PI) SB/FT/LS-312/2012	DST-FT	[22,65,000]	3 years
14.	Magnetotransport in magnetic tunnel junctions	Dr. Ram Shankar Patel (PI) SR/NM/NS-1002/2010(G)	DST	[52,65,000]	3 years
15.	Mining closure, economic disruption and local level sustainability: A case study of Goa, India	Dr. A K Mishra (PI) 02/15/2014-15/RPR Co Directors: Dr. R. P. Pradhan Dr. Debashish Patnaik Dr. Kotha Mahendra	ICSSR	[9,00,000]	2 years
16.	Alternative splicing in signal transduction and disease: A genome wide approach	Dr. Indrani Talukdar (PI) SB/YS/LS-60/2013	DST-FT	[20,00,000]	3 years
17.	Searching for new physics in B-meson decay	Dr. Chandradew Sharma (PI)	BRNS	[19,74,500]	3 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
		Principal collaborator: Dr. Rahul Sinha 2013/37P/34/BRNS			
18.	Preparation of Magnetically Separable, Mesoporous TiO <sub>2</sub> Catalyst and Study of their Catalytic Properties	Dr. N.N. Ghosh (PI) Coinvestigator: Dr. Mainak Banerjee 02(0147)/13/EMR-II	CSIR	[19,04,800]	3 years
19.	Experimental investigations of rotational moulding process using nano-scale fumed silica composites	Dr. Sachin D Waigaonkar (PI) SR/FTP/ETA-61/2012	DST-FT	[15,84,000]	3 years
20.	Improving the energy efficiency of solar cells by spin caloritronics	Dr. Ethirajulu S. Kannan (PI) SR/FTP/PS-138/2012	DST-FT	[22,08,000]	3 years
21.	Development of efficient bioleaching process for the metal recovery from spent catalysts	Dr. S. S. Baral (PI) Dr. P. Venkateswara Rao (Co-PI) BT/PR6362/GBD/27/408/2012	DBT	[17,62,600]	3 years
22.	Nonadiabatic molecular processes on threefold electronic degeneracies	Dr. Tanmoy Mondal (PI) DST/INSPIRE Faculty Award /2013	DST- Inspire	[35,00,000]	5 years
23.	Development of polymer-ferrite (and/or graphene) nanocomposites having high thermal stability and microwave absorption property for Radar Absorbing Coating Application	Dr. N.N. Ghosh (PI) ERIP/ER/1305004/M/01/1523	DRDO	[14,59,000]	3 years
24.	Regulation of hypothalamic gonadotropin releasing hormone expression by putrescine in female rats	Dr. Arnab Banerjee (PI) SB/YS/LS-216/2013	SERC, New Delhi	[22,24,000]	3 years
25.	Development of $\beta, \beta'$ -edge fused $\pi$ -elongated donor-acceptor porphyrin possessing Near-IR optical spectra	Dr. Subhadeep Banerjee (PI) SB/FT/CS-085/2013	DST-FT	[22,60,000]	3 years
26.	Flow investigation through uED-milled metallic micro channels	Dr. G. Karthikeyan (PI) SB/FTP/ETA-0081/2013	DST-FT	[21,21,000]	3 years
27.	Cross Cultural Communication – An empirical analysis of cross cultural communication variables in Indian industries leading towards developing appropriate strategies for multi-cultural workplaces and academia	Dr. Basavadatta Mitra (PI) F.5-303/2013/(HRP)	UGC	[6,50,600]	3 years
28.	Study on EMT regulation through TGF $\beta$ /SMADs in gall bladder disease	Dr. Vijayashree Nayak (PI) Coinvestigator Dr. Utpal Roy Dr. Rajani Gaiind VMMC & Safdarjung Hospital, Delhi SB/SO/BB-0103/2013	SERB	[37,90,000]	3 years
29.	Microbial Diversity and Biotechnological Potentials of selected polar microorganisms	Mrs. Purnima Singh (PI) Mentor: Dr. Utpal Roy SR/WOS-A/LS-419/2013	DST- WOS	[2,07,9194]	3 years
30.	Investigations on microstructures of hard-soft ferrite nanocomposites and influence of microstructures on their properties	Dr. N.N. Ghosh (PI) Co investigator: Dr. P. Parameswaran CSR/Accts/2014-15/671	UGC-DAE	[2,63,400]	3 years
31.	Gheolocial Dynamic of poymer layered silicate/graphene nano-composites	Dr. Asima Shaukat 2014 DST/INSPIRE Faculty Award	DST- Inspire	[35,00,000]	5 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
32.	Chalcogen containing azomethine macrocycles and bicycles: synthesis, characterization, metal complexes and theoretical investigations of nature of intramolecular interactions between divalent chalcogen and nitrogen atoms	Dr. Arunashree Panda (PI) Mentor: Dr. R. N. Behera SR/WOS-A/CS-04/2014 (G)	DST WOS	[17,10,000]	3 years
33.	Addressing challenges in application development for heterogenous computing platform for speedup and power efficiency	Prof. Santonu Sarkar (PI) SB/S3/EECE/0170/2014	DST	[37,55,775]	3 years
34.	Studies on anticoagulant platelet aggregation inhibitors from Indian cobra and viper venoms	Dr. Dibakar Chackrabarty (PI) Coinvestigator: Dr. Angshuman Sarkar Dr. Veeky Baths BT/PR5713/BRB/10/1112 /2012	DBT	[36,54,400]	3 years
35.	Empowered septic tank as decentralised wastewater treatment system	Dr. M. Srikanth (PI) BIRAC/GC/0068/02/13-RTTC	BIRAC	[67,00,000]	2 years
36.	Development of a field portable devise for the analysis of environmental contaminants in water	Prof. Sunil Bhand (PI) Coinvestigator: Prof A P Koley Mr Gautam Bacher PCs: Dr. V K Suri Dr. R. Balasubramaniam Shivam Mishra Ashwin Rathod (ALL from Precision Engineering division, BARC, Mumbai) 36(2)/14/25/2014-BRNS	BRNS	[24,13,800]	3 years
37.	Study and analysis of fluid dynamics and heat transfer characteristics in circulating fluidized bed heat exchanger with novel designs of distributor plates	Dr. Ranjit S Patil (PI) SB/FTP/ETA-0007/2014	SERB-Fast Track	[27,66,000]	3 years
38.	Home automation and smart wheel chair based on electroencephalography (EEG) signals produced in the brain	Dr Veeky Baths Coinvestigator Prof Bharat Deshpande SR/CSRI/50/2014	CSRI, DST	[38,95,600]	3 years
39.	Structure and energetic of C7H2 and C9H2 Isomers:Quantam Chemical studies	Dr. Venkateswan S.Thimmakonda (PI) SERB/F/3698/2015-16	SERB, New Delhi	[23,23,000]	3 years
40.	Studies of the effects of quinacrine (QC) on regulation of Rho like small- GTPase and apoptosis in human lung and breast cancer cell lines cultured in vitro	Dr. Angshuman Sarkar (PI) Coinvestigator: Dr. Indrani Talukdar 6242-P59/RGCB/PMD/DBT/AN SR/2015	DBT	[23,55,000]	3 years
41.	Lanthanide doped hydroxyapatite based nano-materials for theranostics applications: Sensing, Imaging, and Therapeutics	Dr. Meenal Kowshik (PI) Co-Investigator Prof. Sutapa Roy Ramanan Dr. Geeta Varier SR/NM/NS-1354/2014	DST	[39,64,771]	3 years
42.	Synthesis of hydroxyapatite based biocompatible functional magnetic nanoparticles and Investigation of its interaction with biomolecules	Prof. Sutapa Roy Ramanan (PI) Co-Investigator Prof. Meenal Kowshik UDCSR/MUM/AO/CRS-	UGC-DAE Consortium for Scientific research	[2,70,484]	3 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
		M-222/2016			
43.	Observational signals of quantum gravity in CMB	Dr. Kinjal Banerjee (PI) YSS/2015/000274	Start up research grant, SERB	[3,18,528]	3 years
44.	Novel micro biosensor device for heavy metal analysis in vegetables	Prof. Sunil Bhand (PI) Coinvestigator: Mr. Gautam Bacher Principal Collaborator: Mr. Vishal Dhamgaye (RRCAT, Indore) Dr. G. S. Lodha (RRCAT, Indore) CSR-IC-BL-40/CRS-137-2014-15/1233	RRCAT, Indore and UGC DAE consortium Indore	[1,00,000]	2 years
45.	Simulation of simultaneous rock fractures at multiple scales	Dr. Gaurav Singh Co investigator: Prof. Quansheng Liu, Wuhan University China 14/22/2015-Met.IV	Ministry of Mines	[30,00,000]	3 years
46.	FPGA Based Fuzzy Logic Picomotor Controller for Laser Beam Pointing Stability Correction	Dr. A. Amalin Prince (PI) 39/26/2015-BRNS/39004	Plasma and Fusion Research Committee, under DAE-BRNS,	[24,46,000]	2 years
47.	Agenda 2020: India's Maritime Infrastructure, Governance & Naval Diplomacy	Dr. R. P. Pradhan (PI) Co investigator: Prof. Geetha Reddy Anant. Osmania University, Hyderabad Prof. W. Lawrence S. Prabhakar, Madras Christian college, Chennai Mr. Dilip Mehrotra, Secretary, IOMOU, Goa RESPRO/G.-18/2015-16/ICSSR/RPS	ICSSR	[15,00,000]	2 years
48.	Screening, isolation and identification of novel antimicrobial compounds from potential mangroves of Goa	Dr. Kundan Kumar (PI) Coinvestigator: Prof Utpal Roy 38(1416)/16/EMR-II	CSIR	[20,00,000]	3 years
49.	Chlorine Resistant Nano Enhanced Polymer Blend Membranes	Dr. Jegatha Nambi Krishnan (PI) ECR/2015/000014	SERB-Start-up Research Grant	[31,74,281]	3 years
50.	Studies on the gene regulation involved in the lytic-lysogenic switch in staphylococcus aureus temperate bactriophage phil1	Dr. Malabika Biswas (PI) EMR/2015/002229	SERB	[20,46,453]	3 years
51.	Secure vehicular communication and routing in future intelligent transportation systems (ITS)	Dr. Debasis Das (PI) ECR/2015/000256	SERB Early career research award	[19,81,100]	3 years
52.	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	Dr P.Bhavana (PI) EMR/2016/002367	SERB	[28,22,820]	3 years
53.	A Comprehensive study on mechanochemical sp <sup>2</sup> C-H bond activation in five-membered	Dr. Mainak Banerjee (PI) EMR/2016/002253	SERB	[30,57,560]	3 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
	heteroaromatics in a Ball- Mill: Can 1st row transition elements be a potential replacement of late transitional elements a question to investigate				
<b>DEPARTMENTAL PROJECTS K.K. Birla Goa Campus</b>					
54.	Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Department of Mechanical Engineering SR/FST/ETII-005/2011	DST	40,00,000 (DST) 40,00,000(BITS)	5 years
55.	Fund for improvement of S&T Infrastructure in Higher Educational Institutions (FIST)	Department of Chemistry SR/FST/CSI-011/2011	DST	38,50,000 (DST) 38,50,000 (BITS)	5 years
56.	Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Department of Electrical and Electronics/Instrumentation SR/FST/ETI-315/2012	DST	18,00,000 (DST) 18,00,000 (BITS)	5 years
57.	Fund for improvement of S&T Infrastructure in Higher Educational Institutions (FIST)	Department of Chemical Engineering SR/FST/ETI-347/2013	DST	31,00,000 (DST) 31,00,000 (BITS)	5 years
58.	Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Department of Mathematics SR/FST/MSI-092/2013	DST	18,75,000(DST) 18,75,000 (BITS)	5 years
<b>INDUSTRIAL PROJECTS – ONGOING: K.K. Birla Goa Campus</b>					
59.	Experimental and simulation studies on coke mitigation in petroleum refinery systems	Prof. Srinivas Krishnaswami (PI) Co-investigator: Prof K. N. Ponnani CHT/SAC/895	Centre for High Technology (CHT)	[1,32,97,000]	3 years
60.	Design and development of condition based monitoring of pipelines using wireless sensor network	Prof. K.R. Anupama (PI) Co investigator: Dr. Lucy Gudino Dr. Neena Goveas GAIL/NOID/14151/5900000077	GAIL	[95,87,678]	2 years
61.	A cost-effective approach of making software dependable	Prof Santanu Sarkar (PI) Order No. 4501567645	Accenture	[15,00,000]	2 years
62.	Development of sensing systems for residual pesticide and harmful chemical detection in fruits and vegetables	Prof Sunil Bhand (PI) RD TT/MUM/HEALTH/CfDoACCD/ NM/db/2016-17 CADC Kolkata (Partner) Jadavpur University Kolkata (Partner)	R D Tata Trust	BITS share [53,20,000] [Total cost Rs. 212 lakhs]	2 years
63.	Onsite electrochemical wastewater treatment and recycling technology	Dr. M Srikanth (PI)	Bill & Melinda Gates Foundation (through Caltech)	\$ 42759 (29 lakhs)	2 years
64.	Analytics Sensor Test-Kit for advanced process control	Dr Srikanth Mutnuri (PI) Dr Nitin Sharma Investment ID: OPP1164132 Cranfield University Collaborator as lead	Bill and Melinda Gates Foundation	[\$135000] [84,00,000]	2 years
65.	Bio- Sensory Computing for Detection of Pesticide in Tea.	Prof. Sunil Bhand (PI) CDAC Kolkata(Partner) TRA, Jorhat (Partner) DR-22(5)/XIIPlan Project/Bio-sensor/2015	Tea Board, India	[5,50,000] Total project cost [38,00,000]	3 months
66.	Seawater desalination using liquefied natural gas (LNG) refrigeration	Prof. K. Srinivas (PI) Co investigator: Prof. K. Ponnani	GAIL	[3,82,21,000]	3 years

S.No	Title of the project	Name of Principal Investigator & Co-investigator(s) Project Number	Funding Agency	Sanctioned amount of the project (Rs)	Duration
		GAIL/NOIDA/R&D/BITS-GOA-LNG/2012/01			
67.	Roll on Roll off payload design	Dr. PM Singru P14-060 dated 29/09/2014	Lockheed Martin USA	[15,79,000]	2 years
<b>CONSULTANCY</b>					
68.	Terra Preta Sanitation	Dr. Srikanth Mutnuri (P) Biological Sciences	German Technical cooperation	[53,75,424]	16 months
69.	To Establish COD (Cr) Quality testing method for sea water	Dr. M.Srikanth (PI) Biological Sciences	Hitachi India Pvt. Ltd	[16,00,000]	2 years
70.	Technical Writing Training Program	Prof. Meenakshi Raman Dr. ShaliniUpadhyay Dr. Amitendu Bhattacharya	CIPLA BIOTEC, Verna, Goa	[6,65,160]	6 weeks

**Hyderabad Campus:**

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
1	Role of interleukin 22 in diabetic wound healing and regeneration	Dr. Onkar kulkarni	DST	Pharmacy	2726000	3 years	27.01.16
2	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring	Dr. G R Sabareesh	DST	Mechanical Engg.	2604000	3 years	14.03.16
3	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof. D. Sriram	DBT-Tata Innovation	Pharmacy	2700000	3 years	23.03.16
4	"Design and Thermal Analysis of Electronic Controller Mounted on Disc"	Prof. Jeevan Jaidi	M/s HBL Power Systems Ltd.,	Mechanical Engineering	249997	6 months	15.04.16
5	Simulation and Modelling to Minimize Porosity level in Aluminum Castings by Ultrasonic Sir Casting	Prof.N S K Reddy	L & N Structural Engineers (P) Ltd	Mechanical Engineering	803200	3 years	02.04.16
6	"Analytical development studies for pharmaceutical products"	Dr.V.V. Vamsi Krishna	Intera Healthcare Private Limited	Pharmacy	1830855	2 years	02.05.16
7	Frequency Estimation in Wideband receivers with under sampling	Prof. Yoganandam	DLRL	EEE	999413	9 months	16.03.16
8	Screening of immunoglobulin gene sequences of interest	Prof. Suman Kapur	Consultancy Project	Biological Sciences	563886	6 month later extention	01.05.16
9	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Prof. Amit Kumar Gupta	DRDO	Mechanical Engineering	4560000	3 years	02.05.16
10	Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin	Dr. Balaram Ghosh	SUN Pharma Advanced Research Company Ltd.	Pharmacy	2900000	2 years	19.05.16



S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
11	Development of an encryption algorithm for secure transmission of color images	Dr. Manish Kumar	DST	Mathematics	1508053	3 years	25.05.16
12	Regenerating Tank systems for enhanced livelihoods: An evaluation of Mission Kakatiya (MK) project in Telangana	Dr. Srinivas Sajja	ICSSR	Humanities & Social Sciences	30000	3 months	01.04.16
13	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Dr. Balaram Ghosh	Reddy's Lab	Pharmacy	900000	3 years	16.09.16
14	Performance evaluation of backfill soils partially replaced with building derived materials	Dr. Anasuya Guhary	DST	Civil Engineering	2443710	3 years	12.09.16
15	"Hydrogen storage in mesoporous polymer derived ceramics for automotive applications	Dr. Sujith R	DST	Mechanical Engg	4238240	3 years	27.09.16
16	Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements	Prof .Puna Rao & Prof. Shrikant Charde	Shahsi Phytochemical Ltd	Pharmacy	574560	2 years 4months	26.09.16
17	Synthesis of iron oxide nanoparticles for propellant fuel applications	Dr. Balaji Gopalan	Premier Explosives Limited	Chemistry	1215000	1 year	01.09.16
18	Functional role of histone deacetylase 5 (HDAC5) in the pathogenesis of chronic kidney diseases and renal fibrosis	Dr. Onkar Kulkarne	DBT	Pharmacy	7016800	3 years	30.09.16
19	Maintenance of sanitation and solid waste management for swachh Andhra Pradesh	Dr. Sankar Ganesh	Ascent Leadership & Management Consultants (P) Ltd,	Biological Sciences	350550	7 months	15.10.16
20	Investigation on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp.ABS-36 for the treatment of renal injury	Prof. Sajeli Begum	DST	Pharmacy	2439363	3 years	22.12.16

## MEMBERS OF VARIOUS BODIES AND COMMITTEES OF THE INSTITUTE

### (A) GENERAL BODY

**Chancellor:**

Dr. Kumar Mangalam Birla

**Pro-Chancellor:**

Smt. Shobhana Bhartia

**Founding Member:**

Shri B.K. Birla

**Vice-Chancellor, BITS:**

Prof. Souvik Bhattacharyya

**Members admitted by General Body:**

1. Shri Sidharth Birla
2. Shri Tridib Kumar Das
3. Prof. Asis Datta
4. Smt. Manjushree Khaitan
5. Shri Hemant Kumar
6. Prof. L.K. Maheshwari
7. Shri Enrico Malerba

**Four Alumni Term Members:**

1. Prof. D. Balasubramanian
2. Shri Raju Reddy

**Representative of MHRD, Govt. of India:**

Shri V.S. Pandey

**Representative of UGC:**

Vacant

**Representative of CSIR:**

Dr. Santanu Chaudhury

**Representative of AICTE:**

Dr. S.K. Chopra

**Representative of FICCI:**

Shri Ashish Dhawan

**Non-Member Secretary:**

Prof. S.C. Sivasubramanian, 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

**One Director of Campuses by rotation:**

Prof. G. Sundar

**One Nominee of AICTE:**

Vacant

**Three Nominees of the Government of India:**

Vacant

**Four Nominees of the BET:**

1. Shri B.K. Birla
2. Shri Sidharth Birla
3. Shri Hemant Kumar

**Three Members Selected by the General Body:**

1. Shri Rajiv Verma

**Four Members coopted by the Board of Governors:**

1. Smt. Manjushree Khaitan
2. Shri Kris Ramachandran

**One Nominee of the Zuari Industries Limited:**

Vacant

**Non-Member Secretary:**

Prof. S.C. Sivasubramanian, 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. S.C. Sivasubramanian (Acting),  
Member-Secretary

## (D) BUILDING AND WORKS COMMITTEE

**Chairman (Vice-Chancellor):**

Prof. Souvik Bhattacharyya

**Members:**

**Director, Pilani Campus:**

Prof. Ashoke Kumar Sarkar

**Director, Hyderabad Campus:**

Prof. G. Sundar

**Director, K.K. Birla Goa Campus:**

Prof. G. Raghurama

**Nominated members (2):**

1. Dr. Anshuman, Pilani Campus
2. Prof. P.N.K. Rao, Hyderabad Campus

**Member-Secretary:**

Prof. S.C. Sivasubramanian, 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. Ashoke Kumar Sarkar

**Dean, Administration:**

Prof. S.C. Sivasubramanian

**Head, Accounts & Finance:**

Shri Satyen Sharma

## (F) FACULTY SELECTION COMMITTEES

1. **University Level Selection Committee:**
  - Vice-Chancellor (or his nominee) – Chairman
  - One external expert in the concerned discipline
  - Directors of the BITS campuses
  - One of the Chairmen of the Department Level Shortlisting committee from one of the campuses in the concerned department/discipline
  - Dean of Faculty Affairs – Convenor
2. **University Level Shortlisting Review Committee:**
  - Vice-Chancellor (or his nominee) - Chairman
  - Directors of 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. Ashoke Kumar Sarkar (Sr. PROF)

*Secretary:*

Prof. S.C. Sivasubramanian (PROF)

*Directors:*

1. Prof. Ranendra N. Saha (Sr. PROF), Dubai  
Campus
2. Prof. G. Raghurama (Sr. PROF),  
K.K. Birla Goa Campus
3. Prof. G. Sundar (Sr. PROF.), Hyderabad Campus  
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2. Shri R. Sivakumar, *Dubai Campus*

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*Student Members:*

1. Mr. Akshith Reddy Saddi, 2013B3A7673P
2. Mr. Rishav Jalan, 2013A7TS183U
3. Mr. Yashoraj Tyagi, 2013A8PS287G
4. Mr. Himanshu Bagga, 2013B4A7864H

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*Dean, Sponsored Research & Consulting:*

Prof. Sunil Bhand

*Chief Research & Development Officer:*

Vacant

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2. Dr. Jyoti, *Pilani Campus*
3. Prof. N.N. Ghosh, *K.K. Birla Goa Campus*
4. Prof. Tarkeshwar Singh, *K.K. Birla Goa Campus*
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2. Mr. Vaibhav Garg, 2013A3PS587P

#### II. K.K. Birla Goa Campus:

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2. Mr. Garvit Raghuvanshi, 2013B2A7754G

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Prof. S. Gurunaryanan

*Associate Dean, Academic Registration & Counselling Division*

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Prof. Neena Goveas, K.K. Birla Goa Campus

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**Convenorship rotates amongst these members depending on the item to be discussed.**

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2. Prof. Prasanta Kumar Das, K.K. Birla Goa Campus

3. Prof. Vidya Rajesh, Hyderabad Campus

4. Prof. Neeru Sood, Dubai Campus

*One Faculty Member from each Campus*

Prof. Inamur R. Laskar, Pilani Campus

Prof. Anjan Chattopadhyay, K.K. Birla Goa Campus

Prof. Amit Kumar Gupta, Hyderabad Campus

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2. Dr. Sandhya Mehrotra

*Student Member (2):*

1. Mr. Sai Sashank Narayanam, 2013B1A8248P
2. Ms. Nishtha Jain, 2013B1A2240P

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*Chief Warden:*

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2. Dr. Sutapa Roy Ramanan

*Student Member (2):*

1. Mr. Lakshya Ghuliani, 2013B4A7602G
2. Ms. Urvashi Jain, 2014B1A7697G

### III. Hyderabad Campus:

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*Chief Warden:*

Dr. Kumar Pranav Narayan

Mr. Chaitanya Reddy, 2012A4PS353H

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2. Dr. Meenakshi Vishwanathan

*Student Member (2):*

1. Mr. Amitesh Soni, 2013B2AA758H
2. Ms. Stuti Sabharwal, 2013B4A7665H

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2. Dr. Nishant Harishbhai Pandya

*Student Member (2):*

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2. Ms. A. Sharon, 2014AAPS198U

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3. Prof. Meenal Kowshik, *K.K. Birla Goa Campus*
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Prof. S.C. Sivasubramanian, Acting Registrar

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2.	Civil Engineering	Dr. Nikhil Saboo
3.	Chemical Engineering	Dr. Raman Sharma
4.	Chemistry	Dr. Surojit Pande
5.	Computer Science & Information Systems	Dr. Kamlesh Tiwari
6.	Off-Campus Work-Integrated Learning Programmes	Mr. Pawan Sharma
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8.	Electrical & Electronics Engineering	Dr. Sainath Bitragunta
9.	Humanities and Social Sciences	Dr. Sushila Shekhawat
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12.	Management	Dr. Neetu Yadav
13.	Pharmacy	Dr. Aniruddha Roy
14.	Physics	Dr. Srijata Dey

Shri Giridhar M. Kunkur (Librarian) - Chairman of the Library Committee

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3.	Chemistry	Dr. Rashmi Chauhan
4.	Computer Science & Information Systems	Dr. Debasis Das
5.	Economics	Dr. Debdulal Thakur
6.	Electrical & Electronics Engineering	Dr. Ruma Ghosh
7.	Humanities and Social Sciences	Vacant
8.	Mathematics	Dr. G.C. Samanta
9.	Mechanical Engineering	Dr. Kiran D Mali
10.	Physics	Dr. Tarun Kumar Jha

Dr. Anuradha V (Deputy Librarian) - Chairman of the Library Committee

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3.	Chemical Engineering	Dr. Balaji Krishnamurthy
4.	Chemistry	Dr. Ramakrishnan Ganeshan
5.	Computer Science & Information Systems	Prof. R. Gururaj
6.	Economics and Finance	Dr. Abdul Quadir
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10.	Mechanical Engineering	Dr. K. Supradeepan
11.	Pharmacy	Dr. Arti Dhar
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2.	Chemical Engineering	Dr. Eldhose Iype
3.	Civil Engineering	Dr. Meghana Charde
4.	Computer Science	Dr. Sujala D. Shetty
5.	Electrical & Electronics Engineering, Electronics and Communication Engineering and Electronics and Instrumentation Engineering	Dr. Shazia Hasan
6.	General Sciences	Dr. Rusal Raj
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*Director (Off-campus Programmes):*

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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, *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, USA*.

## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - PILANI CAMPUS

This year a total of 179 candidates were permitted to appear in the Qualifying examination. The details are provided below:

#### I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed	Did not appear and dropped
II Sem. 2015-16	83	83	69	14	0
I Sem. 2016-17	96	96	79	17	0
<b>Total</b>	<b>179</b>	<b>179</b>	<b>148</b>	<b>31</b>	<b>0</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	4	4	4	-
I Sem. 2016-17	-	-	-	-
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>-</b>

#### 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)
	4		4		58

Discipline wise Break-up		Organizational Break-up		Discipline wise Break-up	
EEE	5	Research	8	Biosciences	08
Management	2			Chemistry	05
Mechanical	1			Chemical	02
				EEE	11
				Mathematics	05
				Mechanical	02
				CSIS	05
				Lang. & Hum.	01
				Management	06
				Pharmacy	06
				Physics	08
				Econ. & Fin.	02
				Civil	<b>05</b>
					<b>66</b>

## 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. 2015-16	16	16	15	01
I Sem. 2016-17	34	34	32	02
<b>Total</b>	<b>50</b>	<b>50</b>	<b>47</b>	<b>03</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	0	0	0	0
I Sem. 2016-17	05	05	04	01
<b>Total</b>	<b>05</b>	<b>05</b>	<b>04</b>	<b>01</b>

#### 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)
	05		0		45

Discipline wise Break-up		Discipline wise Break-up	
EEE	1	Biosciences	9
		Chemistry	5
		Chemical	2
		EEE	7
		Mathematics	2
		Mechanical	9
		CSIS	7
		Lang. & Hum.	5
		Management & Econ. & Fin.	2
		Pharmacy	0
		Physics	2
		Civil	0
		<b>50</b>	

## 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. 2015-16	25	25	21	4
I Sem. 2016-17	26	26	19	7
<b>Total</b>	<b>51</b>	<b>51</b>	<b>40</b>	<b>11</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	0	0	0	-
I Sem. 2016-17	3	3	3	-
<b>Total</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>-</b>

#### 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)
	3	13	38		23

Discipline wise Break-up		Discipline wise Break-up		Discipline wise Break-up	
EEE	2	EEE	1	Biosciences	0
Eco & Fin	1	Mechanical	4	Chemistry	2
		CSIS	3	Chemical	2
		Pharmacy	1	EEE	0
		Eco&Fin	3	Mathematics	5
		Civil	1	Mechanical	8
				CSIS	3
				Lang. & Hum.	0
				Management	0
				Pharmacy	12
				Physics	2
				Econ. & Fin.	0
				Civil	4
	<u>3</u>		<u>13</u>		<u>38</u>

## 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. 2015-16	3	3	3	3
I Sem. 2016-17	5	1	1	-
<b>Total</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>3</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	-	-	-	-
I Sem. 2016-17	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

#### 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)
	-		-		3

Discipline wise Break-up	Discipline wise Break-up
	Biosciences 0
	Chemistry 0
	Chemical 0
	EEE 1
	Mathematics 0
	Mechanical 0
	CSIS 0
	HSS - Lang. & Hum. 1
	Management 0
	Pharmacy 0
	GS- Physics 1
	Econ. & Fin. 0
	Civil 0
	<u>3</u>



BITS Pilani

# annual report 2016

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**Part B1: Pilani Campus**

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**BITS PILANI – PILANI CAMPUS****B1.1 SENIOR OFFICERS OF THE INSTITUTE****DIRECTOR**

Prof. Ashoke Kumar Sarkar

**ACTING REGISTRAR**

Prof. S.C. Sivasubramanian

**New Administrative appointments**

The following administrative appointments were made during the year:

- A. Prof. Souvik Bhattacharyya has been appointed as Vice Chancellor of the Institute with effect from 13<sup>th</sup> June 2016 for a term of 5 years.
- B. Prof. S.C. Sivasubramanian has been appointed as Acting Registrar with effect 18<sup>th</sup> July 2016 until further orders.
- C. Following have been appointed as Officiating Associate Deans as per details given below:

S.No.	Name	Administrative Function	Period
1.	Prof. Hemant R Jadhav	Sponsored Research & Consulting	23/08/2016 until further orders

- D. Followings have been appointed as Heads of Departments as per details given below:

S.No.	Name	Department	Period
1	Prof. Prabhat Nath Jha	Biological Sciences	01/09/2016 to 31/08/2016
2	Prof. Hare Krishna Mohanta	Chemical Engineering	01/09/2016 to 31/08/2016
3	Prof. Bharti Khungar	Chemistry	01/09/2016 to 31/08/2016
4	Prof. Ravi Kant Mittal	Civil Engineering	01/09/2016 to 31/08/2016
5	Prof. Rahul Banerjee	Computer Science & Information Sys.	01/09/2016 to 31/08/2016
6	Dr. Arun Kumar Vaish	Economics and Finance	01/09/2016 to 31/08/2016
7	Prof. Navneet Gupta	Electrical & Electronics Engineering	01/09/2016 to 31/08/2016
8	Prof. Gajendra Singh Chauhan	Humanities and Social Sciences	01/09/2016 to 31/08/2016
9	Dr.(Mrs.) Leela Rani	Management	01/09/2016 to 31/08/2016
10	Prof. Balram Dubey	Mathematics	01/09/2016 to 31/08/2016
11	Prof. P Srinivasan	Mechanical Engineering	01/09/2016 to 31/08/2016
12	Dr. Anil Gaikwad Bhanudas	Pharmacy	01/09/2016 to 31/08/2016
13	Prof. Anshuman Dalvi	Physics	01/09/2016 to 31/08/2016

- D. Following has been appointed as Professor-in-charge (University wide):

S.No.	Name	Name of Centre	Period
1.	Prof. Rahul Banerjee	Teaching Learning Centre (TLC)	01/09/2016 to 31/08/2017

- E. Following have been appointed as Faculty-in-charges (Campus wise):

S.No.	Name	Name of Centres	Period
1.	Prof. S.K. Choudhary	Teaching Learning Centre (TLC)	01/09/2016 to 31/08/2017
2.	Prof. Hari Om Bansal	First Degree Admissions Tests	13/12/2016 to 12/12/2017
3.	Prof. Hitesh Dutt Mathur	Higher Degree Admissions Tests	13/12/2016 to 12/12/2017
4.	Dr. Rajeev Sakhuja	Institute Functions	13/01/2017 until further orders

The names and designations of senior officers of Pilani campus are given in 'Annexure B1-13'.

## 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 2015-2016	–	–	24(13)	<b>24(13)</b>
First Semester 2016-2017	953(134)	253(75)	36(12)	<b>1242(221)</b>

The programme-wise details are given in 'Annexure B1-1'.

## B1.3 DUAL DEGREES AND TRANSFERS

### (a) Dual Degree

During the Academic year 2016-2017, 260 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 2016, a total no of **16** 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 2016, Two (2) students were permitted to transfer from First Degree to Higher degree and 1 student was permitted to transfer from Higher Degree to Ph.D. Programme at Pilani Campus.

### B1.3(a) Minor Programme

During the Academic year 2016-17, 85 students were admitted in Minor Program, out of them 83 are in Finance and 2 are Physics.

## 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 2015-2016	12-1-2016	16-5-2016	78
First Semester 2016-2017	1-8-2016	14-12-2016	86
Practice School II 2015-16	12-1-2016	18-6-2016	134
Practice School I 2015-16	23-5-2016	16-7-2016	48
Practice School II 2016-17	4-7-2016	14-12-2016	140
Summer Term 2015-2016	21-5-2016	16-7-2016	49

## B1.5 COURSE OFFERED

The number of courses offered during the year 2016 is as follows:

	Number of Courses offered
<b>II Semester 2015-2016</b>	424
<b>I Semester 2016-2017</b>	487
<b>Summer Term 2015-2016</b>	9

The list of new courses introduced during 2016 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 2015-2016	4496
Summer Term 2015-2016	908
First Semester 2016-2017	4637

Details of Registration of students for the First Semester 2016-2017 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 2015-2016	I Semester 2016-2017
1.	Total number of students under the purview of ACB at the beginning of the semester	141	144
2.	No. of students declared out of its purview at the end of the semester	96	78
3.	No. of students who left the Institute during the semester	1	0
4.	No. of new students who came under the purview of ACB at the end of the semester	99	117
5.	Total No. of students under the purview of ACB during the next semester	143	183

## B1.8 AWARD OF DEGREES AND MEDALS

### a. Award of Degrees

#### On Campus Programmes

During the year 86 degrees were awarded in the Board of Governors meeting held on 19.03.2016 (78<sup>th</sup> Award) and 1267 degrees were awarded on 15.07.2016 (79<sup>th</sup> Award), through a Circulatory Resolution. Statistical details of these degrees are given in 'Annexure B1-4'.

### b. Award of Medals

For Academic Year 2015-2016

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 2015-2016 in the following table:

S.No.	Name & ID NO.	Sex	CGPA obtained	Position obtained	Type of medal awarded
<b>Integrated First Degree Programmes (Total number of students 822)</b>					
1.	PRAKHAR KUMAR 2012A3TS133P	M	9.95	First	Gold
2.	MEGHNA BANSAL 2012A7PS054P	F	9.90	Second	Silver
3.	RAHUL RANJAN 2012A3PS720P	M	9.89	Third	Bronze

**B1.9 CAMPUS INTERVIEWS AND PLACEMENT**

Number of companies which conducted campus interviews	186
Number of interviews	1680
Number of offers made	865

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 2016**

Programme	Number graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
<b>On-Campus Programmes</b>				
<b>B.E.(Hons.)</b>				
Chemical	49	43	5	1
Civil	62	43	5	14
Computer Science	92	86	2	4
EEE	91	79	5	8
Electronics & Instrumentation	61	53	4	4
Mechanical	81	66	4	11
Manufacturing	29	27	1	1
<b>B.Pharm</b>	31	20	5	6
<b>M.Sc.(Hons.)</b>				
Bio. Sciences	42	31	0	11
Chemistry	44	31	3	10
Economics	50	47	1	2
Mathematics	49	37	4	8
Physics	44	38	1	5
<b>M.Sc.(Tech.)</b>				
General Studies	28	3	25	0
Information Systems	61	53	4	4
Finance	8	5	1	2
<b>M.E.</b>				
Biotechnology	15	4	3	8
Chemical	25	14	9	2
Civil (Spl. in Structural Engg.)	11	5	3	3
Civil (Spl. in Transportation Engg.)	9	4	1	4
Civil (Spl. in Infrastructure Engg. and Management)	10	2	6	2
Communication Engg.	12	10	2	0
Computer Science	25	22	1	2
Design Engg.	8	7	1	0
Embedded System	9	5	3	1



Programme	Number graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
Manufacturing Systems Engg.	7	6	0	1
Mechanical	14	13	0	1
Microelectronics	16	12	3	1
Software Systems	26	23	3	0
<b>M.Pharm</b>	4	1	1	2
<b>M.Pharm.</b> (Spl. In Pharmaceutics)	14	8	5	1
<b>M.Pharm.</b> (Spl. Pharmaceutical Chemistry)	4	2	0	2
<b>MBA</b>	59	48	9	2
<b>Total</b>	<b>1090</b>	<b>848</b>	<b>92</b>	<b>123</b>

### 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 31<sup>st</sup> December 2016)

Senior Professors, Professors	02
Associate Professors	07
Assistant Professors	07

**Head of the Department:** Prof. Prabhat Nath Jha  
**Contact details:** prabhatjha@pilani.bits-pilani.ac.in  
**Number of PhD Scholars:** 31  
**Number of RA:** 01 (DST Young Scientist)

#### Ph.D. Thesis Submitted during the year: 06

- (i) Mr. Gagandeep Singh Saggi (2009PHXF412P) Characterization of Apicoplast-targeted Isoprenoids Biosynthesis Pathway Enzymes from *Plasmodium vivax* and *P. falciparum* (2016)
- (ii) Mr. Praveen Kumar (2013PHXF108P) Studies on the Role of Chlamydia trachomatis Infection in the Pathogenesis of Reactive Arthritis / Undifferentiated Spondyloarthritis (2016)
- (iii) Ms. Gurpreet Kaur Sidhu (2011PHXF011P) "Analyzing Structural and Functional Evolutionary links between RubisCO and Carbon Concentration Mechanism Proteins"(2016)
- (iv) Arpit Bhargava (2009PHXF411P): Mycosynthesis of Inorganic Nanoparticles and their Evaluation in Catalysis and Nano-fertilization (2016)
- (v) Rajnish Prakash Singh (2011PHXF420P). Molecular Characterization of ACC Deaminase Producing Bacteria for Induced Systemic Tolerance in Wheat (*Triticum aestivum* L.)
- (vi) Bhuvanansundar (2010PHXF445P). Structural and Functional Characterization of Human Lysyl Oxidase through Molecular Cloning, Expression and in silico studies'(2016).
- (vii) Himanshu Kausal (). Studies on immunological responses to PSA-based potential human vaccine candidate and genetic features of disease susceptibility in leishmaniasis.
- (viii) Mithlesh Kajla (2009PHXF410P). Immunomodulatory Role of Blood Induced Anopheles Heme Peroxidase HPX15 and Biocontrol of Human Disease Vectors (2016).
- (ix) A Senthil Nagappan (2009PHXF407P). Co-production of Biodiesel and Alpha Linolenic Acid from *Desmodemus* sp MCCC34 (2016).
- (x) Kuldeep Gupta (2008PHXF024P): Characterization of STAT Immune Signaling Pathway and ABC

## Transporters in Mosquitoes

**A. SPONSORED RESEARCH ACTIVITIES:****Ongoing projects:**

1. (PI: Sanjeev Kumar Co-PI: Lalita Gupta) DBT project, "RNAi screening to study the role of *Aedes* ATP-binding cassette (ABC) transporters in immunity against blood-borne pathogens" Funding Agency: DBT, Govt. of India, New Delhi; Sanctioned Amount: 46.32 Lakhs, Duration 3 Years (2015-2018)
2. (PI: Lalita Gupta) "Studying the impact of Anopheles gut microbial environment on immunity and Plasmodium development" Funding Agency: Indian Council of Medical Research (ICMR), Govt. of India. Approved amount: 30 Lakh, Duration: 3 Years (2015-2018).
3. (PI: Rajdeep Chowdhury, Co-PI: Sudeshna Mukherjee) "Mutant-p53 gain-of-function: its role in regulating lncRNA expression and associated chemoresistance in human cancer cells" Funding Agency: DBT, Govt. of India, New Delhi; Sanctioned Amount: 25 Lakhs; Duration: 3 Years (2015-2018).
4. (PI: Shilpi Garg) "Characterization of major components of (FeS) Cluster assembly pathway in *Plasmodium vivax*" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned amount 23 lakhs Duration: 3 years (2014-2017).
5. (Co-PI: Sandhya Marathe): "Modeling immune response to Salmonella during typhoid". Funding Agency: DST-SERB, Govt. of India, New Delhi, Sanctioned amount 43.52 lakhs, Duration: 3 years (2016-2019)
6. (PI: Jitendra Panwar) "Mechanistic studies on extracellular biosynthesis of metal nanoparticles" Funding Agency: Department of Science & Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: 45.5 Lakh; Duration: 3 Years (2013-2017).

**2. Projects sanctioned during the year 2016.**

1. (PI: Uma Dubey): "Investigating the role of Aryl hydrocarbon receptors in mediating the anticancer properties associated to camel milk" Funding Agency: Department of Science & Technology (DST), Rajasthan; Sanctioned amount: 7.432 Lakhs; Duration: 3 years.

**3. Projects completed**

1. (PI: Sandhya Mehrotra, Co PI: Rajesh Mehrotra) "Design, synthesis and validation of a dehydation stress responsive promoter in plants" Funding Agency: University Grants Commission (UGC), Govt. of India, New Delhi; Sanctioned Amount: 12.88 Lakhs Duration: 3 Years (2013-2016).
2. (PI: Jitendra Panwar) "Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis" Funding Agency: University Grant Commission (UGC), Govt. of India, New Delhi; Sanctioned Amount: 15.05800 Lakh; Duration: 3 Years (2013-2016).
3. (PI: Sanjeev Kumar Co-PI: Lalita Gupta) "Molecular Characterization of Anopheles stephensi gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: 47.18 Lakhs; Duration: 3.5 Years (2012-2016).
4. (PI: P R Deepa): "Identification of potential molecular inhibitors of Fatty acid synthase (FASN) at the enzyme activity and gene expression level". Funding Agency: DBT-COE R&D Project-1, New Delhi. No.: BT/01/CEIB/11/V/16; Sanctioned amount: 33.67 Lakhs. In collaboration with Vision Research Foundation, Sankara Nethralaya, Chennai
5. (PI: Vishal Saxena) "Characterization of Isoprenoid biosynthetic pathway enzymes from *Plasmodium vivax*" Funding Agency: University Grants Commission, Govt. of India, New Delhi; Sanctioned amount 7.88 lakhs Duration: 3 years (2013-2016)
6. (PI: Rajdeep Chowdhury) "Role of Hippo Signaling Pathway Components in Autophagy Regulation in Hepatocellular Carcinoma" Funding Agency: DST-SERB, Govt. of India, New Delhi; Sanctioned Amount: 24 Lakhs; Duration: 3 Years (2013-2016).
7. (PI: Sudeshna Mukherjee) "A mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma" Funding agency: DST FAST Track (Young Scientist), Amount Sanctioned: 17 Lakhs, Duration: 3 Years (2013-16).

**5. Project proposals approved during the year 2016:**

1. (PI: Sandhya Mehrotra) "Introducing cyanobacterial bicarbonate transporters into *C<sub>3</sub>* plants for enhanced photosynthetic performance": SERB major project, Duration: 3 years.
2. (Co-PI: Rajdeep Chowdhury, PI: Aniruddha Roy) "Evaluation of anti-tumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells". SERB, Department of Science and

Technology (SERB-DST) (2016-2019).

## B. PUBLICATIONS:

The faculty members of the Department published a total of 26 papers in various International/ National refereed journals during the year and has one patent. The list is as follows:

1. Baig N, Singh RP, Jha PN, Sah AK. (201x). Synthesis of Glucose- Derived Glycoconjugates and Studies on Their Antimicrobial Activities: Mechanistic Insight. *Chemistry Select*. DOI: 10.1002/slct.201600786
2. Singh RP, Jha PN. (2016). The multifarious PGPR *Serratia marcescens* CDP-13 augments induced systemic resistance and enhanced salinity tolerance of wheat (*Triticum aestivum* L.). *PLoS ONE* 11(6): e0155026. doi:10.1371/journal.pone.0155026
3. Singh RP, Jha PN. (2016). Mitigation of salt stress in wheat plant (*Triticum aestivum*) by ACC deaminase bacterium *Enterobacter* sp. SBP-6 isolated from *Sorghum bicolor*. *Acta Physiologiae plantarum*. 38:110. DOI: 10.1007/s11738-016-2123-9.
4. Singh RP, Jha PN. (2016). Alleviation of salinity-induced damage on wheat plant by an ACC deaminase-producing halophilic bacterium *Serratia* sp. SL- 12 isolated from salt lake. *Symbiosis*. DOI 10.1007/s13199-016-0387-x.
5. Tantak MP, Gupta V., Nikhil, K., Arun V., Singh RP, Jha PN, Shah K., Kumar D. Sequential one-pot synthesis of bis(indolyl)glyoxylamides: Evaluation of antibacterial and anticancer activities, *Bioorg. Med. Chem. Lett.*, 2016, 26, 3167.
6. Chander S., Ashok P., Singh R, Jha PN, Zheng Y-T, Wang P, Murugesan S. (2016). Rational Design, Synthesis, Anti-HIV-1 RT and Anti-Microbial Activity of Novel 2-(6,7-Dimethoxy-3,4-Dihydroisoquinolin-2(1H)-yl)-N-Phenylpropanamide Derivatives. *Anti-Infective Agents*, 14, 63-73.
7. Singh RP, Jha PN. (201x). A halotolerant bacterium *Bacillus licheniformis* HSW-16 augments induced systemic tolerance to salt stress in wheat plant (*Triticum aestivum*). Accepted for publication in *Frontiers in Plant Sciences*.
8. Boopathi PA, Subudhi AK, Middha S, Acharya J, Mugasimangalam RC, Kochar SK, Kochar DK, Das A. (2016) Design, construction and validation of a *Plasmodium vivax* microarray for the transcriptome profiling of clinical isolates. *Acta Tropica*, 164, 438-447.
9. Subudhi AK, Boopathi PA, Middha S, Acharya J, Rao SN, Mugasimangalam RC, Sirohi P, Kochar SK, Kochar DK, Das A. (2016). A cross strain *Plasmodium falciparum* microarray optimized for the transcriptome analysis of *Plasmodium falciparum* patient derived isolates. *Genomics Data*, 9, 118-125.
10. Sunil Nahata, Runthala A, Current best template search methodologies fail to efficiently explore the structural PDB universe, *Protein and Peptide Letters*.
11. A Eshwar Ram, Siddharth V Iyer, Runthala A, Protein structure modelling accuracy: Derived equation with vital parameters, *Big Data Analytics in Genomics*, Springer-Verlag.
12. Runthala A. and Chowdhury S., Refined template selection and combination algorithm significantly improves template based modelling accuracy, *Proteins and Peptide Letters*.
13. Garg S., Kakkar S., Runthala A., Improved Protein Model Ranking through Topological Assessment, *Computational Biology and Bioinformatics: Gene Regulation*, CRC Press, Taylor & Francis Group Monograph Volume, Editor: Ka-Chun Wong, 2016, 406-424.
14. Bhargava, A., Jain, N., Khan, M.A., Pareek, V., Dilip, R.V. and Panwar J., 2016. Utilizing metal tolerance potential of soil fungus for efficient synthesis of gold nanoparticles with superior catalytic activity for degradation of rhodamine B. *Journal of Environmental Management*, 183: 22-32.
15. Nalini V, Deepa PR, Raguraman R, Khetan V, Reddy MA, Krishnakumar S. Targeting HMGA2 in Retinoblastoma Cells in vitro Using the Aptamer Strategy. *Ocul Oncol Pathol*. 2016 2(4):262-269.
16. John A, Umashankar V, Samdani A, Sangeetha M, Krishnakumar S, Deepa PR. In Silico Structure Prediction of Human Fatty Acid Synthase-Dehydratase: A Plausible Model for Understanding Active Site Interactions. *Bioinform Biol Insights*. 2016 10:143-54.
17. S. Leelaram, N.E. Sivanesh, M. Surianarayanan, P.R. Deepa, S. Ashwath Balaje. Effect of feeding strategies on inulinase production analyzed in a biocalorimeter. Original Research Article. *Process Biochemistry* 2016, 51 (6), 692-703.
18. John A, Vetrivel U, Subramanian K, Deepa PR. Comparative docking of dual conformations in human fatty acid synthase thioesterase domain reveals potential binding cavity for virtual screening of ligands. *J Biomol Struct Dyn*. 2016 May 4:1-36.

19. Venkatesan N, Kanwar JR, Deepa PR, Navaneethakrishnan S, Joseph C, Krishnakumar S. Targeting HSP90/Survivin using a cell permeable structure based peptido-mimetic shepherdin in retinoblastoma. *Chem Biol Interact.* 2016 May 5;252:141- 9.
20. Venkatesan N, Kanwar J, Deepa PR, Khetan V, Crowley TM, Raguraman R, Sugneswari G, Rishi P, Natarajan V, Biswas J, Krishnakumar S. Clinico-Pathological Association of Delineated miRNAs in Uveal Melanoma with Monosomy 3/Disomy 3 Chromosomal Aberrations. *PLoS One.* 2016 Jan 26;11(1):e0146128.
21. Palvai S, More P, Mapara N, Nagraj J, Chowdhury R, Basu S. ChemNanoMat; Self-Assembled Oleic Acid Nanoparticle Mediated Targeting of Mitogen Activated Protein Kinase Signaling in Combination with DNA Damage in Cancer Cells. *March 2016, 2(3):201-11.*
22. Raghuram HS, Pradeep S, Dash S, Chowdhury R and Mazumder S. Chitosan encapsulated ZnS:M (M: Fe<sup>3+</sup> or Mn<sup>2+</sup>) quantum dots for fluorescent labeling of sulphate reducing bacteria.. *Bulletin of Materials Science; April 2016:1-9.*
23. Takunari Kono, Mehrotra S., Chikako Endo, Natsuko Kizu, Mami Matusda, Hiroyuki Kimura, Eiichi Mizohata, Tsuyoshi Inoue, Toshihisa Hasunuma, Akiho Yokota, Hiroyoshi Matsumura, Hiroki Ashida, A RuBisCO-mediated carbon metabolic pathway in methanogenic archaea., *Nature Communications.* (2016) Accepted;
24. Tomar V., Sidhu GK.,Nogia P.,Mehrotra R.,Mehrotra S.,Role of habitat and great oxidation event on the occurrence of three multi-subunit inorganic carbon uptake systems in cyanobacteria, *Journal of Genetics; 95(1), 109-118 (2016) DOI 10.1007/s12041-015-0606-x.*
25. Marathe SA\*, Balakrishnan A, Negi VD, Sakorey D, Chandra N, Chakravorty D\*: Curcumin reduces the motility of *Salmonella enterica* serovar Typhimurium by binding to the flagella thereby leading to flagellar fragility and shedding. *Journal of Bacteriology* 2016, 198 (13): 17981811. (\* equal corresponding author)
26. Mahapatra BB, Marathe SA, Meyer-Rochow VB, Mishra M: A closer look at the feather coloration in the male purple sunbird, *Nectarinia asiatica.* *Micron* 2016, 85: 44-50.
27. Kumar A., Kaushal H., Gannavaram S., Dey R., Selvapandiyan A., V Ramesh, Negi NS., Dubey US., Nakhasi H., and Salotra P. Gene deleted live attenuated *Leishmania* vaccine candidates against visceral leishmaniasis elicit pro-inflammatory cytokines response in human PBMCs. *Scientific Reports*
28. Dubey B., Dubey P. and Dubey US., Modeling the intracellular pathogen immune interaction with cure rate, *Commun Nonlinear Sci Numer Simulat*, Vol. 38, 72-90, 2016. DOI: 10.1016/j.cnsns.2016.02.007.
29. Dubey B., Dubey P. and Dubey US., Role of Media and Treatment on an SIR Model, *Nonlinear Analysis: Modeling and Control*, 21(2): 185-200, 2016.
30. Nakazawa N., Mehrotra R.Orie Arakawa and Yanagida M. (2016) ICRF-193, an anti-cancer Topoisomerase II inhibitor, induces arched telophase spindles that snap, leading to a ploidy increase in fission yeast (Genes to cell) In press
31. Bhalothia,1 P., Sangwan,1 C., Alok,2 A., Mehrotra,1 S. and Mehrotra1,\* R.. PP2C-like Promoter and Its Deletion Variants Are Induced by ABA but Not by MeJA and SA in *Arabidopsis thaliana.* *Front Plant Sci.* 2016; 7: 547. Published online 2016 May 3. doi: 10.3389/fpls.2016.00547.
32. Mehrotra R, Khan ZH. and Mehrotra S.. Lipase catalysed transesterification.*Enzyme engineering.* (2016) 5:1 doi:/10.4172/2329-6674.1000e113.
33. Nagappan S. and Verma SK., Development of growth model for raceway pond cultivation of *Desmodesmus* sp. MCC34 isolated from local water body. *Engineering in Life Sciences. Eng Life Sciences.* (2016), 16, 45-52.
34. Nagappan S. and Verma SK., The static extraction of lipid from microalgae *Desmodesmus* sp MCC34. *Res J Biotechnology.* (2016),11 (5) 80-87.
35. Pala, ZR, Saxena V, Saggi GS., Yadav SK., Pareek RP., Kochar SK, Kochar DK., and Garg S.. "Structural and functional characterization of an iron-sulfur cluster assembly scaffold protein-SufA from *Plasmodium vivax.*" *Gene* 585, no. 1 (2016): 159-165.
36. Saggi GS., Pala, ZR., Garg S., and Saxena V.. "New Insight into Isoprenoids Biosynthesis Process and Future Prospects for Drug Designing in *Plasmodium.*" *Frontiers in Microbiology* 7 (2016).
37. Kajla M, Kakani P, Choudhury TP, Gupta K, Gupta L, Kumar S:Characterization and expression analysis of gene encoding heme peroxidase HPX15 in major Indian malaria vector *Anopheles stephensi* (Diptera: culicidae). In Press *Acta Trop.*
38. Kakani P, Suman S, Gupta L and Kumar S: Ambivalent outcomes of cell apoptosis: A barrier or blessing in

- malaria progression. *Front. Microbiol.* | doi: 10.3389/fmicb.2016.00302.
39. Gupta K, Dhawan R, Kajla M, Kumar S, Jnanasiddhy B, Singh NK, Dixit R, Bihani A, Gupta L: Molecular Identification of *Aedes aegypti* mosquitoes from Pilani region of Rajasthan, India (Accepted JVBD).
  40. Kajla M, Bhattacharya K, Gupta K, Banerjee U, Kakani P, Gupta L and Kumar S: Identification of the temperature- induced larvicidal efficacy of *Agave angustifolia* against *Aedes*, *Culex* and *Anopheles* larvae. *Front Public Health.* 2016 Jan 12;3:286. doi: 10.3389/fpubh.2015.00286. eCollection 2015.
  41. Kaushal H, Bras-Goncalves R, Kumar A, Deep DK, Petitdidier E, Lemesre J-L, Papierok G, Kumar S, Ramesh V, Salotra P. 2016. Distinct cellular immunological responses in mono- and polymorphic clinical forms of Post Kala-Azar Dermal Leishmaniasis in India. *Clinical and Experimental Immunology.* (In press). (DOI: 10.1111/cei.12787)
  42. Ashok P, Chander S, Chow LMC, Wong ILK, Singh RP, Jha PN, Sankaranarayanan M (2016). Synthesis and in-vitro anti-leishmanial activity of (4-arylpiperazin-1-yl)(1-(thiophen-2-yl)-9H-pyrido[3,4-b]indol-3-yl)methanone derivatives. *Bioorganic Chemistry.* <http://dx.doi.org/10.1016/j.bioorg.2016.11.013>
  43. Singh RP, Jha PN. (201x). A halotolerant bacterium *Bacillus licheniformis* HSW-16 augments induced systemic tolerance to salt stress in wheat plant (*Triticum aestivum*). *Frontiers in Plant Sciences.* doi: 10.3389/fpls.2016.01890.
  44. Saggi GS, Garg S, Pala ZR., Kochar SK, Kochar DK, Saxena V., (in press). Characterization of 4-hydroxy-3-methylbut-2-en-1-yl diphosphatesynthase (IspG) from *Plasmodium vivax* and its potential as an antimalarial drug target. *Int. J. Biol. Macromol*
  45. Kono T, Mehrotra S, Endo C., Kizu N, Matusda M, Kimura H, Mizohata E, Inoue T, Hasunuma T., Yokota A., Matsumura H, Ashida H., A RuBisCO-mediated carbon metabolic pathway in methanogenic archaea. *Nature Communications.* 8, 14007 doi: 10.1038/ncomms14007 (2017).
  46. Mehrotra S; Cyanobacterial CCM genes for improving photosynthetic yield and water use efficiency during heat stress in C3 plants; An invited lecture in 'International workshop to develop climate resilient cereals' November 3-5, Punjab Agricultural University, Ludhiana
  47. Tomar V: An oral presentation on Strategies for installing SbtA- a cyanobacterial sodium dependent bicarbonate transporter to chloroplasts of model C3 plants to enhance CO2 fixation in the National Conference of Plant Physiology-2016 (NCP-2016), at UAS GKVK Bengaluru, from Dec. 8-10, 2016.
  48. Alam P, Dash S, Climent C, Kaur G, Choudhury AR, Casanova D, Alemany P, Chowdhury R\*, Laskar IR\*. Aggregation Induced Emission' Active Iridium(III) Complexes with Applications in Mitochondrial Staining. *RSC Advances* (\*co-corresponding authors), 2016 (In press)
  49. Rai A, Pradhan P, Nagraj J, Lohitesh K, Chowdhury R and Jalan S. Understanding cancer complexome using networks, spectral graph theory and multilayer framework. *Scientific Reports*, 2016 (in press).

### C. CONFERENCES ATTENDED/ PAPERS PRESENTED:

1. Sandhu M, Jha P, Paul AT., Singh RP, Jha PN (2016). Characterization of biphenyl metabolizing Gram positive bacterium *Rhodococcus* sp. MAPN-1 isolated from rhizosphere of *Morus alba* (Mulberry plant)" In: Mini-symposium on Environmental Biotechnology, Biorefinery and Solid Waste Management. organized jointly by School of Environmental Sciences, Jawaharlal Nehru University and The Biotech Research Society, India (BRSI) at JNU Convention Centre from 11th -13th, pp EB 11-12.
2. Singh RP, Sharma N, Sandhu M, Jha PN. (2016). Exploring the potential of ACC deaminase bacteria for enhanced salinity tolerance of wheat (*Triticum aestivum* L.). In: BIOSANGAM 2016 - International Conference on Translational Biotechnology held at MNNIT, Allahabad during 2-6 Feb, 2016. Abstract no. ABTPR 16, Page no. 60. (Best Poster Award)
3. Singh RP, Jha PN (2016) Biochemical & molecular characterization of ACC deaminase halo-bacterium *Klebsiella* sp. SBP-8 isolated from *Sorghum bicolor*. In: BCGGR 2016 held at BITS Pilani during 18-20 Feb, 2016, Abstract Book Pg No: 83
4. Sandhu M, Sharma N, Jha P, Paul A, Singh RP, Jha PN (2016) PCB degrading potential of bacterial isolates from the rhizosphere of *Morus Alba*. BCGGR, Abstract Book Pg No: 81
5. Garg S (2016) Elucidation of major components of the Suf Pathway from *Plasmodium vivax* in "International Congress on Tropical Medicine and Malaria 2016 (ICTMM-2016)" during September 18th -22nd at Brisbane, Australia
6. Garg S (2016) "Suf pathway in *Plasmodium vivax*: A Prokaryotic type Fe-S cluster biogenesis" in BITS Conference on Gene and Genome Regulation 2016 (BCGGR 2016) during February 18-20
7. Pala ZR., Shilpi Garg, Saggi GS., Saxena V. 2016 "Iron-sulphur cluster assembly in *Plasmodium vivax*: An insight into the SUF machinery." 27th Annual Molecular Parasitology Meeting, at Woods Hole,

Massachusetts, U.S.A., from September 18th – 22nd.

8. Pala ZR., Saxena V, Saggu GS., Yadav SK, Pareek RP., Kochar SK., Kochar DK., Garg S. 2016 "Structural and Functional Characterization of an Iron-Sulfur Cluster Assembly Scaffold Protein-SufA from *Plasmodium vivax*." BITS Conference on Gene and Genome Regulation, at BITS Pilani, India, from February 18th – 20th.
9. Ramya R., Pala ZR., Saggu GS, Garg S., Saxena V., 2016 "Characterization of a novel t-RNA modifying enzyme from *Plasmodium vivax*." BITS Conference on Gene and Genome Regulation", at BITS Pilani, India, from 18th – 20th February, 2016.
10. De R., Saxena V., Garg S. 2016 "Apicoplast division in *Plasmodium*: In-silico identification of potential candidate genes." BITS Conference on Gene and Genome Regulation", at BITS Pilani, India, from February 18th – 20th.
11. Dubey US., (2016). Modeling the role of public awareness and treatment on the susceptibilityinfection and recovery of disease. "International Conference on Mathematical Modeling & Simulation, 2016(ICMMS-2016)" Banaras Hindu University, Varanasi during August 29-31, 2016.
12. Lal M., Runthala A., Mahala N., Jain P., Bhalla T., Dubey US. BITS conference of gene and genome regulation BCGGR-2016. BITS Pilani, Pilani Campus. 18th -20th Feb. 2016.
13. Kulshrestha T, Gupta A., and Chowdhury S., (2016), "Graph Network based classification of DNA structure" In: Annual meeting of the Indian Biophysical Society, 8th – 10th February 2016, Indian Institute of Science, Bangalore.
14. Niveditha D., Joshi P, Mukherjee S., Chowdhury R. and Chowdhury S. 2016, "Sequence level understanding of microRNA mediated gene regulation" In: Annual meeting of the Indian Biophysical Society, 8th – 10th February 2016, Indian Institute of Science, Bangalore.
15. PR Deepa [presenting author], S Krishnakumar (2016). Oral presentation titled 'Metabolic Re-Programming In Cancer Cells: Lipogenesis, Oxidative Stress, And The Mitochondrial Connect', at the '7th World Congress on Targeting Mitochondria' Conference, Oct. 24-26, 2016, Berlin, Germany. Abstract in the Journal of World Mitochondria Society, Vol.2 – Issue2, 2016, pg 59.
16. Fageria L, Venkataramana RD, Panwar J and Chowdhury R. The anti-cancerous effect of biologically synthesized silver nanoparticles in human hepatoma cells. BCGGR, BITS-Pilani, 18th-20th Feb 2016 (Poster Presentation).
17. Niveditha D, Joshi P, Mukherjee S, Chowdhury R and Chowdhury S. Sequence level understanding of microRNA mediated gene regulation. Molecules in Living Cell, Mechanistic and Basics of Function. Indian Biophysical Society, IISc Bangalore. 8-10th Feb 2016 (Poster Presentation).
18. Saini H, Lohitesh K, Mukherjee S and Chowdhury R. Dysregulation of ncRNAs- miRNAs and lncRNAs associated with acquisition of drug resistance in cancer cells. National symposium on current research in cancer biology and therapy (CRCBT-2016), UIAR-Gandhinagar, Gujarat. 7-8th October 2016. (Poster Presentation- BEST POSTER AWARD)

#### D. BOOKS PUBLISHED/EDITED /BOOK CHAPTERS DURING THE YEAR:

1. Sandhya Mehrotra; Cyanobacterial CCM genes for improving photosynthetic yield and water use efficiency during heat stress in C3 plants; An invited lecture in 'International workshop to develop climate resilient cereals' organized by Feed the Future Innovation Lab-Climate Resilient wheat, November 3-5, Punjab Agricultural University, Ludhiana.
2. Debabrat Sabat, Sabera Millan, P. Suchismta Setthy, Sandhya Marathe, Harekrushna Sahoo and Monalisa Mishra, Elemental Analysis of Various Feathers of Indian Rose Ringed Parakeet *Psittacula krameri* in 3rd International Multidisciplinary Microscopy and Microanalysis Congress (InterM), 1st edition, Springer International Publishing, Volume 186 of the series Springer Proceedings in Physics pp 33-40
3. P. Dubey, B. Dubey and Uma S. Dubey. Optimal control for therapeutic drug treatment on a delayed model incorporating immune response, Proceedings of the International Symposium on Mathematical and Computational Biology, BIOMAT 2015 (Edited by Rubem P Mondaini, Brazil), World scientific, pp. 221-240, June 2016, DOI: [http://dx.doi.org/10.1142/9789813141919\\_0015](http://dx.doi.org/10.1142/9789813141919_0015)

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: One

1. A National confereene entitled 'BITS conference on Gene and Genome Expression' was organized on 18-20 February, 2016.
2. Bilateral workshop between BITS-Pilani and Tel Aviv university was organized on Nov 21-22,2016

#### F. INVITED TALKS GIVEN BY BITS FACULTY

1. Shilpi Garg (2016): *Plasmodium vivax* SufA: A prokaryotic scaffold protein involved in Fe-S cluster biogenesis; in International Conference on Biotechnology and Nanotechnology 2016 organized by

Department of Biotechnology, IIS University Jaipur from January 30 – February 1.

2. Shilpi Garg (2016) "Microbes: A boon in disguise" during Science day celebrations at Birla Institute of Technology and Science Pilani on 28th February
3. Vishal Saxena (2016) "Isoprenoid Biosynthesis in Plasmodium vivax: A promising drug target" at Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER) during November 2nd – 6th, 2016 at Puducherry
4. Shilpi Garg (2016) "Plasmodium vivax SufA: A prokaryotic scaffold protein involved in Fe-S cluster biogenesis" at Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER) during November 2nd – 6th, 2016 at Puducherry
5. Fageria L., Dilip, R.V., Panwar, J. and Chowdhury, R. 2016. The anti-cancerous effect of biologically synthesized silver nanoparticles in human hepatoma cells. In: BITS Conference on Gene and Genome Regulation (BCGGR 2016), February 18-20, 2016, Pilani, Pilani Campus, Pilani, p. 63.
6. Pareek, V., Dilip, R.V., Bhargava, A., and Panwar, J. 2016. Synthesis of multifarious metal nanoparticles from metal tolerant fungus *Penicillium janthinellum* DJP06. In: 2nd International Conference on Recent Advances in Nanosciences and Nanotechnology (ICRANN-2016), December 19-20, 2016, Jawaharlal Nehru University, New Delhi, p. 83.
7. Panwar, J. Biomimetic approach towards synthesis of metal & metal oxide nanoparticle and their applications, Institute of Macromolecular Chemistry AS CR, Prague, Czech Republic. June 15, 2016.
8. Panwar, J. Metal tolerant fungi: An efficient system for synthesis of metal and metal oxide nanoparticles. In: National Conference on Fungal Biotechnology (NCFB-2016), Birla Institute of Scientific Research, Jaipur. November 16-18, 2016. (Lead Lecture).
9. Panwar, J. Development of mycogenic nanoparticles and their agricultural potential. In: Bilateral Workshop on Food Security and Safety between BITS Pilani & Tel Aviv University, Israel, Birla Institute of Technology and Science, Pilani. November 21-22, 2016.
10. Sharma PK (2016) Engaging activity-based and learning-centred classes for a second year, undergraduate course on evolutionary biology and taxonomy. In: Fourth International Conference on Psychology & Allied Sciences, Goa, Jan 16-18, 2016.
11. Sharma PK and Marathe S (2016) Using Individual Strength-based Assignments for Student Evaluation to foster a Spirit of Confidence and Well-being. In: National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level, organized by Department of Humanities and Social Sciences & Teaching Learning Centre, BITS, Pilani – Pilani Campus, 30th Sep-1st Oct.
12. Mehrotra R, Kannan M and Sharma PK (2016) Smart Question Paper Design to Enhance Student Learning and Engagement in Examinations. In: National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level, organized by Department of Humanities and Social Sciences & Teaching Learning Centre, BITS, Pilani – Pilani Campus, 30th Sep-1st Oct.
13. Dubey U and Sharma PK (2016) Upgrading Lab-based Course(s) on Instrumental Techniques for Better Appreciation and Development of Research Focus among Undergraduate Students. In: National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level, organized by Department of Humanities and Social Sciences & Teaching Learning Centre, BITS, Pilani – Pilani Campus, 30th Sep-1st Oct.
14. Rajesh Mehrotra delivered a talk on 'Spacer distance between ACGT cis regulatory elements governs differential gene expression in model plant *Arabidopsis thaliana*' in UGC-Sponsored National Conference on Recent Advances in Biological Sciences, Biology & Sustainable Development on 18th & 19th March, 2016, Mohanlal Sukhadia University.

#### **G. INVITED TALKS ARRANGED IN THE DEPARTMENT :- NA**

#### **H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS**

1. Prof. Asish Das was invited by 2016 NIAID ( National Institute of Allergy and Infectious Diseases) NIH Bethesda, MD. USA to review RFA-AI-15-056 "International Centers of Excellence for Malaria Research (U19)".
2. Prof. Vishal Saxena has been nominated for "Visiting Professor Fellowship" under Senior Scientist category of "INSA-CAS International Bilateral Exchange/ Collaboration Programme-2017".
3. Dr. Sandhya Mehrotra been nominated for "Visiting Professor Fellowship" under Senior Scientist category of "INSA-CAS International Bilateral Exchange/ Collaboration Programme-2017".
4. Prof. Jitendra Panwar was awarded "Visiting Professor Fellowship" under Senior Scientist category of "INSA-CAS International Bilateral Exchange/ Collaboration Programme-2016" to visit Prague, Czech Republic for 1 month.

5. Prof. Rajesh Mehrotra was awarded INSA-Royal Society of Edinburgh bilateral exchange award award to visit university of Edinburgh.
6. Severe Plasmodium vivax Malaria: A report on serial cases from Bikaner in Northwestern India by Kochar and Das et al., received 270 citations since 2009 and was cited in DST report.
7. Biodiesel Production through lipase catalysed transesterification an overview by Mehrotra et al., received 293 citations since 2010.
8. Prof Rajesh Mehrotra chaired the session in the National convention on current Practices and future of classroom teaching at higher education level organised by Department of Humanities and Social Sciences & Teaching Learning Centre, Pilani Campus on 30th september -1st october. He also delivered a talk entitled " Smart question paper design to enhance student learning and engagement in examinations" coauthored by Dr Manoj kannan and Dr PanKaj Kumar Sharma.
9. Dr. Shilpi Garg received DST travel award to attend "International Congress on Tropical Medicine and Malaria 2016 (ICTMM-2016)" during September 18th -22nd at Brisbane, Australia
10. Ms Zarna Pala, the PhD student won Best Poster Award for presenting her work on "Structural and Functional Characterization of an Iron-Sulfur Cluster Assembly Scaffold Protein-SufA from Plasmodium vivax." at BITS Conference on Gene and Genome Regulation, at BITS Pilani, India, from February 18th – 20th.
11. Dr. Pankaj Kumar Sharma delivered talks on Phytochemical-cum-Metabolic Profiling of Selected Edible Plants from Rajasthan for Medicinal Potential, and Igniting the Spirit of Scientific Inquiry among Undergraduate Students of Science and Engineering Disciplines at National Seminar on "Science and Technology for National Development", Dr. H.S. Gour Central University, Sagar/Saugor (M.P.) during 23rd-24th September, 2016.
12. Saini H, Lohitesh K, Mukherjee S and Chowdhury R. Dysregulation of ncRNAs- miRNAs and lncRNAs associated with acquisition of drug resistance in cancer cells. National symposium on current research in cancer biology and therapy (CRCBT-2016), UIAR-Gandhinagar, Gujarat. 7-8th October 2016. (Poster Presentation- BEST POSTER AWARD)
13. Zaiba Hasan Khan received best poster award UGC-Sponsored National Conference on Recent Advances in Biological Sciences, Biology & Sustainable Development on 18th & 19th March, 2016, Mohanlal Sukhadia University

#### **I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

#### **J. SIGNIFICANT NEW EQUIPMENTS/ EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

- Oxygraph Plus, Ultracentrifuge, High speed centrifuge, FACS

#### **K. DEPARTMENTAL ASSOCIATION/ CLUB ACTIVITIES**

##### **Biological Society**

The Biological Society in its traditional way executed APOGEE-2015, showing the recent development in modern biology through excellent working and non-working models. Senior members of the Biological Society have also been involved in orientation for freshly joined students and discussions regarding the future scope of Biology and Biotechnology. Other traditional activities such as welcome for new members, B1 alfresco and farewell for graduating students were also organized.

#### **L. STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS**

##### **a. Success of students at national level tests (various PG/Ph.D. entrance tests and tests for JRFetc)**

- Anirvan Majumdar (M.Sc. Student) ranked 13th in CSIR-UGC-NET for July 2016.
- Team of Students visited Harvard University in BioMod competition organized by Wyss Institute, USA and won silver.
- This team was first from India to make to the finals in this competition.
- Anish Nirav Sah Visited USA under DST-Khorana Scholarship program.
- Nandita Sharma (M.E. Student) received Best Poster Award in an International conference held in MNNIT, Allahabad.
- Ms. Monika Sandhu received the Best poster award for her research Characterization of biphenyl metabolizing Gram positive bacterium Rhodococcus sp. MAPN - 1 isolated from rhizosphere of Morus alba (Mulberry plant) at the International Conference on Strategies for Environmental Protection and



Management (ICSEPM - 2016) cum Mini-symposium on Environmental Biotechnology, Biorefinery and Solid Waste Management. The event was organized jointly by School of Environmental Sciences, Jawaharlal Nehru University and The Biotech Research Society , India (BRSI) at JNU Convention Centre from 11 th - 13 th December 2016 ..

- Harsh Kanodia, Manesh Narayan, Nandini Tripathi, Keerti P., Richa Patel and Abhishek Prasad were selected to participate in a Workshop organized by Harvard University South Asia Institute under the B4 program supported by Department of Biotechnology (Government of India) and KBITS (Government of Karnataka).

### B1.10.2 Department: Civil Engineering

Number of faculty members (as on 31 December 2016)

<b>Professors &amp; Senior Professors</b>	04
<b>Associate Professors</b>	04
<b>Assistant Professors</b>	11
<b>Lecturers</b>	01
<b>Visiting Faculty</b>	-

**Head of the Department** : **Prof. Ravi Kant Mittal**

**Contact details** : ravimittal@pilani.bits-pilani.ac.in

**Number of Ph.D. Scholars** : 18

**Ph.D. Thesis Submitted during the year** : 0

### B. SPONSORED RESEARCH ACTIVITIES

#### (i) Projects Sanctioned during the year 2016

S.No.	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1.	Conjunctive use of rainwater and Groundwater to provide safe drinking water with intervention of Advanced Technology	Rajiv Gupta	DST, New Delhi	126.43(DST) 77.70 (Coll.)
2.	Development of Low carbon ternary cement for durable and sustainable concrete	Bahurudeen A	Additional competitive Research Grant, BITS Pilani	9.25
3.	“Assessment of pozzolanic performance of sugarcane bagasse ash from different disposal sites	Bahurudeen A	BITS Research Initiation Grant	2.0
4.	“Development of Freight Generation Model in Urban Areas: A Case study of Jaipur metropolitan Region”	Prasanta Kumar Sahu	BITS Research Initiation Grant	2.0
5.	“Use of copper slag as aggregate replacement in asphalt pavements”	Nikhil Saboo	BITS Research Initiation Grant	2.0
6.	“Modeling Pedestrian Flow Using a Continuum Model”	Durgesh Vikram	BITS Research Initiation Grant	2.0
7.	“Experimental investigation on Structural Performance of RC Frame with Deep Beams under Gravity loading”	G. Muthukumar	BITS Research Initiation Grant	2.0
8.	“Development of Geopolymer Mortar Using mustard husk Briquette Ash”	Vishakha V Sakhare	BITS Research Initiation Grant	2.0

**(ii) Ongoing projects (Sanctioned Prior to 2016):**

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
1.	Investigation of the Effect of Carbonation on the Properties of Concrete	Dipendu Bhunia S B Singh	DST, New Delhi	34.0
2.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	S. B. Singh	DST, New Delhi	25.93
3.	Impact of PMGSY Roads on Accessibility in Rural Areas	A. K. Sarkar Ajit Pratap Singh	NRRDA, Ministry of Rural Development, Gov. of India	22.63
4.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99
5.	Strengthening of Local Soil using Fly Ash	Kamalesh Kumar	UGC, New Delhi	2.0
6.	Roof top Rainwater Harvesting for Safe, Potable and Healthy Drinking Water and Ground Water Replenishment for BITS Pilani, Pilani campus	Rajiv Gupta	BITS, Pilani, CoE-WWE	91.00
7.	Zinc Recovery from Industrial Waste using Bioleaching.	Suresh Gupta (CHE) S.K. verma (BIO) Anupam Singhal	BITS Pilani CoE-WWE	48.00
8.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
9.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman Dipendu Bhunia	DST, New Delhi	28.38
10.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00
11.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
12.	Development of an Automated Non-Destructive Test system for Condition Evaluation of Pavements	Amit Goel	Additional competitive Research Grant, BITS Pilani	9.45

**(iii) Projects completed in the year 2016**

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
1.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99

**(iv) Ongoing Consultancy Projects:**

S.No.	Project Title	Sponsored by	Sanction Amount	Investigators
1.	Road Safety Audit for Ringus-Sikar stretch of NH-11 (43.887 km)	National Highway Authority of India	18.11 lacs	Prof. A K Sarkar Prof. A. P. Singh Dr. Amit Goel

**(iv) Consultancy Projects completed this year:**

Civil Engineering department undertaken more than Rs. 9.0 lacs consultancy works from government departments such PWD, PMGSY (Gramin Gaurav Path), DRDO etc. and completed successfully.

**C. PUBLICATIONS****Papers published by Faculty in Journals**

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
1.	Performance Characterization of Polymer Modified Asphalt Binders and Mixes	Saboo, N., Kumar P.	Advances in Civil Engineering, Hindawi Publication	Volume 2016 (2016), Article ID 5938270

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
2.	Evaluation of the Properties of Bituminous Concrete Prepared from Brick-Stone Mix Aggregate	Dipankar Sarkar, Manish Pal, Ashoke S. Sarkar, Umesh Mishra	Advances in Materials Science and Engineering, Hindawi Publishing Corporation,	Volume 2016 (2016), Article ID 2761038, 7 pages
3.	Direct Shear Testing of Coal Dust Mixed Pilani Soil at Three Different Water Contents”	Kamalesh Kumar, Mitali Gupta, Utpal Sannyashi	American International Journal of Research in Science, Technology, Engineering & Mathematics	Volume 2, Issue 15, pp 122-124, 2016
4.	Advanced Machines and Automation Techniques in Modern Construction Practice and Their Possible Use in India	Mahima S, Soumya K, Bahurudeen A, Haneefa MK, Mahalingam B	Applied Mechanics and Materials	Vol. 83, Issue 2, pp 839-845, 2016
5.	Statistical Investigations of Snowfall and Temperature with Passenger Car and Truck Traffic on Primary Highway in Canada	Roh, H-J., Sahu, P., Sharma, S., Datla, S., and Mehran, B.	ASCE Journal of Cold Regions Engineering	Vol. 30 (2), pp. 1-16, 2016. (DOI: 10.1061/(ASCE)CR.1943-5495.0000099
6.	Prediction of Safe Bearing Capacity of Non-Cohesive Soil in Arid Zone using Artificial Neural Networks	Rajiv Gupta; Kartik Goyal; Navneet Yadav,	ASCE's International Journal of Geomechanics	Volume 16, Issue 2 (April 2016); IF = 1.197
7.	Elastic Analysis of Bridge Cable Wires under Static Loading	S. B. Singh and Piyush Sood	Civil Engineering and Construction Review	Volume 29, Issue 1, pp 1-6, 2016
8.	New Phenomenological Approach for Modeling Fatigue Life of Bituminous Mixes	Saboo, N., Das, BP., Kumar, P.	Construction and Building Materials, Elsevier	Volume 121, Issue: 15, Pages 134–142, 2016
9.	An Experimental Investigation of Accelerated Carbonation on Properties of Concrete	S. Hussain, D. Bhunia and S.B.Singh	Engineering Journal (EJ)	Vol. 20, Issue: 2, DOI:10.4186/ej.2016.20.2.29, 2016
10.	A Study on Performance of Bituminous Mixes Using Falling Weight Deflectometer (FWD)	Kumar, P., R N Rasinchung, G.D., Mehta, M. and Saboo N.	Indian Highways, Indian Roads Congress	Vol. 44, No. 3, pp 25-35, 2016
11.	Investigating the relationship between transport infrastructure and economic growth: The case of India	G. Kalra, V. Chotia, A. Goel,	Indian Journal of Economics and Development	Volume 12, Issue: 2, pp: 315-320, 2016
12.	Improved Design Procedures for Ground Improvement Using Pre-Fabricated Vertical Drains	Agarwal, P., Mittal, R.K. and Gill, G.	Indian Journal of Science and Technology	Volume 9(26), DOI: 10.17485/ijst/2016/v9i46/105280, Dec. 2016
13.	Buckling response of laminated composite stiffened plates subjected to partial in-plane edge loading	S.N.Patel and A.H.Sheikh	International Journal for Computational Methods in Engineering Science & Mechanics	Volume 17, Issue: (5-6), pp. 322-338, 2016
14.	Potential applications of marble dust in industrial use by characterization techniques – A review	Singh, M, Srivastava, A, and D. Bhunia	International Journal of Advanced Structures and Geotechnical Engineering	Volume 5, Issue: 3, pp. 99 - 106, 2016
15.	Recent Developments in utilizing waste tires to reduce seismic earth pressures and liquefaction potential	Mittal, R.K. and Gill, G.	International Journal of Advanced Structures and Geotechnical Engineering	Volume 5, Issue: 3, pp. 107 - 114, 2016
16.	Soil Structure interaction in Indian seismic code: Recommendations for inclusion of potential factors	Mittal, R.K., Chauhan A. and Rawat S.	International Journal of Earth Sciences and Engineering	Volume 9, Issue: 3, pp. 124 - 130, 2016
17.	Shear Strength Characteristics of Coal Dust Mixed Pilani Soil	Kamalesh Kumar, Utpal Sannyashi	International Journal of Innovative Science Engineering and	Vol. 3, Issue 1, pp 337-341, 2016

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
			Technology (IJSET)	
18.	Use of Flow Properties for Rheological Modelling of Bitumen	Saboo, N., Kumar P.	International Journal of Pavement Research and Technology, Elsevier	Vol. 9, No. 1, pp 63-72, 2016
19.	Tender Evaluation by Visual Decision Support System	Rajiv Gupta, Leela Krishna Kondepati, and Anu Gupta	Int'l Journal of Computing, Communications & Instrumentation Engg. (IJCCIE)	Vol. 3, Issue 1 (2016) ISSN 2349-1469 EISSN 2349-1477
20.	Analysis of Different Test Methods for Quantifying Rutting Susceptibility of Asphalt Binders	Saboo, N., Kumar P.	Journal of Materials in Civil Engineering, ASCE	Vol. 28, No. 7, pp 1-8, 2016
21.	Prediction of Global Solar Radiation in India Using Artificial Neural Network	Rajiv Gupta, Saurabh Singhal	Journal of Sustainable Development of Energy, Water And Environment Systems	Volume 4, Issue 2, pp 94-106, 2016
22.	Evaluation of access to health care in rural areas using enhanced two-step floating catchment area (E2SFCA) method	Shalini, K., Ashoke Kumar Sarkar, Ajit Pratap Singh	Journal of Transport Geography	Volume 56, pp. 45-52, 2016
23.	Group Method of Data Handling Algorithms to Predict Compressive Strength of Concrete Based on Absorbed Extraterrestrial Solar Radiations	Manish A. Kewalramani and Rajiv Gupta	Key Engineering Materials	Vol. 689, pp 108-113, 2016 Trans Tech Publications, Switzerland, IF = 0.19
24.	Estimation of Freight Demand at Mumbai Port Using Regression and Time Series Models	Patil, G.R. and Sahu, P.	KSCE Journal of Civil Engineering	Vol. 20(5), pp. 2022-2032, 2016
25.	Modeling Snow and Cold Effects for Classified Highway Traffic Volumes	Roh, H-J., Sharma, S., and Sahu, P.	KSCE Journal of Civil Engineering	Vol. 20(4), pp. 1514-1525, 2016
26.	An Investigation of Material Characterization of Pultruded FRP H and I-beams.	S. B. Singh and Himanshu Chawla	Mechanics of Advanced Materials and Structures	DOI: 10.1080/15376494.2016.1250021
27.	Modelling the complex modulus-strain relationship of asphalt binders	Singh, B., Saboo, N., Kumar, P.	Petroleum Science and Technology, Taylor & Francis	Volume 34, Issue: 13, pp: 1137-1144, 2016
28.	Need of an efficient procedure for the evaluation of pozzolanic performance of supplementary cementitious material	Bahurudeen, A., M.S. Hemalatha, and Manu Santhanam	The Indian Concrete Journal	Volume: 90, Issue: 1, pp. 12-17, 2016
29.	Effect of Overloading on Shear Lag Effect in RC Box-Girder Bridges	Manoj Kumar	The Indian Concrete Journal	Vol. 90, No. 8, pp: 2016
30.	Assessment of Carbonation Depth under Natural and Accelerated Carbonation Conditions	Hussain, S., Bhunia, D., and Singh, S. B.	The Indian Concrete Journal(Point of View)	Vol. 90, Issue 11, 57 - 64, 2016
31.	Review of Alignment design consistency in Mountainous Roads	Nama, S., Maurya, A., Maji, A., Edara, P., and Sahu, P	Transportation in Developing Economies	Vol. 2 (2), pp. 1-11, 2016 (DOI:10.1007/s40890-016-0028-3)
32.	Simultaneous Dynamic Demand Estimation Models for Major Seaports in India	Patil. G., and Sahu, P	Transportation Letters	2016. DOI: 10.1080/19427867.2016.1203582

**D. PAPERS PUBLISHED BY FACULTY IN CONFERENCES:**

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
1.	Three-Step Floating Catchment Area to Quantify the Spatial Accessibility to Health Care Units	Harish Puppala, Ajinkya Ingale, AK Sarkar, Ajit Pratap Singh	12th International Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	19-21 December, IIT Bombay, 2016
2.	Service Life Prediction for Bridge Structures Exposed to Aggressive Marine Environment	Athira G., Mahima S., Bahurudeen A., Jayachandran K., Moorthy P	12th International Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	IIT Bombay 19 – 21 December 2016
3.	Influence of Cement-Aggregate Interface on Evaluation of Ultrasonic Pulse Velocity Test for Rigid Pavement	Subair M., Moorthi P. V. P., Aniruddha T., Sanket R., Bahurudeen A.	12th International Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	IIT Bombay 19 – 21 December 2016
4.	Road safety analysis using multi criteria approach: A case study in India	K. Shalini, R. Agarwala, B. Dutta, P.N. Bhanegaonkar, A.P. Singh, A.K. Sarkar	14 <sup>th</sup> World Conference on Transport Research, Shanghai, China	10-15 July 2016, Shanghai
5.	Impact assessment of open drains on river Ganges using scenario based water quality modeling	R. Srinivas, Ajit Pratap Singh, Tandon Abhilash Borthakur	21 <sup>st</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering	8th-10th Dec 2016, Central Water & Power Research Station (CWPRS), Pune
6.	Assessment of Water Quality of River Brahmaputra in Guwahati City of Assam	Tandon Abhilash Borthakur, Digvijay Kumar, Anupam Singhal	3 <sup>rd</sup> National Conference on Sustainable Water Resources Development and Management, SWARDAM-2016	ISBN 978-93-85777-75-2, pp 293-299, 4th-5th July, 2016
7.	Effect of spindle diameter and plate gap on the rheological properties of asphalt binders	Singh, B., Saboo, N. and Kumar, P.	4 <sup>th</sup> International Chinese European Workshop (CEW)	June 29- July 1, TU Delft, Netherlands, 2016
8.	Application of Soft Computing Tools in Structural Health Monitoring', Int. Conf. on Trends and Recent Advances in Civil Engineering	Harish Mulchandani and Manoj Kumar,	6 <sup>th</sup> Int. Conf. On Recent Advances In Geotechnical Earthquake Engineering and Soil Dynamics IIT Roorkee Greater Noida campus (NCR), India	Greater Noida, August 1-6, 2016.
9.	Application of Displacement Based Design for Shallow and Deep Foundations	Harish Mulchandani, Manoj Kumar and Sanket Rawat,	6 <sup>th</sup> Int. Conf. On Recent Advances In Geotechnical Earthquake Engineering and Soil Dynamics IIT Roorkee Greater Noida campus (NCR), India	Greater Noida, August 1-6, 2016.
10.	Application of Principal Component Analysis for Outlier Detection in Heterogeneous Traffic Data	Pritam Saha, Nabanita Roy, Deotima Mukherjee, Ashoke Kumar Sarkar	7 <sup>th</sup> International Conference on Ambient Systems, Networks and Technologies (ANT 2016)	Madrid, Spain, May 23-26
11.	Facility Location - Allocation using ArcGIS	Lalu Saheb, Rajiv Gupta, Geo Smart	A case study of Amaravati City, Andhra Pradesh, India Expo Centre and Mart	Greater Noida, 1-3 March 2016
12.	Warm mix design of stone matrix asphalt	A. Ingle and A. Goel	ACE 2016	Singapore, April 2016
13.	Prediction of depth of carbonation from accelerated carbonation conditions	S. Hussain, D. Bhunia and S.B.Singh	ACI-KC 4 <sup>th</sup> International Conference and Exhibition	Kuwait, Nov 8-10, 2016,

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
14.	Evaluation of MRTS Using the Spatial Technique, A Case Study	Rajiv Gupta; R. Srinivas; P. Rajesh Reddy; and Vemula Swathi	American Society of Civil Engineers, International Conference on Transportation and Development	June 26–29, 2016, Houston, Texas
15.	Assessment of sustainable alternative cementitious materials using characterisation techniques	Athira G, Sanket R, Aniruddha T, Prateek A and Bahurudeen A	Conference on innovation for sustainability	NIT Hamirpur, 9-10 September 2016
16.	Strategic Facility Location and management using ARCGIS	Rajiv Gupta , and Lalu Saheb,	Geospatial World Forum, Rotterdam	Netherlands, 23-26 May 2016
17.	Tender Evaluation by Visual Decision Support System	Rajiv Gupta, Leela Krishna Kondepoti, Anu Gupta	IIE and URUAE International Conference	March 20-21, 2016 Mauritius
18.	Neural Networks approach for evaluating quality of service in public transportation in rural areas	M. Wagale, A. P. Singh, A. Singh	India International Conference on Information processing (IICIP-2016), Delhi Technological University	12th-14th August 2016, New Delhi
19.	Study on pervious concrete using recycled concrete aggregate	Abhilash S., Anuj B., Amit G	International conference o Recent Trends in Engineering and Material Sciences, ICEMS 2016	Jaipur, India, March- 2016
20.	Dynamic Buckling of Composite Plates Subjected to In-Plane Compression	V. Keshav and S.N.Patel	International Conference of Young Researchers on Advanced Materials(IUMRS-ICYRAM-2016),	December 11-15, 2016, IISc Bangalore in association with IUMRS, Bangalore, India
21.	Optimization of block foundation	Mittal, R.K., Jacob, J. and Tyagi,	International Conference on Advances in Civil Engineering and Sustainable Construction-organized by Department of Civil Engineering, SRM University	Chennai, India, 30 March – 1 April 2016,
22.	Liquefaction Screening Criteria For Earth Dams.	Mittal, R.K., Tyagi, G. and Gill, G	International Conference on Advances in Civil Engineering and Sustainable Construction-ACESC'16, Organized by Department of Civil Engineering, SRM University	Chennai, India, 30 March – 1 April 2016,
23.	Flexural Behavior of Reinforced Masonry Beams with ECC as Bed Joint	S.B. Singh, P. Munjal	International Conference on Advances in Concrete Technology, Materials and Construction Practices	Goa Engineering College, Farmagudi, Goa, June 22-24,
24.	Sustainable material processing of sugarcane bagasse	Athira G, Bahurudeen A, Appari S, Priya	International Conference on Advances in Materials & Materials Processing	IIT Kharagpur 5-7 November 2016
25.	Improvement of Classification Accuracy Using Image Fusion Techniques	Rajesh Singh and Rajiv Gupta	International Conference on Computational Intelligence and Applications	Jeju Island, Korea, August 27-29, 2016
26.	Soil Structure interaction in Indian seismic code- Recommendations for inclusion of potential factors	Mittal, R.K., Chauhan A., Rawat S.	International Conference on Earth Sciences and Engineering organized by Nehru Institute of Technology, Coimbatore, INDIA and Cafet Innova Technical Society, ICEE 2016	17th -18th June, 2016, Hyderabad India
27.	Land use/ Land cover information from various	A. N. Singh, Deepthi G. V. and Anupam Singhal	International Conference on Electrical, Electronics,	DNI college of Engineering

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
	classification methods of Shekhawati region of Rajasthan		and Optimization Techniques (ICEEOT)	Chennai, Tamil Nadu, India , 3-5th March 2016
28.	Leaching Characteristics of fly ash generated from Suratgarh thermal power plant	Rahul Dandautiya, Pranav Mayekar, Madhukar Toshniwal, Ajit Pratap Singh, Sanghamitra Kundu	International Conference On Innovative Trends in Civil Engineering for Sustainability (ICICES'2016)	8th- 9th January 2016, Ernakulum, Kerala.
29.	Potential applications of marble dust in industrial use by characterization techniques – A review	Singh, M, Srivastava, A, and D. Bhunia	International conference on innovative trends in civil engineering for sustainability	Ernakulum, Kerala, 7-9 January 2016
30.	Buckling and postbuckling response of laminated composite plates	S.N.Patel	International Conference on Recent Advances in Mechanics and Materials 2016 (ICRAMM 2016), December 17-18, 2016,	VSS University of Technology, Burla, Odisha, India
31.	Evaluation of marble slurry incorporated concrete using Non destructive test methods	Singh, M, Srivastava, A, Bhunia, D.,	International conference on recent trends in engineering and material science, Jaipur	17-19 March 2016.
32.	Determination of carbon content of residual bagasse ash and its influence on pozzolanic performance	Priya, Appari S, Aniruddha T, Sanket R, Bahurudeen A	International Conference on Recent Trends in Engineering and Material Sciences, ICEMS-2016	JNU March 17-19, 2016
33.	Three Dimensional Kriging Analysis of Temperature Distribution: A Case Study for Puga Valley, Ladakh, .	Shibani K Jha and Harish Puppala	International Conference on Recent Trends in Engineering and Material Sciences, ICEMS-2016,	National University, Jaipur, India March 17-19, 2016
34.	Study on pervious concrete using recycled concrete aggregate	Abhilash S., Anuj B., Amit G.	International Conference on Recent Trends in Engineering and Material Sciences, ICEMS-2016	JNU March 17-19, 2016
35.	Application of fuzzy multi-criteria approach to access the water quality of river Ganges	R. Srinivas, Ajit Pratap Singh	International Conference on Soft Computing: Theories and Applications, SoCTA 2016	December 28-30, AMITY University, Rajasthan
36.	Study of Lane Utilization on Delhi-Gurgaon Expressway	Sagar Kurle, Krishna N.S. Behara, J. Rajendra Prasad, Shrinivas Arkatkar, Ashoke Kumar Sarkar	International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (12th TPMDIC)	Transportation research Procedia, Volume 17, 2016.
37.	Prediction of Compressive strength of Copper Slag Concrete using Artificial Neural network	Rajiv Gupta, and Harish Kumar Mulchandani	International Conference on Trends and Recent Advances in Civil engineering	11-12 August 2016, Amity University, pp: 194-201
38.	Study of Geothermal Energy Potential with Geothermal Doublet: A Case Study for Puga Valley, Ladakh	Shibani K Jha and Harish Puppala	International Conference on Water Environment, Energy & Society, ICWEES-2016	Texas A & M University, USA & AISECT University, Bhopal, India 15-18 March, 2016
39.	Potential Impacts of Climate Change in Water Resources Management of Chittorgarh, District, Rajasthan	A. P. Singh, P. Shrivastava, A. K. Vidyarthi	International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India	March 15 – 18, 2016, Bhopal

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
40.	Water Supply and Demand Sensitivities of Linear Programming Solutions to a Water Allocation Problem	Rajiv Gupta, Devyani Choudhary, Nikita Mongia, Prateek Jain,	International Perspective on water Resources and the Environment, EWRI and ASCE	Jan 4-6, 2016. Colombo, Sri Lanka
41.	Prediction of mixing temperature of asphalt binders using Carreau-Yasuda (C-Y) equation	Saboo, N. and Kumar, P.	National Conference on Fifteen Years of PMGSY (FYPMGSY)	August 5-7, IIT Roorkee, 2016.
42.	Methodology for Pavement Condition Assessment and Maintenance of Rural Roads	A. S. Mane, S. N. Gujarathi, S. S. Arkatkar, A. K. Sarkar, A. P. Singh	National Conference on Fifteen Years of PMGSY (FYPMGSY)	August 6-7, 2016, IIT Roorkee
43.	Impact Assessment of Road Construction on Rural Accessibility: A Case Study in India	S. Kanuganti, A. K. Sarkar, A. P. Singh	National Conference on Fifteen Years of PMGSY (FYPMGSY)	August 6-7, 2016, IIT Roorkee
44.	Improved Design Procedures for Ground Improvement Using Pre-Fabricated Vertical Drains	Agarwal, P., Mittal, R.K. and Gill	National Conference On Technical Advancements in Civil Engineering (NCTACE), LPU.	4-5 April, 2016, Phagwara
45.	Light weight structural configuration for seismic resistance - An innovative approach	Nishant Rathi, Muthukumar G, and Manoj Kumar	National seminar on Emerging Building Materials and Construction Technologies, Building Materials & Technology Promotion Council, Ministry of Housing & Urban Poverty Alleviation, Govt. of India,	November 18, 2016, New Delhi,
46.	Infinite Slope Critical Depth Estimation using Ultrasonics for Pilani Soil	K. Kumar	Presented at XX1st National Symposium on Ultrasonics (NSU 2016), Jointly organized by S. N. Bose National Centre for Basic Sciences & Ultrasonics Society of India at Kolkata	8-10 November, 2016), Abstract on Pages 110-111 of Symposium Proceedings, Kolkata, India
47.	A comparative study of response reduction factor for seismic design of the bridges	Mulchandani H. K. and Mittal, R.K.	Sixth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics	August 1 – 6, 2016, IIT Roorkee
48.	Mechanical and Thermal Material Characteristics of Functionally Graded Materials	S.B. Singh, B. Ranjitha, and Himanshu Chawla	Sixth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2016), SEMC 2016/457	Cape Town, South Africa, September 5-7, 2016
49.	Flexural Response of Masonry Beam Strengthened with FRP Rebars	S.B. Singh, P. Munjal	Sixth International Conference on Structural Engineering, Mechanics and Computation (SEMC 2016), SEMC 2016/457	Cape Town, South Africa, September 5-7, 2016
50.	Dynamic Time History Response of Shear Wall under Earthquake Ground Motion	G. Muthukumar and Manoj Kumar	Structural Engineering Convention (SEC 2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
51.	Reaction Response of Horizontally Curved and Skewed Concrete Box-girder Bridges. Paper ID 266	Gupta, Tanmay and Kumar Manoj,	Structural Engineering Convention (SEC 2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
52.	Effect of Skewness on Shear Lag Effect in RC Box-girder Bridges, Paper ID 653.	Kumar, Manoj, Gulhane, Nishant and Gupta, Tanmay,	Structural Engineering Convention (SEC 2016)	CSIR-SERC jointly with IIT Madras and Anna University,



S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
				Chennai, India December 21-23
53.	Influence of shear core curtailment on the structural response of core wall structures	Nishant Rathi, G. Muthukumar and Manoj Kumar	Structural Engineering Convention (SEC 2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
54.	Nonlinear Dynamic Analysis of Laminated Composite Plates Subjected to In-Plane Harmonic Edge Loading	S.N.Patel and V. Keshav	Structural Engineering Convention (SEC-2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
55.	Dynamic Buckling of Laminated Composite Curved Panels Subjected to In-Plane Compression	V. Keshav and S.N.Patel	Structural Engineering Convention (SEC-2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
56.	Experimental and Analytical studies of failure characteristics of FRP connections	S. B. Singh, Himanshu Chawla, Sudhir Vummadisetti	Structural Engineering Convention (SEC-2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
57.	Mechanical properties of PVA and Polyester fibers based Engineered Cementitious Composites	S. B. Singh and Pankaj Munjal	Structural Engineering Convention (SEC-2016)	CSIR-SERC jointly with IIT Madras and Anna University, Chennai, India December 21-23
58.	Effect of accelerated carbonation on concrete made with fly ash and blast furnace slag	S. Hussain, D. Bhunia and S.B.Singh	The 7 <sup>th</sup> Civil Engineering Conference in the Asian Region (CECAR 7) ASCE	August 30 - September 2, 2016, Waikiki, Hawaii, USA
59.	To predict the impact of passive architecture on the temperature conditions inside a building using ANN	Rajiv Gupta, Anu Gupta, Advait Nair	The 7th International renewable Energy Congress	March 22 – 24, 2016, Hammamet, Tunisia
60.	Developments in Application of Waste Tires in Shallow Foundations	Mittal, R.K. and Gill, G.	Trends and Recent Advances in Civil Engineering (TRACE 2016) in Amity University	Noida, 11-12th Aug, 2016
61.	The Impact of Rainfall on Classified Traffic Volume on an Urban Arterial in India	Sahu, P., Mallika, S., Patil, G., Sharma, S., and Roh, H-J	14th World Conference on Transport Research (WCTRS), Shanghai, China,	Shanghai, China, July, 10-15, 2016
62.	Imputation of Missing Classified Traffic Data during Winter Season	Roh, H-J., Sharma, S., and Sahu, P.	CSCE Annual Conference London Convention Centre, Canada.	Canada, 01st – 04th June, 2016
63.	Understanding Trip Length Distribution for Freight Transportation Planning	Pani, A., Padhi, A., and Sahu, P.	International Conference on Recent Advances in Civil Engineering, Architecture and Environmental Engineering for Sustainable Development (CEAESD-2016)	Jawaharlal Nehru University, New Delhi, February 06, 2016
64.	Statistical Investigation of Truck Type Distribution on Cold Region Highways During Winter Months	Roh, H-J., Sahu, P., Sharma, S., and Mehran, B.	95th Annual Meeting, Transportation Research Board (TRB), Washington D.C., USA	Washington D.C., USA, 10th – 14th January, 2016
65.	Evaluation of Crowding Effect in	Anirban Guharoy,	12th International	19-21 December,

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
	Mumbai Suburban Rail System	Prasanta Sahu*, Gajanand Sharma, Ashoke Sarkar	Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	IIT Bombay, 2016
66.	Modelling Establishment based Freight Generation for Two Cities in Kerala	Agnivesh Pani, Prasanta K. Sahu*, Ashoke K. Sarkar, Gopal R. Patil	12th International Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	19-21 December, IIT Bombay, 2016
67.	Microscopic and Macroscopic Diagnosis of the Impact of Weather Conditions on Truck Traffic Patterns in Regional Urban Commuter Type Highway	Hyuke Jae Roh, Satish Sharma, Prasanta Sahu	12th International Conference Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay	19-21 December, IIT Bombay, 2016
68.	Effect of Soil Heterogeneity on Soil Structure Interaction	Mittal R K and Rawat S.	Indian Geotechnical Conference IGC2016, IIT Madras	15-17 December, IIT Madras, 2016

#### F. BOOKS/BOOK CHAPTERS PUBLISHED DURING THE YEAR

##### Book/Book Chapter

- S. B. Singh, Ranjitha B, H. Chawla. "Mechanical and thermal material characteristics of functionally graded materials", Insights and Innovations in Structural Engineering, Mechanics and Computation, CRC Press, Taylor & Francis Group, London, September 2016, ISBN 9781138029279 - CAT# K27666.
- S. B. Singh, P. Munjal, "Flexural Response of Masonry Beam Strengthened with FRP Rebars", Insights and Innovations in Structural Engineering, Mechanics and Computation, CRC Press, Taylor & Francis Group, London, September 2016, ISBN 9781138029279 - CAT# K27666.
- P. Munjal, S. B. Singh & N. Thammishetti, "Structural performances of masonry beam strengthening with FRP sheets", Brick and Block masonry- Trends, Innovative and Challenges, CRC Press/Balkema, (Taylor & Francis Group, London), June 2016, ISBN 978-1-138-02999-6. pp. 2147-2152.

#### G. INVITED TALKS/KEY-NOTE LECTURES DELIVERED/SESSION CHAIRING BY FACULTY MEMBERS

1. Dr. Bahurudeen A delivered an Invited talk on "Supplementary cementitious materials-Indian and International standard perspective" International conference ICEMS, JNU, March 2016.
2. Dr. Bahurudeen A was Invited as a resource person and delivered talk on "Selection of alternative materials and microstructural characterization of concrete" TEQIP sponsored 6 days short term training programme on Durability of reinforced concrete structures, RIT Government Engineering College, Kerala, July 2016.
3. Prof. Rajiv Gupta chaired the session on Automation and Renewable Energy Systems in the 7th International renewable Energy Congress, March 22 – 24, 2016, Hammamet, Tunisia.
4. Prof. S.B. Singh acted as Expert Advisory Committee for DST Rajasthan (Jaipur) Projects funding in Civil Engineering Discipline on 29<sup>th</sup> January 2016.
5. Prof. S.B. Singh delivered an Invited talk (resource person) on "selection of alternative materials and microstructural characterization of concrete" TEQIP sponsored 6 days short term training programme on Durability of reinforced concrete structures, RIT Government Engineering College, Kerala, July 2016.
6. Prof. S.B. Singh delivered an Invited talk on Supplementary cementitious materials-Indian and International standard perspective" International conference ICEMS, JNU, March 2016.
7. Prof. S.B. Singh delivered invited Keynote Expert Lecture on "Development of Polymer Composites for Civil Engineering Applications," at Symposium on Sustainable Technology Development in Polymer (SSTDP-2016), March 11, 2016, BITS Pilani, Pilani Campus.
8. Prof. S.B. Singh delivered Invited Keynote Lecture on "Flexural Behavior of Reinforced Masonry Beams with ECC as Bed Joint," at International Conference on Advances in Concrete Technology Materials and Construction Practices, Goa Engineering College, Farmagudi, Goa, June 23, 2016.

**CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NIL****G. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

- Dr. Amit Goel was invited to visit NTU Singapore, for exploring collaboration, 17-28 December, 2016.
- Dr. Prasanta kumar sahu was a visiting scientist - University of Regina during June-July, 2016.

**I. AWARDS AND RECOGNITIONS****FACULTY:**

- Prof. Ashoke Kumar Sarkar has been appointed as the member of the committee, Rural Roads Development, Vision 2040.
- A Biographical note prepared by Prof. S.B. Singh has been included in Asia Pacific Who's Who (Vol. XIV), Publisher: Rifacimento International, Ansari Road, Daryaganj, New Delhi 11002, May 05, 2016.
- Best paper award for "Liquefaction Screening Criteria for Earth Dams." by Ravi Kant Mittal, Gaurav Tyagi and Gourav Gill, presented at International Conference on Advances in Civil Engineering and Sustainable Construction-ACESC'16, 30 March – 1 April 2016, Organized by Department of Civil Engineering, SRM University, Chennai, India.
- Dr. Amit Goel received an invitation for an academic visit and meeting with Director (Research, Road/Transport) to discuss current research topics and avenues of collaboration. Three students (FD and HD) also accompanied Dr. Goel. As a result of this visit, BITS Pilani was invited to submit a project proposal (worth 25 lakhs) on a recent research topic and was the only private institute invited for this proposal.
- Dr. Prasanta Kumar Sahu has been appointed as Executive Board Member, Transportation Research Group India (TRG India) in the year 2016.

**STUDENTS:**

- Shubham Thakur (2014A2PS726P) was selected for attending Noble Prize Series-India programme to propose his idea for a sewerage system for the city of Warangal .He presented the same in Nobel Prize series programme, attended by the Prime Minister of India and Chief Minister of Gujarat.
- Pratyaksh Agarwal (2013A2PS671P) got offer letter for admission in London Business School for Masters in Management course through GMAT.
- Rishi Badola (2014A2PS591P) won the India Engineers' quiz competition conducted by ICE.
- Prateek Arora (2014A2PS556P) won the prestigious OP Jindal Engineering and Management Scholarship.
- Harish Puppala (a research scholar) won the student paper award for publishing the paper at the 12<sup>th</sup> International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC).

**J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

1. Model Footing Plate Load Test Equipment
2. Dynamic Plate Load Test Block Vibration Test Setup
3. Digital Hot Air Oven (750 L)
4. Cannon Manning Vacuum Viscometer Tube Size-12
5. Aggregate Crushing Value Apparatus
6. Aggregate Impact Test Machine
7. Automatic Standard Penetrate meter
8. Bitumen Mixing Apparatus
9. Flash & Fire Point Apparatus
10. Tar Viscometer
11. Ring & Ball Apparatus
12. Water Bath
13. Cement Soundness Mould

14. Sieve Shaker For Coarse Aggregate
15. Wheel Barrow Concrete Disposal Cart
16. Flow Table - Hand Operated

#### **K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

The Civil Engineering Association (CEA) and Civil Students Society organized the following events in the year 2016.

##### **Formal Meet**

A formal meet was held on 8<sup>th</sup> August in Lecture Theatre Complex. The meet was attended by faculty members, research scholars, newly admitted students and senior year students in order to brief the scope and expectations of a civil engineer. The meet started with an address by Prof. Ashoke Kumar Sarkar, Senior Professor in Civil Engineering Department. The association team made a brief presentation about the civil engineering profession. The meet finally concluded with interaction of freshmen entrants with faculty members and seniors. One-on-one interaction of the students with the faculty over snacks initiated the bond that will be developed over the years.

##### **APOGEE Meets**

Three APOGEE Project Meets were held. Intense brainstorming was done to discuss ideas as well as the project pitching rounds to follow. Several exciting events were planned for APOGEE 2017. Emphasis was given to make the APOGEE events better and more challenging. Project ideas were encouraged and many projects got selected for further rounds.

##### **Other Events**

The Civil Engineering Association conducted a competition on roller coaster ride for the students on September 5, 2016. Civil Students society organized the event "Jenga" on 3rd September 2016 and attracted 80 participants to build the tallest tower out of the small blocks with an intention to enhance their thinking ability about the stability of structures.

Many students participated in the competition by forming their own groups. A workshop on STAADPRO (23-01-2016) and ETABS (17-02-2016) has been conducted by our Higher Degree students as a part of association activities.

##### **Industrial Visit:**

An industrial visit to Vrindavan Chandrodya Mandir in Vrindavan on September 11, 2016 was organized by Civil Students Society wherein students were to the construction site to know the intricacies of construction of a skyscraper temple-cum-heritage center.

##### **Farewell Meet**

A farewell meet was organized for the passing out class of 2017, in the First semester on 28<sup>th</sup> November 2016. This event was attended by faculty members of the Civil Engineering department. The CEA bid farewell to its graduating students. This event was preceded by the farewell dinner.

**B1.10.3 Department: Chemical Engineering**

Number\* of faculty members (as on 31 December 2016)

<b>Professor</b>	01*
<b>Associate Professor</b>	03
<b>Assistant Professor</b>	09+01*
<b>Lecturers</b>	01*

\* Off Campus.

<b>Head of the Department:</b>	Prof. H. K. Mohanta
<b>Contact details:</b>	harekrishna@pilani.bits-pilani.ac.in
<b>Number of PhD Scholars:</b>	09
<b>Ph.D. Thesis Submitted during the year:</b>	02

**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department: 07

**i. Ongoing projects**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Zinc Recovery from Industrial Waste using Biobleaching	Dr. Suresh Gupta	BITS	48.00	2014 – 17
Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr Srinivas Appari	BITS	2.0	2015-17
Bioremediation of waste automobile engine oil	Dr Amit Jain	BITS	2.0	2015-17

**ii. Projects sanctioned during the year**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Design and development of a novel biomass stove for cooking application	Dr Pratik N Sheth	BITS	9.00	2016-2018
Non linear modeling and simulation of chemical processes	Dr Ajaya Kumar Pani	BITS	BITS	2
Experimental studies on a bench-scale cold-flow FCC unit	Dr Priya C Sande	BITS	BITS	2
Hydrogen Production from Ethanol by Low Temperature Reforming Methods Using Modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr Banasri Roy	BITS	DST	19.27

**iii. Projects completed this year**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Removal of Heavy Metals from Industrial Wastewater using Metallic Nanoparticles as Adsorbents	Dr Suresh Gupta	DST	21.47	2013 – 16
Evaluation and Enhancement of Foam Stability of Ethanol based Aqueous Foam using Commercial Surfactant Sodium Lauryl Sulfate	Dr Pradipta Chattopadhyay	DST	25.0	2013 – 16
Production of hydrogen-rich fuel gas from Jatropha residue cake	Dr Pratik N Sheth	DST	27.06	2013 – 16
Recirculating fluidized bed for chemical looping	Dr Raman Sharma	BITS	2.0	2014-2016

**B. PUBLICATIONS**

The faculty of the department published 19 papers in international refereed journals during the year.

1. Utkarsh Maheshwari, Suresh Gupta, Performance evaluation of activated neem bark for the removal of Zn(II) and Cu(II) along with other metal ions from aqueous solution and synthetic pulp & paper industry effluent using fixed-bed reactor, Process Safety and Environmental Protection, Vol. 102, pp. 547–557
2. Subhajit Majumder, Vedansh Gupta, Smita Raghuvanshi, Suresh Gupta, Simultaneous sequestration of

- ternary metal ions (Cr<sup>6+</sup>, Cu<sup>2+</sup> and Zn<sup>2+</sup>) from aqueous solution by an indigenous bacterial consortium, *Process Safety and Environmental Protection*, Vol. 102, pp. 786-798.
3. Subhajit Majumder, Smita Raghuvanshi, Suresh Gupta, Application of a hybrid biofilter column for the removal of Cr(VI) from aqueous solution using an indigenous bacterial strain *Pseudomonas taiwanensis*, *Bioremediation Journal*, Vol. 20, pp. 10-23.
  4. Subhajit Majumder, Smita Raghuvanshi, Suresh Gupta, Sequestration of Zn<sup>2+</sup> from aqueous solution using *Klebsiella pneumoniae*: Batch kinetics and continuous studies, *Journal of Water Process Engineering*, Vol. 12, pp. 89–104.
  5. Somesh Mishra, Suresh Gupta, Smita Raghuvanshi, Pratibha Pal, Energetic assessment of fixation of CO<sub>2</sub> and subsequent biofuel production using *B. cereus* SM1 isolated from sewage treatment Plant, *Bioprocess and Biosystems Engineering*, Vol. 39, pp. 1247 – 1258.
  6. Vikrant Bhakar, D.N.S. Hemanth Kumar, Nitin Krishna Sai, Kuldip Singh Sangwan, Smita Raghuvanshi, Life cycle assessment of filtration systems of reverse osmosis units: a case study of a university campus, *Procedia CIRP*, Vol. 40, pp. 268 – 273
  7. S. Aich, M.K. Mishra, C. Sekhar, D. Satapathy, B. Roy, Synthesis of Al-doped Nano Ti-O scaffolds using a hydrothermal route on Titanium foil for biomedical applications, *Materials Letters* 178, 135–139
  8. Pradipta Chattopadhyay, R. Arun Karthick, Optimum Dodecanol-detergent foam performance for formulation of eco-friendly surfactants, *Research Journal of Chemistry and Environment*, 20(3), 16-20.
  9. Pradipta Chattopadhyay, R. Arun Karthick, Optimum Isopropanol foams for soil remediation applications, *Research Journal of Chemistry and Environment*, 20(4), 18-24.
  10. Jain, Amit and Babu B. V., Sensitivity of Relative Gain Array for Processes with Uncertain Gains and Residence Times, *IFAC - PapersOnLine* 49(1), 486-491.
  11. Pani, A. K., Amin, K. G., & Mohanta, H. K, Soft sensing of product quality in the debutanizer column with principal component analysis and feed-forward artificial neural network, *Alexandria Engineering Journal*, 55, 1667-1674.
  12. Pani, A. K., Mohanta, H. K, Online monitoring of cement clinker quality using multivariate statistics and Takagi-Sugeno fuzzy-inference technique, *Control Engineering Practice*, 57, 1-17.
  13. Pradipta Chattopadhyay, R. Arun Karthick, An In-Depth Analysis of Ethanol Based Aqueous Foams for Environmental Applications, *International Journal of Chemical Sciences*, 14(3), pp. 1711-1717.
  14. Sharma, R., Sheth, P.N., and Gujarathi, A.M., Kinetic modeling and simulation: Pyrolysis of Jatropha residue de-oiled cake, *Renewable Energy*, Vol. 86, pp. 554-562.
  15. Sharma, S. and Sheth, P.N., Air-steam biomass gasification: experiments, modeling and simulation, *Energy Conversion and Management*, Vol. 110, pp. 307 - 318
  16. Patra, T., Ravindran, N. and Sheth, P.N., A comprehensive dynamic model for downdraft gasifier using heat and mass transport coupled with reaction kinetics, *Energy*, vol. 116, pp. 1230 - 1242.
  17. Amit Jain and B. V. Babu, Relative Response Array: A New Tool for Control Configuration Selection, *International Journal of Chemical Engineering and Applications*, Vol. 6 (5), pp. 356-362.
  18. Priya C. Sande, Saumi Ray, Fine Mesh Computational Fluid Dynamics Study on Gas-Fluidization of Geldart A Particles: Homogeneous to Bubbling Bed, *Industrial & Engineering Chemistry Research*, 55 (9), pp 2623-2633
  19. Priya, Appari S, Aniruddha T, Sanket R, Bahurudeen A, Quantification of Carbon Content in cogeneration boiler waste and Its Effect on Pozzolan Reactivity, *Materials Today Proceedings* (accepted)
  20. Parikshit Kishor Singh, Surekha Bhanot, Hare Krishna Mohanta. 'Optimal Fuzzy Logic Control of a pH Neutralization Process using Swarm and Evolutionary Algorithms'. *WSEAS Transactions on Systems and Control*. Volume no. 11, Page no. 229-238, April 2016. Published by: World Scientific and Engineering Academy and Society, Greece; ISSN: 1991-8763 (Print), 2224-2856 (Online). Indexed by: Scirus (Elsevier). SJR: 0.27. (<http://wseas.org/wseas/cms.action?id=12128>)

**The faculty of the department published 16 papers in international/national conferences during the year.**

1. Pradipta Chattopadhyay, R. Arun Karthick, "Characterization and Optimization of Dodecanol-Surf Excel foams ", *Proceedings of National Symposium on Multiphase Flow (NSMF 2016)*, Durgapur, India, February 22-24, 2016. (National)
2. Pradipta Chattopadhyay, R. Arun Karthick, Ketan Jangir, Manish Chauhan, "Comparison of Detergent Preformulations Using Sodium Lauryl Sulfate, Allyl Alcohol and 1-Octanol", *Proceedings of Symposium on*

- Sustainable Technology Development in Polymer (SSTDP-2016), Pilani, India, March 11-12, 2016. (National)
3. Pradipta Chattopadhyay, R. Arun Karthick, "Characterization and Application of Surfactant Foams produced from Ethanol-Sodium Lauryl Sulfate-Silica Nanoparticle Mixture for Soil Remediation", Proceedings of 2nd International Conference on Soft Materials (ICSM 2016), Jaipur, India, December 12-16, 2016. (International)
  4. Pradipta Chattopadhyay, R. Arun Karthick, Manish Chauhan, "Characterization Of Stabilized Sodium Lauryl Sulfate, Tween 80 Foams And Usage In Contaminated Soil Remediation", Proceedings of the 69th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2016), Chennai, India, December 27-30, 2016. (National)
  5. Pradipta Chattopadhyay, R. Arun Karthick, Prakhar Agarwal, Shashwat Mishra, "A Review And Analysis Of Emerging Contaminated Soil Remediation Techniques", Proceedings of the 69th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2016), Chennai, India, December 27-30, 2016. (National)
  6. Ashwath A B, A K Sharma and Karthick R, Kinetic Modeling of Secondary Cracking of Gasoline Adopting Non Selective Catalyst Deactivation Approach, *20<sup>th</sup> Refinery Technology Meet*, Sept. 7-9, 2016, Gandhinagar, Gujarat, India.
  7. Joshi L. K Tripathi and A K Sharma, Loop Reactors: Advancing Reactors Realm, *International Symposium & 69th Annual Session of IChE in association with International Partners (CHEMCON – 2016)*, Dec 27-30, 2016, Chennai, India.
  8. Khandgave, S., Gupta Suresh, and Pratik N Sheth, The hydrodynamic simulation of bio-film reactors using computational fluid dynamics for bioenergy systems, BIOSANGAM 2016 - International Conference on Translational Biotechnology (Biosangam 2016) held at Motilal Nehru National Institute of Technology (MNNIT), Feb 4-6, 2016.(National)
  9. Garg, M. and Pratik N Sheth, Syngas composition prediction for a biomass gasification process, Chemical Engineering Congress (CHEMCON 2016) held at CHENNAI from Dec 27 – 30, 2016(National)
  10. Sharma, R., Delebarre, A. and Alappat, B. (2016). "Recirculating Fluidized Bed Reactor for Chemical-Looping." *Proc., Fluidization XV Conference*, Quebec, Canada, May 22-26, 2016.
  11. Tomar, S., Sai, N. K. L. and Sharma, R. (2016). "Superiority of Re-circulating Fluidized Bed Reactor over existing reactors arrangements for Chemical-Looping Combustion – A review." *Proc., International Conference on Water, Environment, Energy and Society*, Bhopal, India, March 15-18, 2016.
  12. Priya, S Appari, in-situ reforming of volatiles from pyrolysis of biomass – a review, Chemical Engineering Congress (CHEMCON 2016) held at CHENNAI from Dec 27 – 30, 2016(National).
  13. Suresh Gupta, Treatment Of Wastewater Contaminated Methylene Blue Dye And Reactive Orange-16 Using Bioremediation, Chemical Engineering Congress (CHEMCON 2016) held at CHENNAI from Dec 27 – 30, 2016(National).
  14. Smita Raghuvanshi, Defluoridation Studies Using Graphene Oxide Doped with Magnesium Oxide, Chemical Engineering Congress (CHEMCON 2016) held at CHENNAI from Dec 27 – 30, 2016(National).
  15. Priya, Appari S, Aniruddha T, Sanket R, Bahurudeen A, Determination of carbon content of residual bagasse ash and its influence on pozzolanic performance, ICEMS-2016 - MARCH 17-19, 2016 (ISBN NO. 978-93-5254-230-7).
  16. Athira G, Bahurudeen A, Appari S, Priya, Sustainable material processing of sugarcane bagasse, The 4th International conference in materials & material processing, November 5-7, 2016, IIT Kharagpur.

### C. CONFERENCES/WORKSHOPS ATTENDED/PAPERS PRESENTED

1. Dr. Pratik N Sheth, Dr. Suresh Gupta, Dr. Smita Raghuvanshi , and Dr. Pradipta Chattopadhyay attended 69th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2016), Chennai, India, December 27-30, 2016. (National)
2. Dr. Priya C Sande attended the 2nd International Conference and Exhibition on Powder, Granule and Bulk Solids: Innovations and applications, Jaipur, India, December 1-3, 2016. (International)
3. Dr. Pratik N Sheth attended and presented the article on The hydrodynamic simulation of bio-film reactors using computational fluid dynamics for bioenergy systems, at BIOSANGAM 2016 - International Conference on Translational Biotechnology (Biosangam 2016) held at Motilal Nehru National Institute of Technology (MNNIT), Feb 4-6, 2016.(National)
4. Dr. Raman Sharma attended *Fluidization XV Conference*, Quebec, Canada, May 22-26, 2016.

5. Dr. Raman Sharma attended *International Conference on Water, Environment, Energy and Society*, Bhopal, India, March 15-18, 2016.
6. Dr. Amit Jain attended International conference on *Advances in Control & Optimization of Dynamical Systems*, NIT Trichy, Feb. 1-5, 2016.
7. Dr. Priya C Sande, Computational Fluid Dynamic investigation on transition of Geldart powders from group A to B , 2nd International Conference on Powder, Granule and Bulk Solids: Innovations and Applications, Jaipur, India during 1-3 December 2016.
8. Dr. Hare Krishna Mohanta attended *Hands-on Workshop on Real Time Interfacing using MATLAB, SIMULINK and Guide for Process Control Applications*, MIT Manipal, July 11-15, 2016.

#### D. BOOKS/BOOK CHAPTERS PUBLISHED :

1. Pradipta Chattopadhyay, R. Arun Karthick, P. Kishore, "Foamability of Foam Generated by Use of Surf Excel and Sodium Lauryl Sulfate", Edited by Dr. Bharat A. Bhanvase, Rajendra P. Ugwekar, Apple Academic Press, ISBN: 9781771883245, 2016. (International)

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED

'*Symposium on Sustainable Technology Development in Polymer (SSTD-2016)*', which has been jointly organized by Indian Institute of Chemical Engineers (IChE)- Pilani Regional Center, Dept. of Chemical Engineering, Birla Institute of Technology and Science, Pilani- Pilani Campus, and Elastomer Technology Development Society (ETDS) during March 11-12th, 2016.

#### F. INVITED TALKS GIVEN BY BITS FACULTY:

1. Dr Suresh Gupta invited Distinguished speaker "Research Formulation, Data Analysis, and Interpretation" in the National Workshop on "Novel Approaches and Techniques in Research Methodology" organized by department of Chemistry, English and Mathematics at Government Women Engineering College, Ajmer on 29<sup>th</sup> November 2016 under TEQIP – II.
2. Dr Pratik N Sheth delivered an invited talk during National Conference on Emerging Research Trends in Engineering held at VISHWAKARMA GOVERNMENT ENGINEERING COLLEGE AHMEDABAD, INDIA during April 4-6, 2016 on the topic of Thermochemical Conversion of Biomass: Modeling and Simulation.

#### G. INVITED TALKS ARRANGED IN THE DEPARTMENT

Dr. Ravindra D. Gudi, Professor, Department of Chemical Engineering, Indian Institute of Technology Mumbai delivered a talk on Nonlinear identification and Control of Chemical Processes 22<sup>nd</sup> April, 2016.

#### H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

1. Dr. Raman Sharma was awarded Indian National Science Academy (INSA) 2016 award. Under this award he visited Technical University Darmstadt, Germany for two months (June 01, 2016 to July 31, 2016).
2. Dr. Banasri Roy was awarded Indian National Science Academy (INSA) 2017 award. Under this award she will be visiting Institute of Inorganic Technology and Environment Engineering, West Pomeranian University of Technology, ul. Pułaskiego 10, 70-310 Szczecin, Poland for 4 weeks.

#### I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION

1. Dr. Hare Krishna Mohanta Attended a Hands-on Workshop on Real Time Interfacing using Matlab, Simulink and Guide for Process Control Applications organized by Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal during July 11 - 15, 2016.
2. Dr. Pradipta Chattopadhyay, Amit Jain, Utkarsh Maheshwari, and Subhajit Majumder acted as PS-I 2016 Faculty Coordinators.

#### J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR

1. Softwares: SYSTAT 13 (software for statistical analysis), ANSYS Academic Research CFD Software
2. Fixed-bed reactor is modified for handling high temperature reforming reactions.
3. Recirculating Fluidized bed, Programmable Spin Coating System, Ion Meter with accessories, Interfacial Surface Tensiometer, Contact Angle Measurement System are added

#### K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

##### Chemical Engineering Association

The Chemical Engineering Association (ChEA) organized various activities starting from APOGEE 2016 held from 25<sup>th</sup> – 28<sup>th</sup> February 2016, during which it conducted two events, namely, Dexter's Laboratory and ChemWars. Chemical Engineering students also won first prizes in various categories. Abhishek Tiwari and his team won the first prize for their project under the Material Science Category while Suyash Kirti won the first prize for his paper under the Environmental category. The Association also assisted the Department during the



interviews held in April 2016 for the various Academic awards. On 14th April 2016, the Chemical Engineering Association organized an online talk by Dr. Rajan Bawa on “Novel aspects of Polymer use and Processing and Challenges of Entrepreneurship in the US”. The semester culminated with a farewell function on 24<sup>th</sup> April for seniors where the academic award winners and the office bearers for the next academic year were announced.

The new Semester started with interactions held on 8<sup>th</sup> August 2016 where 1<sup>st</sup> year B.E. & M.E. students were called to meet the office bearers of ChEA for an informal chat regarding Chemical Engineering. This was followed by a formal interaction on 9<sup>th</sup> September where Secretary (ChEA), APOGEE Coordinator of Chemical Engineering Association (ChEA) along with the Secretary of Student Chapter-Indian Institute of Chemical Engineering (IICChE) explained about ChEA and IICChE and also the various events organized by them in BITS. The association also collected data from the final year students about their summer internships and shared the same with current 3<sup>rd</sup> year students. Chemical Engineering Association along with the other departmental associations celebrated Engineers' Day on 15<sup>th</sup> September, 2016 by organizing events like Quiz, Poster presentations on the theme, “Skill Development for Young Engineers to Reform the Core Sector: Vision 2025.” For APOGEE – 2017, a meeting was held on 19<sup>th</sup> September to briefly explain students about various events to be organized during APOGEE mainly about Project Presentation, Poster presentation rules, categories and important dates. The Chemical Engineering Association gave the prize money to award winners for the academic year 2015-2016. It also expanded its online presence with 500 likes on the FB page, an increase of 400 over the past year.

The Chemical Engineering Association also conducted two major events in the last semester (1st Sem 2016-17). The first was a talk by Prof. Arul Jayaraman, Head, Graduate Program, Department of Chemical Engineering, Texas A&M University, U.S.A. held on 4<sup>th</sup> November, in which he discussed about the M.S. opportunities at the University. This was followed by an interactive Q&A session in which the students asked Prof. Arul about the admission process for foreign Universities. A workshop on Career opportunities for Graduate Chemical Engineers was also conducted on 26<sup>th</sup> November 2016 with experts from Engineers Institute of India, explaining the students about how to go about preparing for GATE Exam. This was followed by the expert team distributing a book containing solved GATE question papers of the past 20 years.

The Chemical Engineering Association ended the semester by giving farewell to 26 B.E. and 5 M.E. final year students on 25<sup>th</sup> November 2016. During the farewell, the Association also took a new initiative in providing white T-Shirts and markers to the seniors.

#### **Indian Institute of Chemical Engineers (IICChE ) Pilani Regional Center (PRC)**

Pilani Regional Center, Indian Institute of Chemical Engineers (IICChE), Dept. of Chemical Engineering, Birla Institute of Technology and Science, Pilani- Pilani Campus, and Elastomer Technology Development Society (ETDS) jointly organized a national level Symposium on Sustainable Technology Development in Polymer (SSTDP-2016) during March 11-12th, 2016. The objective of the symposium was to provide a platform to industry (experts and young beginners) and academic (students, research scholars, and faculty) personnel for the exchange of knowledge, information, and ideas leading to useful insights on industrial processes & research and technological innovation in the area of polymer science and engineering.

This workshop was designed to amalgamate Expert Lectures, Poster Presentation from the participants, and Panel Discussion. The Symposium was commenced with the inauguration by Chief Guest: Dr. Srinivasan Duraiswamy (Director, Dr. Reddy's Laboratories, Hyderabad) and Prof. A. K. Sarkar; Director of BITS Pilani, Pilani campus.

The workshop included 8 Expert Lectures in three sessions. In Session 1 Chair Person was Dr. Srinivasan Duraiswamy. Dr. S N Chakravarty, Managing Director, KPS Consultants & Impex Pvt. Ltd., Delhi, and President, Elastomer Technology Development Society was the first speaker. He delivered an excellent talk on Sustainable Technology Development in Elastomer Production & Application - An Indian Perspective. The second expert speaker of the session was Mr. D J Bharucha (Technical Director Bhimrajka Exim Lp and Polmann India Limited). His talk was on Application Of Polymer / Elastomer in Automotive Industry. The last speaker of the session Dr. D. K. Setua (Scientist G, Associate Director, Defense Materials Research & Development Establishment (DMSRDE)) delivered his talk on Polymers/Nanopolymers for Future Energy Applications.

After Lunch, the 2nd session was continued under the Chairpersonship of Dr. S N Chakravarty. Dr. Virendra Kumar (Scientific Officer-F, RTDD, Bhabha Atomic Research Centre, Mumbai, India) Talked on Radiation Processing for Sustainable Technology Development for Polymer Industries. The lecture session was concluded with the talk of Prof. Shamsher Bahadur Singh (Civil Engineering department, BITS Pilani, Pilani Campus) on Application of innovative Polymer composites.

Total 25 participants took part in the “Poster Session” sharing a spectrum of relevant and current aspects of research on the polymer in Chemical and Environmental Engineering. There were participants from inside and outside BITS. The posters were judged by Dr. S. N. Chakravarty, Mr. D J Bharucha, Dr. D. K. Setua, and Dr. Srinivasan Duraiswamy and 3 best poster awards were given.

A small cultural program was also arranged to entertain the guests followed by dinner. During dinner, Pilani Regional Center, Indian Institute of Chemical Engineers (IICChE), Dept. of Chemical Engineering, Birla Institute of Technology and Science, Pilani- Pilani Campus, felicitated Dr. S. N. Chakravarty for his lifelong achievements and contribution in the field of elastomers.

On 12th March, the 3rd session of the Symposium was chaired by Dr. D. K. Setua. Two lectures were delivered on the industrial polymers, the first one by Dr. Srinivasan Duraiswamy on Sustainable Development of Polymers in Pharmaceutical Industries, and the second one by Dr. Ramki Subramanian (Head Business Development, RIL – Petrochemicals) on Commercialization of New and Sustainable Technologies in Polymer Industries. The session was concluded by the talk of Dr. S N Chakravarty on REACH Compliance for Elastomers. Dr. Anomitra Chakravarty (Managing Director , KPS Consultants & Impex Pvt. Ltd., New Delhi.) was withheld at the last moment.

The last topic of the Symposium was the Panel Discussion on Recent trends and opportunities in Polymer and allied Industries. Prof. Arvind Kumar Sharma from Chemical Engineering department of BITS-Pilani was the Moderator. Participants were Dr. Ramki Subramanian, Dr. Virendra Kumar, Dr. D.K. Setua, Dr. S. N. Chakravarty, Dr. Srinivasan Duraiswamy, and Prof.P.Srinivasan (Associate Professor/Mechanical Engineering and Associate Dean/Practice School Division, BITS-Pilani).

On April 22, 2016, Prof. (Dr.) Ravindra D. Gudi, Professor, Department of Chemical Engineering, Indian Institute of Technology Mumbai delivered a talk on "Nonlinear Identification and Control of Chemical Processes". The talk was about the system identification and deals with the task of establishing (largely empirical) cause and effect relationships. Often times, such models are identified for use in control. When the models are parameterized to have a complex form due to the inherent dynamics, the realization of the controller as an inverse of the model is not straightforward. This prompts the need to look for relatively simpler model parameterizations in a reduced order framework. However, one also had to contend with the issue of model plant mismatch that manifests and determines the control loop stability and performance. This talk was focused on the identification of multiple models, that approximate nonlinearities and the approach are aligned with the 'divide-and- conquer' paradigm. The presentation was of the tutorial in nature and had focused on both linear and nonlinear dynamics, with representative case studies from process engineering domain.

#### B1.10.4 Department: Chemistry

Number of faculty members (as on 31<sup>st</sup> December 2016)

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	08
<b>Research Associate</b>	01
<b>DST Inspired Faculty</b>	01

**Head of the Department:** Prof. Bharti Khungar

**Contact details:** bkhungar@pilani.bits-pilani.ac.in

**Number of Ph D Scholars:** 41

**Ph.D. Thesis Submitted and awarded during the year: Awarded : 6, Submitted : 6**

#### A. SPONSORED RESEARCH ACTIVITIES

Total number of Sponsored Projects in the department are 20, the details are given below:

##### (i) Ongoing projects

Principal Investigator	Funding Agency	Title of the Project	Amount (Lakhs)
Department of Chemistry	DST	DST-FIST Programme	87.00
Prof. Ram Kinkar Roy	DST-SERB	Development and Applications of Density Functional Reactivity Theory Based Modeling Techniques to Understand the Energetics of Reactive and Non-reactive Interactions	31.55
Prof. Subit Kumar Saha	UGC-DAE Consortium for Scientific Research, Mumbai Centre, BARC, Mumbai	Investigation of unfolding and refolding of proteins by gemini surfactants with varying spacer groups using fluorescence spectroscopy and small-angle neutron scattering techniques	6.63
Prof. Subit Kumar Saha	Council of Scientific and Industrial Research, New	Effect of Chemical Nature of Spacer group, Headgroups and Counterions of	15.9

	Delhi	Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarins in Aqueous Micelles	
Rajeev Sakhuja	BITS Pilani, ACRG	Design and Synthesis of Multi-functional Smart Low Molecular Weight Gelators (LMWGs)	4.5
Surojit Pande	BITS additional seed grant	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for photocatalysis and electrocatalysis	6.95
Indresh Kumar	ACRG, BITS	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	8.2
Inamur R. Laskar	DST, SERB	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Application in Bio-imaging	35.9
Shamik Chakraborty	DST, SERB, Fast Track	Competition between charge transfer and proton transfer processes in some newly designed schiff bases: Spectroscopic and theoretical investigation in condensed phase	24.98
Kiran Bajaj	DST, SERB, Fast Track	Study of Native Chemical Ligation at Tryptophan and Aspergine sites and its application in Peptide Synthesis.	31.30
Bibhas R. Sarkar	BITS Pilani, ACRG	Sustainable Catalytic Route to C <sub>4</sub> -C <sub>6</sub> Carboxylic acids/ hydroxyacids by Carbonylation of Polyols	5.5
Dr. Dalip Kumar and Dr. Anil Kumar	Ranbaxy	Novel synthesis of anti-HIV agents	27.50

**(ii) Projects sanctioned**

PI	Funding Agency	Title of the Project	Amount (in lakhs)
Prof. Anil Kumar	DST-SERB	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C-H functionalization reactions	33.0

**Projects completed**

Principal Investigator	Funding Agency	Project Name	Sanctioned Amount (Lakhs)
Rajeev Sakhuja	DST-SERB	Design of Synthetically Tunable Azino-fused Chromene Conjugates as Potential Organogelators	24.7
Bharti Khungar	UGC	Synthesis, characterization and application of novel ionic liquid supported metal complexes	13.4
Surojit Pande	DST-SERB	Synthesis and Characterization of (Metal Oxide) <sub>core</sub> - Metal <sub>shell</sub> Nanoparticles in Quantum Dot Region and Their Application in Electrocatalysis	24.93
Ajay K. Sah	UGC	Synthesis, Metallochemistry and Reactivities of D-Glucose derived Glycoconjugates	9.13
Anil Kumar	CSIR	Exploration of Novel Ionic Liquid Supported Sulfonyl Reagents for Organic Synthesis	16.65
Dalip Kumar	DBT	Synthesis of Novel N, O, S Containing Heterocycles and Evaluation of Their Anticancer Activities	25.50
Dalip Kumar	DST-JSPS S&T Programme	Design and Synthesis of Porphyrin-based Photosensitizers as Anticancer Agents	4.21

**B. PUBLICATIONS**

The faculty of the department published forty eight papers in international/national refereed journals during the year.

1	Sonu, Sunita Kumari and Subit K Saha, Solvation dynamics and rotational relaxation of Coumarin 153 in mixed micelles of Triton X-100 and cationic gemini surfactants: Effect of composition and spacer chain length of gemini surfactants, <i>Phys. Chem. Chem. Phys.</i> 2016, 18, 1551-1563.
2	Srishti Sinha, Deepti Tikariha, Jyotsna Lakra, Toshikée Yadav, Sunita Kumari, Subit K. Saha, Kallol K. Ghosh, Interaction of bovine serum albumin with cationic monomeric and dimeric surfactants: A comparative study, <i>Journal of Molecular Liquids</i> , 2016, 218, 421-428.
3	Sunita Joshi, Santosh Kumari, E Chamorro, Debi D. Pant, Rajeev Sakhuja, Fluorescence Quenching of a Benzimidazolium-based Probe for Selective Detection of Picric Acid in Aqueous Medium, <i>ChemistrySelect</i> 2016, 1, 1756.
4	Santosh Kumari, Sunita Joshi, Tania Cordova-Sintjagoc, Debi D. Pant, Rajeev Sakhuja, Highly sensitive fluorescent imidazolium-based sensors for nanomolar detection of explosive picric acid in aqueous medium, <i>Sensors and Actuators B Chemical</i> 2016, 229, 599.
5	Sunita Joshi, Santosh Kumari, Amrit Sarmah, Rajeev Sakhuja, Debi D. Pant, Solvatochromic shift and estimation of dipole moment of synthesized coumarin derivative: Application as sensor for fluorogenic recognition of Fe <sup>3+</sup> and Cu <sup>2+</sup> ions in aqueous solution, <i>Journal of Molecular Liquids</i> 2016, 222, 253.
6	Tej V. Varma, Devesh S. Agarwal, Amrit Sarmah, Yukti; Rajeev Sakhuja, Debi D. Pant, Design and synthesis of amino acid appended azo dye hybrid: Characterization, solvatochromic and quantum-chemical calculations using experimental and theoretical approach, <i>Journal of Molecular Liquids</i> 2016, 221, 1022.
7	Santosh Kumari, S. M. Abdul Shakoor, Kiran Bajaj, S. H. Nanjegowda, P. Mallu, Rajeev Sakhuja, Copper-catalysed C-N/C-O coupling in water: a facile access to N-coumaryl amino acids and fluorescent tyrosine & lysine labels, <i>Tetrahedron Letters</i> 2016, 57, 2732.
8	Devesh S. Agarwal, H. S. Anantaram, D. Sriram, P. Yogeewari, S. H. Nanjegowda, P. Mallu, Rajeev Sakhuja, Synthesis, characterization and biological evaluation of bile acid aromatic/ heteroaromatic amides linked via amino acids as anti-cancer agents, <i>Steroids</i> 2016, 107, 87.
9	Tej V. Yenupuri, .L Mydlova, L.; Devesh S. Agarwal, Ritika Sharma, Rajeev Sakhuja, M Makowska-Janusik, Debi D. Pant, Experimental and Quantum Chemical Calculations of Imidazolium Appended Naphthalene Hybrid: In Different Bio-Mimicking Aqueous Interfaces, <i>J. Phys. Chem. A</i> , 2016, 120, 6563.
10	Devesh S. Agarwal, Nellam Gogoi, Devashish Chowdhury, Rajeev Sakhuja, Amino Acid Appended Cholic acid-Azobenzene Dyad: An Effective & Smart Phase selective Gelator for Aromatic solvents., <i>RSC Adv.</i> , 2016, 6, 76632.
11	Kiran Bajaj, Rajeev Sakhuja, G Pillai, Traceless reductive ligation at a tryptophan site: a facile access to $\beta$ -hydroxytryptophan appended peptides, <i>Org. Biomol. Chem.</i> , 2016,14, 9578-9587.
12	S. M. Abdul Shakoor, Devesh S. Agarwal, Anil Kumar, R Sakhuja, Copper catalyzed direct aerobic double-oxidative cross-dehydrogenative coupling of imidazoheterocycles with aryl acetaldehydes: An articulate approach for dicarbonylation at C-3 position, <i>Tetrahedron</i> 2016, 72, 645–652.
13	S. M. A. Shakoor, S. Kumari, S. Khullar, S. K. Mandal, A. Kumar, Rajeev Sakhuja, Ruthenium(II)-catalyzed regioselective ortho amidation of imidazo heterocycles with isocyanates, <i>J. Org. Chem.</i> 2016, 81, 12340.
14	V.Arun, M. Pilania, Dalip Kumar, An Access to 2-Arylindoles via Decarboxylative C-C Coupling in Aqueous Medium and Heteroaryl Carboxylates under Base-Free Conditions using Diaryliodonium Salt Chem. Asian. J., 2016.
15	V. Arun, P. O. V. Reddy, M. Pilania, Dalip Kumar, A ligand and Base-free Access to Diverse Biaryls by the Reductive Coupling of Diaryliodonium Salts <i>Eur. J.Org.Chem.</i> , 2016, 12, 2096.
16	M. P. Tantak, D. D. Mukherjee, Anil Kumar, Gopal Chakrabarti, Dalip Kumar, A facile and microwave-assisted rapid synthesis of 2-arylamino-4-(3 $\phi$ -indolyl)-thiazoles as apoptosis inducing cytotoxic agents, <i>Anticancer Agents Med Chem</i> , 2016.
17	D. D. Mukherjee, N. M. Kumar, M. P. Tantak, A. Das, A. Ganguli, S. Datta, Dalip Kumar, G. Chakrabarti, Development of novel bis(indolyl)-hydrazide-hydrazone derivatives as potent microtubule- targeting anti-cancer agents against lung cancer, <i>Biochemistry</i> , 2016, 22, 3020.
18	M. P. Tantak, V. Gupta, K. Nikhil, V. Arun, R. P. Singh, P. N. Jha, K. Shah, Dalip Kumar, Sequential one-pot synthesis of bis(indolyl)glyoxylamides: Evaluation of antibacterial and anticancer activities <i>Bioorg. Med. Chem. Lett.</i> , 2016, 26, 3167.
19	S. Sundaree, B. R.Vaddula, M. P. Tantak, S. B. Khandagale, C. Shi, K. Shah, Dalip Kumar, Synthesis and anticancer activity study of indolyl hydrazide- hydrazones, <i>Med Chem Res</i> , 2016, 25, 941.
20	B R. Vaddula, M. P. Tantak, R Sadana, M. A. Gonzalez, Dalip Kumar, One-pot synthesis and in-vitro anticancer evaluation of 5-(2'-indolyl)thiazoles, <i>Sci.Rep.</i> , 2016, 6, 23401.
21	M. Basu, R. Nazir, P. Fageria, S. Pande, <i>Scientific Reports</i> , 2016, 6, No. 34738.
22	P. Fageria, S. Uppala, R. Nazir, S. Gangopadhyay, C.-H. Chang, M. Basu, S. Pande, <i>Langmuir</i> ,

	2016, 32, 10054-10064.
23	P. Ramaraju, N. A. Mir, D. Singh, V. K. Gupta, R. Kant, Indresh Kumar; Enantioselective Synthesis of 1,2-Dihydropyridines by Formal [4+2] Cycloaddition, <i>Synfacts</i> 2016, 12(1), 0026.
24	RK Preetika Sharma, P. Ramaraju, A. Singh, Indresh Kumar, Sumati Anthal; Synthesis and Crystal Structure of 5, 5-diphenyldihydrofuran-2(3H)-one(5); <i>ISOR Journal of Applied Chemistry</i> , 2016, 9(3), 28-31.
25	Nisar A. Mir, Sachin Choudhary, Panduga Ramaraju, Deepika Singh and Indresh Kumar; Microwave assisted aminocatalyzed [3+2] annulation between $\alpha$ -iminonitriles and succinaldehyde: Synthesis of pyrrole-3-methanols and related polycyclic ring systems; <i>RSC Adv.</i> , 2016, 6, 39741.
26	Panduga Ramaraju, Nisar A. Mir, Deepika Singh and Indresh Kumar; Enantioselective synthesis of 1,2,5,6-tetrahydropyridines (THPs) via proline-catalyzed direct Mannich-cyclization/domino oxidation–reduction sequence: application for medicinally important N-heterocycles; <i>RSC Adv.</i> , 2016, 6, 60422.
27	N. Baig, V. K. Madduluri and A. K. Sah, Selective oxidation of organic sulfides to sulfoxides using sugar derived cis-dioxo molybdenum(VI) complexes: kinetic and mechanistic studies, <i>RSC Adv.</i> , 2016, 6, 28015–28022.
28	N. Baig, R. P. Singh, P. N. Jha, and A. K. Sah, Synthesis of Glucose-Derived Glycoconjugates and Studies on Their Antimicrobial Activities: Mechanistic Insight, <i>ChemistrySelect</i> , 2016, 1, 5281–5285
29	N. Baig, G. M. Shelke, A. Kumar, A. K. Sah, Selective Synthesis of Bis(indolyl)methanes Under Solvent Free Condition Using Glucopyranosylamine Derived cis-Dioxo Mo(VI) Complex as an Efficient Catalyst, <i>Catal. Lett.</i> , 2016, 146, 333–337.
30	S. S. Pasha, P. Das, N. P. Rath, D. Bandyopadhyay, N. R. Jana, I. R. Laskar, Water Soluble Luminescent Cyclometalated Platinum(II) Complex - A Suitable Probe for Bio-imaging Applications, <i>Inorg. Chem. Commun.</i> 2016, 67, 107–111.
31	S. S. Pasha, P. Alam, A. Sarmah, R. K. Roy, I. R. Laskar, Encapsulation of Multi-Stimuli AIE Active Platinum(II) Complex: A Facile and Dry Approach for Luminescent Mesoporous Silica, <i>RSC Adv</i> , 2016, 6, 87791 – 87795
32	P. Alam, C. Climent, G. Kaur, D. Casanova, A. Roy Choudhury, A. Gupta, P. Alemany, I. R. Laskar, Exploring the Origin of 'Aggregation Induced Emission' Activity and Crystallization Induced Emission in Organometallic Iridium(III) Cationic Complexes: Influence of Counterions, <i>ACS Crystal Growth &amp; Design</i> , 2016, 10, 5738-5752.
33	P. Alam, V. Kachwal, I. R. Laskar, A Multi-stimuli Responsive "AIE" Active Salicylaldehyde-based Schiff Base for Sensitive Detection of Fluoride, Parvej Alam, Vishal Kachwal, Inamur Rahaman Laskar, <i>Sensors and Actuators B</i> , 2016, 228, 539–550
34	Bijoya Das, Amrita Chakraborty, and Shamik Chakraborty, " Effect of ionic charge on O-H...Se hydrogen bond: A computational study," Accepted for publication in <i>Computational and Theoretical Chemistry</i> , 2016 ( <a href="http://dx.doi.org/10.1016/j.comptc.2016.12.025">http://dx.doi.org/10.1016/j.comptc.2016.12.025</a> )
35	P Kaswan, G. M. Shelke, V. Kameswara Rao, Anil Kumar, Hydroxy-group-facilitated vinylic iodination of ortho-vinylnaphthols using molecular iodine, <i>Synlett</i> , 2016, 27, 2553-2556.
36	R Sakhuja, K Pericherla, K Bajaj, B Khungar, Anil Kumar, Ytterbium triflate catalyzed synthesis of heterocycles, <i>Synthesis</i> , 2016, 48, 4305-4346.
37	MP Tantak, DD Mukherjee, Anil Kumar, G Chakrabarti, D Kumar, A facile and microwave-assisted rapid synthesis of 2-arylamino-4-(3'-indolyl)-thiazoles as apoptosis inducing cytotoxic agents, <i>Anticancer Agents Med Chem</i> , 2016, 16, 1-14.
38	P Kaswan, NK Nandwana, B DeBoef, Anil Kumar, Vanadyl acetylacetonate catalyzed methylenation of imidazo[1,2-a]pyridines by using dimethylacetamide as a methylene source: Direct access to bis(imidazo[1,2-a]pyridin-3-yl)methanes, <i>Adv. Synth. Catal.</i> 2016, 358, 2108–2115.
39	GM Shelke, M Jha and Anil Kumar, Synthesis of indole-annulated sulfur heterocycles using copper-catalysed C-N coupling and palladium-catalysed direct arylation, <i>Org. Biomol. Chem.</i> 2016, 14, 3450–3458.
40	S Dhiman, HK Saini, NK Nandwana, D Kumar, Anil Kumar, Copper-catalyzed synthesis of quinoline derivatives via tandem Knoevenagel condensation, amination and cyclization, <i>RSC Adv.</i> 2016, 6, 23987–23994.
41	NK Nandwana, S Dhiman, G Shelke, Anil Kumar, Copper-catalyzed tandem Ullmann type C–N coupling and dehydrative cyclization: Synthesis of imidazo[1,2-c]quinazolines, <i>Org. Biomol. Chem.</i> 2016, 14, 1736–1741.
42	Priya. C. Sande, Saumi Ray, Fine Mesh Computational fluid Dynamics Study on gas-Fluidization of Geldart-A particles: Homogeneous to Bubbling Bed, <i>Ind. Eng. Chem. Res.</i> 2016, 55, 2623-2633.
43	Archana Choudhary, Bidisa Das, Saumi Ray, Enhanced Catalytic Activity and Magnetization of encapsulated nickel Schiff-base complexes in zeolite-Y: a correlation with the adopted non-planar geometry, <i>Dalton Trans.</i> , 2016, 45, 18967-18976.
44	Moyna Das, Fayaz Baig, Madhushree Sarkar, Photophysical properties of di-Schiff bases: evaluating the synergistic effect of non-covalent interactions and alkyl spacers in enhanced emissions of solids, <i>RSC Adv.</i> , 2016, 6, 57780-57792.

45	Kumari Suman, Dr. Sadhika Khullar, Prof. Sanjay K. Mandal and Dr. Madhushree Sarkar, Role of Anions in Assembling the Coordination Polymers of Bis-pyridyl-alkanediamides, <i>ChemistrySelect</i> , 2016, 1, 6641-6648.
46	SamirGhorai, AmritSarmah, Ram KinkarRoy, Archana Tiwari, and Chandan Mukherjee, Effect of Geometrical Distortion on the Electronic Structure: Synthesis and Characterization of Monoradical-Coordinated Mononuclear Cu(II) Complexes, <i>Inorg. Chem.</i> , 2016, 55 (4), pp 1370–1380.
47	Amrit Sarmah and Ram Kinkar Roy, A Density Functional Reactivity Theory (DFRT) Based Approach to Understand the Effect of Symmetry of Fullerenes on the Kinetic, Thermodynamic and Structural Aspects of Carbon NanoBuds, <i>Chemical Physics.</i> , 2016, 472, 218-228.
48	Prasenjit Sarkar, Archana Tiwari, Amrit Sarmah, Subhrajyoti Bhandary, Ram Kinkar Roy and Chandan Mukherjee, An elusive vinyl radical isolated as an appended unit in a five-coordinate Co(III)- bis(iminobenzosemiquinone) complex formed via ligand-centered C-S bond cleavage <i>Chem. Commun.</i> 2016, 52, 10613-10617.

### C. CONFERENCES ATTENDED/PAPERS PRESENTED

1. S. Kumari, poster presentation on “Characterization and Catalytic Studies of Copper complexes Encapsulated in Zeolite Y” in National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges organized by Department of Chemistry, BITS Pilani, Pilani Campus, Rajasthan, during August 29-30, 2016.
2. R. Shivran, Poster presentation on “Effects of Mg<sup>2+</sup> Doping in Conductivity of Ionic Liquid Incorporated Lithium Silicate Glasses Prepared by Sol-Gel Process” in National Conference On Organic chemistry in Sustainable development: Recent Advances and Future Challenges, Department of Chemistry, organised by BITS Pilani, Pilani, Rajasthan, during August 29 - 30, 2016.
3. S. Kumari, poster presentation on “Aggregation Behavior of Hexadecyltrimethylammonium Surfactants with Various Counterions: Effect of Counterions on Solvation Dynamics and Rotational Relaxation Study” in National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges organized by Department of Chemistry, BITS Pilani, Pilani Campus, Rajasthan, during August 29-30, 2016.
4. Devesh Agarwal, Poster presentation on Amino acid appended Cholic acid Azobenzene Dyad: An effective and smart phase selective gelators for aromatic solvents, at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
5. Sheik Saleem Pasha, Poster presentation on “Strategic Design of ‘Aggregation Induced Emission (AIE)’Active Organic Material: Application in Zn(II) Sensing and Mechanofluorochromism” at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
6. Pankaj Nehra Poster presentation on Oxidation of Thiols to Disulfides using Ionic liquid-supported Schiff Base Copper Complex at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” OCSD-2016 organized by Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, August 29-30, 2016.
7. S M Abdul Shakoor, Poster presentation on Copper Catalyzed Direct Aerobic Dual-oxidative Cross-Dehydrogenative Coupling of Imidazoheterocycles with Aryl Acetaldehydes: An Articulate Approach for Dicarbonylation at C-3 Positio, at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
8. V.Arun, Poster presentation on “An access to 2-arylindoles via decarboxylative C-C coupling in aqueous medium Ligand and base-free access to diverse biaryls by the reductive coupling of diaryliodonium salts”, at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
9. V.Arun participated in GIAN Workshop-Course on “Greener Strategies for Organics and Nanomaterials: Sustainable Applications of Nano-Catalysts in Synthesis and Environmental Remediation” organized by Department of Chemistry Guru Jambheshwar University of Science and Technology, Hisar during November 25-29, 2016
10. Manish Kumar Mehra, Poster presentation on Microwave-assisted metal and ligand-free O-arylation of quinolones using diaryliodonium salts, at 22<sup>nd</sup> International ISCB conference on “Recent trends in affordable and sustainable drug discovery and developments” organized by Uka Tarsadia University, Surat, India, during February 6-8, 2016.

11. Manish Kumar Mehra, Poster presentation on "Metal-free Regioselective C-N and C-O Bonds Formation with the Utilization of Diaryliodonium Salts in Water", at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016
12. Meenakshi Pilania, Poster presentation on Copper-catalyzed cross-coupling of N-tosylhydrazones and aminoheteroarenes: A direct and efficient synthesis of useful N-benzylated aminoheterocycles, at National Conference on "Organic synthesis and catalysis" organized by Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana during February 17-18, 2016
13. Meenakshi Pilania, Poster presentation on An efficient synthesis of N-heterocyclic carbene precursor triazolium salts using diaryliodonium salts, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016
14. Meenakshi Pilania, Oral presentation on Copper-Catalyzed Direct C-H Arylation of Aazaheterocycles Using Diaryliodonium Salts, at International Conference on "Frontiers at The Chemistry-Allied Sciences Interface" organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, during April 25-26, 2016
15. Mukund P. Tantak, Poster presentation on Design and synthesis of bis(indolyl) ketohydrazide-hydrazones as potent antimetabolic agents" organized by Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana during February 17-18, 2016.
16. Mukund P. Tantak, Poster presentation on Design and synthesis of bis(indolyl)ketohydrazide-hydrazones as potent antimetabolic agents, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016
17. Mukund P. Tantak, Oral Presentation on Design and facile synthesis of indolyloxadiazoles as tubulin interacting anticancer agents" at International Conference on "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" Organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, India. 25<sup>th</sup>- 26<sup>th</sup> April, 2016.
18. Santosh B Khandagale, Poster presentation on Synthesis of Novel Heterocyclyl Appended Porphyrins via Metal-Catalyzed Dehydrogenative Cross-Coupling of Porphyrins with Various Azoles and their Photophysical Properties at National conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges, Department of Chemistry BITS Pilani, Pilani Campus, India, August 29-30, 2016
19. P. O. Venkataramana Reddy, Poster presentation on "Synthesis and biological evaluation of novel carbazolyl glyoxamides as anticancer and antibacterial agents" at 22nd ISCB International Conference (ISCB- 2016) Recent Trends in Affordable and Sustainable Drug Discovery and Developments, organized by Uka Tarsadia University, Surat, India, during February 6-8, 2016.
20. P. O. Venkataramana Reddy, Poster presentation on "Synthesis and Identification of  $\beta$ -Carbolinium Salts as Novel Cytotoxic Agents", at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016
21. Khima Pandey, Oral presentation on Environmental Friendly Synthesis of Bis(indolyl)methane Using Sulfonic Acid and Sulfonyl Hydrazine Functionalized Ionic Liquids, at International Conference on "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, during April 25-26, 2016
22. Khima Pandey, Poster presentation on Imidazolium-supported Sulfonic Acid Mediated Microwave-assisted Facile Synthesis of Thiopyrano[2,3-b]indol-2-one, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
23. Khima Pandey, Poster presentation on Iodine and Base Mediated Intramolecular Cyclization Reactions of N-Propargyl Pyridinium Bromide: An Easy Access to 2-carbonylimidazo[1,2-a]pyridines and 2-methylimidazo[1,2-a]pyridines, in 21st International Conference on Organic Synthesis (ICOS 21) held at Indian Institute of Technology Bombay, during December 11-16, 2016.
24. Vikki N. Shinde, Poster presentation on A sequential Suzuki Cross-Coupling/Direct Arylation of 2-Arylimidazo[1,2-a]pyridine: One-Pot Access to Multi Substituted Imidazo[1,2-a]pyridine at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016

25. Shiv Dhiman, Poster presentation on Copper Catalysed Multicomponent One-pot Synthesis of Pyrido[2,1':2,3]imidazo[4,5-c]quinoline Derivatives and Evaluation of Their Antibacterial Activities, at International Conference "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, during April 25-26, 2016.
26. Hitesh Kumar Saini, Poster presentation on A Copper-Catalyzed Cyanation on Substituted Imidazoles with Malononitrile *via* C-C Bond Activation and their Photophysical Properties, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
27. Saroj, Poster presentation on Synthesis of Hydroxamic Acids from Aldehydes Using Imidazolium Salt Supported *N*-Hydroxysulfonamide, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
28. Pinku Kaswan, Poster presentation on Synthesis of bis(2-arylimidazo[1,2-*a*]pyridin-3-yl)methane by  $\text{vo}(\text{acac})_2$  catalyzed reaction of imidazo[1,2-*a*]pyridine with dimethylacetamide at 22nd ISCB International Conference (ISCBC- 2016) Recent Trends in Affordable and Sustainable Drug Discovery and Developments, organized by Uka Tarsadia University, Surat, India, during February 6-8, 2016
29. Pinku Kaswan, Poster presentation on A sequential Suzuki Cross-Coupling/Direct Arylation of 2-Arylimidazo[1,2-*a*]pyridine: One-Pot Access to Multi Substituted Imidazo[1,2-*a*]pyridine at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016
30. Ganesh M. Shelke, Poster presentation on "Synthesis of Indole-annulated sulfur heterocycles using copper-catalysed C-N coupling and palladium-catalysed direct arylation" at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" OCSD-2016 organized by Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, August 29-30, 2016.
31. Fayaz Baig Poster presentation on Structural Transformations of Coordination Polymers on the Counter anion Exchange and Metal-metathesis at 44th National seminar on Crystallography (NSC-2016) organized by NCCS, IISER-Pune and NCL-Pune, Pune, Maharashtra, in July 10-13, 2016.
32. Fayaz Baig Poster presentation on Structural Transformations of Coordination Polymers on the Counter anion Exchange and Metal-metathesis at at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" OCSD-2016 organized by Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, August 29-30, 2016.
33. S. Kumari, Poster presentation on "Enantioselective copper- catalyzed direct C-N/C-O coupling in water: A facile access to fluorescent labelled amino acids and Leu- enkephalin" at 22nd ISCB International Conference (ISCBC 2016) Recent Trends in Affordable and Sustainable Drug Discovery and Developments, organized by Uka Tarsadia University, Surat, India, during February 6-8, 2016.
34. S. Kumari, Poster presentation on "Imidazolium and Benzimidazolium Appended Fluorescent Probes for Highly Selective Sensing of Picric Acid in Aqueous Medium" at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" OCSD-2016 organized by Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, August 29-30, 2016.
35. Vaishali Saini Poster presentation on "Oxidation of Thiols to Disulfides using Ionic liquid-supported Schiff Base Copper Complex", at National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges OCSD-2016 organized by Department of Chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, August 29-30, 2016.
36. B. Pallavi, Poster presentation on "Microwave Assisted Synthesis of Quinoline-4-carboxylic acids and their N-Glycoconjugates", at National Conference on Organic synthesis and catalysis NCOSC-2016 organized by Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana during February 17-18, 2016.
37. Vimal Kumar Madduluri, Poster presentation on "Catalytic Applications of Sugar Derived *cis*-Dioxo Molybdenum (VI) Complexes in Organic Synthesis", at National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
38. Vimal Kumar Madduluri, Poster presentation on "Glucose derived Molybdenum(VI) complex: A promising catalyst to industry", at CARBO XXXI International conference on New frontiers in



Carbohydrate chemistry and Biology jointly organized by Department of Chemistry, University of Delhi, Delhi and Association of Carbohydrate Chemists and Technologists, India during November 14-16, 2016.

39. Sachin Choudhary, Poster presentation on Organocatalytic one-pot approach towards the synthesis of trisubstituted pyrrole ring systems through [3+2] annulation/ I<sub>2</sub> mediated oxidation, at National Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges" organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
40. Sachin Choudhary, Poster presentation on "Organocatalytic one-pot approach towards the synthesis of trisubstituted pyrrole ring systems through [3+2] annulation/ I<sub>2</sub> mediated oxidation" at 22nd ISCB International Conference (ISCBC- 2016) Recent Trends in Affordable and Sustainable Drug Discovery and Developments, organized by Uka Tarsadia University, Surat, India, during February 6-8, 2016.

#### D. BOOKS PUBLISHED/EDITED DURING THE YEAR:

Topics in Heterocyclic Chemistry, chapter: Benzotriazole: Much More Than Just Synthetic Heterocyclic Chemistry, Kiran Bajaj, Rajeev Sakhuja, Springer, 2016.

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED:

Department of Chemistry organized International Conference on "Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges (OCSD-2016)" during August 29-30, 2016.

#### F. INVITED TALKS GIVEN BY BITS FACULTY

Faculty members of the department delivered invited lectures at following conferences/symposia during the year.

1. Indresh Kumar delivered Invited Lecture "Aminocatalyzed Transformations of Dicarboxyls: Asymmetric Synthesis of Medium Sized Nitrogen Heterocycles" during "22<sup>nd</sup> ISCB-International conference (ISCBC-2016) on Recent Trends in Affordable and sustainable Drug Discovery and Development" during 6-8 February 2016 at Uka Tarsadia University, Surat, India.
2. Indresh Kumar delivered Invited Lecture "Organocatalytic approach towards medium sized N-heterocyclic compounds: Emphasize on Enamine Catalysis" during National Symposium on Recent Trends in Eco-friendly Chemistry" during September 29, 2016 at Central University of Haryana, Mahendergarh (Haryana).
3. Indresh Kumar delivered Invited Lecture "Organocatalytic approach towards medium sized N-heterocyclic compounds: Emphasize on Enamine Catalysis" during National Symposium on Celebrating 25 years of Harmony with Organic Chemistry (CYHOC-2016)" during December 16-17, 2016 at NIIST-CSIR Trivandrum, Kerala.
4. Ajay K. Sah, invited talk on "Biological studies of D-glucose derived simple glycoconjugates", CARBO-XXXI International Conference on "New Frontiers in Carbohydrate Chemistry and Biology" organized by Department of Chemistry, University of Delhi, during November 14-16, 2016.
5. Ajay K. Sah, invited talk on "Design, synthesis and application of N-glycoconjugates as multi targeting drugs" 22<sup>nd</sup> ISCB International Conference organized by Uka Tarsadia University, Surat, Gujarat, during February 6-8, 2016.
6. Rajeev Sakhuja delivered Invited Lecture "Functionalized heterocycles: Scope & applications" during "22<sup>nd</sup> ISCB-International conference (ISCBC-2016) on Recent Trends in Affordable and sustainable Drug Discovery and Development" at Uka Tarsadia University, Surat, India during 6-8 February 2016
7. Ram Kinkar Roy, Invited Talk on Charge Transfer Limit of a Chemical Adduct: The Role of Electrostatic Effect in Theoretical Chemistry Symposium (TCS) - 2016, held in University of Hyderabad, 14-17th December, 2016.
8. Dalip Kumar delivered Invited Lecture, "Organoiodine reagents in the construction of bioactive heterocycles" at 22<sup>nd</sup> ISCB International Conference (ISCBC- 2016) Recent Trends in Affordable and Sustainable Drug Discovery and Developments, Organized by Indian Society of Chemists and Biologists Venue: Uka Tarsadia University, Surat, India, 6<sup>th</sup> - 8<sup>th</sup> February, 2016.
9. Dalip Kumar delivered Invited Lecture "Indole Derivatives as Novel Tubulin Interacting Agents" at International Conference on "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" Organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, India. 25<sup>th</sup>- 26<sup>th</sup> April, 2016.
10. Dalip Kumar delivered Invited Lecture "An easy access to natural occurring and bioactive heterocycles via carbon-carbon and carbon-heteroatom bond formations" at National Conference on Organic Synthesis and Catalysis (NCOSC-2016), organized by Department of Chemistry, Guru Jambheshwar University of Science and Technology Hisar, India, 17-18 February, 2016.
11. Dalip Kumar delivered Invited Lecture "Greener Strategies for Organics and Nanomaterials: Sustainable

Applications of Nano-Catalysts in Synthesis and Environmental Remediation” GIAN Workshop-Course held at Guru Jambheshwar University of Science and Technology, Hisar. India, November 25-29, 2016.

#### G. INVITED TALKS ARRANGED IN THE DEPARTMENT

S. No.	Speaker	Affiliation	Topic	Date
1	Prof. Parameshwar K Iyer	IIT Guwahati	New Conjugated Materials for ptoelectronic Devices, Sensors and Theranostics	16/09/2016
2	Dr. Parwez Alam	Post Doctoral Research Fellow, Hong Kong University of Science and Technology.	Syntheses of Red to Near IR Aggregation Induced Emissive iridium(III) metal complexes and its application in mitochondrial staining	16/09/2016
3	Prof. S. K. Mehta	Punjab University.	Exploring Nanostructure Morphology and Dispersibility Using Self Assembly Driven Metallomicelles	04/11/2016
4	Prof. Rajender S. Verma	Cincinnati, Ohio, USA and Regional Centre of Advanced Technologies and Materials, Palacky University, Olomouc, Czech Republic	Greener routes to Organics and Nanomaterials: Sustainable Applications of Magnetic Nanocatalysts and Modified Graphitic Carbon Nitrides in Catalysis and Environmental Remediation.	29/11/2016
5	Dr. Omvir Singh	Director-Chemistry IZEN Biociences Pvt. Ltd.	Ir(I)-Phosphoramidite Complex Catalyzed Regio- and Enantioselective Decarboxylative Allylic Substitution Reactions	19/02/2016
6	Prof. Chebrolu Pulla Rao	Department of Chemistry, IIT Bombay, Mumbai	Science Behind Technology: Engineering Supramolecular Systems for Different Applications including Chemosensors	02/09/2016

#### H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

- Devesh Agarwal, Award of the best poster at National Conference on “Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges” organized by Department of Chemistry, BITS Pilani, Pilani Campus during August 29-30, 2016.
- Shiv Dhiman, Award for the best poster presentation at International Conference on. "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" Organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, India during 25<sup>th</sup>- 26<sup>th</sup> April, 2016.
- Mukund P. Tantak, Award for the best oral presentation at International Conference on. "Frontiers at The Chemistry-Allied Sciences Interface (FCASI-2016)" Organized by Department of Chemistry, University of Rajasthan, Jaipur, Rajasthan, India. 25<sup>th</sup>- 26<sup>th</sup> April, 2016.
- Mukund P. Tantak, Award for the best poster presentation at National Conference on “Organic synthesis and catalysis” (NCOSC-2016)” organized by Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana during February 17-18, 2016.

#### I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

Dr Bharti Khungar was selected for the University Immersion (Abroad) Program, BITS Pilani and visited Chapman University, Irvine, California, USA during May-July 2016.

#### J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR

Digital ultrasonic cleaner, Electrode Kinetics and Maxwell Velocity Distribution measurement equipment,

#### K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

##### Activities of Chemistry Association

Apogee Project Meets: Two Project meets were conducted in order to discuss ideas for projects that were eventually presented during APOGEE 2016. It saw enthusiastic involvement from students of all years. During

APOGEE 2016, two events, Who-Dunnit and Dexter's Lab (in collaboration with Biology and Chemical Engineering Associations), were conducted by the Chemistry Association. Who-Dunnit was solely organized by the Chemistry Association. It witnessed the highest number of participants of any event in APOGEE 2016.

National Science Day celebration: This year Chemistry Association also organized events for the National Science Day on 28th Feb 2016. Students from various schools in and around Pilani were invited to participate and attend the celebrations on campus. The day began with short video presentation on science day, followed by lecture by Dr. Pradeep Srivastava, CDRI Lucknow. There was an inter-school science quiz as well as a poster competition for the school students. There were 2 lectures from BITS faculty members. The students also visited the science labs of Biology, Chemistry and Physics departments at BITS Pilani. Sweat shirt of Chemistry Association was introduced and student signing was taken. Good response and appreciable signing was received.

Informal meet with First year students: The informal meet with First year chemistry students was organized on 10. 08.2016. The purpose of the meet was to introduce them with all the activities and events organized by the association in the whole year.

Formal interaction of First years with Professors: It was organized on 23. 08.2016 in LTC. The motive of this interaction was to introduce the newly admitted students with the professors and senior students, to discuss various events of the association and seek their views and to encourage them to actively participate in different activities organized during fests. All the chemistry students were invited for dinner on in VFAST lawns. The aim was to enhance the interaction between professors and students.

### B1.10.5 Department: Computer Science & Information Systems

Number of faculty members (as on 31<sup>st</sup> December 2016)

<b>Senior Professors, Professors</b>	05
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	12
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	01
<b>Visiting Assistant Professors</b>	01

**Head of the Department: Professor Rahul Banerjee**

**Contact details:** [rahul@pilani.bits-pilani.ac.in](mailto:rahul@pilani.bits-pilani.ac.in)

**Number of PhD Scholars: 10**

#### A. SPONSORED RESEARCH ACTIVITIES & FUNDING

# Two ongoing funded research projects from DST in area of Software Engineering (PI: Prof. Yashwardhan Sharma) and CAIR in area of Multi Robot Systems (PI: Prof. Sudeept Mohan) are in progress. In addition, work is in progress in the area of establishment of one of India's earliest Software-Defined Networking Research Testbed at the Centre for Excellence in SDN with a research grant worth about Rs. 1 Crore from Cisco Inc., San Francisco (PI: Prof. Rahul Banerjee).

#### B. PUBLICATIONS

**The faculty of the department published following papers in international refereed journals during the year.**

1. Avinash Gautam and Sudeept Mohan, "STATE: Distributed Algorithm for Uniform Circle Formation by Multiple Mobile Robots", Journal of Intelligent Service Robotics (Springer), vol. 9, no. 4, pp. 347-366. 2016.
2. Avinash Gautam, Bhargav Jha, Gourav Kumar, J. Krishna Murthy, Arjun Ram and Sudeept Mohan, "FAST: Synchronous Frontier Allocation for Scalable Online Multi-Robot Terrain Coverage", Journal of Intelligent Robotic Systems (Springer), 2016.
3. Ashutosh Bhatia, R.C. Hansdah, "TRM-MAC: A TDMA-based reliable multicast MAC protocol for WSNs with flexibility to trade-o between latency and reliability", Computer Networks, Elsevier, Volume 104, Pages 79-93, 20 July 2016.
4. Amit Dua, Neeraj Kumar, Seema Bawa, "Game Theoretic approach for Real-Time Data Dissemination and Offloading in Vehicular Ad hoc Networks", Journal of Real-Time Image Processing. pp. 1-18, 2016, DOI: 10.1007/s11554-016-0615-x. (IF 1.564). 2016
5. Amit Dua, Neeraj Kumar, Seema Bawa, "ReIDD: Reliability-aware Intelligent Data Dissemination Protocol for Broadcast Storm Problem in Vehicular Ad Hoc Networks", Telecommunication Systems, pp. 1-20,

2016, DOI 10.1007/s11235-016-0184-0, 2016. (IF 0.822). 2016

6. Anish Jindal, Amit Dua, Kuljeet Kaur, Neeraj kumar, Mukesh Singh, S. Mishra, "Decision Tree and SVM-based Data Analytics for Theft Detection in Smart Grid", IEEE Transactions on Industrial Informatics, vol. 12, no. 3, pp. 1005-1016, 2016. (IF 8.79).
7. Dhruv Kumar, Poonam Goyal and Navneet Goyal, "An Efficient Method for Batch Updates in OPTICS Cluster Ordering", in International Journal of Data Analysis Techniques and Strategies (IJDATS). (Accepted in June 2016)
8. Stan Jarzabek and Kuldeep Kumar, "On Interplay between Separation of Concerns and Genericity Principles: Beyond Code Weaving", Computer Science and Information Systems (ComSIS), Vol. 13, No. 3, pp. 731–758, 2016.

### C. CONFERENCES

The faculty of the department published following papers in international/national Conferences during the year.

#### (i) International Conferences papers (outside India):

1. Jagat Sesh Challa, Poonam Goyal, Nikhil S., Aditya Mangla, Sundar Balasubramaniam, Navneet Goyal, "DDR-Tree: A dynamic distributed data structure for efficient data distribution among cluster nodes for spatial data mining algorithms", IEEE International Conference on Big Data (IEEE Big Data 2016), December 5-8, 2016 Washington DC, USA.
2. Poonam Goyal, Sonal Kumari, Sumit Sharma, Dhruv Kumar, Vivek Kishore, Sundar Balasubramaniam, and Navneet Goyal, "A Fast, Scalable SLINK Algorithm for Commodity Cluster Computing Exploiting Spatial Locality," 18th International Conference on High Performance Computing and Communications (HPCC 2016), December 12-14, 2016 Sydney, Australia.
3. Poonam Goyal, Sonal Kumari, Shubham Singh, Vivek Kishore, Sundar S Balasubramaniam and Navneet Goyal, "A Parallel Framework for Grid-based Bottom-up Subspace Clustering", IEEE International Conference on Data Science and Advanced Analytics (DSAA 2016), October 17-19, Montreal, Canada.
4. Poonam Goyal, Sonal Kumari, Sumit Sharma, Vivek Kishore, Navneet Goyal and Sundar S Balasubramaniam, "Spatial Locality Aware, Fast, and Scalable SLINK Algorithm for Commodity Clusters", Accepted for publication in IEEE Cluster 2016, September 13-15, Taipei, Taiwan.
5. Puneet Jolly, Sundaresan Raman, "Analyzing Surface Defects in Apples Using Gabor Features", 12th International Conference on Signal-Image Technology & Internet-Based Systems, Naples, Italy 2016
6. Yashvardhan Sharma, "Effort Estimation for Program Modification in Object Oriented Development", 16th International Conference on Computational Science and Its Applications (ICCSA 2016), Beijing, China, (Springer) Part IV, LNCS 9789, July 4 - 7, 2016, pp. 334–345. 2016
7. Amit Dua, Neeraj Kumar, Mukesh Singh, Mohammad S. Obaidat, Kuei-Fang Hsiao, "Secure Message Communication Among Vehicles Using Elliptic Curve Cryptography in Smart Cities", In the 2016 International Conference on Computer, Information and Telecommunication Systems (CITS 2016), July 6-8, 2016, Kunming, China 2016.
8. Nitin Varyani, Nikhil S, Virendra Singh Shekhawat, "Latency and Routing Efficiency Based Metric for Performance Comparison of DHT Overlay Networks", 30th IEEE International Conference on Advanced Information Networking and Applications (AINA-2016), Le Régent Congress Centre, Crans-Montana, Switzerland, 23-25 March, 2016
9. Anshuman Mishra, Deven Bansod, K Haribabu, "A Framework for OpenFlow-like Policy-based Routing in Hybrid Software Defined Networks", in Proceedings of 11th International Network Conference (INC 2016), Frankfurt, Germany, 19-21 July 2016. pp. 97-102, 2016.
10. Shikhar Vashisht, Yash Sinha, K Haribabu, "Addressing Challenges in Browser Based P2P Content Sharing Framework Using WebRTC", in Proc. 30th IEEE International Conference on Advanced Information Networking and Applications (AINA-2016), Switzerland, Mar 2016 pp. 850-857. IEEE Computer Society 2016.
11. Nitin Singh Rajput, Rahul Banerjee, Ajinkya Rajput, Abhimanyu Siwach: "A New Model for Effective Use of Robustness as a Measure of QoS in Vehicular Ad-hoc Networks", IEEE AACT, (Accepted), To be published in the Proceedings of the 19th IEEE International Conference on Advance Communications Technology, to be held at Phoenix Park, PyeongChang, South Korea.
12. Kuldeep Kumar, Stan Jarzabek, and Dan Daniel, "Managing Big Clones to Ease Evolution: Linux Kernel Example", The 36<sup>th</sup> IEEE Software Engineering Workshop (SEW-36), Poland, pp. 1727–1736, 2016.
13. Kuldeep Kumar, "Research-oriented Multi-course Integration of PDC Topics from TCPP Core Curriculum at Undergraduate level", in 6th NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-16), in conjunction with 30th IEEE International Parallel & Distributed Processing Symposium

(IPDPS-2016), USA, pp. 1–2, May 29–June 02, 2016.

**(ii) Conferences papers presented in India (both, International and National):**

1. Sonal Kumari, Saurabh Maurya, Poonam Goyal, Sundar Balasubramaniam, and Navneet Goyal, "A Parallel and Scalable Shared Nearest Neighbor Algorithm for Big Data," 23<sup>rd</sup> IEEE International Conference on High Performance Computing, Data, and Analytics (HiPC 2016), December 19-22, Hyderabad, India.
2. Navneet Goyal, Sundar Balasubramaniam, Poonam Goyal, Saiyedul Islam, and Mohit Sati, "A High Performance Computing Framework for Data Mining", IEEE International Workshop on Foundations in Big Data Computing, HiPC 2016, 19-22, Hyderabad, India.
3. Ashutosh Bhatia, Ranjeet Kumar Patro, PMAC: "A Poll-Based MAC Protocol for Wireless Body Area Networks (WBANs)", Proceedings of IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2016.
4. Amit Dua, Neeraj Kumar, Mukesh Singh, Mohammad S. Obaidat, Kuei-Fang Hsiao, "Secure Message Communication Among Vehicles Using Elliptic Curve Cryptography in Smart Cities", In the 2016 International Conference on Computer, Information and Telecommunication Systems, CITS, 2016, July 6-8, 2016, Kunming, China 2016.
5. Avinash Gautam, Amitayush Thakur, Garima Dhanania & Sudeept Mohan, "A Distributed Algorithm for Balanced Multi-Robot Task Allocation," <Accepted>, to be published in proceedings of the 11<sup>th</sup> IEEE International Conference on Industrial and Information Systems (ICIIS 2016) during December 2-4, 2016 IIT Roorkee.
6. Vishal Gupta, "Network Selection in 3G-WLAN Interworking Environment Using TOPSIS", accepted to be published in proceedings of 11<sup>th</sup> International conference on Industrial and Information Systems, 2016 (ICIIS 2016), Indian Institute of Technolgoy, Roorkee, 3-4 Dec, 2016.
7. Vishal Gupta, "Link changes with change in demand in Flow Distribution Networks", <Accepted>, to be published in proceedings of the 15<sup>th</sup> International Conference on Information Technology (ICIT 2016), IIIT Bhubaneswar, Dec 22-24, 2016.
8. Shikhar Vashishth, Yash Sinha, and K Hari Babu, "A Browser-Based Distributed Framework for Content Sharing and Student Collaboration", in Proceedings of 4th International Conference on Advanced Computing, Networking, and Informatics [ICACNI-2016], Rourkela, Odisha, 22-24 September 2016.
9. Lavika Goel, Anurag Prakash, "Sentiment Analysis of Online Communities using swarm intelligence algorithms", <Accepted>, to be published in proceedings of the IEEE CICON 2016. 23-25 December, 2016, Tihri, India
10. Astha Gupta, Lavika Goel, "Heuristic Approach for Face Recognition using Artificial Bee Colony Optimization", ISTA 2016, Advances in Intelligent Systems and Computing, Springer, pp. 209-224, 2016. September 21–24, 2016, Jaipur, India
11. Lavika Goel, Rashi Khandelwal, Eloy Retamino, Suraj Nair and Alois Knoll, "Application of a Hybrid Relation Extraction Framework for Intelligent Natural Language Processing", Intelligent Systems & Technology Applications (ISTA 2016), Advances in Intelligent Systems and Computing, Springer Publications, Jaipur, India, pp. 803-814, 2016.
12. Lavika Goel, Nilay Jain, Shivin Srivastava, "A novel PSO based algorithm to find initial seeds for the k-means clustering algorithm", <Accepted>, to be published in proceedings of the International Conference on Communication and Computing Systems (ICCCS) 2016, Taylor & Francis. 9-11 September, 2016, DCE, Gurgaon
13. Lavika Goel, Sunita Singhal, Sharthak Mishra, Satyajit Mohanty, "Hybridization of Gravitational Search Algorithm and Biogeography Based Optimization and its application on Grid Scheduling problem", 9<sup>th</sup> International Conference on Contemporary Computing (IC3) 2016, IEEE, pp. 123-128, 2016. Noida
14. Virendra Singh Shekhawat, Kukatla Nikhil Kumar, "A Message Acknowledgment based Congestion Control (MACC) for Delay Tolerant Networks", <Accepted>, to be published in proceedings of the IEEE 11<sup>th</sup> International Conference on Industrial and Information Systems (ICIIS 2016). December 2-4, 2016 IIT Roorkee.
15. Rupal Bhargava, Yashvardhan Sharma, Gargi Sharma, "ATSSI: Abstractive Text Summarization using Sentiment Infusion", In proceedings of Twelfth International Multi Conference on Information Processing, (Elsevier) Procedia Computer Science, Vol 89C, August 2016, pp. 404-411. Bangalore, India
16. Rupal Bhargava, Yashvardhan Sharma, Shubham Sharma, "Sentiment Analysis for Mixed Script Indic Sentences", In proceedings of 5<sup>th</sup> International Conference on Advances in Computing, Communications & Informatics (5<sup>th</sup> International Symposium on Natural Language Processing), IEEE, September 2016, pp. 538-543. Jaipur, India
17. Rupal Bhargava, Yashvardhan Sharma, "MSATS: Multilingual Sentiment Analysis via Text Summarization", <accepted>, to be published in proceedings of 7<sup>th</sup> IEEE International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE-2017). Noida

**D. BOOKS PUBLISHED/EDITED /CHAPTER WRITTEN DURING THE YEAR:**

1. Amit Dua, Neeraj Kumar, and Seema Bawa, "Intelligent Technique for Clustering and Data Acquisition Vehicular Sensor Networks: Challenges and Solutions," CRC Press, 2016. Taylor and Francis.

**E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NIL****F. INVITED TALKS GIVEN BY BITS FACULTY**

1. Rahul Banerjee: "Security & Privacy Issues in Wearable and Vehicular Computing Systems", Invited Lecture, 4th Security & Privacy Symposium, Indraprastha Institute of Information Technology (IIIT), Delhi, February 13, 2016.
2. Rahul Banerjee: "Software-Defined Networking: State-of-the-Art and Current Research Issues", Invited Lecture, Research Workshop on Software-Defined Networking (SDN), Malviya National Institute of Technology (MNIT), Jaipur, Rajasthan, March 21, 2016.
3. Virendra Singh Shekhawat: "Ubiquitous Computing & Context Aware Applications", Invited lecture at National Workshop on "Ubiquitous Computing (Under TEQIP-II), Ajmer, Rajasthan during 26-30 Sept 2016.
4. Lavika Goel: "Computational swarm Intelligence Techniques for Problem Solving", Scientific Analysis Group (SAG) lab, DRDO, Metcalfe house, Delhi Guest lecture, CEP Training course on "Soft Computing and its applications" during 3-7<sup>th</sup> October 2016 (for scientists).
5. Poonam Goyal and Navneet Goyal delivered series of lectures on BIG DATA Analytics at LMNIT, Jaipur (for benefit of faculty).

**G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. Dr. Aniruddha (Ani) Desai, Director for Centre for Technology Infusion, La Trobe University, Melbourne, delivered a research talk on "Developing Innovative Smart Sensor Technology for High Impact Applications", February 29, 2016.
2. C. Pandu Rangan, Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Madras, delivered an informative talk on "Computational Intelligence" on 26<sup>th</sup> August, 2016.
3. Santanu Chaudhury, Director CEERI Pilani and Professor: CSE IIT Delhi, delivered a special lecture on Applied Aspects of Contemporary Machine Learning on 14<sup>th</sup> November, 2016.

**H. AWARDS AND RECOGNITIONS WON BY STUDENTS**

1. Three students from BITS Pilani, Pilani Campus, namely, Akul Sareen (Computer Science), Anuj Yadav and Pranet Verma qualified for the ACM ICPC World Finals at Phuket, Thailand.
2. Ericsson Innovation Awards India 2016: Three Computer Science students from BITS Pilani, Pilani Campus, namely, Anuj Bansal, Chandradeo Arya and Deeptanu Chaudhary won the second edition of the 'Ericsson Innovation Awards India 2016' organised at the IIT Delhi campus.
3. Microsoft's Build The Shield Competition: BITS Pilani students Vidhi Jain, (2014A7PS113P), Kapil Singhal (2013A7PS038P), Ameesha Mittal (2014A7PS107P) and M Sharat Chandra (2014A7PS108P) have qualified the first round for Microsoft's Build The Shield Competition and have been invited for the Grand Finale at Hyderabad on March 19, 2016.
4. India's Official First Aid App Launched: Six students from BITS PILANI have created India's Official First Aid Mobile Application as their summer internship project from 23rd May -16th July at Indian Red Cross Society, NHQ, New Delhi. On 30th August, the Annual General Meeting of Indian Red Cross was held. It comprised of a ceremonial session and a business session. The Ceremonial Session was presided over by the President of IRCS and the President of India Hon'ble Shri Pranab Mukherjee at Rashtrapati Bhavan, New Delhi and Business Session was presided over by Hon'ble Chairman of IRCS and the Minister of Health & Family Welfare Shri J.P Nadda at DRDO Bhavan, New Delhi.
5. The team of developers of the app comprises of Tushar Dhalwani (Pilani Campus), Rishabh Garg (Pilani Campus), Bhuvan Gupta (Goa Campus), Akanksha Pandey (Hyderabad Campus), Shrey Bansal (Hyderabad Campus), Rahul Mittal (Hyderabad Campus).

**I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION****Industry Immersion:**

1. Dr. Yashvardhan Sharma visited HP Enterprises, Bangalore, under this provision, from 1st June to 22<sup>nd</sup> July 2016.
2. Dr. Sundaresan Raman attended a workshop on Introduction to Python for Biologists at Berlin from 5-9 December, 2016.

**J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

<b>S.No.</b>	<b>Software/Equipment</b>	<b>No. of Licenses or Quantity</b>
1.	Dell Optiplex 7040 Mini Tower CTO, Intel Core i76700 PCs	41
2.	Mini USB Bluetooth CSR V4.0 Dongle Dual Mode wireless Adapter Device	06
3.	Raspberry Pi2-MODB-1GB –Quadcore	03
4.	Arduino UNO R3 ATMEGA 328P ATMEGA 16U2 Compatible with USB Cable	01
5.	TP-Link TL-WN 725N 150 mbps wireless N Nano USB Adapter	01
6.	Gigabyte Geforce PCI 2gbddr-5 GV-N75TOC-2GI	01
7.	Ambrane P-1310 13000 mAh	01
8.	Lily Pad 328 ATmega-328P 5 V Board Compatible with Arduino	03
9.	Lilypad Lipower (SF-DEV-08786)	02
10.	Lilypad Vibe Board	01
11.	Lilypad Protoboard Small	02
12.	TP-Link TL-WN 725N USB Adapter	01
13.	Raspberry Pi2-MODB-1GB –Quadcore	02
14.	Lilypad Lipower (SF-DEV-08786)	01
15.	RF Module 434 Mhz	01
16.	Triple Axis Accelerometer	01
17.	RF Board Pair SIM900A GSM Model with SMA Antenna	01
18.	OBU (On Board Equip) Locomate™ Standard 201 Classic Unit	02
19.	RSU (Road Side Equip) Locomate™ 200 Classic RSU	01
20.	Logitech G29 Driving Force Racing Wheel (Black)	01
21.	Logitech G Driving Force Shifter G Driving Force Shifter Joystick	01
22.	Load Cell Sensor Resistance Strain 50 Kg Half Bridge Body Scale	01
23.	PN532 NFC RFID Module V3 Redder Writer Breakout Board	01
24.	10 Pcs RFID Card/Tag 125 Khz EM4100 Family	01
25.	Generic GY-NE06MV2 NEO-64 GPS Module	01
26.	DHT11 Temperature and Humidity Sensor Module –Arduino	02
27.	Sainsmart MQ137 Semi Conductor Sensor for Auduino UNO Mega 2560 Rs3 Raspberry Pi	02
28.	BMP085 Barometric Pressure Sensor	02
29.	AVT MANTA G-223 Color Cmos Camera	01
30.	6MM EO Megapixel Fixed Lens	01
31.	One Plus 3 (Soft Gold, 64 GB)	01
32.	TCL 562 (Metal Gold, VoLTE)	01
33.	SecuGen Hamster Plus Fingerprint Scanner	02
34.	24 Port 1 GBE Switch, 3 Modular slots for optional uplink/stacking	01
35.	NetFPGA 1 G CML	04
36.	TP-Link TL-WR1043 ND Wireless	01
37.	Transcend USB 3.0 Super Speed Multi Card Reader for SD/SDHC/SDXC/MS/CF Cards	01
38.	TP-Link TL-WR1043 ND Wireless	01
39.	TP Link TLWn 722 N 150 mbps Wireless USS Adaptor	01
40.	HP Switch E3500-24G-PoE + YI (J9310A)	01
41.	Wireless /TI11290/TP Link Adaptor	02
42.	2x U, FL Mini PCI to RP-SMA Pigtail Antenna WiFi cable	01
43.	Wireless WiFi Antenna with pigtail	01
44.	Kindle Voyage Wifi 6" Higher Resolution Display (300 ppi) with adaptive built in light and pagePress sensors	01
45.	H2403RD-NM ANT, Rubber Duck 2.4 GHz 3 dBi	02
46.	TP-Link TL-WN 722n 150 mbps USB high gain	01
47.	ALIX, 2D2 System Board	02
48.	Enclosure 2 LAN, alu, USB	02

49.	PoE Adapter	04
50.	TP Link TL-WR104 3 ND Wireless N Gigabit Router	01
51.	Cadyce CA-US9 USB to Serial Convertor	01
52.	Atheros Ar9285 Ar5b195 Half Mini PCI-e Wireless WLAN WiFi+Bt Bluetooth Card Module 80.211b/g/n	01
53.	Broadcom BCM94321MC BCM4321 Draft 802.11n WLAN Wireless Dual Band PCI-e Card	05
54.	USB to LAN Card	05

## K. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

### K.1 List of events organized by the Computer Science Association:

Month	Name of the Event	Date	Venue
January	Alumni Research Talks 5.0	15 <sup>th</sup> -17 <sup>th</sup>	LTC
February	Qrious	20 <sup>th</sup>	Online
	CodeStorm Prelims	21 <sup>st</sup>	Online
	Anti-Coding	24 <sup>th</sup>	IPC
	Hackathon	25 <sup>th</sup>	LTC
	I-strike	26 <sup>th</sup>	2222
	CodeStorm Finals	27 <sup>th</sup>	IPC
	Mindsweeper	28 <sup>th</sup>	IPC
April	APOGEE Review Meet	2 <sup>nd</sup>	3160
	Farewell Grub	18 <sup>th</sup>	RPA VKB mess
	Farewell Memento Distribution	18 <sup>th</sup>	LTC
	Executive Committee Declaration	30 <sup>th</sup>	SAC
August	Intra CSA meet for planning recruitments	6 <sup>th</sup>	SAC
	Orientation and Recruitment Test	10 <sup>th</sup>	LTC 5102
	Informal Interactions	11 <sup>th</sup>	SAC
	Competitive Programming Special Interest Group(CPSIG)	31 <sup>th</sup>	NAB 6156
September	CPSIG Advanced Lecture 1	1 <sup>st</sup>	NAB 6156
	CPSIG Beginners Lecture 2	6 <sup>th</sup>	NAB 6156
	CPSIG Advanced Lecture 2	7 <sup>th</sup>	NAB 6156
	CPSIG Beginners Lecture 3	9 <sup>th</sup>	NAB 6156
	CPSIG Advanced Lecture 3	12 <sup>th</sup>	NAB 6156
	CPSIG Beginners Lecture 4	14 <sup>th</sup>	NAB 6156
	CPSIG Beginners Lecture 5	15 <sup>th</sup>	NAB 6156
	Engineers Day	15 <sup>th</sup>	NAB Audi
CPSIG Beginners Lecture 6	21 <sup>st</sup>	NAB 6156	
October	Mindturner	15 <sup>th</sup>	NAB 6109
November	Apogee Project Meet	8 <sup>th</sup>	LTC
	Intra CSA Apogee Meet	17 <sup>th</sup>	2207
	Farewell and Grub	24 <sup>th</sup>	LTC and VKB mess

### K.2 Industry-driven Student Workshops at the Department:

1. IBM Global Entrepreneurship Program (GEP) was organized on 16<sup>th</sup> August, 2016 for Discussing IBM's focus on working with Startups, Block chain & IOT on Cloud with mention of Hyperledger, Chain code & Fabric and Discussion around Use cases.
2. Azure Discovery Training Sessions- BITS Pilani, was organized by Microsoft from 22<sup>nd</sup> Sept -30<sup>th</sup> Sept, 2016.



**B1.10.6 Department: Economics and Finance**Number of faculty members (as on 31<sup>st</sup> December, 2016)

<b>Professor</b>	02
<b>Associate Professor</b>	01
<b>Assistant Professor</b>	05
<b>Visiting faculty and lecturer</b>	02

**Head of the Department:** Dr. A K Vaish**Contact details:** akvaish@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 09**A. PUBLICATIONS**

S No	Title of paper	Authors	Name of Journal	Volume & page number
1.	Factorizing the Changes in CO <sub>2</sub> Emissions from Indian Road Passenger Transport: A Decomposition Analysis.	Gupta, M. & Singh, S. K.	Studies in Business and Economics	Forthcoming
2.	"Investigating the Interlinkages between Infrastructure Development, Poverty and Rural - Urban Income Inequality: Evidence from BRICS Nations"	Rao, N.V M and Chotia, V.	Studies in Economics and Finance	Vol. 34, Issue 4
3.	An Empirical Investigation of the Link between Infrastructure Development and Poverty Reduction: The Case of India	Rao, N.V M and Chotia, V.	International Journal of Social Economics	Forthcoming
4.	Examining the Impact of Public Investment and Private Investment on Economic Growth: Empirical Evidence from BRICS Nations	Rao, N.V M and Chotia, V.	International Journal of Economics and Business Research	Forthcoming
5.	Estimating the Efficiency of Public Infrastructure Investment: A State Wise Analysis	Rao, N.V M Saxena, M and Chotia, V.	Global Business Review	Vol. 19, Issue 4
6.	Public Infrastructure Investment and Economic Growth: A Sector Wise Investigation for India Using Westerlund Panel Co integration Approach	Rao, N.V M and Chotia, V.	Romanian Economic Journal	Vol 18, Issue 59
7.	Integrating the issue of Infrastructure Investment with Economic Growth: The Case of India	Rao, N.V M Chotia, V Gupta, M., and Budhadev, R.,	Theoretical and Applied Economics	Vol. 23. Issue 3
8.	Investigating the Infrastructural Efficiency and Productivity of India	Rao, N.V M Chotia, V and Toshniwal, P.,	Business Perspectives	Vol.15, Issue 2
9.	Modelling the Impact of Global Financial Crisis on the Indian Stock Market through GARCH Models	Rao, N.V M Chotia, V and Mathur, S.,	Asia Pacific Journal of Management Research and Innovation	Vol.12, Issue 1
10.	Innovative Approaches to Entrepreneurship Education:	Prof. Arya Kumar	Journal of Management & Entrepreneurship	Vol 10, No 1, Jan-March 2016,

S No	Title of paper	Authors	Name of Journal	Volume & page number
	Illustration with CLEO Course of BITS Pilani			pp.13-25
11.	Changing Paradigm of Higher Education – Need for Introspection	Prof. Arya Kumar	National Conference on Reforming & Rejuvenating Indian Higher Education – A Stakeholders' Perspective	18 <sup>th</sup> May 2016, EPISI, New Delhi, pp 33-36
12.	Modelling persistence in conditional volatility of asset returns	RajanPandey and Arya Kumar	Afro-Asian Journal of Finance and Accounting, Inderscience Publishers	forthcoming
13.	Panel data analysis of financial development, economic growth and rural-urban income inequality: Evidence from SAARC Countries	Dr. A.K. Giri and Madhu Sehrawat	”, International Journal of Social Economics, Emerald.	Vol.43, No.10, pp. 998-1015.
14.	The composition of public expenditure and economic growth in India: Evidence from Auto-Regressive Distributed Lag Approach	Geetilaxmi Mohapatra and A K Giri	Journal of Economic Research (JER),	Vol.21, No.2, pp.205-230.
15.	The impact of financial development on economic growth: evidence from SAARC countries	Dr. A.K. Giri and Madhu Sehrawat	International Journal of Emerging Markets, Emerald	, Vol.11, No.4, pp. 569-583.
16.	Financial Development and Poverty Reduction: Panel data analysis of South Asian Countries,	Dr. A.K. Giri and Madhu Sehrawat	International Journal of Social Economics, Emerald.,	Vol. 43, No. 4, pp.400 - 416
17.	The impact of financial development, economic growth and energy consumption on environmental degradation: Evidence from India	A. K Giri, Geetilaxmi Mohapatra and Madhu Sehrawat	Management of Environmental Quality (MEQ	Vol.26, Issue 5, pp.666-682.
18.	Willingness to pay for carbon tax: A study of Indian road passenger transport.	Monika Gupta	Transport Policy	Vol 45, pp. 46-54.

## B. CONFERENCES

S No	Title of paper	Authors	Name of conference	Venue & Date of conference
1.	Decomposing the CO <sub>2</sub> Emission Increase from Road Passenger Transport in India	Monika Gupta	XUB Sustainability Summit on 'Energy, Peace and Global Governance'	Xavier Institute of Management, Bhubaneswar (XIMB), 11-13 August, 2016).
2.	The role of Globalization and Institutional quality on Finance - Growth Nexus: Empirical evidence from India	Dr. A K Giri	15th International Convention of the East Asia Economic Association	Bandung, Indonesia, November 5-6, 2016
3.	Business Cycle Dynamics of Major Economic Groups	Dr Rajendra N. Paramnik	53- The Indian Econometric Society conference	NISER, Bhubaneswar during 22-24 December 2016.
4.	Economic growth-Income inequality-Poverty nexus and its impact on Environmental degradation: Empirical evidence from India	Dr Geetilaxmi Mohapatra	53- The Indian Econometric Society conference	NISER, Bhubaneswar during 22-24 December 2016.
5.	Contribution of Female Human Capital in Economic Growth: An Empirical Analysis of India	Prof. A K Giri*	53- The Indian Econometric Society conference	NISER, Bhubaneswar during 22-24 December 2016.
6.	Public Infrastructure Investment and Economic Growth: A Sectoral Analysis	Rao, N.V M and Chotia, V.	Management Doctoral Colloquium and VGSOM Research	Vinod Gupta School of Management Indian Institute of Technology

S No	Title of paper	Authors	Name of conference	Venue & Date of conference
	using Panel Cointegration Approach		Scholars Day 2016	Kharagpur, India, Feb 10-11, 2016
7.	"Momentum Profits and Investor Behavior	Prof Arya Kumar and Mr. Aditya Sharma	14th International Conference of the SGBED	Montclair State University, Montclair, NJ, USA from June 21 to 24, 2016
8.	Climate change, Agricultural Production and Poverty	Dr. A.K Giri and Dr. Geetilaxmi Mohapatra	ICSSR Sponsored National Seminar on Indian Agriculture in Post reform era: Issues and Challenges	Vanasthali University, Rajasthan.
9.	Measuring Effectiveness of Carbon Tax: A System Dynamics Approach	Monica Gupta	4 <sup>th</sup> Pan IIM conference World Management Conference	IIM Ahmedabad (13-15 December, 2016).
10.	Business Cycle Dynamics of Major Economic	Dr. Rajendra Narayan Paramanik and Prof. Bandi Kamaiah	3 Annual conference of TIES, NISER	NISER-Bhubaneswar (22-24 December, 2016)
11.	Symmetric and asymmetric behavior of intertemporal volatility of asset returns: observations from the Indian stock market	Rajan Pandey and Arya Kumar	National Conference on Financial System Reforms and Economic Growth: Issues and Challenges	Lal Bahadur Shastri Institute of Management, New Delhi on 19-20 Feb, 2016
12.	Examining the Role of Nominal Shocks for the Current Account	Dr. Archana Kulkarni and Bandi Kamaiah	53rd annual conference of The Indian Econometric Society	Bhubaneswar on 22-24 December, 2016

### C. BOOKS PUBLISHED OR WRITTEN DURING THE YEAR

S.No.	Name of Faculty	Name of Book	Published by
1.	Prof. Arya Kumar and Mr. Anil Bhat	Principles of Management- Competencies/Processes/ Practices/ 2 <sup>nd</sup> edition of the book	Oxford University Press in June 2016.

### D. BOOKS CHAPTERS PUBLISHED OR WRITTEN DURING THE YEAR

1.	Rajan Pandey and Prof. Arya Kumar	Financial System Reforms & Economic Growth: Issues and Challenges (Chapter)	Tata McGraw Hill
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### E. INVITED TALKS GIVEN BY BITS FACULTY

- Arya Kumar delivered an invited talk on "**Policy Perspective on Skill Development - Need for Building an Eco-System**" in two Days Labour Law Workshop organized by Indian Institute of Corporate Affairs in collaboration with Indian Law Watch as Knowledge Partner on 22<sup>nd</sup> April 2016 at Manesar.
- Prof Arya Kumar was invited to chair the valedictory session and address the participants to "Sensitivity towards Competitive Service, Business Intelligence, Emotional Intelligence" programme organized by National Institute of Banking Studies and Corporate Management (NIBSCOM), Noida on 5<sup>th</sup> May 2016.
- Invited as expert member for faculty selection by NIIT University Nimranaon 26<sup>th</sup> August 2016.
- Prof Arya Kumar has been inducted as expert member in the Committee for University Innovation Cluster (UIC) constituted by Biotechnology Industry Research Assistance Council (BIRAC) , DBT, Govt. of India to Screen new proposals and to review ongoing supported projects for a period of three years. Meeting to review the proposals of 5 universities were discussed on 29<sup>th</sup> August 2016.
- Prof Arya Kumar and Prof Alok Pandey participated in the UNIQUE Project Panel Discussion on 'Ecosystem for Internationalization of Higher Education' organized jointly by EPSI and BIMTECH on 8th September, 2016 at Shriram Hall, PHD House, New Delhi
- Participated in the expert members workshop on "Strengthening Publicly Funded Incubators" organized by DST Centre for Policy Research at IIT Delhi on 4 December 2016 at IITD.
- Delivered an invited talk in the Faculty Development Programme organized by Biju Patnaik Technology University on "Excellence in Higher Education – Teaching – Learning Process" on 21<sup>st</sup> December 2016 at Bhubaneswar.

**F. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS: NIL****G. DEPARTMENTAL ASSOCIATION / CLUB ACTIVITIES:**

Economics and finance Association started 2016 with preparations for Apogee 2016 events. It organized three events in the fest under the leadership of Abhishek Dixit as the Apogee coordinator. Stock Market Simulation was its major event and was designed on the concept of live trading floor. It recorded 300+ participation from students of various colleges of the country. EFA also conducted prevent of SMS on DSIJ website with real time stock prices.

BITSOPOLY, a version of monopoly with BITSian flavor witnessed huge footfall. Another event, named Business Master was held in association with consulting club.

Farewell was also organized for the outgoing batch along with formal dinner with the faculty. During later part of the semester, around 400 T shirts were sold generating revenues for the association. New position holders were also selected for continuing the work.

In August 2016, interactive sessions on current topics were organized. These include topics like BREXIT & SUB prime crisis. Members form 2016 batch were inducted into the association. Teacher's day celebrations were held in beginning of September to promote better student teacher bonding.

Mock stock, a virtual stock trading event was held in October. It was EFA's most crowd pulling event of the semester. In November around 500 sweatshirts were sold by the association successfully.

Overall year 2016 was a wonderful year for the association and was a great learning experience for its members.

**B1.10.7 Department: Electrical, Electronics & Instrumentation****Department: Electrical, & Electronics Engineering**

Number of faculty members (as on 31 December 2016)

<b>Emeritus Professors, Professors</b>	<b>05</b>
<b>Associate Professors</b>	<b>04</b>
<b>Assistant Professors</b>	<b>11</b>
<b>Lecturers</b>	<b>13</b>

**Head of the Department:**

**Dr. Navneet Gupta**

**Contact details:**

ngupta@pilani.bits-pilani.ac.in

**Number of PhD Scholars:**

**full time 13, Part time 6**

**A. Sponsored Research/ development activities:**

1. DST under Water Technology Initiatives (WTi -2016) - 38.7 Lakhs, Two years. (Dr. K K Gupta)  
"Soft Computing Framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting Fluoride as major parameter"
2. New lab equipments were procured through DST-FIST grant for research, development and teaching in laboratories
3. Pico-ammeter voltage source -Keithley 6487 (Dr. A. Hazra)
4. High Precision LCR meter -LCR-6300 (10Hz-300 kHz) (Dr. A. Hazra)

**B. Publications:**

**The faculty of the department published 22 papers in international/national refereed journals during the year. (Scopus and SCI indexed)**

1. Prachi Sharma and Navneet Gupta, "Model for threshold voltage instability in top-gated nanocrystalline silicon thin film transistor" Journal of Computational Electronics, Springer-Verlag Berlin, vol. 15, issue 2, 666-671, 2016. (Scopus and Sci indexed).
2. Kavindra Kandpal and Navneet Gupta, "Investigations on high-κ dielectrics for low threshold voltage and low leakage zinc oxide thin-film transistor, using material selection methodologies" Journal of Materials Science: Materials in Electronics, Springer, vol. 27, issue 6, 5972-5981, 2016. (SCI and SCOPUS indexed).
3. G.M Sundram, M. Angira, Navneet Gupta and K.J.Rangra, "Material selection for CMOS compatible high Q and high frequency MEMS disk resonator using Ashby's approach" International Journal of Nanoelectronics and Materials, Malaysia, vol. 9, 157-164, 2016. (Scopus indexed)

4. Navneet Gupta and Abhinav Mishra, "Selection of substrate material for Hybrid Microwave Integrated Circuits (HMICs)", *Energetika*, vol 62, 78-86, 2016. (Scopus indexed)
5. Mishra Ashish, Sharma Aditya, Verma Pranet, Abhijit Asati and Raju Kota Solomon "A modular approach to random task graph generation" *Indian Journal of Science and Technology*, vol 9, Issue 8, February 2016 (link: <http://www.indjst.org/index.php/indjst/article/view/61035>) (SCI Indexed)
6. Vineet Kumar, Abhijit Asati, Anu Gupta, "A novel edge-map creation approach for highly accurate pupil localization in unconstrained infrared iris images", *Journal of Electrical and Computer Engineering*, Hindavi publishing corporation, 2016, Article ID 4709876, May 2016. (<http://dx.doi.org/10.1155/2016/4709876>) (Scopus Indexed)
7. Vineet Kumar, Abhijit Asati, Anu Gupta, "Accurate iris localization using edge map generation and adaptive circular Hough transform for less constrained infrared iris images," *International Journal of Electrical and Computer Engineering*, IAES publication, Indonesia, vol. 6, issue.4, pp. 1637-1646, August 2016. (Scopus Indexed)
8. Vineet Kumar, Abhijit Asati and Anu Gupta, "Hardware implementation of a novel edge-map generation technique for pupil detection in NIR images," *Elsevier Journal Engineering Science and Technology, an International Journal (JESTEC)*, November 2016, (DOI information: 10.1016/j.jestch.2016.11.001)
9. Ashish Mishra, Mohit Agarwal, Abhijit Asati and Kota Solomon Raju "Using graph isomorphism for mapping of data flow applications on reconfigurable computing systems," *Elsevier Journal of Microprocessors and Microsystems*, December 2016. (DOI: 10.1016/j.micpro.2016.12.008) (SCI Indexed)
10. Sneh Lata Murotiya and Anu Gupta, "Hardware-efficient low-power 2-bit ternary ALU design in CNTFET technology", (2016) *International Journal of Electronics*, 103 (5), pp. 913-927, vol. 103, Issue 5, 3 May 2016, Pages 913-927, DOI: 10.1080/00207217.2015.1082199, (SCI, Scopus Indexed).
11. Ananthakrishna Chintanpalli, Jayne B. Ahlstrom, and Judy R. Dubno, "Effects of age and hearing loss on concurrent vowel identification", *Journal of Acoustical Society of America*, vol. 140, issue 6, 4142-4153, 2016. (SCI and Scopus indexed). [Impact factor: 1.572].
12. H. O. Bansal, T Sen and H P Agrawal "Modelling and simulation of hydro power plant using PSO tuned controller" *International Journal of Power and Energy and Systems*, ACTA Press, Volume 36, No.2, 2016 ESCI-Web of science indexed)
13. A Panday and H O Bansal, "Multi-objective optimization in battery selection for hybrid electric vehicle applications", *Journal of Electrical System*, vol. 12, issue 2, 325-343, 2016,. SCOPUS indexed
14. A Panday and H O Bansal, "Development of energy management strategy in hybrid electric vehicles using Pontryagin's minimum principle and genetic algorithm tuned controller", *International Journal of Vehicular Technology*, Article ID 4234261, pages 1-13, 2016. SCOPUS indexed
15. A Panday, H O Bansal and P Srinivasan, "Thermoelectric modeling and online SOC estimation of Li-Ion battery for plug-in hybrid electric vehicles", *Modelling and Simulation in Engineering*, Article ID 2353521, pages 1-12, 2016, SCOPUS indexed.
16. A Panday and H O Bansal, "Energy management strategy for hybrid electric vehicles using genetic algorithm", *Journal of Renewable and Sustainable Energy*, vol. 8, issue. 1:015701, SCIE, Indexed, Impact Factor 1.
17. S. Mohanty, K. K. Gupta, Kota Solomon Raju, "Adaptive fault identification of bearing using EMD-PCA based average Kurtosis technique," *IET - Science, Measurement & Technology*, 2016.
18. S. Mohanty, K. K. Gupta, and Kota Solomon Raju, "Vibro-acoustic fault analysis of bearing using FFT, EMD, EEMD, and CEEDMAN and their implications", *Advances in Machine Learning and Signal Processing*, Springer Lecture Notes in Electrical Engineering, Chapter 25, pp. 281 - 292, vol 387, 2016.
19. K. Dutta, A. Hazra, P. Bhattacharyya, "Ti/TiO<sub>2</sub> Nanotube Array/Ti Capacitive Device for Non-polar Aromatic Hydrocarbon Detection", *IEEE Transaction Device and Materials Reliability*(IEEE), vol.16, issue. 2, pp.-235-242, (2016)(Impact factor 1.516)
20. Y.K. Bhatshvar and H.D. Mathur, "Frequency regulation with vehicle to grid (V2G) option in multi-generation power network" ", *Energetika*, vol. 62, issue. 1-2, pp. 68-77, 2016 (Scopus indexed)
21. Tanuj Sen and H.D. Mathur, "A new approach to solve economic dispatch problem using a hybrid ACO-ABC-HS optimization algorithm" *International Journal of Electrical Power and Energy Systems*, vol. 78, Pages 735-744 , June 2016, (SCI and Scopus indexed). [Impact factor: 2.587]
22. Y. K. Bhatshvar and H. D. Mathur, "Power frequency oscillation suppression using two-stage optimized fuzzy logic controller for multigeneration system," *Advances in Fuzzy Systems*, Article ID 8308109, 13 pages, 2016. (Scopus indexed)

**C. Conferences:**

The faculty of the department published 21 papers in international/national Conferences during the year.

**(i) Conferences attended/papers presented outside India:**

1. Navneet Gupta and Abhinav Mishra, "Comparative study on selection of substrate material for Hybrid Microwave Integrated Circuits (HMICs) using Ashby's and TOPSIS techniques" 13<sup>th</sup> Int. Conf. of Young Scientists on Energy Issues (CYSENI-2016), Kaunas, Lithuania, May 26-27, 2016.
2. G. S. S. Chalapathi, R. Manekar, V. Chamola, K.R. Anupama and S Gurunarayanan, "Hardware validated efficient and simple time synchronization protocol for clustered WSN", IEEE TENCON 2016, Singapore, Nov. 22-25, 2016.
3. Abhishek Joshi, Rahul Singhal, "Performance comparison of probe-fed polygonal patch antennas for L-Band applications" IEEE TENCON 2016 – Technologies for Smart Nation, Singapore, November 22 - 25, 2016.
4. Abhishek Joshi, Rahul Singhal, "Probe-fed regular hexagonal narrow-slot antenna with reduced ground plane for WLAN applications" IEEE TENCON 2016 – Technologies for Smart Nation, Singapore, November 22 - 25, 2016.
5. Rajiv Gupta, Leela Krishna Kondepati, Anu Gupta, "Tender evaluation by visual decision support system", IIE and URUAE International Conference, March 20-21, 2016 Mauritius, Scopus indexed
6. Rajiv Gupta, Anu Gupta, Advait Nair, " To predict the impact of passive architecture on the temperature conditions inside a building using ANN" , The 7th International renewable Energy Congress, March 22 – 24, 2016, Hammamet, Tunisia
7. Karan Raj Singh, Anu Gupta, "A hardware optimized low power RNM compensated three stage operational amplifier with embedded capacitance multiplier compensation" 2nd IEEE International Conference on VLSI Systems, Architecture, Technologies and Applications (VLSI SATA 2016), Amrita School of Engineering, Bengaluru, India, 10 - 12 January 2016
8. Harshavardhan Settibhaktini and Ananthakrishna Chintanpalli, "Computational model predictions of level-dependent changes for concurrent vowel identification (accepted), Association for Research in Otolaryngology (to be held from Feb 11-15 2017) in Baltimore, USA
9. A. Hazra, "Capacitive Modeling of TiO<sub>2</sub> Nanotube based Gas/Vapor Sensor Devices", 11th IEEE Nanotechnology Materials & Devices Conference (NMDC 2016), Toulouse, France, October, 9-12th, 2016
10. Y.K. Bhatshvar and H.D. Mathur, "Frequency regulation with vehicle to grid (V2G) option in multi-generation power network", In the proceedings of 13th Conference of Young Scientists on Energy Issues, 26-27th May 2016, Kaunas, Lithuania
11. Antapurkar Shwetal Kirtikumar, Avinash Pandey and K. K. Gupta, "GFDM Performance in terms of BER, PAPR and OOB and comparison to OFDM system," AIP Conference Proceeding, Advancement in Science & Technology, vol. 1715, pp. 020039/1 - 020039/11, 2016.
12. Toghias Thomas and K. K. Gupta, "NB-PLC channel modelling with cyclostationary noise addition & OFDM implementation for smart grid," AIP Conference Proceeding, Advancement in Science & Technology, vol. 1715, pp. 020037/1 - 020037/9, 2016.
13. Ankita Singh and K. K. Gupta, "A contrast enhancement techniques for low light images," AIP Conference Proceeding, Advancement in Science & Technology, vol. 1715, pp. 020057/1-020057/9, 2016.

**(ii) Conferences attended/papers presented in India:**

1. V S Rakesh Krishna, Rahul Singhal, "720-Mbps 64-QAM-OFDM SCM transmission over RGB-LED-based FSO communication system," 13th International Conference on Wireless and Optical Communications Networks (WOCN), Hyderabad, July 21-23, 2016.
2. V S Rakesh Krishna, Rahul Singhal, "Dual carrier multiplexed M-QAM signals modulated optical SSB transmission over Fiber," 13th International Conference on Wireless and Optical Communications Networks (WOCN), Hyderabad, July 21-23, 2016.
3. Kirti V. Awalkar, Sanjay G. Kanade, Dattatray V. Jadhav, Pawan K. Ajmera, "A multi-modal and multi-algorithmic biometric system combining iris and face" International Conference on Information Processing (ICIP), VIT Pune, Dec 16-19, 2015.
4. Praveen Kumar, A.V., "A probe fed cylindrical dielectric resonator antenna with improved polarization purity", IEEE Indian Antenna Week 2016, Thiagarajar College of Engineering, Madurai, June 2016.
5. Ananthakrishna Chintanpalli and Raghotham Sreekar, "Computational model predictions of level dependent changes in vowel identification", International Conference on Signal Processing, SATI, Vidisha, November 7-9, 2015.

6. A Panday and H O Bansal, "Energy management in hybrid electric vehicles using particle swarm optimization method", IEEE 7<sup>th</sup> Power India International Conference (PIICON 2016) Bikaner, Rajasthan, 25-27 November 2016
7. A. Hazra, "Ti/TiO<sub>2</sub> nanotube/Ti devices for selective vapor sensing: a comparison between resistive and capacitive mode approach", IUMRS-ICYRAM-2016, IISc Bangalore, December 11-15, 2016
8. Y.K. Bhatshvar, H.D. Mathur and R.C. Bansal, "Impact of wind power generating system without frequency regulation support for two-area interconnected power system", In the proceedings of International Conference on Advances in Engineering Research and Applications, 15-16 December 2016, Bhopal, India.

**D. Books Published/Edited /Chapter written/ reviewed articles during the year:** NA

**E. Conferences, seminars & workshops conducted**

1. Dr. Abhijit Asati was technical Committee member of National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015) organized by EEE Department, BITS-Pilani, Rajasthan during Nov 20-21, 2015
2. Prof. Surekha Bhanot conducted KAMLA BHASIN talk on "Gender, Patriarchy, masculinity, are they harmful for men also ?" on April 15-16 under aegis of CESH and Gender Champions
3. Dr. Praveen Kumar A.V. was part of the organizing committee of National Workshop on Outcome Based Learning Using Pedagogy Framework Model organized by the Teaching Learning Centre (TLC) of BITS, Pilani -Pilani Campus in collaboration with the Centre for Educational Technology, Indian Institute of Technology (IIT), Kharagpur under a funded project by the HRD Ministry, Govt. of India, 28-29 November, 2016

**F. Invited Talks / chairing session by EEE faculty:**

1. Prof. Navneet Gupta gave an invited talk on "Nanomaterials and Nanodevices: Basics to Biomedical Impacts" during Seminars on Nanoelectronics organized by IET (Pilani Chapter) at BKBIET, Pilani on 21<sup>st</sup> Jan 2016.
2. Prof. Navneet Gupta was "Guest of Honor" and gave an invited talk during National Conference on Emerging Trends in Computer Science and Electronics Engineering (ETCSEE-2016) organized by RPS Group of Institutions, Mahendragarh (HR) during April 9-10, 2016.
3. Prof. Surekha Bhanot delivered key note address on "Process Automation and Control Systems : Review and trends" in National conference on process automation and control, May 28,29,2016, MNIT Jaipur
4. Dr. Rahul Singhal chaired a session on Antennas, Propagation and Computational EM at IEEE TENCON 2016, Technologies for Smart Nation, Singapore, November 22 - 25, 2016.
5. Dr. Pawan K. Ajmera gave an invited talk on "MATLAB for Signal and Image Processing Application" during a workshop on "Modeling and Simulation for Research and Development" organized by Govt. Women Engineering College, Ajmer during November 22 – 26, 2016
6. Dr. Praveen Kumar A.V. delivered an invited pre-conference lecture on 'Electromagnetic Modes and Applications' at the International Conference on Computing, Communication and Signal processing, College of Engineering, Karunagappally, Kerala, July 20, 2016.
7. Dr. Praveen Kumar A.V. chaired one technical session on antennas at the International Conference on Computing, Communication and Signal processing, College of Engineering, Karunagappally, Kerala, July 20, 2016.
8. Dr. Praveen Kumar A.V. delivered two invited lectures on 'Antenna Engineering' at the National Workshop for Engineering Faculty on Microwave and Antenna Design & Engineering , Govt. Engineering College, Bikaner, Rajasthan, March 28, 2016
9. Dr. K K Gupta: Delivered Lecture in 4th Indo-German workshop on Sustainable Engineering (Learning factory, Internet of Things, Resource efficiency), "Structural Health Monitoring using IoT Technology," Centre for Sustainable Manufacturing, BITS, Pilani, 2016.
10. Dr. K K Gupta: Delivered Lecture in 73rd Taoyaka Program Seminar , "Ongoing Project at BITS, Pilani - Considering Social, Industrial and Futuristic Challenges," Graduate School of Engineering, Hiroshima University, Japan, 2016.
11. Dr. K K Gupta: Delivered Lecture as Resource Person in National Workshop for engineering faculty on Image Processing under TEQIP Phase II, "Image Processing and Pattern Recognition in Biometric Applications - face, Iris, finger. etc.," Government Engineering Collage, Bikaner, 2016.
12. Dr. Arnab Hazra gave an invited talk "J C Jain Memorial Lecture" on " Studies on p and n type TiO<sub>2</sub> nanostructure based devices for alcohol sensing" delivered in 27th AGM of Material Research Society of India (MRSI) at CSIR-NEIST, Jorhat, Assam in 2016

13. Dr. H. D Mathur gave an invited lecture on “Smart grid technologies: opportunities and challenges”, 3rd March, 2016 at Institution of Engineers (India), Pilani Chapter at BKBIET, Pilani (Rajasthan).
14. Dr. Praveen Kumar A.V. reviewed two articles for IET Electronics Letters, and one article for International Conference on Next generation Computing Technologies (NGCT 16) , in 2016
15. Dr. K K Gupta: Reviewed articles for Elsevier - Measurement Journal, Computer & Electrical Journal, Mechanical Systems and Signal Processing Journal, Applied Soft Computing Journal; International Journal of Electronics and Communications; Journal of Systems and Control Engineering

#### **G. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:**

1. Prof. Surekha Bhanot attended a workshop on “Intelligent & green buildings” on Oct 25, 2016, By Johnson Controls
2. Dr. Nilanjan Chattaraj attended a workshop on “Intelligent & geen buildings” on Oct 25, 2016, By Johnson Controls
3. Dr. Nilanjan Chattaraj attended “National workshop on outcome based learning using pedagogy framework model” organized by Teaching Learning Centre, BITS Pilani, Pilani Campus in collaboration with Centre for Educational Technology, Indian Institute of Technology (IIT), Kharagpur, 28-29 November 2016
4. Dr. Praveen Kumar A.V. participated in 'IEEE Indian Antenna Week', a 5 day workshop on advanced antenna technology, Thiagarajar College of Engineering, Madurai, June 2016
5. Dr. B. Sainath participated in the Teaching and Learning Workshop organized by teaching and learning center (TLC), BITS Pilani, Pilani Campus during Jan.7-9, 2016.

#### **H. Awards and recognitions won by faculty and students**

1. Prof. Surekha Bhanot was nominated as Expert member in Academic Council of Graphic era University, Dehradun, on Oct 2016 for period of two years
2. Under the mentorship of Dr. Praveen Kumar A.V., Mr. Mohit Bharadwaj received the Professor I. J. Nagrath Student project fund for APGEE 2016-17
3. Dr. A Hazra was awarded "IEI Young Engineers Award"-Electronics & Telecomm. Engg. by Institute of Engineers in 2016
4. Dr. A Hazra was awarded, "Best PhD thesis award" by Institute of Smart Structure & System (ISSS), IISc Bangalore in 2016
5. Dr. A Hazra was awarded, "Early Career Research Award" by Science and Engineering Research Board (SERB), India in 2016
6. Dr. K. K. Gupta "Outstanding Reviewer" - Elsevier Measurement: Oct 2016"

#### **I. Faculty Development, International Collaboration & Industry/ University Immersion**

1. Mr. G. S. S. Chalapathi visited Institute for Communications Engineering and RF-Systems, Johannes Kepler University, Linz, Austria during Jun-Aug 2016 supported by a research visit grant for lecturers by BITS and worked on Time Synchronization in Wireless Sensor Networks with researchers there.
2. Dr. K. K. Gupta went to Robotics Lab, System Cybernetics, Graduate School of Engineering, Hiroshima University, Japan during Jun-Jul 2016 under University-Immersion scheme

#### **J. Significant new equipments/experimental facility added during the year**

1. IRIS Wireless Sensor Motes (XM2110CB) and Sensor boards (MTS310CB) worth ₹1.28 lakhs have been procured to perform sensor node localization experiments (Mr. G Sai Sessa Chalapathi )
2. RIG grant (26/7/009) plus OPERA grant (26/7/0014): (Dr. B. Sainath )
  - a. Procured NetSim standard v9 consisting of inter-networks (base component) and cognitive radio network component. It was installed in a DELL desktop located in communication systems lab.
3. OPERA grant: (Dr. B. Sainath )
  - a. Procured DELL desktop computer which is in use by a research student and located in communication system lab. NetSim software was installed in this computer.
4. Department grant: (Dr. B. Sainath )
  - a. NooElec software defined radio (SDR) and DVB-T USB with antenna (11 Nos.)
  - b. The SDRs are used in communication systems lab in the last semester.
5. Dell Precision T7810 XCTO (Intel Xeon Processor, 32 GB, 1 TB Hard drive): 189383.89 (INR), (Dr. Ananthakrishna Chintanpalli)



**K. Departmental association/club activities:**

1. Dr. B. Sainath is currently acting as departmental meeting coordinator
2. Dr. B. Sainath is currently acting as single point of contact (SPOC) from EEE department. As SPOC representative from the department, he attends practice school (PS) meetings and involves in PS related activities

**EEE / ENI Association****Activities of Instrumentation Forum in the 1<sup>st</sup> Semester of Academic Year 2016-17**

1. 14<sup>th</sup> September, 2016 – Conducted a lab visit session for the 1st year students
2. 15<sup>th</sup> September, 2016 – Held a quiz competition and poster (based on events organized in Apogee) presentation on the occasion of 49th Engineer's day with the other Associations
3. 20<sup>th</sup> September, 2016- First Student Faculty Council Meet was held.
4. 17<sup>th</sup> October, 2016 – First lecture of Workshop on MATLAB, Simulink & Arduino was held.
5. 17<sup>th</sup> October, 2016 – First lecture of Workshop on MATLAB, Simulink & Arduino was held.
6. 26<sup>th</sup> October, 2016 – First meet for APOGEE projects and paper presentation was held.
7. 27<sup>th</sup> October, 2016 Project meets was conducted for giving a brief details to the students interested in doing projects in Apogee
8. 7<sup>th</sup> November, 2016 – Second lecture of Workshop on MATLAB, Simulink & Arduino was held.
9. 8<sup>th</sup> November, 2016 – Second meet for APOGEE projects and paper presentation was held.
10. 27<sup>th</sup> November, 2016 – Farewell was held for the BE and ME students who are going for PS next semester.
11. 27<sup>th</sup> November, 2016 Farewell for outgoing students of EEE and ENI was organized combining with ENI Assoc
12. Issued a magazine named 'LIVEWIRE' (EEE Assoc annual magazine) to all EEE students

**B1.10.8 Department: Humanities and Social Sciences**

Number of faculty members (as on 31 December 2016)

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	06
<b>Assistant Professors</b>	12
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Prof. G.S. Chauhan

**Contact details:** gsc@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** FT : 8 PT: 5 Total : 13

**Ph.D. Thesis Submitted during the year: 6**

**A. SPONSORED RESEARCH ACTIVITIES:****(i) Projects Ongoing during the year 2016**

1. Sangeeta Sharma. "Rural women empowerment and sustainable growth" in collaboration with MNIT, Jaipur, Monica Sharma, Amount 30 Lakhs, DST, 2015 (Ongoing).

**(ii) Projects completed during the year 2016**

1. Choudhary Sanjiv, Impact Assessment Study of Pradhan Mantri Gram Sadak Yojana (PMGSY) including Gender- funded by NRRDA, MoRD, Govt. of India, New Delhi-Principal Investigator, 492000/- (Completed).
2. Nandigama, Sailaja., "Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia" Amount: 1,00,000/-; BITS RIG Project (Completed).
3. Raina, Sunita. Ongoing Research Initiation Grant Project titled "GM Foods, Food Security and WTO: Exploring the Politics of Food in India" (Completed).

**(iii) Project proposals approved during the year 2016****B. Publications:**

1. Hari Nair, "Where teachers learn" *Economic and Political Weekly*, vol. LI, no. 18, pp. 128-30 30 April 2016,
2. Choubisa, R. (2016). *Social Responsibility and Environmental Sustainability in Business: How Organizations Handle Profit and Social Duties* by Preeta. M Banerjee and VanitaShastri, Sage Publications, March 2016.
3. Madhusmita Das and Sangeeta Sharma (2016) Audience perception about the portrayal of women in Indian Television advertising *IUP Journal of marketing management*, Volume XV, number 3 2016.
4. Geetika Shree and Kumar Neeraj Sachdev"Understanding the Effects of Social Networking Sites on Communicative Virtues: A Literature Review"*International Journal of Humanities and Social Sciences*, Volume 1, No. 1, April 2016, 1-13.
5. Geetika Shree and Kumar Neeraj Sachdev"Understanding the Effects of Social Networking Sites on Communicative Virtues: A Literature Review"*International Journal of Humanities and Social Sciences*, Volume 1, No. 1, April 2016, 1-13.
6. Sharma Ruchika, Sangeeta Sharma.Study of Linguistic Deviations used in Advertising Slogans of Confectionery and Beverages in India*International Journal of Physical and Social Sciences (ISSN 2249-1058)*, January 2016 Issue 1 Volume 6.
7. Somdatta Bhattacharya and Ricky Lohkar PradhanHerland: The Reality and Representations of Khasi Matriliney." *LANGLIT: An International Peer Reviewed Open Access Journal*. Vol.2 Issue 3 ISSN 2349-5189 February, 2016.
8. V. S. Nirban and P C Kumar"Social Media Technology Interventions and Interruptions in Pursuit of Happiness"*Journal of International Academic Research in Multidisciplinary Disciplines*; Volume 4, Issue 6, pp. 295 - 301, ISSN: 2320-5083.March 2016.
9. Chasul and V. S. NirbanEvolution of Technology Acceptance in Education*International Journal of Applied Research*. Volume 2, Issue 6, pp. 893-895. ISSN: 2394-7500June 2016.
10. Chasul and V. S. NirbanA Study of Smartclass Technology Acceptance by Secondary School Teachers.*Indian Streams Research Journal*. Vol:5, Issue:6 DOI: 10.9780/22307850July 2016.
11. Neerja Vyas and Sushila Shekhawat. Feministic Undertones in Rabindranath Tagore's Punishment,Vision and Garibala.*Literary Voice*.Volume1.No 5.March 2016.
12. Sushila Shekhawat and Neerja Vyas Shakespeare and Contemporary Indian politics:An Analysis of Haider by Vishal Bharadwaj. *The International Journal of Culture,Literature and Criticism*.Issue No.14.ISSN:0976-1608October 2016.
13. Chauhan, G.S. & Shukla, TanuSocial Media Advertising and Public Awareness: Touching the LGBT Chord!*Journal of International Women's Studies*, 18 (1). Bridgewater, US Oct 2016.
14. Chauhan, G.S. & Shukla, Tanu, India, Nationalism and Sedition Debate: Media Trial of JNU Outrage, *An International Journal of Communication*. *Media Watch*, 7(3). [DOI: 10.15655/mw/2016/v7i3/48556]Sep 2016.
15. Shukla, TanuEthics in Healthcare and Medical Communication.*International Journal of Computer Application*. Assoc. of Medical Consultants.Feb 2016
16. Kumar, K K& Shukla, TanuEducational Outcomes and Child's Work: A Case Study of Children in Slum. *Educational Quest*, *International Journal of Education and Applied Social Science*. 7(2). [DOI 10.5958/2230.7311.2016.00028.3] Oct 2016.
17. Shukla, Tanu Women at the Threshold of Globalization *Journal of Society & Culture in South Asia*, Sage Publications, Vol 2(2) July 2016.
18. Shukla, TanuAn Introduction to Qualitative Research by UWE Flick *South Asian Journal of Management*, Sage Publications, Vol 23 (4), ISSN 0971-5428, New Delhi Oct-Dec2016.
19. Choubisa, R.&Slezackova, A. (2016).Mental Health Continuum-Short Form (MHC-SF): PsychometricHarmony, Divergence & Deviations for Indian & Czech Cultures. *International Journal of Psychology*, 51 (S1), 939, DOI: 10.1002/ijop.12342. 2016.
20. Choubisa, R. (2016).A Plebiscite on Job-Crafting Behaviors in Indian Employees: Structure, Incidences, Evidences and other Complexities. *International Journal of Psychology*, 51 (S1), 748. DOI: 10.1002/ijop.12328.
21. Chauhan, G.S. & Shukla, Tanu Consumer Psychology and Memory Recall Effect: An Analytical Study on

- Comparative Advertising. Learning Community [DOI:10.5958/2231-458X.2016.00009.9] 7(1). Sep 2016
22. Bhattacharya Somdatta The Insane, the Invisible and the Tumble Down the Hole: Representations of the No-man's Lands within the 'Urban'. Akshara. Vol 8 May 2016.
  23. Bhattacharya Somdatta Visual Culture of Stereotypes: Roadside Billboards in Kolkata Coldnoon Cities. Volume V Issue II (London/Lahore/Cairo/Calcutta) September 2016.
  24. Choudhury, Sanjiv Kumar, Virendra Singh Nirban and Sailaja Nandigama (eds) Opportunities and Challenges in Classroom Teaching: A few Reflection National Convention Proceeding on Current Practices and Future of Classroom Teaching at Higher Education Level BITS Pilani, Pilani Campus, Rajasthan. 2016.
  25. Krishna Akhil Kumar Adavi and Hari Nair with the assistance of Swaha Das "Gandhi and the 'race' question" in the Proceedings of the international conference on Gandhi and the contemporary world, 24-25 February 2016 edited by Sanjeev Kumar, Victorious Publishers, Delhi, pp. 62-70. (ISBN 978-93-84224-47-9) Proceedings of the international conference on Gandhi and the contemporary world, 24-25 February 2016.
  26. V. S Nirban, Chasul and Priyanka Integrating the Socio-Economic Factors into Technology Interventions in Higher Education: Moving from Technology Use to Technology Acceptance. Opportunities and Challenges in Classroom Teaching: A Few Reflections. Eds. S K Choudhary, VS Nirban and S Nandigama. Jain Brothers, New Delhi. ISBN: 9788183602327 September 2016.
  27. Chasul, V. S Nirban, and Priyanka Challenges in Technology Planning and Implementation in Higher Education. Opportunities and Challenges in Classroom Teaching: A Few Reflections. Eds. S K Choudhary, VS Nirban and S Nandigama. Jain Brothers, New Delhi. ISBN: 9788183602327 September 2016.
  28. Priyanka, V. S Nirban, and Chasul Skills for Specific Purpose: Redesigning Teaching in Higher Education. Opportunities and Challenges in Classroom Teaching: A Few Reflections. Eds. S K Choudhary, VS Nirban and S Nandigama. Jain Brothers, New Delhi. ISBN: 9788183602327 September 2016.
  29. Nandigama, Sailaja Opportunities and Challenges in Classroom Teaching: A Few Reflections Jain Brothers, New Delhi. ISBN: 978-81-8360-232-7, Edited by S.K.Choudhary, V.S.Nirban and S.Nandigama. September 2016.
  30. Nandigama, Sailaja "Ecology of Teaching and Learning in Classrooms: Perspectives on Pedagogical Practices". In Opportunities and Challenges in Classroom Teaching: A Few Reflections, Jain Brothers, New Delhi. ISBN: 978-81-8360-232-7, Edited by S.K.Choudhary, V.S.Nirban and S.Nandigama. September 2016
  31. Devika Utilization of Peer Feedback for Effective Learning Opportunities and Challenges in Classroom Teaching: A Few Reflections. Eds. S K Choudhary, VS Nirban and S Nandigama. Jain Brothers, New Delhi. ISBN: 9788183602327.Pp-32-34 September 2016.

### C. Conferences:

#### (i) Conferences attended/papers presented outside India:

1. Kumar Neeraj Sachdev "Virtue-based Compatibility of Business and Professions" International Academic Forum (IAFOR), Japan sponsored International Conference on Arts and Humanities – Dubai 2016 February 27-29, 2016.
2. Sharma, Sangeeta "Why should boys have all the fun: Ad initiatives to achieve equality" 2nd World Conference on Women Studies conference Colombo, Sri Lanka. 5-6 May, 2016.
3. Sharma, Sangeeta "Advertising: Reflection of Cultural Idiosyncrasies" 14<sup>th</sup> International Conference of the Society for Global Business and Economic Development (SGBED) at Feliciano school of Business, Montclair State University, Montclair, USA June 21-24, 2016.
4. Ruchika Sharma "A Study of Advertising Language as Antecedent to Children's Brand Recall and Ad Recognition" 14<sup>th</sup> International Conference of the Society for Global Business and Economic Development (SGBED) at Feliciano school of Business, Montclair State University, Montclair, USA June 21-24, 2016.
5. Anupam Yadav "Beyond the Disciplinary Boundaries: Feminist Perspectives on Education" 2nd World Conference on Women's Studies Colombo, Sri Lanka May 5-6, 2016.
6. Bhattacharya, Kumar Sankar. "Grief for the Living and for the Dead: Draupadi's Lament as a Paradigm for an Alternative Reading of the Mahabharata." Annual Conference of American Comparative Literature Association Harvard University, Boston, MA, USA March 17-20, 2016.
7. Nandigama, Sailaja. "Gender Inequality in Higher Education in India and the Netherlands: A comparative study of the challenges and opportunities faced by women academics." Paper presented at the 2nd World Conference on Women's Studies (WCWS). Colombo, Sri Lanka. 5-6 May, 2016.

8. Shukla, Tanu & Chauhan, G.S. "Social Media: An Exploration of Social Acceptance in India" 2nd, World Conference on Women's Studies, 2016, Colombo, Sri Lanka 5-6 May, 2016.
9. Shukla, T & Kumar K. "Envisioning a Road to Social Justice", World Conference on Women's Studies, 2nd, World Conference on Women's Studies, 2016, Colombo, Sri Lanka 5-6 May, 2016.
10. Shukla T, Chauhan, GS & Saumya "Female Entrepreneurs in the Urban Start up Scenario" 2nd, World Conference on Women's Studies, 2016, Colombo, Sri Lanka 5-6 May, 2016.
11. Shukla, T & Kanna, C. Information Technology in relation to Human Resource Management International Conference on Organization and Management: Innovative Management Practices: Challenges & Opportunities in the 21st Century Al Ain University of Science and Technology, Abu Dhabi 31 Jan- 4 Feb, 16.
12. Somdatta Bhattacharya and KP Nisha, "The Geography of Taste and the Taste of Geography: Food in Amit Chaudhuri's Fiction." International Conference on "The Culture of Food" MES College of Arts and Commerce, Zuarinagar, Goa 25-27 February 2016.
13. Somdatta Bhattacharya, "Narrating the Space and Spatiality of Loss: Remembered 'Home' and Exilic 'House' in MT Vasudevan Nair's "Sherlock" 2016 Annual Meeting of the American Comparative Literature Association (ACLA) Harvard University, USA 17-20 March 2016.
14. Dinesh Yadav and Somdatta Bhattacharya "Performance as Transformation of Everyday Urban Space: Reading a Delhi Ram Leela" IFTR 2016: Presenting the Theatrical Past Stockholm University, Sweden 13-17 June, 2016.
15. Neerja Vyas and Sushila Shekhawat Cultural value and Questions of Morality: The Bollywood Biopic. Fifth Annual London Film and Media Conference on Questions of Cultural Value held in London, UK 7 to 9 July 2016.
16. Devika. "From Private to Public: Shifting of the emotive domains in Bhardwaj's Haider (2014) as a Cross-Cultural Adaptation of Hamlet." Annual Conference of American Comparative Literature Association Harvard University, Boston, MA, USA March 17-20, 2016.

**(ii) Conferences attended/papers presented in India:**

1. Choubisa, R A Plebiscite on Job-Crafting Behaviors in Indian Employees: Structure, Incidences, Evidences and other Complexities. 31<sup>st</sup> International Congress of Psychology (ICP 2016) 24-29<sup>th</sup> July 2016.
2. Choubisa, R. & Slezackova, A. Mental Health Continuum-Short Form (MHC-SF): Psychometric Harmony, Divergence & Deviations for Indian & Czech Cultures 31<sup>st</sup> International Congress of Psychology (ICP 2016) 24-29<sup>th</sup> July 2016.
3. Choubisa, R. Substantiating the Rural-Urban Dichotomy in Personality Dispositions: Investigating an Academic Cohort. 23<sup>rd</sup> International Congress of Cross-Cultural Psychology (IACCP 2016) 31<sup>st</sup> July to 4<sup>th</sup> August 2016.
4. Choubisa, R. Prototype of a Multiculturally Appropriate Internet Delivered Well-Being Enhancement Intervention: An Insight into Content & Design. 8<sup>th</sup> Scientific Meeting International Society for Research on Internet Interventions (ISRII) 7-9 April 2016.
5. Sanjiv Kumar Choudhary "In the Age of ICT and Post Method Teaching How Relevant are Textbooks for Classroom Teaching?" 3<sup>rd</sup> International ELT Conference on No One Left Behind: The Role of ELT in Promoting Inclusive Growth, ASCENT, Amity University, Lucknow Campus in association with RELO, U.S. Embassy and AINET March 5-6, 2016.
6. Ms. Rajni Singh and Sanjiv Kumar Choudhary "Impact of Socioeconomic Status on Language Learning Motivation" 3<sup>rd</sup> International ELT Conference on No One Left Behind: The Role of ELT in Promoting Inclusive Growth, ASCENT, Amity University, Lucknow Campus in association with RELO, U.S. Embassy and AINET March 5-6, 2016.
7. Sanjiv Kumar Choudhary, "Socio-Economic and Health Impacts of PMGSY Roads on Women: An Impact Assessment Study of Five Recently PMGSY Road Connected Panchayats in Rajasthan" National Conference on Fifteen Years of PMGSY, Transportation Engineering Group, Civil Engineering Department, IIT Roorkee August 6-7, 2016.
8. Sharma, Sangeeta Shifting trends in the world of advertising International Conference on "Mastering Supply Chain Intricacies for Market Leadership" Prestige Institute of Management, Gwalior January 9-11, 2016.
9. Ruchika Sharma & Sangeeta Sharma "Impact of Advertising messages on Children's brand recall and Ad identification: An Experimental Study" International Conference on "Mastering Supply Chain Intricacies for Market Leadership" Prestige Institute of Management, Gwalior January 9-11, 2016.
10. Anupam Yadav "Narrative and Philosophical Discourse" ICPR National Seminar on "Perspectives in Philosophy of Literature" Department of Philosophy, University of Delhi April 11- 13, 2016.
11. Nandigama, Sailaja. "Women and Equity in Higher Education: A Comparative study of Practices in Indian and Dutch Academia". Held by the National Commission for Women (National Seminar) on Capacity

Building Among Women in India: Entrepreneurship and Estate. National Law University, Jodhpur. 2-3 October,

12. Nandigama, Sailaja., "Research Methods in Social Sciences" Participated in the week long Faculty Development Programme (FDP) on "Research Methods in Social Sciences" organized by University of Lucknow. January 4 to 10, 2016.
13. V. S. Nirban Social Media Interruptions and Happiness First Asia Pacific Conference on Pursuit of Happiness, organized by Department of Psychology, University of Rajasthan 1-2 March 2016.
14. S. Nandigama. "Ecology of Teaching and Learning in Classrooms: Perspectives on Pedagogical Practices". National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level BITS Pilani, Pilani Campus, Rajasthan. September 30th to October 1st, 2016.
15. Devika. "Utilization of Peer Feedback for Effective Learning." National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level BITS Pilani, Pilani Campus, Rajasthan. Sept 30 - Oct 1. 2016.
16. Choubisa, R. The Pandemonium and Predicament Behind Digital India's Subrogation of National e-Governance Plan: A Perception based SWOT Analysis. 2<sup>nd</sup> International Conference on Contemporary Debates in Public Policy and Management Indian Institute of Management, Calcutta (IIM-C) Kolkata, INDIA 15-17 January 2016.
17. Arun Poonia and Gajendra Singh Chauhan. 6<sup>th</sup> India International Hotel, Travel, & Tourism Research Conference held in BC Institute of Hotel management & Catering, New Delhi, 10–12 February 2016. Presented a research paper entitled "Tourism Promotion of Two States: A Comparative Study of Destination Image Formation Through Video Commercials of Rajasthan & Gujrat."
18. Arun Poonia and Gajendra Singh Chauhan. MICA's Third International Communication Management Conference in MICA, Ahmedabad, 18-20 February, 2016. Presented a research paper entitled "Branding Gujrat as a Tourist Destination: Video Content Analysis of 'Khushboo Gujrat ki' Campaign."

**D. Books Published/Edited /Chapter written/ reviewed articles during the year: NA**

**E. Conferences, seminars & workshops conducted:**

1. Department of Humanities and Social Sciences in association with Teaching Learning Centre (TLC) organized two days National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level during 30 Sep-1 Oct 2016. Funding was generated by registration fee and sponsorship

**F. Invited Talks / chairing session by EEE faculty: NA**

**G. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:**

- Nair Hari 2016 Lecture on "Gandhi and the race debate" Thu 20 October 2016 Sri Venkateswara College, University of Delhi
- Nair Hari 2016 Lecture sesión titled "Gandhi y la cuestión de raza" at Seminario Universitario de Estudios Asiáticos, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México 11 Oct 2016 (via video conference).
- Nair Hari 2016 Lecture sesión titled "Secularismo y nacionalismo religioso en el siglo XX en el contexto de la partición e Independencia de la India" at Seminario Universitario de Estudios Asiáticos, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México 27 Sep 2016 (via video conference).
- Dr. Sailaja Nandigama : Dilemma of Development: Challenges in providing food security and safety for the poor. in the Bilateral workshop between BITS Pilani University, Pilani Campus and Tel Aviv University on "Food Security and Safety". Held in BITS PILANI, Pilani Campus on 21-22 November, 2016.
- Department of Humanities and Social Sciences organized second time the national theatre Festival Melange on 5-7 February 2016. It was a self-funded programme.
- Dr. Rajeshwari Narendran delivered an invited talk on Job Interviews for Business Communication students on 4<sup>th</sup> November, 2016.
- Department of Humanities and Social Sciences organized has provided the platform and intellectual support to the student community to host the TEDx Talks on 24 January 2016.

**H. Awards and recognitions won by faculty and students: NA**

**I. Faculty Development, International Collaboration & Industry/ University Immersion: NA**

**J. Significant new equipments/experimental facility added during the year: NA**

**K. Departmental association/club activities: NA**

**L. Students Activities, Achievements, Scholarships, Cultural And Academic Festivals: NA**

**B1.10.9 Department: Mathematics**

Number of faculty members (as on 31 December 2016)

<b>Professors</b>	03
<b>Associate Professors</b>	04
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Prof. Balram Dubey**Contact details:** bdubey@pilani.bits-pilani.ac.in**Number of Ph. D. Scholars:** 13**Ph.D. Thesis Submitted during the year:** 01**Ph.D. Thesis Awarded during the year:** 02**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Funds (Sponsored Projects, funds through various programs) in the department: 03

**2. Projects funds sanctioned during the year : 02**

<b>Principal Investigator</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount in lac rupees and Duration</b>
Dr. Padma Murli	Modeling and Analysis of the Dynamics of Diabetes Mellitus in Indian Population and Control Measures	CSIR	Rs. 1790000.00, 3years
Dr. Suresh Kumar	Study of observational constraints on dark energy models of Universe using COSMOMC in a HPC system	SERB-DST	Rs. 2629027.00, 3 years
Dr. Sumanta Pasari	Earthquake Modelling from GPS Observations in Northwest Himalaya	BITS Pilani	Rs. 200000.00, May 2016-September 2017

**Projects completed this year:** 01Principal Investigator: **Dr. Suresh Kumar**

A major research project entitled "Dark Energy Modeling of Cosmic Acceleration with Observational Constraints in Einstein Gravity and Modified Theories" awarded by the DST under the FAST track scheme for young scientists, for a period of 3 years (Starting from 06-09-2013). The project budget was Rs. 14.16 Lakhs.

**C. PUBLICATIONS****C1. Publications in international/national refereed journals**

1. Agarwal, Shivi, Scale Efficiency with Fuzzy Data", International Journal of Business and System Research, (in Press).
2. Dubey B., Dubey Preeti and Dubey Uma S, Role of media and treatment on an SIR model, Nonlinear Analysis: Modelling and Control, Vol. 21, pp. 185-200, (2016).
3. Dubey B, Dubey Preeti and Dubey Uma S, Modeling the intracellular pathogen-immune interaction with cure rate, Communications in Nonlinear Science and Numerical Simulations, Vol.38, pp. 72-90 (2016).
4. Deka B.D., Patra Atasi, Tushar Jai and Dubey B, Stability and Hopf-bifurcation in a general Gauss type two-prey and one-predator system, Applied Mathematical Modelling, 40: 5793-5818, (2016).
5. Lata K., Misra A. K. and Dubey B., Modeling the effects of wood and non-wood based industries on forestry resources, Natural Resource Modelling, 29(4): 559-580, 2016.
6. Gupta C.B., Brijesh P. Sigh and Sachin Kumar, First Birth Interval: A Comparative Study of Two Indian States, 5(2), 1-11 (2016).
7. Gupta C.B., Brijesh P Sigh and Sachin Kumar, Statistical Modelling of Distance Associated Marriage Migration with Special Reference to Western Uttar Pradesh(India), Americal Journal of mathematics and Statistics, 6(4), 155-161 (2016).

8. Gupta C.B., Sachin Kumar and Brijesh P Singh, A Probability Model for Measuring Fecundability of Migrant and Non-Migrant Couples, *International Journal of Statistics and applications*, 6(3), 163-167 (2016).
9. Kumar, Jitender, K. V. Krishna, Syntactic Semigroup Problem for the Semigroup Reducts of Affine Near-semirings over Brandt Semigroups, *Asian European Journal of Mathematics*, World Scientific, Vol. 9, pp. 1650021-1-10 (2016).
10. Kumar, Jitender, K. V. Krishna, The Rank Properties of the Semigroup Reducts of Affine Near-Semiring over Brandt Semigroup, 93: 516-534, *Semigroup Forum*, 2016.
11. Shekhar, C., Jain, M. and Raina, A.A. (2016): Transient analysis of machining system with spares provisioning and geometric renegeing, *International Journal of Mathematics in Operational Research* (Accepted).
12. Jain, M., Shekhar, C. and Shukla, S. (2016): 'A time-shared machine repair problem with mixed spares under N-policy', *Journal of Industrial Engineering International (Springer)*, Vol. 12, No. 2, pp. 145-157, DOI 10.1007/s40092-015-0136-4.
13. Vashisth, V., Tomar, A., Shekhar, C., Malik, A.K. (2016): 'A trade credit inventory model with multivariate demand for non-instantaneous decaying products', *Indian Journal of Science and Technology*, Vol. 9, No. 15, pp. 1-6, DOI: 10.17485/ijst/2016/v9i15/84213.
14. Jain, M., Shekhar, C. and Shukla, S. (2016): Queueing analysis of machine repair problem with controlled rates and working vacation under F-policy, *Proceedings of the National Academy of Sciences, India Section A: Physical Sciences*, Vol. 86, No. 1, pp. 21-31.
15. Shekhar, C., Raina, A.A. and Kumar, A. (2016): 'A brief review on retrial queue: Progress in 2010-2015', *International Journal of Applied Science and Engineering Research*, Vol. 5, No. 4, 324-336.
16. Shekhar, C., Jain, M., Raina, A.A., Iqbal, J. (2016): Optimal (N,F) policy for queue-dependent and time-sharing machining redundant system, *International Journal of Quality and Reliability Management* (Accepted).
17. C B Gupta, Sachin Kumar and Brijesh P Singh: Modelling of Rural Urban Migration: A Statistical Investigation of Western Uttar Pradesh (India), *International Journal of Statistics and Applications*, (OCT.2016), Vol.6(5), pp 293-299.
18. Rajiv Kumar, On multiplicative perturbation of generators of semigroup of Linear Transformations: Survey. *Nonlinear studies* Vol 23(3), 511-514, 2016.
19. Suresh Kumar & Rafael C. Nunes, Probing the interaction between dark matter and dark energy in the presence of massive neutrinos, *Physical Review D* 94, 123511, 2016.
20. Ram Singh, Shoket Ali, Madhu Jain, Rakhee. Epidemic Model of HIV/AIDS Transmission Dynamics with Different Latent Stages Based on Treatment. *American Journal of Applied Mathematics*. Vol. 4, No. 5, 2016, pp. 222-234. doi: 10.11648/j.ajam.20160405.14.

## **C2. Publications in the proceedings of international/national conferences:**

1. Dubey P., Dubey B. and Dubey Uma S., Optimal control for therapeutic drug treatment on a delayed model incorporating immune response, *Proceedings of the International Symposium on Mathematical and Computational Biology, BIOMAT 2015* (Edited by Rubem P Mondaini, Brazil), World scientific, pp. 221-240, June 2016,  
DOI: [http://dx.doi.org/10.1142/9789813141919\\_0015](http://dx.doi.org/10.1142/9789813141919_0015).
2. Dubey P., Dubey B. and Dubey Uma S., An SIR model with nonlinear incidence rate and Holling type III treatment Rate, (Eds.: Cushing, J.M., Saleem, M., Srivastava, H.M., Khan, M.A., Merajuddin, M.), *Springer Proceedings in Mathematics and Statistics: Applied Analysis in Biological and Physical Sciences*, pp. 63-81, 2016.
3. Shekhawat, K., Duarte J.P., Automated best connected rectangular floorplans. SEVENTH INTERNATIONAL CONFERENCE ON DESIGN COMPUTING AND COGNITION (DCC'16 OR DCC16), held at Northwestern University, Evanston (Chicago), USA during 27 – 29 June 2016 (Pages 523-543, DCC-16 Book Chapter, Springer).
4. Tripathi, B., Sharma B. K. (2016): Effect of heat and mass transfer on MHD flow of blood through an artery with stenosis having variable viscosity. 6th ICCMS Proceeding, IIT Bombay, PP. 33-35.

## **C3. CONFERENCES ATTENDED/PAPERS PRESENTED**

1. Kumar, Devendra, Presented a paper entitled "Some techniques for the solution of Fractional Order Differential Equations" in NATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS & OPERATIONS RESEARCH organized by BK Birla Institute of Engineering & Technology, Pilani during 15-16 October 2016.

2. Kumar, Jitender, Presented a paper entitled "On the large ranks of certain semigroups of transformation on a finite chain" in the International conference on Algebra and Its application (ICAA- 2016) held at Aligarh Muslim University, Aligarh.
3. Shekhawat, K., Presented a paper entitled "A plus-shape arrangement of rectangles" in the International Conference on Current Trends in Graph Theory and Computation CTGTC 2016, South Asian University New Delhi.
4. Kumar, Devendra, Presented a paper entitled "Numerical Method for Fractional Order Boundary Value Problems" in International Conference on Differential Geometry, Algebra and Analysis" organised by Department of Mathematics, Jamia Millia Islamia, New Delhi during November 15 - 17, 2016.
5. Agarwal, Shivi, Fuzzy Total Factor Productivity by Credibility Theory, ICMCSSE 2016: held at Stockholm, SWEDEN during July 11-12, 2016.
6. Kumar, Devendra, International Conference on "Mathematical Modeling, Differential Equations, Scientific Computation and Applications"; held at IIT Kanpur during March 27-29, 2016.
7. Mathur, Trilok, Chaired one session and presented a research paper "Caputo-Type Fuzzy Fractional Riccati Differential Equations with Fuzzy Initial Conditions" in ICMCSSE 2016: International Conference on Mathematical, Computational and Statistical Sciences and Engineering held on Jul 11-12, 2016 in Hotel Park Inn, Stockholm, Sweden. This conference was organised by World Academy of Science, Engineering and Technology.
8. Murali, Padma, A Mathematical Model to Evaluate the Risk of Cardiovascular Disease in Diabetic Population, 7th Workshop and Conference on Dynamical Systems Applied to Biology and Natural Sciences (DSABNS 2016), University of Evora, Portugal, Feb. 2016.
9. Pasari, Sumanta, Computational Earthquake Modeling: Insights from a Class of Exponentiated Distributions, National Conference on Optimization and Computational Mathematics (NCOCM 2016), March 01-02, 2016, Department of Applied Mathematics, Vidyasagar University, Midnapore, WB.
10. Pasari, Sumanta and Dikshit, Onkar, Computational Earthquake Physics: Insights from Geodetic and Stochastic Modeling, National Conference on Emerging Trends in Physics of Fluids and Solids (NCETPFS 2016), March 03-04, 2016, Department of Applied Mathematics, Jadavpur University, Kolkata.
11. Shekhar, C. Transient analysis of machining system with space provisioning and geometric renegeing, presented in 3rd International conference on Science, Technology and Management (ICSTM 16), at India International Centre, New Delhi on January 17, 2016.
12. Shekhar, C. Presented paper entitled 'Optimal (N,F) policy for queue dependent and time sharing machining redundant system' in 2nd International conference on Mathematical techniques in Engineering Applications (ICMTEA 2016) organized by Department of Mathematics, Graphic Era University on April 29-30'2016.
13. Shekhar, C. Attended 27th Annual Conference of Rajasthan Ganita Parishad and National Conference on Applied Mathematics in Engineering and Technology organized by Department of Mathematics, Sobhasaria Group of Institutions on March 05-06'2016.
14. Tripathi, B. and Sharma, B. K., Effects of Heat and Mass Transfer on MHD flow of Blood Through an Artery with Stenosis having Variable Viscosity. Presented in Sixth International Congress on Computational Mechanics and Simulation" held at IIT Bombay, Bombay, during June 25 – July 01, 2016.
15. Sharma B K and Sharma M, 'Bio-magnetic Fluid of Blood Flow through a Tapered Porous Arteries with Soret and Dufour Effect in the Presence of Stenosis' in National Conference on 'Computational Mathematics & Operation Research, during 15-16 Oct. 2016 at BKBIET, Pilani.
16. Pasari S (2016), Presented a poster on "Scope of Earthquake Insurance in Indian Cities", at India International Science Festival (IISF 2016), Physical Research Laboratory, New Delhi, during December 08-11, 2016.

### C3. WORKSHOPS ATTENDED

1. Rakhee, Attended a 11th International Workshop on Retrieval Queues and Related topics, held during August 31-September 2, 2016, Organized by Tinbergen Institute, Vrije University, Amsterdam, The Netherlands. Title of my research paper is "Analysis of Discrete Time Retrieval Queue with Negative Customer, Unreliable Server and Second Optional Service"
2. Kumar, Devendra, Attended "A Workshop on Singularly Perturbed Partial Differential Equations (SPPDEs): Theory, Computation and Application (AWSPPDES 2016)" during March 24-28, 2016 held at Indian Institute of Technology, Kanpur.
3. Yadav, Sangita, Resource person in Advanced Level Training Programme on Differential Equations, BITS Pilani, Hyderabad Campus, May 25-June 14, 2016 (Conducted Lab on FEM for elliptic and heat equations).
4. Yadav, Sangita, Advanced Workshop on Singularly Perturbed PDEs: Theory, Computation and Applications (AWSPPDES-2016), IIT Kanpur, Mar. 24-28, 2016.



**D. BOOKS PUBLISHED/EDITED DURING THE YEAR**

1. Gupta, C.B., Singh S. R. and Kumar, Mukesh, Engineering Mathematics for Semesters III and IV, Tata McGraw Hill Education New Delhi 2016.

**E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NIL****F. INVITED TALKS GIVEN BY BITS FACULTY**

1. Mathur, Trilok, Invited lecture on "Introduction to MATLAB" in National Workshop on MATLAB and LaTeX (NWML-2016) held at Department of Mathematics, Indira Gandhi University, Meerpur, Rewari (Haryana) from 24-30 August, 2016.
2. Aggarwal, Shivi, Invited lecture on "Optimization Toolbox" in National Workshop on MATLAB and LaTeX (NWML-2016) held at Department of Mathematics, Indira Gandhi University, Meerpur, Rewari (Haryana) from 24-30 August, 2016.
3. Dubey B. delivered an invited talk on "Some mathematical models for harvesting of renewable resources at optimal level" in an International Conference on Mathematical Modelling and Simulations at BHU during August 29 – September 01, 2016.
4. Rakhee, Invited for a Lecture in Workshop on Modelling, Optimization and Simulation of Stochastic Systems, organized by Department of Mathematics, IIT Roorkee, held on 26-11-2016. Title of the lecture is "Stochastic Simulation using MATLAB
5. Rakhee, Delivered an invited talk in National Workshop on Matlab and Latex (NWML-2016), organised by Department of Mathematics, Indira Gandhi University Meerpur, Rewari during 24-30 August 2016.
6. Kumar Devendra, Delivered an invited talk in National Workshop on Matlab and Latex (NWML-2016), organised by Department of Mathematics, Indira Gandhi University Meerpur, Rewari during 24-30 August 2016.
7. Gupta, C. B., Delivered an Invited Talk on "Mathematics and Its Applications" at department of Mathematics, SML(PG) College Jhunjhunu (Rajasthan )on 6th October 2016.
8. Gupta, C. B., National Conference on Computational Mathematics and Operations Research held at BKBIET, Pilani Rajasthan) during 15-16 October, 2016: Chief Guest on Inaugural Ceremony. Also delivered an invited talk on "A study of First Birth Interval of Kerala and Rajasthan" and chaired a technical session.
9. Gupta, C. B., One day workshop on Optimization Techniques held at Govt. College of Engineering and Technology, Bikaner (Rajasthan) on 21 October 2016 and delivered expert lectures on Non Linear Optimization.
10. Gupta, C. B., National Seminar on Recent Advances in Mathematics and Its Computational Aspects held at Shaheed Mangal Pandey Govt. girls PG College, Meerut (UP); keynote Speaker. Also delivered an invited talk on "Simulation and Its Applications" and chaired a technical session, 2016.
11. Agarwal, Shivi, Some Applications of Data Envelopment Analysis, Faculty of Economics, VSB-Technical University of Ostrava, Czech Republic, 9th June 2016.
12. Kumar, Devendra, Delivered an invited talk on Solution of Fractional Order Differential Equations, Invited Speaker in International Conference on "Mathematical Modeling, Differential Equations, Scientific Computation and Applications held at IIT Kanpur during March 27-29, 2016.
13. Gupta, C. B., National Workshop on Modeling and Simulation, at Central University of Rajasthan , Kishan Garh during 14-18 March, 2016.
14. Mathur, Trilok, Invited Lecture "Fractional Order Calculus" in Faculty of Economics, VSB-Technical University of Ostrava, Czech Republic on 10th June 2016.
15. Shekhar, C. Invited talk, A study of machine repair problem, Central University of Himachal Pradesh, Kangra, Himachal Pradesh, January 19, 2016.
16. Tiwari, Ashish, Delivered an invited talk in workshop entitled " Fluid mechanics: modelling, analysis and computation" held at IIT Patna during 14-17 July 2016.
17. Gupta, C. B., Delivered an invited talk entitled "A Comparative study on First Birth interval of Two Indian States" in Silver Jubilee conference on Interdisciplinary Mathematics, statistics and Computational Mathematics (IMSCT 2016) of Forum of Interdisciplinary Mathematics organized by department of Mathematics and Statistics, Manipal University Jaipur during 22-24 December 2016.

**G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. Prof. Dharendra Bahuguna, Department of Mathematics, Indian Institute of Technology, Kanpur delivered a talk on the topic "The method of lines to non-local initial boundary value problems" on 29-03-2016.

2. Prof. N.S.N. Sastry, ISI Bengaluru, delivered a talk on the topic “Finite simple groups and their geometries” on 11-06-2016.

#### H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

Dr. Shivi Agarwal got the best paper presentation award for the paper entitled “Fuzzy Total Factor Productivity by Credibility Theory”, ICMCSSE 2016 held at Stockholm, SWEDEN during July 11-12, 2016.

#### I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

1. Agarwal, Shivi, Visited VSB-Technical University of Ostrava, Czech Republic under University Immersion Program, BITS Pilani 2016 during 29th May 2016 to 17th July 2016
2. Rakhee, Visited Chair of Production Management, Business School, University of Mannheim, Germany under DFG Bilateral Co-operation fellowship, during 01st December 2015 - 15th January 2016.
3. Gupta, C. B., Visited Singapore to collaborate with GSTF, Singapore during 17-18 January 2016.
4. Pasari, S., Visited IIT Kanpur for research collaboration during 14-18 June, 2016.
5. Pasari, S., Visited IIG Mumbai for research collaboration during 28 June - 13 July, 2016.
6. Kumari, Priyanka, Visited IIT Roorkee for research collaboration from 14-8-2016 to 21-8-2016.
7. Tiwari Ashish, Visited Gubkin Russian State University of Oil and Gas, Leninsky Prospekt Moscow, Russia for a collaborative work under the joint Indo-Russian project funded by DST and RFBR during 22-10-2016 to 26-10-2016.

#### J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR: NIL

#### K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

**Mathematics Association conducted the following activities during 2016:**

1. A cricket match between Students and Department Faculty was organized to increase the faculty-student interaction.
2. Organized Mathematics Department Farewell.
3. Organized Teacher’s Day Celebration.

#### Events in APOGEE 2016

1. **APOGEE Projects/Papers:** Total 14 projects were passed by Mathematics Association and 7 Papers were shortlisted for presentation during APOGEE 2016.
  - i) **Gambling Mathematics:** Winners were - Ketan Chandak and Karan Jhajhu (First prize)
  - ii) **Zombie Mathematics:** Winners were -Shakar Khurana and Vivek (First prize)
  - iii) **Join and Win:** Winners were -Shubham (First prize)

#### Student Achievements in the year 2016 :-

1. Arjun Gupta and Akshay Goel – Won gold in BOSM 2016 being a part of Cricket Team, BITS Pilani.
2. Prateek Gupta and Jai Agarwal – Were a part of Google Summer of Code 2016 [GSoC-2016].
3. Anmol – Awarded Max Planck Scholarship.
4. Akhat Singh Dua – Got selected for internship in Germany through DAAD.

**B1.10.10 Department of Mechanical Engineering**

Number of faculty members (as on 31 December 2016, on-campus (off-campus))

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	05 (03)
<b>Assistant Professors</b>	14 (06)
<b>Lecturers</b>	01 (01)

**Head of the Department:** Prof. P. Srinivasan

**Contact details:** psrinivasan@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** 23 (on-campus)

**Ph.D. Thesis Submitted during the year:** 03

**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department:

Details are given below.

**(i) Ongoing projects:**

1. Department of Science and Technology (DST): Experimental Investigation on CO<sub>2</sub> Based Refrigeration System in Trans-critical Cycle, Rs. 27.5 Lakhs, PI: Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta.
2. Department of Science and Technology (DST): Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST), 2012-17, Rs. 163 Lakhs.
3. Department of Science and Technology (DST): Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions, 30.13 Lakhs, Dr. Ravi Inder Singh, 2014-2017.
4. Department of Science and Technology (DST): Modelling immune response to salmonella during typhoid, PI: Amol M. Marathe, Rs. 43.52 Lakhs, 2015-18.
5. MHRD: Developing suitable pedagogical methods for various classes (Energy Technology) intellectual calibers and research in e-learning - Anchored by IIT Kharagpur, PI: Dr. ManojSoni, Rs. 7 Lakhs, 2015-17.

**(ii) Projects sanctioned during the year**

1. DAAD: JINGEL – Joint indo-German Experience Lab, PI: Prof. K. S. Sangwan, Euro 346954, 2016-19.
2. Department of Science and Technology (DST) Rajasthan: Design of healthcare supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan, PI: Prof. SrikantaRoutroy, Co-PI: Dr. Sunil Dubey, Rs. 5.88 Lakhs, 2016-19.
3. RIG: Development and validation of control oriented model for unbalanced rotating systems with soft suspensions, PI: Dr. Sandip Dhar, Rs. 2 Lakhs, 2016-17. (Resigned)
4. RIG: Development and validation of a Finite Volume Method based flow solver for the compressible two-phase flows with phase change, PI: Dr. Shyam S. Yadav, Rs. 1 Lakh, 2016-17.
5. RIG: A preliminary study on developing and investigating tungsten inert gas (TIG) welding process for producing free form metallic parts, PI: Dr. Prateek Kala, Rs. 2 Lakhs, 2016-17.
6. RIG: Design and fabrication of a test rig to experimentally investigate propulsive characterisation of a wiggling elastic flagella, PI: Dr. J. S. Rahore, Rs. 1 Lakh, 2016-17.
7. RIG: Electrical and thermal characterisation of nano-composites, PI: Dr. Sachin U. B., Rs. 1 Lakh, 2016-17.
8. Department of Science and Technology (DST) under Technology Intervention for Disabled and Elderly (TIDE) program: Design and Development of a Power Assistive Hybrid e- Trike for Differently Abled Person in Rural and Urban Regions of India, In collaboration with CEERI Pilani. PI: Dr. Sachin U Belgamwar, Co-PI: Dr. Jitendra S Rathore, Approximate Rs. 80 Lakhs, 2016-2018.

**(iii) Projects completed this year**

1. Department of Science and Technology (DST): Characterization of surface errors in machining of thin-walled curved geometries, PI: Dr. T. C. Bera, Rs. 26.13 Lakhs.
2. DAAD: Indo-German automotive life cycle engineering, Prof. K. S. Sangwan, Euro 94423.
3. UGC: Development and validation of sustainability measurement framework for manufacturing

industries, PI: Prof. A. K. Digalwar, Rs. 3.22 Lakhs.

4. UGC: Development of drivers, barriers and key performance indicators for implementation of green manufacturing in Indian micro, small and medium ceramic enterprises, PI: Prof. K. S. Sangwan, Rs. 9.90 Lakhs.
5. UGC: Design of supplier development implementation framework for Indian manufacturing industries, PI: Prof. Srikanta Routroy, Rs. 9.10 Lakhs.
6. RIG: Development and CFD modelling of ash cooler of circulating fluidized bed boilers, PI: Dr. Ravi Inder Singh, Rs. 2 Lakhs.
7. Ministry of Information and Technology, (MIT): Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment, PI: Prof. B. K. Rout, Rs. 45 Lakhs.

### Department-Mechanical Engineering

#### 1. Detail of FDTs in the following format

S.No.	ID No.	Name	Title	Supervisor	Department
<b>II Sem 2015-16</b>					
1	2011B1A4696P	Prateek Jain	Design Optimization of Cardiovascular Stent using FEA.	Ashish Runthala	Mechanical
2	2011B1AB840P	Bhanu Kharbanda	Application of Machine Learning in Bio Molecular Recognition	Shibasish Chowdhury, Girish Kant	Mechanical
3	2011B1AB859P	Anand Shankar	Design Optimization of Cardiovascular Stent using FEA.	Ashish Runthala	Mechanical
4	2011B2AB745P	Uppala Veera Venkata S.	Physical Characterization of Microspheres by Microscopy and Predictive Modeling	Sharad Shrivastava	Mechanical
5	2011B3A4382P	Prabeen Ghadia	Supply Chain Management in Banking Industry Credit management and NPA Resolution	Satyendra Kr. Sharma	Mechanical
6	2011B3A4493P	Abhiram Patankar	State of Art in Autonomous Vehicles	Srinivas Kota	Mechanical
7	2011B3A4570P	Sujeeth Ganta	Modeling Resilience of Tenload transportation using Bayesian Networks	Satyendra Kr. Sharma	Mechanical
8	2011B3A4614P	Nikhil Bhutada	Benchmarking of benchmarking Models for lean manufacturing.	Girish Kant	Mechanical
9	2011B5A4444P	Tanayveer Singh Bhatia	Prototyping a Portable and Affordable 3-D Prints	Srinivas Kota	Mechanical
10	2011B5AB362	Manan Mehrotra	Web Based tool for Virtual Manufacturing	Placid Ferreira	Mechanical
11	2012A4TS043P	Harisankar R.	Compliant Mechanism to Roll & Characterize Biological Cells.	Murali Palla	Mechanical
12	2012A4TS141P	Kshitiz Gupta	Characterization of Rapid Electro kinetic Trap Stiffness	Steve T. Wereley	Mechanical
13	2012A4TS170P	Vijay Sankar A.	Parametric Study of Friction Stir Welding	M.S. Dasgupta	Mechanical
14	2012A4TS186P	Braj Kishore	Development of strategy to enhance green capability of Indian steel supply chain	Srikanta Routroy	Mechanical
15	2012A4TS217P	Rajath Kantharaj	Correlated Microstructure and Thermal Conduction in Granular Material packing	Timothy S. Fisher	Mechanical
16	2012A4TS223P	Anand Parwal	Gesture based manipulation of industrial manipulator	B K Rout	Mechanical
17	2012A4TS227P	Nikhil Gupta	Development of strategies to enhancing green	Srikanta Routroy	Mechanical

S.No.	ID No.	Name	Title	Supervisor	Department
<b>II Sem 2015-16</b>					
			capability of Indian mining industry		
18	2012A4TS236P	Chaitanya Karwa	Compliant Mechanism to Roll & Characterise Biological Cells.	MuraliPalla	Mechanical
19	2012A4TS256P	DhruvTandon	Innovative Application of Drone Technology	M.S.Dasgupta	Mechanical
20	2012A4TS280P	Jeevan G.A	Numerical Simulation of Two-Phase electro hydrodynamic	Shyam Sunder yadav	Mechanical
21	2012A4TS286P	Nimit Kothari	Surrogate Modeling of Thermo-elastic Stresses in Threaded Fasteners	Rakesh K Kaparia	Mechanical
22	2012A4TS287P	ChetanAnand	Development of a framework for implementation of telemedicine in India	R.P.Mishra	Mechanical
23	2012A4TS289P	Sahib Singh Dhanjal	Path Planning in Robots	Sandeep Dhar, AvinashGautam	Mechanical
24	2012A4TS298P	TaizoonChunawala	Chaos Control and energy Harvesting from ambient Vibrations	Maryam Ghandchi Tehrani	Mechanical
25	2012A4TS323P	Vineet Gupta	Towards the conceptual Framework for integrating product Development with supply chain	Srinivas Kota	Mechanical
26	2012A4TS330P	Abhishek Banerjee	Effects of Flexible Fairings on the Loads on a Cylinder	Rajeev K. Jaiman	Mechanical
27	2012A4TS370P	Anand Shekhar	Internalizing the externalities of Coal based power plants in India	P.Srinivasan	Mechanical
28	2012ABTS103P	ShubhamAbrol	Development of FMFA/FMCA Model for Mechanical system	R.P.Mishra	Mechanical
29	2012ABTS620P	Ricky Lohkar Pradhan	Developing Benchmarking Models for Supplier Development	SrikantaRoutroy	Mechanical
30	2012ABTS648P	Arjun Ekbote	Study and Optimization of Ram Extruder for Recycling Pet	K.S.Sangwan	Mechanical
31	2012ABTS695P	Yuganshu Jain	Exploratory Study on the Process of Frugal Innovation	MuraliPalla	Mechanical
<b>I Sem 2016-17</b>					
1	2013A4PS398P	DivyanshKhattak	RANS calculations of liquid film thickness distributions in subchannel& nuclear fuel rod bundle	Michael Horst Prasser, P. Srinivasan	Mechanical
2	2013A4TS127P	Jeet Desai	To develop and examine efficiency of shape and topology optimization for a Genetic design	Rafael Estevez, AmolMarathe	Mechanical
3	2012B4AB727P	Romanch Arya	Development of modular production system for experience laboratory	K.S.Sangwan, Christoph Herrmann	Mechanical
4	2013ABPS205P	Devina Jain	Resource Efficiency Management in Production	K.S.Sangwan, Christoph Herrmann	Mechanical
5	2012B5A4579P	Mukul	Numerical Simulation of the thermal management system of a kystron tube's spent electron beam	Shyam Sunder Yadav	Mechanical

S.No.	ID No.	Name	Title	Supervisor	Department
<b>II Sem 2015-16</b>					
6	2013ABPS193P	Viven Sharma	Development & implementation of RCM model in manufacturing industry (case study)	Rajesh P. Mishra	Mechanical
7	2013A4PS407P	ShubhamHorane	Numerical Simulation of Taylor Couette flow (fluid Mechanics)	SyamSuner	Mechanical
8	2012B1A4851P	TanmayKulshrestha	Study of various aspects related to Manufacturing, agriculture and Health Care supply chain.	SrikantaRoutroy	Mechanical
9	2013A4PS086P	Akshay Sunil Honrao	Bifurcation and chaos in 100F non-smooth oscillators with parametric excitation	Amol M. Marathe	Mechanical
10	2013A4PS257P	ShriramravindraAshirgade	Bifurcation and Chaos in stick-slip oscillator	Amol M. Marathe	Mechanical
11	2013A4PS334P	Shashwat Chopra	Modeling and Analysis of post-harvest Agriculture supply chain	SrikantaRoutroy	Mechanical
12	2012B1AB790P	SuryanshRastogi	Understanding Bio-mimetics with respect to product design	Srinivas Kota	Mechanical
13	2012A4PS301P	Afzal Ahmed Khan	Inventory Management (Supply Chain management)	Anil Jindal, Satyendra Kr. Sharma	Mechanical
14	2012B1A4814P	Harshit Sharma	Solar Thermal Engineering	M.S.Soni	Mechanical
15	2012B1A4803P	DevamJhanwar	Optimization of mold design in casting using simulation software	P.Srinivasan	Mechanical

## 2. Detail of HDD in the following format.

S.No	ID No.	Name	Title	Supervisor	Department
1	2010HS41319P	AlokSaxena	Molecular Dynamics Simulation of Polymer Grapheme Nano Composite	MuraliPalla	Mechanical
2	2014H106142P	AkshaySarda	Review of Cryogenic Machining for Titanium alloys	A.K.Digalwar	Mechanical
3	2014H106145P	Aditya Potnis	Simulation of flow Through Exhaust System using finite Volume Method	Shyam Sunder Yadav	Mechanical
4	2014H106146P	Vijay Chauhan	Energy and Energy Analysis of Oxy fluidized bed combustor	Ravi Inder Singh	Mechanical
5	2014H106147P	Nisha Tamar	Numerical Modeling and Simulation of Latent heat Thermal Energy Sto. System	M.S.Soni	Mechanical
6	2014H106149P	Peeyush Kulkarni	Micro fluidic Device for Single cell Capture and Retrieval	J.S.Rathore	Mechanical
7	2014H106154P	V.C.Aravindan	Design and Simulation of CSP power Plant	M.S.Soni	Mechanical
8	2014H106155P	Darsan A.S.	CFD Analysis of Cyclone and flue gas cooker of oxy fired fluidized bed combustor using coal and Biomass	Ravi Inder Singh	Mechanical
9	2014H106156P	Abhyuday Singh Banafer	Simulation of Scroll Expander	M.S.Dasgupta	Mechanical
10	2014H141116P	VidyadharPatil	Phase field modeling of crack propagation in Bio-Inspired Composite using hyper elastic Constitutive Equations	MuraliPalla	Mechanical

S.No	ID No.	Name	Title	Supervisor	Department
11	2014H141117P	Tanmay Gupta	Molecular Dynamics Simulation of Polymer Grapheme Nano Composite	MuraliPalla	Mechanical
12	2014H141119P	Ajinkya Jayant Tathe	Dynamic Modeling and Balancing Horizontal Axis Washing Machine	Sandeep Dhar	Mechanical
13	2014H142132P	AstajyhotiBehera	Development of Strategy for Indian Agriculture supply Chain to enhance its productivity	SrikantaRoutroy	Mechanical
14	2014H142136P	Shekhada Ankit	Reliability Oriented outlook for a high service life Mechanical Component using German wear	R.P.Mishra	Mechanical

### 3. Pre submission seminar conducted during 1<sup>st</sup> Jan 2016- 31Dec 2016

S.No.	Name of Student	Department	Title
1	Sunil Kumar	Mechanical	Design of Supplier Development Programs for Indian Manufacturing Companies- A Supply Chain Perspective
2	Girish Kant	Mechanical	Prediction and Optimization of Machining Parameters for Minimizing Surface Roughness and Power Consumption during Turning of AISI 1045 Steel
3	PavanKumar Potdar	Mechanical	Design of Agile Manufacturing System for Indian Industries: A Supply Chain Perspective

### 4. PhD qualifying examination conducted-

Semester	Permitted to appear	Appeared	Passed	Failed	Did not appear
II Sem 2015-16	3	3	1	2	0
I Sem 2016-17	1	1	1	0	0

### 5. Research Related Seminar/ Workshop

S. No.	Title of Seminar	Resource Person	Name of Department	Date
1	Importance of Plastics to Mechanical Engineers Introduction to Lean Six Sigma	Mr. Vikram Bhargava, FSPE (International Society of Plastics Engineers)	Mechanical	2 <sup>nd</sup> February 2016
2	Workshop on Geometric stackup software	Expert from Geometric, Bengaluru	Mechanical	During First week February 2016
3	Campus to Corporate Success Mantras for Next Phase	Mr. Shishir Joshipura, Managing Director & Country Manager SKF India	Mechanical	11 <sup>th</sup> April 2016
4	Workshop on Ansys17.0	Expert from Ansys	Mechanical	During Last week April 2016
5	Future Missions of ISRO	Dr. A. S. Kiran Kumar, Chairman, ISRO	ASME BITS Pilani Chapter, Mechanical	23 <sup>rd</sup> August 2016
6	Packaging & Sustainability: Trends and Future Scope	Mr. Hari Mohan Kansal, Director, Jindal Group	Mechanical	10 <sup>th</sup> September 2016
7	4th Indo-German Workshop on Sustainable Engineering	Dr. Reinhard Pittschellis, Global Development Research Head, FESTO Didactic SE, Germany; Dr. Gerrit Posselt, Head of Department, Die Lernfabrik, TU Braunschweig;	Indo-German centre for sustainable manufacturing, Mechanical	17-18 September 2016

S. No.	Title of Seminar	Resource Person	Name of Department	Date
		Mr. Sameer Seksaria, Vice President, Aditya Birla, Group Corporate Business Excellence; Mr. Kamal Batra, PTC; Dr. K. S. Raju, CEERI Pilani; Prof. K. S. Sangwan, Dr. K. K. Gupta, Dr. M. S. Soni, Dr. Smita Raghuvanshi, Dr. Srinivas Kota, and Mr. Vikrant Bhakar from BITS Pilani.		
8	Two day executive training programme on Damage tolerant design	Prof. P. Srinivasan and Dr. Sharad Srivasthava	Mechanical	11-12 January 2016 at Vishakapatnam steel Plant , vishkapatnam
9	Two day executive training programme on Damage tolerant design	Prof. P. Srinivasan	Mechanical	24-25 February 2016 at Vishakapatnam steel Plant , Vishkapatnam.
10	Three day executive training programme on Belts, shafts and bearing maintenance	Dr. Jitendra Rathore	Mechanical	Birla Cellulosic, Kharach
11	Three day executive training programme on Welding and Gas cutting	Dr. T. C. Bera	Mechanical	Birla Ploy fibers, Harihar
12	Three day executive training programme on Construction Materials	Prof. P. Srinivasan and Dr. Sachin Belgamwar	Mechanical	28-30 December 2016 at Birla Poly fibers , Harihar

#### 6. Research Publications in journals (Year 2016)

S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
1	Supply Management Integration Model for Indian Manufacturing Industries	Sudeep Kumar Pradhan and Srikanta Routroy	International Journal of Operations and Production Management	Vol. 36 No.7, pp. 781-802
2	Case Application of a Methodology for Determining a Manufacturer's Preferred Customer Status with Suppliers	Sunil Kumar C V and Srikanta Routroy	Engineering Management Journal	Vol. 28 No. 1, pp. 25-38
3	Modeling information risk in supply chain using Bayesian Networks	Satyendra Sharma and Srikanta Routroy	Journal of Enterprise Information Management	Vol. 29 No. 2, pp. 238-254
4	An approach to develop green capability in manufacturing supply chain	Srikanta Routroy and Sunil Kumar C V	International Journal of Process Management and Benchmarking	Vol. 6 No.1, pp. 1-28
5	Analysis of Preferred Customer Enablers from Supplier's Perspective	Sunil Kumar C V and Srikanta Routroy	Business Process Management Journal	Vol. 22 No. 6
6	An Approach to Address Principal Supplier Development Impediments	Sunil Kumar C V and Srikanta Routroy	Benchmarking: an International Journal	Vol. 24 No.5
7	An Approach for Measuring a Manufacturer's Preferred Supplier Status	Sunil Kumar C V and Srikanta Routroy	Asia Pacific Journal of Marketing and Logistics	Vol. 28 No.5
8	Interpretive Structural Modelling of Agility Enablers for enhancing the organizational Agility: A Case Study	Pavan Kumar Potdar and Srikanta Routroy	Benchmarking: an International Journal	Vol. 24 No. 2
9	Evaluating the Implementation Performance of Supplier Development Program	Srikanta Routroy, Sudeep K. Pradhan and Sunil Kumar C V	Asia Pacific Journal of Marketing and Logistics	Vol. 28 No. 4
10	Analyzing a manufacturer's returns from supplier development	Sunil Kumar C V and Srikanta Routroy	Materials Today: Proceeding	Accepted for Publication



S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
	programs			
11	Addressing the Agile Manufacturing Impediments using Interpretive Structural Modeling	Pavan Kumar Potdar, SrikantaRoutroy and AstajyotiBehera	Materials Today: Proceeding	Accepted for Publication
12	Performance Analysis of Supplier Development Programs	Sunil Kumar C V and SrikantaRoutroy	Benchmarking: an International Journal	Vol. 24 No. 4
13	Analysis of suppliers' preferences to a manufacturer using Kano model and performance value analysis	Sunil Kumar C V and SrikantaRoutroy	International Journal of Business and Systems Research	Accepted for Publication
14	A benchmarking approach for enhancing agility in manufacturing environment	Pavan Kumar Potdar, SrikantaRoutroy and AstajyotiBehera	International Journal of Productivity and Quality Management	Accepted for Publication
15	Vehicle Routing Problem: Recent Literature Review of its variants	Satyendra Kumar Sharma, SrikantaRoutroy and Utkarsh Yadav	International Journal of Operational Research	Accepted for Publication
16	Analyzing the Agile Manufacturing Barriers using fuzzy DEMATEL	Pavan Kumar Potdar, SrikantaRoutroy and AstajyotiBehera	Benchmarking: an International Journal	Accepted for Publication
17	Positioning of Inventory in Supply Chain Using Simulation Modeling	B V Sai Suraj, Satyendra Kumar Sharma and SrikantaRoutroy	The IUP Journal of Supply Chain Management	Vol.13, No. 2, pp. 20-32
18	A SWOT analysis of reliability centered maintenance framework	G. Gupta, R. P. Mishra	Journal of Quality in Maintenance Engineering	Vol. 22 Iss: 2, pp.130 - 145
19	A Failure Mode Effect and Criticality Analysis of Conventional Milling Machine Using Fuzzy Logic: Case Study of RCM	G. Gupta, R. P. Mishra	Quality and Reliability Engineering International	DOI: 10.1002/qre.2011
20	Life Cycle Assessment of Arc Welding and Gas Welding Processes	Sangwan, K. S., Herrmann, Christoph, Egede, Patricia, Bhakar, Vikrant, Singer, Jakob	Procedia CIRP	Volume 48, pp. 62-67
21	Life Cycle Assessment of Filtration Systems of Reverse Osmosis Units: A Case Study of a University Campus	Bhakar, Vikrant, Kumar, DNS Hemanth, Sai, Nitin Krishna, Sangwan, Kuldip Singh, Raghuvanshi, Smita	Procedia CIRP	Volume 40, pp. 268-273
22	Multi-objective fuzzy mathematical modelling of closed-loop supply chain considering economical and environmental factors	Jindal, Anil and Sangwan, Kuldip Singh	Annals of Operations Research	pp. 1-26
23	A framework for lean manufacturing implementation	Bhamu J and Sangwan K. S.	International J of Services and Operations Management	25 (3), pp. 313-333
24	Review on CFD Modeling of Fluidized Bed Combustion Systems based on Biomass and Co – firing	Hemant Kumar, SK Mohapatra and Ravi Inder Singh,	Journal of The Institution of Engineers-Part C, Springer	Accepted
25	Design, Development, Experimental And Cfd Analysis Of A Prototype Fluidized Bed Stripper Ash Cooler	Ravi Inder Singh and Karan Ghulle	Applied Thermal Engineering	<a href="http://dx.doi.org/10.1016/j.applthermaleng.2016.07.044">http://dx.doi.org/10.1016/j.applthermaleng.2016.07.044</a>
26	CFD modelling of stripper Ash cooler of Circulating fluidized bed boiler	Ravi Inder Singh and Karan Ghulle	Perspectives in Science,PISC216, Elsevier	10.1016/j.pisc.2016.04.046
27	Current Status and Experimental investigation in oxy fired bubbling fluidized bed combustor	Ravi Inder Singh and Rajesh Kumar	Renewable and Sustainable Energy Reviews	61, pp. 398–420
28	An Investigations in 20 kWth	Rajesh Kumar and	Fuel Processing	148,

S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
	Oxygen-enriched Bubbling Fluidized Bed Combustor using coal and Biomass	Ravi Inder Singh	Technology	pp. 256–268
29	Agglomeration in stripper ash coolers and its possible remedial solutions- A Case Study	Ravi Inder Singh	Journal of The Institution of Engineers-Part C, Springer	DOI: 10.1007/s40032-016-0218-0
30	Performance Analysis of Earth Water Heat Exchanger for Concentrating Photovoltaic Cooling	Sanjeev Jakhar, M.S. Soni, Nikhil Gakkhar	Energy Procedia,	Volume 90, pp.145-153
31	Analysis of Water Cooling of CPV Cells Mounted on Absorber Tube of a Parabolic Trough Collector	Nikhil Gakkhar, M.S. Soni, Sanjeev Jakhar	Energy Procedia,	Volume 90, pp.78-88
32	Parametric modeling and simulation of photovoltaic panels with earth water heat exchanger cooling	Sanjeev Jakhar, M. S. Soni, Nikhil Gakkhar	Geothermal Energy	Volume 4, issue 10, September 2016
33	Performance Analysis of Photovoltaic Panels With Earth Water Heat Exchanger Cooling	Sanjeev Jakhar, M. S. Soni, and Nikhil Gakkhar	MATEC Web of Conferences	Vol 55, pp. 1-6
34	Parametric simulation and experimental analysis of earth air heat exchanger with solar air heating duct	Sanjeev Jakhar, RohitMisra, M.S. Soni, Nikhil Gakkhar	Engineering Science and Technology, an International Journal	<a href="http://dx.doi.org/10.1016/j.jestch.2016.01.009">http://dx.doi.org/10.1016/j.jestch.2016.01.009</a>
35	Historical and recent development of concentrating photovoltaic cooling technologies,	Sanjeev Jakhar, M.S. Soni, Nikhil Gakkhar	Renewable and Sustainable Energy Reviews	Vol 60, pp. 41-59
36	Second Law Thermodynamic Study of Solar Assisted Distillation System: A review	Nikhil Gakkhar, M.S. Soni, Sanjeev Jakhar	Renewable and Sustainable Energy Reviews	Vol 56, pp. 519-535
37	Roadmap for the implementation of green manufacturing practices in Indian manufacturing industries: An ISM approach	Digalwar, A.K., MundraNidhi, Tagalpallewar, A. R., Sunnapwar, V. K.	Benchmarking an International Journal	Vol. 24, Issue 5
38	Development of Fuzzy PROMETHEE Algorithm for evaluation of Indian World Class Manufacturing Organizations	Digalwar, A. K. and Date, Prasanna	International Journal of Services and Operations Management	Vol. 24, No.3, pp.308-330
39	Surface roughness modelling for Double Disk Magnetic Abrasive Finishing process	Prateek Kala, V. Sharma, P. M. Pandey	Journal of Manufacturing Processes	Vol.25, pp.37-48

#### 7. List of faculty members who presented papers in various conferences

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
1	Development of an integrated ISM-fuzzy MICMAC model of enablers for sustainable development of cement industries in India	Digalwar A. K.	9th ISDSI Conference	Goa Institute of Management, 2-4 January 2016
2	Model based fault diagnosis of a rotor bearing system: crack versus unbalance,	JalanA. K.	ICADVC-2016	NIT Durgapur
3	Effective Localization of Humanoid with Fish-Eye Lens Using Field Line Detection	PratyushKar, Archit Jain, B. K. Rout	IEEE ACIRS - 2016	July 20-24, 2016 Tokyo, Japan
4	Performance Evaluation of Manipulators with Links of Different Cross Sections	B. Naveen, and B. K. Rout	ICMPC 2016	12 <sup>th</sup> -13 <sup>th</sup> March, GMRIT Hyderabad
5	Analyzing a manufacturer's returns	Sunil Kumar C. V. and SrikantaRoutroy	5th International Conference of Materials	12 <sup>th</sup> -13 <sup>th</sup> March, GMRIT Hyderabad

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
	from supplier development programs		Processing and Characterization 2016	
6	Addressing the Agile Manufacturing Impediments using Interpretive Structural Modeling	Pavan Kumar Potdar, SrikantaRoutroy and AstajyotiBehera	5th International Conference of Materials Processing and Characterization 2016	12 <sup>th</sup> -13 <sup>th</sup> March, GMRIT Hyderabad
7	Life Cycle Assessment of Arc Welding and Gas Welding Processes	Kuldip Sing Sangwan, Christoph Herrmann, Patricia Egede, Vikrant Bhakar, Jakob Singe	23rd CIRP Life cycle engineering conference	T U Berlin, Germany during 20-23 May 2016
8	Modification in powder feeder for Nano-Powder for thermal Spray Coating	RohitUpadhyaya, SharadShrivastava	International Thermal Spray Conference 2016	May 10-12, 2016 Shanghai China.
9	Towards a conceptual framework for integrating product development with supply chain	Vineet Kumar and Srinivas Kota	10th ISDSI International Conference	MET,Nasik.28-30 December 2016
10	Reliability of CNC Lathe Machine Tool Based On Gamma Wear Process	R. P. Mishra	10th ISDSI International Conference	MET,Nasik.28-30 December 2016
11	Identifying the barriers and opportunities in the Small and Medium Scale Garment Industries in India using MCDM approach	AnunjayNath and A. K. Digalwar	10th ISDSI International Conference	MET,Nasik.28-30 December 2016
12	A road map to make sustainability effective in engineering	Sangwan K. S.	Global Product Sustainability (GPS) Workshop	Rhode Island, 5-6 October 2016
13	Using learning factories for teaching sustainability	Sangwan K. S.	Global Product Sustainability (GPS) Workshop	Rhode Island, 5-6 October 2016
14	Learning factories for education towards industry 4.0	Sangwan K. S.	BRICS seminar on skill development for industry 4.0	FICCI House, New Delhi, India, 16 September 2016
15	Reverse logistics and integrated supply chain: network design and research issues	Sangwan K. S.	STP on Operations and Supply Chain Management	National Institute of Technology Jalandhar, Jalandhar, 06 September 2016
16	Assessment and evaluation of collection methods and product recovery processes in reverse logistics	Sangwan K. S.	STP on Operations and Supply Chain Management	National Institute of Technology, Jalandhar, 06 September 2016
17	Innovative Product Design and Development	Sangwan K. S.	Two day workshop on Emerging trends in manufacturing and automation	AmityUniversity, Gawalior, 29 September 2016
18	Creep and fatigue analysis of pressure vessels	AseemShrivastava, Prateek Kala	3rd International conference on REDSET	GD Goenka University, Gurugram, 21-22 October, 2016
19	Performance Evaluation of Manipulators with Links of Different Cross Sections	B. Naveen, B.K. Rout	ICMPC 2016	GMRIT Hyderabad, March - 2016
20	Effective Localization of Humanoid with 5 Fish-Eye Lens Using Field Line Detection,	PratyushKar, Archit Jain, B.K. Rout	IEEE ACIRS - 2016,	Tokyo, Japan, July 20-24, 2016.

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
21	Prioritizing 6R strategies for manufacturing sustainability: An AHP Approach	Vikrant Bhakar, Kiran Kumar, A. K.Digalwar, K. S.Sangwan	6th International and 27th AIMTDR conference	COEP Pune 16-18 December 2016
22	Developing causal loop relationships for analyzing Leanness of an organization: System Dynamics approach	Mohit Agrawal and A. K.Digalwar	Proceedings of 10th ISDSI International conference	MET Nasik, 28-30 December 2016
23	Improving OEE by Emulsion to Oil conversion of CBN Crankshaft Grinder	SahilWankhede and A. K.Digalwar	Proceedings of 10th ISDSI International conference	MET Nasik, 28-30 December 2016
24	Application of Lean Six Sigma Methodology in Small and Medium Manufacturing Enterprise: A Case Study	AnimeshGoyal and A. K.Digalwar	Proceedings of 10th ISDSI International conference	MET Nasik, 28-30 December 2016
25	Application of 5S for Workplace Performance Improvement: Case Study	Shubham Shukla and A. K.Digalwar	Proceedings of 10th ISDSI International conference	MET Nasik, 28-30 December 2016
26	Thermodynamic analysis of various ejector expansions in R-744 transcritical cycles at warm weather condition	Kapil Dev Choudhary, Shyam Sunder, M.S. Dasgupta	Gustav Lorentzen Natural Working Fluids Conference	Heriot-Watt University, Edinburgh, Scotland, 21-24 August, 2016
27	Energetic and Exergetic Investigation of a N2O Ejector Expansion Transcritical Refrigeration Cycle	Kapil Dev Choudhary, Shyam Sunder, M.S. Dasgupta	Recent Advances in Air Conditioning and Refrigeration	CVRCE Bhubaneswar, 10-12 November 2016
28	Influence of environmental parameters on groundwater contamination in Rajasthan, India	Nikhil Gakkar, M. S. Soni, and Sanjeev Jakhar	International Conference on Biology, Environment and Chemistry (ICBEC 2016)	San Francisco, USA, Volume: 7th, 26-28 October, 2016
29	An investigation on thermal aspect in peripheral milling of thin-walled geometries	ManikandanHareendran, AshutoshMadhavaraoBable, Tufan Chandra Bera,	International Conference on Recent Trends in Engineering, Science & Technology	Hyderabad, Telangana, India, 2016

#### 8. Awards and honors for BITS faculty

- Prof. Ravi Inder Singh, Best Oral presentation award in ICECS 2016, Toronto.
- Prof. M. S. Dasgupta, Judge, SpaceX Hyperloop Pod Design Weekend, Texas A&M, USA
- Prof. Abhijit Digalwar was selected as President Elect for Indian Subcontinent Region Decision Sciences Institute during 2016 for next two years and hosted ISDSI conference during 2016.

#### 9. Books published by faculty members

#### 10. Faculty Research Area

Sl.No.	Name of faculty	Research Area
1	Souvik Bhattacharyya	Thermal Science & Natural Circulation Loops
2	R.K.Mittal	Robotics
3	Mani SankarDasgupta	Design, Simulation
4	Kuldip Singh Sangwan	Manufacturing
5	P. Srinivasan	Production Engineering
6	ArunMaity*	Project Management, Manufacturing Excellence
7	Bijay Kumar Rout	Quality, Reliability, Operations Research and Robotics

Sl.No.	Name of faculty	Research Area
8	Abhijeet K Digalwar	Manufacturing Engineering and Management
9	SrikantaRoutroy	Industrial Engineering and Management
10	Manoj Kumar S Soni	Solar Thermal and Thermal Engineering
11	Venkataraman P B <sup>*</sup>	Operations Management, Decision Sciences
12	SharadShrivastava	Biomedical Engg, Engineering Materials
13	Ravi Inder Singh	Thermal Engineering
14	Ravi ShrikrishnaReosekar <sup>*</sup>	Manufacturing Organization and Management
15	R P Mishra	Manufacturing Systems Engineering
16	Pavan Kumar Potdar <sup>*</sup>	Materials Management, Manufacturing Management
17	Naga Vamsi Krishna Jasti <sup>*</sup>	Lean Manufacturing
18	Jitendra Singh Rathore	Nano System and Fluidics
19	Sachin U Belgamwar	Materials Engineering and MEMS
20	Amol M. Marathe	Nonlinear vibrations
21	Sudeep Kumar Pradhan <sup>*</sup>	Supply chain Management, Operation Management
22	PallaMurali	Solid Mechanics, Materials Science
23	ArunJalan	Dynamics, Vibration
24	Srinivas Kota	Product Design, Life Cycle Assessment
25	Tufan Chandra Bera	Manufacturing
26	Shyam Sunder Yadav	Computational Fluid Dynamics
27	Prateek Kala	Advanced Manufacturing Processes
28	Girish Kant	Manufacturing Engineering
29	SatyabrataSahoo	Heat & Mass Transfer , Solid Sorption Systems
30	Gajanand Gupta	Manufacturing, Reliability based Maintenance
31	Sandeep Kayastha <sup>*</sup>	Supply Chain Management
32	S. Raghuraman <sup>*</sup>	Thermal Engineering
33	Dinesh Wamanrao W. <sup>*</sup>	Thermal Engineering
34	Mukundhan C. <sup>*</sup>	Thermal Engineering

<sup>\*</sup> off-campus faculty

## DEPARTMENTAL ASSOCIATIONS /CLUB ACTIVITIES

### (i) Society of Automotive (SAE) Collegiate Club

SAE Collegiate Club, BITS Pilani is a group of budding engineers committed to the promotion of automotive knowledge and technologies. The club has been instrumental in providing students a link between practical and theoretical knowledge. With more than 150 student members, from various disciplines, the club encourages inter-disciplinary approach to finding automotive solutions. The club organizes various activities such as Guest Lectures, Workshops, Quizzes, Project presentation, and Design competitions based on Land and Air transport technologies throughout the academic year. Inspired Karters, the flagship group formed under SAE has been successfully participating in BAJA SAE India, an ATV design challenge and SUPRA SAE India since its inception.

### (ii) ASME

ASME, BITS Pilani Chapter has conducted numerous activities in the past year. Like every year, ASME, BITS Pilani Chapter had organized and also sponsored a kernel event, Airborne, during APOGEE 2016, which saw an impressive participation from colleges all over India. Airborne is a hovercraft racing competition was organized in association with the Radio Control Club. An Interactive Session with Mr. ShishirJoshi, Managing Director of SKF India Ltd and also the Country Head for SKF group's subsidiaries in India on 'CAMPUS TO CORPORATE-Success Mantras for the Next Phase'. It has also conducted in association with Goa Campus an online talk by

Dr. A.S Kiran Kumar, Chairman of the Indian Space Research Organisation (ISRO) on Future missions of ISRO in telepresence class room.

**(iii) RC**

Radio Control (RC) club was founded in 2011 and aims to bring together all the RC enthusiasts from all the four BITS campuses, share knowledge & research work and also work on various multi-disciplinary projects. The club comprised of students mainly from Mechanical, Manufacturing, Electrical and Electronics & Instrumentation Engineering discipline.

**(iv) Renewable Energy Club**

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.

**(v) CRIS**

The humanoid robot project sponsored by MIT is closed and final presentation was held in March 2016 at BITS Pilani. Prof. Ishii of Hiroshima University Japan visited CRIS to explore the possibility of collaboration. Student group of this center are engaged to develop Acyut -VI humanoid which is capable of walking in stair case, dribble and capable of doing acrobatics.

**(vi) Manufacturing Engineering Association (MnA)**

It was a very successful year for the Manufacturing Engineering Association (MnA). APOGEE 2016 saw two events, Reverse Engineering & Innovate, being organised by the Association. Reverse Engineering is a kernel event and more than 500 students participated in the event. Innovate was conducted by the association for the first time and it, too, witnessed an enthusiastic participation from students. Students from BITS as well as various other institutes took part in the events conducted by MNA. Towards the end of August, an open-for-all Advanced Matlab workshop was conducted by the association with a view to impart the skills and knowledge of the software to the students. The workshop spanned over three days and a huge participation from the first degree as well as higher degree students of a variety of disciplines was seen. A week later, a popular event of MNA, the Minifest was conducted. A series of free workshops and tutorials on various software like Arduino, Solidworks and AutoCAD were conducted during the fest. The participating students found these workshops quite useful to hone their software skills. With a view to invite experts to connect students to the industrial and corporate world, Mr. Hari Mohan Kansal, a Director and CEO with the Jindal Group, was invited to the Pilani campus on 10th September, 2016. Mr. Kansal has been in the world's leading MNCs in chemicals, inks, polymers and flexible packaging for around three decades. He delivered a talk on 'Packaging & Sustainability: Trends & Future Scope'. He talked about the evolution and importance of the packaging industry and how sustainability plays a key role in its future development. After the talk, an interactive session was also held for the students.

**(vii) Mechanical Engineering Association (MEA)**

It was an eventful year for the Mechanical Engineering Association. MEA organized three events namely Full throttle grand prix (FTGP), Junk yard war and battle of Waterloo during the Oasis 2016. Many participants took part in the event and benefitted and won prizes. Students of MEA took part in the poster presentation event during the Engineers day celebration and displayed their talent in the technology and its impact on society. The formal interaction with the first year students and fare well for the graduating students were organized by the association. A seminar on "How to teach effectively" was organized by the association in which the students come up with the ideas of innovative class room teaching.

**B1.10.11 Department: Management**

Eleventh batch of sixty-three students were admitted to the M.B.A Programme (launched from 1<sup>st</sup> sem.2006) this year. The institute used CAT and GMAT scores for short-listing candidates for its MBA Programme for 2016-18. This was followed by group discussion and personal interviews for the candidates that were conducted by the faculty teams of Management Department at Delhi, Hyderabad, Bangalore and Pilani. The major change that was incorporated in the eligibility conditions for applying to our MBA Program (regarding relaxing the condition of allowing only engineering degree or BITS first degree holders to any candidate with a post graduate degree in any discipline) did yield positive results with additional applicants.

**Faculty activities**

The group discussion and personal interviews for the candidates were conducted by the faculty teams of Management Department at Delhi, Hyderabad, Bangalore and Pilani. The department organized five workshops in emerging areas related to: KPMG Six Sigma Certification, Project Management Workshop

Workshop on Financial Modelling, Make a Difference Journey: Challenges & Opportunities, Orientation workshop on Awesome Firms, during this year. Several projects in various functional areas of management

were supervised by the Department faculty members under special oriented projects, study oriented projects, and computer 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 including contact sessions of M Phil. (HHSM). Faculty and research scholars published papers in international journals, national journals and in conference proceedings. Many faculty members have submitted proposals for projects to funding organizations and 4 new research projects have taken off under 6 faculty members.

### 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 along with **Interface 2016**. Workshops were organized where students participated for learning and/or certifications, namely, 4-day Project Management Professional Workshop, KPMG delivered Six Sigma Workshop, Financial modeling workshop.

### SPONSORED RESEARCH PROJECTS

#### Ongoing

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000	2007 - ongoing
2	Understanding Impact of Social Learns Forms on Environmentally Sustainable Behavior in Children	Dr Leela Rani	ICSSR	5,00,000	10-05-2014 - 10-12-2016
3	Development and validation of service quality index in Indian Telecom & Banking Sector	Dr. Arun Agaria & Dr. Jyoti	ICSSR	4,00,000	1/Sep/2016 to 31/Aug/2018
4	Modelling of Employee Performance and Human Capital, Assessment and Optimization of Productivity of Indian Manufacturing Industry	Dr. Udayan Chanda & Dr. Praveen Goyal	ICSSR	5,00,000	April 2016- May 2018
5	Campus Sustainability in India: Issues and Challenges (A Study of Select Institutions of Higher Education)	Dr. Neetu Yadav	BITS Pilani RIG grant	2,00,000	Nov 2015-Nov 2017
6	Empirical investigation of management practices in the Indian manufacturing sector	Dr. Jayshree Mahesh	BITS Pilani RIG grant	2,00,000	20/09/2016 15/02/2018

### PUBLICATIONS

#### International/National Journals

- Satyendra K Sharma and Anil Bhat "Risk mitigation in automotive supply chain: an empirical exploration of enablers to implement supply chain risk management" Global Business Review, 17(4), Issue: [July-August2016]
- Satyendra Sharma and Saurabh Sharma (2016), "Developing a Bayesian Network model for Supply chain Risk Assessment", Supply Chain Forum: An International Journal, Vol. 16, No.4, pp. 50-72 Taylor & Francis
- Nirankush Dutta, and Anil Bhat, (2016) "Exploring the Effect of Store Characteristics and Interpersonal Trust on Purchase Intention in the Context of Online Social Media Marketing". Journal of Internet Commerce pp 239-273, Vol 15, issue 3 (Taylor & Francis),
- Nirankush Datta & Anil Bhat (2016), "FirstCry.com: Fighting to Lead the Giant Baby-Care Product Market Online" International Journal of Case Studies in Management. HEC Montreal, volume 14, issue3, Sept.2016 (Harvard Business Publishing for Educators, Product #: HEC141-PDF-ENG)
- Nirankush Datta and Anil. K. Bhat (2016) "Role of Trust on Perceived Store Characteristics and Consumer Behavioural Outcome in the Context of Online Social Media Marketing". Indore Management Journal (IIM Indore) volume 7, issue 2, pp52-62,
- Chanda, Udayan, Bhat, Anil, Sharma, Satyendra Kumar and Bardhan, Amit (2016). "Evidence based

management for services sector”, International Journal of Information Systems in the Service Sector, 8(4), vi - ix.

- Kumar, Alok and Chanda, Udayan "Effect of Shape of the Demand Function and Permissible Delay in Payments on Economic Order Quantity of High Technology Products", International Journal of Services and Operations Management (Accepted for Publication).
- Chanda, Udayan and Kumar, Alok, " Optimisation of fuzzy EOQ model for advertising and price sensitive demand model under dynamic ceiling on potential adoption", International Journal of Systems Science: Operations & Logistics.
- Chanda, Udayan and Aggarwal, Remica, (2016) "Bayesian Network on Labour Dissonance: A Social Sector Development challenge to India", Journal of Management Analytics, 3(1), 80-111.
- Kumar, Alok and Chanda, Udayan (2016), "Economic Order Quantity Model for New Product under Fuzzy Environment where Demand follows Innovation Diffusion Process with Salvage Value", International Journal of Procurement Management, 9(3), 290-309.
- Kumar, Alok and Chanda, Udayan, "Economic Order Quantity under Permissible Delay in Payments for New Products in Dynamic Pricing-Advertising Condition", International Journal of Business Innovation and Research (Forthcoming).
- Shaikh, I., Sharma, SK and Goyal, P. (2016), "Evidence-based management practices in accounting and finance", International Journal of Management Practice, Vol. 9 No.3, pp. 209-212.
- Praveen Goyal (2016), Evidence Based Management Practices in Accounting & Finance Int. J. Management Practice, Vol. 9, No. 3.
- Arun Kumar Agariya, A. K.; Shivam, B. K.; Murali, S. and Tikoria, J. (2016) HashLearn Now: Mobile Tutoring in India, Journal of Internet Banking and Commerce, Vol. 21, No. 2, pp. 1-12.
- Arun Kumar Agariya & Deepali Singh (2016), "SRM Index Development and Validation in Indian Automobile Sector", International Journal of Business Performance and Supply Chain Modelling, 8(1), 1-26.
- Kamboj, S., Yadav, M. Rahman, Z. and Goyal, P. (2016), "Impact of Social CRM Capabilities on Firm Performance: Examining the Mediating Role of Co-Created Customer Experience", International Journal of Information Systems in the Service Sector, Vol. 8 No. 4, pp. 1-16
- Goyal, P. and Kumar, D. "Modelling the CSR barriers in manufacturing industries", Benchmarking: An International Journal, (Accepted).

### Conferences

1. Anubha Dadhich, "Review of Leadership Theories from an Ethical Perspective" presented at HRD Congress: Nurturing World Class Organizations in an Emerging Global Diaspora on 16-18th September' 2016 at School of Business Studies, Central University Jammu.
2. Anubha Dadhich, Paper titled "Role of Ethical Leadership and Organizational Climate: A study of healthcare sector in India" accepted for presentation in International Conference on Evidence Based Management to be held on 17-18 March' 2017.
3. Preeti Tewari, Anil Bhat & Jyoti (2016) "Exploring the Factors Responsible in Predicting Entrepreneurial Intention among Nascent Entrepreneurs: A Field Research" 9th Annual Conference of the Academy of Innovation and Entrepreneurship(AIE) at University of Sydney, Sept. 2-3rd, [Awarded Excellent paper award]
4. Jayashree Mahesh and Anil Bhat "How Global is "Indian" Management? A Study of Management Practices in Indian I.T. Sector", Accepted for presentation at Academy of Management (AOM)Annual Meeting, 2016August 5-9 ,Anaheim, California, USA,
5. Nirankush Dutta ,and Anil Bhat , "Effect of Structural Attributes of Online Social Network on Trust, E-WOM and Purchase Intention" Accepted for presentation at Academy of Management (AOM) Annual Meeting,2016 August 5-9 ,Anaheim, California, USA,
6. Nirankush Dutta and Anil Bhat , "Effect of Social Media Characteristics on Intention to Purchase and Pass along Electronic Word of Mouth," Accepted to be presented at the 2016 Summer Marketing Educators' Conference American Marketing Association(AMA), August 5-7,Atlanta, USA
7. Arunima Rana, Anil Bhat and Leela Rani, "The Underlying Dimensions of Brand equity: Multidimensional Scaling Approach in the Indian Online Retail Segment", 30<sup>th</sup> annual conference of British Academy of Management (BAM) , Sept.5-8, 2016, Newcastle University, U.K.(BAM 2016 Proceedings-Track-Marketing and retail; paper type-full paper)



8. Nirankush Dutta, and Anil Bhat "Effect of Tie Strength on Intention to Pass-along e-WOM: Exploring the Role of Trust in s-Commerce" Conference on Brand Management (CBM 2016) organized by IIT Delhi, April 16-17, 2016
9. Arunima Rana, Anil Bhat and Leela Rani "The Impact of E-marketing Mix Elements on Brand Association: A Comparative Examination in the Indian E-commerce Segment" Conference on Brand Management (CBM 2016) organized by IIT Delhi, April 16-17, 2016
10. Dutta, Nirankush, and Bhat, Anil. 2016. "Influence of Social Media Design Characteristics on Intention to Purchase: Exploring the Mediating Role of Trust" Accepted for presentation in 4th Pan-IIM World Management Conference (WMC 2016) organized by all 13 Indian Institutes of Management (IIMs) together at IIM Ahmedabad Campus from Dec 13, 2016 to Dec 15, 2016
11. Rana, Arunima., Bhat, Anil and Rani, Leela "Consumer Heuristics for Online Travel Portal brands: IRCTC vs. Private brands" accepted to be presented as poster at PAN IIM WMC Conference 2016 to be held at IIM, Ahmedabad during 13-14 December, 2016
12. Nikita Sharda, Anil Bhat and Sinha P.K,(2016)"Research imperatives for growth of luxury market in India "International conference on Marketing, Technology and Society, Sept 29-1<sup>st</sup> Oct, IIM Kozhikode
13. Udayan Chanda, (2016), "International Conference on Marketing Technology and Society (MARCONF16) organized by IIM Kozhikode during September 29 - October 1, 2016 and presented a paper titled "Effective Marketing Strategy using Two-warehouse Inventory Model".
14. Udayan Chanda, 7th International Conference on Information Technology & Business Intelligence (ITBI-15) organized by IMT-Nagpur at RIT, Goa Campus during 21-23 Jan, 2016 and presented a paper titled "Impact of Network Externalities and Churn Analysis of Indian Telecom Market".
15. Praveen Goyal, 7th International Conference on Information Technology & Business Intelligence (ITBI-15) organized by IMT-Nagpur at RIT, Goa Campus during 21-23 Jan, 2016 and presented a paper titled, "Assessing Managers Awareness about CSR Issues: A study of Indian IT Industries".
16. Dr. Neetu Yadav, Interaction of Strategic Interventions with Performance Measurement: A System Dynamics Perspective 28th June 2016 PMA 2016 conference, Edinburgh, Scotland
17. Dr. Neetu Yadav, Amazon India's 'Apni Dukaan': Branding strategy 17th April, 2016 Conference on Brand Management, IIT Delhi, India.
18. Dutta, Nirankush, and Bhat, Anil, Effects of Perceived Homophily on Intention to Pass-along e-WOM: Exploring the role of Trust in s-Commerce Third International Communication Management Conference (ICMC) organized by MICA, Ahmedabad at from Feb 18, 2016 to Feb 20, 2016
19. Arun Kumar Agariya & Jyoti Tikoria, E-CRM Scale Development & Validation in Indian E-Commerce Sector 16-17 April, 2016, Conference on Brand Management 2016- IIT Delhi
20. Mridula Goel & Jyoti Tikoria, Reflections on Business Incubation Processes in a Technical University 21-22nd March 2016 XIME-IEF International Conference on Business Incubation & Acceleration held at XIME, Bangalore
21. Priyanka Bhattacharya and Sarvesh Satija, Positive Organizational Practices in Indian Engineering & Technology Institute: An Exposition of Grounded Theory Jul 24-29, 2016, 31st International Congress of Psychology (2016), Jul 24-29, Yokohama Japan.
22. Jayashree Mahesh and Anil K Bhat How Global is "Indian" Management? A Study of
23. Management Practices in Indian I.T. Sector 76th Annual Meeting of the Academy of Management organized by Academy of Management at Anaheim, from Aug 7, 2016 to Aug 9, 2016
24. Yadav, N., "Amazon India's 'Apni Dukaan': Branding Strategy" (Case Study In Conference Proceeding of Conference of Brand Management, IIT Delhi, Apr. 16-17, 2016.
25. Jyoti Tikoria, Arun Kumar Agariya, "Sustainable Operations: A Case of Refreshment Shops Operating with Zero Electricity and Minimum Physical Infrastructure", XX Annual International Conference of Society of Operations Management, December 22-24, 2016 held at ABV- Indian Institute of Information Technology and Management Gwalior

#### **CONFERENCES/WORKSHOPS ATTENDED BY FACULTY**

1. Dr. Udayan Chanda attended Workshop on "Design of Programs / Curriculum with focus on Experiential Learning", 8th to 10th February' 2016 in the Hyderabad campus of BITS Pilani.
2. Dr. Satyendra Sharma attended Project Management Professional Workshop delivered by Mr. K T. Upadhyaya (Management Trainer) from 9th to 12th Sep' 2016, at BITS Pilani, Pilani campus.
3. Prof. Anil K Bhat attended Project Management Professional Workshop delivered by Mr. K T. Upadhyaya (Management Trainer) from 9th to 12th Sep' 2016, at BITS Pilani, Pilani campus.

4. Dr. Neetu Yadav attended workshop on “Make a Difference Journey: Challenges & Opportunities” by Dr. Rajeshwari Narendran, Management Director, Academy of Human Resource Development on 3rd Nov' 2016, at BITS Pilani, Pilani campus.
5. Dr. Anubha Dadhich, attended workshop on “Make a Difference Journey: Challenges & Opportunities” by Dr. Rajeshwari Narendran, Management Director, Academy of Human Resource Development on 3rd Nov' 2016, at BITS Pilani, Pilani campus.

#### BOOKS/CHAPTERS PUBLISHED:

1. Kumar, Alok and Chanda, Udayan (2016). “Inventory Model For Repeat Purchase Under Innovation Diffusion Criterion”. Competing through Operations Excellence: Agility, Adaptability and Analytics” Das, Jitendra K., Sharma, Mohita Gangwar, Kaur, Sumeet and Kumar, Alok (Ed.) pp. 3-16. BLOOMSBURY INDIA
2. Chanda, Udayan and Kumar, Alok (2016). “Stage wise Innovation Diffusion with a Dynamic Market”. Competing through Operations Excellence: Agility, Adaptability and Analytics” Das, Jitendra K., Sharma, Mohita Gangwar, Kaur, Sumeet and Kumar, Alok (Ed.), pp. 17-27. BLOOMSBURY INDIA

#### CONFERENCES/WORKSHOPS ORGANIZED BY THE DEPARTMENT

##### Workshops Organized by the Department

Speaker	Department	Designation	Topic	Date
Mr. Pradeep Chittamsetty	Management	Six Sigma Trainer, KPMG	KPMG Six Sigma Certification	Aug. 25-28, 2016
Mr. K T. Upadhyaya	Management	Trainer	Project Management Workshop	Sep. 9-12, 2016
Mr. Manoj Kumar	Management	Sr Trainer & Asst. Director & Founder, Investment Banking Institute, New Delhi	Workshop on Financial Modelling	Sep. 23-25, 2016
Dr. Rajeshwari Narendran	Management	Director, Academy of Human Resource Development	Make a Difference Journey: Challenges & Opportunities	Nov. 3, 2016
Mr. S Venkatesh,	Management	Founder, CEO Awesome Firms	Orientation workshop on Awesome Firms	Nov. 14, 2016

#### INVITED TALKS GIVEN BY THE FACULTY:

Dr. R. Raghunathan was invited by IIM Rohtak to deliver lectures in the area of E-business and Internet marketing.

#### INVITED TALKS ARRANGED BY THE DEPARTMENT

Speaker	Department	Designation	Broad area of lecture	Date
Mr. V. Ramkumar	Management	Partner-Cedar Consulting	Leadership	5-6 March 2016
Mr. Amit Sinha Roy	Management	VP - Marketing & Strategy Tata Communications	Marketing	5-6 March 2016
Dr. J. K. Sharma	Management	Head CRM, Jagsonpal Pharmaceutical Ltd. 30 Years of Corporate experience in product and brand management and CRM.	Neuro- marketing and branding	5-6 March 2016
Mr. Rahul Chandra	Management	MD - Helion Ventures	Finance	5-6 March 2016
Mr. Vineet Sharma	Management	Talent Acquisition Head, NBC Bearings	HR & Talent Management	5-6 March 2016
Ms. Amandeep Kaur	Management	Marketing Communication Head, Myntra	Digital marketing	5-6 March 2016
Mr. Amit Sharma	Management	Assistant Vice President – Mall Business Future Market Networks Ltd., Mumbai	Retail Marketing	21-24 March 2016
Mrs. Aparna Sharma	Management	Country Head-Human Resources at Lafarge India (Cement, Ready Mix Concrete, Aggregates & KAM Projects	Campus to Corporate	22-24 April 2016
Prof. Krishnamurthy Bindumadhavan	Management	Faculty Off-campus, BITS Pilani, Hyderabad Campus	Financial Accounting	24-26 Oct' 2016

Prof. Krishnamurthy Bindumadhavan	Management	Faculty Off-campus, BITS Pilani, Hyderabad Campus	Financial Accounting	21-24 Nov'2016
Mr. S.P. Sethi	Management	Ex-Secretary to Government of India and Sr. Prof at National University of Singapore	Sustainability & Finance	29-30 Nov' 2016

## FACULTY AND STUDENT ACHIEVEMENT

### Faculty Achievements/Awards

1. Dr. Praveen Goyal, received Highly Commended Paper in the 2016 Emerald Literati Network Awards for Excellence.
2. Dr. Arun Kumar Agariya received Best Personalities of India Awards, Friendship Forum of India, 2016
3. Dr. Jyoti received Runner up award for Entrepreneurship Week National Entrepreneurship Network (NEN)- Wadhvani Foundation, 2016

### Students Achievements:

Organizing institute	Name of competition	Students participated
Mentored research	Equity research initiative	Bhavya joshi
IIM Calcutta	Intaglio MUN - 7 & 8th January,2017	Rounak Biswas
Mentored Research	Equity Research Initiative	Chaitanayam
IIM Ranchi	Arthashastra- 22ndOct-1st November	Smiti Saxena
BIMTECH NOIDA	MARK-X, Cross cultural marketing event ,24th OCTOBER 2016,	KRITESH GUPTA(1st prize),PARAS VOHRA (1st prize)
IIM Udaipur	Zeitgeist- IIM Udaipur Oct 2016	Vibhor Khetrapal
MDI Gurgaon	Opniscient 2016 26th Oct 2016	Vibhor Khetrapal, Rounak Biswas, Gaurav Kumar

### i. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION

### ii. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR -

Following software were purchased: @Risk, QuestionPro.

### DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

#### All India Management Convention, Interface 2016

39th All India Management Convention, Interface 2016 was organized by the Department of Management of BITS Pilani on 5th and 6th March 2016. Interface serves as a platform for students and professionals to come alive with the skills and ideas that are necessary to run the ever dynamic and fast growing industries in India. It's a Pan-India Management Convention where students showcase their exceptional managerial dexterity, innovative business ideas and incomparable entrepreneurial skills. Interface which started as an annual event in 1978 has been running every year with increasing participation from various colleges across the country.

The two days Management extravaganza with the theme, 'FLIGHT BEYOND INFINITY' had several events like FinQuest, AdMania, Desert Storm, FinPlay, Kaleidoscope, Game of Clanes including: Guest Talks by Industry bigwigs like Mr. Amit Sinha Roy (VP Tata Communications Ltd.), Dr. J K Sharma ( Head-CRM Jagsonpal Pharmaceuticals), Miss Amandeep Kaur( Head – Marketing & Comm. Myntra.com), Dr Vineet Sharma (Talent Acquisition Head-NBC Bearing) and Mr. RamKumar Venkatraman ( Partner-Cedar Management Intl.). Guest talks covered a wide array of topics relevant in the current market scenario. These topics included NeuroMarketing, Leadership with Social Responsibility, Digital Transformation of Brands, Shifting Trends in marketing and many more.

Prof. S.C. Sivasubramanian, Deputy Director and Dean Administration BITS Pilani, Pilani campus, Dr. Chandrashekhar, Sr. Professor Emeritus and Retired Senior Scientist (CEERI), Dr. J K Sharma, Head CRM Jagsonpal Pharmaceuticals, Mr. V Ramkumar, Partner Cedar Management Intl. and Mr. Amit Sinha Roy, VP Tata Communications Ltd. graced the inaugural function. Keynote address was delivered by Prof. S. C. Sivasubramanian laying focus on the theme "Flight Beyond Infinity" and its relevance and significance in the corporate world. At the same time all the other guest of honour gave insights on the current challenges, threats and opportunities prevailing in the market.

The valedictory ceremony of Interface 2016 turned out to be a culmination of innovative thoughts and ideas which had Dr J K Sharma ( Head-CRM Jagsonpal Pharmaceuticals) and Miss Amandeep Kaur ( Head – Marketing & Comm. Myntra.com) delivering emphatic talks about the events and festivities that had taken place during Interface -2016, giving it a relevant closure for us all.

Valedictory ceremony of Interface 2016 ended with lighting of Sky Candles by Dr J K Sharma and Miss Amandeep Kaur and with candles rising in the sky, Interface 2016 -"Flight Beyond Infinity" was concluded.

**B1.10.12 Department: Pharmacy**

Number of faculty members (as on 31 December 2016)

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	01
<b>Assistant Professors</b>	11
<b>Lecturers</b>	02
<b>Visiting Faculty</b>	01

**Head of the Department:** Dr. Gaikwad Anil Bhanudas.**Contact details:** anil.gaikwad@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 18**Number of PhD Scholars being supported through Projects and External Funding:** 08**Number of First Degree and Higher Degree Students being Supported by Sir Ratan Tata Trust:** 15**Ph.D. Thesis Submitted during the year:** 03**A. SPONSORED RESEARCH ACTIVITIES****(i) Ongoing projects:**

<b>S.No.</b>	<b>Project Title</b>	<b>Principal Investigator</b>	<b>Agency</b>	<b>Sanction (Rs. in Lakh)</b>
1.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd.	18.46
2.	To study the protective effects of Herbal formulation against Myocardial Ischemia-reperfusion injury in rats	Dr. Rajeev Taliyan & Dr. Sunil K Dubey	Industry-Etica-Clinpharm	4.0
3.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes	Dr. Anil Gaikwad	DST-SERB	39.66
4.	Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr. Anil Gaikwad	CSIR	32.85
5.	Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population	Dr. Atish T. Paul	DST-SYST	12.19
6.	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr. Atish T. Paul	DST SERB	27.30
7.	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	Additional Competitive Grant (BITS-Pilani)	9.9
8.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.2
9.	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST-SERB	26.90
10.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
11.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45

**Brief Write Up of Projects:*****Development of Novel Processes for Increasing the Content of Sennoside-B from Senna***

The project is aimed to increase the Sennosides content basically Sennoside B from senna leaves through novel techniques. The project also aims to develop analytical methods for estimation of sennosides A and B through various analytical techniques. Apart from this residual solvent present in the sample need be estimated. The work is in progress

***To study the protective effects of Herbal formulation against Myocardial Ischemia- reperfusion injury in rats***

The project is aimed to evaluate the protective activity potential of ANEL-Herbal Formulation against myocardial ischemia reperfusion injury in rats through ligation of left anterior descending coronary artery (LAD) in rats. The work is in progress.

***Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes.***

Diabetic nephropathy is a result of several metabolic and hemodynamic processes. It is increasingly apparent that individuals with chronic kidney disease are more likely to die of cardiovascular disease than to develop kidney failure. Chronic kidney disease promotes hypertension and dyslipidemia, which in turn can contribute to the progression of renal failure. Together, hypertension, dyslipidemia, and diabetes are major risk factors for the development of endothelial dysfunction and progression of atherosclerosis. Inflammatory mediators are often elevated and the renin-angiotensin system is frequently activated in chronic kidney disease, which likely contributes through enhanced production of reactive oxygen species to the accelerated atherosclerosis observed in chronic kidney disease. Hence, in the proposed study natural product like esculetin, which has been recognized as inhibitors of lipoxygenase, cyclooxygenase enzymatic pathways and neutrophil-dependent superoxide anion generation will be used as a therapeutic intervention for cardio-renal syndrome in type 2 diabetes.

***Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition.***

Diabetic Nephropathy (DN) is the most leading cause of End Stage Renal Disease (ESRD). Up regulation of Renin Angiotensin System (RAS) is involved in the pathogenesis of DN. Although chronic treatment with angiotensin receptor blockers (ARBs) and angiotensin converting enzyme (ACE) inhibitors are effective in retarding the progression of DN but it is not a cure, indicating requirement for finding additional pathways in RAS as a potential drug targets. ACE2, a component of RAS is involved in the degradation of Angiotensin II (Ang II), is found to be down regulated in diabetic kidney. Hence, the present study is conceived to understand the molecular mechanisms and epigenetic changes involved by activating ACE2 in diabetic kidney.

***Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population***

Mosquitoes affect millions of people throughout the world as they can transmit various diseases like malaria, yellow fever, dengue fever, chikungunya fever, and filariasis. *Anopheles* mosquitoes are the only species known to carry malaria and also transmit filariasis and encephalitis. *Culex* mosquitoes carry encephalitis, filariasis, and the West Nile virus. *Aedes* mosquitoes, carry yellow fever, dengue, and encephalitis. Mosquito borne diseases are prevalent in more than 100 countries across the world, infecting over 700,000,000 people every year globally and 40,000,000 of the Indian population. In 2012, malaria caused an estimated 627,000 deaths, mostly among African children. Mosquito control is essential to prevent propagation of mosquito borne diseases. The major means for mosquito control is the use of synthetic insecticides such as organochlorine and organophosphate. In recent years, use of many of the synthetic insecticides in mosquito control programme has been limited due to lack of novel insecticides, high cost, fear for environmental sustainability, harmful effect on human health, non biodegradable nature, and increasing resistance on a global scale. Keeping above facts in the view, the present study has been proposed for developing a botanical based novel formulation with mosquito larvicidal action against *Anopheles*, *Culex* and *Aedes* larvae.

***Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach***

Obesity is one of the major metabolic disorder that is are a growing epidemic and by 2015, World Health Organization (WHO) estimates the number to increase upto 2.3 billion. Pancreatic lipase is the enzyme responsible for the hydrolysis of 50-70% of total dietary fats and is the most valid target to treat obesity. However orlistat that is the only approved antiobesity drug available in market has been reported to exhibit severe liver injuries, demanding discovery of new drugs. Natural product research based on herbals mainly focuses on bioassay driven startegy, but it is well know fact that most herbals work via synergy. Hence NPs from herbals fail in clinical trials. The current project will explore a new synergy directed fractionation startegy to identify, isolate and evaluate the synergist natural products as pancreatic lipase inhibitor and further evaluate them in high fat diet model in rats.

***Development of Nano-Carriers for Improved Drug Delivery***

Nano-carriers have provided a means to deliver potent but "difficult to deliver" drugs. Reports have demonstrated its applicability in improving the therapeutic benefit of several drugs. A prerequisite for the making nano-carriers commercially viable is the availability of a scalable production method. The project aimed at development of

processes for preparing nano-carriers (such as solid lipid nanoparticles, polymeric nanoparticles, liposomes) using high pressure homogenization (HPH) technology which could be industrially viable.

**Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer**

Many diagnosed breast cancers are HER2/ER<sup>+</sup>/PR<sup>+</sup>, or HER2<sup>-</sup> and ER<sup>-</sup>/PR<sup>-</sup>triple negative (TNBC) resulted in poor prognosis due to development of chemo-resistance and metastasis. miRNA-34a is a master tumor suppressor that can antagonize many oncogenic processes and could improve the efficacy of chemotherapeutic drugs such as docetaxel. The project aimed at simultaneous delivery of miR-34a and docetaxel using actively targeted polymeric system for locally advanced and metastatic breast cancer.

**Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes**

The aim of the project is to prepare lysophylline (LSF)-fatty acid (LSF-FA) conjugate and deliver this conjugate using a micellar system and evaluate its efficacy in diabetic rats. We expect that LSF-FA conjugate will exhibit better encapsulation efficiency, slow metabolism and overall enhanced efficacy.

**Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer**

Tamoxifen represents a first-line anti-estrogen therapy for treatment of estrogen receptor positive (ER+) breast cancers. Although a potent molecule, it exhibits poor bioavailability and hepatotoxicity. To improve its therapeutic benefit and overcome the associated toxicity, the current project aims at designing a unique multifunctional self-assembling nano-carrier system for Tamoxifen. Lipo-polymer containing polycarbonate based hydrophobic core and cholesterol based lipid chains will be synthesized such that upon self-assembly it would yield nano-sized micelles. The micelles will be functionalized with cRGD to enable active targeting to  $\alpha_v\beta_3$  integrin receptors which are over expressed in the breast tumor tissue. This actively targeted nano-formulation of Tamoxifen will enable high drug payload, enhanced permeation and retention (EPR) effect, enhanced cellular uptake due to presence of cholesterol and prolonged mean residence time of the drug in the body. Overall the approach will decrease the dose of Tamoxifen along with decreasing the adverse effects, increasing the therapeutic efficacy and hence providing clinical benefit to breast cancer patients.

**Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats**

The consultancy project is aimed to develop effective formulation for herbal drug and evaluation of toxicity in laboratory rats. Formulation studies and evaluation has been done

**(ii) Projects sanctioned during the year**

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs.in Lakh)
1.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd	18.46
2.	Exploring the synergism of PPAR-Y agonist and HDAC inhibitor for reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment".	Dr.Rajeev Taliyan & Dr.Deepak Chitkara (Co-PI)	DST-Nanomission	34.0
3.	To Study the Protective Effects of Herbal formulation against Myocardial Ischemia-reperfusion Injury in Rats	Dr. Rajeev Taliyan & Dr. Sunil Kumar Dubey	Etica Clin Pharm	4.00
4.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
5.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45
6.	Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells	Dr. Aniruddha Roy	DST-SERB	33.86

**Brief write up of projects:**

**Development of Novel Processes for Increasing the Content of Sennoside-B from Senna**

The project is aimed to increase the Sennosides content basically Sennoside B from senna leaves through novel techniques. The project also aims to develop analytical methods for estimation of sennosides A and B through various analytical techniques. Apart from this residual solvent present in the sample need be estimated. The work is in progress.

***Exploring the synergism of PPAR- $\gamma$  agonist and HDAC inhibitor for reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment***

Recently, insulin resistance syndrome has been reported to play crucial role in the pathogenesis of memory deficit and AD. However, the molecular and cellular basis that link insulin resistance with neurodegeneration is yet to be explored. Probable links between insulin resistance and neurodegeneration will give an insight into the mechanistic approaches to a quick acting neuroprotective therapeutic regimen in co-morbid condition. Evidences have indicated that PPAR $\gamma$  agonists and HDAC inhibitors could play a crucial role in memory deficit and AD, however, their combination have not been yet tested due to the challenges involved in their effective delivery such as low water solubility, poor penetration into the brain and associated toxicity. Thus, the current project aims at establishing the synergism in these two therapeutic modalities and assess their delivery to the brain using brain targeted peptide conjugated nano-carrier system that would possibly be taken up for clinical trials after appropriate investigations.

***To Study the Protective Effects of Herbal formulation against Myocardial Ischemia- reperfusion Injury in Rats***

The project is aimed to evaluate the protective activity potential of ANEL-Herbal Formulation against myocardial ischemia reperfusion injury in rats through ligation of left anterior descending coronary artery (LAD) in rats.

***Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer***

Tamoxifen represents a first-line anti-estrogen therapy for treatment of estrogen receptor positive (ER+) breast cancers. Although a potent molecule, it exhibits poor bioavailability and hepatotoxicity. To improve its therapeutic benefit and overcome the associated toxicity, the current project aims at designing a unique multifunctional self-assembling nano-carrier system for Tamoxifen. Lipo-polymer containing polycarbonate based hydrophobic core and cholesterol based lipid chains will be synthesized such that upon self-assembly it would yield nano-sized micelles. The micelles will be functionalized with cRGD to enable active targeting to  $\alpha_v\beta_3$  integrin receptors which are over expressed in the breast tumor tissue. This actively targeted nano-formulation of Tamoxifen will enable high drug payload, enhanced permeation and retention (EPR) effect, enhanced cellular uptake due to presence of cholesterol and prolonged mean residence time of the drug in the body. Overall the approach will decrease the dose of Tamoxifen along with decreasing the adverse effects, increasing the therapeutic efficacy and hence providing clinical benefit to breast cancer patients.

***Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats***

The consultancy project is aimed to develop effective formulation for herbal drug and evaluation of toxicity in laboratory rats

***Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells***

Current anticancer therapeutic strategies frequently leads to treatment failure. Inability to kill cancer stem cells (CSC) is a major contributing factor for that. In the proposed project, we are planning to develop a tumor targeted, triggered release nanoparticle based system to co-deliver an anti-CSC agent and a chemotherapeutic drug for possible synergistic effect and better therapeutic efficacy.

**(iii) Projects completed this year**

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. In Lakh)
1.	International malarial research consortium for the development of novel classes of antimalarials (BT/IN/ CANADA / 22/ AM/ 2009) (Indo-Canadian DBT Project)	Prof. R. Mahesh	DBT	21.86
2.	Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	Dr. Rajeev Taliyan	DST-SERB	26.98
3.	Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF- $\kappa$ B through AT1 or AT2 receptor in Type II diabetic nephropathy	Dr. Anil Gaikwad	SERB	19.41
4.	Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions	Dr. Anil Gaikwad	UGC	13.43
5.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal	BITS Pilani	2.0
6.	Nano-carriers for co-delivery of small molecules and oligonucleotides.	Dr. Deepak Chitkara	BITS-Pilani	2.0

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. In Lakh)
7.	Development and Evaluation of Lipopolymeric Micelles For Drug Delivery	Dr. Anupama Mittal	BITS-Pilani	2.0
8.	Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Pilani	2.0

#### Brief Write Up of Projects:

##### ***International malarial research consortium for the development of novel classes of antimalarials***

Malaria an infectious disease caused by Plasmodium parasites, among which *Plasmodium falciparum* is the most dangerous one, with the highest rates of complications such as cerebral malaria and mortality. Therefore, development of novel and effective chemical class of anti-malarial drugs especially compounds that act against novel biochemical targets is the better approach to deceive the problem faced by clinically used drugs.

The DBT (Indo-Canada) project includes the development of novel molecules against cysteine protease, aimed to overcome the limitations/challenges of existing anti-malarial pharmacotherapy, which could be a milestone for the treatment of malaria. The existing inhibitors were used as a template for making a pharmacophore model. Based on this model different series of novel compounds were designed, synthesized, characterized (<sup>1</sup>H NMR, and mass) and screened. The preliminary structure activity relationships served as a solid starting point for structural modification of the hit compound in order to improve potency, selectivity and pharmacokinetic parameters for the generation of the lead. In summation, the present work is expected to provide some novel molecules beneficial in the clinic.

##### ***Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke***

Extensive pre-clinical studies have shown that many neuroprotectants reduce infarction and improve neurological functioning in animal models of stroke, however, very few neuroprotectants have been successfully translated into clinical applications. The current lack of clinical treatment for acute stroke necessitates the exploration of novel concepts that may eventually lead to clinical application such as ischemic preconditioning and post conditioning strategy. IPC can even be produced via a remote organ, such as limbs, kidney and abdominal aorta; a phenomenon termed as remote ischemic post-conditioning that reduce myocardial injury in rats. The molecular characterization of ischemic remote post-conditioning of fundamental importance to establish the neuroprotective mechanisms, if any, elicited by remote ischemic post conditioning against brain injury. Therefore, this study was designed to investigate the neuroprotective effect of remote limb ischemic post-conditioning and its potential molecular mechanism against brain stroke in rats. We found:

- The involvement of mitochondrial KATP channel in the neuroprotection offered by RIPOC protection against cerebral I/R injury and associated cognitive deficits was done.
- The neuroprotective role hemeoxygenase-1 (HO-1) in IPOC mediated protection against cerebral I/R injury and associated cognitive deficits was investigated.
- Beneficial role of GSK-3β in RIPOC conferred neuroprotection against cerebral I/R injury and associated cognitive deficits was found.
- RIPOC neuroprotection against cerebral I/R injury and associated cognitive deficits and the possible role HO-1 was confirmed.
- The role mPTP in RIPOC neuroprotection against cerebral I/R injury and associated cognitive deficits was explored.

##### ***Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF-κB through AT1 or AT2 receptor in Type II diabetic nephropathy.***

Diabetic nephropathy has become the leading cause of end stage renal diseases worldwide. Pathologies contributing in the development of renal failure under type II diabetic condition underlie NF-κB regulated immune and inflammatory responses. An increased tissue NF-κB activity and upregulated pro-inflammatory mediators could be diminished by blockade of RAS. The contribution of Ang II in the development of kidney failure is already established, but the receptor subtype involved in the inflammatory cell recruitment is not clear. Histone modifications affect inflammatory genes expression in the diabetic kidney. Hence it is important to identify the modifications of the histones during the development of nephropathy and their role in modulation of inflammatory response in diabetic kidney. This study improves our understanding regarding regulation of NF-κB mediated inflammatory cascade and ACE2 by AT1R and AT2R in type II diabetic kidney. Also, we could conclude that the Angiotensin II mediated macrophage infiltration in T2DN is regulated at least partially by H2AK119Ub through both AT1 and AT2 receptors.



***Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions.***

Esculetin (6, 7- dihydroxycoumarin) was found to be protective against hepatic and renal damage associated with Streptozotocin (STZ) induced type 1 diabetes, because of its radical scavenging property. However, there were no reports regarding its effect on vascular dysfunction under hyperinsulinemic and hyperglycemic conditions. The study investigated and elaborated the effect of esculetin on vascular dysfunction under hyperglycemic and hyperinsulinaemic conditions which now establishes Esculetin's potential to curb the complications linked with these conditions.

***Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery***

According to the latest statistics on global HIV and AIDS epidemic by UNAIDS, WHO and UNICEF, around 35.3 million people were living with HIV/AIDS around the globe in 2012. Nanotechnology based approaches offer some unique opportunities specifically for the targeting of antiretroviral drugs to HIV reservoir sites. Following oral administration, lipid nanoparticles can access to lymphatic transport systems through Peyer's patches or by stimulating chylomicron production and transport via triglyceride rich lipoproteins. The present project therefore deals with the design of enteric coated lipid nanoparticles to enable high concentration of anti-HIV drug at lymphoid tissues following oral administration. Lipids are prone to hydrolysis by the acidic lipase in the stomach which could result in the release of free drug in the gastrointestinal track. Enteric coating could protect the lipid nanoparticle from degradation by acid lipase and prevent the release of free drug before absorption of nanoparticles in the intestine

***Nano-carriers for co-delivery of small molecules and oligonucleotides.***

The project encompasses design, synthesis and evaluation of novel biodegradable polymers that could self-assemble to form nano-sized carrier and could simultaneously encapsulate small drug molecules and oligonucleotides such as siRNA and miRNA.

***Development and Evaluation of Lipo-polymeric Micelles For Drug Delivery.***

The project aims at developing a new self-assembling, lipo-polymeric carrier for efficient delivery of hydrophobic drugs. The proposed lipopolymer contains polyethylene glycol and polycarbonate based hydrophobic core with cholesterol pendant groups and will form nano-micelles upon self-assembly. Successful delivery of model drug  $\alpha$ -lipoic acid using this polymer would provide a platform delivery system for hydrophobic drugs.

***Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and its Application to Pharmacokinetic Studies***

The method development for enantiomeric separation is challenging and time consuming. Chiral separation and analysis enhances the clarity of the pharmacological and toxicological data obtained and can also help in controlling the quality of synthesized drugs. Dried blood spots sampling technique was utilized for bioanalysis. Analytical method was developed for verapamil, resperidone and tolvaptan under this project.

**(iv) Financial Support Sanctioned to Department**

S.No.	Scheme	Agency	Sanction (Rs. in Lakh)
1	Fund for Improvement of S&T Infrastructure in Higher Educational Institutes (FIST)	DST	135.00
2	Fellowship to First Degree and Higher Degree Students of Department	Sir Ratan Tata Trust	12.65

**Brief Write Up:****DST FIST**

Department has been sanctioned Rs. 135 lakhs under DST-FIST Phase II during last year. From this fund UPLC-MS/MS facility has been created in a new industrial research laboratory at Department of Pharmacy. A highly advanced Waters Acquity UPLC /Triple Quadrupole (TQD) MS/MS has been purchased from Waters India Ltd and has been installed.

**B. PUBLICATIONS**

S.No.	Authors	Title	Journals	Vol.	Page
1	Bhatt S, Mahesh R, Jindal A, Devadoss T	Neuropharmacological and neurochemical evaluation of Nn-propyl-3-ethoxyquinoxaline-2-carboxamide (6n): a novel serotonergic 5-HT <sub>3</sub> receptor antagonist for co-morbid antidepressant-and anxiolytic-like potential using traumatic brain injury model in rats	Journal of Basic and Clinical Physiology and Pharmacology		Accepted (ahead of print)

S.No.	Authors	Title	Journals	Vol.	Page
2	Bhatt S, Mahesh R, Devadoss T, Jindal A	Neuropharmacological evaluation of a novel 5-HT <sub>3</sub> receptor antagonist (4-benzylpiperazin-1-yl)(3-methoxyquinoxalin-2-yl) methanone (6g) on lipopolysaccharide-induced anxiety models in mice	Journal of Basic and Clinical Physiology and Pharmacology		Accepted (ahead of print)
3	Kurhe Y, Mahesh R	Pioglitazone, a PPAR $\alpha$ agonist rescues depression associated with obesity using chronic unpredictable mild stress model in experimental mice	Neurobiology of Stress	3	114-121
4	Gupta D, Prabhakar V, R Mahesh	5-HT <sub>3</sub> receptors: Target for new antidepressant drugs	Neuroscience & Biobehavioral Reviews	64	311-325
5	Bhatt S, Bagal SM, Butola S, Dhar AK, Mahesh R	Antidepressant-and anxiolytic-like effect of novel 5-hydroxytryptamine <sub>3</sub> receptor antagonist 2-[4-(3-chlorophenyl) piperazin-1-yl]-1, 8-naphthyridine-3-carboxylic acid (7e)-:An approach using rodent behavioral antidepressant and anxiolytic test battery	International Journal of Nutrition, Pharmacology, Neurological Diseases	6	81-89
6	Priti Jain, Pankaj K Wadhwa, Hemant R Jadhav	Design, synthesis and evaluation of Acridin-9-yl hydrazide derivatives as BACE-1 inhibitors	Medicinal Chemistry Research	25	1507-1513
7	Priti Jain, Pankaj K Wadhwa, Sinduri Gunapati, Hemant R Jadhav	Design, synthesis and in vitro evaluation studies of Sulfonyl-amino-acetamides as small molecule BACE-1 inhibitors	Bioorganic & Medicinal Chemistry	24	2567-75
8	Vandana Kharb, Vikas Anand Saharan, Vivek Kharb, Hemant Jadhav and Suresh Purohit	Formulation and characterization of taste masked ondansetron–magnesium aluminum silicate adsorption systems	Drug Development and Industrial Pharmacy	42	1291-1299
9	Priti Jain, Pankaj K Wadhwa, Shilpa Rohilla, Hemant R Jadhav	Rational design, synthesis and in vitro evaluation of allylidene hydrazinecarboximidamide derivatives as BACE-1 inhibitors	Bioorganic & Medicinal Chemistry Letters	26	33-37
10	Penta Ashok, Subhash Chander, Ana Tejería, Laura García-Calvo, Rafael Balaña-Fouce, Sankaranarayanan Murugesan	Synthesis and Anti-leishmanial Evaluation of 1-phenyl-2,3,4,9-tetrahydro-1H- $\beta$ -carboline Derivatives Against Leishmania infantum	European Journal of Medicinal Chemistry	123	814-821
11	Subhash Chander, Penta Ashok, Bidart de Macedo Maira, Cappoen Davie and Sankaranarayanan Murugesan	Design, synthesis and biological evaluation of novel tetrahydroquinoline based propanehydrazides as antitubercular agents	Letters in Drug Design and Discovery	13	1-8
12	Subhash Chander, Ping Wang, Penta Ashok, Liu-Meng Yang, Yong-Tang Zheng and Sankaranarayanan Murugesan	Rational design, synthesis, anti-HIV-1 RT and antimicrobial activity of novel 3-(6-methoxy-3,4-dihydroquinolin-1(2H)-yl)-1-(piperazin-1-yl)propan-1-one derivatives	Bioorganic Chemistry	67	75-83
13	Subhash Chander, Penta Ashok, Cappoen Davie, Paul Cos and Sankaranarayanan	Design, synthesis and biological evaluation of novel quinoline based carboxylic hydrazides as anti-tubercular agents	Chemical Biology and Drug Design	88	585-591

S.No.	Authors	Title	Journals	Vol.	Page
	Murugesan				
14	Subhash Chander, Penta Ashok, Rajnish Singh, Prabhat N. Jha, Yong-Tang Zheng, Ping Wang and Sankaranarayanan Murugesan	Rational design, synthesis, anti-HIV-1 RT and anti-microbial activity of novel 2-(6,7-dimethoxy-3,4-dihydroisoquinolin-2(1H)-yl)-N-phenylpropanamide derivatives	Anti-Infective Agents	14	63-73
15	Subhash Chander, Penta Ashok, Yong-Tang Zheng, Ping Wang, Krishnamohan S. Raja, Akash Taneja, and Sankaranarayanan Murugesan	Design, synthesis and in-vitro evaluation of novel tetrahydroquinoline carbamates as HIV-1 Reverse Transcriptase inhibitor and their antifungal activity	Bioorganic Chemistry	64	66-73
16	Subhash Chander and Sanakaranarayanan Murugesan	In-silico based drug repositioning approach for the search of potent anti-HIV-1 RT inhibitors	Cutting Edge	6	9-14
17	Subhash Chander, Ashok Penta, Sankaranarayanan Murugesan	1,2,3,4-Tetrahydroquinoline: A Versatile Nucleus in the New Millennium	Research & Reviews: A Journal of Drug Design & Discovery	3	1-18
18	Ashok Penta, Subhash Chander, Sankaranarayanan Murugesan	In-Silico Design and Study of Novel Tetrahydro- $\beta$ -Carbolines as Inhibitor of HIV-1 Reverse Transcriptase	Med Chem Res	24	513-522
19	Taliyan R, Ramagiri S	. Delayed neuroprotection against cerebral ischemia reperfusion injury: putative role of BDNF and GSK-3 $\beta$ .	Receptors & Signal Transduction	36	402-10
20	Sharma S, Taliyan R	Epigenetic modifications by inhibiting histone deacetylases: reverse memory impairment in insulin resistance induced cognitive deficit in mice	Neuropharmacology	10	285-297
21	Sharma S, Taliyan R	Histone deacetylase inhibitors: Future therapeutics for insulin resistance and type 2 diabetes	Pharmacological Research	113	320-326
22	Ramagiri S, Taliyan R	Neuroprotective effect of hydroxy safflor yellow A against cerebral ischemia-reperfusion injury in rats: putative role of mPTP.	J basic & clinical physiology and pharmacology	27	1-8
23	D Mittal, Taliyan R, Sharma PL, Yadav HN	Effect of pioglitazone on the abrogated cardioprotective effect of ischemic preconditioning in hyperlipidemic rat heart	Indian journal of pharmacology	48	53-59
24	Pandey A, Goru SK, Kadakol A, Malek V, Sharma N, Gaikwad AB	H2AK119 monoubiquitination regulates angiotensin II receptor mediated macrophage infiltration and renal fibrosis in type 2 diabetic rats	Biochimie	131	168-176
25	Goru SK, Kadakol A, Pandey A, Malek V, Sharma N, Gaikwad AB	Histone H2AK119 and H2BK120 Monoubiquitination Modulate SET7/9 and SUV39H1 in Type 1 Diabetes Induced Renal Fibrosis	Biochem J.	473	3937-3949
26	Kadakol A, Sharma N, Kulkarni YA, Gaikwad AB	Esculetin: A phytochemical endeavor fortifying effect against non-communicable diseases	Biomed Pharmacother	84	1442-1448
27	Goru SK, Pandey A, Gaikwad AB	E3 ubiquitin ligases as novel therapeutic targets for inflammatory diseases	Pharmacol Res.	106	1-9
28	Pandey A, Kumar GS,	FoxO1 inhibitors: The future	Curr Diabetes Rev.	12	223-230

S.No.	Authors	Title	Journals	Vol.	Page
	Kadakol A, Malek V, Gaikwad AB	medicine for metabolic disorders?			
29	Shankar D. Katekhaye, Atish Paul and K. S. Laddha	Lupane analogue from bark of <i>Pithecellobium dulce</i> and <i>in vitro</i> $\alpha$ -glucosidase and $\alpha$ -amylase enzyme inhibition assay of extract for potential antidiabetic activity	Chemistry of Natural Compounds	52	359-362
30	Anil B Jindal	Nanocarriers for spleen targeting: anatomo-physiological considerations, formulation strategies and therapeutic potential	Drug Delivery and Translational Research	6	473-85
31	Chanchal Kiran Thakur, Nagarani Thotakura, Rajendra Kumar, Pramod Kumar, Bhupinder Singh, Deepak Chitkara, Kaisar Raza	Chitosan-modified PLGA polymeric nano-carriers with better delivery potential for tamoxifen	Int. J. Biol. Macromol	93	381-389
32	Pramod K, Rajendra K, Bhupinder Singh, Ruchi Malik, Gajanand Sharma, Deepak Chitkara, OP Katare, Kaisar Raza	Biocompatible Phospholipid-Based Mixed Micelles for Tamoxifen Delivery: Promising Evidences from In-Vitro Anticancer Activity and Dermatokinetic Studies	AAPS PharmSciTech	DOI: 10.1208/s12249-016-0681-1	
33	Deepak Chitkara, Saurabh Singh, Anupama Mittal	Nano-carrier based co-delivery of small molecules and siRNA/miRNA for treatment of cancer	Therapeutic Delivery	7	245-255
34	Anupama Mittal and Deepak Chitkara	Structural modifications in polymeric micelles to impart multifunctionality for improved drug delivery	Therapeutic Delivery	7	73-87
35	Sunil K Dubey, Amit Anand, Ranendra N Saha	Enantioselective Disposition of Venlafaxine and its Metabolite O-Desmethylvenlafaxine in Rats.	Int. J. Pharmacokinetics	DOI :10.4155/ipk-2016-0003 Future Science	
36	Aniruddha Roy, Shyh-Dar li.	Modifying the tumor microenvironment using nanoparticle therapeutics	Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology	8	891-908.
37	M. M. Pandey, Shrikant Y. Charde, Jaipal A., Prashant P. Raut, Puneet Goel, Love Kumar	Development and Validation of a Simple High-Performance Liquid Chromatography Method for Estimation of Felodipine in Rabbit Plasma: Application to Pharmacokinetic Study	Current Pharmaceutical Analysis	Accepted	
38	Mahaveer Singh and Hemant R. Jadhav	Dynamins functions and ligands Classical mechanism behind	Molecular pharmacology	DOI: <a href="https://doi.org/10.1124/mol.116.105064">https://doi.org/10.1124/mol.116.105064</a>	

### C. CONFERENCES ATTENDED/PAPERS PRESENTED:

S.No.	Authors	Title	Name of Conference	Place	Date
1.	Kurhe Y, Mahesh R, Thangaraj D	Mechanisms linking depression associated with obesity through serotonergic modulation in experimental mice	Society for Neuroscience (SfN) 46 <sup>th</sup> Annual Meeting, Neuroscience 2016	San Diego, California, United States	Nov 12-16, 2016
2	Kurhe Y, Mahesh R	Ondansetron ameliorates depression associated with obesity in high fat diet fed experimental mice: an investigation based on the behavioral, biochemical and	49 <sup>th</sup> Annual Conference of Indian Pharmacological Society (IPSCON-2016)	PGIMER Chandigarh, Punjab, India	Oct 20-23, 2016

S.No.	Authors	Title	Name of Conference	Place	Date
		molecular approach			
3	Mundra S, Mahesh R	Identification of novel class of falcipain-2 inhibitors as potential anti-malarial agents.	Organic Chemistry in Sustainable Development: Recent advantages and future challenges (OCSD-2016)	BITS Pilani, Pilani Campus, Pilani, Rajasthan, India	Aug 29-30, 2016
4	Gupta D, Mahesh R	6z, a novel 5HT <sub>3</sub> receptor antagonist reverses depression-like behavior in streptozotocin-induced diabetic mice by normalizing serotonin deficiency and HPA-axis hyperactivity	14 <sup>th</sup> Meeting of the Asian Pacific Society for Neurochemistry	Kuala Lumpur, Malaysia	Aug 27-30, 2016
5	Kurhe Y, Mahesh R	High fat diet fed obese rats injected with exogenous corticosterone: an animal model to study depressive-phenotypes associated with obesity	DBT, ICMR and APTI Sponsored Two Days National Conference on Contemporary Technologies in Drug Delivery and Envisaged Future Trends	Geetanjali Institute of Pharmacy, Geetanjali University, Udaipur, Rajasthan, India	Aug 12-13, 2016
6	Pankaj Wadhwa, Priti Jain, Hemant R. Jadhav	Design, synthesis and evaluation of novel 7,7-dimethyl-4-substituted phenyl-3,4,7,8-tetrahydroquinazoline-2,5(1H,6H)-dione analogues as potent inhibitors of HIV-1 Integrase Strand Transfer	Sixth Euro-India International Conference on Holistic Medicine ICHM-2016	Kottayam, Kerala	September 9-11, 2016
7	Mahaveer Singh and Hemant R. Jadhav	EGFR Tyrosine kinase inhibitors: In-silico studies using (4-[3-(morpholin-4-yl)propoxy]-N-phenylbenzamide derivatives	National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges (OCSD 2016)	BITS Pilani, Pilani Campus	August 29-30, 2016
8	Pankaj Wadhwa, Priti Jain, Hemant R. Jadhav	Design, synthesis and evaluation of novel 4-oxo-6-substituted phenyl-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carbonitrile analogues as potent inhibitors of HIV-1 Integrase strand transfer	National Conference on Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges (OCSD 2016)	BITS Pilani, Pilani Campus	August 29-30, 2016
9	Pankaj Wadhwa, Priti Jain, Hemant R. Jadhav	Design, synthesis and evaluation of novel N-(4-fluorophenyl)-6-methyl-2-oxo-4-substituted phenyl-1,2,3,4-tetrahydropyrimidine-5-carboxamides as HIV integrase inhibitors	Chem-Cys-2016	Belgium	March 16-19, 2016
10	Vadiraj Kurdekar, Anupama Devarajan, Pankaj Wadhwa, Priti Jain, Hemant R. Jadhav	Anthranilate urea hydroxamate derivatives: <i>In silico</i> Design, Synthesis and Evaluation as TACE inhibitors	Current Trends in Drug Discovery & Research - CTDDR-2016	CDRI Lucknow	February 24-28, 2016
11	Pankaj Wadhwa, Priti Jain, Hemant R. Jadhav	Flap endonuclease-1 inhibitors: <i>In-silico</i> studies using 2-hydroxy-6-methyl-4-oxo-N-substituted-phenyl-4H-pyran-3-carboxamides	Current Trends in Drug Discovery & Research - CTDDR-2016	CDRI Lucknow.	February 24-28, 2016
12	Murugesan Sankaranarayanan	Attended a guest lecture entitled "HPTLC Fingerprint –	Anchrom Enterprises (I) Pvt. Ltd. Mumbai,	CCRAS Auditorium,	October 20, 2016

S.No.	Authors	Title	Name of Conference	Place	Date
		The regulatory method for identification of materials of botanical origin" by Dr. Eike Reich, Director (Lab), Camag, Switzerland	India.	Ministry of Ayush, Govt. of India, New Delhi.	
13	Murugesan Sankaranarayanan	Attended National Convention on organized by Department of Humanities and Social Sciences & Teaching Learning Centre, Birla Institute of Technology and Science, Pilani- Pilani campus	Current Practices and Future of Classroom Teaching at Higher Education Level	Pilani	30-9-16 to 1-10-16
14	Subhash Chander, Penta Ashok and Murugesan Sankaranarayanan	Design, synthesis and anti-HIV-1 RT evaluation of quinoline based carboxylic hydrazide derivatives	Sixth Euro- India International Conference on Holistic Medicine (ICHM-2016)	Kottayam	September 09-11th, 2016.
15	Subhash Chander, Ping Wang, Penta Ashok, Liu-Meng Yang, Yong-Tang Zheng and Murugesan Sankaranarayanan	Rational design, synthesis and anti-HIV-1 RT evaluation of 1-(4-phenylpiperazin-1-yl)ethanone based hybrid compounds	National Conference on Organic Chemistry in sustainable Development: Recent Advances and Future Challenges (OCSD-2016) organized by Department of Chemistry, BITS Pilani, Pilani Campus	Pilani	August 29 - 30, 2016.
16	Penta Ashoka, Subhash Chander, Ana Tejería, Laura García-Calvo, Rafael Balaña-Fouce, Murugesan Sankaranarayanan	Synthesis and Anti-leishmanial Evaluation of 1-phenyl-tetrahydro- $\beta$ -carboline Derivatives against <i>Leishmania infantum</i>	National Conference on Organic Chemistry in sustainable Development: Recent Advances and Future Challenges (OCSD-2016) organized by Department of Chemistry, BITS Pilani, Pilani Campus	Pilani	August 29 - 30, 2016.
17	Ashok Sharma, Badvel Pallavi, Leena Fageria, Rajdeep Chowdhary, Subhash Chander, Murugesan Sankaranarayanan and Paritosh Shukla	One-step, Eco-friendly synthesis of useful spiro/non-spiro pyranopyrazole small molecules and an investigation of their remarkable anticancer and DNA binding activities	National Conference on Organic Chemistry in sustainable Development: Recent Advances and Future Challenges (OCSD-2016) organized by Department of Chemistry, BITS Pilani, Pilani Campus	Pilani	August 29 - 30, 2016.
18	Penta Ashok, Subhash Chander, Scott Franzblau, Baojie Wan and Sankaranarayanan Murugesan	Design, Synthesis and Evaluation of 1-phenyl-b-carboline derivatives as potent anti-tubercular agents	Current Trends in Drug Discovery and Research organized by CSIR-CDRI	Lucknow	February 25-28th, 2016.
19	Subhash Chander, Penta Ashok and Sankaranarayanan Murugesan	In silico Lead optimization, synthesis and anti-HIV 1 RT evaluation of Indolin-2-one derivatives	Current Trends in Drug Discovery and Research organized by CSIR-CDRI	Lucknow	February 25-28th, 2016.
20	Sankaranarayanan Murugesan, Subhash Chander, Penta Ashok, Cappoen Davie and Paul Cos	Design, synthesis and anti-tubercular activity of novel N'-benzylidene-2-(quinolin-6-yloxy)propanehydrazide analogs	22nd ISCB International Conference (ISCB-2016), Recent Trends in Affordable and Sustainable Drug Discovery and Developments organized by Indian Society of Chemists	Surat	6-8th February, 2016.

S.No.	Authors	Title	Name of Conference	Place	Date
			and Biologists, Uka Tarsadia University, Surat, India.		
21	Subhash Chander, Penta Ashok, Yong-Tang Zheng, Ping Wang and Sankaranarayanan Murugesan	Rational design, synthesis and anti-HIV-1 RT activity of novel 6-methoxy-tetrahydroquinoline and arylpiperazine hybrid derivatives	European Chemistry Congress organized by Omics International, Rome, Italy,	Rome	June 16-18, 2016.
22	Taliyan R	Attended and Chaired the session	49 th Annual Conf-IPSCON-2016	PGI, Chandigarh	Oct 20-23, 2016
23	Ramagiri S, Taliyan R	Remote limb preconditioning mediated neuroprotection against cerebral ischemic stroke (Oral)	49 th Annual Conf-IPSCON-2016	PGI, Chandigarh	Oct 20-23, 2016
24	Ramagiri S, Taliyan R	Protective effects of ischemic post conditioning mediated hemoxygenase signaling pathway against cerebral I/R injury and associated cognitive deficits	10th World Stroke Congress,	Hydrabad	Oct 26-29, 2016
25	Ramagiri S, Taliyan R	Neuroprotective effect of remote post conditioning via mitochondrial KATP opening against cerebral ischemic reperfusion injury (Oral)	World Congress on Drug Discovery & Development	IISC, Bangalore,	Nov 23-25, 2016
26	Ramagiri S, Taliyan R	Limb remote ischemic post conditioning attenuates cerebral I/R injury and associated cognitive deficits in rats: Role of GSK-3 $\beta$ and BDNF (Oral)	2nd IBRO/APRC Chandigarh Neuroscience School, Punjab University	Punjab University, Chandigarh	December 14-22, 2016
27	Sharma S, Taliyan R	GSK3 $\beta$ inhibitor, AR-A014418 attenuates insulin resistance induced cognitive deficit in mice.	14 <sup>th</sup> meeting of Asian-pacific society for neurochemistry (APSN 2016)	Kuala Lumpur, Malaysia	27-30 August, 2016
28	Sruthi R, Taliyan R	Beneficial role of HO-1 upregulation against cerebral ischemic stroke	25 th European Stroke Conference 2016, Italy	Venice, Italy	April 13-15, 2016
29	Sharma S, Taliyan R	Peripheral insulin resistance promotes neurodegeneration through altered Histone acetylation activity.	4th International conf on "Pharmacogenomics , Proteomics in Drug Discovery, Development and Clinical Therapeutics	Chitkara, University, Punjab	13-14 April, 2016
30	Sharma S, Taliyan R	The Malleable brain: Plasticity of neural circuits and Behaviour	The International Society of Neurochemistry & the Journal of Neurochemistry	Alpbach, Austria	Sept, 12-18, 2016
31	Anil Bhanudas Gaikwad, Almesh Kadakol, Vajir Malek, Santosh Kumar Goru, Anuradha Pandey	Telmisartan and esculetin combination ameliorates type 2 diabetic cardiomyopathy by reversal of H3, H2A and H2B histone modifications	IPSCON 2016, PGIMER, Chandigarh	Chandigarh	October 20 <sup>th</sup> -23 <sup>rd</sup> , 2016
32	Sengupta P, Paul A and Kumar S	Comparative larvicidal activity of organic extracts from three Piper species against Aedes aegypti	5 <sup>th</sup> Biennial International Conference on New Developments in Drug Discovery and Natural products and Traditional Medicine	NIPER S.A.S. Nagar, Mohali, Punjab	18-20 November 2016
33	Harshita Raina, Anil	Engineering of Enteric	International	IISER), Pune	February 29,

S.No.	Authors	Title	Name of Conference	Place	Date
	Jindal	Coated Lipid Nanoparticles of Efavirenz by Spontaneous Nanoprecipitation Method: A Quality by Design Approach	Conference on Nanoscience and Technology (ICONSAT 2016)		2016- March 02, 2016
34	Diksha Mishra, Nitish Babhulgaonkar, Anil Jindal	Solid Self Nanoprecipitating Preconcentrate (Solid-SNP) :An Innovative Approach For Preparation Of Nanocrystal Based Immediate Release Tablets	RAJAPTICON 2016	Alwar Pharmacy College, Alwar	March 11-12, 2016
35	Tushar D. Date, Saurabh Sharma, Kishan Italiya, Anupama Mittal, Deepak Chitkara,	Synthesis and Characterization of Amphiphilic Cationic Co-polymers as Gene Delivery Nano-Carriers	Symposium on sustainable technology development in polymer,	Birla Institute of Technology and Science (BITS), Pilani	March 11-12, 2016,
36	Tushar D. Date, Anupama Mittal, Deepak Chitkara,	Nano-carriers for co-delivery of miRNA-34a and docetaxel for treatment of breast cancer	International Conference on Materials Science & Technology (ICM Tech -2016),	Delhi University, New Delhi.	Feb' 2016
37	Ishit R. Kothari, Tushar Date, Anupama Mittal, Deepak Chitkara	Development and evaluation of docetaxel loaded nano-carriers for treatment of locally advanced breast cancer	International Conference on Materials Science & Technology (ICM Tech -2016),	Delhi University, New Delhi.	Feb' 2016
38	Deepak Chitkara, Anupama Mittal, SW Behrman, Neeraj Kumar, Ram Mahato	Gemcitabine containing nano-carrier for treatment of pancreatic cancer	International Conference on Materials Science & Technology (ICM Tech -2016),	Delhi University, New Delhi.	Feb' 2016
39	Abhishek Bansal, Saurabh Sharma, Jyostna Kamat, Deepak Chitkara	Cancer Nanotherapeutics From Bench To Bed Side	International Conference on Advances in Nanomaterials and Nanotechnology	Jamia Milia Islamia, Delhi	Nov' 2016
40	S. K Dubey, K. V. Krishna, R. N. Saha, Rajeev Taliyan, Rajesh Khadgawat	Simultaneous Method for the Estimation of Endocrine Disrupting Chemicals; Bisphenol A and Bis-sulphone ,	Annual Conference of Endocrine Society of India (ESICON 2016)	AIIMS, New Delhi, Hotel Pullman, Aerocity, New Delhi,	21-23 October 2016
41	K.V.Krishna, M.Sneha, S.K.Dubey, R.N.Saha,	Rapid and Sensitive Reverse Phase HPLC Method for Estimation of Rifaximine in Pharmaceuticals using Weighed Regression.	4th International Conference on "Pharmacogenomics, Proteomics in Drug Discovery, Development and Clinical Therapeutics	Chitkara University Chandigarh	13-14 April 2016
42	Saswata Banerjee*, Sahil Anandpara, Gautam Singhvi, Archana Khosa.	Influence of process parameters on particle size of solid lipid nanoparticles. Department of	"Contemporary Technologies in Drug Delivery and Envisaged Future Trends"	Geetanjali Institute of Pharmacy, Geetanjali University, Udaipur, Rajasthan.	August 12-13, 2016
43	Gautam Singhvi, Nalla Shri Raviteja, Saswata Banerji	Preparation and characterization of modified calcium starch polymer and its application as release retardant polymer.	Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges (OCSD-2016);	at BITS, Pilani, Pilani campus	August 29-30, 2016,
44	Gautam Singhvi*, Sri Raviteja Nalla, Nirav Patel, Niyati	Pharmacokinetic investigation of controlled release formulation of	IPSCON 2016,	at PGIMER, Chandigarh.	OCT 21-23, 2016



S.No.	Authors	Title	Name of Conference	Place	Date
	Parmar.	milnacipran hydrochloride in rabbits [Oral Presentation]			
45	Gautam Singhvi*, Archana Khosa, C S S Adhokshaja, Saswata Banerji.	Design and characterization of polymeric nanoparticles of pioglitazone hydrochloride and study the effect of formulation variables using qbd approach.	Second edition of International Conference on Soft Materials (ICSM 2016),	MNIT Jaipur	12-16th Dec 2016.
46	Gautam Singhvi, Shubham Agrawal, Jayant Agrawal, Akanksha Kudalkar, Archana Khosa.	Aspirin loaded pcl nanoparticles-effect of formulation variables on particle size and drug loading.	Second edition of International Conference on Soft Materials (ICSM 2016),	MNIT Jaipur	12-16th Dec 2016.
47	Aniruddha Roy, Shyh-Dar Li.	Targeting Resistant and Metastatic Tumors by a Podophyllotoxin-Carboxymethylcellulose Nanoparticle	Fifteenth International Symposium of Controlled Release Society	Institute of Chemical Technology (ICT), Mumbai	19-20 February 2016.
48	M. M. Pandey, Prashant P. Raut, Shrikant Y. Charde	Modified Release from Directly Compressible Felodipine Buccal Tablets	Controlled Release Society-Indian Chapter	Mumbai	19th- 20th Feb. 2016
49	Mahaveer Singh, H. R. Jadhav.	EGFR Tyrosine Kinase Inhibitors: In-silico studies Using (4-[3-(morpholin-4-yl)propoxy]-N-phenylbenzamide derivatives	Organic Chemistry in Sustainable Development: Recent Advances and Future Challenges (OCSD-2016)	BITS Pilani	August 29-30, 2016
50	Mahaveer singh and Hemant R Jadhav	Melatonin and histamine 3 receptors ligands: New hope for central nervous system disorders.	Drug Des	Rome, Italy	October 27-29, 2016

#### D. BOOKS CHAPTER PUBLISHED/EDITED DURING THE YEAR

S.No.	Authors	Title	Publisher
1	Yogesh A. Kulkarni, Mayuresh S. Garud, R. S. Gaud, Gaikwad AB	Recent developments in using plant derived natural product as tubulin inhibitors for the management of cancer	Elsevier Publication
2	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Oza, Gaikwad AB	Diabetes, diabetic complications and Flavonoids	Elsevier Publication
3	Kalyani H. Barve, Yogesh A. Kulkarni, Gaikwad AB	Nutraceuticals as Therapeutic Agents For Inflammation	Elsevier Publication
4	Anuradha Pandey, Yogesh A. Kulkarni, Gaikwad AB	Curcumin: The epigenetic therapy	Elsevier Publication
5	Mahaveer singh and H R Jadhv	Fast Dissolving oral Films, in Current Advances in fast Dissolving/ Disintegrating dosage form	Bentham Science

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED

Two days workshop and hands-on training on LC-MS was conducted between 23 to 24th Aug 2016.

#### F. INVITED TALKS GIVEN BY BITS FACULTY

1. Dr. S. Murugesan delivered a talk on "An in-silico virtual screening, synthesis and evaluation of Isatin analogues as HIV-1 Reverse Transcriptase inhibitor" at Hospira Healthcare India Pvt, Ltd (a Pfizer Company), Chennai, Tamilnadu on 28 June 2016.

2. Dr. Sunil Kumar Dubey was invited as Faculty member to give insights on "Endocrine Disrupting Chemicals" in Annual Conference of Endocrine Society of India (ESICON 2016) organized by AIIMS, New Delhi, Date: 21-23 October 2016.
3. Dr. Sunil Kumar Dubey delivered a talk on the topic "Bridging gap between academic and pharmaceutical Industry" at National Seminar sponsored by Chhattisgarh Council of Science & Technology, at Raipur, Chhattisgarh. Date: 05- 6 March 2016.

#### **G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. Prof. Mukul Mathur, Sr. Prof. SMS Medical College, delivered lecture on, "Role of Pharmacist In Health Care System: Present challenges" on the occasion of Pharmacist Day celebrations (24 th September 2016).
2. Prof. BG Nagavi (Dean, RAK College of Pharmaceutical Sciences, Ras Al Khaimah, UAE) delivered the Prof. B M Mithal Memorial lecture on "Pharmacy Education & Practice in UAE" on the occasion of BM Mithal Memorial Lecture & Award Ceremony (18 Nov 2016).

#### **H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS**

1. Yeshwant Kurhe (Ph.D. student working under the supervision of Prof. R. Mahesh) was awarded the International Travel Award by Society for Neuroscience-International Brain Research Organization (SfN-IBRO) for attending SFN 46<sup>th</sup> Annual Meeting, Neuroscience 2016 held in San Diego, California, United States, Nov 12-16, 2016.
2. Deepali Gupta (Ph.D. student working under the supervision of Prof. R. Mahesh) was awarded the International Society for Neurochemistry (ISN) Travel Award for attending 14<sup>th</sup> Meeting of the Asian Pacific Society for Neurochemistry held at Kuala Lumpur, Malaysia Aug 27-30, 2016.
3. Yeshwant Kurhe (Ph.D. student working under the supervision of Prof. R. Mahesh) was awarded the Best Poster Award at DBT, ICMR and APTI Sponsored Two Days National Conference on Contemporary Technologies in Drug Delivery and Envisaged Future Trends organized by Geetanjali Institute of Pharmacy, Geetanjali University, Udaipur, Rajasthan, India, Geetanjali University, Udaipur, Rajasthan, India Aug 12-13, 2016.
4. Dr. S. Murugesan has been appointed as Vice-Chancellor's nominee member of Post Graduate Board of Studies in the subject of Pharmacy at Ch. Bansi Lal University, Bhiwani. Haryana. India.
5. Dr. S. Murugesan Underwent BITS Pilani sponsored Industry Immersion Program at Hospira Healthcare India Pvt, Ltd (a Pfizer Company), Chennai, TamilNadu during 2 to 30th June, 2016 and learned several new techniques in the area of Medicinal Process Chemistry and Impurity Profiling.
6. Sruthi Ramagiri (Ph.D. student working under the supervision of Dr. Rajeev Taliyaan) received the Best Poster Award (4th position) for her work entitled, "Remote ischemic post conditioning attenuates cerebral I/R injury and associated cognitive deficits in rats: Role of GSK-3 $\beta$  and BDNF" at 2nd IBRO/APRC Chandigarh Neuroscience School, Punjab University, 14-22 December, 2016.
7. Sruthi Ramagiri (Ph.D. student working under the supervision of Dr. Rajeev Taliyaan) received an International Travel grant from DST for presenting her research work entitled, "Beneficial role of HO-1 upregulation against cerebral ischemic stroke", at 25<sup>th</sup> European Stroke Conference, Venice, April 13-15, 2016.
8. K.V.Krishna (Ph.D. student working under the supervision of Dr. Sunil K Dubey & Prof. R.N. Saha) was awarded 2nd Prize for poster for his work entitled, "Rapid and Sensitive Reverse Phase HPLC Method for Estimation of Rifaximine in Pharmaceuticals using Weighed Regression" at 4th International Conference on "Pharmacogenomics, Proteomics in Drug Discovery, Development and Clinical Therapeutics, Chitkara University, 13-14 April 2016.

#### **I. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR:**

1. Biosafety cabinet - Class II
2. CO<sub>2</sub> incubator
3. Gel Permeation Chromatography
4. Flash Chromatography

#### **J. DEPARTMENTAL ASSOCIATION**

##### **Pharmacy**

In the year 2016, Department of Pharmacy, its students and faculty members, continued their untiring efforts for further betterment and had several achievements and activities during the year including:

**1) Pharmacist Day (24th September 2016)**

Guest of honor, Prof. Mukul Mathur, Sr. Prof. SMS medical college, delivered lecture of the day on the theme, "Role of Pharmacist In Health Care System: Present challenges."

**2) Reunion of 1966 B.Pharm Batch (14-16th October, 2016)**

During their visit, they interacted with the Vice-chancellor, Director, Dean (Administration), HOD (Pharmacy) and faculties of Pharmacy department and shared their memories and experiences of their college life at BITS.

**3) BM Mithal Memorial Lecture & Award Ceremony (18 Nov 2016)**

Chief guest of the day: Prof. BG Nagavi (Dean, RAK College of Pharmaceutical Sciences, Ras Al Khaimah, UAE) and other dignitaries, Prof. AK Sarkar (Director, BITS Pilani, Pilani campus), Prof. RN Saha (Director, BITS Pilani, Dubai campus) and Mr. M L Bansal (Trustee, BM Mithal Trust) graced the occasion.

**4) APOGEE, 2016**

This APOGEE, 12 project ideas had been submitted out of which 07 projects were selected for Round 2 of pitching. 02 of these were selected for final presentation during APOGEE. These projects were presented with working models which directly benefitted the students to explore various other fields where pharmacy can be applied.

During APOGEE 2016, BITS Pharmaceutical Society had organized the following events:

**Doper's quiz:** Doper's Quiz was an online quizzing event to test students' logic relating to the field of Pharmacy. Most of the questions were related to the myriad world of narcotics. A total of 100 students participated in this quiz.

**ESPOIR 2016:** A Health B-Plan Competition. Being a part of APOGEE 2016, Espoir is an effort towards providing advanced health care solutions with innovative ideas that have a well rounded business plan. The event was divided into 3 phases :

Phase 1: Submission of the Executive Summary.

Phase 2: Mentor-ship Phase and Submission of executive Summary.

Phase 3: Final Presentation of Complete Business Plan in front of a panel of judges at BITS Pilani

A total of 4 teams registered for ESPOIR and among them 3 teams was selected for presentation in the final round.

Apart from this, The Pharmaceutical Society also organized freshers welcome function for new students and farewell dinner twice during the year (in both semesters) for the graduating students.

Research activities of Department increased further in terms of sponsored projects, departmental projects, number of publications and conference presentations and number of doctoral students. During the year faculty members of Department completed research projects worth 89.68 lakhs. Currently research projects worth Rs. 213.44 lakh are being carried out by the department and additionally projects worth Rs 67.86 lakhs have been sanctioned. Financial support from the various government agencies and industries have boosted the research activities of the faculties and enabled procurement of hi-end equipments.

The experiences acquainted by the Pharmacy department Faculty Members and research scholars by visiting various conferences and workshops were shared with the staff and students of the department.

During the year Sir Ratan Tata Trust, Mumbai, New Delhi recognized the achievements of Department by sanctioning fellowships to students of Department. Sir Ratan Tata Trust, Mumbai gave scholarship to 15 meritorious students.

**B1.10.13 Department: Physics**

Number of faculty members (as on 31 December 2016)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	08
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**HOD:** Dr. Anshuman Dalvi**Contact details:** adalvi@pilani.bits-pilani.ac.in, 01596-515288**Number of PhD Scholars:** 20 (including 01 part-time student)**Thesis Submitted:** 04**RESEARCH ACHIEVEMENTS**

Projects: (ongoing projects, sanctioned/completed this year): 21

S.N.	Title	Sponsoring Agency	Amount (in lacs)	P.I.	Current Status
1	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems.	DST Major Project	Rs. 53.01	Dr. D. D. Pant	Ongoing
2	Steady state measurements of Fluorescent molecules in restricted environments	UGC Major Project	Rs. 11.63	Dr. D. D. Pant	Completed
3	Detection of contaminants in water using functional ultrathin films (Sub Project of Rain Water Harvesting Prof Rajiv Gupta)	Waste Water Energy Programme of BITS Pilani	Rs 9.32 (Total Project fund:Rs 91 lacs)	Dr. Raj Kumar Gupta (Co-PI) PI:Prof Rajiv Gupta	Ongoing
4	Investigations on Quark-Gluon Plasma through quarkonia suppression in QCD matter.	DST	Rs. 11.40	Dr. Madhukar Mishra	Completed
5	A multiple-scattering computing platform for nanomaterials	Marie Curie International Research Staff Exchange Scheme (IRSES) of the European Commission (EC) (7 <sup>th</sup> Framework Programme (FP-7))	€25,200	Dr. Rakesh Choubisa (Coordinator: Dr. D. Sebilliau, CNRS (France))	Completed
6	The study of post-reionization HI distribution using the redshifted 21-cm signal and Ly-alpha forest towards understanding cosmic acceleration	DST fast track	Rs 10.38	Dr. Tapomoy Guha Sarkar	Ongoing
7	Study of laser interaction with atomic clusters and preformed plasmas	DST Fast Track (ongoing)	Rs. 15	Dr. Amol Holkundkar	Ongoing

S.N.	Title	Sponsoring Agency	Amount (in lacs)	P.I.	Current Status
8	Preparation and Characterization Thin films of electrochromic polymer and fabrication of smart pixel display	CSIR	Rs.14.1	Dr S. Sindhu	Ongoing
9	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Method	BITS-PILANI- SEED GRANT SCHEME	R. 5.2	Dr. Niladri Sarkar	Completed
10	Thermodynamics studies on force induced unzipping DNA in crowded environment	DST Major	Rs. 18.64	Dr. Navin Singh	Ongoing
11	EXAFS Investigations on Polymer nanocomposites for conductivity-structure correlation	DAE CRS	11	Dr. Anshuman Dalvi	Approved
12	Investigations on Li+ ion conducting glass-ceramics containing NASICON structured nano crystallites	DST SERB	40	Dr. Anshuman Dalvi	Approved
13	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	DST	19.7	Dr. Amol R. Holkundkar	Approved
14	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	DST	19.1	Dr. J.N. Bandyopadhyay	Approved
15	Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	DST	16.11	Dr. M. Mishra	Approved
16	Theoretical Study of Electron impact double ionization of atoms and molecules	DST	22.63	Dr. R. Choubisa	Approved

#### **PUBLICATIONS- RESEARCH ARTICLES, BOOKS, CHAPTERS, CONFERENCE PROCEEDINGS)**

##### **Book Edited and Research Articles**

##### **DEPARTMENTAL ACTIVITIES**

(Conferences, seminars and workshops, invited talks, significant new equipment/ experimental facility):

##### **Significant new equipment/experimental facility installed in the department**

1. Department has procured fiber optics based spectrophotometer from Ocean Optics. The instrument is installed and experiments like (a) Determination of refractive index of liquids (b) Determination of optical pitch by Bragg reflection are designed as a part of advanced physics laboratory course. Department has spent approximately Rs. 4 lakhs from departmental CAPEX grant.
2. Department of Physics took an initiative to build a high performance cutting edge computing facility to fulfill the computational needs of the Department in the frontier areas of research like Condensed Matter Physics, Plasma Physics, Nuclear and Particle Physics, Cosmology and Astrophysics, Complex systems,

Bio Physics, and Atomic and Molecular Physics. And also to enhance the quality of different teaching courses where the above-mentioned system can be an integrated part. This facility also can be used as a part of students project work and also for part of 1st degree thesis work. In view of this Department has added two more IBM servers each having 24 cores of processor, 64 GB of RAM and 3.6 TB of HDD to the existing computational facility of the department from the CAPEX grant of the Institute.

#### **Invited Talks given by BITS faculty**

1. Research and Development in the field of thin films of liquid crystals and nanomaterials by Dr. Raj Kumar Gupta at Colorado University Boulder, USA, on 13<sup>th</sup> July, 2016
2. Coincidence electron impact ionization processes on atoms and extended targets. By Dr. Rakesh Choubisa at Rennes during 1-2 July, 2016
3. Star Formation in Embedded and Obscured Clusters in the Carina Nebula by Dr. Kaushar Vaidya, at the Graduate Institute of Astronomy, National Central University, Taiwan, on 6<sup>th</sup> June, 2016
4. Effective time-independent analysis for periodically driven quantum systems by Dr. J. N. Bandyopadhyay at IISER-Kolkata on 19<sup>th</sup> October, 2016
5. Exploring grain boundary impedance in superionic systems: assessment of ionic liquids, ionic glasses and polymer electrolytes as possible fillers invited talk by Dr Anshuman Dalvi in 15<sup>th</sup> Asian Conference on Solid State Ionics at IIT Patna

#### **Invited talks arranged in the department**

1. The department organized an invited talk by Prof. Deshdeep Sahdev (Quazar Research and IIT, Kanpur) on "Towards a Technological Renaissance in India: Case-study of an innovative hi-tech start-up" on 14<sup>th</sup> October, 2016
2. The department organized an invited talk by Dr. Mani Chandra (Quazar Research) on "Supermassive Black Holes" on 14<sup>th</sup> October, 2016
3. Prof. Avinash Deshpande of Raman Research Institute gave a talk on "Pulsars" on 1<sup>st</sup> April, 2016

#### **Workshop/Conference/Event organized in the department**

##### **Conferences attended/papers presented**

1. EUSpec Training School on Multiple Scattering Codes by Dr. Rakesh Choubisa at the University of Rennes, France, during June 27-30, 2016
2. 26<sup>th</sup> Stat Phys by Dr. Navin Singh at Lyon, France, during 18-22 July, 2016
3. Graphene Oxide/PEDOT: PSS Nano Composite to Improve Hole Transportation in Organic Light emitting devices by Dr. S. Sindhu, at Singapore during 3-8 July, 2016
4. Fabrication and Characterization of Electrochromic Pixel Display Using Di-isopropylbenzyl derivative of Poly (3,4-propylenedioxythiophene) by Dr. S. Sindhu, at Singapore during 3-8 July, 2016
5. A multiple scattering approach to (e, 2e) spectroscopy by Dr. Rakesh Choubisa at Moscow during 23-26 August, 2016
6. Self-similar fractal spectrum in quantum mechanical systems by Dr. Jayendra N. Bandyopadhyay in CNSD2016 at IISER-Kolkata during 15-18 December, 2016

##### **National and International Collaborations**

Department has several collaborations with different national and internally reputed institutes. Some of the institutes are listed as follows. A short notes on the selective collaborative work with the research outputs are also described.

1. Bengal Engineering and Science University, Shibpur, Howrah, West Bengal, India.
2. RRI, Bangalore
3. CEERI, Pilani
4. Physical Research Laboratory, Ahmedabad.
5. University Illinois at Urbana Champaign
6. Tata Institute of Fundamental Research

7. Aryabhata Research Institute of Observational Science, Nainital
8. Swiss Federal Institute of Technology Lausanne(EPFL), Switzerland
9. University of Bremen, Germany
10. University of Nottingham, UK
11. Bhabha Atomic Research Centre, Mumbai
12. Jain University, Bangalore
13. Missouri State university Springfield, USA
14. Universite de Rennes1 (France)
15. LNF, INFN, Frascati (Italy)
16. Institute of Physics, Academy of Sciences of the Czech Republik, Prague
17. Department of Physics, Banaras Hindu University, Varanasi
18. Institute of Physics, Bhubaneswar
19. National Central University, Taiwan
20. University of Illinois at Urbana-Champaign, USA
21. Warsaw University of Technology, Poland
22. Indian Institute of Technology, Roorkee
23. VECC, Kolkata
24. IISER, Pune
25. Chalmers University of Technology, Gothenburg, Sweden
26. Indian Institute of Technology Kharagpur
27. National Centre for Radio-Astrophysics Pune
28. Max-Planck Institute for the Physics of Complex Systems, Dresden, Germany
29. UGC-DAE-CSR Indore

## DISCIPLINE ASSOCIATION WORK HIGHLIGHTS

### 1. Astronomy Club

The department houses an astronomical observatory that is equipped with two telescopes, a 6" refracting telescope, and an 11" Celestron's Schmidt-Cassegrain telescope which is a fully computerized telescope. The observatory has recently procured a CCD camera which can be used with the 11" telescope to obtain long-exposure, high quality images, of nebulae and star-clusters. These images are stored in computers, and later analyzed to obtain photometric magnitudes of stars. Students interested in observational astronomy become a part of a club known as the Astro-Club. At any point in time, there are 30-40 students in this club across different disciplines and years, and a faculty member of the physics department is appointed as the faculty-in-charge of the club. Currently, Dr. Kaushar Vaidya is the faculty-in-charge of the Astro-club. With the guidance of Dr. Kaushar Vaidya, the Astro-club makes a regular use of both the telescopes to observe celestial objects on a fortnightly basis. In addition, following are the activities of the Astro-club.

**Public Observation Sessions** - They conduct regular astronomical observation sessions (sky watch) for general public, i.e. entire BITS community of students and staff, twice during a semester.

**Sky Watch for Faculty/Staff Families** – In the second week of October, 2016, the club organized a sky-watch followed by a lecture exclusively meant for faculty and staff families. It saw a large participation of over 90 people. Such events will be organized on a regular basis to inspire young kids into the beautiful world of Astronomy.

**Space Week Celebration** – During the world space week, October 4-11, the club organizes several talks by BITS faculty, experts from other places in India, and sometimes abroad (online talks) in addition to sky watch sessions for the public.

**APOGEE** – During the technical festival of BITS Pilani, APOGEE, the club organizes telescope making workshop. The club purchases components of a telescope from a vendor in Delhi and participants work in teams to make 6" telescopes which participants take back home with themselves. The club also organizes sky-watch sessions for all participants from across the country during the APOGEE.

## 2. Physics Association

All students and faculty are default members of B5 (Physics) Association at BITS Pilani. A 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. Kaushar Vaidya is the faculty-in-charge of the association. Some of the yearly activities of the association are as follows:

**APOGEE Projects** - The association invites entries for physics projects for participation in the BITS technical festival, APOGEE. It then requests a team of faculty from the department to select the good entries for the participation and then helps the individuals/teams in show-casing these projects during the festival.

**Teacher's Day Celebration** – Since last two years the association celebrates teacher's day for the physics faculty. A program including tributes to faculty, some games among the team consisting of faculty and students, are planned to felicitate the faculty.

## 3. In APOGEE 2016, Physics Society organized following events:

Physics Society organized "Physics of the Impossible" in APOGEE 2016: a quiz event to test student's fundamental concepts in physics where they had to explain the physics behind some phenomena (naturally/artificially occurring).

Around 35 teams, each team of 2 members, participated in the event. In addition to this, students prepared projects and participated in demonstration of those. Plus on an individual basis they presented their work in paper presentation event of the PEP team on campus. Mr. Souradeep Bhattacharya won the best paper award for his work on "Star Formation in an embedded cluster, Tr 16-SE" in the Physics category.

## 4. In 1st semester,2016-2017, following activities have been organized by society:

### Physics Remedial Classes for the first year course, Mechanics Oscillations and Waves

For the first year students coming from Hindi medium schools, and for those having difficulty in coping with the learning environment at BITS Pilani, the ACC organizes remedial classes in the late evening hours or on Sundays with the help of faculty of the respective departments. In the semester I 2016-2017, about 8 remedial classes for the physics course Mechanics Oscillations and Waves, each of an average duration 2 hours, were arranged. Dr. Srijata Dey, Dr. Debashish Bandyopadhyay, Dr. Kaushar Vaidya, Dr. Rishikesh Vaidya, Dr. Tapomoy Guha Sarkar, and Dr. Niladri Sarkar taught these classes.

## 6. Physics Talks by Embryo Club

The Embryo Club is a forum for on-line, live and interactive lectures, run by students and faculties of BITS-Pilani. It aims to foster strong collaboration of BITS students and BITS faculty with the alumni and friends of BITS Pilani. The club aims to give students an exposure to the cutting edge research areas through lecture series and collaborative projects. The students also get an opportunity to network with Alumni and friends of BITS, who are reputed academicians and industry leaders. Under a highly ambitious project, BITS Connect2.0, BITS has acquired a state of the art telepresence solutions across all campuses. Dr. Rishikesh Vaidya and Dr. Amol Holkundkar of physics department are the faculty-in-charge of the Embryo Club. Following are some of the physics (only) talks organized by the Embryo Club during the year 2015-16:

1. David Kaiser of Massachusetts Institute of Technology, USA, on Quantum Entanglement on August 20, 2016
2. Dr. Harry Cliff of University of Cambridge, England, on Have we reached the end of Physics, on April 1, 2016

The information about lectures arranged (year-wise) can be found at the website of the club:<http://embryo.bits-pilani.ac.in/>

## AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

### Students who have opted for higher studies in the year 2015-2016

1. Steffie Ann Thayil, Ph.D. Program at the Rutgers University, USA
2. Saumya Sahai, Ph.D. Program at the Cornell University, USA
3. Adbhut Gupta, Ph.D. Program at the Virginia Tech University, USA
4. Adama Prakhar Goyal, Ph.D. Program at the University of Florida, USA
5. Vivek Sharma, Ph.D. Program at the University of Virginia Tech, USA
6. Niranjana Natekar, Ph.D. Program at the University of Minnesota, USA
7. Malay Singh, M.S. Program at the Technical University of Delft, Netherlands



**FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION****International Collaborations**

1. Dr. Amol Holkundkar has been invited by Prof. Mattias Marklund of Chalmers University of Technology, Gothenburg, Sweden for a week (24th Oct 2015 to 31st Oct 2015) to discuss the possible collaborative research projects.
2. Dr Kaushar Vaidya was invited to visit Graduate Institute of Astronomy at the National Central University, Taiwan, during May 29-June 11, 2016, as a guest scientist for collaborative research with full financial support.
3. Dr. Raj Kumar visited the University of Colorado, Boulder, USA during June 5 – July 25, 2016 under the university immersion program.
4. Dr. Madhukar Mishra visited the Heidelberg University, Germany, during May 19-July 17, 2016 under the university immersion program.
5. Dr. Jayendra Nath Bandopadhyay was invited to visit Max-Planck Institute for the Physics of Complex Systems IMPI-PKS), Dresden, Germany, during June 10 - July 10, 2016, as a guest scientist with full financial support.
6. Dr. Rakesh Choubisa visited Universite de Rennes during May 25-July 18, 2016, as a Marie Curie Researcher in the MSNano project funded by European Commission.

**CHAPTERS in Book:**

1. Revisiting Normal Ionic Systems: Tailoring Electrical Transport by Ionic Liquid Dispersion” Anshuman Dalvi Chapter 7, P77, in ENERGY STORAGE AND CONVERSION: MATERIALS AND DEVICES ED: ASHOK KUMAR Narosa Publications (2016) (to be published)
2. "Sol-gel Synthesized Ionic Liquid Incorporated Novel Glassy Ionic System" Rajinder Shivran, S. C. Sivasubramanian and A. Dalvi Chapter 13, P143 in ENERGY STORAGE AND CONVERSION: MATERIALS AND DEVICES ED: ASHOK KUMAR Narosa Publications (2016) (to be published)

**Papers Published in refereed journals:**

1. "Opening of DNA due to force applied on different locations" Amar Singh, Tushar Modi, and Navin Singh, Phys. Rev. E, 94 (2016) 32410
2. "Interaction of xenon clusters with intense sub-cycle laser pulses" P. Venkat and A. R. Holkundkar, Phys. Plasmas, 23 (2016) 123106
3. "Efficient ion acceleration by relativistic self induced transparency in subwavelength targets" S. Choudhary and A. R. Holkundkar, Eur. Phys. J. D, 70 (2016) 234
4. "Differential stability of DNA based on salt concentration" A. Maity, A. Singh, & N. Singh, Eur Biophys J, 46 (2017), 33
5. "Focusing effects in laser-electron Thomson scattering" C. Harvey, M. Marklund, and A. R. Holkundkar, Phys. Rev. Accel. Beams, 19 (2016), 94701
6. "Magnetism, Structures and Stabilities of Cluster Assembled TM@Si Nanotubes (TM=Cr, Mn and Fe): A density functional study" Kapil Dhaka and Debashis Bandyopadhyay, Dalton Transactions, 45 (2016), 12432-12443
7. "Fast response in TN Liquid crystal cells: Effect of functionalized carbon nanotubes" Jitendra Kumar, V. Manjuladevi, R.K Gupta & S. Kumar, Liquid Crystals, 43 (2016), 488-492
8. "Surface plasmon resonance sensor based on a new opto-mechanical scanning mechanism" Devanarayanan V. P., V. Manjuladevi, & R. K. Gupta, Sensors & Actuators B: Chemical, 227 (2016), 643-648
9. "Highly selective low temperature acetone sensor based on hierarchical 3D TiO<sub>2</sub> nanoflowers" B. Bhowmik, V. Manjuladevi, R. K. Gupta, & P. Bhattacharyya, Sensors Journal (IEEE), 16 (2016), 3488-3495
10. "Langmuir monolayer assisted formation of cadmium sulfide nanoparticles at air-water interface and its role in alignment of bulk liquid crystal" C. Karthik, V. Manjuladevi, R. K. Gupta, RSC Advances, 6 (2016), 46607-46615
11. "Thin films of discotic liquid crystals and their applications", R.K. Gupta, V. Manjuladevi, C. Karthik, Keerti Choudhary, Liquid Crystals, DOI: 10.1080/02678292.2016.1195454, (2016)
12. "Measurement of optical anisotropy in ultrathin films using surface plasmon resonance" Devanarayanan VP, Manjuladevi V., Monika Poonia, RK Gupta, SK Gupta, and J. Akhtar, Journal of Molecular Structure (Elsevier), 1103 (2016), 281-285

13. "Fluorescence Quenching of a Benzimidazolium-based Probe for Selective Detection of Picric Acid in Aqueous Medium" Sunita Joshi, Santosh Kumari, Eduardo Chamorro, D. D. Pant, and Rajeev Sakhuja, *ChemSelect*, 1 (2016), 1-8
14. "Interaction of 6-methoxyquinoline with anionic sodium dodecylsulfate micelles: Photophysics and rotational relaxation dynamics at different pH", Y. Tej Varma and D. D. Pant, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 158 (2016), 9-17
15. "Highly sensitive fluorescent imidazolium-based sensors for nanomolar detection of explosive picric acid in aqueous medium" Santosh Kumari, Sunita Joshi, Tania C. Cordova-Sintjago, D. D. Pant, Rajeev Sakhuja, *Sensors and Actuators B: Chemical*, 229 (2016), 599-608
16. "Design and Synthesis of Amino acid Appended Azo Dye Hybrid : Characterization, Solvatochromic and Quantum-Chemical Calculations - Using Experimental and Theoretical Approach" Y. Tej Varma, D. S. Agarwal, A. Sarmah, Yukti, Rajeev Sakhuja and D. D. Pant, *Journal of Molecular Liquids*, 221 (2016), 1022-1028
17. "pQCD approach to charmonium regeneration in QGP at the LHC" S. Ganesh and M. Mishra, *Nucl. Phys. A*, 947 (2016), 38
18. "Study of adsorption and dissociation of H<sub>2</sub> molecule on RgnRh (n=1-10) clusters: A first principle investigation" Ravi Kumar Trivedi and Debashis Bandyopadhyay, *International Journal of Hydrogen Energy*, 41 (2016), 20113-20121
19. "Fabrication of fast switching electrochromic window based on poly(3,4-(2-dimethylpropylenedioxy) thiophene) thin film" L. P. P. Raja, N. C. Shivaprakash, S. Sindhu, *Journal of Material Science: Materials in Electronics*, Vol 27, Issue 6, 66035-66042, 2016
20. "Constraining neutrino mass using the large-scale H I distribution in the post-reionization epoch" A. K. Pal, T. Guha Sarkar, *Monthly Notices of the Royal Astronomical Society* 459 (4), (2016) 3505-3511
21. "Prospects of probing quintessence with HI 21-cm intensity mapping survey", A Hossain, S. Thakur, T. Guha Sarkar, A. A. Sen, *Monthly Notices of the Royal Astronomical Society* , 463 (4) , (2016), 3492-3498,
22. "Upsilon suppression at LHC energy based on temperature dependent formation Time," S. Ganesh and M. Mishra, *DAE-BRNS Symposium Springer Proc. Phys.*, 174 (2016), 115
23. "Study of the Indus Valley Scripts through Linguistic and Markov Chain Methods", Niladri Sarkar, *Indian Journal of History of Science*, 51.2.1 (2016), 292-302
24. "Cosmology and Astrophysics using the Post-Reionization HI", Tapomoy Guha Sarkar, A.A Sen, *Journal of Astrophysics and Astronomy*, 37 (4), (2016)
25. "Redshifted HI 21-cm Signal from the Post-Reionization Epoch: Cross-Correlations with Other Cosmological Probes", Tapomoy Guha Sarkar, K. K. Datta, A. K. Pal, T. R. Choudhury, S. Bharadwaj, *Journal of Astrophysics and Astronomy*, 37 (2016), 26
26. "Phase transition in a Aubry-Andre system with rapidly oscillating magnetic field", Tridev Mishra, Rajath Shashidhara, Tapomoy Guha Sarkar, J. N. Bandyopadhyay, *Physical review A*, 94 (2016), 53612
27. "Understanding the Overall Shape of the Output Characteristics from the Change in the Channel Potential Profile for Nanowire FET", Niladri Sarkar, *Superlattices and Microstructures*, Accepted (Available online <http://dx.doi.org/10.1016/j.spmi.2016.11.025>), (2016)
28. "Experimental and Quantum Chemical calculations of Imidazolium Appended Naphthalene Hybrid in Different Biomimicking Aqueous Interfaces" Tej Varma Yenupuri, Lucia Mydlova, Devesh S. Agarwal, Ritika Sharma, Rajeev Sakhuja, Malgorzata Makowska-Janusik, and D. D. Pant, *Journal of Phys. Chem. A.*, 120 (2016), 6563-6574
29. Solvatochromic shift and estimation of dipole moment of synthesized coumarin derivative: Application as sensor for fluorogenic recognition of Fe<sup>3+</sup> and Cu<sup>2+</sup> ions in aqueous solution, Sunita Joshi, Santosh Kumari, Amrit Sarmah, Rajeev Sakhuja, D. D. Pant, *Journal of Molecular Liquids*, 222 (2016), 253-262
30. "Highly Selective Sensing of Li<sup>+</sup> in H<sub>2</sub>O/CH<sub>3</sub>CN via Fluorescence 'Turn-on' Response of a Coumarin-Indole Linked Dyad: an Experimental and Theoretical Study" Santosh Kumari, Sunita Joshi, Amrit Sarmah, D. D. Pant and Rajeev Sakhuja, *Journal of Fluorescence*, 26 (2016) 2177-2185.

**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 2016**

Position	Offered	Joined				Declined				Yet to Join			
	University	Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
Professor	-	-	-	-	-	-	-	1*	-	-	-	-	-
Associate Professor	1	-	1	-	-	-	-	-	-	-	1	-	-
Assistant Professor	44	15	10	12	7	10+9*	6	7+5*	3+5*	1	2	3	-
Lecturer	5	-	3	1	1	1*	3+2*	1+2*	1	-	-	-	-
Visiting Faculty	-	-	-	-	-	-	-	1*	-	-	-	-	-
<b>Total</b>	<b>76(50+26*)</b>	<b>50</b>				<b>31+26* = 57</b>				<b>7</b>			

\*Joined- offered in 2015

**3. OFF-CAMPUS RECRUITMENT**

Position	Total (offered)	Offered (details)					Joined (Total)	Joining (details)					Total	Declined (details)						
		Delhi	Pune	Chennai	Hyd	Bangalore		Mumbai	Delhi	Pune	Chennai	Hyd		Bangalore	Mumbai	Delhi	Pune	Chennai	Hyd	Bangalore
Professor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Associate Professor	-	-	-	-	-	-	2*	-	-	-	1*	-	1*	-	-	-	-	-	-	-
Assistant Professor	1	-	-	-	-	1	2*	-	-	-	1*	1*	-	1	-	-	-	-	1	-
Lecturer	3	-	1	2	-	-	6(3+3*)	-	1+1*	2+1*	1*	-	-	-	-	-	-	-	-	-
Instructors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4</b>	<b>4</b>					<b>10(3+7*)</b>	<b>3+7* = 10</b>					<b>1</b>	<b>1</b>						

\* Candidate Joined in 2016 and was offered in 2015

- 4. Faculty Performance Appraisals:** Performance Appraisal for 2015-16 is in process at all three campuses (institutes level). Contributions in three key performance areas, namely:- (i) teaching, (ii) research, and (iii) institutional contribution are being assessed. The assessments include self-appraisal, appraisal by the Head of the respective departments in consultation with the respective faculty, and/ or Divisional Dean, which is then followed by a cross campus committee assessment and then by university level committee. On the basis of appraisals, it is proposed to give the feedback soon to the faculty. Goal setting process for Dubai campus and Off-Campus faculty has also been done. Faculty are shared with appraisal assessments for the years 2013- 14 and 2014-15.

5. **Promotions:** This year, promotions were made for faculty at Pilani, Goa and Hyderabad campuses (18) and Faculty at Off-Campus (05). The following table illustrates the details of promotions:

Campus	Recommendations for Promotion as Assistant Professor	Recommendations for Promotion as Associate Professor	Recommendations for Promotion as Professor
Pilani Campus	-	05	1
Goa Campus	-	03	-
Hyderabad Campus	-	08	1
Dubai Campus	-	-	-
Off-campus	03	02	-
<b>Total</b>	<b>03</b>	<b>18</b>	<b>2</b>

6. **Change of superannuation age from 60 to 65:** Total 14 faculty, across the BITS campuses, were considered for change in age of superannuation from 60 to 65. Superannuation age was extended for 2 faculty members (one each from Pilani & Goa Campus) from 60 to 65, among eligible applicants.

7. **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. The following Faculty from across four campuses visited the industries as per details below:

S.No.	Name of the Faculty Member	Campus	Department	Industry Visited	Duration of the Visit
1	A. Amalin Prince	Goa	EEE & I	Institute for Plasma Research, Gandhinagar	June 10 - June 30, 2016
2	Mainak Banerjee	Goa	Chemistry	Syngenta Bioscience Pvt. Ltd.	June 01 - July 15 2016
3	Amrita Chatterjee	Goa	Chemistry	National Institute of Oceanography, Goa	June15-July 15, 2016
4	Punna Rao Ravi	Hyderabad	Pharmacy	Biocon-Bristol Myers Squibb, Bangalore	June 04 - July 15, 2016
5	Amit Nag	Hyderabad	Chemistry	Quazar Technologies	May 31 - June 30, 2016
6	Vikranth Kumar Surasani	Hyderabad	Chemical	Shell Technology Centre Bangalore	June 01-July 10, 2016
7	Yasvardhan Sharma	Pilani	CSIS	Hewlett Packard Enterprise, Bangalore, India	June 01 - July 22, 2016
8	S Murugesan	Pilani	Pharmacy	Hospira Healthcare India Pvt. Ltd. Chennai	June 01 - June 30, 2016
9	Sachin U Belgamwar	Pilani	Mechanical Engineering	Tata Advance Material Limited, Bengaluru	June 01 - July 15, 2016
10	Trupti Gokhale	Dubai	Biotechnology	National Chemical Laboratory, Pune	July 04 - July 22, 2016

8. **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. Eleven faculty from four campuses- Pilani, Goa,

Hyderabad and Dubai utilized this opportunity, as per details given below:

S.No.	Faculty's Name	Department	Campus	University Visited	Duration of the Visit
1	Prof. Bharti Khungar	Chemistry	Pilani	Chapman University, California (USA)	May 19 - July 17, 2016
2	Prof. K K Gupta	EEE	Pilani	Hiroshima University, Japan	June 01 - July 28, 2016
3	Prof. Madhukar Mishra	Physics	Pilani	Heidelberg University, Heidelberg, Germany	May 19 - July 17, 2016
4	Prof. Raj Kumar Gupta	Physics	Pilani	University of Colorado, Boulder, USA	June 05 - July 25, 2016
5	Prof. Shivi Agarwal	Maths	Pilani	Technical University of Ostrava, Ostrava, Czech Republic	May 29 - July 24, 2016
6	Prof. Radhika TSL	Maths	HYD	University of Wisconsin, Madison, USA	June 03 - July 15, 2016
7	Prof. Sajeli Begum A	Pharmacy	HYD	Meiji University, Japan	May 10 - June 20, 2016
8	Srinivas Morapakala	ME	HYD	University of Exeter, Cornwall Campus, Exeter, UK	May 25 - June 26, 2016
9	Prof. Anil Kumar	Maths	GOA	University of Newcastle Callaghan NSW, Australia	May 21 - July 22, 2016
10	Prof. Sachin Waigaonkar	ME	GOA	Poznan University of Technology, Poland	May 31 - July 15, 2016
11	Prof. Gomathi Bhavani R	EEE	Dubai	Ryerson University, Canada	June 20 - August 13, 2016

- 9. Online peer feedback in Performance Management System PMS:** This year, the online version of Peer Feedback was institutionalized for all the four campuses, which is expected to quicken the process.
- 10.** Apart from attracting and selecting talented and competent people, the division is also intensely focused on retaining the talent. Several staff welfare measures, relook on compensation and benefits, policies related to career growth and related guidelines, health and family welfare, housing, rewards and recognitions are under discussion.
- 11.** As many of these activities fall in line with core human resource management activities, it was proposed to create a human resource centre / office and appoint human resource manager in earlier years. In the year 2016, at Pilani Campus, one HR Manager and one Administrative Assistant to Dean FAD have been appointed to support the HR related activities. A senior HR manager, Mr. Sreekanth Reddy from ABG has been deputed to streamline HR activities of the institute and create a suitable structure. Relevant activities are initiated.

## 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 2016 the Practice School programme was operated at 443 stations, with 12 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4255 students and 160 faculty members. Categorization of PS stations is given below:

Sr.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	18 (25)	2 (3)
2.	Design, Development, Consultancy and Software Organization.	175 (155)	45 (49)
3.	National Research Laboratories and other Research centers	21 (32)	32 (29)
4.	Production, Manufacturing and Public Work Units	46 (43)	98 (94)
5.	Publishing Houses, News Agencies and Museums	1 (1)	5 (7)
<b>Total</b>		<b>261 (256)</b>	<b>182 (182)</b>

In 2016, an integrated practice school allotment for 4255 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 break up of students who were registered in PS-I, PS-II & PS for Higher Degree:

PS-I	Summer Term 2015-2016	(2096) 2184
PS-II	II Semester 2015-2016	(860) 762
	I Semester 2016-2017	(1075) 1072
<b>PS for Higher Degree</b>		
	II Semester 2015-2016	(246) 237
	I Semester 2016-2017	(03) 00
<b>Total</b>		(4280) 4255

**Note:-** The figures shown in brackets relate to the year 2016.

### PS-II Assignments: Institute's Contribution to Industrial Development

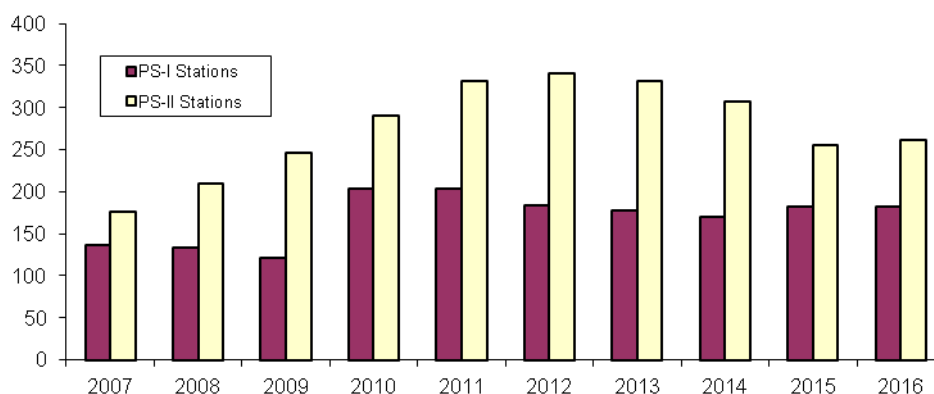
Apart from developing skills in professional judgment, data-handling, documentation, decision making ability, etc., in students, the PS-II assignments also relate to real-life problems of the host organizations. PS-II assignments listed in **Annexure 'A-11'** were completed by the final year students at their respective PS-II stations during the year 2016. 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 2184 students of Pilani (878), Goa (602) & Hyderabad (704) campuses accompanied by 100 faculty members attended Practice School-I and 2184 students attended Practice School-II. The entire Practice School-II operations were supervised by 60 faculty members residing at the respective locations. For the year 2016, 169 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.65,000/- p.m. at Nutanix Technologies India Pvt. Ltd, Bangalore. The average stipend is around Rs.21,000/- 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 95 new PS-II stations (Table 1) and out of pocket allowance was increased at 25 PS-II stations (Table 2).



**Table 1**  
**PS-II Stations Added during the Year 2016**

Sr.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
<b>AHMEDABAD</b>		
1.	VMS (Vakil Mehta Seth) Consultants Private Limited	Rs.6,000/-p.m.
<b>AJMER</b>		
2.	Toshniwal Industries Pvt. Ltd.	Rs.14,000/-p.m.
<b>BANGALORE</b>		
3.	Aditya Auto products & Engg (I) .P.Ltd.	Rs.12,000/-p.m.
4.	Apollo Tyres Ltd.	Rs.25,000/-p.m.
5.	Aurigo Software	Rs.35,000/-p.m.
6.	Azul Systems	Rs.25,000/-p.m.
7.	Biocon	Rs.7,000/-p.m.
8.	Capital One	Rs.50,000/-p.m.
9.	Cerner	Rs.22,000/-p.m.
10.	Dell R&D	Rs.25,000/-p.m.
11.	Ernst & Young Global Delivery Services	Rs.15,000/-p.m.
12.	GiftXOXO	Rs.10,000/-p.m.
13.	HolidayIQ.com	Rs.18,000/-p.m.
14.	Hortonworks	Rs.45,000/-p.m.
15.	Innovation Labs	Rs.25,000/-p.m.
16.	J P Morgan CIB-RFT	Rs.60,000/-p.m.
17.	Math Works India Private Limited	Rs.30,000/-p.m.
18.	Nvidia Graphics -Software division	Rs.30,000/-p.m.
19.	Oracle Financial Services Software Ltd. ( OFSS)	Rs.25,000/-p.m.

20.	Paypal	Rs.50,000/-p.m.
21.	Pilani Experts Technology Labs Pvt Ltd	Rs.10,000/-p.m.
22.	Price Waterhouse Coopers (PWC)	Rs.25,000/-p.m.
23.	Probe Equity Research	Rs.15,000/-p.m.
24.	Qualcomm India Private Limited	Rs.30,000/-p.m.
25.	Samsung R &D Institute	Rs.35,000/-p.m.
26.	Skoda Auto India Pvt. Ltd.	Rs.14,000/-p.m.
27.	SmartLivez	Rs.25,000/-p.m.
28.	Tata Advanced Materials Ltd	Rs.10,000/-p.m.
29.	Tata Consultancy Services	Rs.20,000/-p.m.
30.	Think and learn	Rs.40,000/-p.m.
31.	TYCO International Ltd	Rs.12,000/-p.m.
32.	Vitacloud	Rs.22,000/-p.m.
33.	Vymo	Rs.20,000/-p.m.
<b>BHUBANESHWAR</b>		
34.	Aditya Birla Skills Foundation-( part of Aditya Birla Group)	Rs.20,000/-p.m.
35.	Mindfire Solutions	Rs.21,000/-p.m.
36.	Verve Consulting Pvt Ltd	Rs.10,000/-p.m.
<b>CHENNAI</b>		
37.	HCL Technologies	Rs.18,000/-p.m.
38.	Price Waterhouse Coopers (PWC)	Rs.25,000/-p.m.
39.	Tata Chemical Innovation Center	Rs.10,000/-p.m.
40.	Tube Investments of India Limited	Rs.8,000/-p.m.
41.	Vestas Technology Ltd.	Rs.15,000/-p.m.
42.	Zoho Corporation	Rs.18,000/-p.m.
<b>DELHI</b>		
43.	Cubical laboratories	Rs.12,000/-p.m.
44.	Price Waterhouse Coopers (PWC)	Rs.25,000/-p.m.
45.	Quality council of India	Rs.25,000/-p.m.
<b>GURGAON</b>		
46.	American Express India	Rs.30,000/-p.m.
47.	Busigence	Rs.20,000/-p.m.
48.	DB MUdra Group	Rs.10,000/-p.m.
49.	Decisionresourcesgroup	Rs.25,000/-p.m.
50.	Gabriel India Ltd	Rs.8,000/-p.m.
51.	Genpact	Rs.15,000/-p.m.
52.	Pluss Advanced Technologies Pvt. Ltd.	Rs.12,000/-p.m.
53.	Urban Clap	Rs.50,000/-p.m.
<b>HOSUR</b>		
54.	Gabriel India Ltd	Rs.8,000/-p.m.
<b>HYDERABAD</b>		
55.	Endless Robotics Pvt. Ltd.	Rs.5,000/-p.m.



56.	Freescale Semiconductor India Pvt. Ltd.	Rs.20,000/-p.m.
57.	GGK Technologies.	Rs.20,000/-p.m.
58.	Hyderabad Eye Research Foundation (HERF) the research arm of LV Prasad Eye Institute	NILL
59.	Industry ARC	Rs.12,000/-p.m.
60.	John F Welch Technology Center (GE)	Rs.20,000/-p.m.
61.	Market Forecast	Rs.18,000/-p.m.
62.	Microsoft	Rs.35,000/-p.m.
63.	Price Waterhouse Coopers (PWC)	Rs.25,000/-p.m.
64.	Qualcomm India Private Limited	Rs.30,000/-p.m.
65.	ReportGarden Technologies Pvt. Ltd.	Rs.20,000/-p.m.
66.	YUPPTV	Rs.25,000/-p.m.
<b>JAIPUR</b>		
67.	NBC Bearings	Rs.4,000/-p.m.
68.	Rajputana Constructions	Rs.15,000/-p.m.
<b>JODALLI</b>		
69.	Spicer India Ltd.	Rs.8,000/-p.m.
<b>KOLKATA</b>		
70.	Bundl Technologies Private Limited (Swiggy)	Rs.20,000/-p.m.
71.	HedgeQuants Capital Advisory LLP	Rs.50,000/-p.m.
<b>MUMBAI</b>		
72.	Ernst & Young L.L.P.	Rs.15,100/-p.m.
73.	HDFC Bank	Rs.20,000/-p.m.
74.	Henkel	Rs.20,000/-p.m.
75.	J P Morgan -CIB	Rs.60,000/-p.m.
76.	Nomura Global Markets & Global Finance Analyst Division	Rs.50,000/-p.m.
77.	Nomura Information Technology Division	Rs.50,000/-p.m.
78.	Price Waterhouse Coopers (PWC)	Rs.25,000/-p.m.
79.	Skoda Auto India Pvt. Ltd.	Rs.14,000/-p.m.
80.	Skumars Online	Rs.10,000/-p.m.
<b>NAVI MUMBAI</b>		
81.	Hindalco Innovation Centre - Semifab Talaja	Rs.10,000/-p.m.
<b>NOIDA</b>		
82.	Edcil India Ltd	Rs.10,000/-p.m.
83.	HCL Technologies	Rs.18,000/-p.m.
84.	Nucleus Software Export Ltd	Rs.25,000/-p.m.
<b>PANTNAGAR</b>		
85.	Tata Motors	Rs.18,000/-p.m.
<b>PATIALA</b>		
86.	Rajputana Constructions	Rs.17,000/-p.m.
<b>PUNE</b>		
87.	Alfa Laval (India) Limited	Rs.5,000/-p.m.

88.	Bundl Technologies Private Limited (Swiggy)	Rs.20,000/-p.m.
89.	Cadence Design Systems India Pvt Ltd.	Rs.20,000/-p.m.
90.	Gabrel India Ltd	Rs.8,000/-p.m.
91.	Mahle Beher India Pvt Ltd	Rs.8,000/-p.m.
92.	Oracle Financial Services Software Ltd. ( OFSS)	Rs.25,000/-p.m.
93.	Symantec Software Solutions Pvt. Ltd.	Rs.40,000/-p.m.
94.	vConstruct Private Limited	Rs.15,000/-p.m.
<b>USA</b>		
95.	Knox Payments	Rs. 34,000/-p.m.

Table 2

## Increase in Monthly Stipend at PS-II Stations during the Year 2016

Sr.No	PS-II Stations	Monthly Stipend / out of pocket allowance	
		During 2015	During 2016
1	Aditya Birla Science & Technology Company Ltd. , Mumbai	Rs.8,500/-p.m.	Rs.11,000/-p.m.
2	Amazon Development Center , Bangalore	Rs.30,000/-p.m.	Rs.40,000/-p.m.
3	Amazon Development Center , Hyderabad	Rs.30,000/-p.m.	Rs.40,000/-p.m.
4	Analog Devices , Bangalore	Rs.20,000/-p.m.	Rs.25,000/-p.m.
5	Century Rayon , Mumbai	Rs.6,000/-p.m.	Rs.7,500/-p.m.
6	DBOI (Deutsche Bank) , Mumbai	Rs.15,000/-p.m.	Rs.30,000/-p.m.
7	Here Maps , Mumbai	Rs.20,000/-p.m.	Rs.30,000/-p.m.
8	IMI Mobile , Hyderabad	Rs.18,000/-p.m.	Rs.25,000/-p.m.
9	Infinera, Bangalore	Rs.30,000/-p.m.	Rs.35,000/-p.m.
10	J.P. Morgan Chase , Bangalore	Rs.15,000/-p.m.	Rs.26,250/-p.m.
11	JDA Software Solutions , Bangalore	Rs.18,000/-p.m.	Rs.25,000/-p.m.
12	JDA Software Solutions , Hyderabad	Rs.18,000/-p.m.	Rs.26,000/-p.m.
13	John F Welch Technology Center (GE) , Bangalore	Rs.20,000/-p.m.	Rs.25,000/-p.m.
14	Media Iq Digital , Bangalore	Rs.20,000/-p.m.	Rs.26,500/-p.m.
15	Mercedes Benz , Bangalore	Rs.12,000/-p.m.	Rs.16,000/-p.m.
16	Mordor Intelligence , Hyderabad	Rs.14,000/-p.m.	Rs.17,000/-p.m.
17	Morningstar , Mumbai	Rs.30,000/-p.m.	Rs.35,000/-p.m.
18	Nomura Global Markets & Global Finance Analyst Division , Mumbai	Rs.35,000/-p.m.	Rs.50,000/-p.m.
19	Nvidia Graphics , Bangalore	Rs.25,000/-p.m.	Rs.30,000/-p.m.
20	Nvidia Graphics , Hyderabad	Rs.25,000/-p.m.	Rs.30,000/-p.m.
21	Nvidia Graphics , Pune	Rs.25,000/-p.m.	Rs.30,000/-p.m.
22	Oracle India Pvt Ltd. , Bangalore	Rs.25,000/-p.m.	Rs.35,000/-p.m.
23	Oracle India Pvt Ltd. , Hyderabad	Rs.25,000/-p.m.	Rs.35,000/-p.m.
24	Tata Motors , Pune	Rs.12,000/-p.m.	Rs.18,000/-p.m.
25	VMS (Vakil Mehta Seth) Consultants Private Limited , Mumbai	Rs.8,000/-p.m.	Rs.10,000/-p.m.

**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.

**Academic Research****First Degree Thesis**

During the year, 332 First-Degree thesis projects have been completed at Pilani campus. The list of completed First-Degree thesis during Second Semester 2015-2016 and First Semester 2016-2017 is given in **Annexure 'B1-9'**.

**Higher Degree Dissertation**

During the year, 99 Higher Degree dissertation projects have been completed in Pilani campus. The list of completed Higher Degree Dissertations during Second Semester 2015-2016 and First Semester 2016-2017 is given in **Annexure 'B1-10'**.

**Ph.D. Programme****(a) Award of Ph.D. Degree (viva conducted)-Pilani camous**

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
1	2007PHXF427P	Vinita Kumari	Association study, analysis for genetic and environmental interaction of variants in candidate genes for inflammation (ICAM-1 CFH) and neuroprotection (PEDF, EPO) in type 2 diabetic retinopathy patientsw from south India	2016	Biological Sciences	S. Sripriya
2	2010PHXF041P	M.K.Janani	A Clinico-Molecular Biological and Genotypic study on epstein - Barr virus in Chennai population	2016	Biological Sciences	J. Malathi; Sanjay Kumar
3	2011PHXF401P	Madhu Sehrawat	Financial Development, Inflation and Economic Growth in India : Issues and Evidences	2016	Management	A.K. Giri
4	2006PHXF410P	Jayashree Mahesh	'Indian' Management Practices in the I.T. Sector - An experimental	2016	Management	Anil K. Bhat

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
			investigation			
5	2010PHXF036P	Rishi Man Chugh	A Study on differential growth-arrest of 3T3 fibroblasts used as feeders for epidermal stem cell propagation	2016	Biological Sciences	LK Yerneni
6	2009PHXF440P	Subhajit Majumder	Studies on Removal of Heavy Metals from Wastewater using Biofiltration	2016	Chemical	Suresh Gupta; Smita Raghuvanshi
7	2008PHXF004P	N.Mehala	Query Content Aware Strategies for Performance Improvement of Search Engines	2016	CSIS	Poonam Goyal
8	2010PHXF401P	C. Karthik	Studies on Thin Films of Liquid Crystalline Molecules	2016	Physics	Raj Kumar Gupta
9	2008PH29003P	Manoshi Gayen	Revolutionary Approach for Inactivated Vaccine Production and Radioprotection using Mn <sup>2+</sup> Complexes from Deimocous radiodurans	2016	Biological Sciences	RK Maheshwari; AK Das
10	2011PHXF412P	Pooja Joshi	Relationship between Macroeconomic Variables and Stock Market Development: Evidences from the Indian Economy	2016	Economics & Finance	A.K. Giri
11	2011PHXF034P	Mandeep Singh	Monotone Iterative Techniques for a Class of Nonlinear Boundary Value Problems	2016	Mathematics	A.K. Verma
12	2007PHXF432P	Parikshit Kishore Singh	Design and Implementation of intelligent control schemes for pH neutralization process	2016	EEE	Surekha Bhanot; H. K. Mohanta
13	2009PHXF037P	Priti Jain	Design, Synthesis and Evaluation of Novel Agents to Treat Alzheimer's Disease	2016	Pharmacy	H.R. Jadhav
14	2007PHXF430P	Srinivasa Reddy K.	High Performance VLSI Architecture for Digital FIR Filter Design	2016	EEE	S.K. Sahoo
15	2010PHXF006P	Amar Singh	Thermodynamic Studies on DNA Unzipping	2016	Physics	Navin Singh
16	2003PHXF407P	Ravi S. Reosekar	An Empirical Investigation of Six Sigma Practices in Indian Manufacturing Industry	2016	Mechanical	S.D. Pohekar
17	2008PHXF406P	Ashish Runthala	Refinement and Improvement of Template Based Protein Modelling Algorithms	2016	Biological Sciences	S.Chowdhury
18	2006PHXF406P	Ruchika Sharma	Linguistic Deviations in Advertising Messages of Chocolates and Beverages: Its Impact	2016	Humanities and Social Sciences	S. Sharma

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
			Measurement on the Psychology of Children in India			
19	2008PHXF003P	Murli Manohar Pandey	Design and evaluation of mucoadhesive buccal delivery systems of felodipine	2016	Pharmacy	SY Charde
20	2009PHXF020P	Bharath Selvi	Biochemical Mechanisms of Homocysteine and its Role in RETINAL VASCULAR DISEASES	2016	Biological Sciences	KN Sulochana
21	2006PHXF006P	A Lingaiah	Physicians and Strategic Decision Making Processes in Hospitals	2016	Economics & Finance	NVM Rao
22	2009PHXF414P	Arghya Kusum Dhar	Desig, Synthesis and Pharmacological Screening of Potential 5-HT3 Receptor Antagonists for Co-morbid Disorders Like Depression and Anxiety	2016	Pharmacy	R.Mahesh
23	2005PHXF003P	K. Manjusha	Strategies and Algorithms for the Effective Control of E-mail Spam	2016	CSIS	Rahul Banerjee
24	2008PHXF019P	Srilatha Jasty	Identification and Characterization of Human Iris Pigment Epithelial Cells and Ciliary Pigment Epithelial Cells In-vitro for Retinal Stem/Progenitor Properties	2016	Biological Sciences	S.Krishnakumar
25	2010PHXF44P	Vimalin Jeyalatha	Prevention of Corneal Limbal Epithelial Cell Death during Collagen Crosslinking and the Pathogenic Mechanisms Involved in Progression of Keratoconus	2016	Biological Sciences	J. Malathi
26	2011PHXF039P	Pallavi Singh	Formulating Suitable Strategies to Improve Public Health Services in India with Focus on Infrastructure and Administration	2016	Pharmacy	Bhaskar Bose; SY Charde
27	2009PHXF001P	Emil Joseph	Design, Characterization and Evaluation of Polymeric and Solid Lipid Nanoparticulate Systems of Olanzapine for Enhanced Efficacy	2016	Pharmacy	R.N. Saha
28	2007PHXF415P	G.Meenakshi Sundaram	MEMS Resonator based Bandpass Filter Design for Wireless Communication Transceiver	2016	EEE	Kamaljit Rangra
29	2007PHXF007P	Swarna Kanchan	Evaluation of AP Endonucleases: An In-Silico Genomic and Modelling study	2016	Biological Sciences	Shibasish Chowdhury
30	2008PHXF407P	Vandana Agarwal	Computational Intelligence Based Face	2016	CSIS	Surekha Bhanot

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
			Recognition			
31	2010PHXF445P	R.Bhuvanasunder	Structural and Functional Characterization of Human Lysyl Oxidase through Molecular Cloning, Expression <i>In Silico</i> Studies	2016	Biological Sciences	KN Sulochana
32	2007PHXF013P	D.C.Kiran	Compiler assisted parallelization and optimization for multicore architecture	2016	CSIS	S.Gurunarayana n
33	2011PH30049P	K. Shalini	Quantification of Rural Accessibility and Development of a Need-Based Approach for Rural Road Network Planning	2016	Civil	AK Sarkar; A. P. Singh
34	2013PHXF108P	Praveen Kumar	Studies on the Role of chlamydia trachomatis Infection in the Pathogenesis of Reactive Arthritis Undifferentiated Spondyloarthritis	2016	Biological Sciences	Sangita Rastogi; Vishal Saxena
35	1996PH29707P	Manoj Kannan	Genetic and Epigenetic of L1 Retrotransposition in Mouse and Man	2016	Biological Sciences	David E. Symer
36	2012PHXF020P	Nisar Ahmad Mir	Organocatalytic Approach Towards the Synthesis of Five Membered Nitrogen Heterocyclic Compounds	2016	Chemistry	Indresh Kumar
37	2006PHXF421P	Girish Kant	Prediction and Optimization of Machining Parameters for Minimizing Surface Roughness and Power Consumption during Turning of AISI 1045 Steel	2016	Mechanical	KS Sangwan
38	2011PHXF027P	KAPIL	Transition metal doped semiconductor nanoclusters and nanotubes A Density functional Investigation	2016	Physics	D. Bandyopadhyay
39	2010PHXF039P	Vidhya Srinivasan	Understanding the Role of Adiponectin in Proliferative Diabetic Retinopathy; Design and Development of Therapeutic Molecules	2016	Biological Sciences	KN Sulochana; Suman Kapur
40	2010PHXF447P	S.Ganesh	Studies on Quark-Gluon Plasma at Large Hadron Collider	2016	Physics	Madhukar Mishra
41	2008PHXF024P	Kuldeep Gupta	Characterization of STAT Immune Signaling Pathway and ABC Transporters in Mosquitoes	2016	Biological Sciences	Lalita Gupta
42	2009PHXF411P	Arpit Bhargava	Mycosynthesis of Inorganic Nanoparticles and their evaluation in Catalysis and Nanofertilization	2016	Biological Sciences	Jitendra Panwar

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
43	2002PHXF026P	Samir Ramdas Kale	Design of Occupational Health and Safety Management Systems for Viscose Staple Fiber Division, Grasim Industries Limited	2016	Chem. Engg.	Arun Maity
44	2011PHXF029P	Ravi Kumar Trivedi	Study of Hybrid Semicndictpr mampc;isters amd Hydrpgem Strpage <ateroa;s nu ismg Demsofu Fimctopma; Theory	2016	Physics	D. Bandyopadhyay
45	2012PHXF021P	Panduga Ramaraju	Organocatalytic Synthesis of Six Membered Nitrogen Heterocycles and Related Alkaloids	2016	Chemistry	Indresh Kumar
46	2010PHXF026P	Sneh Lata Murotiya	Low-Power High-Speed and Compact Ternary VLSI Circuit Designs using Carbon Nanotube Field Effect Transistors	2016	EEE	Anu Gupta
47	2009PHXF444P	Lakshmanan R.	Adoption of Open Source Software in Information Technology Outsourcing Organizations	2016	CSIS	Sundaresan Krishnan Iyer
48	2009PHXF403P	Madhusmita Das	Portrayal of Women in Indian Television Advertisements - An exploratory Study	2016	Humanities and Social Sciences	Sangeeta Sharma
49	2011PHXF415P	Jitendra Kumar	Design and Analysis of Dielectric Resonator Antenna (DRA) for Wideband Applications	2016	EEE	Navneet Gupta
50	2010PHXF420P	Noorullah Baig MD	Syntheses, Molybdochemistry and Antimicrobial Studies of Glucose Derived Glycoconjugates	2016	Chemistry	AK Sah
51	2008PH29001P	Raghavendar Chandran	MicroRNAs as Biomarkers for Mild Traumatic Brain Injury and Post-traumatic Stress Disorders	2016	Biological Sciences	R.K. Maheshwari-
52	2011PHXF033P	Preeti Dubey	Stability Analysis and Simulation of Deterministic Models in Epidemiology and Immunology	2016	Mathematics	Balram Dubey; Uma S Dubey
53	2011PHXF046	Piyush Gupta	Dhananjahya's Dasarupa: The Analysis of Plot, Characters and Rasa in Shakespearean Hindi Film Adaptations (Omkaara, Maqbool and Angor)	2016	Humanities and Social Sciences	Devika
54	2009PHXF029P	Siju C.R.	Preparation and Characterization of Conjugated Polymer Thin Films for the Fabrication of Electrochromic Rear-view Mirror	2016	Physics	S.Sindhu

S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
55	2011PHXF017P	Parvej Alam	Chemistry of Iridium (III) based Aggregation Induced Emission Active Complexes: Applications in Sensing and Bioimaging	2016	Chemistry	IR Laskar
56	2011PHXF001[	Aishwarya Panday	Developmemnt of State of Charge Estimation Method and Power Optimization Strategies for Hybrid Elecric Vehicles	2016	EEE	Hari Om Bansal
57	2011PHXF408P	Prachi Sharma	Study on Electronic Behaviour of Nanocrystalline Silicon Thin Film Transistors	2016	EEE	Navneet Gupta
58	2009PHXF006P	Rout Popatrao	Design and evaluation offloating gastroretentive multi unit particulate systems for levodopa and carbidopa	2016	Pharmacy	SY Charde
59	2008PHXF428P	Mahesh Angira	Reconfigurable RF-MEMS Capacitive SPST and SPDT Switches for Wireless Communication Systems	2016	EEE	Kamaljit Rangra
60	2011PHXF032P	Suman Luhach	Scaffolding wring skills for indian college students through collaborative learning tasks using online forums	2016	Humanities and Social Sciences	Pushp Lata
61	2009PHXF410P	Mithilesh Kajla	Studying the Immunomodulatory role of blood induced anopheles heme peroxidase HPX15 and mosquito larvicidal properties of agave angustifolia	2016	Biological Sciences	Sanjeev Kumar
62	2009PHXF407P	A. Senthil Nagappan	Co-production of biodiesel and alphs linolenic acid from Desmodemus sp. MCC34	2016	Biological Sciences	S.K. Verma
63	2011PHXF003P	Yogesh K. Bhatshvar	Intelligenet Control and Optimization for Power Frequency Balance in Multi-Generation System	2016	EEE	HD Mathur
64	2009PHXF409P	Sonu	Study on Physicochemical Properties of Some Soft Matter Using Fluorescence and Cojnductometric Methods	2016	Chemistry	SK Saha
65	2004PHXF402P	Krishnakant T Upadhyaya	Analysis of Project Risk Managemnet Using Socio-Technical Systems Approach	2016	Management	Sunil D. Lakdawala
66	2007PHXF429P	Monika Sikri	Agile and Adaptive QoS Aware Management and Discovery in Service Oriented Systems	2016	CSIS	Dr. Rajkumar Goel



S.No	ID No	Name	Title of thesis	Year	Department	Supervisor/ Co-Supervisor
67	2011PHXF411P	Tej Verma Y.	Excited State Relaxation Dynamics of Fluorescent Molecules in Nano-sized Micellar Systems	2016	Physics	DD Pant
68	2010PHXF417P	Geetika Shree	An Empirical Study of Online Social Networking On well-being of Indian Users	2016	Humanities and Social Sciences	Kumar Neeraj Sachdeva
69	2011PHXF028P	Monika Poonia	Studies on Thin Films of Carbon Based Nanomaterials	2016	Physics	RK Gupta
70	2007PHXF431P	A. Ananda Kumar	Design and Development of Hybrid Controller for Z-Source Inverter: An Application of Electric Vehicle	2016	EEE	Dheerendra Singh

**(b) Ph.D. Thesis Submitted and Under Process of Evaluation (Pilani campus)**

S.No	ID No	Name	Title	Year	Dept	Supervisor
1	2009PHXF412P	Gagandeep Singh Saggi	Characterization of Apicoplast-targeted Isoprenoids Biosynthesis Pathway Enzymes from Plasmodium vivax and P. falciparum	2016	Biological Sciences	Vishal Saxena
2	2011PHXF026P	Jitendra Kumar	Effect of Nanomaterial Dopants on the Physical Properties of Liquid Crystals	2016	Physics	V. Manjuladevi
3	2010PHXF416P	Tantak Mukund P.	Design, Synthesis and Anticancer Activity Studies of Selected Indole-Based Heterocycles	2016	Chemistry	Dalip Kumar; Anil Kumar
4	2008PHXF015P	Sanjeev Saxena	Impact of Service Orientation on Organizational Performance	2016	Management	Prashant Mishra
5	2011PH42115P	C.V.Sunil Kumar	Design of Supplier Development Programs for Indian Manufacturing Companies - A Supply Chain Perspective	2016	Mechanical	Srikanta Routroy
6	2011PHXF402P	CV Jayanthi	Perspectives on Some Aspects of Ethical Awareness in Corporate India - an Empirical Study	2016	Management	U. Dhyani
7	2004PHXF021P	Swati D. Keskar	An Innovative Wearable Computing Framework for Early Detection of Cardiac Anomalies	2016	EEE	Rahul Banerjee
8	2008PHXF433P	Vineet Kumar	Iris Localization in Iris Recognition System : Algorithms and Hardware Implementation	2016	EEE	Abhijit Asati; Anu Gupta
9	2011PHXF031P	Arun Kumar Pooniya	Communication Strategies for Promoting Tourist:	2016	Humanities and Social Sciences	GS Chauhan

S.No	ID No	Name	Title	Year	Dept	Supervior
			Discursive Analysis of Television Campaign: Khushboo Gujarat Ki			
10	2010PHXF457P	Himanshu Kaushal	Studies on Immunological Responses to Parasite Surface Antigen as a Potential Vaccine Candidate against Human Leishmaniasis and Estimation of Asymptomatic Leishmania Infections in the Endemic areas	2016	Biological Sciences	Poonam Salotra; Sanjeev Kumar
11	2010PHXF009P	Ashok Sharma	Nickel Catalyzed Coupling Reactions and Studies on Pyranopyrazole Heterocyclic Molecules	2016	Chemistry	Paritosh Shukla
12	2008PH08411P	Deepali Gupta	Behavioral and Neuro-pharmacological Screening of Potential Serotonergic Ligands for the Management of Depression and Anxiety Co-morbid with Type-1 Diabetes Mellitus	2016	Pharmacy	R. Mahesh
13	2009PHXF432FP	Mayuri A. Digalwar	Energy Efficient Multicore Scheduling Algorithms for Real Time Systems	2016	CSIS	Sudeept Mohan; Biju K. R.
14	2009PHXF436P	Avinash Gautam	Design and Implementation of Efficient Coordination Algorithms for Multi-Robot Systems	2016	CSIS	Sudeept Mohan
15	2009PHXF038P	Ashish Mishra	Framework for Translation of C/C++ Applications on Reconfigurable Computing Systems	2016	EEE	Kota Solomon Raju; Abhijit Rameshwar Asati
16	2013PHXF307P	Rajiv Agarwal	An Empirical Study of Career Choices of Successors in Family Managed Businesses in Indian Context	2016	Economics & Finance	Keith D'Souza; Arya Kumar
17	2009PHXF026P	Vinita Tiwari	Design and Performance Analysis of High Speed Optical Communication Skills	2016	EEE	V.K.Chaubey
18	2009PHXF028P	Ritu Arora	A Framework and Tool for Supporting Collaborative Work in Software Development	2016	CSIS	Sanjay Goel; R.K. Mittal
19	2010PHXF422P	Kumari Suman	Crystal Engineering of Co-ordination Polymers (CPs) Derived from Bis-pyridyl amides and Analyzing Their Structural Transformations Triggered by External Stimulus	2016	Chemistry	Madhushree Sarkar

S.No	ID No	Name	Title	Year	Dept	Supervisor
20	2011PHXF025P	Keerti Choudhary	Studies on Liquid Crystals and Nanocomposites at Interfaces	2016	Physics	V. Manjuladevi
21	2011PHXF045P	Devanarayanan VP	Development of Surface Plasmon Resonance based Instrument with a Novel Opto-mechanical Scanning Mechanism	2016	Physics	RK Gupta
22	2011PHXF030P	Surender Pratap	Study of Low Dimensional Systems with NEGF and RMT Approach	2016	Physics	Niladri Sarkar
23	2011PHXF422P	Nirankush Dutta	Role of Trust in Online Social Media Marketing: A Model Building Approach	2016	Management	Anil K. Bhat
24	2009PHXF021P	RN Bansal	Investigating Impact of Perceived Leader's Behaviour on Employees' Motivation and Job Satisfaction in a Select Nonprofit Healthcare Organisation	2016	Management	Meenakshi Malhotra
25	2011PHXF406P	Rajni Singh	An Empirical Study on the Predictive Role of Socio-demographic and Socio-psychological Factors on Secondary School Students Achievements in Learning ESL	2016	Humanities and Social Sciences	SK Choudhary
26	2007PHXF424P	PA Boopathi	In vivo transcriptome Profiling of Plasmodium vivax Clinical Isolates: New Insights into Severe Malaria	2016	Biological Sciences	AK Das
27	2011PHXF420P	Rajnish Prakash Singh	Molecular Characterization of ACC Diaminase Producing Bacteria for Induced Systemic Tolerance in Wheat ( <i>Triticum aestivum</i> L.)	2016	Biological Sciences	PN Jha
28	2011PHXF011P	Gurpreet Kaur Sidhu	Analyzing Structural and Functional Evolutionary links between RuBisCO and Carbo Concentrating Mechanism (CCM) Proteins	2016	Biological Sciences	Sandhya Mehrotra
29	2011PHXF022P	Meenakshi Pilania	Organiodines in the Synthesis and Functionalization of some Novel Bioactive Heterocycles	2016	Chemistry	Dalip Kumar
30	2011PHXF018P	V.Arun	Organiodine-Promoted Strategies for the Construction of Selected Bioactive Heterocycles.	2016	Chemistry	Dalip Kumar

S.No	ID No	Name	Title	Year	Dept	Supervior
31	2011PHXF015P	Ganesh M. Shelke	Development of Synthetic Methods for Selected Indole-Based Heterocyclic Compounds from Indole, Isatin and Indoline-2-thione	2016	Chemistry	Anil Kumar; Mukund Jha
32	2011PHXF021P	Sunita Choudhary	Ionic Liquid-supported Sulfonyl Hydrazine and Iodine Reagents: Synthesis and Application in Selected Organic Transformations	2016	Chemistry	Anil Kumar
33	2011PHXF418P	Satish Mohanty	Vibro-Acoustic Health Monitoring of Bearings using Signal Processing Techniques	2016	EEE	KK Gupta; K Solomon Raju
34	2012PHXF418P	Kaushal Pathak	Contribution of Liver Fat and Visceral Fat to Cardiometabolic Risk In Diabetic Patients in India	2016	Pharmacy	Anookh Mohanan; HR Jadhav
35	2010PHXF405P	Sourabh Mundra	Design, Synthesis and Screening of Potential Anti-malarial Agents	2016	Pharmacy	R. Mahesh
36	2008PHXF436P	Palanivel G.	Compression and error robustness performance improvement of a scalable multi view video coding frame work	2016	EEE	Biju K. Joseph
37	2004PHXF434P	Dinesh Kumar Tyagi	Survivable Routing Mechanisms in Optical WDM Networks	2016	EEE	V.K.Chaubey
38	2009phxf032p	Mahaveer Singh	Design, Synthesis and Evaluation of Novel Anticancer Agents	2016	Pharmacy	H.R. Jadhav
39	2009PHXF431P	Pavan Kumar Potdar	Development of Agility Enhancement Strategies for Agile Manufacturing	2016	Mechanical	Srikanta Routroy

#### Ph.D. Aspirant's & Part-Time Ph.D. Scheme

This scheme has attracted candidates from industry, R&D, education and entrepreneurial sectors towards the Ph.D. programme of the Institute. A number of candidates have been permitted in this year to appear in the Ph.D. qualifying examination. Topics of research identified by these candidates are of relevance to the organization and the society as a whole. Association of many such candidates and their supervisors has given the academic benefits to the ongoing students through special lectures delivered by them.

**Ph.D. Qualifying examination:** 179 Ph.D. candidates under aspirants, faculty development scheme and students category, were permitted to appear in the Ph.D. qualifying examination in the year 2016.

#### CSIR/UGC/DST Fellowship

Funding agencies such as Council of Scientific and Industrial Research (CSIR), University Grants Commission (UGC), DST, ICMR has provided 95 Junior and Senior Research Fellowships to Ph D students of the Institute. These research fellows are working for their Ph.D. degree across the campuses.

#### Fellowships under Externally Funded Projects

Apart from the above mentioned fellowship there are full time research scholars working on projects sponsored by various agencies like DST, DBT, CSIR, ICAR, NPMAS, Incozen, Inspire, BRNS, MNRE, UGC, ICMR, TCS etc. There are 109 research scholars at present in such position.

**Sponsored Research Projects**

Research projects sponsored by agencies such as UGC, CSIR, DST, DBT, ICMR, DRDO, ICAR and such other sponsoring agencies are in operation. A list of on-going research projects is given below:

**Ongoing projects:**

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
1.	DBT project, "RNAi screening to study the role of <i>Aedes</i> ATP-binding cassette (ABC) transporters in immunity against blood-borne pathogens"	Sanjeev Kumar / Lalita Gupta)	DBT, Govt. of India, New Delhi	46.32 Lakhs, 3 Years
2.	Studying the impact of Anopheles gut microbial environment on immunity and Plasmodium development	Lalita Gupta	Indian Council of Medical Research (ICMR), Govt. of India	30 Lakh, 3 Years
3.	Mutant-p53 gain-of-function: its role in regulating lncRNA expression and associated chemoresistance in human cancer cells	Rajdeep Chowdhury/Sudeshna Mukherjee	DBT, Govt. of India, New Delhi	25 Lakhs; 3 Years
4.	Characterization of major components of (FeS) Cluster assembly pathway in <i>Plasmodium vivax</i>	Shilpi Garg	Department of Science and Technology (DST), Govt. of India, New Delhi	23 lakhs: 3 years
5.	Modeling immune response to Salmonella during typhoid	Sandhya Marathe	DST-SERB, Govt. of India, New Delhi	43.52 lakhs, 3 years
6.	Mechanistic studies on extracellular biosynthesis of metal nanoparticles	Jitendra Panwar	Department of Science & Technology (DST), Govt. of India, New Delhi	45.5 Lakh; 3 Years
7.	Investigation of the Effect of Carbonation on the Properties of Concrete	Dipendu Bhunia, S B Singh	DST, New Delhi	34.0
8.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	S. B. Singh	DST, New Delhi	25.93
9.	Impact of PMGSY Roads on Accessibility in Rural Areas	A. K. Sarkar, Ajit Pratap Singh	NRRDA, Ministry of Rural Development, Gov. of India	22.63
10.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99
11.	Strengthening of Local Soil using Fly Ash	Kamalesh Kumar	UGC, New Delhi	2.0
12.	Roof top Rainwater Harvesting for Safe, Potable and Healthy Drinking Water and Ground Water Replenishment for BITS Pilani, Pilani campus	Rajiv Gupta	BITS, Pilani, CoE-WWE	91.00
13.	Zinc Recovery from Industrial Waste using Bioleaching.	Suresh Gupta (CHE), S.K. verma (BIO), Anupam Singhal	BITS Pilani CoE-WWE	48.00
14.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal, S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
15.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman, Dipendu Bhunia	DST, New Delhi	28.38
16.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00
17.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
18.	Development of an Automated Non-Destructive Test system for Condition Evaluation of Pavements	Amit Goel	Additional competitive Research Grant, BITS Pilani	9.45

19.	Road Safety Audit for Ringus-Sikar stretch of NH-11 (43.887 km)	Prof. A K Sarkar, Prof. A. P. Singh, Dr. Amit Goel	National Highway Authority of India	18.11 lacs
20.	Zinc Recovery from Industrial Waste using Bioleaching	Dr. Suresh Gupta	BITS	48.00
21.	Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr Srinivas Appari	BITS	2.0
22.	Bioremediation of waste automobile engine oil	Dr Amit Jain	BITS	2.0
23.	DST-FIST Programme	Department of Chemistry	DST	87.00
24.	Development and Applications of Density Functional Reactivity Theory Based Modeling Techniques to Understand the Energetics of Reactive and Non-reactive Interactions	Prof. Ram Kinkar Roy	DST-SERB	31.55
25.	Investigation of unfolding and refolding of proteins by gemini surfactants with varying spacer groups using fluorescence spectroscopy and small-angle neutron scattering techniques	Prof. Subit Kumar Saha	UGC-DAE Consortium for Scientific Research, Mumbai Centre, BARC, Mumbai	6.63
26.	Effect of Chemical Nature of Spacer group, Headgroups and Counterions of Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarins in Aqueous Micelles	Prof. Subit Kumar Saha	Council of Scientific and Industrial Research, New Delhi	15.9
27.	Design and Synthesis of Multi-functional Smart Low Molecular Weight Gelators (LMWGs)	Rajeev Sakhuja	BITS Pilani, ACRG	4.5
28.	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for photocatalysis and electrocatalysis	Surojit Pande	BITS additional seed grant	6.95
29.	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	Indresh Kumar	ACRG, BITS	8.2
30.	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Application in Bio-imaging	Inamur R. Laskar	DST, SERB	35.9
31.	Competition between charge transfer and proton transfer processes in some newly designed schiff bases: Spectroscopic and theoretical investigation in condensed phase	Shamik Chakraborty	DST, SERB, Fast Track	24.98
32.	Study of Native Chemical Ligation at Tryptophan and Aspergine sites and its application in Peptide Synthesis.	Kiran Bajaj	DST, SERB, Fast Track	31.30
33.	Sustainable Catalytic Route to C <sub>4</sub> -C <sub>6</sub> Carboxylic acids/ hydroxyacids by Carbonylation of Polyols	Bibhas R. Sarkar	BITS Pilani, ACRG	5.5
34.	Novel synthesis of anti-HIV agents	Dr. Dalip Kumar and Dr. Anil Kumar	Ranbaxy	27.50
35.	The area of establishment of one of India's earliest Software-Defined Networking Research Testbed at the Centre for Excellence in SDN	Prof. Rahul Banerjee	Cisco Inc., San Francisco	1 Crore
36.	Soft Computing Framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting Fluoride as major parameter - Water Technology Initiatives (WTI -2016)	Dr. K K Gupta	DST	38.7 Lakhs, Two years.
37.	Experimental Investigation on CO <sub>2</sub> Based Refrigeration System in Trans-critical Cycle	Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta	Department of Science and Technology (DST)	27.5 Lakhs
38.	Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST), 2012-17		Department of Science and Technology (DST)	Rs. 163 Lakhs

39.	Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions	Dr. Ravi Inder Singh	Department of Science and Technology (DST)	30.13 Lakhs
40.	Modelling immune response to salmonella during typhoid	PI: Amol M. Marathe	Department of Science and Technology (DST)	Rs. 43.52 Lakhs
41.	Developing suitable pedagogical methods for various classes (Energy Technology) intellectual calibers and research in e-learning - Anchored by IIT Kharagpur	Dr. ManojSoni	MHRD	Rs. 7 Lakhs
42.	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000
43.	Understanding Impact of Social Learns Forms on Environmentally Sustainable Behavior in Children	Dr Leela Rani	ICSSR	5,00,000
44.	Development and validation of service quality index in Indian Telecom & Banking Sector	Dr. Arun Agaria & Dr. Jyoti	ICSSR	4,00,000
45.	Modelling of Employee Performance and Human Capital, Assessment and Optimization of Productivity of Indian Manufacturing Industry	Dr. Udayan Chanda & Dr. Praveen Goyal	ICSSR	5,00,000
46.	Campus Sustainability in India: Issues and Challenges (A Study of Select Institutions of Higher Education)	Dr. Neetu Yadav	BITS Pilani RIG grant	2,00,000
47.	Empirical investigation of management practices in the Indian manufacturing sector	Dr. Jayshree Mahesh	BITS Pilani RIG grant	2,00,000
48.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd.	18.46
49.	To study the protective effects of Herbal formulation against Myocardial Ischemia-reperfusion injury in rats	Dr.Rajeev Taliyan & Dr. Sunil K Dubey	Industry-Etica-Clinpharm	4.0
50.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes	Dr. Anil Gaikwad	DST-SERB	39.66
51.	Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr. Anil Gaikwad	CSIR	32.85
52.	Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population	Dr. Atish T. Paul	DST-SYST	12.19
53.	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr. Atish T. Paul	DST SERB	27.30
54.	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	Additional Competitive Grant (BITS-Pilani)	9.9
55.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.2
56.	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST-SERB	26.90
57.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
58.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
	Rats			
59.	Rural women empowerment and sustainable growth MNIT , Jaipur , Monica Sharma	Sangeeta Sharma	DST	30 Lakhs
60.	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems.	Dr. D. D. Pant	DST Major Project	Rs. 53.01
61.	Detection of contaminants in water using functional ultrathin films (Sub Project of Rain Water Harvesting Prof Rajiv Gupta)	Dr. Raj Kumar Gupta (Co-PI) PI:Prof Rajiv Gupta	Waste Water Energy Programme of BITS Pilani	Rs 9.32 (Total Project fund:Rs 91 lacs)
62.	The study of post-reionization HI distribution using the redshifted 21-cm signal and Ly-alpha forest towards understanding cosmic acceleration	Dr. Tapomoy Guha Sarkar	DST fast track	Rs 10.38
63.	Study of laser interaction with atomic clusters and preformed plasmas	Dr. Amol Holkundkar	DST Fast Track (ongoing)	Rs. 15
64.	Preparation and Characterization Thin films of electrochromic polymer and fabrication of smart pixel display	Dr S. Sindhu	CSIR	Rs.14.1
65.	Thermodynamics studies on force induced unzipping DNA in crowded environment	Dr. Navin Singh	DST Major	Rs. 18.64
66.	Theoretical Study of Electron impact double ionization of atoms and molecules	Dr. R. Choubisa	DST	22.63

**Projects sanctioned**

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1.	Conjunctive use of rainwater and Groundwater to provide safe drinking water with intervention of Advanced Technology	Rajiv Gupta	DST, New Delhi	126.43(DST) 77.70 (Coll.)
2.	Development of Low carbon ternary cement for durable and sustainable concrete	Bahurudeen A	Additional competitive Research Grant, BITS Pilani	9.25
3.	"Assessment of pozzolanic performance of sugarcane bagasse ash from different disposal sites	Bahurudeen A	BITS Research Initiation Grant	2.0
4.	"Development of Freight Generation Model in Urban Areas: A Case study of Jaipur metropolitan Region"	Prasanta Kumar Sahu	BITS Research Initiation Grant	2.0
5.	"Use of copper slag as aggregate replacement in asphalt pavements"	Nikhil Saboo	BITS Research Initiation Grant	2.0
6.	"Modeling Pedestrian Flow Using a Continuum Model"	Durgesh Vikram	BITS Research Initiation Grant	2.0
7.	"Experimental investigation on Structural Performance of RC Frame with Deep Beams under Gravity loading"	G. Muthukumar	BITS Research Initiation Grant	2.0
8.	"Development of Geopolymer Mortar Using mustard husk Briquette Ash"	Vishakha V Sakhare	BITS Research Initiation Grant	2.0
9.	Investigating the role of Aryl hydrocarbon receptors in mediating the anticancer properties associated to camel milk	Uma Dubey	Department of Science & Technology (DST), Rajasthan	7.432 Lakhs; Duration: 3 years.
10.	Design and development of a novel biomass stove for cooking application	Dr Pratik N Sheth	BITS	9.00
11.	Non linear modeling and simulation of chemical processes	Dr Ajaya Kumar Pani	BITS	2
12.	Experimental studies on a bench-scale	Dr Priya C Sande	BITS	2



S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
	cold-flow FCC unit			
13.	Hydrogen Production from Ethanol by Low Temperature Reforming Methods Using Modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr Banasri Roy	DST	19.27
14.	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C-H functionalization reactions	Prof. Anil Kumar	DST-SERB	33.0
15.	Modeling and Analysis of the Dynamics of Diabetes Mellitus in Indian Population and Control Measures	Dr. Padma Murli	CSIR	Rs. 1790000.00, 3years
16.	Study of observational constraints on dark energy models of Universe using COSMOMC in a HPC system	Dr. Suresh Kumar	SERB-DST	Rs. 2629027.00, 3 years
17.	Earthquake Modelling from GPS Observations in Northwest Himalaya	Dr. Sumanta Pasari	BITS Pilani	Rs. 200000.00, May 2016-September 2017
18.	Joint indo-German Experience Lab	Prof. K. S. Sangwan	DAAD: JINGEL	Euro 346954, 2016-19
19.	Design of healthcare supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan	Prof. Srikanta Routroy	Department of Science and Technology (DST) Rajasthan	Rs. 5.88 Lakhs, 2016-19
20.	Development and validation of control oriented model for unbalanced rotating systems with soft suspensions	Dr.Sandip Dhar	RIG	Rs. 2 Lakhs, 2016-17
21.	Development and validation of a Finite Volume Method based flow solver for the compressible two-phase flows with phase change	Dr.Shyam S. Yadav	RIG	Rs. 1 Lakh, 2016-17
22.	A preliminary study on developing and investigating tungsten inert gas (TIG) welding process for producing free form metallic parts	Dr.Prateek Kala	RIG	Rs. 2 Lakhs, 2016-17
23.	Design and fabrication of a test rig to experimentally investigate propulsive characterisation of a wiggling elastic flagella	Dr. J. S. Rahore	RIG	Rs. 1 Lakh, 2016-17
24.	Electrical and thermal characterisation of nano-composites	Dr. SachinU	RIG	Rs. 1 Lakh, 2016-17
25.	Technology Intervention for Disabled and Elderly (TIDE) program: Design and Development of a Power Assistive Hybrid e- Trike for Differently Abled Person in Rural and Urban Regions of India, In collaboration with CEERI Pilan	Dr. Sachin U Belgamwar	Department of Science and Technology (DST)	Rs. 80 Lakhs, 2016-2018
26.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Kumar Dubey	Shashi Phytochemicals Pvt. Ltd	18.46
27.	Exploring the synergism of PPAR-Y agonist and HDAC inhibitor for reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment".	Dr.Rajeev Taliyan & Dr.Deepak Chitkara (Co-PI)	DST-Nanomission	34.0
28.	To Study the Protective Effects of Herbal formulation against Myocardial Ischemia- reperfusion Injury in Rats	Dr. Rajeev Taliyan & Dr. Sunil Kumar Dubey	Etica Clin Pharm	4.00
29.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
30.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45
31.	Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells	Dr. Aniruddha Roy	DST-SERB	33.86
32.	Fund for Improvement of S&T Infrastructure in Higher Educational Institutes (FIST)	Dr. Anshuman Dalvi	DST	135.00
33.	Fellowship to First Degree and Higher Degree Students of Department	Dr. Anshuman Dalvi	Sir Ratan Tata Trust	12.65
34.	EXAFS Investigations on Polymer nanocomposites for conductivity-structure correlation	Dr. Amol R. Holkundkar	DAE CRS	11
35.	Investigations on Li <sup>+</sup> ion conducting glass-ceramics containing NASICON structured nano crystallites	Dr. J.N. Bandyopadhyay	DST SERB	40
36.	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	Dr. M. Mishra	DST	19.7
37.	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	Dr. R. Choubisa	DST	19.1
38.	Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	Dr. Anshuman Dalvi	DST	16.11
39.	Theoretical Study of Electron impact double ionization of atoms and molecules	Dr. Anshuman Dalvi	DST	22.63

**Projects completed**

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
1.	Facility Management Using GIS and Genetic Algorithm	Rajiv Gupta	DST, New Delhi	19.99
2.	Design, synthesis and validation of a dehydration stress responsive promoter in plants	Sandhya Mehrotra	University Grants Commission (UGC)	12.88 Lakhs Duration: 3 Years (2013-2016)
3.	Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis	Jitendra Panwar	University Grant Commission (UGC)	15.05800 Lakh; Duration: 3 Years (2013-2016)
4.	Molecular Characterization of Anopheles stephensi gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens	Sanjeev Kumar	(DST), Govt. of India, New Delhi	47.18 Lakhs; Duration: 3.5 Years (2012-2016)
5.	Identification of potential molecular inhibitors of Fatty acid synthase (FASN) at the enzyme activity and gene expression level	P R Deepa	DBT-COE R&D	33.67 Lakhs
6.	Characterization of Isoprenoid biosynthetic pathway enzymes from Plasmodium vivax	Vishal Saxena	University Grants Commission	7.88 lakhs Duration: 3 years (2013-2016)
7.	Role of Hippo Signaling Pathway Components in Autophagy Regulation in Hepatocellular Carcinoma	Rajdeep Chowdhury	DST-SERB, Govt. of India, New Delhi	24 Lakhs; Duration: 3 Years (2013-2016)
8.	A mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma	Sudeshna Mukherjee	DST FAST Track (Young Scientist)	17 Lakhs, Duration: 3 Years (2013-16)
9.	Removal of Heavy Metals from Industrial Wastewater using Metallic Nanoparticles as Adsorbents	Dr Suresh Gupta	DST	21.47

10.	Evaluation and Enhancement of Foam Stability of Ethanol based Aqueous Foam using Commercial Surfactant Sodium Lauryl Sulfate	Dr Pradipta Chattopadhyay	DST	25.0
11.	Production of hydrogen-rich fuel gas from Jatropha residue cake	Dr Pratik N Sheth	DST	27.06
12.	Recirculating fluidized bed for chemical looping	Dr Raman Sharma	BITS	2.0
13.	Design of Synthetically Tunable Azino-fused Chromene Conjugates as Potential Organogelators	Rajeev Sakhuja	DST-SERB	24.7
14.	Synthesis, characterization and application of novel ionic liquid supported metal complexes	Bharti Khungar	UGC	13.4
15.	Synthesis and Characterization of (Metal Oxide) <sub>core</sub> - Metal <sub>shell</sub> Nanoparticles in Quantum Dot Region and Their Application in Electrocatalysis	Surojit Pande	DST-SERB	24.93
16.	Synthesis, Metallochemistry and Reactivities of D-Glucose derived Glycoconjugates	Ajay K. Sah	UGC	9.13
17.	Exploration of Novel Ionic Liquid Supported Sulfonyl Reagents for Organic Synthesis	Anil Kumar	CSIR	16.65
18.	Synthesis of Novel N, O, S Containing Heterocycles and Evaluation of Their Anticancer Activities	Dalip Kumar	DBT	25.50
19.	Design and Synthesis of Porphyrin-based Photosensitizers as Anticancer Agents	Dalip Kumar	DST-JSPS S&T Programme	4.21
20.	Impact Assessment Study of Pradhan Mantri Gram Sadak Yojana (PMGSY) including Gender	Choudhary Sanjiv	funded by NRRDA, MoRD	4.92
21.	Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia	Nandigama, Sailaja	BITS RIG Project	1.00
22.	Dark Energy Modeling of Cosmic Acceleration with Observational Constraints in Einstein Gravity and Modified Theories	Dr. Suresh Kumar	DST	14.16
23.	Characterization of surface errors in machining of thin-walled curved geometries	Dr. T. C. Bera	DST	26.13
24.	Indo-German automotive life cycle engineering	Prof. K. S. Sangwan	DAAD	Euro 94423
25.	Development and validation of sustainability measurement framework for manufacturing industries	Prof. A. K. Digalwar	UGC	3.22
26.	Development of drivers, barriers and key performance indicators for implementation of green manufacturing in Indian micro, small and medium ceramic enterprises	Prof. K. S. Sangwan	UGC	9.90
27.	Design of supplier development implementation framework for Indian manufacturing industries	Prof. Srikanta Routroy	UGC	9.10
28.	Development and CFD modelling of ash cooler of circulating fluidized bed boilers	Dr. Ravi Inder Singh	RIG	2 Lakhs.
29.	Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment	Prof.B. K. Rout	Ministry of Information and Technology, (MIT)	45.00
30.	International malarial research	Prof. R. Mahesh	DBT	21.86

	consortium for the development of novel classes of antimalarials (BT/IN/ CANADA / 22/ AM/ 2009) (Indo-Canadian DBT Project)			
31.	Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	Dr.Rajeev Taliyan	DST-SERB	26.98
32.	Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF-kB through AT1 or AT2 receptor in Type II diabetic nephropathy	Dr. Anil Gaikwad	SERB	19.41
33.	Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions	Dr. Anil Gaikwad	UGC	13.43
34.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal	BITS Pilani	2.0
35.	Nano-carriers for co-delivery of small molecules and oligonucleotides.	Dr. Deepak Chitkara	BITS-Pilani	2.0
36.	Development and Evaluation of Lipopolymeric Micelles For Drug Delivery	Dr. Anupama Mittal	BITS-Pilani	2.0
37.	Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Pilani	2.0
38.	Steady state measurements of Fluorescent molecules in restricted environments	Dr. D. D. Pant	UGC Major Project	Rs. 11.63
39.	Investigations on Quark-Gluon Plasma through quarkonia suppression in QCD matter.	Dr. Madhukar Mishra	DST	Rs. 11.40
40.	A multiple-scattering computingplatform for nanomaterials	Dr. Rakesh Choubisa (Coordinator: Dr. D. Sebillieu, CNRS (France))	Marie Curie International Research Staff Exchange Scheme (IRSES) of the European Commission (EC) (7 <sup>th</sup> Framework Programme (FP-7))	€25,200
41.	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Method	Dr. Niladri Sarkar	BITS-PILANI- SEED GRANT SCHEME	R. 5.2

The details of these projects are given in individual department write-ups (B1.10.1 to B1.10.13).

### 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 form of the *Nalanda portal*, apart from focusing on the design / development / deployment of the Internet-based distributed learning architecture and synchronous as well as asynchronous-delivery-based content development. In addition, it has complementary features of Digital Video delivery over the Internet. Three phases of this project have already been completed. For quite some time now, it has added the live interactive (bi-directional audio/video/text-based) classroom feature to value add its off-campus student population.

The SDET Unit has played the leading role in co-designing and establishing (along with alumni of the Institute) 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 which have been further integrated with the interactive-web-conferencing system capable of involving numerous live interactions amongst faculty and off-campus students along with recording and view-on-Demand capabilities. This has been done as part of the BITS-connect 2.0 initiative and has benefitted from significant contributions from BITS Pilani and BITS Alumni spread over the Globe.

In the past, the Unit had been involved in the Journal Server Project which is a freeware international virtual digital library project, being led by Oxford University and BITS, involves over fifteen major universities in UK, India, USA, Norway, Italy, South Africa, Germany, Pakistan, Taiwan and Bangladesh, BITS had contributed to the overall architecture and Search Engine aspects of this project.

The SDETU has played a major role nationally and internationally in several areas including the research, development and deployment specific to the next-generation internetworking technologies like IPv6. It has brought several firsts to BITS and has contributed to funded international research projects in this area.

Members of the team have also presented, the research and development work being done at BITS at several international fora apart from being actively involved in IEEE and IETF activities in the area of networking research and standardization. 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, – 80°C Deep Freezer, etc. We developed Insectory to facilitate research on mosquito borne diseases. In the year 2015-16 approximately 75 students were trained in molecular biology techniques through various laboratory courses. Over 50 students completed their projects in the area of modern biology. A conference entitled "*BITS conference on Gene and Genome Expression*" was conducted during February 18-20, 2014 at BITS Pilani, Pilani Campus, India by the centre with the support from Biological sciences department, Department of Biotechnology, India, and Dept. of Science & Technology, Rajasthan.

### **Centre for Desert Development Technologies (CDDT)**

The Centre for Desert Development Technologies (CDDT) was established in April 2005 as an Alumni initiative at BITS-Pilani in collaboration with Jacob Blaustein Institutes for Desert Research (BIDR) of Ben Gurion University (BGU) – the acknowledged global leaders in making the desert bloom through their demonstrable success in the Negev Desert [[www.bgu.ac.il/bidr](http://www.bgu.ac.il/bidr)]. The C-DDT mission is to make the desert areas of Rajasthan bloom through demonstration, extension, and development of world class desert development technologies-water and energy conservation in irrigation systems, rain water harvesting and ground water management, conservation and propagation of plants suited for the desert environment, and optimizing human existence in the desert ecosystem. The C-DDT vision is to develop a multi-disciplinary center of excellence to demonstrate the role that various technologies play in desert development and to assess their socio-economic impact on the inhabitants. The key disciplines involved are Civil, Chemical, Electronics and Electrical Engineering; Plant Biotechnology, Solar Energy, and Humanistic studies. A water management system consisting of rainwater harvesting pipelines, tank, solar pump, drip irrigation system, biotechnology complex consisting of a plant tissue culture lab, and a greenhouse were constructed. A four rooms complex has been created to study the

use of solar energy in passive architecture with support of UGC. The different studies are being carried out related to energy saving techniques. It implements the new energy efficient static sun-shade, cavity walls, wall with brick projections, roof with stoneware and vents to show case the energy efficient house to reduce the active load for comfort conditions. An extended roof top with hard sloping floor are constructed to harness more rainwater and drainages are connected to main tank, which is also covered to reduce the evaporation with the helping contribution of 79 batch. A good number of International publications are made and a Ph.D. along with number of projects are completed by students. It is expected that this summer the micro and macro irrigation system will be developed and implemented. A group of undergraduate students is working.

### Centre for Educational Technology (CET)

The Centre for Educational Technology (CET) is the second of the two major centres run by the Software Development and Educational Technology Unit (SDET Unit) at BITS-Pilani. It comprises of modern digital video studio and is equipped with the high-quality Video-conferencing facilities.

This is further complemented by the Internet-based, highly scalable distributed desktop video-conferencing facility allowing medium-quality but more interactive live classroom sessions where all students cannot come to on or off-campus classrooms and may be resident in different parts of country / world. The Centre is equipped with the IP-based Video-on-Demand and Scheduled Video Multicast facilities which can allow reuse / review / streaming of lectures delivered earlier for the benefit of students. Incidentally, the above referred Project Embryo makes effective use of this technology already and allows ALL campuses of BITS-Pilani to be benefitted simultaneously whenever an Alumnus expert delivers a scheduled lecture from elsewhere in the world.

Its focus is on E-learning delivery systems, related web-services, live and stored video streaming as current thrust areas. Its mandate is to identify suitable educational technology solutions for on as well as off-campus operations of the Institute and helping in their deployment.

The CET has played the leading role in co-designing and establishing (along with alumni of the Institute) a University-wide, Integrated immersive Telepresence Infrastructure with seamless support for very high-quality eye-to-eye contact based meetings between people present in three Telepresence rooms in three campuses along with integrated multi-campus interactive lecture delivery and recording support for three class rooms spread over all Indian campuses of the Institute which would be further integrated gradually with the interactive-web-conferencing system capable of involving numerous live interactions amongst faculty and off-campus students along with recording and view-on-Demand capabilities. This has been done as part of the BITS-connect 2.0 initiative and has benefitted from significant contributions from BITS Pilani and BITS Alumni spread over the Globe.

CET has evolved a sustainable dual-purpose large-scale open or partly-closed global instruction delivery system for BITS Pilani built atop the Open edX™ Platform of our own known as 'Any-Learn™', accessible at the URL: <http://any-learn.bits-pilani.ac.in>.

Currently, the CET, in association with the Teaching-Learning Centre (TLC) of the BITS Pilani and the CET, IIT Kharagpur is in process of expanding its operations in Pedagogy-research-driven Educational Technologies and is also gearing up for significantly contributing towards creating technology-assisted, low-cost sustainable solutions aiming at helping rural-and semi-urban school children as well as creating a focused skill-development framework for select high-priority skillsets for the nation.

### Centre for Entrepreneurial Leadership (CEL)

The major projects running under CEL at BITS Pilani - Pilani Campus are Conquest, E-Week, Rural Entrepreneurial Division, Summer in a Startup (SIS), StartupSphere and Mantra awards. The entire CEL team has been working with their full zeal and has been taking all their projects to next level.

The brief descriptions of the activities done under the major projects by CEL team during 2016 are as:

#### E-Week 2016

Center for Entrepreneurial Leadership (CEL), BITS Pilani , Pilani Campus has been awarded the **E-Week High Impact Award** by National Entrepreneurship Network in its Grand Finale of E Week held on 19th March 2016 at Jaipur.

As per tradition, Entrepreneurship Week 2016, in association with NEN, was managed and organised by CEL team from 31st January - 7th February 2016. E-Week 2016 was a plethora of activities that made the participants think on Entrepreneurial lines. The prime purpose of these was to imbibe the "Startup" culture in all of the students. Keeping up with the spirit of the week, it was hosted by the CEL student team studying in first years so that they can have a proper learning experience under real conditions. Everything, from getting sponsors to marketing the event was handled by this team.

#### Conquest 2016

Conquest is BITS Pilani's international startup conclave, which aims at encouraging the spirit of entrepreneurship in India. Organized by CEL team, its mission is to invite most innovative startups . It explores and caters every need of a startup incubation opportunities, IP filing, expert mentoring and networking sessions with Industry stalwarts, Angel investors and leading Venture Capitalists. Conquest has a resplendent application

process. Beginning with online registrations followed by mentoring sessions organized throughout the country, the Grand Finale of Conquest is a spectacle where competing startups pitch their ideas to an esteemed panel. **The twelfth edition of Conquest, BITS Pilani's International Startup Conclave was organized on 28th of August at ITC Maurya Hotel, Delhi. Project Mudra** bagged the winner's trophy along with 2 lakhs of equity less cash funding, while **Comfort Products** received the second spot with 1 lakh of equity less cash funding.

Conquest was a huge success with **Mr. R Chandrashekhar, President, NASSCOM** who enthralled the audience with his incisive assessment of the Indian startup ecosystem and why it was conducive to supporting new ventures. **Prof. Ashoke Sarkar, Director of BITS Pilani, Pilani Campus**, inaugurated the event and encouraged the student community to continue pursuing their endeavours in entrepreneurship.

**Around 1200 startups registered for Conquest 2016.** The long list of mentors included renowned entrepreneurs and industrialists such as Bhawna Agarwal, CEO at NDTV Gadgets; Vibhore Sharma, CTO at Naukri; Murali Natrajan, MD & CEO at DCB Bank and many more. With DCB as its Title Sponsor, other prominent names associated with Conquest 2016 were CitrusPay, Accel Partners, Exotel etc. After an arduous round of screening and networking sessions in New Delhi, Mumbai and Bangaluru, 10 best startups made it to the Finale wherein each was grilled by a panel of judges. Having organized the event with tremendous success, the CEL team is high spirited and ready to raise the bar even further with Conquest 2017.

### Rural Entrepreneurial Division

CEL team continuously look for business opportunities for generating employment for people living in rural area near Pilani and mentors the youth to exploit those opportunities. Working with the villagers is still on and the new ideas will take time to take effect in the slow rural community.

### Summer in a Startup (SiS) 2016

SIS or Summer in a Startup is an initiative by CEL, BITS Pilani. It aims to give the students at BITS Pilani the opportunity to intern in a startup during the summers. It seeks to promote startups and encourage entrepreneurial acumen amongst undergraduates. The interns are virtual stakeholders of the startup, thereby replicating the total experience of operating in the startup ambiance.

Entering into its 8<sup>th</sup> edition this year, SiS had an outstanding turnout last year with 600+ applications from students. Students are shortlisted on the basis of their CV and final selections are made after a round of Personal Interview (PI). The internship period varied from startup to startup, but it was close to around two months. Almost all the startups provided stipends that ranged from Rs. 5,000/- to Rs.15,000/-. SiS strives to bring out an entrepreneur in each student, by making him have his own hands on experience in entrepreneurship, by interning in a startup. Students get to discover their passion and interests through SIS.

### StartupSphere

Startup Sphere is the latest project adopted by CEL. Its main aim is to facilitate the startup culture in BITS Pilani and mould fresh ideas into successful ventures. Startup Sphere achieves this by conducting guest lectures delivered by industry experts and organizing workshops for the students. Startup Sphere provides mentorship needed by freshly sown ideas of the students oblivious to market dynamics. It conducts meets regularly where all BITSians are invited for discussion. The mentor engages and discusses ideas, policies and situations with students, which allow tapping of innovative ideas, leading to mutual nourishment for the young and experienced ones.

Startup Sphere held various such meetups and discussed topics like Product Optimization and Idea Validation of hypothetical models. Startup Sphere also publishes a newsletter released by CEL, for propagation of startup culture, within and outside BITS Pilani.

### Technology Innovation Centre (TIC)

Technology Innovation Centre was instituted as a facility by which engineer/scientist entrepreneur could spend desired period at the campus and investigate problems brought by him along with a team of BITS facilities and students. These people are given associate faculty status so that they can use all the infrastructural facilities of the Institute and participate in the academic process. Moreover, these entrepreneurs are able to work for their Ph.D. degree of BITS and participate in teaching certain state of the art courses during their visits to the campus.

Past-experience shows that this facility mostly attracts knowledge – intensive small-scale entrepreneurs, who cannot afford the high cost of R & D in their establishment. The institute, in turn, has been able to train its students on entrepreneurial skills and has provided the rewarding experience of investigating real – life problems brought from the industry.

In the past year, 2 companies have applied under this scheme and selected students for their projects with stipend.

Company Revel Films Pvt Ltd, Mumbai selected 5 students to work on their project in the II sem 2015-16.

Company Eurofit Sports Research Institute, Austria has given 1 project in II sem 2015-16. 4 students worked on it. In the present semester, a company Acnowledge has taken 5 student for its project under this scheme

### 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 Tensometer, various hardness testing machines such as Brinell, Rockwell, and Vickers Hardness Testers, Rotating Bending Fatigue Testing Machine, Combined Bending and Torsion Fatigue Testing Machine, Circular Polariscopes, Strain-gauge testing facility, Izod Impact Testing Machines, Digital impact testing machine, Double disk polisher, Inverted Metallurgy Microscope, Erichsen cupping tester, Single Screw Extruder with Calendering and Pelletization Facilities Ultrasonic Flaw Detectors, Liquid Penetrant Test kit, Magnetic Crack Detector, Eddy Current Tester, Acoustic Emission Testing equipments, Acousto-ultrasonic 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.

### 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, ABB 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-1 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-2 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-3 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. During the year under review, the students working at CRIS has developed a number of models and working robots. Namely, humanoid Acyut-4 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 (2012-2014) has sponsored a project worth 45 Lacs 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 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 from previous years, this year saw development in 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. The CRIS research incorporates with all aspects of creating and controlling robots such as mechanical design, dynamics, perception, control and decision making.



Current faculty researches includes projects in the following areas: Humanoid robot, computer vision, motion planning and control, Machine learning for robotics, sensors/actuators and robot design, Bio-robotics.

### **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<sub>2</sub> 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.

### **Centre for Software Development (CSD)**

The Centre for Software Development (CSD) is first of the two major centres that comprise the newly formed Software Development and Educational Technology Unit (SDET Unit) at BITS-Pilani.

The CSD has two wings namely *Media Laboratory* and the *Laboratory for Open Source Computing*. Recently, as part of restructuring, the erstwhile *Laboratory for Mobile Computing* was made a constituent research laboratory of the Department of the Computer Science & Information Systems., under the new name of Wearable, Pervasive Computing Networking Research Laboratory.

The CSD, in the past, has played a major role nationally and internationally in several areas including the research, development and deployment specific to the next-generation internetworking technologies like IPv6. It has brought several firsts to BITS and has contributed to funded international research projects in this area.

In the recent past, CSD had also developed a software for biometric attendance system known as 'e-Attend' that also piloted across all campuses of the Institute.

Members of the team, in the past, have also presented, the research and development work being done at BITS at several international fora apart from being actively involved in IEEE and IETF activities in the area of networking research and standardization.

Currently, the CSD is envisioning creation of a new-age integrated, adaptive web-site for the university and hopes to complete the deployment by December 2017.

## **CENTRES ESTABLISHED WITH STRONG INDUSTRIAL SUPPORT**

### **Embedded Controller Application Centre**

Prof. Surekha Bhanot (Coordinator), Prof. S Gurunayanan, Mr. Rajiv Ranjan Singh, Mr. Ashish Mishra, Mr. G Sai Sessa Chalapathi.

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 Pentium machines, Microcontroller Modular Evaluation Systems, Microcontroller Development Systems, Emulators, Assemblers and Cross compilers for various microcontroller families (ARM, ATMEL, Microchip, Cypress, ST Microelectronics, Motorola, etc.) DSP processors, logic analyser and other bench equipments.

Faculty members of the group are involved in research work in areas of Embedded System, Wearable Computing. Faculty has published research work, attended National and International seminars, conferences and invited talks.

Centre has established a PSoC Lab with support from Cypress Semiconductor Corporation. Recently a student project named "Project SmartLAB" has been sanctioned the "Prof. I. J. Nagrath Student Project Fund" by BITS Alumni Shri Brij Bhushan (1964 batch).

The Centre provides support for FPGA based system design and has facility for Xilinx Atlys, Gensys, Zedboard boards and camera interface.

### **Center for Innovation, Incubation and Entrepreneurship (CIIE)**

**Center for Innovation, Incubation and Entrepreneurship (CIIE)** is continuously working for streamlining various processes to develop an ecosystem in the campus for promoting innovation and entrepreneurship through academic courses like "Creating and Leading Entrepreneurial Leadership" & "New Venture Creation"; Intellectual property protection; Technology Business Incubator (TBI) activities under PIED Society and Centre for Entrepreneurial Leadership (CEL).

### **Courses**

New Venture Creation course for the fifth time was delivered across three campuses simultaneously. There were around 26 teams constituting around 60 students that participated in fine tuning their ideas to come out with a business plan that can be taken to next stage of implementation. Creating and Leading an Entrepreneurial Organisation course delivered on experiential learning pedagogy is being offered regularly for the past more than 11 years.

### **Patent Filing and Protection**

Faculty members are being encouraged through workshops and interactions to come out with patents from their research endeavours that can have commercial worth. During the year 5 patent applications were filed in Indian Patent Office.

### **Pilani Innovation and Entrepreneurship Development Society (PIED Society)**

Birla Institute of technology and Science (BITS), Pilani in association with Department of Science and Technology (DST), Government of India has established a Technology Business incubator in the area of Embedded Systems and VLSI Design to promote entrepreneurial leadership across all disciplines. TBI facilitate entrepreneurial activity on campus and off-campus and commercialization of R&D efforts at BITS. In 2013, TBI was incorporated as separate society as Pilani Innovation and Entrepreneurship Development Society (PIED Society).

The incubates presently working and funded by PIED Society are as under:

**Sharp Edge Pvt Ltd.** is providing a technology platform for engineering students which seamlessly integrates the traditional chalk & talk method with smart classrooms based on cognitive learning. It enables Professors to use digital resources such as educational animations, assessments and diagrams to make classroom more interactive creating multi-sensory learning for students and help improve their academic performance. Institute's classrooms are converted into i-classrooms with a projector, CPU, keyboard and pointing device. The Institute has the flexibility to decide its infrastructure without any burden on its financial resources. The solution is flexible to work with the basic CPU+ moveable projector solution to the use of Smart Boards, Pen Tablets, i-pads and other gadgets as per the institute's discretion.

**My-Ti Technotronics** introduces an innovative sleek design with close to natural approach for typing & writing on a tablet or on paper. Recent success of Samsung Galaxy Note emphasizes this point. We plan to take this as an opportunity for market and provide a productivity centric tablet creating a new market called "utility tablet market".

**Snapchai Productions Pvt. Ltd.** provides Photographers end to end support with your culling, editing, design and print requirements, with an easy and superior workflow. We aim to partner with Photographers to become their extended team, backing them up with a high quality output and faster turn around times. This way, they free up time to do what you love most - Shoot, Expand Business And Enjoy Life.

**3D-IP Semiconductors Private Ltd.** is a semiconductor chip design company developing advance products such as Digital IC, Mixed Signal IC & Chip Software.

**Paxport web Services Pvt. Ltd.** provides a One Click Unified Platform for authenticating any physical product, which enables consumers to authenticate any product when they are trying to buy a product anywhere, addressing 1.7 trillion dollar Counterfeiting market.

**WeMakeScholars Edtech Pvt. Ltd.** has built the most reliable and transparent platform for International Education. The platform was inaugurated by Dr. Shashi Tharoor on 29th April, 2015, with the listing of more than 18,000 Scholarships and international internships for students globally. They have also been endorsed by Helen Clark, former Prime-Minister of New Zealand and current administrator of UNDP. Within 14 months of launch,

they have helped more than 12 lac students from 225 countries in finding reliable information while planning to study abroad. Out of these 12 lac, close to 4 lac Indian students have used the platform to find scholarships and other information.

TBI incubates Sharp Edge Pvt Ltd., My-Ti Technotronics, Snapchai Productions Pvt. Ltd., Paxport Web Services Pvt. Ltd., 3D-IP Semiconductors Private Ltd. and WeMakeScholar have been funded by PIED Society, BITS Pilani under the TIDE scheme of Ministry of Communications and Information Technology Department of Electronics and Information Technology.

### Teaching Learning Centre (TLC)

Teaching Learning Centre, BITS Pilani, Pilani Campus conducted various events during the year 2016 (II semester, 2015-16 and I semester, 2016-17). Those events are as follows:

- ❖ Intensive Teaching Workshop (ITW)-Part I was conducted for newly inducted faculty members where senior faculty members introduced the newly inducted faculties with BITS system (7-9<sup>th</sup> January 2016).
- ❖ Guest lecture on "Outcomes based Education and Accreditation: Opportunities and Challenges" was delivered by Dr. Yogesh Velankar, Consultant and Director of Indo Universal Collaboration for Engineering Education Centers of Excellence (21 March 2016).
- ❖ Intensive Teaching Workshop-Part II was conducted for newly inducted faculty members in two groups where newly inducted faculties gave lectures using Blackboard and PPT and a group of senior faculty members observed their lectures and gave feedback on their teaching (6-20 April 2016).
- ❖ Intensive Teaching Workshop (ITW)-Part I was conducted for newly inducted faculty members where senior faculty members introduced the newly inducted faculties with BITS system (27-28<sup>th</sup> August 2016).
- ❖ Intensive Teaching Workshop-Part II was conducted for newly inducted faculty members in two groups where newly inducted faculties gave lectures using Blackboard and PPT and a group of senior faculty members observed their lectures and gave feedback on their teaching (20<sup>th</sup> September-26<sup>th</sup> October 2016).
- ❖ An Open Forum Discussion, titled "How do I find my class?" was held on 23<sup>rd</sup> September 2016 where students of the campus shared their classroom experiences with the administrators, faculty members and fellow students. The Vice Chancellor and the Campus Director attended the discussion and made their concluding remarks.
- ❖ A two-day National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level was held during 30 September-01 October 2016 where more than 80 participants from higher education institutions across the country participated. Experts from National University of Singapore, IIT Madras, IIT Kharagpur, Manipal University, Jaipur, etc. delivered the key note lectures during the convention. Vice Chancellors of Dr. APJ A K Technical University, Uttar Pradesh; Shivaji University, Kolhapur (Maharashtra), BITS Pilani and Directors of CEERI Pilani and BITS Pilani, Pilani Campus participated in a panel discussion which followed the inauguration of the convention. The former Vice Chancellor of BITS Pilani, Prof. L.K.Maheshwari moderated the panel discussion. The convention was inaugurated by the former high court justice of Patna and Allahabad High Court and senior advocate of the Supreme Court of India, Shri Dharnidhar Jha.
- ❖ A two-day National Workshop on "Outcome Based Learning Using Pedagogy Framework Model was conducted during 28-29<sup>th</sup> November 2016. This workshop was conducted in collaboration with the Centre for Educational Technology, IIT Kharagpur Under the MHRD government of India funded project "Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning (Main Phase)". More than 60 participants from engineering colleges across the country attended the workshop.
- ❖ The first issue of the TLC quarterly newsletter, named Taleem, was released by the Vice Chancellor, BITS Pilani; Director, BITS Pilani, Pilani Campus; and Prof. Anupam Basu, Head of the Computer Science Department and Chairman, CET, IIT Khargapur on 29 November 2016.

## B1.12 CENTRAL FACILITIES REPORT

### Central Library

Library collection has crossed 2,41,000 volumes and during the year, 1276 new volumes were added to the existing collection in various disciplines of Science, Engineering, Technology, Pharmacy, Management, Humanities and general reading materials.

250 print journals and 34 online databases were subscribed. The online resources now cover more than 31000 e-journals for accessing full-text articles and databases related to company and industries. The Library received 123 Theses in soft-copy format submitted by the Researchers under leading to PhD Degrees.

As part of University-wide service called Inter-Library Document Request Service (ILDRS) the library has retrieved, downloaded and sent 2446 articles/ book chapters from various databases and resources requested by faculty members and Research scholars of other campuses i.e Goa Dubai and Hyderabad

As a part of MOU with UGC INFLIBNET, the library has provided to all faculty members access to anti-plagiarism software called URKUND. It is now the part of the library portal.

Following are some of the major developments are made during 2015-16:

- Implementation of Second phase of RFID Technology including Self Issue and Self Return Kiosk. As a result of this, the library has withdrawn the manual Issue/Return Counter.
- The library has launch Mobile App called "infoBITS" on 8th April 2016 which provides the following services online:
  - Federated Search engine "One Search"
  - Daily News
  - Monthly InfoBITS Bulletins across 13 disciplines
  - Lost and Found service
  - Online Databases
  - Communication Panel "Connect with Library"

In addition to the above developments following are some of the events organised by the library to inculcate the reading habits and popularize library services among the library users:

- **Basant Book Festival** and series of motivational talks 15-21 Feb 2016
- **"Elements of Effective Librarianship"** a two day workshop in association with MANLIBNET was held during 8-9 April 2016.
- With the help of National Archives of India, a three day training program on **"Preservation and Binding of Rare Books"** was conducted during May 25-27, 2016.
- Two week **Communication and behavioural skills** training for the library staff with the help of BITS Pilani HSS Department was conducted during the summer vacation.
- **World Book and Copy right day** celebrated by organizing display of books on William Shakespeare and others literature during 23-26 April 2016.
- **RFID Technology** and Hall No.1 Air Conditioned facility was inaugurated by Prof A.K Sarkar, Director BITS Pilani on 2nd April 2016 displaying.
- **Information Literacy programmes** for new UG and PG students were held for one week in the month of August in the library
- Inauguration of new facilities (E-Zone, Circulation Desk, TB Counter, Ref. Display) and Smart Serve Kiosk by VC on 12th Aug 2016 as a part of Librarians Day Celebration.
- **Design a Book Mark that Speaks** contest was held on 12th August 2016 as a part of Librarians Day Celebration
- **Teachers day celebration** was held on 7th Sept.2016.
- **Library timings were extended till 2.00 am** during the comprehensive exams.
- **NAAC** team visited BITS Library on 5th December 2016 as part of their assessment.
- As a part of MoU with UGC-INFLIBNET, BITS Library has uploaded 425 PhD theses to Shodhganga-ETD.
- Seven Orientation and Database training sessions were organized by the library in the last 12 months.

#### 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	2,41,176
2	Average number of books issued per month	3000
3	Average number of readers visiting the library per month	9140
4	Books added during the year	1276
5	Total number of Theses	1255

6	Number of print Journals subscribed	250
7	E journals made available on library site through online databases	25000+
8	CD-ROM collection (including VCDs)	2,397
9	Educational Video Cassettes collection	148
10	Total number of reading seats in the library	750
11	Total library area	65,000 sq.ft
12	Total number of Library users (members)	5072

### Medical Centre (MedC)

The medical center is providing good services and facilities with the dedicated services of Medical Superintendent and Physician Dr. R. P. Pareek and his team. There is a Gynecologist & Obstetrician, Dr. Sanjana R. Bhat working fulltime at the Centre. A General Duty Medical Officer from Birla Sarvajanic Hospital is there to assist in the evening hours. Dr. Sanjay Katewa, the dentist is available on every Saturday evening while the ENT specialist, Dr. H. S. Sankhla is available on every Monday and Thursday evening, Dr. Diwakar Pathak, the homeopathic is available on every Tuesday Dr. Karan Beniwal, the pediatricians is available on every Wednesday evening. Dr. Ramesh P. Jajoo is a visiting an Ayurvedic Consultant.

The center has a well-equipped clinical laboratory with a fully-automated bio chemistry-analyzer for Biochemical tests, fully automated hematology analyzer and fully automated urine analyzer, computerized ECG machine for the diagnosis of heart ailment and an ELISA plate analyzer for the diagnoses of other diseases. The laboratory has upgraded facilities to test glycosylated hemoglobin, which is one of the most important tests for diabetes. A Digital Dental X-ray unit is located in the center. The center has a computerized Spirometer, to help in the diagnosis of respiratory problem of the students and staff of the Institute.

During the year around 32000 persons were treated at the Medical Centre and about 4250 persons were tested in the laboratory for various hematological & biochemical tests. Patients utilized the facility and about 850 patients were tested by ECG, Spirometer and Elisa Reader instruments. The student gets a 50% discount on the test performed at the medical center.

A three bed observation room facility for emergency is available in the medical center and all emergency medicines are also available in observation room.

Five camps were held to make people aware of osteoporosis. Bone Mineral Density (BMD) was measured by ultrasonography unit and computerized analysis was done. Reports with comments were given to all the persons attending the camps. Around 100 people were examined in each camp. These camps were sponsored by pharmaceutical companies.

The new record keeping system is working well after its introduction in the Centre in May 2007. All the faculty and staff members with a PSRN have been given ID cards for all members of their family and separate files are maintained to keep the records.

The Medical shop in the Centre provides the medicines prescribed by the doctors on credit on production of the ID card by the staff and students and this has reduced the cash transaction and paper work. Same process is followed for the Clinical investigations also. Most of the medical center operation is computerized so as to make all the reports and records in digital form.

### 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 2016 was 3183 consisting of 819 staff members and 2364 students. They were holding 4095 major and 8766 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. During the year 2016, the center had 94 students.

During this period the center had organized various activities such as sports competition, drawing competition, fancy dress competition, etc. The Annual day program of the center was held on 20<sup>th</sup> March 2016 and Prof A K Sarkar, director BITS-Pilani, Pilani Campus was invited as chief guest of the function. The children of the Centre also participated in the program held on Gandhi Jayanti, organized by BITS.

### **Institute Functions**

Institute functions have been the integral part of BITS as an organization/ institution. In year 2016, 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- 12th February), (iii) Ram Navmi- Birthday of Founder Chairman Shri G. D. Birla (15th 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) behind 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.

### **Recreation Activiites Forum (RAF)**

The Executive Committee of RAF selected and screened Hindi & English movies, which were enjoyed by the members and their guests during the year. During the two semesters RAF membership for both Hindi and English sections together was as followings:

Second Semester 2015-2016	1299
First Semester 2016-2017	1270

### **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.11,50,000/- as loan to 115 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. This year Rs.90,000/- has been given to 2 staff members for this facility.

#### **(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. 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. Student volunteers who worked as reporters in the Unit found the work experience very useful.

### (i) Reprography

The Reprography Section takes care of all the in-house printing, binding and photocopying work, (e.g. printing of institute bulletin, application forms, annual report, various information brochures, time table, academic regulation, educational development division notes, 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 desktop printing, computer type setting, drafting, off-set printing, laser printer, cutting, laminating, stitching, spiral binding, etc. Reprography has 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 programmes 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 round the clock. Reprography also support 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 reprography.

### (ii) Communication and allied facilities

The following facilities are available for the benefit of students and staff.

#### 1. *Telephones*

Each hostel has been provided with a receiving telephone facility placed near the common room.

#### 2. *Dispatch facility*

All the Institute dispatch requirements are catered through reprography either through ordinary/speed post facility available at the Vidya Vihar Post Office, Pilani or through private courier and cargo carriers for both domestic and international destinations as per needs.

#### 3. *Color Photography Lab.*

The lab has following facilities: Camera: Olympus Digital SLR Camera E 300, Cannon EOS 500N, Durst Color Enlarger (Model M-670), processing timer, temperature controlled paper processing tank, 35 mm SLR Camera (Pentax K 1000) with flash gun (mega 988 twin), temperature controlled film processing tank with 6 developer tanks, Cannon Zoom Lens EF 75-300 mm Pentax wide Zoom lens 35-80 mm and enlarger timer.

#### 4. *Photocopying and allied facilities*

Photocopying, printing, word processing, binding and laminating facilities are available for students and staff on charge basis at Reprography section. Photocopying service is also available at the BITS Library.

### Central Workshop

The Central Workshop of the Institute imparts training to the students and caters to the maintenance and fabrication needs of the Institute. Students' training consists of training all integrated first degree students through the course 'Workshop Practice' by imparting skills in various manufacturing processes like machining, fitting, turning, carpentry, smithy, sheet metal, electroplating, welding, etc. 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.

The workshop comprises the following sections: Machining, Welding, Electroplating, Fitting, Smithy and Sheet Metal, Carpentry, Foundry and Patterns, Tool Room, Metrology, Painting, Metal Processing and Metallurgy, Electrical, Automobile, CNC Training Centre and Store. The major equipments include industrial vertical machining center (LMW KODI 40 Klein), five CNC trainers (three turning centers and two vertical machining centers), industrial robot (pick and place), five universal milling machine tools, universal cylindrical, centreless, surface (hydraulic), and tool and cutter grinders, gear hobbing machine tool, NC machine tool (retrofitted at workshop), thirty one lathes (centre, turret, capstan, precision and dc supply heavy duty), seven shapers, planner, slotter, twelve drilling machines, ten wood working lathes, two wood working planers, band, circular and universal wood saws, TIG, gas and arc welding equipment, power press, pneumatic hammer, etc. The new building for the workshop is ready.

## Instrumentation

Instrumentation unit undertakes regular and annual maintenance of laboratory instruments across the Institute.

Instrumentation unit provides LCD projection facility for regular class-work in fifty plus classrooms, workshops, conferences, symposiums and other academic and cultural activities across the institute. The centre also performs preventive maintenance for these projectors.

The centre facilitates institute programs with high quality Public Address Systems, Digital Mixers and Hi-Fi loud speakers and Lighting equipment to make the events more effective and lively.

The centre maintains the 128 Port C-DOT EPABX of VFAST Hostel.

Tata Sky dishes have been installed in all hostels's common rooms.

All classes have been equipped with projection facility supported by UPS. Unit has procured some state of art equipment like Kramer switch, 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 Panasonic memory card camera-recorder

In-house training for technical staff across the institute in maintenance of lab equipment, PA system, EPBAX, projection system, cable network, lighting systems and computer hardware was organized during May 26 to June 14, 2016, for nonteaching staff, eleven persons attended the program.

## 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 Center has signed campus agreement with Microsoft and MATLAB for licensing their product & tools. With a view to upgrade the computing resources, across the Institute, 200 desktop machines 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. Currently the center is involved in setting up of a 256 core cluster machine as part of augmenting the compute infrastructure.

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 center 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 has a Blade Servers and 10 numbers of Intel based SMP servers, supporting variety of operating systems and development tools. These systems operate under UNIX and Windows environment and support variety of compilers database and software tools such as C, C++, Lisp, Microsoft Visual tools, Matlab, PSPICE, Rational Rose etc. The Centre has 350 numbers of desktop machines, with Windows 7/ Linux and variety of software tools. The central computing facility specifically takes care of the bulk computing needs of students in their courses, which needs acquiring and use of computer programming skills. It also caters to large number of computer projects of First Degree, Higher Degree and Ph.D. Students.

Apart from the above mentioned centralized computing facility, the Institute has workstations and Pentium machines distributed at various other locations. These Centers are placed near to the locations requiring Computer Aided Modeling & Design, computer-based instrumentation and experiments as well as other activities. In addition to this the various departments have their own computing facility supporting specialized tools.

## 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.

- Several learning materials, prepared by faculty members over a period, have been deployed on the Intranet. The courseware spans from simple lessons on HTML pages, online presentations, to fully interactive learning applets. 'Intrabits', in this sense, also acts as a Test-Bed for the BITS-VU project.
- In addition, faculty members can upload lecture slides, assignments, notices, lecture notes etc. through the in-house developed Course Management Tool. This tool allows them to carry out grading (Mid-Sem and End-Sem) for their courses. This facility is open only to the Instructor-in-charge of each course. Students



can log into the IntraBITS portal and see the material, notices and grading information as published by the faculty member for their benefit.

- In addition, 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 on-campus and off-campus.
- Recently, an online Notice-Management System developed by the CSD has been integrated with this portal.

The BITS Intranet is serving as a vibrant medium for exchange of academic and other ideas among students and faculty.

### **Computer Assisted Housekeeping**

The Computer Assisted Housekeeping Unit (CAHU) is a central facility of the Institute, which provides centralized information management and processing for Computerized University Administration to all the sections of BITS. The academic and technical staff members at CAHU have expertise in software maintenance, management, development, and computer operations, to meet the wide-ranging computerized housekeeping needs of the Institute. The computing resources include HP9000 E35 system, HP rp3440 system with SAN array, HP Proliant DL360G4 and HP ML-350 servers, IBM servers, Pentium/Core2-Duo PC nodes, HP LaserJet8150 and 9050dn, HP Color Laserjet 5550dn printers and other peripherals.

In recent years the emphasis is on shifting the in-house developed computing operations to PeopleSoft ERP system; By August 2015 all the academic data and procedures except degree printing, have been shifted to ERP System and from 2015-16 first semester, student academic registration is done entirely in the ERP system. Similarly the legacy accounting software will slowly be replaced by the ERP. As an intermediate step from FY 2015-16 pilani campus accounts data has been shifted to Tally system, which will eventually move to PeopleSoft. Currently CAHU is maintaining only Pilani Campus Staff Pay Roll and personal data and Alumni Data Base. Efforts are being made to shift these data also to PeopleSoft ERP system.

Degree processing and printing: 194 degrees (Pilani-86, Goa-28, Dubai-49, and Hyderabad-31) for 78th award and 3307 degrees (Pilani-1267, Goa-758, Dubai-373, and Hyderabad-909) for the 79th award were printed using the enhanced software. The degrees were made available on time for the convocations held at different campuses during 2016.

### **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 an is equipment with latest instruments which include - Stability Cabinets (For stability testing of drugs and organic molecules), UV-Visible Spectrophotometers, UV-Visible-NIR Scanning Spectrophotometer, IR Spectrophotometer, FTIR Spectrophotometer, Scanning Spectrofluorimeter, High Voltage Electrophoresis, Digital Polarimeters, Ultra and Refrigerated Centrifuges, Differential Scanning Calorimeter, Gas Chromatography, High Performance Liquid Chromatography (with auto-sampler and various detectors), 400 MHz NMR spectrophotometer (Bruker AVANCE III) equipped with BBFO probe and auto-sampler and Elemental Analyser (vario MICRO cube) for estimating the elemental compositions of organic compounds. Recently the laboratory has been upgraded with three sophisticated equipments including Flash chromatography (Cheetah) for rapid and efficient purification of organic compounds, CytoFlex flow cytometer (Beckman Coulter) for cell sorting and cell analysis and HPTLC (Shimadzu) for chromatographic information of complex mixtures of pharmaceuticals, natural products, clinical samples, food stuffs ETC. 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, non invasive blood pressure recorder, semi dry transfer apparatus, microtome, RT-PCR, electroconvulsimeter, actophotometer, analgesiometer, light dark apparatus, rotarod etc. Equipments such as surgical anaesthesia 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.

### **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 STP, 33KV 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 Cement Concrete Plate form for Kiosk at Budh Bhawan (Tea Stall).
- 2 Aluminium Fixed and Openable Grill for Windows & Ventilators at V- Fast Hostel New Wing.
- 3 Installation of Bird Spikes to control bird menace at Common rooms of Budh, Ram & Gandhi Bhawan and d V-Fast Front.
- 4 Painting Work of Vice Chancellor's Official Residence (New Allotment).
- 5 Painting Work (during - Convocation, Orientation and NAAC Visit) at Library, WILPD, LTC, NSB, NAB, SAC.
- 6 Providing and Fixing Backyard Shed (M.S. Tube Frame and Acrylic Sheet) and tile flooring at Vice Chancellor's Official Residence.
- 7 Distemper painting of 145 Rooms in Krishna Bhawan.
- 8 Provision of Rain and Dust protecting Openable Aluminum Frame Glass window (16 Nos.) at Library.
- 9 Repair & painting work at the Swimming Pool to make it operational.
- 10 Provision of Dog Sterilization Room with M.S. Grill to control dog menace in the Campus.
- 11 Provision of Aluminum Sliding Window at NAB Auditorium Projector Room.
- 12 Wooden Flush Door with Glass Panel at Vice Chancellor and Director's offices.
- 13 Painting of Rooms, Pipes & Tanks at 01 MLD STP.
- 14 Paint Work at Reprography (FD – III -3129,3130,3131).
- 15 Scheduled Preventive Maintenance of Institute and Hostels Buildings (Plumbing, Carpentry, Masonry, Blacksmith & Painting).
- 16 White Wash Work (Internal - Complete) in Summer Vacation (MB – I, II, III, IV, V, VI, IX, Mal – B, C, D, RPB, AKB, BGB and KRB).
- 17 Summer Vacation - Complete Repair, partial internal white wash, partial putty work, doors windows painting in Institute Buildings.
- 18 Over Head Tanks Cleaning at Hostels, Messes and Institute Buildings.
- 19 Fluorescent Paint Border on Stone Raised Blockade/Step at New Academic Block & New Courtyard Building in FD III.
- 20 Paint, distemper and lime wash work in Messes (MB, Mal, SV, KG, RPA & VKB).
- 21 Repair & renovation of two office chambers for CFO & Head HR.
- 22 Water proofing of affected area at terrace of FD-II, Auditorium, Cafeteria and FD – III Buildings.
- 23 Replacement of 12 nos. cast iron sewage line man hole covers with cement concrete covers in Staff Quarters.
- 24 Replacement damaged glass panes in Clock Tower Ventilators with acrylic sheet.
- 25 Provision of Door Seal at Budh, Gandhi, Shankar, Vyas, Rana Pratap, Bhagirath, Ashok and SR Bhawan.
- 26 M.S. Louvers fixing on BITS Building Store East Wall.
- 27 Lime Wash Work and Door Window Painting(Internal) Qtrs – 257.

- 28 Lime Wash Work (Internal External Complete) Qtr – Warden House – MB – I.
- 29 Band Saw Machine Plant Shifting from Old Building Store to New Building Store.
- 30 Installation of 40 nos. of 80 Liters capacity Litterbins with stand on Road side.
- 31 Planning & co-ordination of dog menace by catching dogs, castration of male & Female dogs to control their birth.
- 32 Installation of pedal 15 nos. of pedal operated MS cover system on existing garbage bins in the Campus.
- 33 Road repair work: PMC - 120645 sqft. and WBM 4637 sqft.
- 34 Painting in Staff quarters: 'B' Type- 2 Nos., 'C' Type-6 Nos., D Type-3 Nos., 'E' Type-5 Nos., 'F' Type-8 Nos., 'S' Type-6 Nos. and TSF-15 Nos.
- 35 Reconstruction of damaged V- Fast boundary wall -70 feet.
- 36 Fixing of water leakage in Overhead water tanks of quarter nos.458/1&3, 462/2&4 and 465/1&3.
- 37 Extension of Main Gate Security Shade for housing Biometric system.
- 38 Tree painting - 1000 Nos.
- 39 Reconstruction of 300 feet damaged Campus Compound Wall on East side on Basgaon road.
- 40 Providing & fixing awning and shade in quarters nos.110, 138, 223,234/3,234/4, 244, 263, 264 and 267.
- 41 Numbering on 395 nos of street light poles.
- 42 Valve chamber construction near CEERI Gate.
- 43 Relaying of courtyard flooring in quarter no.73, 93,256, 260, 273 and 283/2.
- 44 Footpath repair work on Gandhi Marg- 2000 Sqft and Krishna Marg- 2300Sqft
- 45 Fixing of Road Signage at Gandhi Patel Statue.
- 46 Installation of LDR (Light Dependent Relay) for street lighting switching.
- 47 Installation of motion sensors for lights in toilet area to save the electricity.
- 48 Converted overhead electric line to underground on Meera Marg to prevent fault during rainy season.
- 49 Converted 65 Nos. of CFL lamp street light fixture to LED light fixture.
- 50 Installation of 31 nos. of street light poles to increase illumination on roads.
- 51 New Workshop Lift was made operational.
- 52 Provision of DG supply to New Workshop Building.
- 53 Converted overhead electric line to underground on RP Marg to prevent faults during rainy season.
- 54 Made new earthing points on Pooja Marg to provide earth to staff quarters, which were not connected earlier.
- 55 Converted the manual changeover to automatic changeover for DG supply for street lights.
- 56 Installed APFC panels to improve the overall power factor.
- 57 Two new replacement bore wells were made.
- 58 10 nos. of Valve Chambers were constructed in water distribution network.
- 59 Replacement of old & leaky pipe lines 1", 2", 3" & 4"– 1400, 800, 460 & 100rft respectively.
- 60 Repair & replacement of 200 feet of STP treated water pipe lines.
- 61 STP treated water line network was extended by 1290 feet to connect additional eight sites of Budh Bhawan, Gandhi Bhawan, Library Periphery, FD – II & III Nursery, Cafeteria Lawn, Puja ground and Shiv Ganga Marg.
- 62 40nos. New RO system & new water coolers were installed in renovated hostels, VFAST, BITS-COOP and Infant Center.
- 63 AMC for NAB HVAC System was concluded for efficient operations. De-scaling of the CWS & CWR lines was done by de-scaling chemical, for enhancing the life & effectiveness of the system.
- 64 Extensive maintenance of all the 26 Air Cooling systems was carried to ensure smooth & efficient operation.
- 65 AMC was finalized for smooth & efficient operations of all the 105nos of Solar water heating system

- installed in Hostels & Messes. De-scaling was done with de-scaling chemical.
- 66 STP Operations were made more effective by cleaning of all tanks, replacement of all defective diffusers.
  - 67 85nos. new ABC type fire extinguishers were installed in Ram, Budh & Gandhi Bhawan, New Science Block, New Courtyard Buildings and 10 Pumping Stations.
  - 68 All the 491 fire extinguishers (FE) were checked for their working. 73 nos. of defective ABC type and 145 nos. of DCP type were refilled.
  - 69 Equipment procured to establish a Lab for checking parameters of raw & treated sewage.
  - 70 Level sensors installed in 6nos. underground water reservoir to avoid overflowing of water.
  - 71 All ten reservoirs at Pumping Stations and 04 Bore wells were cleaned.
  - 72 Structural Ladder installed for OHT near well no.6.
  - 73 Prepared temporary chiller plant to run the HVAC system in NSB-FF.
  - 74 All Bio Labs are made air-conditioned at NSB-GF.
  - 75 Servicing done & made operational of media filter at Swimming Pool.
  - 76 Pipes, Railings & Platform painting in 1.0MLD STP.
  - 77 Projected acrylic sheets have been installed to avoid water splashes on ground from Cooling Tower in NAB.
  - 78 Grass laying in front of Budh & Gandhi Bhawan.
  - 79 Planting 1500 nos. of plants in the Campus as part of plantation drive in July & Aug.
  - 80 Trimming up to 7 feet height of trees on footpath.
  - 81 Development of soft scape near Patel Statue on South East of NAB.
  - 82 Trimming of trees which were obstructing illumination from street lights.
  - 83 Regular Fogging in the Campus.
  - 84 Taking over of renovated Budh & Gandhi Bhawan and RB Mess from Project Team.
  - 85 Taking over of New Courtyard Building in FD-III and further handing it over to Depts. of Chemistry & Pharmacy.
  - 86 Taking over of Sports Ground and commenced its operations & maintenance.
  - 87 Procurement of 02 Ton per day capacity wet garbage treatment plant.
  - 88 Budget preparation for the FY 2017-18.

#### **Works in Progress**

1. Renovation of Urinal Section in a Toilet (3 Toilets- FD III G.F., Audi Toilet, CB 2264,
2. Two Wheeler Parking Area at BITS - Building Store
3. Synthetic Enamel Painting on Wall up 3' Height at New Science Block.
4. Conversion of Indian Type Toilet into Western Type Toilet at Library.
5. Construction of Ramp for Especially Able Persons at Food King (Student Activity Centre).
6. Fabrication and fixing of G.I. Pipe and M.S. Bar Railing Railing at Ramp at BITS COOP front.
7. Dholpur Sand Stone Replacement at Library Front.
8. Extension of STP treated water line to Ram Bhawan, CVR Bhawan, VFAST & Landscaping area of FDII & FDIII.
9. Procurement & installation of 3nos. Flow meter.
10. Procurement & Installation of Hot & Cold Inverter AC at VFAST.
11. Installation of level gauge for OHT at well no.6
12. Procurement & Installation of 500LPH RO water purifier system in RB Mess.
13. Construction of Solid Waste Management Facility to treat 02ton wet waste per day.
14. Installation of M.S. stand in Student Hostels (Ram, Budh, Gandhi) to reduce scattering of trash in corridors.
15. Procurement of Manual road sweeping M/c for road cleanliness.

16. Procurement of E-Rickshaw loader for Solid waste collection & transportation and day to day maintenance related material transportation in campus.
17. Installation of water less urinal kit in Library, LTC & NSB.
18. Provision of 01MW Roof Top Solar Power Plant to save expenditure on electricity bills and help our Campus in go Green.

#### **B1.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR**

Centralized purchase 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 4000 types of consumable, 1250 equipments, and 1950 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, DIT, 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 1200 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 'B-11'.

#### **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 2016-2017:

<b>President</b>	-	Prateek Bothra
<b>General Secretary</b>	-	Manas Luthra

##### **Hostel Representatives**

<b>Bhawan</b>	<b>Name</b>
Ashok Bhawan	Aayush Gupta
Budh Bhawan	Puli Bharatha Ratna Deep
Bhagirath Bhawan	Gupta Harshil Ashwani
CVR	Emani Sai Chand
Day Scholar	Manan Mehta
Krishna Bhawan	Litesh Soni
Gandhi Bhawan	Tushar Gupta
Malviya Bhawan (B)	Vaibhav Sinha
Malviya Bhawan (C)	Kapil Agarwal
Malviya Bhawan (EXt)	Harsha Vardhan A

Meera Bhawan 12378	Anushka Ghosh
Meera Bhawan	Runal Shrivastava
Ram Bhawan	Vibhas Jaiswal
Ranapratap Bhawan	Abhishek Gupta
Shankar Bhawan	Shubham Gupta
SR Bhawan A&B	Satyansh Rai
SR Bhawan C&D	Rishi Babaria

### Secretaries of Clubs

The following were elected Secretaries for various Clubs and Societies:

ARBITS	Aditya Agarwal
Astro Club	Himanshu Singh
Audi Force	Kancharla Prany Kumar
Coding Club	Siddharth Agarwal
Creative Activities Club	Samradh Agarwal
Dance Club	Vishal Raj
Debating Society	Pavan Pillai
Dept. of Firewallz	Mano Vihari
Dept. of Informalz	Jyotiroop Das
Dept. of Live Events	Ishan Shreyash
Dept. of Photography	Yash Tibrewala
Dept. of Theatre	Siddharth Pandey
Embryo Club	Shashwat Shivam Jha
English Drama Club	Vima Gupta
English Language Activities Society	Gautham Venkatasubramanian
Fashion Club	Muskaan Verma
Film Making Club	Nikhil Vinay Sharma
Gurukul (Dept. of Music)	Adarsh Kumar Sadhukha
Hindi Activity Society	Gargi Gupta
Hindi Drama Club	Aishwarya Sharma
Lights	Vishal Rangarajan
Matrix	Eshan Tyagi
Mime Club	Abhisumat Barthwal
Mountaineering Club	Ved Purohit
Music Club	Varun Karulkar
Nirmaan Organization	Arjun Gupta
NSS, BITS Pilani	Divyansh Gupta
OASIS English Press	Niharika Aggarwal
OASIS Hindi Press	Nilesh Naraniwal
Photography Club	Rishabh Jain
Poetry Club	Rishabh Mittar
Punjab Cultural Association	Deeptanshu Agarwal
RadioAktiv	Kunal Sharma
Ragamalika	Shreya Tripathy
Renewable Energy Club	Kirti Singh
Safety and Medical Advisory Council	Reetika Shrivastav
Sounds	Hari Subramanian
ADP	Abhishek Prasad

Controls	Mudit Marda
DVM	Tarun Kumar
General Secretary	Manas Luthra

The Students' 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 2016 were

<b>Secretary</b>	-	Zalak Shah
<b>Joint Secretaries</b>	-	1. Aditya Joshi
	-	2. Rushil Handa
	-	3. Malvika Paliwal

The names of the captains for various games/sports are given below:

S.No.	Games / Sports	Name
1	Athletics (boys)	Aditya Rehlan
2	Athletics (Girls)	Anuradha Bansal
3	Badminton (Boys)	Priyanshu Bajpai
4	Badminton (Girls)	Surbhi Dang
5	Basketball (Boys)	V G Atley
6	Basketball (Girls)	Sanjana Patil
7	Carrom	Subham Thakur
8	Chess	Simantini Hucheche
9	Cricket	Jayshil Joshi
10	Football	Manik Bhandari
11	Hockey	Pranav Sood
12	Lawn Tennis (Boys)	Siddhanth Tripathi
13	Lawn Tennis (Girls)	Aishwarya Sharma
14	Squash	Tushar Gupta
15	Swimming (Boys)	Harsh Sharma
16	Swimming (Girls)	Jayati
17	Table Tennis (Boys)	Abhinav Jain
18	Table Tennis (Girls)	Muskan
19	Volleyball (Boys)	Arjun Choudhary
20	Volleyball (Girls)	Katyayani Sonti
21	Taekwon-do	Parikshit Joon

### Sports Events organized

#### BITS Open Sports Meet

The BITS Open Sports Meet (BOSM) was conducted successfully from 18<sup>th</sup> to 22<sup>nd</sup> September 2016. As in the past the institute organized an intensive coaching camp from 3<sup>rd</sup> to 22<sup>nd</sup> September 2015. Rajasthan State coaches were invited to prepare Institute's teams in various events. More than 1200 outstation students from all over the country participated in the meet. The meet was characterized as having displayed sportsmanship spirit and was full enthusiasm.

The results were as follows:

1.	Athletics (Boys)	Winner – IIT, DELHI Runner-up – BITS, PILANI
2.	Athletics (Girls)	Winner – BITS, PILANI Runner-up – MATA SUNDRI
3.	Badminton (Boys)	Winner – VENKATESHWARA Runner-up – LNIFE
4.	Badminton (Girls)	Winner – VENKATESHWARA Runner-up – LNIFE

5.	Football (Boys)	Winner - VENKTESHWARA Runner-up – BITS, PILANI
6.	Football (Girls)	Winner- JDM Runner up- KAMLA NEHRU
7.	Power-lifting	Winner – BK BIET Runner-up – BITS, PILANI
8.	Hockey (Boys)	Winner – JFHA Runner-up – TIT & S
9.	Swimming (Boys)	Winner – BITS, PILANI Runner-up - NIT TRICHY
10.	Swimming (Girls)	Winner –BITS, PILANI Runner-up – NIT TRICHY
11.	Table Tennis (Boys)	Winner – BITS PILANI Runner-up – CHITKARA
12.	Table Tennis (Girls)	Winner – ST. STEPHEN'S Runner-up – JESUS & MARRY
13.	Volleyball (Boys)	Winner – B.R AMBEDKAR Runner-up – 5YEARS LAW
14.	Volleyball (Girls)	Winner – MATA SUNDRI Runner-up – JDMC
15.	Basketball (Boys)	Winner –JAMIA MILLIA Runner-up – HINDU
16.	Basketball (Girls)	Winner –SRCC Runner-up – VENKTESHWARA
17.	Cricket	Winner – BITS, PILANI Runner-up – IIT DELHI
18.	Chess	Winner – KMC Runner-up – SRCC
19.	Tennis (Boys)	Winner – LNIPE Runner-up – BITS, PILANI
20.	Tennis (Girls)	Winner – VENKTESHWARA Runner-up – BITS PILANI
21.	Carrom	Winner – RAIT Runner-up – BITS, PILANI
22.	Squash	Winner – HANSRAJ Runner-up – BITS, PILANI
23.	Taekwondo (Boys)	Winner – BITS, PILANI Runner-up – GOSEDMA
24.	Taekwondo (Girls)	Winner – BIKANER Runner-up – BITS, PILANI
25.	Snooker & Pool	Winner – BITS, PILANI Runner up – CHITKARA

### The Intra-BITS Sports Tournaments

**i-BOSM 2016:** Pre-BOSM EVENT NAMED i-bosm 2016 was conducted from 01-04-2016 to 14.04.2016. Around 400 students participated in the event. Prize giving ceremony was conducted in the end of the semester

**League Competition:** Hockey league competition was conducted from 15-10-2016 to 20-10-2016. Around 72 students participated in the league.

### Outstation Participation

Various sports teams consisting 138 students were sent to participate in Sangram '16 a Sports Meet held at IIT Roorkee, during 20<sup>th</sup> to 22<sup>nd</sup> March 2016. 26 students of certain sports went to BKBIET, Pilani to take part in Quasar 2016 from 26<sup>th</sup> to 29<sup>th</sup> October 2016. Students also participated in the sports tournament conducted by Dubai Campus, BITS, Pilani in Dubai during 11 – 25 November 2016.

### Swimming Club

The Swimming team distinguished itself by its performance in BOSM 2016 winning by 13 Gold, 11 Silver, and 16 Bronze Medals

Swimming Camp was conducted from 19<sup>th</sup> May 2016 to 26<sup>th</sup> July 2016

### Health Club

The Health Club is equipped with various advanced machines for aerobic and anaerobic exercises. During II Semester 2015-2016, the Health Club had a membership of 800 while in I Semester 2016-2017 it was 933.

### Hockey Camp

A camp on learning basic skills of Field Hockey was conducted by Sports Club from 6<sup>th</sup> April 2016 to 11<sup>th</sup> April 2016 in which a total of 82 students were registered and 48 students regularly attended the same. The



certificate-giving Ceremony was held at the end of the semester.

### **Tennis Camp**

A camp on learning basic skills in Tennis was conducted by Sports Club from 6<sup>th</sup> April 2016 to 11<sup>th</sup> April 2016 in which a total of 64 students were registered and 47 students regularly attended the same. The certificate-giving Ceremony was held at the end of the semester.

### **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.

### **OASIS 2016**

BITS Pilani celebrated the 46<sup>th</sup> edition OASIS. Its annual cultural festival from 19<sup>th</sup> October to 23<sup>rd</sup> October 2016. This festival, managed entirely by the students, was mainly sponsored by Infoview, Panasonic. It attracted about 1600 outstation participants from about 70 colleges situated all over the country. The festival hosted as many as 80 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 "Of Gods and Men"

The music concerts by Mr. Amit Trivedi, Zaeden, Light Years Explode, a DJ night by RedBull tour bus and a comedy show were among the several highlights of the festival. The festival also witnessed various workshops of dance, music and pottery. Events like desert dull, start 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 show case 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. In the words of Mr Akhil Reddy, 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 2016**

APOGEE is the Annual international technical festival OF BITS Pilani. With over 8000 students, 100 colleges and 80 technical events, APOGEE 2016 was conducted from 25<sup>th</sup> to 28<sup>th</sup> February 2016. The chief sponsors for the festival included SAP, fitbit and Tata. It provided opportunities to bright research-oriented minds fostering fruitful innovation through events that include Guest Lectures, Panel Discussions, Project, Paper Presentations, Hackathons, Programming Events, Workshops and Exhibitions extending over a period of five days. The Think Again Conclave was the major attraction of the festival with greats like Dr. Richard Stallman(Father of free software movement, Founder GNU), Javed Akbar(Edior, Author), Rohit Gupta(Columnist for Hindu Businessline) gracing the stage and making the event an astounding success. APOGEE 2016 surely took the standard of APOGEE as a festival a few notches higher.

### **INTERFACE 2016**

#### **All India Management Convention, Interface 2016**

39th All India Management Convention, Interface 2016 was organized by the Department of Management of BITS Pilani on 5th and 6th March 2016. Interface serves as a platform for students and professionals to come alive with the skills and ideas that are necessary to run the ever dynamic and fast growing industries in India. It's a Pan-India Management Convention where students showcase their exceptional managerial dexterity, innovative business ideas and incomparable entrepreneurial skills. Interface which started as an annual event in 1978 has been running every year with increasing participation from various colleges across the country.

The two days Management extravaganza with the theme, 'FLIGHT BEYOND INFINITY' had several events like FinQuest, AdMania, Desert Storm, FinPlay, Kaleidoscope, Game of Clanes including: Guest Talks by Industry bigwigs like Mr Amit Sinha Roy( VP Tata Communications Ltd.), Dr J K Sharma( Head-CRM Jagsonpal Pharmaceuticals), Miss Amandeep Kaur( Head – Marketing & Comm. Myntra.com), Dr Vineet Sharma (Talent Acquisition Head-NBC Bearing) and Mr RamKumar Venkatraman( Partner-Cedar Management Intl.). Guest talks covered a wide array of topics relevant in the current market scenario. These topics included NeuroMarketing, Leadership with Social Responsibility, Digital Transformation of Brands, Shifting Trends in marketing and many more.

Prof. S. C. Sivasubramanian, Deputy Director and Dean Administration BITS Pilani, Pilani campus, Dr. Chandrashekhar, Sr. Professor Emeritus and Retired Senior Scientist (CEERI), Dr J K Sharma, Head CRM Jagsonpal Pharmaceuticals, Mr V Ramkumar, Partner Cedar Management Intl. and Mr Amit Sinha Roy, VP Tata Communications Ltd. graced the inaugural function. Keynote address was delivered by Prof. S. C. Sivasubramanian laying focus on the theme "Flight Beyond Infinity" and its relevance and significance in the corporate world. At the same time all the other guest of honour gave insights on the current challenges, threats and opportunities prevailing in the market.

The valedictory ceremony of Interface 2016 turned out to be a culmination of innovative thoughts and ideas which had Dr J K Sharma( Head-CRM Jagsonpal Pharmaceuticals) and Miss Amandeep Kaur( Head – Marketing & Comm. Myntra.com) delivering emphatic talks about the events and festivities that had taken place during Interface -2016, giving it a relevant closure for us all.

Valedictory ceremony of Interface 2016 ended with lighting of Sky Candles by Dr J K Sharma and Miss Amandeep Kaur and with candles rising in the sky, Interface 2016 -"Flight Beyond Infinity" was concluded.

## RAGAMALIKA

The year 2016 was really eventful for Ragamalika and saw great deal of activities. On Founders' Day, the club performed Thyagaraja Aradhana as a tribute to the great composer Thyagaraja. The semester's flagship show was SANGAMAM based on a creative blending of two great classics "The Phantom of the Opera" and "Swan Lake". The dancers enthralled the audience with their performance. The second semester 2015-16 came to an end with the senti concert of the veteran vocalist of the club, J KrishnaMurthy and the first semester of 2016-2017 began traditionally by inducting fresher's into the club. The newly inducted dancers and musicians showcased their potential through the freshers' concert. Ragamalika started a new tradition of Chamber concerts this year where in the club members put up a professional performance in front of a limited audience showcasing their talent. The club's major production Nritya Ranjani was titled Moksha. The show portrayed the nuances of dance by sticking to the classical repertoire and the main theme was based on the ultimate end of human life which is salvation. On popular demand, the club organized a concert of Rakshit Prasad, a Mandolin player extremely enjoyed by all. Ragamalika collaborated with the team of Oasis, 2016 to organize a jugalbandhi concert of Pandit Vishwa Mohan Bhatt. The first semester, hence ended with the grand senti concert of the celebrated vocalist of the club, Rohan Shankar.

## SPIC MACAY

### Classical Music Concerts - I Semester 2016-17

SPICMACAY BITS Pilani chapter organized two concerts during I Semester 2016-17. The first concert held on 08<sup>th</sup> October, 2016 was a Shehnai rendition by Pandit Daya Shankar accompanied by Shri. Anand Shankar on Tabla. Pandit Daya Shankar inaugurated the concert with Raag Bihag. He later engaged the audience explaining the concept and tradition of the Indian classical music. The concert concluded with a chota khayala set to Raag Bhairavi. The second SPICMACAY concert was held on 16<sup>th</sup> October, 2016 in the NAB Auditorium. Mr. Johar Ali Khan, a violinist, along with Mr Rashid Zafar Khan on tabla, produced a spectacular performance that kept the audience spellbound for almost ninety minutes. The concert began with a khayala based on Raag Jog. Subsequently Mr Johar Ali enthralled the audience by playing snippets of foreign classical music style belonging to western, Arabian as well as Chinese tradition. He later played the native folk music style belonging to various states of India and quizzed students on identifying the state to which it belonged. It was indeed a memorable evening.

## MATRIX

### Second Semester 2015-2016

Members of the club attended the Jaipur Literature Festival in the third week of January. Matrix has been attending JLF since the year of its inception and plans to uphold this tradition in the coming years. It gives us the opportunity to attend talks, panel discussions, book introductions by eminent personalities. Talks by Gulzar, Javed Akhtar, William Darlymple, Stephen Fry and many others were the major attractions in this particular edition.

In February, the club engaged itself in preparations for APOGEE, the annual technical festival of BITS Pilani. Matrix conducted two quizzes and screened two movies during APOGEE. One of the quizzes was based on the Anime|Manga|Comics theme and the other was based on goofups in popular movies, TV series etc. The movies screened were 'The Book Thief' and 'Gravity'. The APOGEE Coordinator was Rishabh Agarwal.

The first yearites reviewed two books - The Fountainhead by Ayn Rand and The Accidental Prime Minister by Sanjay Baru. There were two informal discussions. One of them was on the ideas discussed by Ayn Rand in The Fountainhead (objectivism, capitalism etc.). The other discussion revolved around two books and was supposed to be a discussion on fairy tales. The two books were Tales of Beedle The Bard by JK Rowling and Metamorphosis by Franz Kafka. Informal discussions like these lead to spontaneous exchange of ideas and interesting debates. Matrix looks forward to increasing the frequency of such informal discussions in the future.

In the first week of April, a History and Historical Fiction Panel was organized. It was a book introduction panel. The books introduced were

- Memoirs of a Geisha (Arthur Golden) - Shaista Hussain
- Stalin : The Court of the Red Czar (Simon Montefiore) - Arshad Latif Saikia
- The Boy in the Striped Pyjamas (John Boyne) - Rishabh Agarwal
- The Blood Telegram (Gary Bass) - Avinash Rao

Another book introduction panel was organized in the third week of April. The details are as below

- The Illicit Happiness of Other People (Manu Joseph) - Soumya V.
- Gujarat: The Making of a Tragedy (Siddharth Varadarajan) - Pankaj Singla
- 62: A Model Kit (Julio Cortazar) - Sai Venkat Anumula
- Nagaland: A Journey To India's Forgotten Frontier (Jonathan Glancey) - Ricky Lahkar Pradhan
- Shantaram (Gregory David Roberts) - Shreyas Dixit

The panel consisted of students in their last semester on campus. This has been a standing tradition of bidding farewell to our beloved seniors.

The interviews for post holders began early in April and concluded with 7 post holders.

The semester ended with the Valedictory Ceremony where all the people who were actively involved with the club and its activities were acknowledged. It was graced by the presence of our director, Prof. A.K. Sarkar, other faculty members like Dr. Devika, Dr. Sailaja Nandigama, Mr. Tathagato Chakraborty and Dr. Kumar Sankar Bhattacharya.

### **First Semester 2016-2017**

The semester started with the recruitment process which was held in two stages. It saw a lot of enthusiastic participation from the freshers as well as the club members. A movie screening was conducted in parallel to aid the recruitments. 'The Truman Show' was screened. A total of 13 first years were recruited.

A 'Book Exchange' session was conducted right after, wherein the members brought along a book of their choice. Everyone took their turns and briefly introduced their respective books after which the books were pooled and left open for the members to borrow. Some of the titles introduced in the Book Exchange were - American Gods (Neil Gaiman), Unladylike (Radhika Vaz), The Art of War (Lao Tzu), Life of Pi (Yann Martel), The Sialkot Saga (Ashwin Sanghi).

Two more Book Exchange sessions were held during the semester. Titles introduced include -

- Wind-up Bird Chronicle (Haruki Murakami)
- Kafka On The Shore (Haruki Murakami)
- Wuthering Heights (Anne Bronte)
- Freakonomics
- Fencer Trilogy (K J Parker)
- I Am The Messenger (Markus Zusak)
- How Music Got Free (Stephen Richard Witt)
- Roots : The Saga of an American Family (Alex Haley)
- My Man Jeeves (P J Wodehouse)
- Surely You're Joking, Mr. Feynman (Richard Feynman)

In BOSM, the club conducted match and movie screenings in GymG grounds. It also conducted a Cricket Quiz and a game show-inspired literature, cinema, TV series, anime, comics and manga based event called 'Wheel of Fortune'. They had a participation of around 100 each. The BOSM coordinator was Krishna Sai.

The days after BOSM and preceding Oasis were spent in planning, discussion and working on the events to be conducted. The club organized a Film Festival in Oasis in collaboration with the Poetry Club. The events conducted under the same were a talk by Manav Kaul (poet, playwright and actor), a Movie Quiz and three movie screenings. The movies screened were 'Bruce Almighty' and 'Princess Mononoke'. In addition to these, there was the Triathlon based on the mythological theme of the fest. The Oasis Coordinator was Eshan and the Joint Coordinator was Anshumala.

Realizing that the introductions in Book Exchange should not be restricted to just literature, sometime after Oasis, Book Exchange was changed to an Open Stage type of meet to include movies, manga, anime and abstract ideas in addition to literature. Open Stages were conducted on Sundays and these informal sessions turned out to be quite interesting.

The Matrix book collection was also catalogued on a better platform - Goodreads.

The semester ended with a book introduction whose details are as follows:

- Madness and Civilization (Michael Foucault) - Rishabh Agarwal
- Democrats and Dissenters (Ramachandra Guha) - Arshad Latif Saikia
- Johnny Got His Gun (Dalton Trumbo) - Shaista Hussain
- All The King's Men (Robert Penn Warren) - Sayan Maitra

### **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:

<u>Admission year</u>	<u>No. of students</u>
I Year	47
II Year	33
III Year	12
IV Year	07
V Year	03
<b>Total</b>	<b>102</b>

#### Aditya Birla Group Scholarships

One student, Mr. Sanat Sharma (2016A7PS019P) has been awarded the prestigious Aditya Birla Scholarships for the academic year 2016-2017. These scholarships are awarded to meritorious students of Engineering from among those admitted to BITS Pilani and the IIT's at Bombay, Chennai, Delhi, Kanpur and Kharagpur after a rigorous selection process.

#### GE Fund Scholarship Program – 2015 -17

GE Foundation, USA, which is the philanthropic organization of the General Electric Company, has sanctioned four scholarships worth \$ 8000. \$ 2000 each to four students of Second Year B.E.(Hons.) Mechanical and B.E.(Hons.) Computer Science programme in the BITS, Pilani. The scholarships were awarded to Ms. Vidhi Jain, (ID No.2014A7PS113P), Mr. Shubham Maurya (2014B3A7282P), Mr. Pranav Misra (2014A7PS096P) and Mr. Nabarun Gogoi (2014B1A7485P).

#### Institute of International Education - Avery Dennison Foundation Scholarship Program

Sanctioned six scholarships worth \$ 1300 each to students. The six winners of the Avery Dennison Foundation 'InvEnt' Scholarship Program – 2015-16 are the following:

1. Mr. Alanckrit Jain (ID No.2015A8PS327P)
2. Mr. Agarwal Vaibhav Sunilkumar (ID No.2015A4PS220P)
3. Mr. Anmol Gupta (ID No. 2015A1PS635P)
4. Ms. Aakriti Agrawal (ID No. 2015A3PS276P)
5. Mr. Anirudh Tusnial (ID No. 2015ABPS715P)
6. Mr. Neeraj Janardan Gadi(ID No. 2015A4PS314P)

#### Alumni Scholarships

BITS Alumni have instituted several merit-cum-means scholarships. For the First Semester 2015-2016 and Second Semester 2015-2016 the scholarships were awarded to the following students.

<b>Scholarship</b>	<b>I Semester 2014-2015</b>	<b>II Semester 2014-2015</b>
Vamsi Pendyala and Prasanna Kalahasthi Memorial Scholarship	Kush Agarwal ID No. 2014A8PS419P	Aditya Relhan ID No.2014A4PS378P
S.S. Seshadri Memorial Scholarship	Shivankar Datta ID No. 2013A4PS363P	Ayush Gupta ID No. 2013A5PS584P
BITS Alumni Class of 1966-71 Scholarship	Joshi Jayshil Kamlesh ID No. 2014B2A8737P	Bandaru Mokshagnya ID No. 2014B4A3542P
Rakesh Chandra Scholarship	Nikita Srivastava ID No. 2014A5PS430P	Akshay Golechha ID No. 2014B5A4844P
Shantha E. Iyer Scholarship	Priya Agarwal ID No. 2012A23PS517P	Priya Agarwal ID No. 2012A23PS517P
	Neha Agarwal ID No. 2013A1PS493P	Neha Agarwal ID No. 2013A1PS493P
	Vrinda Poddar ID No. 2014B4A7802P	Vrinda Poddar ID No. 2014B4A7802P
	Ayushi Agarwal ID No. 2015A1PS712P	Ayushi Agarwal ID No. 2015A1PS712P
Arun Agarwal Scholarship	Akshit Deep Singh ID No.2015B1PS652P	Shubham Bhandari ID No. 2015B3PS471P

Scholarship	I Semester 2014-2015	II Semester 2014-2015
M.R. Dalmitya Scholarship	-	Priyal Jain ID No.2014A2PS773
	-	Ravish Kumar ID No.2014A4PS015
Divya-Dileepan Scholarship	-	Prakhar Srivastava ID No.2015B1PS834

## National Service Scheme

### Introduction

The Birla Institute of Technology & Sciences, BITS Pilani is an all India Institute for higher education. BITS Pilani, since its establishment has been striving to develop the community and with a mindset of instilling the thoughts of social awakening in its students as well, established National Service scheme as early as 1969. Over the past few decades, NSS has been working tirelessly in the surrounding villages to develop the community in the spirit of nation building. NSS also provides students the opportunity of developing leadership skills, and develop a sense of social and civic responsibility.

### Faculty Body Structure

NSS Coordinator:

**Dr. Anupam Singhal**

NSS Program Officers:

1. Dr. Hitesh Dutt Mathur
2. Dr. Hari Om Bansal
3. Dr. R.P. Pareek
4. Dr. Shibasish Chowdhury
5. Dr. Subhashis Gangopadhyay
6. Dr. Shivi Agarwal
7. Dr. Surojit Pande

### Activities:

The following is the brief overview of the NSS BITS Pilani activities undertaken during first semester 2015- 2016:

1. **Literacy Program: (Aim: To provide literacy and smart education to needy)** NSS School started on 5th of August of this academic session. With registering of the 250, which is itself a record students we have selected 130 students from class 3<sup>rd</sup> to 12<sup>th</sup> based on financial condition and enthusiasm of students. The number of active volunteers last semester was 80. Various workshops were conducted for kids which consisted of sketching, coloring, origami, etc. Every alternate week these workshops were conducted and the other alternate week a test was conducted for every kid. A new system was implemented to keep a record of each student's database, wherein every volunteer was instructed to visit his/her child's home and upload the data on google drive. Also, volunteers started a puzzle system where every alternate day a puzzle was put up on notice board and the children were required to think of a possible solution to it. The children could not take help from the volunteers and were supposed to solve it on their own. The student with maximum correct answers was given a present on the last day of school. Volunteers also started "Word of the Day" during assembly in the beginning of school, where all the students learn 2 new words of Hindi & English each. In this way, volunteers kept it interesting coming to the school for children and not like monotonous school life. Children develop a strong bond with the volunteers and this bond is further enhanced by celebration of various festival in the school. A sports day was organized, where games like kho-kho, kabaddi, football, athletics etc were played in the school and prizes given at the end. The school was closed on 22<sup>nd</sup> of November. For this semester it has been planned to organize an informative session by our teachers on career counselling and also we have planned to organize a cultural event for the students.
2. **Computer Literacy Programme (CLP):** The Computer Literacy Programme (CLP) which aims at providing computer literacy to adults and students living in Pilani and in nearby villages was carried out successfully by National Service Scheme, BITS Pilani, in First Semester 2016-17 in Pilani and neighboring areas, with the locations where the programme was carried out being as follows:
  - A. **Pilani Resource Centre, Harinagar:** Pilani Resource Centre (PRC), located in the vicinity of the campus, has a well-equipped computer lab with a total of 20 computers. Established jointly by BITSAA, the alumni association of BITS Pilani and Pratham, an NGO which functions at an all-India level, it is ideal for holding computer classes as the staff members provide support to carry out the programme there. Based on earlier

experience and results, batches were planned to be held six days a week, viz. for students of higher classes (including college-going students) for providing them computer training for the exams to be organized by govt. for jobs recruitment. The slot's timings were 5:30 PM to 6:30 PM. Total 40 people has been registered for the training but as we don't have the authority to provide the govt. authorized certificate the number drops down to 20.

- B. **CLP in Rayla village Govt. school:** CLP has also started its classes as a pilot run in NSS School. A total of 4 classes were conducted over the last semester which ran very successfully. In this semester we have increased the number of classes' manifolds in Raila, a village located around 2 Km from Pilani, is also one of the places where the CLP functioned this semester. A government school in Raila was well-equipped with 4 computers but a shortage of teachers forced the principal to shut down the lab. On being approached by NSS, the principal expressed his willingness to hold computer classes in the school for those interested in learning. Thus, the CLP was extended to this village. Classes were held from 3 PM to 4 PM, thrice a week (after school hours) in the computer lab, and all the residents of the village were open to attend. Around 50 students have had a good exposure to computers through this initiative. The topics covered include the basics of computers, typing, file-handling operations on an OS, MS-Paint, MS-Word, and MS-PowerPoint, to an extent. The content was taught by verbal means along with some visual aids in the form of demonstrations using a projector, showing tutorial videos on the volunteers' laptops, notes, etc.
3. **Health and Public Awareness (HPA)** Health and Public Awareness focuses on making the people aware about the government policies and how to get maximum benefit from them. It also tries to uplift their life by making them aware about diseases by conducting various camps and surveys like general health assessment survey and camp, sanitary health camp etc. Considering the objectives, a lot of activities were taken up, this semester, in Raila village which is located 2km from Pilani. Some of the activities were 'Tree plantation', health survey, Raila school project, RTE seminar, health workshop etc. In support to the tree plantation drive done last year, a tree treatment drive has been conducted to deal with the the height of the trees, 60 trees were monitored in almost in every part of the Gharinda village. Health survey was conducted before health camp in which a doctor from outside visited the village and medicines were distributed accordingly. The result that came out to be was much of a concern. Health survey indicated the need of increase the quality of drinking water rather than the checkup. Raila school project has been continued to provide children of Raila with firm foundations in every subject along with ethical values. There are three visits per week by the volunteers to the Village. In the coming semester various camps are planned. A Vocational Training Center is planned to be set up in Raila/Gharinda according with basic focus on Sewing & Papad Making. A health camp also will organized in Raila.
4. **Special Events:** The Events Department organized following events in this semester.
- A. **Blood Donation Camp** (6th February 2016- 7th February 2016) NSS BITS Pilani organized 35th edition of Blood Donation Camp on 6th-7th February 2016 in collaboration with Indian Red Cross Society, Delhi. Two day event was inaugurated by director of BITS Pilani Professor A.K. Sarkar. Event got overwhelming response with about 1000 people registering for noble cause out of which total of 731 unit of blood was collected. NSS BITS Pilani was also awarded for its outstanding and consistent performance in organizing BDC over the year.
- Taking a leap forward, this year we conducted organ donation camp in collaboration with AIIMS Delhi, spreading awareness about organ donation and registering interested organ donors. Around 200 people registered for organ donation. Registered forms were sent to AIIMS, who thereby will contact donors directly.
- B. **LEAP** (Leading Endeavour to Achieve Progress) is an initiative for all the student run social volunteer organizations across the country. It is an initiative to improve the efficiency of organizations and a way through which creative and good ideas can be shared and used for the betterment of the society.
- In LEAP, Mentorship is provided to selected societies throughout the year, for their significant progress. A LEAP Portal is made, aims to form an interactive community of all such student led societies which are working with the aim of development. Portal provides data on the ongoing working of various societies, their contact details, new initiatives and collaboration offers etc. Suggestions can also be exchanged via this platform and for an annual assemblage of all the participating organization to discuss the progress and for building a strong relationship Youth conference will be conducted.
- In YOUTH CONFERENCE 2016, held on 27-28 Feb., apart from the convention involving various societies, we also had our on-board mentors during the conference, sharing their vast experience and knowledge through a panel discussion and mentoring sessions.
- C. **Dhiti** (Last week of Feb., 2016) Last event of academic year 2015-16, Dhiti is organized as a part of Technical Festival of BITS Pilani. It took place in the form of competition where participants are asked to submit technologically feasible solution to the existing social problem. Previous editions of Dhiti saw extensive and encouraging participation and are expected to continue in the upcoming year as well.
- D. **Junoon** (10<sup>th</sup>-11<sup>th</sup> September, 2016): The fifth edition of the sports fest for especially abled, Junoon was organized in BITS Pilani – Pilani Campus on 10th and 11th September. The fest saw a participation of over 120 specially abled people from 6 different NGOs. The NGOs participated are Akshay Pratishthan, a Delhi based school for challenged children; Asha kaJharna, a non-profit organization from Nawalgarh, Rajasthan;

Deepalaya, a social service organization from Delhi; Disha, a Resource Centre for Multiple Disabilities from Jaipur; Manovikas, a Charitable Society from Delhi; and SOB (Special Olympics Bharat) from Pilani will participate in this show of sportsmanship. Several events like cricket, basketball, badminton, Bocce, athletics (races, shotput, softball etc.) were hosted. A special event called "Floor Ball" was also organized. The two days event was graced by Dr. Malathi Krishnamoorthy Holla, an acclaimed international para-athlete. A talk was also organized in this occasion where our chief guest delivered a motivating speech to BITSians. The event was inaugurated by the Vice-Chancellor Prof. Souvik Bhattacharya. With a decent BITSian participation, the fest saw the fulfilment of its motive. At the end of the event, the NGOs were felicitated by the Director Prof. A. K. Sarkar.

- E. **NSS Oasis Stall** (19<sup>th</sup> – 23<sup>rd</sup> October 2016) NSS BITS PILANI organizes NSS Oasis Stall during Oasis which is a four day cultural fest of BITS Pilani. It aims to promote NGOs and spread awareness about them by showcasing their products. NSS Oasis Stall 2016 exhibited products of 17 NGOs. NSS Stall was inaugurated by Dr. A. K. Sarkar, Director BITS Pilani.

This year NSS reached out to an NGO Antarkranti, which solely works for the rehabilitation of prisoners also showcase the products manufactured by them. Further, this year the stall was decorated with over 300 photos depicting a decade long timeline of various successful and unsuccessful attempts made to create a change and also focused on "PinjraTod– Break the Cage" an initiative by DU was extended arguing various curfews and restrictions the modern society puts on girls.

### **NIRMAAN**

Nirmaan Organisation, started in 2005 by a group of 4 BITSians, has entered into its 10th year of operation to create social leaders in various corners of India. The oldest chapter of this organisation, Nirmaan BITS Pilani, a completely student-run chapter, conducted several events this year inside and outside the campus. Some of the major highlights are as follows:

- 1) **Apogee:** In Apogee, Nirmaan organised 2 events namely India Quiz and DHITI. India quiz was an event to test the participants on the basis of their general knowledge. DHITI on the other hand is a multi-stage event with an aim to provide a platform for the technical implementation for social ideas. The judging panel for DHITI 2015 was headed by Bindeshwar Pathak, founder of Sulabh International.
- 2) **Joy of Giving Week:** October 14-20 was celebrated as Joy of Giving Week in our campus. The inauguration ceremony was graced with the presence of Dr. Anshu Gupta, founder Goonj and winner of Raman Magsaysay Award. Rhythm for Life, a Delhi-based musical group, performed on the inauguration evening. Major attractions of the week were Day of Joy for kids of Courtbasti, Baas and Natbasti along with wish trees and Hour of Joy in various communities in Pilani. Some events were also conducted in Birla Senior secondary School thus expanding the season of happiness.
- 3) **Oasis:** In Oasis, Nirmaan hosted Nirmaan Stall. 3 NGO's namely Atijivan, MESH and Nayi Dishayein were invited to collaborate with Nirmaan in setting up of stall. Alongside with products made from women in Baas, we had Prayogshala setting up a separate stall for handmade google cardboards. The earnings from these directly went to the beneficiaries.

Apart from these events, the chapter has several projects working in sectors of education, employment, community development, government interfacing and technical innovations at grassroots. The current strength of over 100 volunteers has been working hard to light the lives of hundreds of beneficiaries living in four different communities namely Court-basti, Natbasti and at 2 different places in Baas of Pilani.

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### DETAILS OF ADMISSIONS MADE DURING THE YEAR 2016

**(A) Second Semester 2015-2016**

**Doctoral Programmes**

Ph.D.	24 (13)
<b>Total</b>	<b>24 (13)</b>

**(B) First Semester 2016-2017**

PROGRAMMES	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>1. Integrated First Degree Programmes</b>			
<b><u>Group A</u></b>			
B.E.			
Chemical	69(12)	351	319
Civil	69(3)	354	314
EEE	99(12)	389	362
Mechanical	89(5)	372	346
Computer Science	121(13)	423	384
Electronics & Instrumentation	68(10)	382	345
Manufacturing	36(4)	345	311
B. Pharm.	55(24)	309	240
	606(83)		
<b><u>Group B</u></b>			
M.Sc.			
Biological Sciences	59(7)	331	304
Chemistry	71(10)	333	308
Economics	67(10)	357	335
Mathematics	69(11)	378	330
Physics	70(10)	402	324
	336(48)		
<b><u>Group C</u></b>			
M.Sc.			
Gen. Studies	11(3)		
	11(3)		
<b>Total :</b>	<b>953(134)</b>		

**Note:**

- (i) The above list consists of 7 students who are First rank holders from different central/ state boards admitted under 'direct admission of board toppers' scheme.
- (ii) The above numbers also include 33 admissions of staff children and of BET school students, made under special dispensation consisting of 1 in Bio Sciences, 2 in Chemistry, 7 in Economics, 6 in Mathematics, 6 in Physics and 11 in General Studies.

## 2. Higher Degree Programmes :

M.E.	
Biotechnology	11(10)
Chemical Engineering	14(04)
Civil (Structural Engineering)	11(03)
Civil (Transportation Engineering)	10(03)
Civil (Infrastructure Engineering)	6(02)
Computer Science	21(06)
Communication Engineering	11(03)
Design Engineering	10( 0)
Embedded Systems	10(04)
Manufacturing Systems Engineering	10(01)
Mechanical Engineering	16(01)
Microelectronics	14(00)
Software Systems	24(10)
MBA	63(19)
M.Pharm.	6(04)
M.Pharm. (Pharmaceutics)	10(03)
M.Pharm. (Pharmaceutical Chemistry)	6(02)
<b>Total</b>	<b>253(75)</b>

## 3. Doctoral Programmes :

Ph.D.	36(12)
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## SUMMARY

	II Semester 2015-2016	I Semester 2016-2017
<b>Programmes</b>		
Integrated First Degree Programmes	-	953(134)
Higher Degree Programmes	-	253( 75)
Ph.D.	24(13)	36( 12)
<b>Total</b>	<b>24(13)</b>	<b>1242 (221)</b>

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2016-2017 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

**FIRST PRIORITY**

(i) **Pilani Campus:**

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

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AB	Total
B1	5	9	9	7	-	7	6	3	46
B2	9	7	8	11	-	8	6	4	53
B3	9	4	9	11	-	16	9	4	62
B4	6	5	10	3	-	17	6	4	51
B5	5	7	12	11	-	9	3	1	48
<b>Total</b>	<b>34</b>	<b>32</b>	<b>48</b>	<b>43</b>	<b>-</b>	<b>57</b>	<b>30</b>	<b>16</b>	<b>260</b>

**OTHER PRIORITIES : NIL**

(ii) **Transfer within same tier:**

Programmes* From ↓ To →	A3	A7	A8	Total
A1	1			1
A3		3		3
A4		1		1
A8			1	1
B3		1		1
<b>Total</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>07</b>

(iii) **Transfer within B to B**

Programmes* From ↓ To →	B1	B3	B4	B5	Total
B1		1	2	1	4
B2	1		2		3
B4		1			1
B5		1			1
<b>Total</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>9</b>

(iv) **Vertical Transfers:**

From	To	No. of Students
M.Sc. (Hons.) Mathematics B.E. (Hons.) Computer Science	M.E. Computer Science	1
B.E. (Hons.) Electrical & Electronics	M.E. Communication Engg.	1
M.E. Civil with Specialization in Transportation Engg.	Ph.D in Civil Engg	1

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2016-2017**

Programme	Year of Admission						Total
	2011 and earlier	2012	2013	2014	2015	2016	
<b>I. On Campus Programmes</b>							
<b>A. Integrated First Degree Programmes</b>							
<b>B.E.(Hons.)</b>							
Chemical	0(0)	2(0)	62(7)	68(10)	71(12)	73(12)	276(41)
Civil	0(0)	0(0)	57(6)	62(3)	72(3)	71(4)	262(16)
E.E.E.	0(0)	3(1)	98(16)	99(7)	94(5)	100(12)	394(41)
Mechanical	0(0)	2(0)	85(2)	83(1)	90(0)	91(5)	351(8)
Computer Science	2(0)	1(0)	132(15)	128(13)	122(13)	121(13)	506(54)
Electronics & Instrumentation	0(0)	1(0)	67(13)	62(8)	67(9)	71(10)	268(40)
Manufacturing Engg.	0(0)	0(0)	35(6)	41(1)	33(1)	39(4)	148(12)
<b>B.Pharm. (Hons.)</b>	1(1)	1(0)	10(0)	41(19)	45(22)	52(23)	150(65)
<b>M.Sc. (Hons.)</b>							
Bio. Sciences	0(0)	46(13)	50(11)	56(13)	48(7)	60(7)	260(51)
Chemistry	1(0)	37(7)	45(6)	50(12)	54(13)	72(10)	259(48)
Economics	0(0)	47(6)	68(12)	68(10)	69(8)	71(12)	323(48)
Mathematics	0(0)	44(9)	54(12)	63(7)	60(8)	70(11)	291(47)
Physics	1(0)	45(7)	46(9)	63(10)	52(8)	70(10)	277(44)
<b>M.Sc.(Tech.)</b>							
Information Systems	1(0)	1(0)	1(0)	1(0)	0(0)	0(0)	4(0)
Gen. Studies	0(0)	1(0)	16(5)	14(5)	9(3)	11(3)	51(16)
Finance	0(0)	10(05)	0(0)	0(0)	0(0)	0(0)	10(5)
<b>Sub Total</b>	<b>6(1)</b>	<b>241(48)</b>	<b>826(120)</b>	<b>899(119)</b>	<b>886(112)</b>	<b>972(136)</b>	<b>3830(536)</b>

**Note:** The numbers in brackets indicate number of female students

Programme	Year of Admission						Total
	2011 and earlier	2012	2013	2014	2015	2016	
<b>B. Higher Degree Programmes</b>							
<b>M.E.</b>							
Chemical	0(0)	0(0)	0(0)	0(0)	19(13)	14(4)	33(17)
Computer Science	1(0)	0(0)	0(0)	0(0)	23(5)	21(6)	45(11)
Mechanical	1(0)	0(0)	0(0)	0(0)	15(1)	15(1)	31(2)
Software Systems	2(1)	0(0)	0(0)	1(1)	20(9)	24(10)	47(21)
Microelectronics	1(0)	0(0)	0(0)	0(0)	12(3)	14(0)	27(3)
Communication Engineering	0(0)	1(0)	0(0)	0(0)	9(1)	11(3)	21(4)
Biotechnology	0(0)	0(0)	0(0)	0(0)	11(8)	11(10)	22(18)
Embedded Systems	1(0)	0(0)	0(0)	0(0)	10(2)	10(4)	21(6)
Design Engineering	0(0)	0(0)	0(0)	0(0)	13(0)	10(0)	23(0)
Manufacturing Sys.Engg	0(0)	0(0)	0(0)	0(0)	11(0)	10(1)	21(1)
Civil with Specialisation in Transportation Engg.	0(0)	0(0)	0(0)	0(0)	11(0)	10(3)	21(3)
Civil with Specialisation in Structural Engg.	1(0)	0(0)	0(0)	0(0)	11(2)	11(3)	23(5)
Civil with Specialisation in Infrastructural Systems	0(0)	0(0)	0(0)	0(0)	6(3)	6(2)	12(5)
<b>Master of Business Administration</b>	0(0)	0(0)	0(0)	0(0)	70(20)	63(19)	133(39)
<b>M.Pharm</b>	0(0)	0(0)	0(0)	0(0)	9(6)	6(4)	15(10)
<b>M.Pharm.</b> (with Specializations in Pharmaceutics Chemistry)	0(0)	0(0)	0(0)	0(0)	4(2)	6(2)	10(4)
<b>M.Pharm.</b> (with Specializations in Pharmaceutics)	0(0)	0(0)	0(0)	0(0)	16(6)	10(3)	26(9)
<b>Sub Total</b>	7(1)	1(0)	0(0)	1(1)	270(81)	252(75)	531(158)
<b>C. Ph.D.</b>	39(17)	46(23)	71(31)	43(18)	42(16)	35(12)	276(117)
<b>Total (On-Campus)</b>	<b>52(19)</b>	<b>288(71)</b>	<b>897(151)</b>	<b>943(138)</b>	<b>1198(209)</b>	<b>1259(223)</b>	<b>4637(811)</b>

#### SUMMARY

	On-Campus			
	Engg.	Sc.	Hum.	Total
First Degree	2219(217)	1237(255)	374(64)	<b>3830(536)</b>
Higher Degree	347(96)	51(23)	133(39)	<b>531(158)</b>
<b>Total</b>	<b>2566(313)</b>	<b>1288(278)</b>	<b>507(103)</b>	<b>4361(694)</b>
Ph.D.	-	-	-	<b>276(117)</b>
<b>Grand Total</b>				<b>4637(811)</b>

**Note:** The numbers in brackets indicate number of female students.

### STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	
	78 <sup>th</sup> Award (19.03.2016)	79 <sup>th</sup> Award (15.07.2016)
(i) On-campus Programmes		
A. Integrated First Degrees		
<b>B.E. (Hons.)</b>		
Chemical	2(0)	20(6)
Chemical (with PS)	0(0)	51(12)
Civil	2(0)	19(3)
Civil (with PS)	5(0)	59(6)
Computer Science	0(0)	28(5)
Computer Science (with PS)	2(0)	100(22)
EEE	3(1)	20(2)
EEE (with PS)	4(0)	102(18)
Electronics & Instrumentation	1(1)	16(1)
Electronics & Instrumentation (with PS)	1(0)	68(18)
Electronics & Communication Engineering	0(0)	0(0)
Electronics & Communication Engineering (with PS)	0(0)	0(0)
Mechanical	4(0)	32(1)
Mechanical (with PS)	2(0)	77(0)
Manufacturing Engg.	0(0)	9(0)
Manufacturing Engg. (with PS)	0(0)	31(8)
	<b>26(2)</b>	<b>632(102)</b>
<b>B.Pharm. (Hons.)</b>	0(0)	8(3)
<b>B.Pharm. (Hons.) (with Practice School)</b>	0(0)	25(4)
<b>M.Sc.(Hons)</b>		
Bio. Sciences	3(2)	35(11)
Bio. Sciences (with PS)	1(1)	3(0)
Chemistry	1(0)	26(3)
Chemistry (with PS)	2(0)	15(6)
Economics	0(0)	36(8)
Economics (with PS)	0(0)	15(5)
Mathematics	1(0)	36(6)
Mathematics (with PS)	0(0)	12(4)
Physics	2(0)	40(5)
Physics (with PS)	0(0)	2(1)
	<b>10(3)</b>	<b>253(56)</b>
<b>M.Sc. (Tech)</b>		
Engg. Tech	0(0)	0(0)
Engg. Tech. (with PS)	0(0)	0(0)
Finance	0(0)	4(1)
Finance (with PS)	0(0)	12(2)
General Studies	3(0)	2(0)
General Studies(with PS)	6(4)	17(10)
Information Systems	0(0)	13(3)
Information Systems (with PS)	2(0)	48(8)
	<b>11(4)</b>	<b>96(24)</b>
	<b>47(9)</b>	<b>981(182)</b>

**Note:** The numbers in brackets indicate number of female students.

Degrees	No. of degrees	
	78 <sup>th</sup> Award (19.03.2016)	79 <sup>th</sup> Award (15.07.2016)
<b>B. Higher Degrees</b>		
<b>M.E.</b>		
Civil with specialisation in Structural Engg.	0(0)	6(0)
Civil with specialisation in I Structural Engg. (with PS)	0(0)	5(2)
Civil with specialisation in Infrastructure Engg & Mgmt.	0(0)	6(3)
Civil with specialisation in Infrastructure Engg & Mgmt. (with PS)	0(0)	4(0)
Civil with specialisation in Transportation Engg.	1(1)	6(0)
Civil with specialisation in Transportation Engg. (with PS)	0(0)	1(0)
Civil with specialisation in Infrastructure Systems	1(0)	0(0)
Chemical	0(0)	24(12)
Chemical (with PS)	0(0)	1(0)
Computer Science	0(0)	5(2)
Computer Science (with PS)	1(0)	19(11)
Communication Engineering (with PS)	0(0)	12(3)
Embedded Systems	0(0)	1(0)
Embedded Systems (with PS)	0(0)	8(3)
Master of Business Administration	0(0)	2(1)
Master of Business Administration (with PS)	0(0)	57(16)
Master of Public Health	0(0)	0(0)
Master of Public Health (with PS)	0(0)	0(0)
Mechanical	0(0)	8(1)
Mechanical (with PS)	0(0)	6(0)
Electrical with specialization in power Electronics & Drives	0(0)	0(0)
Electrical with specialization in power Electronics & Drives (with PS)	0(0)	0(0)
Software Systems	1(1)	4(0)
Software Systems (with PS)	2(1)	19(4)
Microelectronics	0(0)	1(1)
Microelectronics (with PS)	0(0)	15(2)
Biotechnology	1(0)	9(6)
Biotechnology (with PS)	0(0)	5(5)
Manufacturing Systems Engg.	0(0)	2(0)
Manufacturing Systems Engg. (with PS)	0(0)	5(0)
Design Engineering	0(0)	4(0)
Design Engineering (with PS)	0(0)	4(0)
<b>M.Pharm.</b>	0(0)	0(0)
<b>M.Pharm.(with PS)</b>	0(0)	4(2)
M.Pharm.(with specialization in Pharmaceutics)	0(0)	3(1)
M.Pharm.(with specialization in Pharmaceutics) (with PS)	0(0)	11(3)
M.Pharm.(with specialization in Pharmaceutics Chemistry)	0(0)	2(0)
M.Pharm.(with specialization in Pharmaceutics Chemistry) (with PS)	0(0)	2(2)
<b>Sub Total</b>	<b>7(3)</b>	<b>261(80)</b>
<b>C. Ph.D.</b>	32(14)	25(11)
<b>Total (On Campus)</b>	<b>86(26)</b>	<b>1267(273)</b>

**Note:** The numbers in brackets indicate number of female students.

## SUMMARY

### (i) On-Campus Programmes

Discipline	Engineering			Science			Humanities			Total		
	78 <sup>th</sup>	79 <sup>th</sup>	Total	78 <sup>th</sup>	79 <sup>th</sup>	Total	78 <sup>th</sup>	79 <sup>th</sup>	Total	78 <sup>th</sup>	79 <sup>th</sup>	Total
<b>Integrated First Degree</b>	28(2)	709(116)	737(118)	10(3)	202(43)	212(46)	9(4)	70(23)	79(27)	47(9)	981(182)	1028(191)
<b>Higher Degrees</b>	7(3)	180(55)	187(58)	-	22(8)	22(8)	-	59(17)	59(17)	7(3)	261(80)	268(83)
<b>Ph.D.</b>	-	-	-	-	-	-	-	-	-	32(14)	25(11)	57(25)
<b>Total</b>	<b>35(5)</b>	<b>889(171)</b>	<b>924(176)</b>	<b>10(3)</b>	<b>224(51)</b>	<b>234(54)</b>	<b>9(4)</b>	<b>129(40)</b>	<b>138(44)</b>	<b>86(26)</b>	<b>1267(273)</b>	<b>1353(299)</b>

**Note:** The numbers in brackets indicate number of female students.



**LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS**

S.No.	Name of Organization	Number of tudents		Discipline
		Interviewed	Selected	
1.	Aakash Institute	3	1	All ME/BE
2.	ABInBev	4	4	All BE
3.	Aditya Birla Science & Technology	8	1	ME Chemical
4.	Adobe	4	3	CS, IS
5.	Aeques	3	1	BE/ME Che, Mech
6.	Affine Analytics	7	5	All ME/BE
7.	Agro Star	3	1	BE Che, Mech, CS, IS, Mfg.
8.	Altair Eng. Pvt. Lim.	2	1	Manufacturing
9.	Amazon	36	32	All BE
10.	Anand Group	6	4	Mech
11.	Arete	3	2	All BE
12.	Arm Embedded Technology	2	1	BE EEE, EnI
13.	Artoo	4	1	ME/BE CSIS
14.	Aurigo	7	3	BE EEE, EnI, CSIS
15.	Avanti	5	2	EEE, EnI
16.	Avaya	8	5	ME
17.	Axis Bank	5	3	All Dual
18.	Axtria	6	4	All BE/ME
19.	Bain Capability Center Pvt. Ltd	4	2	All
20.	Bank of America	7	4	All
21.	BCC	5	3	All
22.	Bharat Oman Refineries Ltd	6	3	BE Che, EnI
23.	Blue Stone	3	1	All BE/ME
24.	Book My Show	2	1	All BE
25.	Bosch Lim	4	2	BE Mech/EEE/EnI
26.	Boston Consulting Group	5	3	All BE
27.	Broadcom India Pvt Ltd , Bangalore	3	1	All BE
28.	Bundl Technologies Pvt. Ltd. (Swiggy)	3	1	All BE
29.	CA Tech	2	1	EEE/EnI
30.	Capgemini	15	12	All
31.	CDOT	4	2	BE EEE/CS
32.	CEG Limited	3	2	ME Civil
33.	CISCO	10	7	All BE/ME
34.	Citi Bank	7	5	All BE
35.	Codenation	5	3	BE EnI
36.	Cognizant	8	6	MBA
37.	Credit Suisse	32	27	All
38.	CRISIL	8	5	All BE
39.	Cypress	11	8	All ME
40.	DCB Bank	9	5	All BE/MBA
41.	Dell	8	6	All

S.No.	Name of Organization	Number of tudents		Discipline
		Interviewed	Selected	
42.	Diamond Consulting	5	3	All BE
43.	Directi	14	10	CS, IS
44.	Dr Reddy's Lab	8	6	BE Che, M Pharm
45.	Eaton	5	3	ME Embedded, Micro., Mech., Mfg., Che., SS
46.	eBay	5	3	All BE/ME
47.	Eccela Consulting	7	3	All BE/MBA
48.	Edgeverve	12	8	CS, IS
49.	EMC	3	1	BE CS
50.	Endurance	6	4	BE CS
51.	Epic	3	1	All BE/ME
52.	Ericsson	9	6	EEE/Enl
53.	Ernst & Young	7	4	All BE
54.	Evalueserve	23	13	All BE/ME
55.	Exl Service	11	8	All BE
56.	Exotel	8	4	BE Che, CSIS, B.Pharm, Enl, Mfg., Bio, Phy.
57.	Exxon Mobil	4	2	Chemical
58.	Fairfield	7	4	BE/ME Mech, EEE
59.	Faively	13	8	BE/ME Mech., Mfg.
60.	FICO	9	7	CS/IS/EEE/Enl
61.	Flipkart	14	10	CS, IS
62.	Fractal Analytics	2	1	Pharm
63.	Futures First	5	4	All BE/ME/MBA
64.	GE India	6	4	CS/IS/EEE/Enl
65.	General Motors	3	1	All
66.	Genpact	4	2	MBA
67.	Goldman Sachs	13	9	CS, IS
68.	Grey Orange	16	11	All BE
69.	Grofers	5	2	All BE
70.	Guzool Inc	3	1	ME SS
71.	Gwynniebee	3	1	All
72.	Healthkart	2	1	All BE/ME
73.	Hindalco	16	6	BE Che, EEE, Mech
74.	Holiday IQ	2	1	MBA
75.	Honeywell	2	1	Chem
76.	Hospira	7	4	ME Che/Mech
77.	HPE	6	3	CI, IS
78.	HSBC	8	6	BE CSIS, EEE,Enl, Mech., Mfg.
79.	Hewlett Packard	16	11	CS, IS
80.	ICICI	9	5	All BE
81.	Idea	8	2	All BE
82.	IMS Health	7	5	ME Biotech/Che/ M.Pharm
83.	Indus Insights	10	7	All BE
84.	Infosys	13	9	CS, IS
85.	InMobi	4	2	CS, IS
86.	Innoplexus	5	2	BE CS, IS, EEE, Enl, ME CS, SS

S.No.	Name of Organization	Number of students		Discipline
		Interviewed	Selected	
87.	Insta Mojo	4	2	CS, IS, EEE, EnI
88.	Intel	15	9	All BE
89.	Intellibus	3	1	ME SS
90.	IRunway	6	4	BE EEE, EnI, CS, B.Pharm, M.Pharm., ME SS
91.	Johnson Controls	7	4	BE EEE, Mech., CS, EnI, Mfg., ME Mech., Micro. Commu. Embedded, Design, Mfg.
92.	JP Morgan Services	24	18	All
93.	JSW	3	1	Mech/Chem
94.	Jubilant	2	1	M.Pharm.
95.	Juniper	5	3	EEE, EnI
96.	Khosla Labs	4	2	BE EEE, ME CS, SS, Communication
97.	Kinapse	3	1	Bio, Pharm., M.Pharm., ME Biotechnology
98.	Kotak Mahindra Bank	4	2	MBA
99.	KPL International Lim	2	1	M.Pharm. Pharmaceuticals
100.	KPMG	3	2	All
101.	L&T	8	3	BE Civil/EEE/EnI, ME Civil/Struc.
102.	Latent View	9	6	All
103.	Lexinova	5	3	All
104.	Maruti	8	5	Mech
105.	Mathworks	5	3	ME Comm., CS, Embedded, Micro., SS
106.	Mckinsey	3	1	All BE
107.	Media Iq Digital	7	4	BE Che, CS, EnI
108.	Mehta Group	2	1	BE Manu/EnI
109.	MeraJob	3	1	MBA
110.	Microsoft	17	12	CS, IS
111.	Microsoft SMSG	7	3	CS, IS
112.	Mobstac	3	1	All BE/ME
113.	Mordor Intelligence	11	8	Chemical
114.	Morning Star India	2	1	EEE
115.	Musale	3	1	All BE
116.	Musigma	3	1	All BE
117.	Myntra	7	5	All
118.	National Instruments	7	2	ME Circuit
119.	NBC Bearings	7	1	Mech
120.	Nearbuy	7	4	All BE
121.	Nestle	3	1	BE Mech, EEE
122.	Net App	6	4	All BE/ME
123.	Nextgen PMS Pvt. Ltd .	3	1	All BE
124.	Novartis	17	11	All BE
125.	Nvidia	14	6	EEE/EnI
126.	Open World Money	9	6	All BE
127.	Opera	9	7	CS, IS
128.	Oracle	28	22	All BE

S.No.	Name of Organization	Number of tudents		Discipline
		Interviewed	Selected	
129.	Orbees	3	1	All BE
130.	Paypal	13	8	All BE/ME
131.	Paytm	7	3	All BE
132.	PMI	4	2	BE/ME Mech., Mfg.
133.	PN Shidhore	3	1	BE/ME Civil
134.	Presidency University	7	3	ME Civil/Mech
135.	PWC	14	11	All
136.	Qualcomm	15	11	All BE/ME
137.	Qubole	4	2	BE CS, IS, EEE, Enl
138.	Rao Edusolutions	15	11	All BE/ME
139.	Reckitt Benkiser	3	1	BE Che/BPharm/Chem
140.	Reliance Industries Ltd.	6	4	All BE
141.	Reliance Jio	17	14	All BE
142.	Resonance	13	4	All BE/ME
143.	Roadrunnr	11	3	All BE
144.	Saint Gobain	13	1	BE Che., Civil, EEE, Mech.
145.	Samsung	11	4	CS, IS
146.	Samsung R&D Bangalore	9	2	CS, IS
147.	Samsung Research Institute, Delhi	13	5	CS, IS
148.	Samsung Research Institute, Noida	16	5	CS, IS
149.	Sap Labs	15	3	All BE, ME SS/CS
150.	Schlumberger	11	2	Chem, Mech
151.	Segacious	7	1	All ME/BE
152.	Shaadi.com	8	1	ME CS, SS
153.	Simplilearn	9	2	MBA
154.	Smartprix	11	1	BE EEE, Enl, CS, M.Pharm., ME SS
155.	Sokrati	13	1	All BE
156.	Sprinklr	29	11	BE/ME CS/IS/SS
157.	Stayzilla	7	1	All BE
158.	Steelwedge	9	1	EEE
159.	Synopsys	13	3	BE CS/EEE
160.	Tata Motors	35	15	BE Mech/Mfg.
161.	Tata Steel	11	3	Mech/Chem
162.	TCG	13	3	All BE
163.	TCS	49	35	All
164.	Tensilica Cadence Design Systems	8	1	Enl
165.	Texas Instruments	23	9	EEE
166.	Times Internet	9	2	All BE
167.	Tolexo	11	3	MBA
168.	Tresvista	8	1	All
169.	Trident	19	9	All BE
170.	UHG	9	3	CS, IS
171.	Unicommerce esolutions	7	1	All BE/ME
172.	UTC-Otis Elevators	17	6	Mech.
173.	Value Edge	16	7	All

S.No.	Name of Organization	Number of tudents		Discipline
		Interviewed	Selected	
174.	vConstruct Pvt. Ltd.	7	2	ME Infrastructure
175.	VISA - Domestic	18	6	BE CS
176.	VISA - International	9	1	BE CS, IS, EEE, EnI, ME CS, SS
177.	VM Ware	19	4	All
178.	VMS Consultants Pvt. Ltd.	17	3	BE Civil, ME Structural, Infra.
179.	Vodafone	13	3	All BE
180.	Walmart	17	9	All BE
181.	Wipro	18	8	All BE
182.	Works Application	7	1	BE CS, IS, EEE, EnI, ME CS, SS
183.	ZeMoSo Technologies Pvt. Ltd.	5	1	EEE, EnI
184.	Zinnov	19	11	All
185.	Zoomcar India Pvt. Ltd.	9	4	All BE
186.	ZS Associates	32	23	All BE
		1680	865	

### Summary

Total No. of companies: 186

Total No. of students interviewed: 1680

Total No. of appointments offered: 865<sup>\$</sup>

### Legend

BT: Biotechnology, CE: Civil, CHE: Chemical, CM: Communication Engineering, CS: Computer Science, DE: Design Engineering, EEE: Electrical & Electronics, ET: Engineering Technology, E&I: Electronics & Instrumentation, ECON: Economics, FIN: Finance, GS: General Studies, IS: Information System, MANUF: Manufacturing Systems Engineering, MATH: Mathematics, MECH: Mechanical, MI: Microelectronics, MMS: Master of Management Studies, PHARM: Pharmacy, SS: Software Systems, MBA.

\$ 37 students received more than one offer.

**LIST OF PROJECTS COMPLETED UNDER CERTAIN PROJECT-ORIENTED COURSES IN THE YEAR 2016**

**Second Semester 2015-2016 (January 2016 to May 2016) and First Semester 2016-2017(August 2016 to December 2016)**

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
1	AKSHIT SETH	Amol M R Marathe	DYNAMICAL SYSTEMS THEORY
2	ARYA ROY	Mukesh Kr Rohil	OPTIMIZATION OF REAL SYSTEMS BY DERIVING INSIGHTS FROM PROCESS LOGS
3	ABHISHEK SURESH	Amit Jain	CFD APPLICATIONS TO PROCESS AND PLANT SAFETY WITH RESPECT TO PRESSURE RELIEF VALVE.
4	MANSI NARANG	Prabhat Nath Jha	STUDY AND ANALYSIS OF CELLULOSE PRODUCING GENES IN MICRO ORGANISMS.
5	SHIKHIN GARG	Ashish Runthala	DEVELOPMENT OF AN IMPROVED PROTEIN MODEL ASSESSMENT SCHEME
6	GEETIKA GARG	Pramod Kr Tanwar	STUDY OF IMPLEMENTATION OF PROTOCOL STACK IN C FOR LOW POWER ZIGBEE NETWORKS.
7	ANISH SRINIVAS VASAN	P Srinivasan	MODELLING OF HEAT PENETRATION INSIDE TISSUE SUBJECTED TO HYPER/HYPOTHERMIA SURGERY TREATMENT
8	HARSHIT MATHUR	P Srinivasan	MODELLING OF HEAT PENETRATION INSIDE THE TISSUES IN CASE OF HYPOTHERMIA/HYPERTHERMIA SURGERY TREATMENT.
9	PRABODH AGARWAL	Manoj Kannan	DESIGN A ANDROID AND WEB APPLICATION TO PROMOTE TEACHER-STUDENT INTERACTION IN CLASS AND PROVIDE REGULAR PERFORMANCE ANALYSIS
10	KUSHAL JASORIA	Manoj Kannan	DESIGNING WHITE-BOARD ANIMATIONS FOR BIOLOGY COURSES AND ASSESSING THEIR IMPACT ON STUDENT LEARNING
11	UTTARAN BASAK	HK Mohanta	DESIGN OF A UREA PRODUCTION PLANT
12	RRAHUL BHARDAWAJ	Pratik N Sheth	CFD STUDY OF DOWNGRAFT GASIFIER WITH INTERNAL CYCLONIC COMBUSTION CHAMBER
13	AKSHAY VENKATESH	Srikanta Routroy	ANALYSIS OF SUPPLIER INNOVATION FLOW IN MANUFACTURING ENVIRONMENT.
14	BHAMBURKAR CHINMAYEE VIJAY	Mahesh Angira	MODELING AND SIMULATION OF DESIGN OF A GAS SENSOR(PYRO-BASED).
15	MOREY AKSHAY KAMALAKAR	Arun Kumar Vaish	VERIFICATION OF BLACK SHOLES OPTION PRICING MODEL FOR FINANCIAL SECTOR IN INDIA
16	AMIT ARORA	Satyendra Kr Sharma	STUDY AND MINIMIZING THE BULL WHIP EFFECT
17	RAJAT JAIN	Arun Kumar Vaish	EMPERICAL VERIFICATION OF BLACK-SCHOLES MODEL
18	SHIKHAR KEJRIWAL	Arun Kumar Vaish	VERIFICATION OF BLACK SHOLES MODEL OPTIONS VALUATION OF CHEMICAL INDUSTRIES TRADED IN INDIA
19	NEHA TALESRA	Praveen Goyal	DESIGNING A STRATEGY TO IMPROVE MARKET SHARE OF YEPME IN INDIA.
20	ANIRUDH SRIDHAR	NV Muralidhar Rao	ANALYSING THE DEBT-GROWTH DYNAMICS FOR A DEVELOPING ECONOMY

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
21	BANSOD DEVEN GIRISH	K Hari Babu	DESIGNING AND IMPLEMENTING A DEVICE DRIVER FOR TRANSLATING OPENFLOW MESSAGES TO CISCO-IOS APIS
22	SALONI CHANDAK	Geetilaxmi Mohapatra	GLOBALIZATIONS IMPACT ON ECONOMIC GROWTH, POVERTY AND INCOME DISTRIBUTION IN INDIAN ECONOMY
23	SAAHIL KHETAN	Krishna Muniyoor	FEATURE SET SELECTION FOR PREDICTING COMMODITY PRICES
24	DHRUV DAVE	G Meenakshi Sundaram	DESIGN SIMULATION OF MEMS ENERGY HARVESTER
25	ARPIT GUPTA	Krishna Muniyoor	RESEARCH DESIGN FOR DETERMINING THE NEED FOR INVENTORY MANAGEMENT SYSTEM IN INDIAN CONTEXT.
26	PANDAOOKAR SAMAY PRASHANT	Parikshit K Singh	DEVELOPMENT OF INTELLIGENT ALGORITHM USING COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR DETECTION OF ADULTERATION IN FOOD & BEVERAGE ITEMS.
27	BHAGAT AMIT VIJAYKUMAR	Udayan Chanda	ROLE OF FUTURES AND DERIVATIVES MARKET IN THE FINANCIAL MELTDOWN OF 2008.
28	VARUN JAIN	Ajay Kumar Pani	MODELLING OF A SULPHUR RECOVERY UNIT FOR OUTPUT QUALITY PREDICTION USING SUPPORT VECTOR REGRESSION
29	VAIBHAV	Shyam Sundar Yadav	NUMERICAL SIMULATION OF FLOW THROUGH A WIND TUNNEL DIFFUSER SECTION.
30	SANCHIT SAMNANI	Shivi Agarwal	FUZZY MODELING AND CONTROL FOR AUTONOMOUS UNDERWATER VEHICLE
31	NIKITA TANWANI	K J Rangra	MODELLING AND SIMULATION OF DESIGN OF A GAS SENSOR
32	MEHAK	Shivi Agarwal	FUZZY MODELING AND CONTROL FOR AUTONOMOUS UNDERWATER VEHICLE
33	ROMANCH ARYA	Kuldip Singh Sangwan	MULTI-OBJECTIVE OPTIMIZATION OF SUPPLY CHIN NETWORK
34	LAVLEEN BHATI	Pratik N Sheth	MODELLING AND SIMULATION OF AQUEOUS PHASE REFORMING OF BIOMASS
35	VEDANT RAJENDRA MAHULKAR	Parikshit K Singh	DEVELOPMENT OF INTELLIGENT ALGORITHM USING COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR DETECTION OF ADULTERATION IN FOOD AND BEVERAGE ITEMS
36	VEDANT RAJENDRA MAHULKAR	Rakesh Choubisa	USE OF CHAOS IN CRYPTOGRAPHY
37	SOURADEEP BHATTACHARYA	Parikshit K Singh	DEVELOPMENT OF INTELLIGENT ALGORITHM USING COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR DETECTION OF ADULTERATION IN FOOD AND BEVERAGE ITEMS
38	SOURADEEP BHATTACHARYA	Kaushar Vaidya	STUDY OF EMBEDDED CLUSTERS USING 2MASS
39	SHUKLA PAWAS SANDESH	Rakesh Choubisa	INFLUENCE OF EMPTY SPHERES ON MULTIPLE SCATTERING CALCULATIONS
40	VATSAL PANWAR	Kaushar Vaidya	STUDY OF EMBEDDED CLUSTERS USING 2MASS
41	AGASHIWALA KUNJESH DEVANG	Vinod Kumar Chaubey	MODELLING OF HIGH SPEED CIRCUITS AND DEVICES
42	ANAMIKA AGGARWAL	Praveen Kumar A V	BEAM DYNAMICS STUDIES OF RADIO FREQUENCY (RF) CAVITIES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
43	ADIT MAKHIJANI	Anshuman Dalvi	DESIGN & FABRICATION OF MG+2 ION POLYMER BATTERY.
44	RAKSHIT CHAUDHARY	Shyam Sundar Yadav	NUMERICAL SIMULATION OF FLOW THROUGH A WIND TUNNEL DIFFUSER SECTION.
45	KHARBADE ASHLESH SANJAY	Mayuri Digalwar	ENERGY EFFICIENT REAL TIME SCHEDULING ALGORITHMS FOR MULTI CORE PROCESSORS.
46	RAJATH S	Tapomoy G Sarkar	STUDY OF PERIODICALLY FORCED 2D QUANTUM MECHANICAL SYSTEMS USING IMAGINARY TIME PROPAGATION
47	BUGDANI TEJAS ANIL	Jayendra N Bandyopadhyay	QUANTUM ALGORITHMS AND CRYPTOGRAPHY (SIMULATION AND APPLICATIONS)
48	KARTHIKAN C	Omvir Chaudhry	ROLE OF PRIVATE PARTICIPATION IN INDIA'S ECONOMIC GROWTH.
49	SHRADDHA PANWAR	NV Muralidhar Rao	ANALYZING THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND CORPORATE PERFORMANCE FOR INDIA'S INFRASTRUCTURE SECTOR.
50	ADITI JOSHI	Omvir Chaudhry	A STUDY ON BANKING CRISES AND MORAL HAZARD.
51	ABHISHEK	HK Mohanta	DESIGN, SIMULATION AND OPTIMIZATION OF CRUDE DISTILLATION UNIT
52	NIKHIL MALHOTRA	Subhajit Majumdar	COST OPTIMIZATION AND ENERGY INTEGRATION ANALYSIS FOR OIL REFINERY
53	YARA SRUJAN REDDY	Smita Raghuvanshi	MODELING AND SIMULATION OF CONTINUOUS BIOREACTOR FOR THE CO2 MITIGATION
54	ABHISHEK BHATIA	HK Mohanta	DESIGN OF ETHANOL PRODUCTION VIA INDIRECT GASIFICATION AND MIXED ALCOHOL SYNTHESIS OF BIOMASS
55	SILABRATA PAHARI	HK Mohanta	DESIGN SIMULATION AND OPTIMIZATION OF CRUDE DISTILLATION UNIT
56	BHAVYA MITTAL	Subhajit Majumdar	COST OPTIMIZATION AND ENERGY INTEGRATION ANALYSIS FOR SUGAR INDUSTRY
57	V S V SRAVYA	Pratik N Sheth	MODEL DEVELOPMENT OF GAS FIRED AUGER PYROLYSIS UNIT
58	HARSH TRIPATHI	Ajay Kumar Pani	MULTI-VARIATE STATISTICAL ANALYSIS USING R
59	PERLA KISHORE	Ajay Kumar Pani	MODELING OF A SULPHUR RECOVERY UNIT FOR OUTPUT QUALITY PREDICTION USING LEAST SQUARE SUPPORT VECTOR REGRESSION
60	NIDHI AGGARWAL	HK Mohanta	DESIGN OF ETHANOL PRODUCTION VIA INDIRECT GASIFICATION AND MIXED ALCOHOL SYNTHESIS OF BIOMASS.
61	MAHESH AGRAWAL	Pratik N Sheth	MODELLING AND SIMULATION OF HYDROGEN RICH GAS FROM COAL USING ASPEN PLUS
62	MAHESH AGRAWAL	Suresh Gupta	MODELLING AND SIMULATION OF DIFFERENT CHEMICAL PROCESSES
63	SANKET DEY	HK Mohanta	DESIGN OF PHOSPHATE FERTILIZER MANUFACTURING PLANT
64	RACHIT GOEL	Amit Jain	SENSITIVITY ANALYSIS OF RELATIVE GAIN ARRAY (RGA) FOR DECENTRALIZED CONTROL OF CHEMICAL PROCESSES



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
65	ROSHNI CHHABRA	HK Mohanta	DESIGN OF A UREA PRODUCTION PLANT.
66	ROSHNI CHHABRA	Amit Jain	CONTROL CONFIGURATION SELECTION FOR DECENTRALIZED CONTROL OF MULTI-VARIABLE SYSTEMS.
67	AYUSH GARG	Arvind Kumar Sharma	ADSORPTION IN SINGLE AND MULTISTAGE FLUIDIZED BEDS
68	VISHAL TRIPATHI	Pratik N Sheth	MODELING AND SIMULATION OF DAE (DISTRIBUTED ACTIVATION ENERGY) BASED BIOMASS PYROLYSIS MODEL.
69	VISHAL TRIPATHI	HK Mohanta	GLOBAL OPTIMIZATION OF MULTIVARIATE FUNCTIONS USING MATLAB
70	CHAITANYA BHATLA	Pratik N Sheth	DESIGN OF SOLAR ASSISTED PYROLYSIS UNIT
71	ROHIT AGARWAL	Raman Sharma	DESIGN OF A CIRCULATING FLUIDISED BED FOR CARBON CAPTURE USING SOFTWARE PACKAGES LIKE MATLAB OR ASPEN PLUS.
72	MANSI PANT	HK Mohanta	DESIGN OF PHOSPHATE FERTILIZER MANUFACTURING PLANT.
73	HARMANDEEP SINGH GILL	Arvind Kumar Sharma	ADSORPTION IN SINGLE AND MULTISTAGE FLUIDISED BEDS.
74	BAYIREDDY LEELA MANAS	Shamsher B Singh	ANALYSIS AND DESIGN OF LAMINATED FRP I-SECTION BEAMS
75	BAYIREDDY LEELA MANAS	Prasanta Kumar Sahu	STATISTICAL INVESTIGATION OF HIGHWAY ACCIDENT DATA
76	RAMYA MITTAL	Shamsher B Singh	ANALYSIS AND DESIGN OF FRP LAMINATED RECTANGULAR BEAMS
77	RAMYA MITTAL	Prasanta Kumar Sahu	TRAFFIC PLANNING AND MANAGEMENT
78	SWAPNIL KHANDELWAL	Shamsher B Singh	ANALYSIS AND DESIGN OF FRP LAMINATED BEAMS(T AND L BEAMS)
79	VARSHA VIVEK	Rahul Singhal	TO STUDY AND IMPLEMENT THE DESIGN OF A FREE SPACE OPTICAL COMMUNICATION SYSTEM (FSO)
80	DAVINDER PAL SINGH	Pankaj Vyas	TEST CASE GENERATION FROM UML STATE DIAGRAM.
81	SANGANI DISHANT ANIL	S C Bose	DESIGN AND SIMULATION OF CIRCUITS USING NON-CONVENTIONAL TRANSISTORS
82	SUMEDH K RAMAPRASAD	Vinod Kumar Chaubey	MODELLING OF TRANSISTOR FOR HIGH SPEED ANALOG DESIGN
83	SUMEDH K RAMAPRASAD	Kari Babu Ravi Teja	DESIGN OF EXTREMELY LOW POWER ANALOG CIRCUITS
84	PARAKH SARDA	Dheerendra Singh	WIRELESS CHARGING FOR BATTERY OF ELECTRIC VEHICLES
85	R ABHISHEK SHANKAR	S Gurunarayanan	DESIGNING A FAULT TOLERANT CIRCUIT ON AN ARCHITECTURE BASED ON THAT OF FPGA AND FPAW USING THE CONCEPT OF EVOLVABLE HARDWARE
86	BUGADE VISHWAJIT BABASAHEB	Kavindra Kandpal	DESIGN OF LOW POWER, LOW VOLTAGE, HIGH SPEED DYNAMIC COMPARATOR FOR HIGH SPEED ADCS.
87	SANUJ BHATIA	Surekha Bhanot	ARTIFICIAL INTELLIGENCE TECHNIQUES IN PATTERN RECOGNITION
88	KARAN SALUJA	Jl Raheja	DEVELOPING EYE GAZE TRACKING ALGORITHM FOR MICROSOFT KINECT.
89	BODDUPALLI VENKAT AKHIL	Vinod Kumar Chaubey	MODELLING OF HIGH SPEED TRANSISTORS FOR ANALOG CIRCUIT DESIGN
90	PRAJYOT GUPTA	Ashish Mishra	IMPLEMENTATION OF INTERNET OF THINGS ON VEHICLES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
91	SHETTY NIKHIL ACHUTHA	Dhiraj	PORTING OF REAL TIME OPERATING SYSTEM(RTOS) ON ARM BOARD.
92	PRANSHU KALRA	Chandra Shekhar	RISC PROCESSOR DESIGN
93	DEEPANSHU SHARMA	K S Raju	HARDWARE IMPLEMENTATION OF SOBEL OPERATOR.
94	SHUBHAM GOYAL	K S Raju	HARDWARE IMPLEMENTATION OF SOBEL OPERATOR
95	B SAITEJA	Kari Babu Ravi Teja	DESIGN OF EXTREMELY LOW POWER ANALOG CIRCUITS
96	SHRIKHANDE SIDDHESH SATISH	Pradyumn Chaturvedi	DESIGN, SIMULATION AND IMPLEMENTATION OF SINGLE PHASE ACTIVE POWER FILTER
97	PAVAN THAKKAR	Dheerendra Singh	DEVELOPMENT OF SPEED CONTROL ALGORITHM FOR BLDC MOTOR(REGENERATIVE BRAKING)
98	TEJAS PRAKASH HARNE	Sanjay Singh	FEATURE EXTRACTION USING WEBER LOCAL DESCRIPTOR AND ITS VARIANTS FOR FACIAL EXPRESSION RECOGNITION. (WLD, SWLD, MSWLD)
99	VARUN HALDIYA	Kavindra Kandpal	DESIGN OF MOS ONLY BANDGAP REFERENCE CIRCUITRY
100	KSHITIJ GUPTA	Sanjay Singh	FEATURE EXTRACTION USING WEBER LOCAL DESCRIPTOR AND ITS VARIANTS FOR FACIAL EXPRESSION RECOGNITION. (WLD, SWLD, MSWLD)
101	SHAISTA HUSSAIN	Kari Babu Ravi Teja	DESIGN OF LOW POWER DIGITAL CIRCUITS USING FINFET
102	NEHA AGARWAL	Kavindra Kandpal	DESIGN OF BPSK DEMODULATOR FOR IMPANTABLE BIOMEDICAL DEVICES
103	VAIBHAV GARG	Kavindra Kandpal	DESIGN OF BPSK DEMODULATOR FOR IMPLANTABLE BIOMEDICAL DEVICES
104	VANSHIKA BAONI	Anil Kumar Saini	IMPLEMENTATION OF DEEP LEARNING ALGORITHMS
105	VANSHIKA BAONI	Ashish Mishra	INTERNET OF VEHICLES: IMPLEMENTATION OF IOT ON VEHICLES
106	HARSHIT SRIVASTAVA	Arun Kumar Jalan	ACTIVE VIBRATION CONTROL OF M-DOF(MULTI-DEGREE OF FREEDOM) SYSTEM.
107	TRIVEDI PRAGYAN PRIYAMEDH	Manoj Soni	SECOND LAW ANALYSIS OF SOLAR THERMAL POWER PLANTS.
108	RAJEEV.R	Manoj Soni	DESIGN OF SOLAR COLLECTORS FOR MEDIUM AND HIGH TEMPERATURE APPLICATIONS
109	DUBE SANDESH SANDEEP	Bijoy Kumar Raut	APPLICATION OF STRUCTURAL TOPOLOGY OPTIMIZATION TECHNIQUES FOR DESIGNING OF LINKS IN STANFORD MANIPULATOR
110	TALWEKAR YASH PUNDALIK	Amol M R Marathe	ANALYSIS AND NUMERICAL STUDY OF OUT-OF-PLANE VIBRATIONS OF A WIND TURBINE BLADE
111	ARDANDI SANDEEP REDDY	P Srinivasan	ANALYSIS OF CREEP FAILURE IN BOILER TUBES OF A SUPER CRITICAL BOILER.
112	TEJAS SHIVANAND MANE	Ravi Inder Singh	COOLING ENHANCEMENT OF MICROPROCESSORS USING NANOFUIDS
113	TEJAS SHIVANAND MANE	Manoj Soni	DESIGN OF THERMAL INFRARED SENSOR FOR GAS DETECTION AND STUDY OF MATERIALS USED TO TO MAKE THERMAL IR BASED MEMS SENSORS
114	SAGAR SHOREY	P Srinivasan	DESIGN OF A COMPACT SOLAR THERMAL STORAGE SYSTEM

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
115	CHILLARA VINAY	Ravi Inder Singh	STUDY OF EFFECT OF TIME VARYING INTRA-CRANIAL PRESSURE ON BLOOD FLOW THROUGH A CEREBRAL ARTERY
116	APOORV VAISH	Manoj Soni	DESIGN AND SIMULATION OF COOLING OF CPV CELLS MOUNTED ON CONCENTRATING SOLAR COLLECTOR RECEIVERS
117	SIDDHANT RANJAN	Ravi Inder Singh	HEAT TRANSFER ENHANCEMENT USING NANOFLUIDS IN MICROPROCESSORS
118	SATCHIT VARMA	K S Raju	DESIGN OF A MECHANISM FOR A WET- AND DRY-CLEANING ROBOT
119	ARANAV KACKER	Bijoy Kumar Raut	DYNAMIC ANALYSIS OF HUMAN ARM AFTER JOINT FAILURE
120	AKSHAY CHANDRAN	K S Raju	DESIGN OF A MECHANISM FOR A WET- AND DRY-CLEANING ROBOT
121	CHANDAN SATIJA	Bijoy Kumar Raut	DESIGN AND ANALYSIS OF REDUNDANT PARALLEL MANIPULATORS.
122	SRINIVAAS.M.B	Ravi Inder Singh	MODELING OF AUTOMATIC GEAR TRANSMISSION IN MAPLE SIM
123	PRITHU MITASH	Murali Palla	FATIGUE MODELLING IN METALS
124	DIVYANSH KHATTAK	P Srinivasan	THERMAL ANALYSIS FOR TWO PHASE HEAT TRANSFER PHENOMENA OF THE COLLECTOR OF A 250KW CW KLYSTRON
125	S. RAHUL	P Srinivasan	STUDY AND SIMULATION OF FRICTION STIR WELDING AND HEAT AFFECTED ZONE
126	S. RAHUL	Shyam Sundar Yadav	STUDY AND ANALYSIS OF FLOW OVER AIRFOILS USING OPENFOAM.
127	SIDDHANT PUNDIR	P Srinivasan	DESIGNING OF TRIANGULAR TRIHEDRAL CORNER REFLECTORS
128	SHYAM SUNDAR SANKARAN	Shyam Sundar Yadav	OPTIMIZATION OF AIRFOIL SHAPE FOR SUPERSONIC FLOW BY MODIFICATION OF SU2S C++ CODE
129	SOUMYA SUCHARITA	Mukesh Kr Rohil	AUTOMATIC FACE RECOGNITION IN GROUP PHOTOGRAPHS
130	SOUMYA SUCHARITA	Anil Kumar Saini	COMPARATIVE PERFORMANCE ANALYSIS OF VARIOUS CLASSIFICATION ALGORITHMS ON A DATASET OF HEART DISEASES.
131	DEEPTANU CHAUDHARY	Atanendu Sekhar Mandal	IDENTIFICATION OF A PERSON USING MULTIMODAL APPROACH INCLUDING GAIT ANALYSIS AND BEHAVIOURAL TRAITS
132	CHANDRADEO ARYA	Atanendu Sekhar Mandal	IDENTIFICATION OF A PERSON USING MULTIMODAL APPROACH INCLUDING GAIT ANALYSIS AND BEHAVIORAL TRAITS.
133	ABHINAV BAID	S Mohan	STUDY AND IMPLEMENTATION OF SOME MULTI-ROBOT LOCALIZATION ALGORITHMS
134	ABHINAV BAID	Shan Balasubramaniam	IMPLEMENTATION OF A MODULE FOR ANALYSIS OF DOMAIN-SPECIFIC CONSTRUCTS IN PARALLELIZING COMPILER
135	HARSHVARDHAN GUPTA	Avinash Gautam	IMPLEMENTATION OF SOME RECENT ALGORITHMS FOR TERRAIN COVERAGE TASKS.
136	ROHIT GOYAL	Abhishek Mishra	PERFORMANCE EVALUATION OF TASK DUPLICATION BASED SCHEDULING
137	PRATYUSH KAR	Shan Balasubramaniam	CONTENT BASED IMAGE RETRIEVAL FOR SHEKHAWATI PAINTINGS
138	KAPIL SINGHAL	Rahul Banerjee	INVESTIGATION INTO PROCESSING AND LOOKUP STRATEGIES IN OPEN SOURCE SWITCHES AND PROPRIETARY SWITCHES WITH RESPECT TO NETWORK PERFORMANCE

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
139	MAYANK VILAS TOTALE	Devesh Samaiya	ARM CORTEX M0+ BASED LPC1114 DEVELOPMENT BOARD DESIGN
140	SHARTHAK MISHRA	Lavika Goel	APPLICATION OF BIOGEOGRAPHY BASED OPTIMIZATION IN GRID SCHEDULING.
141	SHARTHAK MISHRA	Anil Kumar Saini	IMPLEMENTATION OF DEEP LEARNING ALGORITHMS AND ITS APPLICATION
142	INES KHANDELWAL	Sundaresan Raman	ANALYSIS OF IMAGE SEGMENTATION IN CELLULAR IMAGES
143	PRATIK S	Abhishek Mishra	ENERGY EFFICIENT TASK SCHEDULING ON MULTIPLE MULTI-CORE PROCESSOR SYSTEMS WITH TASK MIGRATION OVERHEADS
144	ANURAG PRAKASH	Vishal Gupta	WIRELESS NETWORK VIRTUALIZATION FOR WIFI NETWORKS
145	AYUSHI AGARWAL	Vishal Gupta	WIRELESS NETWORK VIRTUALIZATION
146	AYUSHI AGARWAL	Poonam Goyal	PARALLELIZING DECISION TREE ALGORITHM
147	SHANTANU SHRIVASTAVA	JP Misra	STUDY AND SIMULATION OF SIMULTANEOUS LOCALIZATION AND MAPPING ALGORITHMS
148	SHIVIN SRIVASTAVA	Lavika Goel	OPTIMIZING THE NP HARD PROBLEM OF CHOOSING K CLUSTERS USING SWARM INTELLIGENCE(PSO) IN K-MEANS++ INITIALIZATION.
149	RAGHAV NAIR	JP Misra	TERRAIN MAPPING IN A DISTRIBUTED BOT SYSTEM
150	A.S.ADITYA SARMA	Lavika Goel	PROJECT FOOD SENSE
151	SATYAJIT MOHANTY	Lavika Goel	HYBRIDISATION OF GRAVITATIONAL SEARCH ALGORITHM(GSA) AND BIOGEOGRAPHY BASED OPTIMIZATION(BBO).
152	SATYAJIT MOHANTY	Anil Kumar Saini	COMPARATIVE PERFORMANCE ANALYSIS OF VARIOUS CLASSIFICATION ALGORITHMS ON A DATASET OF HEART DISEASES.
153	GIREEK BANSAL	Abhishek Mishra	PERFORMANCE EVALUATION OF TASK DUPLICATION BASED SCHEDULING
154	SHUBHANKAR SRIVASTAVA	K Solomon Raju	WIRELESS NETWORK BASED ANOMALY DETECTION
155	SHREY HITENDRA SHAH	JP Misra	STUDY AND SIMULATION OF SIMULTANEOUS LOCALIZATION AND MAPPING TECHNIQUES
156	ANUJ BANSAL	Atanendu Sekhar Mandal	IDENTIFICATION OF A PERSON USING MULTIMODAL APPROACH INCLUDING GAIT ANALYSIS AND BEHAVIOURAL TRAITS.
157	RAJAT ARORA	Navneet Goyal	DESIGNING OF DOMAIN SPECIFIC LANGUAGE FOR DATA MINING FRAMEWORK (ASSOCIATION RULES AND PREPROCESSING)
158	RAJAT ARORA	Navneet Goyal	WRITING A MODULE TO MEASURE SOFTWARE METRICS FOR DOMAIN SPECIFIC LANGUAGE
159	ISHAN CHUTANI	Navneet Goyal	KINSHIP VERIFICATION AND FAMILY ALBUM ORGANIZATION
160	SANKET SHAH	Yashvardhan Sharma	IDENTIFICATION OF MIXED-SCRIPT TEXT VIA DEEP LEARNING TECHNIQUES
161	SANKET SHAH	Poonam Goyal	FEATURE SELECTION FOR IMAGE DATA
162	ABHINAV AGARWAL	Atanendu Sekhar Mandal	FACIAL RECOGNITION USING INFORMATION COMPUTATION TECHNIQUES
163	GYANENDRA MISHRA	K Solomon Raju	WIRELESS NETWORK BASED ANOMALY DETECTION
164	PURAV AMIT SHAH	Vishal Gupta	WIRELESS NETWORK VIRTUALIZATION FOR WIFI NETWORKS

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
165	SHUBHAM KHANDELWAL	Rahul Banerjee	INVESTIGATION INTO POSSIBILITY OF CO-EXISTENCE OF IEEE 802.11P/WAVE SYSTEMS ALONGSIDE MODIFIED VARIANT OF IEEE 802.11 A/B/G
166	MUNDHADA RAGHAV	Mukesh Kr Rohil	ENHANCED POSE ESTIMATION MODULE DESIGNING FOR AUGMENTED REALITY APPLICATIONS
167	RISHABH AGARWAL	K Solomon Raju	DESIGN AND DEVELOP A DRIVER FOR ATTACHING ZYNQ BOARD TO MP 435 BOARD
168	ATISHAY JAIN	Poonam Goyal	PARALLELIZATION OF SVM ALGORITHMS
169	NITESH VIJAY	Avinash Gautam	IMPLEMENTATION OF SOME RECENT ALGORITHMS FOR TERRAIN COVERAGE TASKS
170	VARUN WACHASPATI J	K S Raju	DESIGN AND DEVELOPMENT OF DRIVER SOFTWARE TO INTERFACE ZYNQ BOARD WITH MP 435
171	NILAY JAIN	Lavika Goel	OPTIMIZING THE NP HARD PROBLEM OF CHOOSING K CLUSTERS USING SWARM INTELLIGENCE (PSO) AND K MEANS++ INITIALIZATION.
172	GOVIND NARAYAN SHARMA	Mukesh Kr Rohil	DESIGNING A REAL TIME FEATURE DETECTION AND SIMILARITY ANALYSIS SYSTEM FOR TWO IMAGES
173	SANYA JAIN	Shan Balasubramaniam	DESIGN & IMPLEMENTATION OF A SYSTEM TO EXPLORE AND EVALUATE QUERIES WITH DIFFERENT EFFICIENCY REQUIREMENTS IN THE SPECIFIC DOMAIN OF ENGLISH LITERATURE (SHAKESPEARES PLAYS)
174	ANUSHKA BAONI	Anil Kumar Saini	IMPLEMENTATION OF DEEP LEARNING ALGORITHMS AND ITS APPLICATIONS
175	HARNISH NARESH LAKHANI	Yashvardhan Sharma	TEMPORAL AND IMPLICIT FEATURE EXTRACTION FOR SENTIMENT ANALYSIS
176	KSHITIJ BUDHANI	Shyamapada Mukherjee	OPINION MINING AND SENTIMENT ANALYSIS USING NATURAL LANGUAGE PROCESSING
177	KSHITIJ BUDHANI	Virendra Singh Nirban	SENTIMENT ANALYSIS ON TWITTER DATA REGARDING ADVERTISEMENTS
178	ANISH BANSAL	A. S. Mandal	DESIGN OF ALGORITHM FOR VISUAL MOTION DETECTION AND IMPLEMENTATION OF THE SAME IN ANALOG NEUROMORPHIC CIRCUITRY
179	GARVIT GOEL	Abhijit R Asati	HARDWARE IMPLEMENTATION OF TRANSCENDENTAL FUNCTIONS.
180	MANEK AISHWARYA HIMANSHU	Surekha Bhanot	SIGN LANGUAGE RECOGNITION
181	MUGALODI RAMESHA RAKESH	Jl Raheja	DEVELOPING EYE GAZE TRACKING ALGORITHM FOR MICROSOFT KINECT.
182	AKSHAT MATHUR	Kavindra Kandpal	DESIGN OF MOS ONLY BAND GAP REFERENCE CIRCUIT
183	ASHISH ANAND	Surekha Bhanot	IMPLEMENTATION OF AI FOR MEDICAL DIAGNOSIS OF A CLASS OF DISEASE
184	MADHAVPREET SINGH SAINI	K K Gupta	MODELLING AND SIMULATION OF AUTONOMOUS UNDERWATER VEHICLES.
185	R.S.VEEARRAGHAVAN	Anu Gupta	DESIGN OF CLASS AB AMPLIFIERS
186	HARSHIT RAGHUWANSHI	Pradyumn Chaturvedi	DESIGN, SIMULATION & IMPLEMENTATION OF SINGLE PHASE ACTIVE POWER FILTER
187	GAURAV MITTAL	Abhijit R Asati	HARDWARE IMPLEMENTATION OF TRANSCENDENTAL FUNCTIONS.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
188	BHIMSARIA NIKUNJ LAXMIKANT	Chandra Shekhar	DESIGN OF HARDWARE ARCHITECTURES FOR REAL TIME DATA ENCRYPTION APPLICATIONS
189	DIVYA SUNEJA	Nitin Chaturvedi	CACHE MEMORY ARCHITECTURE
190	DIVYA SUNEJA	Chandra Shekhar	RISC PROCESSOR DESIGN
191	PANDE ADITYA MOHAN	Rajesh P Mishra	MULTI CRITERA DECISION MAKING INTERFACE (FUZZY-ANP)
192	AMAN AGRAWAL	Srinivas Kota	UNDERSTANDING THE CONCEPTS OF PRODUCT DESIGN AND USE THEM IN SUPPLY CHAIN MANAGEMENT.
193	V.ANIERUDH	Rajesh P Mishra	IMPLEMENTATION OF TOYOTA PRODUCTION SYSTEM IN THE INDIAN HEALTHCARE SYSTEM
194	ROHAN JANGID	Bijoy Kumar Raut	MOTION PLANNING ALGORITHM FOR ROBOT MANIPULATORS.
195	SHUBHAM RATHI	Srinivas Kota	DESIGNING A MEANS OF TRANSPORT FOR THE BLIND AND PARALYZED.
196	ADITYA SANJAY RUIA	Satyendra Kr Sharma	QUICK RESPONSE IN SUPPLY CHAIN
197	ANSH THAKUR	Ashish Runthala	DECODING THE FUNCTIONAL ASPECTS OF THE PROTEIN SEQUENCE THROUGH MACHINE LEARNING.
198	ABHIJEET CHOWDHURY	Shibasish Chowdhury	UNDERSTANDING INTERACTION BETWEEN MRNA-MIRNA
199	AKSHAT BORDIA	Ashish Runthala	DECODING THE FUNCTIONAL ASPECTS OF PROTEIN SEQUENCE THROUGH MACHINE LEARNING
200	VANDIT GANDOTRA	Rajesh Mehrotra	DEVELOPMENT OF A SOFTWARE FOR BIOLOGICAL DATA ANALYSIS.
201	NANDINI TRIPATHI	Rajesh Mehrotra	ANALYSIS OF CIS REGULATORY ELEMENTS
202	SEWAKE DEWANSHU CHHAGAN	SK Verma	STUDY AND MODELLING OF BIOSENSORS
203	SIDDHANT DANG	Sandhya Marathe	IMMUNE RESPONSE MODELING TO SALMONELLA INFECTION
204	ABHISHEK PRASAD	Sandhya Marathe	MATHEMATICAL MODELING OF SALMONELLA INFECTION
205	SAMYADEEP BASU	Rajesh Mehrotra	DEVELOPMENT OF SOFTWARE FOR BIOLOGICAL DATA ANALYSIS.
206	MANESH NARAYAN K	Rajesh Mehrotra	DEVELOPMENT OF SOFTWARE FOR BIOLOGICAL DATA ANALYSIS
207	TARUN KUMAR VANGANI	Shilpi Garg	DECIPHERING A CONSENSUS SEQUENCE TO PREDICT TARGETING OF A PROTEIN TO APICOPLAST.
208	KUNAL PARMANI	Sandhya Mehrotra	DESIGNING AN IN SILICO MODEL OF THE CARBOXYSOME OF A PRIMITIVE CYANOBACTERIUM GLOBEBACTERIA VIOLACEOUS.
209	RUSHIL HANDA	G Meenakshi Sundaram	DESIGN SIMULATION OF MEMS ENERGY HARVESTOR
210	ABHISHEK GUPTA	G Meenakshi Sundaram	DESIGN SIMULATION OF MEMS ENERGY HARVESTER
211	AAYUSH GUPTA	Ravi Saini	DESIGN OF A RISC MICROPROCESSOR USING VERILOG
212	SHUBHAM GARG	Sachin U Belgamwar	DESIGN & STRUCTURAL ANALYSIS OF MEMS BASED PIEZORESISTIVE/CAPACITIVE ACCELEROMETER.
213	NEEL KASAT	NV Muralidhar Rao	AGRICULTURAL VALUE CHAIN PRESENT SITUATION AND FINANCE STRATEGY, DESIGN

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
214	DEWRAT VEGAD	NV Muralidhar Rao	FORMULATION OF A NEW AND COMPREHENSIVE INDEX OF HUMAN AND SOCIAL DEVELOPMENT
215	SIMRAN KAUR	NV Muralidhar Rao	DEVISING A MODEL FOR ALGORITHMIC TRADING USING CANDLESTICK PATTERNS.
216	AKSHIT BHATIA	NV Muralidhar Rao	AGRICULTURAL VALUE CHAIN PRESENT SITUATION , AND FINANCE STRATEGY , DESIGN
217	VAIBHAV AGARWAL	NV Muralidhar Rao	ANT ALGORITHM APPROACH TO PORTFOLIO OPTIMIZATION
218	TANYA SRIVASTAVA	NV Muralidhar Rao	DESIGNING A MODEL FOR ALGORITHMIC TRADING USING CANDLESTICK PATTERNS.
219	GAURAV AAKAR	NV Muralidhar Rao	ANT COLONY OPTIMIZATION APPROACH TO PORTFOLIO MANAGEMENT.
220	ABHISUMAT BARTHWAL	G Meenakshi Sundaram	DESIGN AND STRUCTURAL ANALYSIS OF MEMS BASED PIEZORESISTIVE/CAPACITIVE ACCELEROMETER
221	VIGNESH V S	Ravi Saini	DESIGN OF A RISC MICROPROCESSOR USING VERILOG
222	AMANDEEP SINGH	NV Muralidhar Rao	FORMULATION OF A NEW AND COMPREHENSIVE INDEX OF HUMAN AND SOCIAL DEVELOPMENT
223	KETUL SANDIP MATHURIA	Satyendra Kr Sharma	CROSS CHANNEL EFFECT OF PRICE PROMOTION
224	JANESH SINGLA	Satyendra Kr Sharma	CROSS CHANNEL EFFECTS OF PRICE PROMOTION
225	AKSHAY R KULKARNI	Satyendra Kr Sharma	TO ASSESS AND EVALUATE THE SUPPLY RISKS USING THE VALUE AT RISK (VAR) MODEL.
226	DEEVITA AGARWAL	NV Muralidhar Rao	IMPACT OF CREDIT RISK MANAGEMENT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN INDIA
227	HARSHIKHA GUPTA	Satyendra Kr Sharma	IDENTIFYING AND ASSESSING OPERATIONAL RISK FOR RETAIL INDUSTRY.
228	AAYUSH GUPTA	Ajay Kumar Pani	MODELING OF SULPHUR RECOVERY UNIT USING PARTIAL LEAST SQUARE REGRESSION
229	KUMAR NIMITT	Amit Jain	USE OF EXCEL VBA FOR SOLVING SELECTED CHEMICAL ENGINEERING PROCESS PROBLEMS
230	PIYUSH SHARDA	Rahul Singhal	DESIGN AND SIMULATION OF GAN BASED LEDS WITH GRAPHENE
231	PAWAN SARAN	Niladri Sarkar	A SURVEY OF PARTICLE-IN-CELL METHODS FOR PLASMA-ASSISTED TUBE MODELLING
232	VISHNU SHARMA R K	J N Bandopadhyay	COMPUTATIONAL STUDY OF NON-ABELIAN QUANTUM CHAOTIC SYSTEMS
233	ANTARANG JAIN	Navin Singh	PARALLELISATION OF CODE
234	ADITYA VIJAYKUMAR	J N Bandopadhyay	COMPUTATIONAL STUDY OF QUANTUM COUPLED CHAOTIC SYSTEMS
235	ANSH SHAH	Navin Singh	DNA UNZIPPING: CROWDING EFFECTS
236	MANISH	Navin Singh	FIBRE BUNDLE MODAL
237	SRAJAN JAIN	Navin Singh	THERMODYNAMICS OF PROTEIN FOLDING
238	MOHAMMAD SHERAJ	Navin Singh	FIBRE BUNDLE MODEL
239	RAGHAV KUMAR	M S Dasgupta	DESIGN IMPROVEMENT ON BICYCLE SEAT.
240	NAMITHA SURESH	Tapomoy G Sarkar	SIMULATING EFFECT OF GEOMETRIC PHASE IN 2-D ELECTRON SYSTEMS

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
241	VIKAS KATARIA	Gajendra S Chauhan	DEVELOPING AUDIO-VIDEO TEACHING MODULES
242	YASHODHARA	Gajendra S Chauhan	INCREASING AWARENESS AMONG INDIAN CITIZENS ABOUT THE CURRENT PACE OF ENVIRONMENTAL DESTRUCTION AND THE URGENT NEED FOR SAVING ENVIRONMENT.
243	SUNIL KUMAR	Gajendra S Chauhan	DEVELOPING AUDIO-VIDEO TEACHING MODULES
244	RAYAAM KISHORKUMAR GHOSH	Pratik N Sheth	DESIGN OF A SOLAR ASSISTED PYROLYSIS UNIT.
245	TUSHAR GUPTA	Pratik N Sheth	SIMULATION OF CATALYTIC PYROLYSIS USING ASPEN
246	SOUMYASHIS PRADHAN	Ajay Kumar Pani	MODELING OF SULPHUR RECOVERY UNIT USING RIDGE REGRESSION METHOD.
247	HITESH SONI	G Muthukumar	DESIGN ASPECTS OF REINFORCED CONCRETE TALL BUILDINGS
248	AIRSON	Somdatta Bhattacharya	DESIGNING A MODEL CURRICULUM FOR TEACHING MORAL EDUCATION IN SCHOOLS
249	SHREYAS PRANAV	Ravi Kant Mittal	USE OF GEOSYNTHETICS TO STABILIZE TERRAIN
250	AKSHANSH RAI	G Muthukumar	EVALUATION OF EFFICIENCY OF VARIOUS STRUCTURAL CONFIGURATION OF BUILDING
251	PARIKSHIT AGRAWAL	Kuldip Singh Sangwan	DESIGN OF REVERSE LOGISTICS NETWORKS (SELECTION & DESIGN OF NETWORK ELEMENTS AND OPTIMISATION OF PARAMETERS )
252	SARTHAK BISHT	Praveen Kumar A V	DESIGN OF ELECTROMAGNETIC SIMULATOR FOR TWTS PSC0101 (WP-15)
253	PARITOSH VERMA	Lavika Goel	GLOBAL ROUTING USING NATURE INSPIRED TECHNIQUES
254	NEMA DAIVIK RAKESH	Lavika Goel	GLOBAL ROUTING USING NATURE INSPIRED TECHNIQUES
255	ISHANT GUPTA	Mukesh Kr Rohil	DESIGN OF A SYSTEM FOR IDENTIFICATION OF A SINGLE MATHEMATICAL SYMBOL AND AN ENGLISH ALPHABET DRAWN ON COMPUTER DISPLAY
256	SIDDHARTH SHANKAR TRIPATHI	Shamik Chakraborty	STUDY OF QUANTUM TUNNELING AND INELASTIC ELECTRON TUNNELING SPECTROSCOPY WITH RESPECT TO OLFACTION SYSTEM.
257	MANAN SINGHAL	Bhupendra K Sharma	STUDY OF NON-NEWTONIAN ARTERIAL BLOOD FLOW WITH STENOSIS.
<b>LABORATORY PROJECT</b>			
1	SONALI GUPTA	SUDESHNA M CHOUDHURY	STUDY OF DNA BINDING PROPERTIES OF AIE DYES.
2	SHUBHAM PRAVIN RATHI	JITENDRA PANWAR	ANTIMICROBIAL ACTIVITY OF SILVER NANOPARTICLES ON GRAM NEGATIVE BACTERIAL SPECIES
3	KANEKANTI ASHISH KHANNA	LALITA GUPTA	ANALYSIS OF APOLIPOPHORIN-3 IN ANOPHELES SPECIES
4	GEETIKA GARG	SHIBASISH CHOWDHURY	INTEGRATING DIFFERENT ONLINE BIOLOGICAL SOFTWARES AND DATABASES
5	BHAVAYA GUPTA	K K GUPTA	IMPLEMENTATION OF OBJECT TRACKING ALGORITHMS.



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
6	PRAJAKTA KIRAN JOSHI	AJAY AGARWAL	TO DESIGN A MEMS SENSOR TO DISTINGUISH DISEASED CELLS.
7	PRAJAKTA KIRAN JOSHI	AJAY AGARWAL	TO DESIGN A MEMS SENSOR TO DISTINGUISH DISEASED CELLS.
8	DEVAM JHANWAR	JITENDRA PANWAR	ANTIMICROBIAL ACTIVITY OF SILVER NANOPARTICLES ON GRAM POSITIVE BACTERIAL SPECIES.
9	ANKIT BANSAL	SOM SUKLA MAITI	ANALYSIS OF EEG SIGNALS.
10	KUNAL JINDAL	AK DAS	ANALYSIS OF MICROARRAY DATA FROM PATIENTS SHOWING COMPLICATED AND UNCOMPLICATED MALARIA, WITH A VIEW TO IDENTIFY SEXUAL STAGE SPECIFIC TRANSCRIPTS IN VIVO
11	SRABASTI NANDI	SANDHYA MARATHE	EFFECTS OF NATIVE PROSOPIS CINERARIA AND NON-NATIVE PROSOPIS JULIFLORA ON VISIBLE FAUNA
12	ANKIT AGARWAL	UMA S DUBEY	BIOINFORMATICS ASPECT OF ANTI-CANCER PROPERTIES OF CAMEL MILK.
13	MUDDA SWATHI SREE DURGA	UMA S DUBEY	BIOINFORMATIC ASPECTS OF ANTI-CANCER PROPERTIES OF CAMEL MILK
14	JYOTHIR GHOSH	SUROJIT PANDE	SYNTHESIS AND CHARACTERIZATION OF NI NANOPARTICLES AND ITS APPLICATION IN ELECTROCATALYSIS.
15	RRAHUL BHARDAWAJ	INAMUR R LASKAR	CHARACTERIZATION OF AIE ACTIVE ORGANIC MOLECULES AND COMPLEXES AND STUDY OF THEIR APPLICATIONS IN SENSING AND MECHANOCROMISM
16	SARANSH MEHTA	MAHESH ANGIRA	DESIGN OF MEMS TECHNOLOGY BASED LOGIC GATES
17	KASHISH MITTAL	ANU GUPTA	EXPLORATION OF FREQUENCY COMPENSATION TECHNIQUES IN AN OPAMP
18	AASTHA AGRAWAL	JL RAHEJA	3 DIMENSIONAL SIZE ANALYSIS
19	JEFFREY GEORGE	SHAMIK CHAKRABORTY	STUDY AND SIMULATION OF HYDROGEN ABSORPTION ON CARBON NANO-TUBE DOPED WITH ALUMINUM AND PHOSPHORUS USING DFT
20	AKSHAY VENKATESH	SHAMIK CHAKRABORTY	STUDY AND SIMULATION OF HYDROGEN ADSORPTION ON CARBON NANOTUBES DOPED WITH ALUMINIUM AND PHOSPHORUS USING DFT.
21	ISUKAPALLI SAI VAMSI KRISHNA	INAMUR R LASKAR	DESIGN AND SYNTHESIS OF NOVEL AIE(AGGREGATION INDUCED EMISSION) ACTIVE MOLECULES FOR SENSITIVE AND SELECTIVE DETECTION OF ANALYTES.
22	ANURAG CHERUVU SREENIVAS	BHARTI KHUNGAR	SYNTHESIS, CHARACTERIZATION AND CATALYTIC APPLICATION OF SCHIFF BASE METAL COMPLEX
23	ARCHIT GADHOK	BHARTI KHUNGAR	PREDICTING PROPERTIES OF IONIC LIQUIDS USING MACHINE LEARNING TECHNIQUES
24	AKASH SHARMA	SOM SUKLA MAITI	ANALYSIS OF EEG SIGNALS.
25	MANISH KUMAR	AJAY KUMAR SAH	APPLICATION OF SUGAR CONTAINING METAL COMPLEXES IN CATALYSIS.
26	DHIRAJ KAPGATE	AMIT JAIN	AUTOMOBILE LUBRICATION WASTE OIL REUSE AS A BIODIESEL/FUEL
27	NAMAN SHINGHAL	PRADYUMN CHATURVEDI	DEVELOPMENT OF IMPROVED POWER QUALITY CONVERTER.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
28	PRANAV DATTATRAY KULKARNI	SRIKANTA ROUTROY	APPLICATION OF MONTE CARLO SIMULATION METHOD IN SUPPLY RISK ANALYSIS
29	AMAN TAKIYAR	NV MURALIDHAR RAO	AN EMPIRICAL INVESTIGATION OF THE LINK BETWEEN INFRASTRUCTURE DEVELOPMENT AND ECONOMIC GROWTH
30	GOGRI ADITYA BHUSHAN	ANIL JINDAL	DUAL CHANNEL CLOSED-LOOP SUPPLY CHAIN COORDINATION WITH A REWARD DRIVEN RE-MANUFACTURING POLICY
31	GOGRI ADITYA BHUSHAN	ANIL JINDAL	DUAL CHANNEL CLOSED-LOOP SUPPLY CHAIN COORDINATION WITH A REWARD DRIVEN RE-MANUFACTURING POLICY
32	GOPAL YOGESH BHATT	ANIL JINDAL	DUAL CHANNEL CLOSED-LOOP SUPPLY CHAIN COORDINATION WITH A REWARD DRIVEN RE-MANUFACTURING POLICY
33	GOPAL YOGESH BHATT	ANIL JINDAL	DUAL CHANNEL CLOSED-LOOP SUPPLY CHAIN COORDINATION WITH A REWARD DRIVEN RE-MANUFACTURING POLICY
34	SHUBHAM SINGH	POONAM GOYAL	PARALLELIZATION OF SHARED NEAREST NEIGHBOR(SNN) ALGORITHM
35	AKSHAY	K K GUPTA	MEDICAL IMAGE PROCESSING AND ITS IMPLEMENTATION USING MATLAB.
36	SAUMYA UPADHYAY	SRIKANTA ROUTROY	APPLICATION OF MONTE CARLO SIMULATION METHOD IN SUPPLY RISK ANALYSIS
37	VAIBHAV	MAHANTH PRASAD	DESIGN AND MODELING OF MEMS BASED MICROPHONE
38	SANCHIT SAMNANI	SACHIN U BELGAMWAR	ENHANCING THE SENSING CHARACTERISTICS IN MEMS-BASED SNO2 GAS SENSORS FOR DETECTION OF NO2 AND NH3 GASES
39	ILASHREE	SANJAY SINGH	FACE ALIGNMENT SOFTWARE
40	ILASHREE	SANJAY SINGH	FACE ALIGNMENT SOFTWARE
41	GAUTAM SINGHANIA	SANJAY SINGH	FACE ALIGNMENT SOFTWARE
42	GAUTAM SINGHANIA	SANJAY SINGH	FACE ALIGNMENT SOFTWARE
43	SANGOI DHAIRYA PANKAJ	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
44	SANGOI DHAIRYA PANKAJ	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
45	SANGOI DHAIRYA PANKAJ	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
46	RISHABH SINGH	NAVNEET GOYAL	DETECTING MALICIOUS WEBSITES USING MACHINE LEARNING
47	HARISH TUNDWAL	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
48	HARISH TUNDWAL	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
49	HARISH TUNDWAL	ANIL KUMAR SAINI	OBJECT TRACKING IN A VIDEO.
50	ARITRA DAS	PRADYUMN CHATURVEDI	DEVELOPMENT OF FUZZY LOGIC CONTROLLED POWER ELECTRONIC CONVERTERS
51	MEHAK	ARNAB HAZRA	ENHANCING THE SENSING CHARACTERISTICS IN MEMS-BASED SNO2 GAS SENSORS FOR DETECTION OF NO2 AND NH3 GASES
52	MANSI SINGH	RAKHEE	STUDY OF MARKOV CHAIN MONTE CARLO SIMULATION METHOD
53	ADIT MAKHIJANI	MURALI PALLA	SYNTHESIS OF BIO-INSPIRED COMPOSITES.
54	KHARBADE ASHLESH SANJAY	SANJAY SINGH	FACE DETECTION BASED ON RIGID TEMPLATES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
55	KHARBADE ASHLESH SANJAY	SANJAY SINGH	FACE DETECTION BASED ON RIGID TEMPLATES
56	GUNJAN KUMAR SINGH	SANJAY SINGH	FACE DETECTION BASED ON RIGID TEMPLATES
57	GUNJAN KUMAR SINGH	SANJAY SINGH	FACE DETECTION BASED ON RIGID TEMPLATES
58	ANUMULA SAI VENKATA REDDY	MADHUKAR MISHRA	LOADING AND DECAY OF A MAGNETO OPTICAL TRAP
59	MUDIT GANDHI	ANSHUMAN DALVI	IONIC TRANSPORT STUDIES ON MG++ IONS
60	RAVINA GOYAL	KAMLESH KUMAR	FLY ASH MIXED PILANI SOIL : AN EXPERIMENT STUDY
61	SUKRITI KUMAR	KAMLESH KUMAR	FLY ASH AND CEMENT IN PILANI SOIL: AN EXPERIMENTAL STUDY
62	GEET KALRA	DIPENDU BHUNIA	USE OF WASTE MARBLE DUST AS A CURING AID FOR CONCRETE.
63	NISARG KANANI	SMITA RAGHUVANSHI	DEFLUORIDATION OF DRINKING WATER USING GRAPHENE OXIDE BASED NANOADSORBENTS
64	UTSAV MAJUMDER	SONAL MAZUMDER	EFFECT OF FREEZE DRYING PROCESS CONDITIONS ON STABILITY OF POLYMERIC NANOPARTICLES
65	ANMOL SHRIVASTAVA	AMIT JAIN	AUTOMOBILE LUBRICATION WASTE OIL REUSE AS A BIODIESEL/FUEL
66	ABHISHEK JINDAL	SONAL MAZUMDER	MODIFICATION OF SILICA NANOPARTICLE COATINGS ON GLASS SUBSTRATES
67	ABHISHEK KUMAR	BANASRI ROY	SILICA-IRON OXIDE NANOPARTICLE COATING ON METAL WITH CELLULOSE FIBRE FOR RUST PREVENTION
68	SILABRATA PAHARI	SMITA RAGHUVANSHI	REACTIVE EXTRACTION OF PRODUCTS OBTAINED FROM CARBON DIOXIDE MITIGATION.
69	ANKIT RAJ	BANASRI ROY	SILICA-IRON OXIDE NANOPARTICLE COATING ON METAL WITH CELLULOSE FIBRE FOR RUST PREVENTION
70	PRANJAL SHARMA	SONAL MAZUMDER	PHYSICOCHEMICAL CHARACTERIZATION AND HEAT TRANSFER ANALYSIS OF NANO FLUIDS.
71	SAJAL GUPTA	AJAY KUMAR PANI	A COMPARATIVE STUDY OF DIFFERENT PID CONTROLLER TUNING METHODS
72	RISHABH JAIN	SMITA RAGHUVANSHI	DEFLUORIDATION OF DRINKING WATER USING METALLIC NANOADSORBENTS
73	SHUBHAM AGARWAL	SMITA RAGHUVANSHI	DEVELOPMENT OF BIO-FILTER COLUMN FOR THE REMOVAL OF CHLORINATED POLLUTANTS FROM AIR.
74	SHIVAM GUPTA	AJAY KUMAR PANI	A COMPARATIVE STUDY OF DIFFERENT PID CONTROLLER TUNING METHODS.
75	MANASWI SANKRITYAYAN	SONAL MAZUMDER	MODIFICATION OF SILICA NANOPARTICLE COATINGS ON GLASS SUBSTRATES.
76	LALWANI SUVESH MANOJ	BANASRI ROY	SILICA IRON OXIDE NANOPARTICLE COATING ON METAL WITH CELLULOSE FIBRE FOR RUST PREVENTION
77	YIMKUM I OZUKUM	SHIBANI K JHA	MODEL FABRICATION AND EXPERIMENTAL STUDIES OF FLOW INSTABILITIES IN HELE SHAW CHAMBER
78	PARTH GIRISHBHAI SUTARIA	MANOJ KUMAR	ANALYSIS OF CONCRETE FILLED TUBULAR ARCHES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
79	ABHINAV SETHI	MANOJ KUMAR	ANALYSIS OF CONCRETE FILLED TUBULAR ARCHES
80	BAJIO RAJU	SHIBANI K JHA	MODEL FABRICATION AND EXPERIMENTAL STUDIES OF FLOW INSTABILITIES IN HELESHAW CHAMBER.
81	DEVANSH MAHAJAN	ANUPAM SINGHAL	TO FIND OUT RIVER WATER QUALITY IN A GIVEN STRETCH.
82	MODANI SURAJ VIJAY	ANUPAM SINGHAL	ANALYSIS OF WASTE WATER QUALITY DRAINED IN VILLAGE RAILA AND REMEDIAL MEASURES.
83	MOHIT KATIYAR	SHIBANI K JHA	MODEL FABRICATION AND EXPERIMENTAL STUDIES OF FLOW INSTABILITIES IN HELESHAW CHAMBER.
84	POONAM BRAR	ANSHUMAN	USE OF MARBLE DUST AS FILLER MATERIAL IN ROAD EMBANKMENT CONSTRUCTION.
85	RANA ANSHUMAN	DIPENDU BHUNIA	RESPONSE OF LOW COST HOUSES USING STRAW BALE UNDER EARTHQUAKE LOADING
86	HARSH AMBASTA	ANUPAM SINGHAL	TO FIND OUT RIVER WATER QUALITY IN A GIVEN STRETCH.
87	ASHUTOSH KUMAR SINGH	ANUPAM SINGHAL	ANALYSIS OF WASTE WATER QUALITY DRAINED IN THE VILLAGE RAILA AND THE REMEDIAL MEASURES.
88	A ANJANA	S GURUNARAYANAN	FPGA IMPLEMENTATION OF ARITHMETIC CIRCUITS
89	MEHRAN ALI BANKA	VINEET KUMAR	HARDWARE IMPLEMENTATION OF FUNCTIONAL BLOCKS SUCH AS FEATURE EXTRACTION USED IN IRIS RECOGNITION.
90	VARSHA VIVEK	VINEET KUMAR	HOG AND ITS VARIANTS BASED FEATURE EXTRACTION FOR FACIAL EXPRESSION RECOGNITION (CEERI)
91	DAVINDER PAL SINGH	DHEERENDRA SINGH	DIGITAL IMPLEMENTATION OF SLIDING MODE CONTROLLER (SMC) FOR 3 PHASE ENERGY EFFICIENT MOTOR DRIVE USING FPGA
92	SANGANI DISHANT ANIL	VINOD KUMAR CHAUBEY	MODELLING OF JUNCTION-LESS TRANSISTORS USING MATLAB AND SILVACO.
93	SURANA RAHUL MANOJ	VINOD KUMAR CHAUBEY	STUDY OF NOVEL STRUCTURE OF FINFETS
94	SUMEDH K RAMAPRASAD	KARI BABU RAVI TEJA	DESIGN AND SIMULATION OF VOLTAGE REFERENCE CIRCUITS FOR CMOS CIRCUITS
95	PARAKH SARDA	CHANDRA SHEKHAR	VLSI ARCHITECTURE FOR SOME DSP ALGORITHM
96	ABHISHEK GUPTA	HITESH DUTT MATHUR	MODELLING AND FUZZY LOGIC CONTROL OF DFIG BASED WIND ENERGY CONVERSION SYSTEMS (WECS)
97	HARSH MISRA	RAHUL SINGHAL	DESIGN OF ORGANIC SOLAR CELLS
98	VIVEK RATHORE	VINEET KUMAR	HARDWARE IMPLEMENTATION OF FUNCTIONAL BLOCKS USED IN IRIS RECOGNITION SUCH AS TEMPLATE MATCHING
99	PARAG AGRAWAL	DHEERENDRA SINGH	PERFORMANCE EVALUATION OF SOLAR POWERED SRM DRIVE FOR ELECTRICAL VEHICLE.
100	ADITYA CHAWLA	DHEERENDRA SINGH	PERFORMANCE EVALUATION OF SOLAR POWERED SRM (SWITCHED RELUCTANCE MOTOR) DRIVE FOR ELECTRIC VEHICLES.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
101	SANUJ BHATIA	K K GUPTA	INTRODUCTION TO COMPUTER VISION
102	BODDUPALLI VENKAT AKHIL	HITESH DUTT MATHUR	APPLICATION OF NEURAL NETWORKS IN LOAD FREQUENCY CONTROL IN POWER SYSTEMS
103	BODDUPALLI VENKAT AKHIL	A ANAND KUMAR	IMPLEMENTATION OF PID CONTROLLERS USING NEURAL NETWORKS WITH DSP.
104	ARCHIT SAXENA	DHIRAJ	PORTING OF REAL TIME OPERATING SYSTEM (RTOS) ON ARM BOARD.
105	ARCHIT SAXENA	K K GUPTA	APPLICATION OF IMAGE MOSAICING PROCESS ON VIDEO FRAMES
106	PRAJYOT GUPTA	ASHISH MISHRA	ANALYSIS, EXTRACTION AND DISPLAY OF BRAIN SIGNALS ON RTOS USING FPGA
107	PRAJYOT GUPTA	CHANDRA SHEKHAR	VLSI ARCHITECTURE FOR SOME DSP ALGORITHM
108	SHETTY NIKHIL ACHUTHA	SHASHIKANT SADISTAP	STUDY AND DEVELOPMENT OF COOKIE INSPECTION SYSTEM.
109	SHUBHAM JAIN	PRAMOD KR TANWAR	GUI DEVELOPMENT FOR CROSS PLATFORM APPLICATIONS USING QT OR PYTHON FOR IMAGE PROCESSING ANALYSIS.
110	PRANSHU KALRA	DEVESH SAMAIYA	SMARTPHONE BASED MULTIMETER DEVICE
111	PRANSHU KALRA	NITIN CHATURVEDI	SIMULATION OF CACHE MEMORIES FOR MULTICORE ARCHITECTURES USING MULTITHREADED BENCHMARKS
112	SHUBHAM GOYAL	PANKAJ VYAS	TEST CASE GENERATION FROM UML SEQUENCE DIAGRAMS
113	VIVEK JAIN	PRADYUMN CHATURVEDI	MULTILEVEL INVERTER BASED RENEWABLE ENERGY SYSTEM
114	SACHIN KUMAR	DEVESH SAMAIYA	DESIGNING A SMARTPHONE BASED MULTIMETER
115	AMRITA BHOWMICK	K K GUPTA	RECOGNITION OF DIGITAL LOGIC CIRCUIT DIAGRAMS
116	B SAITEJA	KARI BABU RAVI TEJA	DESIGN AND SIMULATION OF VOLTAGE REFERENCE CIRCUITS FOR CMOS CIRCUITS.
117	MONISHA GOYAL	VINOD KUMAR CHAUBEY	VEHICLE SAFETY SYSTEM
118	MONISHA GOYAL	ABHIJIT R ASATI	CNT FET BASED MULTIPLIER DESIGN
119	PRAYAG GODHA	G MEENAKSHI SUNDARAM	SMART STICK FOR THE VISUALLY IMPAIRED.
120	PRATIK JAIN	VINEET KUMAR	IMPLEMENTATION OF FACE RECOGNITION USING VHDL
121	DEEPAK AGARWAL	DEVESH SAMAIYA	SMARTPHONE BASED MULTIMETER
122	NALIN PRASHANT MUJUMDAR	K K GUPTA	INTRODUCTION TO COMPUTER VISION
123	TEJAS PRAKASH HARNE	PRAMOD KR TANWAR	IMPLEMENTATION OF EFFICIENT FEATURE EXTRACTION ALGORITHMS FOR FACIAL AND FINGERPRINT RECOGNITION.
124	VARUN HALDIYA	ASHISH MISHRA	ANALYSIS, EXTRACTION & DISPLAY OF BRAIN SIGNAL ON RTOS USING FPGA.
125	PLAKSHA VERMA	VINOD KUMAR CHAUBEY	VEHICLE SAFETY SYSTEM
126	PLAKSHA VERMA	ABHIJIT R ASATI	CNT FET BASED DIGITAL DESIGN
127	KSHITIJ GUPTA	DHIRAJ	IMPLEMENTATION OF EFFICIENT FEATURE EXTRACTION ALGORITHMS FOR FACIAL AND FINGERPRINT RECOGNITION.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
128	SHAISTA HUSSAIN	S.A. AKBAR	DEVELOPMENT AND SIMULATION OF INTELLIGENT CONTROL FOR SMALL SUBSYSTEMS OF AN AUV (DEPTH, STEERING, MOTION SUBSYSTEMS)
129	SHAISTA HUSSAIN	NITIN CHATURVEDI	SIMULATION OF CACHE MEMORIES FOR MULTICORE ARCHITECTURE USING MULTITHREADED BENCHMARKS
130	SAYONTINI CHOWDHURY	K K GUPTA	DIGITAL IMAGE PROCESSING TECHNIQUES FOR FACE RECOGNITION AND IMPLEMENTING THE ALGORITHM IN MATLAB
131	DHARMIL YATIN SHAH	G MEENAKSHI SUNDARAM	SMART STICK FOR THE VISUALLY IMPAIRED
132	VAIBHAV GARG	CHANDRA SHEKHAR	DESIGN OF HARDWARE ARCHITECTURES FOR REAL TIME DATA ENCRYPTION APPLICATIONS.
133	HARSHIT SRIVASTAVA	TUFAN CHANDRA BERA	AN INVESTIGATION ON THERMAL ASPECT IN THIN WALLED MACHINING.
134	SAYYED MUDASSIR ALI SABIR ALI	TUFAN CHANDRA BERA	AN INVESTIGATION ON THERMAL ASPECCT IN THIN WALL MACHINING
135	HONRAO AKSHAY SUNIL	AMOL M R MARATHE	LIMIT CYCLE FLUTTER OF AIRFOIL
136	SORTEE SARVESH SURENDRA	AMOL M R MARATHE	NUMERICAL STUDY OF A SINGLE DEGREE OF MOTION OSCILLATOR WITH IMPACT
137	TALWEKAR YASH PUNDALIK	AMOL M R MARATHE	LIMIT CYCLE FLUTTER OF AIRFOILS.
138	ANKURJYOTI BORDOLOI	RAVI INDER SINGH	SYNTHESIS AND TESTING FOR BIO-FUEL AND SCOPE OF IMPROVEMENT
139	SAGAR SHOREY	KULDIP SINGH SANGWAN	ENERGY EFFICIENCY OF MACHINE TOOLS
140	APOORV VAISH	SACHIN U BELGAMWAR	APPLICATION OF CARBON ALLOTROPES AND THEIR COMPOSITES
141	SHRIRAM RAVINDRA ASHIRGADE	AMOL M R MARATHE	BIFURCATION PHENOMENA IN A TYPICAL NON-SMOOTH DYNAMICAL SYSTEM
142	POOJAN PAREKH	KULDIP SINGH SANGWAN	STATISTICAL ANALYSIS OF GREEN MANUFACTURING DRIVERS, BARRIERS AND KEY PERFORMANCE INDICATORS.
143	CHIRAG BATRA	KULDIP SINGH SANGWAN	LIFE CYCLE ASSESSMENT OF CERAMIC TILES
144	RONGALI HARISH	P SRINIVASAN	THERMAL COOLING ENHANCEMENT TECHNIQUES FOR ELECTRONIC COMPONENTS
145	DIGVIJAY SINGH JODHA	RAVI INDER SINGH	SYNTHESIS AND TESTING FOR BIO-FUEL AND SCOPE OF IMPROVEMENT
146	PIYUSH RATHORE	ABHIJIT K DIGALWAR	STUDY OF PRODUCTIVITY IMPROVEMENT ANT ITS ANALYSIS USING SIMULATION SOFTWARE, FLEXSIM.
147	SIDDHANT PUNDIR	KULDIP SINGH SANGWAN	EXPERIMENTAL INVESTIGATION & MODELLING OF MACHINE PARAMETERS FOR MILLING OPERATION TO IMPROVE ENERGY EFFICIENCY
148	JEET DESAI	AMOL M R MARATHE	DETERMINATION OF ACTIVE VIBRATION CONTROL FUNCTION OF A TIMOSHENKO BEAM
149	AMIT PRATIK SINHA	DEEPAK CHITKARA	DEVELOPMENT AND IN-VITRO EVALUATION OF SOLID LIPID NANOPARTICLES LOADED WITH HYDROPHOBIC MOLECULE
150	ABHINAV BAID	AVINASH GAUTAM	STUDY & IMPLEMENTATION OF VARIOUS STATE OF THE ART ALGORITHMS FOR MULTI-ROBOT TASK ALLOCATION USED IN AREA EXPLORATION

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
151	HARSHVARDHAN GUPTA	AVINASH GAUTAM	MULTI ROBOT AREA EXPLORATION
152	HARSHVARDHAN GUPTA	SHASHIKANT SADISTAP	DEVELOPMENT OF APPLICATION FOR ENVIRONMENT QUALITY MANAGEMENT
153	TADIKONDA BAPIRAJU VAMSI	ATANENDU SEKHAR MANDAL	MOBILE BASED MEDICAL DIAGNOSIS AND ASSISTANCE APPLICATION
154	KOTHA ACHYUTH REDDY	ATANENDU SEKHAR MANDAL	MOBILE BASED MEDICAL DIAGNOSIS AND ASSISTANCE APPLICATION
155	VIVEK HALDIYA	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
156	VIVEK HALDIYA	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
157	VIVEK HALDIYA	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
158	HARSH SHARMA	SANJAY SINGH	HLAC AND HLAC-LIKE FEATURES FOR FACIAL EXPRESSION RECOGNITION
159	HARSH SHARMA	SANJAY SINGH	HLAC AND HLAC-LIKE FEATURES FOR FACIAL EXPRESSION RECOGNITION
160	DHAWAL HARKAWAT	B.A. BOTRE	APP OR WEB BASED MODEL EXPERT SYSTEM FOR FERTILIZER RECOMMENDATION FOR A PARTICULAR TYPE OF SOIL.
161	MAYANK VILAS TOTALE	VISHAL GUPTA	SDN IN WIRELESS DOMAIN
162	INES KHANDELWAL	SUNDARESAN RAMAN	ANALYSIS OF TIME SERIES MICROSCOPIC DATA
163	PORLIKAR SHUBHAM ANAND	SUNDARESAN RAMAN	IMAGE PROCESSING ALGORITHMS FOR ANALYZING NATURAL PRODUCTS
164	PORLIKAR SHUBHAM ANAND	SUNDARESAN RAMAN	IMAGE PROCESSING ALGORITHMS FOR ANALYZING NATURAL OBJECTS
165	SIDHARTH SIKRI	POONAM GOYAL	PARALLEL FRAMEWORK FOR SUBSPACE CLUSTERING ALGORITHMS.
166	VASUDEV MITTAL	ANIL KUMAR SAINI	STUDYING AND APPLICATION OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA
167	VASUDEV MITTAL	ANIL KUMAR SAINI	STUDYING AND APPLICATION OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA
168	VASUDEV MITTAL	ANIL KUMAR SAINI	STUDYING AND APPLICATION OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA
169	ANURAG PRAKASH	SHYMAPADA MUKHERJEE	ROUTABILITY DRIVEN FPGA PLACEMENT
170	ADITYA AGARWAL	S S SADISTAP	DESIGN AND DEVELOPMENT OF AN ADVANCED ADAPTIVE FUZZY NEURO ALGORITHM FOR STABLE AND EFFICIENT ODOR RECOGNITION USING PREDEVELOPED ELECTRONIC NOSE SYSTEM.
171	NAMAN RAJ BAID	MUKESH KR ROHIL	REAL TIME POSE ESTIMATION OF VIRTUAL OBJECTS FOR AN AR SYSTEM.
172	NAMAN RAJ BAID	MUKESH KR ROHIL	3D RENDERING OF VIRTUAL OBJECTS IN REAL SCENES.
173	SHANTANU SHRIVASTAVA	VISHAL GUPTA	802.11 NETWORK VIRTUALIZATION TESTBED
174	DIDDIGA AKHIL	SANJAY SINGH	HLAC & HLAC LIKE FEATURES FOR FACIAL EXPRESSION RECOGNITION.
175	DIDDIGA AKHIL	SANJAY SINGH	HLAC & HLAC LIKE FEATURES FOR FACIAL EXPRESSION RECOGNITION.
176	RAGHAV NAIR	NAVNEET GOYAL	DATA PROVENANCE

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
177	YASHASVI GALAV	ANIL KUMAR SAINI	STUDYING AND APPLYING VARIOUS MACHINE LEARNING ALGORITHMS ON EXISTING AIRLINES DATASET.
178	YASHASVI GALAV	ANIL KUMAR SAINI	STUDYING AND APPLYING VARIOUS MACHINE LEARNING ALGORITHMS ON EXISTING AIRLINES DATASET.
179	YASHASVI GALAV	ANIL KUMAR SAINI	STUDYING AND APPLYING VARIOUS MACHINE LEARNING ALGORITHMS ON EXISTING AIRLINES DATASET.
180	A.S.ADITYA SARMA	POONAM GOYAL	PARALLELIZING CLUSTERING ALGORITHMS
181	GAYATRI H BHAT	S MOHAN	STUDY, SIMULATION AND IMPLEMENTATION OF SOME ALGORITHMS FOR SIMULTANEOUS LOCALISATION AND MAPPING USING SINGLE ROBOT
182	AMARTYA TIWARI	ANIL KUMAR SAINI	IMPLEMENTATION OF DIFFERENT CLASSIFIERS FOR IMAGE PROCESSING
183	AMARTYA TIWARI	ANIL KUMAR SAINI	IMPLEMENTATION OF DIFFERENT CLASSIFIERS FOR IMAGE PROCESSING
184	AMARTYA TIWARI	ANIL KUMAR SAINI	IMPLEMENTATION OF DIFFERENT CLASSIFIERS FOR IMAGE PROCESSING
185	SHUBHANKAR SRIVASTAVA	ATANENDU SEKHAR MANDAL	DETECTION OF PARKINSONS DISEASE USING KINECT
186	SHREY HITENDRA SHAH	JP MISRA	STUDY OF SIMULTANEOUS LOCALIZATION AND MAPPING TECHNIQUES
187	SHREY HITENDRA SHAH	VISHAL GUPTA	802.11 NETWORK VIRTUALISATION TEST-BED
188	ANUJ BANSAL	S MOHAN	STUDY OF CERTAIN ALGORITHMS FOR MR BASED TASKS IN A CLOUD ENVIRONMENT.
189	RAJAT ARORA	SUNDARESAN RAMAN	3-D VISUALISATION OF SCIENTIFIC DATA AND ISOSURFACE GENERATION
190	LAKSHMI SOUMYA AMBADIPUDI	RAVI SAINI	VLSI ARCHITECTURE FOR IMAGE AND VIDEO PROCESSING APPLICATIONS
191	LAKSHMI SOUMYA AMBADIPUDI	RAVI SAINI	VLSI ARCHITECTURE FOR IMAGE AND VIDEO PROCESSING APPLICATIONS
192	ISHAN CHUTANI	NAVNEET GOYAL	AGE INVARIANT FACIAL RECOGNITION
193	SANKET SHAH	S MOHAN	STUDY, SIMULATION AND IMPLEMENTATION OF SOME ALGORITHMS FOR SIMULTANEOUS LOCALISATION AND MAPPING USING A SINGLE ROBOT.
194	GYANENDRA MISHRA	ATANENDU SEKHAR MANDAL	DETECTION OF PARKINSONS DISEASE USING KINECT
195	PURAV AMIT SHAH	SUNDARESAN RAMAN	IMAGE PROCESSING ALGORITHMS FOR ANALYZING NATURAL PRODUCTS
196	PURAV AMIT SHAH	SUNDARESAN RAMAN	IMAGE PROCESSING ALGORITHMS FOR ANALYZING NATURAL PRODUCTS
197	SHUBHAM KHANDELWAL	NAVNEET GOYAL	DATA PROVENANCE : ROLE OF GRAPH DATABASES
198	SHUBHAM KHANDELWAL	YASHVARDHAN SHARMA	IDENTIFYING SENTIMENTS FOR SMS LANGUAGE VIA DEEP LEARNING TECHNIQUES
199	MUNDHADA RAGHAV	MUKESH KR ROHIL	PARALLEL IMPLEMENTATION OF FEATURE DETECTION FOR IMAGE REGISTRATION IN AR REAL TIME.



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
200	SAURABH ANAND	S S SADISTAP	DESIGN AND DEVELOPMENT OF AN ADVANCED ADAPTIVE FUZZY NEURO ALGORITHM FOR STABLE AND EFFICIENT ODOR RECOGNITION USING PREDEVELOPED ELECTRONIC NOSE SYSTEM.
201	JONNALAGADDA SAI KRISHNA	ATANENDU SEKHAR MANDAL	MOBILE BASED MEDICAL DIAGNOSIS AND ASSISTANCE APPLICATION
202	ATISHAY JAIN	S MOHAN	STUDY AND IMPLEMENTATION OF VARIOUS STATE-OF-THE-ART ALGORITHMS FOR MULTI-ROBOT-TASK-ALLOCATION USED IN AREA EXPLORATION
203	ATISHAY JAIN	S MOHAN	STUDY AND IMPLEMENTATION OF SOME MULTI-ROBOT LOCALIZATION ALGORITHMS
204	PRABHJYOT SINGH SODHI	ATANENDU SEKHAR MANDAL	DETECTION OF PARKINSONS DISEASE USING KINECT
205	ANTIL SINGHAL	YASHVARDHAN SHARMA	FRAMEWORK FOR COMPARATIVE ANALYSIS OF OPINIONS
206	GARGI SHARMA	YASHVARDHAN SHARMA	TEXT SUMMARIZATION USING DEEP LEARNING TECHNIQUES
207	NITESH VIJAY	AVINASH GAUTAM	MULTI ROBOT AREA EXPLORATION
208	NITESH VIJAY	B.A. BOTRE	WEB BASED EXPERT SYSTEM FOR FERTILIZER RECOMMENDATION IN INDIAN SOILS.
209	VARUN WACHASPATI J	K HARI BABU	SOFTWARE DEFINED NETWORKING - DESIGN AND DEVELOPMENT OF A "REAL TIME" NETWORK MONITORING FRAMEWORK
210	MANYA SETIA	AVINASH GAUTAM	STUDY AND IMPLEMENTATION OF VARIOUS APPROACHES FOR GRAPH PARTITIONING
211	GAURAV SINGH DAHIMA	S S SADISTAP	FABRIC COLOUR MATCHING USING IMAGE PROCESSING AND MACHINE LEARNING.
212	NILAY JAIN	B.A. BOTRE	WEB BASED EXPERT SYSTEM FOR FERTILIZER RECOMMENDATION IN INDIAN SOILS.
213	HIMANSHU SINGH DHONI	S S SADISTAP	SENSOR FUSION ALGORITHMS
214	SANJAY REDDY S	POONAM GOYAL	FEATURE SELECTION IN IMAGES
215	SHUBHAM AGRAWAL	ANIL KUMAR SAINI	STUDYING AND APPLICATIONS OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA.
216	SHUBHAM AGRAWAL	ANIL KUMAR SAINI	STUDYING AND APPLICATIONS OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA.
217	SHUBHAM AGRAWAL	ANIL KUMAR SAINI	STUDYING AND APPLICATIONS OF VARIOUS MACHINE LEARNING ALGORITHMS ON AIRLINE DATA.
218	AGRAWAL PRACHI ANIL	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
219	AGRAWAL PRACHI ANIL	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
220	AGRAWAL PRACHI ANIL	ANIL KUMAR SAINI	IDENTIFYING SIGNS OF DIABETIC RETINOPATHY IN EYE IMAGES.
221	HARSHIT JAIN	S S SADISTAP	APPLICATION OF SENSOR FUSION
222	PIYUSH KUMAR JAIN M	K HARI BABU	DESIGN AND DEVELOPMENT OF A "REAL TIME" NETWORK MONITORING FRAMEWORK FOR SOFTWARE DEFINED NETWORKS
223	ANUSHKA BAONI	YASHVARDHAN SHARMA	REVIEW SPAM DETECTION USING DEEP LEARNING TECHNIQUES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
224	HARNISH NARESH LAKHANI	POONAM GOYAL	COMPLEX QUERY PROCESSING IN IMAGE RETRIEVAL
225	TANMAY SHARMA	HITESH DUTT MATHUR	FUZZY LOGIC BASED ENERGY MANAGEMENT SYSTEM FOR A MICROGRID
226	GEETIKA KAUR BAGGA	VINEET KUMAR	DEVELOPING ALGORITHMS SUITABLE FOR HARDWARE IMPLEMENTATION FOR IRIS RECOGNITION.
227	ANISH BANSAL	NITIN CHATURVEDI	DESIGN AND ANALYSIS OF AUTO ADJUSTABLE WRITE ASSIST TECHNOLOGY FOR SRAM
228	PRAKHAR NEEMA	PRADYUMN CHATURVEDI	MULTI-LEVEL INVERTER BASED RENEWABLE ENERGY SYSTEM
229	PEROLLA VINAY KUMAR REDDY	A ANAND KUMAR	DESIGN OF INVERTER USING ANN IN CLOSED LOOP SYSTEM.
230	PEROLLA VINAY KUMAR REDDY	A ANAND KUMAR	IMPLEMENTATION OF PID CONTROLLERS USING FUZZY GAIN SCHEDULING WITH DSP.
231	RAHUL KUMAR BUDHWANI	PAWAN K AJMERA	EMBEDDED ENHANCEMENT OF CONTRAST ENHANCEMENT ALGORITHM
232	SAKAAR KHURANA	VINEET KUMAR	HARDWARE IMPLEMENTATION OF FUNCTIONAL BLOCKS USED IN IRIS RECOGNITION
233	ANSHUMAN	HITESH DUTT MATHUR	FUZZY LOGIC BASED ENERGY MANAGEMENT SYSTEM FOR A MICROGRID
234	MANEK AISHWARYA HIMANSHU	NAVNEET GOYAL	HCI USING GESTURES
235	UTKARSH MISHRA	PAWAN K AJMERA	EMBEDDED IMPLEMENTATION OF CONTRAST ENHANCEMENT ALGORITHM
236	SHREYA	VINEET KUMAR	HARDWARE IMPLEMENTATION OF FUNCTIONAL BLOCKS USED IN IRIS RECOGNITION.
237	AKSHAT MATHUR	ASHISH MISHRA	ANALYSIS,EXTRACTION & DISPLAY OF BRAIN SIGNAL ON RTOS USING FPGA
238	DIVYA PRADEEPKUMAR TAORI	KAVINDRA KANDPAL	DESIGN OF HIGH DYNAMIC RANGE CMOS IMAGE SENSORS IN 180NM TECHNOLOGY.
239	GRANDHI SAI ABHIRAM	A ANAND KUMAR	CALCULATION OF SPEED OF INDUCTION MOTOR USING PROXIMITY SENSOR
240	PARIKSHIT MITTAL	VINITA TIWARI	WIRELESS SENSOR NETWORKS (WSN) AND ITS APPLICATIONS.
241	MOHIT KUMAR SONI	PARIKSHIT K SINGH	DESIGN AND DEVELOPMENT OF INTELLIGENT CONTROL SCHEMES FOR NON-LINEAR PROCESS
242	SIDDHARTH RAI	RAHUL SINGHAL	DESIGN OF ORGANIC LIGHT EMITTING DIODES
243	AKSHAT SAXENA	PRAMOD KR TANWAR	IMPLEMENTATION OF FACE RECOGNITION USING VHDL.
244	BHIMSARIA NIKUNJ LAXMIKANT	NITIN CHATURVEDI	DESIGN OF ULTRA-LOW POWER ASYNCHRONOUS CIRCUITS IN HYBRID TECHNOLOGIES
245	BHIMSARIA NIKUNJ LAXMIKANT	A. S. MANDAL	DESIGN OF ALGORITHM FOR VISUAL MOTION DETECTION AND IMPLEMENTATION IN ANALOG NEUROMORPHIC CIRCUITRY
246	YASH KRIPLANI	SANJAY SINGH	EMBEDDED IMPLEMENTATION OF CONTRAST ENHANCEMENT ALGORITHM
247	YASH KRIPLANI	SANJAY SINGH	EMBEDDED IMPLEMENTATION OF CONTRAST ENHANCEMENT ALGORITHM
248	DESHMUKH SHARVARI SATISH	SANJAY SINGH	HUMAN GESTURE RECOGNITION AND SENTIMENT ANALYSIS.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
249	ISHAN SHARMA	DHEERENDRA SINGH	DIGITAL IMPLEMENTATION OF SLIDING MODE CONTROLLER (SMC) FOR 3-PHASE ENERGY EFFICIENT MOTOR DRIVE USING FPGA
250	ARSHAD LATIF SAIKIA	TUFAN CHANDRA BERA	MANUFACTURING OF THIN WALL COMPONENTS
251	ANIMESH GOYAL	KULDIP SINGH SANGWAN	STATISTICAL ANALYSIS OF GREEN MANUFACTURING DRIVERS BARRIERS AND KEY PERFORMANCE INDICATOR
252	ANIMESH GOYAL	ABHIJIT K DIGALWAR	DEVELOPMENT OF SIMULATION MODEL FOR PRODUCTIVITY IMPROVEMENT USING FLEXSIM
253	ROHAN JANGID	TUFAN CHANDRA BERA	DESIGN OF A DIFFUSER AND FABRICATING ITS MODEL USING CNC AND RAPID PROTOTYPING(3D PRINTING)
254	HEMABH TRIVEDI	P SRINIVASAN	YIELD IMPROVEMENTS AND ANALYSIS OF DEFECTS AND THEIR SUBSEQUENT REDUCTION IN CASTING PROCESS USING SIMULATION AND NUMERICAL ANALYSIS
255	HIMANSHU SHARMA	TUFAN CHANDRA BERA	DESIGNING OF THE DIFFUSER AND FABRICATING ITS MODEL USING CNC AND RAPID PROTOTYPING(3D- PRINTING)
256	SIDDHANT MEHANDRU	UMA S DUBEY	SCOPE OF HERBAL MEDICINES TO CURE CANCER.
257	LAKSHYA SHARMA	VISHAL SAXENA	CLONING AND EXPRESSION OF SUF-C FROM PLASMODIUM VIVAX
258	SHIVI JAIN	SHILPI GARG	CLONING AND EXPRESSION OF SUF-B GENE FROM PLASMODIUM VIVAX
259	PARIKSHIT JOON	PRABHAT NATH JHA	GETTING HANDS ON LABORATORY EXPERIENCE WHILE WROKING WITH PATHOLOGICAL BACTERIA.
260	PRIYANK KUMAR CHAUHAN	PRABHAT NATH JHA	EVALUATION OF COLONIZING POTENTIAL OF PLANT GROWTH PROMOTING BACTERIA.
261	PRIYANK KUMAR CHAUHAN	BANASRI ROY	DEVELOPING CERAMIC BASED BIOMATERIALS FOR HARD TISSUE IMPLANTATION
262	ABHIJEET CHOWDHURY	SHIBASISH CHOWDHURY	UNDERSTANDING MIRNA-MRNA INTERACTION.
263	VEDULA SAI BHARADWAJL	PRABHAT NATH JHA	EVALUATION OF PGPR POENTIAL OF PSEUDOMONAS AERUGINOSA PM389
264	AASHISH KUMAR PASSRIJA	VISHAL SAXENA	GENOTYPING OF PLASMODIUM FALCIPARUM ISOLATES FROM BIKANER.
265	VANDIT GANDOTRA	RAJESH MEHROTRA	DESIGNING OF BIOSENSORS
266	VANDIT GANDOTRA	PRAMOD KR TANWAR	IMPLEMENTATION OF FLOOR CLEANING ROBOTIC ALGORITHMS
267	NANDINI TRIPATHI	AJAY AGARWAL	EXPERIMENTAL SIMULATION OF FLUIDS USING MICRO-VISCOMETER AND ITS DESIGN
268	GEETA BANSAL	RAVI SAINI	STRUCTURED BINARY GRADIENT PATTERNS BASED ROBUST FACE RECOGNITION
269	KULKARNI APURVA VIJAY	SHILPI GARG	CHARACTERIZATION OF A HYPOTHETICAL PROTEIN FROM PLASMODIUM SPECIES
270	MANESH NARAYAN K	RAJESH MEHROTRA	GENOME WIDE ANALYSIS OF CIS-REGULATORY ELEMENTS USING DATA MINING APPROACH IN ARABIDOPSIS THALIANA

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
271	KSHITIJ GANDHI	SHIBASISH CHOWDHURY	DEVELOPING APPLICATION REGARDING FORMAT CHANGE.
272	HARSHIT OBEROI	VISHAL SAXENA	GENOTYPING OF PLASMODIUM VIVAX ISOLATES FROM BIKANER
273	ANANT KUMAR JAIN	SAUMI RAY	COMPARISON OF THE CATALYTIC ACTIVITIES OF ZEOLITES ENCAPSULATED COBALT AND COPPER COMPLEXES.
274	RIJUL DUTTA	PARITOSH SHUKLA	SYNTHESIS & CHARACTERIZATION OF PYRANOPYRAZOLE DERIVATIVES
275	HARDIK MITTAL	RAJEEV SAKHUJA	TRANSITION METAL CATALYSED REACTION SYNTHESIS AND FUNCTIONALISATION OF BIOLOGICALLY IMPORTANT HETEROCYCLIC COMPOUNDS.
276	SANCHIT ADITYA NANGIA	PARITOSH SHUKLA	DOCKING STUDIES OF TACRINE DERIVATIVES
277	MAHAJAN YASH PRASHANT	DEVESH SAMAIYA	COMPRESSED DOMAIN VIDEO ANALYSIS.
278	PRANAV RAJ PRAKASH	SUBIT KUMAR SAHA	EFFECT OF SURFACTANT ON SOLVATION DYNAMICS AND ROTATIONAL RELAXATION OF COUMARIN IN CYCLODEXTRIN AND NANOTUBES OF CYCLODEXTRIN.
279	SARTHAK RAHEJA	SUMITRA SINGH	IMPLEMENTATION OF FLOOR CLEANING ROBOTIC ALGORITHMS
280	HARSH SINHA	PAWAN K AJMERA	EAR BIOMETRICS USING NEURAL NETWORKS
281	SHIVAM ARORA	DEVESH SAMAIYA	COMPRESSED DOMAIN VIDEO ANALYSIS
282	ABHISHEK RAJ	SUROJIT PANDE	SYNTHESIS AND CHARACTERISATION OF CARBON NITRIDE(C <sub>3</sub> N <sub>4</sub> )/FERRIC OXIDE (FE <sub>2</sub> O <sub>3</sub> ) NANO-COMPOSITE AND APPLICATION IN PHOTOCATALYSIS.
283	ADITYA CHAUHAN	SAUMI RAY	COMPARISON OF CATALYTIC ACTIVITIES OF ZEOLITES ENCAPSULATED COBALT AND COPPER COMPLEXES.
284	AISHWARYA SHARMA	SAUMI RAY	CHARACTERIZATION AND STUDY OF CATALYTIC ACTIVITY OF ZEOLITE ENCAPSULATED NICKEL AND PALLADIUM COMPLEXES.
285	AISHWARYA SHARMA	PARITOSH SHUKLA	IN-SILICO DOCKING STUDIES OF PYRANO PYRAZOLES BY FREELY AVAILABLE SOFTWARE LIKE AUTODOCK
286	SURAYANS TIWARI	PRASHANT U MANOHAR	STUDY OF FREEZING STRING METHOD AND DETERMINATION OF TRANSITION STATE OF A REACTION USING THE METHOD.
287	SHUBHAM BHARADIA	BIBHAS RANJAN SARKAR	STUDIES IN SURFACE MODIFICATION OF MATERIALS TOWARDS ULTRA-HYDROPHOBICITY
288	YASHITHA JAISWAL	SUROJIT PANDE	SYNTHESIS AND CHARACTERIZATION OF FE <sub>2</sub> O <sub>3</sub> /C <sub>3</sub> N <sub>4</sub> NANOCOMPOSITES AND ITS APPLICATION IN OXYGEN EVOLUTION REACTION.
289	VEDANT MISHRA	SAUMI RAY	EFFECT OF GEOMETRY ON CATALYTIC PROPERTIES OF COORDINATION COMPLEXES.
290	ANSHUL CHHABRA	SUBIT KUMAR SAHA	EFFECT OF POLYMER ON SOLVATION DYNAMICS AND ROTATIONAL RELAXATION OF COUMARIN IN MICELLES OF GEMINI SURFACTANT
291	PREKSHA AGRAWAL	SAUMI RAY	CHARACTERIZATION AND STUDY OF CATALYTIC ACTIVITIES OF ZEOLITE ENCAPSULATED NI AND PD COMPLEXES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
292	SHRIPRADA MISHRA	DALIP KUMAR	DESIGN AND SYNTHESIS OF AZAHETEROCYCLES AS NOVEL TUBULIN BINDING AGENTS.
293	HONEY GOYAL	S MOHAN	STUDY OF CERTAIN ALGORITHMS FOR MR BASED TASKS IN CLOUD ENVIRONMENT.
294	AKSHITH REDDY SADDI	PRAMOD KR TANWAR	MOBILE APPLICATION DEVELOPMENT FOR THE ON-GOING INTELLIGENT BUILDING SYSTEM (IBS)
295	TATAVARTHI ARCHANA	NV MURALIDHAR RAO	STOCK MARKET AND MONETARY POLICY IN INDIA:TAKING EVIDENCES FROM THE FAILURES OF CHINA, GREECE AND US STOCK MARKET CRASHES.
296	KOGANTI SRIMOUNIKA	NV MURALIDHAR RAO	STOCK MARKET AND MONETARY POLICY IN INDIA: TAKING EVIDENCES FROM THE FAILURES OF CHINA, GREECE AND US STOCK MARKET CRASHES.
297	DEEVITA AGARWAL	GEETILAXMI MOHAPATRA	MODELLING THE IMPACT OF VARIOUS ECONOMIC FACTORS ON THE UNEMPLOYMENT RATE IN INDIA
298	SHIVANI DEEPAK CHOUDHARY	VINEET KUMAR	VLSI DESIGN AND ARCHITECTURE FOR IMAGE AND VIDEO PROCESSING
299	LAKSHIT AGARWAL	SUMITRA SINGH	ZSTACK NETWORK LAYER/IMPLEMENTATION
300	DEVRAJ PALIT	RAVI SAINI	FPGA BASED HARDWARE IMPLEMENTATION OF IMAGE PROCESSING ALGORITHMS.
301	DIKSHA GARG	SUMITRA SINGH	ZSTACK NETWORK LAYER (WIRELESS SIMULATION NETWORKS)
302	AKASH PANIGRAHI	ANIL JINDAL	DESIGNING AN INTELLIGENT MPPT CONTROL FOR A GRID CONNECTED HYBRID POWER SYSTEM AND PV GRID MODELLING.
303	HARMEET SINGH LAMBA	DEVENDRA KUMAR	NUMERICAL SOLUTION OF SYSTEM OF ODE/PDE
304	ANMOL KUMAR GUPTA	DEVENDRA KUMAR	NUMERICAL SOLUTION OF SYSTEM OF ODE/PDE
305	AKUL SAREEN	SHAN BALASUBRAMANIAM	IMPLEMENTATION AND OPTIMIZATION OF CONVERGENT LOOPS IN A COMPILER FOR A DATA MINING DOMAIN SPECIFIC LANGUAGE.
306	MALVIKA PALIWAL	D BANDYOPADHYAY	STUDY OF SCATTERING MATRICES OF DIFFERENT MICROWAVE COMPONENTS
307	AKANKSHA SONI	SUBHASHISH GANGOPADHYAY	GROWTH AND CHARACTERIZATION OF SEMICONDUCTOR THIN FILMS
308	UTKARSH SINGH	D BANDYOPADHYAY	STUDY OF OPTICAL PROPERTIES OF MICROWAVE
309	SHUBHENDRA RAJENDRA SINGH	RAVI SAINI	FPGA BASED HARDWARE IMPLEMENTATION OF IMAGE PROCESSING ALGORITHMS
310	CHAURE RISHABH SUBHASH	D BANDYOPADHYAY	STUDY OF DIFFERENT X-BAND MICROWAVE ANTENNA COMMUNICATION
311	PRAGATI RATAN	D BANDYOPADHYAY	STUDY OF SCATTERING MATRICES OF DIFFERENT MICROWAVE COMPONENTS.
312	S SARATH SANKAR	D BANDYOPADHYAY	STUDY OF DIFFERENT X-BAND MICROWAVE ANTENNA COMMUNICATION
313	ADITYA JOSHI	SRIJATA DEY	STUDY OF BRAGGS DIFFRACTION OF MICROWAVES
314	SHRIYA MISHRA	SRIJATA DEY	STUDY OF BRAGGS DIFFRACTION OF MICROWAVES
315	DHAIRYA MITTAL	SUBHASHISH GANGOPADHYAY	GROWTH AND CHARACTERIZATION OF SEMICONDUCTOR THIN FILMS.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
316	PRANESH ANUBHAV	D BANDYOPADHYAY	STUDY OF OPTICAL PROPERTIES OF MICROWAVE
317	RAHUL SHARMA	SHAN BALASUBRAMANIAM	PARALLELIZATION OF ARTIFICIAL INTELLIGENCE ALGORITHMS
318	SOMA MISHRA	RAJ KUMAR GUPTA	THIN-FILM BASED GAS SENSOR
319	VINAYAK MISHRA	DEVIKA	LANGUAGE LAB SOFTWARE FOR VOCABULARY AND PRONUNCIATION
320	SONTI VENKATA SEETHARAMA KATYAYANI	BANASRI ROY	DEVELOPING NANO CATALYST SYSTEMS FOR H2 PRODUCTION FROM BIOMASS.
321	NIHARIKA AGARWAL	BANASRI ROY	DEVELOPING NANO-CATALYST SYSTEMS FOR H2 PRODUCTION FROM BIOMASS.
322	VIDEHI SHAH	SMITA RAGHUVANSHI	LAB TO PILOT SCALE STUDIES FOR EFFECTIVE DEVELOPMENT OF BIO-FILTER SYSTEM.
323	SUVRASOUMYA MOHANTY	SMITA RAGHUVANSHI	SOLVENT SOLVENT EXTRACTION FOR THE RECOVERY OF PRODUCTS FROM CARBON DIOXIDE MITIGATION
324	DANDE RACHANA	AMIT JAIN	AUTOMOBILE LUBRICATION WASTE OIL REUSE AS A BIODIESEL /FUEL, ALSO TITLED BIODEGRADATION OF WASTE AUTOMOBILE ENGINE OIL.
325	SHASHWATA SINHA	AMIT JAIN	AUTOMOBILE LUBRICATION WASTE OIL REUSE AS A BIODIESEL/FUEL.
326	VENKAT ASHRITH J.R	BAHURUDEEN A	CHARACTERIZATION OF CONCRETE FIRE EXPOSURE
327	SHUBHAM AGGARWAL	ANSHUMAN	EFFECT OF PARTIAL REPLACEMENT OF CEMENT BY MARBLE DUST AND RICE HUSK ASH.
328	RAJESH BENIWAL	ANSHUMAN	EFFECT OF PARTIAL REPLACEMENT OF CEMENT BY MARBLE DUST AND METAKAOLIN
329	ARUN KUMAR SHARMA	ANSHUMAN	EFFECT OF PARTIAL REPLACEMENT OF CEMENT BY MARBLE DUST AND GGBS
330	PRATEEK ARORA	ANSHUMAN	EFFECT OF PARTIAL REPLACEMENT OF CEMENT BY MARBLE DUST AND SILICA FUME
331	Abhinav Rawat	DEVESH SAMAIYA	DIGITAL ALARM CLOCK WITH VOICE RECORDING FACILITY.
332	R. GAUTHAM SUNDAR RAM	VINITA TIWARI	DESIGN AND IMPLEMENTATION OF HIGH SPEED VISION ALGORITHMS USING OPEN CV.
333	ANANT ANURAG	AVINASH GAUTAM	STUDY AND IMPLEMENTATION OF SOME MULTI-ROBOT SLAM ALGORITHMS.
334	SHREY JAIN	DEVESH SAMAIYA	DIGITAL ALARM CLOCK WITH VOICE RECORDING FACILITY
335	KUNAL GUPTA	SUREKHA BHANOT	STUDY OF INTELLIGENCE AS AN EMERGENT BEHAVIOUR IN COMPLEX SYSTEMS.
336	NIHAL M	SUREKHA BHANOT	STUDY OF INTELLIGENCE AS AN EMERGENT BEHAVIOUR IN COMPLEX SYSTEMS.
337	MANDAR KHAPEKAR	AMIT GOEL	AUTONOMOUS NON DESTRUCTIVE TESTING
338	SARTHAK JAIN	K K GUPTA	AUTOMATED SLEEP STAGE CLASSIFICATION
339	ARVIND.K.R	VINITA TIWARI	DESIGN AND IMPLEMENTATION OF HIGH-SPEED VISION ALGORITHMS USING OPEN-CV
340	SRISHTI JAIN	K S RAJU	DESIGN AND IMPLEMENTATION OF HIGH SPEED VISION ALGORITHMS USING OPEN CV LIBRARY(IN IMAGE PROCESSING)

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
341	SHUKLA YASH SANDEEP	AMIT GOEL	AUTONOMOUS NON-DESTRUCTIVE TESTING.
342	PRANJALI AGRAWAL	AJAY AGARWAL	EFFECT OF SURFACE PARAMETERS ON THE SENSITIVITY OF METAL OXIDES TO GASES.
343	SATYANARAYAN PATEL	ATISH T R PAUL	STUDY OF VALUE ADDITION TO NATURAL PRODUCTS.
344	Debopriya Shukla	SHYAMAPADA MUKHERJEE	HEART ATTACK TRACKER
345	Supriya Agarwal	SHAN BALASUBRAMANIAM	AUTOMATIC ANSWER CHECKING APPLICATION FOR DATABASES
346	BHUVNESH JAIN	SHAN BALASUBRAMANIAM	PARALLEL AND DISTRIBUTED DATA STRUCTURES AND ALGORITHMS
347	CHIRAG AGARWAL	SHAN BALASUBRAMANIAM	PARALLEL AND DISTRIBUTED DATA STRUCTURES
348	INDRAJEET MISHRA	YASHVARDHAN SHARMA	HEALTH CARE APP
349	RAUNAQ NANDY MAJUMDAR	G S SESA CHALAPATHI	STUDY AND IMPLEMENTATION OF TIME SYNCHRONISATION ALGORITHMS FOR WIRELESS SENSOR NETWORKS (WSN)
350	AAYUSH GUPTA	ANU GUPTA	DESIGN AND ANALYSIS OF OPERATIONAL TRANSCONDUCTANCE AMPLIFIER USED IN GM-C FILTERS.
351	PIYUSH HRITHIK KARUNA	G S SESA CHALAPATHI	STUDY AND IMPLEMENTATION OF TIME SYNCHRONIZATION ALGORITHMS FOR WIRELESS SENSOR NETWORKS(WSN)
352	NAMAN GUPTA	ANU GUPTA	DESIGN AND ANALYSIS OF AN OPERATIONAL TRANS-CONDUCTANCE AMPLIFIER USING CADENCE AS A TOOL.
353	AKSHAT MISHRA	VISHAL SAXENA	IDENTIFICATION AND ISOLATION OF MICROORGANISMS TO RECTIFY LIQUEFACTION OF SOIL.
354	KREETI JHA	AJAY KUMAR SAH	SYNTHESIS AND CHARACTERIZATION OF D-GLUCOSE DERIVED MOLECULES
355	KARTHIK SURESH	SHAMIK CHAKRABORTY	ADVANCE TECHNIQUES FOR DEGRADATION/SEPARATION OF TOXIC SUBSTANCES INTO NON-TOXIC FORMS.
356	ANMOL BHATIA	RAKHEE	IMPLEMENTATION OF SCHEDULING ALGORITHMS USING PYTHON
357	AARUSHEE RANGRA	MANJULADEVI V	LIQUID CRYSTAL BASED SENSOR
358	YASH MEHTA	MANJULADEVI V	LIQUID CRYSTAL BASED SENSOR
<b>READING COURSE</b>			
1	PADALIA PINAKIN MANSUKHBHAI	RISHIKESH VAIDYA	SPECIAL TOPICS IN QUANTUM MECHANICS
2	LOVEPERTEEK SINGH	A K GIRI	GAME THEORY
3	SHUBHAM SHUKLA	SRIKANTA ROUTROY	STUDY OF IMPLEMENTATION ISSUES IN ERP
<b>SPECIAL PROJECT</b>			
1	AFZAL AHMED KHAN	SATYENDRA KR SHARMA	RISK SCORE CARD OF RETAIL SUPPLY CHAIN
2	MAYANK KUMAR	BHAGAVATULA VANI	SUGGESTING THE DESIGN OF A GREEN BUILDING FOR THE INDIAN CLIMATIC CONDITIONS
3	SMARTH KAKKAR	UMA S DUBEY	STUDY OF LUNG CANCER AND ITS THERAPEUTIC MODALITIES
4	SMARTH KAKKAR	PRASANTA KUMAR SAHU	AN INVESTIGATION OF MAJOR INDIAN PORTS PERFORMANCE
5	ANKUR BHARDWAJ	UMA S DUBEY	STUDY OF LUNG CANCER AND ITS THERAPEUTIC MODALITIES.
6	PRAJAKTA KIRAN JOSHI	SHIBASISH CHOWDHURY	PRIMARY AND SECONDARY STRUCTURE ANALYSIS OF MIRNA-MRNA COMPLEX.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
7	ABHINAV GANDOTRA	PANKAJ KUMAR SHARMA	UPDATE ON MIND-BODY MEDICINE
8	SURYANSH RASTOGI	LALITA GUPTA	IDENTIFICATION OF SOCS-7 IN DIFFERENT MOSQUITO SPECIES
9	ANURAG CHERUVU SREENIVAS	GIRISH KANT	FORMULATION OF A MULTI-OBJECTIVE OPTIMIZATION MODEL FOR PUSH TO PULL TRANSITION
10	ANIRUDH SRIDHAR	A K GIRI	FINANCIAL DEVELOPMENT AND HUMAN CAPITAL IN INDIA
11	VISHAD BHALODIA	IMLAK N SHAIK	STRATEGIC AND FINANCIAL ANALYSIS OF THE INDIAN OIL INDUSTRY
12	BANSOD DEVEN GIRISH	GEETILAXMI MOHAPATRA	EFFECTS OF TAX CHANGES ON ECONOMIC GROWTH AND INCOME INEQUALITY : EVIDENCE FROM INDIAN ECONOMY
13	KOKANDAKAR AJINKYA HEMANT	NV MURALIDHAR RAO	SOME ASPECTS OF LABOUR MOBILITY ON WAGES
14	SALONI CHANDAK	NAVNEET GOYAL	ALGORITHMS FOR DYNAMIC CLASS CLASSIFICATION
15	VATSAL GUPTA	IMLAK N SHAIK	STRATEGIC AND FINANCIAL ANALYSIS OF THE INDIAN OIL INDUSTRY
16	DEEPANSHU SINGH	A K GIRI	FINANCIAL DEVELOPMENT AND HUMAN CAPITAL IN INDIA
17	SAMISH BEDI	GEETILAXMI MOHAPATRA	ECONOMETRIC ANALYSIS OF DETERMINANTS OF QUALITY OF EDUCATION.
18	RAM KARNANI	GEETILAXMI MOHAPATRA	ECONOMETRIC ANALYSIS OF DETERMINANTS OF QUALITY OF EDUCATION
19	AKSHAT KHANDELWAL	SHIVI AGARWAL	STUDY OF DATA ENVELOPMENT ANALYSIS AND ITS APPLICATIONS IN REAL LIFE PROBLEMS.
20	AYUSH JAIN	SHIVI AGARWAL	DATA ENVELOPMENT ANALYSIS AND ITS APPLICATION IN REAL LIFE PROBLEMS
21	SWARNIM SINGHAL	SHIVI AGARWAL	STUDY OF FUZZY DATA ENVELOPMENT ANALYSIS
22	NIKITA TANWANI	SHIVI AGARWAL	STUDY OF FUZZY DATA ENVELOPMENT ANALYSIS
23	SAGAR KUMAR CHOURASIA	SANGITA YADAV	BOUNDARY ELEMENT METHOD FOR PARTIAL DIFFERENTIAL EQUATION.
24	LAVLEEN BHATI	MADHUKAR MISHRA	QED CALCULATIONS OF ELEMENTARY PARTICLE PROCESSES AND QUANTISATION OF FIELDS
25	SHEFALI GUPTA	MADHUKAR MISHRA	TO LEARN HOW TO PERFORM QED CALCULATIONS .
26	VAIBHAV SINGH	MADHUKAR MISHRA	DECAY RATE, CROSS SECTION CALCULATION IN PARTICLE PHYSICS AND UNDERSTANDING CURRENT EXPERIMENTAL DATA AT HADRON COLLIDER EXPERIMENT.
27	AVESH KUMAR SINGH	MADHUKAR MISHRA	ELECTRIC TRANSPORT IN SEMICONDUCTOR MATERIAL
28	NANDAN LUTHRA	TAPOMOY G SARKAR	ENGINEERING OF TIME INDEPENDENT POTENTIAL USING HIGH FREQUENCY FORCED QUANTUM SYSTEMS
29	MOHIT BHARDWAJ	MADHUKAR MISHRA	THE PHYSICS OF THE INTERSTELLAR AND INTERGALACTIC MEDIUM
30	MOHIT BHARDWAJ	BISWANATH LAYEK	STUDY THE PULSARS AND ITS VARIOUS OBSERVATIONAL ASPECTS
31	ANAMIKA AGGARWAL	RISHIKESH VAIDYA	SPECIAL TOPICS IN PARTICLE PHYSICS



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
32	NEMANI AKHIL MANISH	MADHUKAR MISHRA	STUDY OF SUPERCONDUCTIVITY AND ITS CURRENT APPLICATIONS
33	RAKSHIT CHAUDHARY	AMOL HOLKUNDKAR	STUDY OF CURRENT CHALLENGES IN LASER AND ION INDUCED NUCLEAR FUSION
34	BALKRISHNA SRIVASTAVA	D BANDYOPADHYAY	STUDY OF MASERS
35	MIHIR SHARMA	D BANDYOPADHYAY	STUDY OF MASERS
36	VIPUL VAIDYA	J N BANDOPADHYAY	STUDY AND SIMULATION OF VARIOUS QUANTUM ALGORITHMS & COMPLEXITY
37	VARUN IYER	AMOL HOLKUNDKAR	STUDY OF CURRENT CHALLENGES IN LASER AND ION INDUCED NUCLEAR FUSION
38	VIPUL SHARMA	RAMAN SHARMA	A NOVEL CO2 CRYOGENIC LIQUEFACTION AND SEPARATION SYSTEM.
39	RISHABH AGARWAL JAIN	RAMAN SHARMA	PRE-COMBUSTION CO2 CAPTURE: TECHNICAL AN ECONOMICAL ASPECTS.
40	V S V SRAVYA	PRIYA C SANDE	CFD MODELLING AND SIMULATION OF THREE PHASE REACTOR WITH REACTING SYSTEM
41	VIVEK KUMAR BANSAL	ANUPAM SINGHAL	PREDICTION OF AIR QUALITY DUE TO VEHICULAR AND INDUSTRIAL POLLUTION.
42	VIVEK KUMAR BANSAL	OMVIR CHAUDHRY	DEVELOPING WEB-MARKETING MODEL AND CREATING STATISTICAL DATA ON THE BASIS OF ANALYSIS OF MODEL.
43	ADARI BHASKAR	G MUTHUKUMAR	ANALYSIS AND DESIGN OF STRUCTURAL ELEMENTS IN HIGH RISE STRUCTURES
44	PRATYAKSH AGARWAL	ANUPAM SINGHAL	PREDICTION OF AIR QUALITY DUE TO VEHICULAR AND INDUSTRIAL POLLUTION
45	SAURAV DWIVEDI	RAJESH P MISHRA	BAYESIAN NETWORK FOR THE EVALUATION OF COMPLEX SYSTEMS AVAILABILITY
46	HARSHIT SRIVASTAVA	RAJESH P MISHRA	OPTIMAL RELIABILITY, WARRANTY AND PRICE FOR MECHANICAL PRODUCTS.
47	SAYYED MUDASSIR ALI SABIR ALI	AMOL M R MARATHE	ANALYTICAL INVESTIGATION OF LOW FREQUENCY DISK BRAKE NOISE
48	ANKURJYOTI BORDOLOI	GIRISH KANT	STUDY OF SUPPLY CHAIN MANAGEMENT FOR AGRICULTURE PRODUCTS
49	SHAH ZALAK K	RAJESH P MISHRA	A STUDY ON IMPLEMENTATION OF LEAN PRINCIPLES IN INDIAN MANUFACTURING INDUSTRY.
50	SAAD NAQVI	GIRISH KANT	STUDY OF SUPPLY CHAIN MANAGEMENT FOR AGRICULTURAL PRODUCT
51	CHANDRA BHAN SINGH CHOUHAN	RAJESH P MISHRA	BAYESIAN NETWORK FOR THE EVALUATION OF COMPLEX SYSTEMS AVAILABILITY
52	PIYUSH RATHORE	GAJANAND GUPTA	DEVELOPMENT OF MAINTAINABILITY INDEX FOR MECHANICAL COMPONENTS.
53	AYUSH GUPTA	SUNIL KUMAR DUBEY	COMPARATIVE ANALYSIS OF PATENT PROCESS OF KEY EMERGING WORLD MARKETS
54	TADIKONDA BAPIRAJU VAMSI	T CHAKRABORTY	CHARMINAR TO CYBERABAD: URBANIZATION IN ANDHRA PRADESH
55	MANIT GUPTA	RAJNEESH CHOUBISA	MHEALTH: DESIGN AND DEVELOPMENT OF A HEALTH PSYCHOLOGY APPLICATION.
56	SHUBHAM AGRAWAL	RAJNEESH CHOUBISA	MHEALTH: DESIGN AND DEVELOPMENT OF A HEALTH PSYCHOLOGY APPLICATION
57	TEJAS PORWAL	RAJESH P MISHRA	ANALYSIS OF CRITICAL ATTRIBUTES INVOLVED IN THE IMPLEMENTATION OF TOTAL PRODUCTIVE MAINTAINANCE

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<b>Design Project</b>			
58	ISHANI SINGH	SRINIVAS KOTA	STUDY ON APPLYING LEAN PRINCIPLES TO HEALTHCARE SYSTEMS.
59	MUDRIKA SINGHAL	JITENDRA PANWAR	ROLE OF ARBUSCULAR MYCORRHIZA FUNGI IN REGULATING PLANT DEFENCE RESPONSE.
60	PARIKSHIT JOON	RAJDEEP CHOWDHURY	PREDICTION OF BIO MARKERS BY IN SILICO ANALYSIS FOR VARIOUS CANCERS
61	NISHTHA JAIN	JITENDRA PANWAR	PROTEIN NANOPARTICLE INTERACTIONS
62	SHREYA KAPOOR	PRABHAT NATH JHA	UNDERSTANDING BACTERIAL IMMUNE SYSTEM : CURRENT STATUS AND ITS APPLICATION
63	KARAN RAJPAL	SHILPI GARG	STUDY OF BIDIRECTIONAL PROMOTERS IN PLASMODIUM FALCIPARUM.
64	GEETA BANSAL	JITENDRA PANWAR	STUDIES ON MICROBIAL RESPONSE TO SILVER NANO-PARTICLES
65	SANJAY GHOSH	RAJDEEP CHOWDHURY	INTERPRETATION OF MIRNA CLUSTERING DATA OF HEPATOCELLULAR CARCINOMA (HCC) PATIENTS AND EXTENDING THIS MODEL TO OTHER TYPES OF CANCERS.
66	TANHYA CHITLÉ	SRIKANTA ROUTROY	STUDY OF IMPLEMENTATION ISSUES IN ERP
67	ABHISHEK DIXIT	ANUBHA DHADHICH	PERSONALITY AND RESPONSE TO FINANCIAL CRISIS.
68	LAKSHIT AGARWAL	KRISHNENDRA SHEKHAWAT	ENUMERATING ARCHITECTURAL ARRANGEMENTS USING GRAPH THEORETICAL TECHNIQUES
69	SHAMBHAVI VERMA	KRISHNENDRA SHEKHAWAT	RECTANGULAR DUALIZATION
70	DIKSHA GARG	KRISHNENDRA SHEKHAWAT	ENUMERATING ARCHITECTURAL ARRANGEMENTS USING GRAPH THEORETICAL TECHNIQUES
71	KEESARA SAI RAGHAV REDDY	RAJIV KUMAR	STUDY AND IMPLEMENTATION OF GRAPH ALGORITHMS
72	PRANJAL GUPTA	RAJIV KUMAR	SOCIAL NETWORK ANALYSIS : MODELLING, METRICS AND RANKING
73	KETAN CHANDAK	DEVENDRA KUMAR	NUMERICAL TREATMENT OF FRACTIONAL ORDER IVP/BVPS.
74	THAKKAR VANDIT ARVINDBHAI	RAJIV KUMAR	STUDY AND IMPLEMENTATION OF GRAPH ALGORITHMS
75	S VIVEK	RAJIV KUMAR	APPLIED ANALYSIS
76	CHOKSI NEEL DIPESH	SANGITA YADAV	STUDY OF FAST FOURIER TRANSFORM ALGORITHM AND ITS APPLICATION IN DIGITAL SIGNAL PROCESSING.
77	SHUBHAM KUMAR	DEVENDRA KUMAR	NUMERICAL TREATMENT OF FRACTIONAL ORDER IVP/BVPS.
78	HARSHITA RAJPUROHIT	KRISHNENDRA SHEKHAWAT	RECTANGULAR DUALIZATION
79	ANANYA BANERJEE	TRILOK MATHUR	INTRODUCTION TO ANALYTICAL NUMBER THEORY
80	VIDYA SAGAR	MADHUKAR MISHRA	APPLICATIONS OF SUPERCONDUCTIVITY (EG- MAGNETIC LEVITATION.MRI)
81	ANIRUDH VENU	J N BANDOPADHYAY	QUANTUM MECHANICAL PROCESSES ON GRAPHS
82	ADITYA JOSHI	RAJESH P MISHRA	A STUDY ON EXTENT OF IMPLEMENTATION OF LEAN PRINCIPLES IN THE INDIAN MANUFACTURING INDUSTRY
83	YASHODHARA	SAILAJA NANDIGAMA	THE HISTORY OF ENVIRONMENTAL POLICY MAKING IN INDIA

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<b>Design Project</b>			
84	ABHISHEK KUMAR JHA	BAHURUDEEN A	DURABILITY OF CONCRETE STRUCTURES IN AGGRESSIVE ENVIRONMENT.
85	ABHISHEK BANSAL	DEEPAK CHITKARA	QUALITY CONTROL AND QUALITY ASSURANCE IN PHARMACEUTICAL COMPANIES
86	TASKAR SHIVANI SHISHIR	SUNIL KUMAR DUBEY	DISPARITY IN DRUG REGULATIONS IN DEVELOPED AND DEVELOPING COUNTRIES.
87	RASHMI CHAUDHARY	DEVIKA	A COMPARISON OF LITERARY STYLE OF AGATHA CHRISTIE AND ARTHUR CONAN DOYLE
<b>STUDY PROJECT</b>			
1	ARYA ROY	PUSHP LATA	THE NEED AND DEVELOPMENT OF EMOTIONAL INTELLIGENCE IN WORK GROUPS FOR EFFECTIVE LEADERSHIP
2	AFZAL AHMED KHAN	SOMDATTA BHATTACHARYA	UNEARTHING THE DARK SIDE :EXPLORING THE HOLLYWOOD VILLAIN
3	SHUBHAM GUPTA	MURALI M PANDEY	TRANSDERMAL DRUG DELIVERY SYSTEM
4	KANEKANTI ASHISH KHANNA	SANDHYA MEHROTRA	A STUDY ON THERMODYNAMICS OF RUBISCO CARBOXYLASE/OXYGENASE ACTIVITY
5	DAKSH DUTTA	BANASRI ROY	A REVIEW ON FLEXIBLE IMPLANTABLE NEURAL PROBES
6	SONALI KALLANI	BHAGAVATULA VANI	MECHANISMS BEHIND ALKALINE PH TOLERANCE IN CYANOBACTERIA
7	MANSI NARANG	UTKARSH MAHESHWARI	COMPARATIVE STUDY OF VARIOUS TYPES OF NANO-ADSORBENTS USED FOR EFFICIENT REMOVAL OF HEAVY METALS.
8	MAYANK KUMAR	G MUTHUKUMAR	RESPONSE ANALYSIS OF FRP REINFORCED CONCRETE STRUCTURES
9	TADRISH KUMAR SINGH	ANUPAM SINGHAL	PERFORM A COMPARATIVE ANALYSIS BETWEEN 2 GREEN BUILDING RATING SYSTEMS AND FIND OUT CONFLICT OF INTEREST( IF ANY)
10	DESAI MASOOM KARTIK	ANUPAM SINGHAL	WASTE WATER TREATMENT BY BIOREMEDIATION
11	AKSHAY JADIYA	BHAGAVATULA VANI	USE OF ALGAE IN ELECTRICITY GENERATION
12	ANKUR BHARDWAJ	SANDHYA MEHROTRA	TO STUDY THE ENZYMES WITH THE POTENTIAL TO INCREASE YIELD OF CROP PLANTS UNDER HEAT STRESS.
13	ANISH SRINIVAS VASAN	AK DAS	STUDY OF THE MOLECULAR, PHYSIOLOGICAL AND NEUROLOGICAL ASPECTS OF ALZHEIMERS DISEASE
14	GARIMA GUPTA	KULDIP SINGH SANGWAN	TO INCREASE EFFICIENCY OF MACHINE TOOLS BY OPTIMIZING ITS OPERATING CONDITIONS AND POWER REQUIREMENT
15	HARSHIT SHARMA	ABHIJIT K DIGALWAR	A STUDY ON DISASTER RESPONSE SUPPLY CHAIN MANAGEMENT
16	MANINDER GOYAL	P SRINIVASAN	HEAT TRANSFER IN CONCENTRIC AND ECCENTRIC ANNULAR CHANNELS
17	ROHAN SINGH	RAJESH MEHROTRA	ANALYSIS OF UPREGULATED GENES INDUCED IN RESPONSE TO BIOTIC STRESS
18	PRABODH AGARWAL	K HARI BABU	INTEGRATING EXISTING PUBLISHER SUBSCRIBER SYSTEMS WITH SDN FOR PERFORMANCE AND SECURITY GAINS
19	ANKIT BANSAL	RAJESH MEHROTRA	ANALYSIS OF UPREGULATED GENES INDUCED IN RESPONSE TO ABIOTIC STRESS

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<b>Design Project</b>			
20	AAKRITI JHA	NAVNEET GOYAL	CLASSIFICATION OF MULTI-VARIATE TIME SERIES DATA
21	SRABASTI NANDI	LUCKY SHARAN	SIMULINK MODELING OF HIGH ENERGY DWDM IN PRESENCE OF NON-LINEARITY
22	ABHINAV GANDOTRA	VISHAL GUPTA	ARCHITECTURE FOR HETEROGENEOUS ACCESS POINTS VISUALIZATION
23	SURYANSH RASTOGI	GAJANAND GUPTA	BAYESIAN NETWORKS FOR MECHANICAL SYSTEM RELIABILITY ASSESSMENT
24	KARTAVYA KHANNA	SRINIVAS APPARI	A DETAILED KINETIC MODELLING APPROACH FOR SURFACE REACTIONS
25	KAVERI SINGH	UTKARSH MAHESHWARI	COMPARATIVE STUDY OF VARIOUS TECHNIQUES EMPLOYED FOR ENHANCED OIL RECOVERY
26	RRAHUL BHARDAWAJ	SRINIVAS APPARI	IN SITU CATALYTIC REFORMING AND SECONDARY VAPOR PHASE CRACKING OF VOLATILES DERIVED FROM THE FAST PYROLYSIS OF BIOMASS
27	ASHWIN KURUVILLA	R. SRINIVAS	STUDYING THE RELATIONSHIP BETWEEN FLOW AND QUALITY OF RIVER GANGA
28	ARCHIT AGGARWAL	PRASANTA KUMAR SAHU	CLASSIFICATION OF INDIAN AIRPORTS
29	ARCHIT AGGARWAL	BIBHAS RANJAN SARKAR	STUDY OF SOLID STATE NMR OF CONSTRUCTION MATERIALS, TYPICALLY CEMENT
30	ARNAV GUPTA	KAVINDRA KANDPAL	INVESTIGATION ON MATERIALS FOR NEXT GENERATION OXIDE TFT
31	SALMAN ANJUM	MURALI PALLA	NANOCOMPOSITE MATERIALS: A STUDY ON THEIR STRUCTURAL FEATURES AND APPLICATIONS
32	ISUKAPALLI SAI VAMSI KRISHNA	MURALI PALLA	TOUGH, BIO INSPIRED COMPOSITE MATERIALS; STUDY AND ANALYSIS OF THEIR MICROSTRUCTURAL CHARACTERISTICS.
33	VIBHANSHU GROVER	PARITOSH SHUKLA	COMBUSTION KINETICS OF BIODIESEL IN BIODIESEL ENGINES AND USE OF KINETICS FOR KNOCK PREVENTION.
34	ARCHIT GADHOK	JL RAHEJA	REAL TIME AGE INVARIANT FACIAL RECOGNITION USING QUALCOMM VUFORIA SDK INTEGRATED WITH AN ANDROID APPLICATION.
35	MIHIR BISWAL	VISHAL GUPTA	FLOWVISOR: A NETWORK VIRTUALIZATION LAYER
36	AKASH SHARMA	JL RAHEJA	EXTRACTING JOINT ANGLES USING RGB VALUES AND DEPTH VALUES FROM KINECT.
37	BHAMBURKAR CHINMAYEE VIJAY	BIBHAS RANJAN SARKAR	STUDY OF PAINT MANUFACTURING PROCESS AND THE CHEMISTRY BEHIND PAINTS & THEIR FORMULATIONS.
38	MANISH KUMAR	VINITA TIWARI	FBG SENSORS AND THEIR APPLICATIONS.
39	CHETAN RAJ PANDEY	OMVIR CHAUDHRY	MODELLING THE IMPACT OF OIL PRICES FLUCTUATIONS ON INDIAN STOCK MARKET
40	AMIT ARORA	R GUPTA	OPTIMIZING CSR FUNDS USING IMPACT ANALYSIS IN DIFFERENT SECTORS
41	RAJAT JAIN	SATYENDRA KR SHARMA	OPTIMIZING DISTRIBUTION NETWORK
42	NAMAN SHINGHAL	DHEERENDRA SINGH	DESIGN OF CONTROL SYSTEM FOR INVENTORY MANAGEMENT.
43	AMAN AGARWAL	SATYENDRA KR SHARMA	ROLE OF ONLINE HIRING CAB COMPANIES LIKE UBER, OLA, ETC. IN PEOPLES LIFE AND ITS EFFECT ON AUTOMOTIVE INDUSTRY

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<b>Design Project</b>			
44	NAMAN GUPTA	ARUN KUMAR	CASE STUDY OF JABONG.COM
45	NAMAN GUPTA	SAINATH BITRAGUNTA	DEVELOPMENT OF NOVEL AND EFFICIENT PROTOCOLS FOR GREEN- COMMUNICATION SYSTEMS
46	PRANAV DATTATRAY KULKARNI	A K GIRI	ANALYSIS OF MEAN AND VOLATILITY SPILLOVERS USING BRIC COUNTRIES REGIONAL AND WORLD EQUITY INDEX RETURNS
47	GOGRI ADITYA BHUSHAN	PRAVEEN GOYAL	OPTIMAL CHANNELIZATION OF CSR INVESTMENTS FOR IMPROVING THE SKILLS OF SMES
48	NISHCHAY NAGPAL	RAVI INDER SINGH	STUDY OF VARIATION IN KNOCK IN CI ENGINE
49	GOPAL YOGESH BHATT	PRAVEEN GOYAL	OPTIMAL CHANNELIZATION OF CSR INVESTMENTS FOR IMPROVING THE SKILLS OF SMES
50	KOKANDAKAR AJINKYA HEMANT	SHAN BALASUBRAMANIAM	DESIGN AND IMPLEMENTATION OF CONCURRENT DATA STRUCTURES FOR SUBSPACE CLUSTERING
51	SHUBHAM ARORA	JL RAHEJA	REAL TIME AGE-INVARIANT FACIAL RECOGNITION USING QUALCOMM VUFORIA SDK
52	SHUBHAM ARORA	KRISHNA MUNIYOOR	FEATURE-SET SELECTION FOR PREDICTING COMMODITY PRICES
53	SAMISH BEDI	JL RAHEJA	EXTRACTING JOINT ANGLES USING RGB VALUES AND DEPTH VALUES FROM KINECT.
54	SHRIYA JAIN	RAJAN PANDEY	MODELLING IMPACT OF MACROECONOMIC VARIABLES ON VOLATILITY OF INDIAN STOCK MARKETS.
55	DHRUV DAVE	NV MURALIDHAR RAO	IPR, RESEARCH & DEVELOPMENT AND ECONOMIC GROWTH IN ASIA
56	ANIRUDDH GAUTAM	VINEET KUMAR	HARDWARE ARCHITECTURE EXPLORATION FOR IRIS RECOGNITION.
57	ARPIT GUPTA	DHEERENDRA SINGH	DESIGN OF CONTROL SYSTEM FOR INVENTORY MANAGEMENT.
58	PANDAOKAR SAMAY PRASHANT	RAJAN PANDEY	TEST SEMI - STRONG EFFICIENT MARKET HYPOTHESIS USING DATA FROM INDIAN STOCK MARKET.
59	BHAGAT AMIT VIJAYKUMAR	GAJANAND GUPTA	EVALUATION OF RELIABILITY OF MECHANICAL EQUIPMENTS.
60	SATWIK PRABHU K	SAINATH BITRAGUNTA	DEVELOPMENT OF NOVEL AND EFFICIENT PROTOCOLS FOR GREEN COMMUNICATION SYSTEMS
61	AYUSH GOYAL	MAHANTH PRASAD	DESIGN AND MODELING OF MEMS BASED MICROPHONE BY USE OF OPTIMIZING TECHNIQUE TO ENHANCE PERFORMANCE AND SENSITIVITY.
62	RAJEEV DUTT MISRA	MAHANTH PRASAD	DESIGN AND MODELING OF MEMS BASED MICROPHONE
63	AKSHAY	CHANDRA SHEKHAR	A STUDY OF NATURE BASED OPTIMIZATION TECHNIQUE AND ITS APPLICATION.
64	AKSHAY	CHANDRA SHEKHAR	A STUDY OF NATURE BASED OPTIMIZATION TECHNIQUE AND ITS APPLICATION.
65	MOHIT SALUJA	VISHAL GUPTA	VIRTUALISATION OF WIRELESS MEDIUM
66	SAKSHI BHARGAVA	SUMANTA PASARI	GLOBAL POSITIONING SYSTEM AND ITS APPLICATIONS
67	AYUSH JAIN	SRIKANTA ROUTROY	ANALYSIS OF SUPPLIER INNOVATION FLOW IN MANUFACTURING ENVIRONMENT

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<b>Design Project</b>			
68	SWARAJ DALMIA	ABHISHEK MISHRA	COMPUTATIONAL COMPLEXITY THEORY
69	GAUTAM SINGHANIA	CHANDRA SHEKHAR	SOLVING OPTIMIZATION PROBLEMS USING ANT COLONY OPTIMIZATION
70	GAUTAM SINGHANIA	CHANDRA SHEKHAR	SOLVING OPTIMIZATION PROBLEMS USING ANT COLONY OPTIMIZATION
71	DEVASHISH MATHUR	JL RAHEJA	REAL TIME AGE INVARIANT FACIAL RECOGNITION USING QUALCOMM VUFORIA SDK INTEGRATED WITH AN ANDROID APPLICATION.
72	HARISH TUNDWAL	SHIVI AGARWAL	STUDY OF REAL WORLD APPLICATIONS OF HYBRID NEURAL NETWORK.
73	SHIKHAR AGARWAL	A ANAND KUMAR	SMART GRIDS AND RENEWABLE ENERGY RE-SOURCES
74	KESHAV RAHEJA	ABHIJIT R ASATI	SUDY OF FLIP FLOP ARCHITECTURES
75	MANSI SINGH	PARIKSHIT K SINGH	PRESSURE SENSOR(S) FOR INTRAOCULAR PRESSURE (IOP) MONITORING
76	SAGAR KUMAR CHOURASIA	GAJANAND GUPTA	STOCHASTIC RELIABILITY AND MAINTENANCE MODELLING FOR MECHANICAL MACHINE TOOL.
77	SHEFALI GUPTA	AMIT JAIN	REUSE OF LUBRICATION WASTE OIL FROM AUTOMOBILES AS A FUEL /BIO FUEL
78	AVESH KUMAR SINGH	R GUPTA	OPTIMIZING CSR FUND USING IMPACT ANALYSIS IN DIFFERENT SECTORS.
79	NANDAN LUTHRA	AMIT JAIN	REUSE OF LUBRICATION WASTE OIL FROM AUTOMOBILES AS A FUEL/BIOFUEL
80	NAMAN MUNOT	R. SRINIVAS	WATER QUALITY MODELLING OF RIVER GANGA USING A CONVENTIONALLY AVAILABLE SOFTWARE.
81	NAMAN MUNOT	KUSUM LATA	SEARCH FOR THE PARALLEL UNIVERSE : TO STUDY THE WORKING OF THE LARGE HADRON COLLIDER (LHC) AND STATE ITS DISCOVERIES SO FAR. ALSO STUDY ABOUT THE SUPERSYMETTRY THEORY.
82	SAURJYA SARKAR	ANANTHA KRISHNA CHINTANPALLI	PREDICTED EFFECTS OF VOWELS IN BACKGROUND NOISE IN AUDITORY NERVE.
83	ADITYA RAKESH KULKARNI	SHYAM SUNDAR YADAV	NUMERICAL STUDY OF THE INTERACTION OF A DROP WITH AN INTERFACE BETWEEN A CONDUCTING AND DIELECTRIC FLUID IN PRESENCE OF AN ELECTRIC FIELD.
84	MUKUL	SHYAM SUNDAR YADAV	NUMERICAL STUDY OF THE INTERACTION BETWEEN THE CONDUCTING DROPS IN PRESENCE OF AN ELECTRIC FIELD.
85	NEMANI AKHIL MANISH	SUBHASHISH GANGOPADHYAY	STUDY OF GROWTH AND CHARACTERIZATION OF METAL THIN FILMS.
86	RAJATH S	SHAN BALASUBRAMANIAM	PARTIAL PARSING OF CONTEXT FREE GRAMMARS
87	ASHUTOSH TRIPATHI	AMOL HOLKUNDKAR	STUDY OF VARIOUS MODELS FOR LASER PULSE AND ITS IMPLEMENTATION TOWARDS THE DYNAMICS OF CHARGE PARTICLE.
88	SUMANTRA SHARMA	MADHUKAR MISHRA	STUDY OF MAGNETO RESISTANCE PHENOMENA SUCH AS GMR,TMR,EMR AND APPLICATION OF GMR IN MAGNETIC FIELD SENSORS AND MRAMS.QUANTUM HALL EFFECT AND SUPERCONDUCTIVITY.
89	VIPUL VAIDYA	S GURUNARAYANAN	STUDY OF CACHE PERFORMANCE FOR DIFFERENT MULTI-CORE PROCESSORS.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
90	BUGDANI TEJAS ANIL	ABHIJIT K DIGALWAR	SUSTAINABLE MANUFACTURING IN THE CONTEXT OF PROCESS INDUSTRIES
91	ANUMULA SAI VENKATA REDDY	ABHIJIT K DIGALWAR	STUDY OF SUSTAINABLE MANUFACTURING IN THE CONTEXT OF DISCRETE MANUFACTURING
92	VARUN IYER	SRINIVAS KOTA	STUDY OF SUPPLY CHAIN IN THE OIL MANUFACTURING INDUSTRY
93	KARTHIKAN C	SRINIVAS APPARI	INSTU CATALYTIC REFORMING AND SECONDARY VAPOR PHASE CRACKING OF VOLATILES DERIVED FROM FAST PYROLYSIS OF BIO-MASS.
94	VIPUL SHARMA	SHASHIKANT SADISTAP	STUDY OF EFFECTS OF PROBIOTIC BACTERIA'S CHEMICAL REACTIONS IN THE GUT ON HUMAN HEALTH
95	NIRALI KANSARA	PRATIK N SHETH	STUDY OF CFD APPLICATIONS IN FIXED/MOVING BED SOLID GAS REACTORS
96	SHRADDHA PANWAR	OMVIR CHAUDHRY	IMPACT OF FINANCIAL LITERACY ON THE ECONOMIC DEVELOPMENT OF INDIA.
97	UTSAV SHUKLA	UTKARSH MAHESHWARI	RESIDUE UPGRADATION TO VALUABLE PRODUCTS
98	ARIHANT JAIN	SRINIVAS APPARI	A DETAILED KINETIC MODELING APPROACH FOR SURFACE REACTIONS
99	PARTHO MUKHERJEE	P CHATTOPADHYAY	RECENT DEVELOPMENTS IN FOAM CHARACTERIZATION
100	ABHI SHARMA	ARVIND KUMAR SHARMA	CLEANING GANGA ... !
101	R VAISHNAVI	SONAL MAZUMDER	NANOTOXICOLOGY. IS NANOTECHNOLOGY SAFE TO THE ENVIRONMENT?
102	ANIRUDH SHARMA	SATYENDRA KR SHARMA	TRADE-OFF DECISIONS IN PROJECTS
103	PRANJAL SHARMA	SRINIVAS APPARI	SOFC-CATALYST
104	ANKUSH SHARMA	AJAY KUMAR PANI	MULTIVARIATE DATA ANALYSIS USING CONVENTIONAL AND ROBUST PRINCIPAL COMPONENT ANALYSIS
105	VANDANA JAIN	KRISHNA MUNIYOOR	HOW COULD WE HAVE PREVENTED "BLACK MONDAY"-24 AUGUST 2015.
106	PARTH PAREEK	UMESH DHYANI	PUBLIC POLICY- MONITORING, ANALYSIS AND RESEARCH
107	ARPIT GOYAL	RAJAN PANDEY	CONTRIBUTION OF LOCAL AND GLOBAL FACTORS IN INFLUENCING VOLATILITY IN THE INDIAN STOCK MARKET
108	MANAV MARYA	KAMLESH KUMAR	EFFECTIVE DATABASE DESIGN FOR GEOSCIENCE PROFESSIONALS
109	ANCHAL GUPTA	KAMLESH KUMAR	EFFECTIVE DATABASE DESIGN FOR GEOSCIENCE PROFESSIONALS
110	VIVEK KUMAR BANSAL	SHUVENDU N PATEL	DYNAMIC ANALYSIS OF COMPOSITE PLATES WITH CUT-OUTS.
111	RANA ANSHUMAN	SHUVENDU N PATEL	VARIATIONAL FINITE ELEMENT FORMULATION OF SOME ELEMENTS/ FINITE ELEMENT FORMULATION USING VARIATIONAL APPROACH.
112	YAMBAL MUKUL RATNAKUMAR	G MUTHUKUMAR	INFLUENCE OF WIND LOADS ON TALL BUIDINGS
113	TANDON ABHILASH BORTHAKUR	SANJIV KR CHOUDHARY	CONTEMPORARY ISSUES RELATED TO INDIAN GEOGRAPHY WITH SPECIAL FOCUS ON ENVIRONMENT AND NATURAL HAZARDS.
114	PARTH SUREKA	R GUPTA	SCENARIO BUILDING BY SYSTEMS APPROACH

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<b>Design Project</b>			
115	HIMANSHU SETIA	G MUTHUKUMAR	INFLUENCE OF FIRE LOADING ON REINFORCED CONCRETE AND STEEL STRUCTURAL ELEMENTS.
116	AVINASH RAMACHANDRA ACHARYA	G MUTHUKUMAR	INFLUENCE OF WIND LOADS ON TALL BUILDINGS
117	AISHWARYA CHOPRA	ANSHUMAN	PARTIAL REPLACEMENT OF CEMENT WITH A BLEND OF MARBLE SLURRY AND FLY ASH.
118	PRITYUSH HALDAR	PRADYUMN CHATURVEDI	ENERGY GENERATION USING PHOTO-VOLTAIC CELLS
119	K.N.SANGEETH	K S RAJU	SENSOR CIRCUITARY DEVELOPMENT FOR DUST IDENTIFICATION ON THE FLOOR
120	NIKHIL KASHYAP	K S RAJU	FINGER PRINT MATCHING ALGORITHM
121	ANAND SAHOO	KAVINDRA KANDPAL	INVESTIGATION OF HIGH-K DIELECTRICS FOR ENHANCED PERFORMANCE.
122	KARTIK GOEL	ARNAB HAZRA	TO STUDY THE EFFECT OF SOIL MOISTURE ON CROPS
123	THANVI SANKET ASHOK	VINEET KUMAR	SENSOR INTERFACING WITH MSP430
124	NIHAR D	VINOD KUMAR CHAUBEY	ELECTRICAL MODELLING AND SIMULATION OF TUNNEL FETS
125	ARUSHI BHANSALI	KRISHNA MUNIYOOR	EFFECT OF INVESTOR SENTIMENTS IN STOCK PRICE MOVEMENTS.
126	BUGADE VISHWAJIT BABASAHEB	KARI BABU RAVI TEJA	DESIGN AND ANALYSIS OF CMOS VOLTAGE REGULATORS FOR RF ENERGY HARVESTERS.
127	LOKESH KUMAR VERMA	ARNAB HAZRA	INTERFACING OF FIGARO GAS SENSORS
128	KAUSTUBH SHARMA	ASMA RANI	PROVENANCE GENERATION FOR COMPLEX QUERIES
129	SHETTY NIKHIL ACHUTHA	PRAMOD KR TANWAR	GUI DEVELOPMENT FOR CROSS PLATFORM APPLICATION USING QT OR PYTHON FOR IMAGE PROCESSING ANALYSIS.
130	BHUWAN MOHAN	SAINATH BITRAGUNTA	EFFICIENT DESIGN AND PERFORMANCE ANALYSIS OF GLOBAL POSITIONING SYSTEMS
131	AKSHAT DUBEY	VINITA TIWARI	STUDY OF STATISTICAL AND MULTI-VARIAD DATA ANALYSIS TECHNIQUES FOR GAS AND HUMIDITY SENSORS.
132	DESHMUKH PRANJAL SHAHAJIRAO	MAHESH ANGIRA	STUDY OF ROBOTIC KINEMATICS FOR POSITION CONTROL REQUIRED FOR SHAPE-MEMORY EFFECT MONITORING/TESTING.
133	KRIT GOYAL	DHEERENDRA SINGH	DESIGN OF CONTROL SYSTEM FOR INVENTORY MANAGEMENT
134	SAHIL	PRAVEEN KUMAR A V	MICROWAVE FILTER DESIGN FOR COMMUNICATION APPLICATIONS
135	MANVI SAXENA	NV MURALIDHAR RAO	A COMPREHENSIVE STUDY OF INFRASTRUCTURE FINANCING IN INDIA: ANALYSIS OF INFRASTRUCTURE PROJECTS
136	VARUN RAJ MAHAJAN	LUCKY SHARAN	MATHEMATICAL MODELLING OF NONLINEAR OPTICAL EFFECTS FOR HIGH SPEED WDM SYSTEMS.
137	JANGA ROHIT SAI	SAINATH BITRAGUNTA	EFFICIENT DESIGN & PERFORMANCE ANALYSIS OF GLOBAL POSITIONING SYSTEM
138	NALIN PRASHANT MUJUMDAR	HARI OM BANSAL	ENERGY MANAGEMENT STRATEGIES IN HYBRID ELECTRIC VEHICLES



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<b>Design Project</b>			
139	TEJAS PRAKASH HARNE	PRAMOD KR TANWAR	STUDY OF IMPLEMENTATION OF FAST SEARCHING ALGORITHMS FOR BIOMETRIC DATABASE AND INTEGRATING THE DATABASE WITH PYTHON AND SQLITE
140	GAURAV BANSAL	K S RAJU	FINGER PRINT MATCHING ALGORITHM IMPLEMENTATION
141	HIMANSHU DWIVEDI	PRAVEEN KUMAR A V	MICROWAVE FILTER DESIGN FOR COMMUNICATION APPLICATION
142	RAGHU RAMI REDDY BALLARY	A ANAND KUMAR	SPACE-BASED SOLAR POWER
143	AKKALA NAGA VENKATA DURGA SANTOSH	SAINATH BITRAGUNTA	OPTIMISING ENERGY HARVESTING CO-OPERATIVE COGNITIVE RADIO COMMUNICATION SYSTEMS
144	KAMPARA SATYA NAGA JAGADEESH	SAINATH BITRAGUNTA	OPTIMISING ENERGY HARVESTING CO-OPERATIVE COGNITIVE RADIO COMMUNICATION SYSTEMS
145	DANISH ABDI	ANANTHA KRISHNA CHINTANPALLI	PREDICTED EFFECTS OF INTENSITY VARIATION IN VOWELS IN THE AUDITORY NERVE USING THE COMPUTATIONAL MODEL
146	SHRAYAN CHANDA BARMAN	PRAMOD KR TANWAR	STUDY OF IMPLEMENTATION OF FAST SEARCHING ALGORITHMS FOR BIOMETRIC DATABASE AND INTEGRATING THE DATABASE WITH PYTHON AND SQLITE
147	PRAMOD KUMAR K	SATYENDRA KR SHARMA	VEHICLE ROUTING PROBLEM
148	HARDIK MALHOTRA	SUREKHA BHANOT	BIOMEDICAL EXPERT SYSTEM
149	SAURAV DWIVEDI	MURALI PALLA	ATOMISTIC MODELLING OF FAILURE IN MATERIALS
150	NAVDEEP TRIVEDI	SRIKANTA ROUTHROY	STUDY OF SUPPLIER RISK IMPOSED ON A MANUFACTURER
151	SAGNIK MUKHERJEE	MANOJ SONI	STUDY OF LOW COST AND LOW POWER MEMS BASED GAS SENSORS
152	TRIVEDI PRAGYAN PRIYAMEDH	P SRINIVASAN	EFFECT ON HEAT TRANSFER INSIDE A NUCLEAR REACTOR CONTAINMENT DUE TO HYDROGEN EMBRITTLMENT AND HYDROGEN DIFFUSION INSIDE THE CONTAINMENT.
153	TRIVEDI PRAGYAN PRIYAMEDH	GAJENDRA S CHAUHAN	ROLE OF MEDIA IN POLITICAL ADVERTISING.
154	ARDANDI SANDEEP REDDY	SANJIV KR CHOUDHARY	FORMATION OF SMALLER STATES: HOW HAS IT IMPACTED?
155	ARDANDI SANDEEP REDDY	BIJOY KUMAR RAUT	ROBUST & RELIABILITY BASED DESIGN OPTIMIZATION FOR SERIES OF MANUFACTURING OPERATIONS.
156	VISHNUU.AD	HARI OM BANSAL	ENERGY OPTIMIZATION IN PHEVS
157	ANKURJYOTI BORDOLOI	DEVIKA	FEMINISM IN INDIA POST 1947 AND ITS EFFECTS ON POPULAR BELIEFS
158	DALIA RAJAT SUBHASH	GIRISH KANT	APPLICATION OF MONTE CARLO SIMULATION METHOD IN SUPPLY RISK ANALYSIS
159	ELKUNCHWAR NISHANT GIRISH	AMOL M R MARATHE	NUMERICAL STUDY OF EVOLUTION EQUATIONS OF ESR OF A 2D DEFORMABLE MEDIUM
160	ELKUNCHWAR NISHANT GIRISH	TAPOMOY G SARKAR	STUDY OF KINEMATICS OF FLOW IN DEFORMABLE MEDIUM.
161	CHILLARA VINAY	MURALI PALLA	MODELING A CRACK USING XFEM AND/OR RELATED TECHNIQUES.
162	APOORV VAISH	SACHIN U BELGAMWAR	APPLICATION OF GRAPHENE IN BATTERIES
163	ADITYA VENKATARAMANI	UDAYAN CHANDA	METHODS FOR OPTION PRICING AND DERIVATIVES

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<b>Design Project</b>			
164	SIDDHANT AGARWALA	ARCHANA KULKARNI	EVALUATING THE IMPLEMENTATION OF ICDS(INTEGRATED CHILD DEVELOPMENT SERVICES) IN PILANI
165	SIDDHANT RANJAN	GIRISH KANT	SUPPLY CHAIN MANAGEMENT.
166	KOTHAKAPU SANTOSH REDDY	MURALI PALLA	MODELING A GROWING CRACK USING XFEM AND/OR RELATED TECHNIQUES.
167	AMISH NEVATIA	ANIL JINDAL	OPTIMAL CODE ACQUISITION AND RE-MANUFACTURING POLICIES UNCERTAINTY
168	AMISH NEVATIA	ANIL JINDAL	OPTIMAL CODE ACQUISITION AND RE-MANUFACTURING POLICIES UNCERTAINTY
169	SHASHWAT CHOPRA	SRIKANTA ROUTROY	ANALYSIS OF SUPPLIER INNOVATION FLOW IN MANUFACTURING ENVIRONMENT
170	ARANAV KACKER	BIJOY KUMAR RAUT	REDUCTION OF WORKSPACE DUE TO FAILURE OF ACTUATOR IN SERIES MANIPULATOR.
171	SAAD NAQVI	RUCHIKA SHARMA	CSR AS A MARKETING STRATEGY
172	NIKHIL NAIR	SRIKANTA ROUTROY	STUDY OF SUPPLIER RISK IMPOSED ON A MANUFACTURER.
173	CHARCHIT SHUKLA	ABHIJIT K DIGALWAR	STUDY OF EXISTING TECHNOLOGIES & EQUIPMENTS USE FOR DISABLED & ELDERLY PEOPLE DURING POST DISASTER MANAGEMENT
174	ARUN SREYAS PALLE	RAVI INDER SINGH	STUDY AND OPTIMIZATION OF CHANGING TRANSMISSION GEAR RATIOS ON VEHICLE SPEED USING MATLAB/SIMULINK
175	CHANDAN SATIJA	KULDIP SINGH SANGWAN	APPLICATION OF 3-D PRINTING OVER CONVENTIONAL MANUFACTURING PROCESSES IN MASS CUSTOMIZATION
176	ROHAN SANGHVI	SACHIN U BELGAMWAR	DESIGN OF MULTI-SOURCE MEMS ENERGY HARVESTING SYSTEM FOR AUTOMOBILE
177	AYUSHI BANSAL	ANIL JINDAL	STUDY OF MARKOV DECISION PROCESS IN SUPPLY CHAIN PROBLEM
178	AYUSHI BANSAL	ANIL JINDAL	STUDY OF MARKOV DECISION PROCESS IN SUPPLY CHAIN PROBLEM
179	SOURABH BALDWA	SRIKANTA ROUTROY	STUDY OF MARKOV DECISION PROCESS IN SUPPLY CHAIN PROBLEM
180	S. RAHUL	SANGITA YADAV	FLUID STRUCTURE INTERACTION PROBLEMS USING DISCONTINUOUS GALERKIN METHODS
181	CHANDRA BHAN SINGH CHOUHAN	MURALI PALLA	ATOMISTIC MODELLING OF FAILURE IN MATERIALS
182	PIYUSH RATHORE	ANIL JINDAL	STUDY OF SUPPLIER RISK IMPOSED ON A MANUFACTURER.
183	PIYUSH RATHORE	ANIL JINDAL	STUDY OF SUPPLIER RISK IMPOSED ON A MANUFACTURER.
184	SHYAM SUNDAR SANKARAN	P SRINIVASAN	SIMULATION OF LAMINAR NATURAL CONVECTION IN AN ENCLOSED CAVITY, WITH A TEMPERATURE DIFFERENCE BETWEEN A SET OF OPPOSITE WALLS USING C PROGRAMMING
185	AYUSH GUPTA	RAJAN PANDEY	IMPACT OF CRUDE PRICE MOVEMENT ON STOCK MARKET VOLATILITY
186	ROSHAN KUMAR	RAJEEV TALIYAN	NON PHARMACOLOGICAL TREATMENT STRATEGIES FOR THE TREATMENT OF PARKINSON DISEASE.
187	ABHIJEET MANU	PADMA MURALI	STUDY OF NOVEL METHODS FOR CALCIUM DETERMINATION IN BLOOD AND MILK.

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<b>Design Project</b>			
188	ABHIJEET MANU	GAUTAM SINGHVI	STUDY OF NOVEL METHODS FOR CALCIUM DETERMINATION IN BLOOD AND MILK.
189	AKASH KUMAR SHAHI	RAJEEV TALIYAN	IN VIVO, IN VITRO MODELS OF HUNTINGTONS DISEASE: RECENT DEVELOPMENTS IN CELL LINES AND ANIMAL MODELS
190	JUHI	ANIL KUMAR SAINI	FEATURE EXTRACTION AND IMPLEMENTATION OF FACE RECOGNITION
191	JUHI	ANIL KUMAR SAINI	FEATURE EXTRACTION AND IMPLEMENTATION OF FACE RECOGNITION
192	JUHI	ANIL KUMAR SAINI	FEATURE EXTRACTION AND IMPLEMENTATION OF FACE RECOGNITION
193	GUDDU KUMAR SINGH	JL RAHEJA	PEOPLE COUNTING AND GENDER PREDICTION
194	SOUMYA SUCHARITA	VIRENDRA S SHEKHAWAT	END TO END DATA WORKLOAD ANALYTICS IN DATA CENTER ENVIRONMENT.
195	SURENDRA PAL SINGH RATHORE	YASHVARDHAN SHARMA	DESIGN AND DEVELOPMENT OF OPINION MINING FRAMEWORK
196	BHATTAD ABHISHEK SHYAMSUNDAR	PRAMOD KR TANWAR	DESIGN AND IMPLEMENTATION OF BIOMETRIC AUTHENTICATION ALGORITHMS.
197	THAMMANA SAI ROHITH	ATANENDU SEKHAR MANDAL	CLOUD BASED MEDICAL DIAGNOSTICS AND ASSISTANCE APP
198	AYUSH KATARIA	POONAM GOYAL	DEVELOPMENT OF PARALLEL DE NOVO COMPILER AND BENCH MARKING IT AGAINST THE EXISTING COMPILERS
199	UPADHYAY GAURAV ARVIND	YASHVARDHAN SHARMA	DESIGN AND DEVELOPMENT OF OPINION MINING FRAMEWORK
200	CHITTERSU RAGHU VAMSI KRISHNA	ATANENDU SEKHAR MANDAL	CLOUD BASED MEDICAL DIAGNOSTICS AND ASSISTANCE APP
201	KAPIL SINGHAL	SHASHIKANT SADISTAP	PREDICTION OF YIELD OF TREE BY STUDYING ITS SHADOW, IMAGE AND PREDICTION OF QUALITY OF FRUIT BY ITS IMAGE
202	SAJAL KHANNA	K S RAJU	DEVELOPMENT OF GUI FOR IBS DATABASE MANAGEMENT SYSTEM
203	DHAWAL HARKAWAT	SHASHIKANT SADISTAP	APP BASED MODEL USING SENSOR FUSION TECHNOLOGIES FOR ENVIRONMENTAL MONITORING AND WATER MONITORING.
204	MAYANK VILAS TOTALE	JP MISRA	TERRAIN MAPPING BASED ON HEXAGONAL CELL BASED MAPPING
205	SHARTHAK MISHRA	SHASHIKANT SADISTAP	STUDY AND DEVELOPMENT OF COOKIE INSPECTION SYSTEM
206	PORLIKAR SHUBHAM ANAND	SHYAMAPADA MUKHERJEE	ROUTING DRIVEN FPGA PLACEMENT
207	SUBHAM JAIN	ASMA RANI	PROVENANCE GENERATION FOR COMPLEX QUERIES
208	PRATIK S	ABHISHEK MISHRA	LOCAL SEARCH BASED ENERGY EFFICIENT TASK SCHEDULING ALGORITHMS FOR MULTI-CORE SYSTEMS
209	ANURAG PRAKASH	LAVIKA GOEL	SENTIMENT ANALYSIS OF ONLINE COMMUNITIES USING SWARM INTELLIGENCE
210	AYUSHI AGARWAL	YASHVARDHAN SHARMA	IDENTIFYING SARCASM FOR SENTIMENT ANALYSIS
211	SHANTANU SHRIVASTAVA	JP MISRA	STUDY OF SIMULTANEOUS LOCALIZATION AND MAPPING TECHNIQUES

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<b>Design Project</b>			
212	NEKKANTI SRI SESA SAI SANDEEP	ATANENDU SEKHAR MANDAL	CLASSIFICATION OF FACE EXPRESSIONS INTO REAL OR FAKE
213	SHIVIN SRIVASTAVA	POONAM GOYAL	DESIGN AND DEVELOPMENT OF A DISTRIBUTED DATA STRUCTURE FOR ANYTIME ONLINE STREAM MINING
214	ABHIMANYU	RAHUL BANERJEE	DEVISING STRATEGIES AND ALGORITHMS FOR ROBUST AND EFFICIENT NETWORK COMMUNICATION IN CONTEXT OF INTELLIGENT TRANSPORTATION SYSTEMS (ITS), SPECIFICALLY TO IMPROVE UPON EXISTING VANET ROUTING PROTOCOLS FOR MORE RELIABLE COMMUNICATION.
215	RAGHAV NAIR	NAVNEET GOYAL	DATA PROVENANCE - ROLE OF GRAPH DATABASES
216	YASHASVI GALAV	NAVNEET GOYAL	DATA PROVENANCE
217	SATYAJIT MOHANTY	VIRENDRA S SHEKHAWAT	END TO END DATA WORKLOAD ANALYTICS IN DATA CENTER ENVIRONMENT.
218	GAYATRI H BHAT	SHAN BALASUBRAMANIAM	PARALLELISATION OF MACHINE-LEARNING ALGORITHMS
219	BAJPAI PRIYANSHU RAVIKANT	YASHVARDHAN SHARMA	DESIGN AND DEVELOPMENT OF OPINION MINING FRAMEWORK
220	AMARTYA TIWARI	ATANENDU SEKHAR MANDAL	EMOTION AND FACE RECOGNITION USING TEXTURE ANALYSIS
221	SHUBHANKAR SRIVASTAVA	SANJIV KR CHOUDHARY	EARLY WARNING SYSTEM FOR EPIDEMIC DISEASES USING SOCIAL MEDIA
222	JHANAVI SHETH	JL RAHEJA	CURSOR CONTROL USING EYE TRACKING
223	JHANAVI SHETH	NAVNEET GOYAL	HCI: GESTURE RECOGNITION
224	KRISHNA KUMAR JOSHI	JL RAHEJA	WEB SURFING FOR VISUALLY IMPAIRED
225	VARUN VASUDEVAN	K HARI BABU	HYBRID SOFTWARE DEFINED NETWORKING: NS3 SIMULATOR INTEGRATION
226	MUDIT MARDA	K S RAJU	DEVELOPMENT OF GUI FOR IBS DATABASE MANAGEMENT
227	ISHAN CHUTANI	VIRENDRA SINGH NIRBAN	SARCASM DETECTION FROM SOCIAL MEDIA DISCOURSE
228	MANIT GUPTA	RAJ KUMAR GUPTA	BRAIN TUMOR DETECTION USING IMAGE PROCESSING TECHNIQUES
229	MANIT GUPTA	RAJNEESH CHOUBISA	TO STUDY THE RELATIONSHIP OF DIGITAL FOOTPRINT OF A PERSON WITH HIS PSYCHOLOGICAL PROFILE
230	YASH TIBREWALA	HARIKRISHNAN G NAIR	GANDHIAN EDUCATIONAL PHILOSOPHY AND THE UNIVERSITY IN CONTEXT OF INDIAN ISLAMIC IDENTITY
231	MANAN KHASGIWALE	SAI KRISHNA YADDADI	IDENTIFICATION OF DISEASES IN IMAGES OF LEAVES AND NUMBER OF FRUITS IN A GIVEN TREE USING IMAGE PROCESSING
232	GUPTA YASH DINESH	JL RAHEJA	PEOPLE COUNTING AND GENDER PREDICTION.
233	SAI CHARAN AGRAHARAM	J N BANDOPADHYAY	QUANTUM FINITE AUTOMATA
234	RISHABH AGARWAL	JL RAHEJA	RAPISTS PSYCHOLOGICAL PROFILE GENERATION
235	LINGAM SATYA PAVAN	ATANENDU SEKHAR MANDAL	CLOUD BASED MEDICAL DIAGNOSTICS AND ASSISTANCE APP
236	PRABHJYOT SINGH SODHI	JL RAHEJA	RAPISTS PSYCHOLOGICAL PROFILE GENERATION

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<b>Design Project</b>			
237	AGRAWAL SAKSHI DEVENDRA	SANJAY SINGH	ADABOOST FOR FACIAL FEATURE SELECTION
238	AGRAWAL SAKSHI DEVENDRA	SANJAY SINGH	ADABOOST FOR FACIAL FEATURE SELECTION
239	DEEPAK MISHRA	JL RAHEJA	WALKING ASSISTANCE MOBILE APPLICATION FOR BLIND PERSONS.
240	GAURAV BOSE	JL RAHEJA	PEOPLE COUNTING AND GENDER PREDICTION
241	ANTIL SINGHAL	NAVNEET GOYAL	PARALLEL IMPLEMENTATION OF SAMPLING ALGORITHMS FOR DATA MINING ALGORITHMS.
242	GARGI SHARMA	YASHVARDHAN SHARMA	ABSTRACTIVE TEXT SUMMARIZATION
243	GARGI SHARMA	KUMAR S BHATTACHRYA	WOMEN IN MUSLIM WORLD 1920 ONWARDS.
244	BIKRAMJIT SINGH	S S SADISTAP	FABRIC TEXTURE RECOGNITION SYSTEM USING FUZZY BACK-PROPAGATION NEURAL NETWORKS.
245	JAYATI AGGARWAL	YASHVARDHAN SHARMA	OPINION MINING FRAMEWORK DEVELOPMENT
246	VARUN WACHASPATI J	PANKAJ VYAS	STUDY OF EARLY RELIABILITY ESTIMATION APPROACHES
247	MANYA SETIA	AVINASH GAUTAM	IMPLEMENTATION OF SOME META-HEURISTIC ALGORITHMS FOR MULTI-ROBOT TASK ALLOCATION.
248	AKHILESH SUDHAKAR	SAILAJA NANDIGAMA	TRACING THE EMERGENCE OF THE MIDDLE EAST AS A MAJOR PLAYER IN THE INTERNATIONAL POLITICAL SCENARIO
249	MOHAMMAD ADNAN OQUAISH	JL RAHEJA	WEB SURFING FOR VISUALLY IMPAIRED
250	SAURABH SHUKLA	K S RAJU	DEVELOPING A PYTHON BASED GUI FOR EFFICIENT PERFORMANCE OF BUILDING SYSTEMS, BY FACILITATING BUILDING AUTOMATION.
251	DEEVANKSHU GARG	JL RAHEJA	WALKING ASSISTANCE MOBILE APPLICATION FOR VISUALLY IMPAIRED
252	HIMANSHU SINGH DHONI	POONAM GOYAL	COMPLEX QUERIES FOR IMAGES
253	HIMANSHU SINGH DHONI	TANU SHUKLA	CONSUMER PSYCHOLOGY AND ROLE IN ADVERTISING
254	SANJAY REDDY S	POONAM GOYAL	FEATURE SELECTION IN IMAGES
255	SANJAY REDDY S	RAJ KUMAR GUPTA	AUTO COLLAGE
256	SHUBHAM AGRAWAL	NAVNEET GOYAL	HUMAN COMPUTER INTERACTION USING GESTURES
257	HARSHIT JAIN	POONAM GOYAL	DEVELOPMENT OF EFFECIENT DATA STRUCTURES FOR DATA MINING
258	HARSHIT JAIN	TANU SHUKLA	CONSUMER PSYCHOLOGY.
259	KSHITIJ BUDHANI	VIRENDRA SINGH NIRBAN	ANALYSIS OF EVENTS USING SENTIMENT ANALYSIS OF REAL DATA FROM TWITTER
260	PRASOON TRIVEDI	PRAMOD KR TANWAR	DESIGN AND IMPLEMENTATION OF BIOMETRIC AUTHENTICATION ALGORITHMS.
261	DEVANSHI SANJIV KOTAK	NITIN CHATURVEDI	STUDY OF SRAM CELL ARCHITECTURE
262	ANISH BANSAL	CHANDRA SHEKHAR	TO STUDY THE IMPLEMENTATION OF GRAPHICAL PROCESSOR UNITS, GENERAL PURPOSE GRAPHICAL PROCESSOR UNITS AND CONFIGURABLE DIGITAL SIGNAL PROCESSORS
263	AISHWARYA NALWAYA	HARI OM BANSAL	VEHICLE TO GRID TECHNOLOGY

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
264	PEROLLA VINAY KUMAR REDDY	HITESH DUTT MATHUR	APPLICATION OF NEURAL NETWORKS IN LOAD FREQUENCY CONTROL IN POWER SYSTEMS.
265	MANEK AISHWARYA HIMANSHU	PARIKSHIT K SINGH	INTELLIGENT WEATHER SYSTEM
266	YELURI MANIKANTA SATHWIK	A ANAND KUMAR	HARVESTING SOLAR ENERGY IN MORE EFFICIENT WAY
267	ANKUR DUBEY	ARNAB HAZRA	TO STUDY THE EFFECT OF MOISTURE ON SOIL NUTRIENTS WITH THE HELP OF MOISTURE SENSORS.
268	AISHWARYA SINGH	HITESH DUTT MATHUR	VEHICLE TO GRID APPLICATION IN POWER GRIDS
269	SAKSHAM KHUNTETA	ARNAB HAZRA	STUDY OF EFFECT OF SOIL MOISTURE ON CROPS
270	MOHIT SINGH	G S SESA CHALAPATHI	STUDY AND IMPLEMENTATION OF ENERGY EFFICIENT REAL TIME SCHEDULING ALGORITHMS
271	SARVESH KESHARWANI	K S RAJU	IMPLEMENTATION OF FINGERPRINT MATCHING ALGORITHM.
272	KAILAS NATH.R	K S RAJU	SENSOR CIRCUITARY DEVELOPMENT FOR DUST IDENTIFICATION ON THE FLOOR
273	R.S.VEEARRAGHAVAN	KARI BABU RAVI TEJA	STUDY OF ADVANCED SEMICONDUCTOR DEVICES
274	RISHAB CHAUHAN	KRISHNA MUNIYOOR	EFFECT OF INVESTOR SENTIMENTS IN STOCK PRICE MOVEMENT.
275	RACHIT KUMAR	HITESH DUTT MATHUR	VEHICLE TO GRID APPLICATION IN FREQUENCY REGULATION OF MICROGRID STRUCTURE
276	DHOBLE SHUBHAM RAJESH	VINEET KUMAR	SENSOR INTERFACING WITH MSP430
277	VIKSIT SAPRA	MAHESH ANGIRA	STUDY OF ROBOTIC KINEMATICS FOR POSITION CONTROL REQUIRED FOR SHAPE MEMORY EFFECT MONITORING/TESTING
278	SHAURYA SINGH	RAJAN PANDEY	COMPREHENSIVE STUDY OF MARKET ANOMALIES IN THE INDIAN STOCK MARKET
279	SHAURYA SINGH	PARIKSHIT K SINGH	A REVIEW ON INTERNET OF THINGS FOR SMART CITIES WITH SPECIAL EMPHASIS ON GRID MANAGEMENT, TRAFFIC MANAGEMENT AND NOISE MONITORING
280	UTKARSH GUPTA	HARI OM BANSAL	EFFICIENT CHARGING OF BATTERIES IN HYBRID VEHICLES
281	GAURAV SHRIVASTAVA	SUREKHA BHANOT	BIO-MEDICAL EXPERT SYSTEMS
282	SHILPI AGRAWAL	SHARAD SRIVASTAVA	BUCKLING OF BEAMS AND COLUMNS
283	DEEKSHA PRAKASH	SRINIVAS KOTA	STUDY ON AFTER-USE PROCESSES OF ELECTRONIC EQUIPMENTS
284	DHAIRIK FULETRA	GIRISH KANT	SUPPLY CHAIN MANAGEMENT
285	ARSHAD LATIF SAIKIA	DEVIKA	REFLECTION OF POSTMODERN CULTURE AND ITS EFFECTS IN CINEMA
286	PARTH GUPTA	ARUN KUMAR VAISH	BANKRUPTCY AND MONEY BORROWING TRENDS
287	AAYUSH MULYE	P SRINIVASAN	HEAT TRANSFER THROUGH COMPOSITE MATERIALS : AN ANALYSIS OF CONDUCTION THROUGH AN AIRCRAFT WING STRUCTURE (CARBON/EPOXY COMPOSITE)
288	PANDE ADITYA MOHAN	RAJESH P MISHRA	DEVELOPMENT OF GUI FOR MULTI-CRITERIA DECISION MODEL USING MATLAB
289	SHELJA GUPTA	KRISHNA MUNIYOOR	STOCK MARKET VOLATILITY

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<b>Design Project</b>			
290	SHITIJ MAHAJAN	RAJESH P MISHRA	DEVELOPMENT OF GUI FOR MULTI-CRITERIA DECISION MODEL USING MATLAB
291	TEJAS PORWAL	GAJANAND GUPTA	IMPLEMENTATION OF TOTAL PRODUCTIVE MAINTAINANCE IN INDIAN SCENARIO
292	SHUBHAM RATHI	ARUN KUMAR VAISH	BANKRUPTCY AND MONEY BORROWING TRENDS.
293	MRIDUL GUPTA	ANIL JINDAL	APPLICATION OF MONTE CARLO SIMULATION METHOD IN SUPPLY RISK ANALYSIS
294	MRIDUL GUPTA	ANIL JINDAL	APPLICATION OF MONTE CARLO SIMULATION METHOD IN SUPPLY RISK ANALYSIS
295	HEMABH TRIVEDI	SRINIVAS KOTA	ANALYSIS AND APPLICATIONS OF THE SUPPLY CHAIN PROCESSES IN NEW PRODUCT DEVELOPMENT.
296	HIMANSHU SHARMA	SATYENDRA KR SHARMA	RISK MANAGEMENT IN SUPPLY CHAIN
297	ADITYA SANJAY RUIA	RAJAN PANDEY	APPLICATION OF MODERN PORTFOLIO THEOREM IN CURRENT MARKET ECONOMICS
298	VINAY KHANDELWAL	UMA S DUBEY	STUDYING THE ROLE OF HERCEPTIN ON BREAST CANCER CELLS
299	MUDRIKA SINGHAL	JITENDRA PANWAR	ROLE OF AM FUNGI AGAINST PLANT PATHOGENS.
300	LAKSHYA SHARMA	SHILPI GARG	EPIGENETIC MECHANISM FOR GENE REGULATION IN PLASMODIUM
301	SHIVI JAIN	RAJDEEP CHOWDHURY	AUTOPHAGY OF SUB-CELLULAR ORGANELLES: MECHANISM OF DETECTION
302	AKSHAY JHAMB	BHAGAVATULA VANI	EFFECT OF HIGH TEMPERATURE STRESS ON PHOTOSYNTHETIC MECHANISM IN CYANOBACTERIA
303	AKSHAY JHAMB	DIPENDU BHUNIA	ANALYSIS OF BEAMS COLUMNS AND FRAMES IN VARIOUS BUILDINGS
304	NISHTHA JAIN	KAMLESH KUMAR	GEOENVIRONMENTAL ENGINEERING
305	CHINMAY TIWARY	UMA S DUBEY	CYTOKINE MEDIATED IMMUNOTHERAPY ON BREAST CANCER CELLS.
306	CHINMAY TIWARY	ANUPAM SINGHAL	WASTE WATER MANAGEMENT
307	AKSHIT ANEJA	SANJEEV KUMAR	AUTOIMMUNITY
308	ROHIT AGRAWAL	UMA S DUBEY	CELL MEDIATED IMMUNOTHERAPY ON BREAST CANCER CELLS
309	ROHIT AGRAWAL	ANUPAM SINGHAL	ENVIRONMENTAL IMPACT ASSESSMENT AND ITS USE IN INDUSTRIAL PROJECTS(AIR POLLUTION)
310	AKSHAT BORDIA	R GUPTA	DECODING THE COMPRESSIVE STRENGTH OF CONCRETE BY MACHINE LEARNING
311	VEDULA SAI BHARADWAJL	SHAMSHER B SINGH	STRUCTURAL HEALTH ASSESSMENT AND REHABILITATION.
312	RITWIK CHAKRADHAR	UMA S DUBEY	STUDY OF ALTERNATE CURES OF CANCER
313	AASHISH KUMAR PASSRIJA	SHILPI GARG	EPIGENETIC MECHANISMS FOR GENE REGULATION IN PLASMODIUM
314	SATYA PRIYA SINGH DEO	RAJESH MEHROTRA	STUDY OF THE ROLE OF CIS REGULATORY ELEMENTS.
315	SATYA PRIYA SINGH DEO	ASHISH MISHRA	ADVANCE TECHNIQUES OF EMBEDDED SYSTEMS AND MACHINE LEARNING IN THE DEVELOPMENT OF ELECTRONIC NOSES.

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<b>Design Project</b>			
316	SHREYA KAPOOR	PRABHAT NATH JHA	UNDERSTANDING BACTERIAL IMMUNE SYSTEM: CURRENT STATUS AND ITS APPLICATION.
317	SEWAKE DEWANSHU CHHAGAN	RAJESH MEHROTRA	DESIGNING OF BIOSENSORS
318	SEWAKE DEWANSHU CHHAGAN	VINOD KUMAR CHAUBEY	STUDY AND MODELLING OF BIO-FET
319	KARAN RAJPAL	ANKUSH JAHAGIRDAR	CONTROL SYSTEM AND ITS MATHEMATICAL MODELLING
320	GEETA BANSAL	SANDHYA MARATHE	STUDYING LOGICAL AND MATHEMATICAL MODELS OF ANIMAL BEHAVIOUR
321	SHIRSH ZIBBU	SHILPI GARG	IN SILICO CHARACTERISATION OF A HYPOTHETICAL PROTEIN IN PLASMODIUM
322	AKSHAY GOYAL	UMA S DUBEY	NANOTECHNOLOGY IN CANCER BIOLOGY
323	SAMYADEEP BASU	POONAM GOYAL	IMPLEMENTATION OF ALGORITHMS FOR THE PARTIAL PARALLELIZATION OF DE NOVO GENOME ASSEMBLER.
324	SOURABH BANSAL	SHILPI GARG	STUDY OF BI-DIRECTIONAL PROMOTERS IN PLASMODIUM VIVAX.
325	SOURABH BANSAL	K S RAJU	HIGH SPEED VIDEO PROCESSING ALGORITHMS USING OPEN CV.
326	MANESH NARAYAN K	POONAM GOYAL	IMPLEMENTATION OF ALGORITHMS FOR THE PARTIAL PARALLELIZATION OF DE NOVO GENOME ASSEMBLER
327	A SAI RAHUL	TBA (BIOSC)	ANALYSIS OF CIS-REGULATORY ELEMENTS P.S. PROJECT GUIDE: RAJESH MEHROTRA
328	A SAI RAHUL	PRAMOD KR TANWAR	MOBILE APPLICATION DEVELOPMENT FOR THE ON-GOING INTELLIGENT BUILDING SYSTEM
329	ANISH NIRAV SHAH	RAJESH MEHROTRA	GENOME WIDE ANALYSIS OF CIS-REGULATORY ELEMENTS USING DATA MINING APPROACH IN ARABIDOPSIS THALIANA.
330	KSHITIJ GANDHI	DHIRAJ	DESIGNING ALGORITHMS TO GET NUTRITIONAL VALUE OF FOOD USING MACHINE LEARNING
331	HARSHIT OBEROI	SHILPI GARG	EPIGENETIC MECHANISMS FOR GENE REGULATION IN PLASMODIUM
332	SAI SASHANK NARAYANAM	SHILPI GARG	APPLICATION OF NANOTECHNOLOGY IN MALARIA RESEARCH
333	KUNAL PARMANI	UMA S DUBEY	CELL SIGNALLING VIA ARYL HYDROCARBON RECEPTORS IN CANCER CELLS.
334	KUNAL PARMANI	DHEERENDRA SINGH	SOFTWARE IMPLEMENTATION OF WORKING OF INDUCTION MOTOR USING MATLAB AND PROGRAMMING IN "C".
335	SWARN SINGH BHAL	UMA S DUBEY	BLOOD BRAIN BARRIER AND METASTASIS
336	TANHYA CHITLE	RAVI INDER SINGH	STUDY AND OPTIMIZATION OF CHANGING TRANSMISSION GEAR RATIOS ON VEHICLE SPEED USING MATLAB/SIMULINK
337	ANIKET SINGH	RAJESH MEHROTRA	ROLE OF AUXIN IN EMBRYO DEVELOPMENT
338	GEETANJALI ARUN KUMAR	RAJDEEP CHOWDHURY	NEUROTRANSMITTERS AND CANCER
339	SARITA KUMARI	PANKAJ KUMAR SHARMA	EXPLORING PLANT DIVERSITY FOR MEDICINAL VALUE



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<b>Design Project</b>			
340	VISHAL RAJ	PARITOSH SHUKLA	SAFETY AND REGULATORY STATUS OF COSMETICS, FOOD AND DRUG ADDITIVES EXEMPT FROM CERTIFICATION
341	ANANT KUMAR JAIN	SRINIVAS APPARI	APPLICATION OF POROUS MATRICES AS CATALYSTS IN PETRO-REFINING & HYDROCARBON-CRACKING
342	BUDDHAVARAPU SPANDANA	KAMLESH KUMAR	GEOSYNTHETICS AND ITS APPLICATIONS
343	RIJUL DUTTA	DIPENDU BHUNIA	ANALYSIS OF VARIOUS TYPES OF TRUSSES
344	HARSH SHARMA	G MUTHUKUMAR	UNDERSTANDING BRIDGES AND ITS VARIOUS COMPONENTS ALONG WITH THEIR FUNCTION;ALSO TO UNDERSTAND THE DESIGN ASPECT OF BRIDGES
345	HARSH SHARMA	BIBHAS RANJAN SARKAR	DETAILED ANALYSIS OF GEOMEMBRANES AND THEIR DESIGNING
346	MAHAJAN YASH PRASHANT	SUBIT KUMAR SAHA	SURFACTANT INDUCED REMOVAL OF HEAVY METAL IONS FROM WASTE WATER.
347	PRANAV RAJ PRAKASH	B.A. BOTRE	STUDY OF ADVANCES IN EMBEDDED SYSTEMS, SMART ELECTRONIC INTERFACES AND CONTROL SYSTEMS FOR SYSTEM DESIGN.
348	RUSHIL HANDA	ABHIJIT R ASATI	PERCEPTION ROBOT FOR SICK AND ELDERLY
349	SHIVAM ARORA	SUBIT KUMAR SAHA	FLUORESCENCE BASED DETECTION OF HEAVY METAL IONS IN WASTE WATER
350	KARTIK GANDHAM ABHISHEK	BIBHAS RANJAN SARKAR	STUDY AND COMPARISON OF DIFFERENT TYPES OF ANODE CATALYSTS AND MEMBRANES USED IN AN ETHANOL FUEL CELL.
351	KARTIK GANDHAM ABHISHEK	MANOJ SONI	STUDY OF ETHANOL AS AN ALTERNATIVE FUEL FOR TRADITIONAL IC ENGINES
352	ADITYA CHAUHAN	SAUMI RAY	APPLICATIONS OF ZEOLITES IN AQUACULTURE
353	AISHWARYA SHARMA	RAVI INDER SINGH	HOMOGENEOUS CHARGE COMPRESSION IGNITION ENGINE (HCCI) DESIGN CONSIDERATIONS AND ANALYSIS
354	AVISH VORA	SAUMI RAY	CHEMICAL PREPARATION AND APPLICATIONS OF GRAPHENE NANOMATERIAL
355	KARTHIK MADDIPOTI	BIBHAS RANJAN SARKAR	TO STUDY AND UNDERSTAND THE SYNTHESIS OF 5-HYDROXYMETHYLFURFURAL
356	ANSHUL CHHABRA	RAJIV KUMAR	PLANAR GRAPH DRAWINGS.
357	SRAJIT SAKHUJA	K S RAJU	DEVELOPMENT OF A CUSTOM DRIVER SOFTWARE USING LINARO LINUX.
358	ABHISHEK SHARMA	JL RAHEJA	TO IDENTIFY WBC AND RBC IN BLOOD CELLS THROUGH IMAGE PROCESSING AND NEURAL NETWORK.
359	GUPTA HARSHIL ASHWANI	ANKUSH JAHAGIRDAR	CONTROL SYSTEM DESIGN AND ITS MATHEMATICAL MODELLING
360	TARUN RAGHAV	B.A. BOTRE	STUDY OF ADVANCES IN EMBEDDED SYSTEMS, SMART ELECTRONIC INTERFACES AND CONTROL SYSTEMS FOR SYSTEM DESIGN.
361	DAULAT DAGA	BIBHAS RANJAN SARKAR	TO STUDY THE CHEMISTRY OF CATALYTIC CONVERTER IN AUTOMOBILES.
362	PREKSHA AGRAWAL	SRIKANTA ROUTROY	STUDY OF IMPLEMENTATION ISSUES IN ERP

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<b>Design Project</b>			
363	ISHA YADAV	PARITOSH SHUKLA	STUDY OF THE MOLECULES WHICH ARE USED AS PROBES OF THE CELL CYCLE AND HAVE POTENTIAL CANCER THERAPEUTIC VALUE.
364	BHANU PHANI KRISHNA KODURU	RAVI KANT MITTAL	ECONOMICAL DESIGN OF SHALLOW AND DEEP FOUNDATION
365	BARGAJE INDRAYANI JITENDRA	PRASANTA KUMAR SAHU	REVIEW OF PUBLIC TRANSPORTATION POLICIES IN INDIA
366	SUNNY PARUTHI	KRISHNA MUNIYOOR	EFFECT OF PORTS ON INDIAN ECONOMY AND TRADE
367	HARDIK GUPTA	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
368	HARDIK GUPTA	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
369	YASH TYAGI	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
370	YASH TYAGI	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
371	JAIN PRACHI YOGESH	NV MURALIDHAR RAO	IMPACT OF POPULATION AND GDP ON CARBON FOOTPRINT OF DEVELOPING AND DEVELOPED COUNTRIES
372	AAYUSH GUPTA	ANKUSH JAHAGIRDAR	STUDY OF GAS SENSOR FOR TOXIC GASES
373	VINAYAK AWASTHI	A K GIRI	MUTUAL FUNDS INDUSTRY IN INDIA.
374	ANUBHAV GUPTA	SANJAY SINGH	MUTUAL INFORMATION BASED FEATURE SELECTION ALGORITHMS
375	ANGAD SINGH DHAMIJA	A K GIRI	ANALYSIS OF MONETARY POLICY TRANSMISSION IN INDIA.
376	SHUBHAM KHANDELWAL	GEETILAXMI MOHAPATRA	WOMEN HUMAN CAPITAL AND ECONOMIC GROWTH: EMPIRICAL DATA FOR INDIAN STATES.
377	TANAYA JHA	SOM SUKLA MAITI	WEB BROWSING USING BCI
378	KUNAL TODI	NV MURALIDHAR RAO	RISK FACTORS IN BACKBONE INDUSTRIES: EVIDENCE FROM INDIAN ECONOMY
379	SHUBHI RASTOGI	KRISHNA MUNIYOOR	RELATIONSHIP BETWEEN EXCHANGE RATE AND CAPITAL MOBILITY IN EMERGING ECONOMIES.
380	AKSHAY R	RAJAN PANDEY	EMPIRICAL ANALYSIS OF VOLATILITY FORECASTING MODELS ON INDIAN STOCK MARKET
381	SURBHI DANG	K SOLOMON RAJU	DESIGN AND DEVELOPMENT OF DRIVER SOFTWARE FOR CUSTOM HARDWARE IN LINARO LINUX
382	SURBHI DANG	NV MURALIDHAR RAO	IMPACT OF CAPITAL INFLOWS ON ECONOMIC GROWTH OF INDIA
383	NIPUN JAIN	TANU SHUKLA	DETERMINANTS OF CONTEMPORARY CONSUMER BEHAVIOUR
384	ANIRUDH AGARWAL	A K GIRI	OPTION PRICING USING MACHINE LEARNING TECHNIQUES
385	NEEL KASAT	A K GIRI	RELATION BETWEEN PUBLIC DEBT AND ECONOMIC GROWTH: AN EMPIRICAL ANALYSIS
386	AKSHITH REDDY SADDI	RAJAN PANDEY	AN OVERVIEW OF THE DEBT RESTRUCTURING MECHANISM IN INDIA AND ITS EFFECTS ON THE STOCK PRICES
387	SIMRAN KAUR	A K GIRI	ROLE OF MONETARY POLICY VARIABLES IN STOCK MARKET PERFORMANCE

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<b>Design Project</b>			
388	VAIBHAV SHRIMAL	A K GIRI	EFFECT OF MACROECONOMIC SHOCKS ON AN ECONOMY- A CASE OF INDIAN ECONOMY
389	SHASHWAT RAWAT	PANKAJ VYAS	SOFTWARE RELIABILITY ESTIMATION OF OBJECT ORIENTED SOFTWARE SYSTEMS.
390	BRAJESH SHISHIR	PANKAJ VYAS	SOFTWARE SAFETY ANALYSIS TECHNIQUES
391	ADITI	NV MURALIDHAR RAO	COST-BENEFIT ANALYSIS OF RAILWAY BUDGETS IN INDIA
392	ABHISHEK DIXIT	ANIL KUMAR SAINI	STUDY OF MACHINE LEARNING ALGORITHMS AND APPLICATION IN DETECTION OF MALICIOUS URL.
393	TATAVARTHI ARCHANA	PRAVEEN GOYAL	EVALUATING THE MEDIATING ROLE OF TRUST IN CSR AND CUSTOMER SATISFACTION RELATIONSHIP.
394	TATAVARTHI ARCHANA	K SOLOMON RAJU	STUDY OF VARIOUS INTERFACES FOR HIGH-SPEED VISION SYSTEM.
395	TANYA SRIVASTAVA	NV MURALIDHAR RAO	SPATIAL INFRASTRUCTURE AND PRODUCTIVITY IN INDIA
396	KSHITIJ PRAFULL PANSE	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
397	KSHITIJ PRAFULL PANSE	SANJAY SINGH	CASCADE SUPPORT VECTOR MACHINE CLASSIFICATION
398	GAURAV AAKAR	A K GIRI	RELATION BETWEEN CORRUPTION AND ECONOMIC GROWTH OF INDIA
399	GAURAV AAKAR	K S RAJU	STUDY OF VARIOUS INTERFACES FOR HIGH SPEED VISION SYSTEM.
400	ABHISUMAT BARTHWAL	K SOLOMON RAJU	STUDY OF VARIOUS INTERFACES FOR HIGH SPEED VISION SYSTEM
401	SHONHIT TREHAN	B.A. BOTRE	ADVANCE TECHNIQUE OF EMBEDDED SYSTEM AND MACHINE LEARNING IN DEVELOPMENT OF ELECTRONIC NOS
402	VIGNESH V S	GEETILAXMI MOHAPATRA	INFRASTRUCTURE, ECONOMIC GROWTH AND INDUSTRY EXPANSION
403	VIGNESH V S	ANKUSH JAHAGIRDAR	STUDY OF GAS SENSORS FOR TOXIC GASES
404	ARCHIT CHAUDHARY	VINITA TIWARI	STUDY OF STATISTICAL AND MULTI-VARIAD DATA ANALYSIS TECHNIQUES FOR GAS AND HUMIDITY SENSORS.
405	KETUL SANDIP MATHURIA	TANU SHUKLA	EMPIRICAL STUDY OF POLITICAL CAMPAIGN
406	JANESH SINGLA	TANU SHUKLA	EMPIRICAL STUDY OF POLITICAL CAMPAIGNS
407	AKSHAY R KULKARNI	TANU SHUKLA	DETERMINANTS OF CONTEMPORARY CONSUMER BEHAVIOR.
408	DEEVITA AGARWAL	A K GIRI	ROLE OF MONETARY POLICY VARIABLES IN STOCK MARKET PERFORMANCE
409	TANUJ ARORA	ASHISH TIWARI	FLOW OF NEWTONIAN AND NON NEWTONIAN FLUIDS THROUGH POROUS CYLINDRICAL TUBES
410	PARUL BEHL	SATYENDRA KR SHARMA	TO STUDY THE KEY RISK INDICATORS OF A PARTICULAR FIRM.
411	PARUL BEHL	BHUPENDRA K SHARMA	MATHEMATICAL MODELLING OF MHD MIXED CONVECTION FLOW FOR NANOFLUID PARTICLES.
412	AAYUSH GUPTA	ASHISH TIWARI	FLOW OF CASSON FLUID THROUGH STENOTIC ARTERIES.
413	SNEHA	KAMLESH KUMAR	EARTHQUAKE ENGINEERING
414	KUNAL BANSAL	AMIT GOEL	HIGHWAY DESIGN

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
415	KUNAL BANSAL	SUMANTA PASARI	IMAGE PROCESSING
416	SHIVANI DEEPAK CHOUDHARY	NITIN CHATURVEDI	INTERFACING PERIPHERALS WITH 8051 MICRO CONTROLLERS
417	LAKSHIT AGARWAL	RAJIV KUMAR	HAMILTONIAN CYCLE AND MAXIMUM FLOW IN PLANAR GRAPHS
418	SHAMBHAVI VERMA	NITIN CHATURVEDI	INTERFACING PERIPHERALS WITH 8051 MICROCONTROLLER
419	DEVRAJ PALIT	RAJIV KUMAR	HAMILTONIAN CYCLES AND MAXIMUM FLOW IN PLANAR GRAPHS
420	NIKITA BISHT	SANGITA YADAV	STUDY OF INTEGRAL TRANSFORMS AND ITS APPLICATIONS
421	ATHARV GUPTA	JITENDER KUMAR	INTRODUCTION TO GALOIS THEORY
422	SADHANA SRINIVASAN	SHYAM SUNDAR YADAV	STUDY OF FLOWS THROUGH CONVERGENT-DIVERGENT NOZZLE
423	SADHANA SRINIVASAN	ANIL JINDAL	MACHINE LEARNING FOR MODELING ENGINE EMISSION AND PERFORMANCE
424	KARULKAR VARUN ALOK	DEVENDRA KUMAR	B-SPLINE COLLOCATION METHOD FOR P.D.ES
425	AKASH PANIGRAHI	BHUPENDRA K SHARMA	MATHEMATICAL MODELLING OF THE MAGNETO HYDRO DYNAMICS OF A MICROPOLAR FLUID.
426	PRANJAL MITTAL	ASHISH TIWARI	PERISTALTIC FLOW THROUGH CYLINDRICAL TUBES.
427	KEESARA SAI RAGHAV REDDY	ANIL KUMAR SAINI	STUDY OF MACHINE LEARNING ALGORITHMS AND APPLICATION IN DETECTION OF MALICIOUS URLS.
428	KEESARA SAI RAGHAV REDDY	CHANDRA SHEKHAR	STUDY OF SOME NATURE-INSPIRED OPTIMIZATION ALGORITHMS
429	KEESARA SAI RAGHAV REDDY	CHANDRA SHEKHAR	STUDY OF SOME NATURE-INSPIRED OPTIMIZATION ALGORITHMS
430	KETAN CHANDAK	RAJIV KUMAR	CLUSTERING ALGORITHMS AND ANALYSIS.
431	PRYANSHU ARORA	RAJIV KUMAR	PLANAR GRAPH DRAWINGS
432	THAKKAR VANDIT ARVINDBHAI	ANIL KUMAR SAINI	STUDY OF MACHINE LEARNING ALGORITHMS AND APPLICATION IN DETECTION OF MALICIOUS URLS
433	THAKKAR VANDIT ARVINDBHAI	CHANDRA SHEKHAR	METAHEURISTIC APPROACH FOR SOLVING OPTIMIZATION PROBLEMS
434	THAKKAR VANDIT ARVINDBHAI	CHANDRA SHEKHAR	METAHEURISTIC APPROACH FOR SOLVING OPTIMIZATION PROBLEMS
435	ARJUN DABRA	RAJIV KUMAR	PLANAR GRAPH DRAWINGS
436	AKUL SAREEN	TRILOK MATHUR	TOPOLOGICAL DATA ANALYSIS
437	DHRUV RASTOGI	SOM SUKLA MAITI	WEB-BROWSING USING BCI
438	VISHESH SHARMA	ABHIJIT R ASATI	AUTONOMOUS UNDERWATER VEHICLE.
439	VISHESH SHARMA	RAJIV KUMAR	SHORTEST PATH AND MATCHING PROBLEMS IN GRAPH THEORY.
440	SHUBHAM SHARMA	TRILOK MATHUR	TOPOLOGICAL DATA ANANLYSIS
441	CHOKSI NEEL DIPESH	VINOD KUMAR CHAUBEY	NANOELECTRONIC DEVICES SIMULATION AND STUDY OF TRANSPORT THEORY IN SUCH DEVICES.
442	CHOKSI NEEL DIPESH	AMIT KUMAR VERMA	STUDY OF WAVELET TYPES AND BASIC APPLICATIONS.
443	SHUBHAM KUMAR	RAJIV KUMAR	CLUSTERING ALGORITHMS AND ANALYSIS.
444	KARAN GILL	ABHIJIT R ASATI	AUTONOMOUS UNDERWATER VEHICLE.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
445	KARAN GILL	RAJIV KUMAR	SHORTEST PATH AND MATCHING PROBLEMS IN GRAPH THEORY
446	SALIL BHANDARI	ABHIJIT R ASATI	PERCEPTION ROBOT FOR SICK AND ELDERLY
447	SALIL BHANDARI	JITENDER KUMAR	INTRODUCTION TO GALOIS THEORY
448	POOJA SONI	JITENDER KUMAR	INTRODUCTION TO SEMIGROUPS AND ITS APPLICATIONS.
449	POOJA SONI	JITENDER KUMAR	INTRODUCTION TO SEMIGROUPS AND ITS APPLICATIONS.
450	KUMAR NIMITT	J N BANDOPADHYAY	CLASSICAL PERTURBATION THEORY
451	MALVIKA PALIWAL	SRIJATA DEY	STUDY OF ADSORBATES ON SUBSTRATES WITH STM
452	RAHUL NARULA	SRIJATA DEY	PHOTO ASSISTED STM.
453	APOORV KHANUJA	DIPENDU BHUNIA	COMPARATIVE STUDY OF A MULTI-STOREY BUILDING CONSIDERING DIFFERENT TYPES OF DAMPERS AND BASE ISOLATORS.
454	UDIT PRAKASH	AMIT GOEL	HIGHWAY DESIGN USING MX ROAD AND AUTOCAD CIVIL 360
455	PRADEEP KUMAR	RAKESH CHOUBISA	STUDY OF PHOTON ATOM INTERACTION
456	VIDYA SAGAR	ANUPAM SINGHAL	TO STUDY THE DIFFERENT METHODS FOR DOMESTIC WASTE WATER TREATMENT
457	ANIRUDH VENU	TAPOMOY G SARKAR	STUDY OF SU(2) AND SO(3) GROUPS AND ITS APPLICATIONS IN QUANTUM MECHANICS AND OTHER ASPECTS OF PHYSICS.
458	PIYUSH SHARDA	BISWANATH LAYEK	SPECIAL TOPICS IN GENERAL RELATIVITY
459	PAWAN SARAN	BISWANATH LAYEK	SPECIAL TOPICS IN QUANTUM MECHANICS
460	VISHNU SHARMA R K	BISWANATH LAYEK	GAUGE THEORY AND THE STANDARD MODEL
461	AKANKSHA SONI	NILADRI SARKAR	STUDY OF NEGF METHOD FOR NANO-SCALE DEVICES.
462	SHUBHENDRA RAJENDRA SINGH	J N BANDOPADHYAY	QUANTUM COMPLEX NETWORKS
463	SREENIKETH.H	MADHUKAR MISHRA	STUDY ON QUANTUM HALL EFFECT
464	SHUBHI GARG	BISWANATH LAYEK	BASIC UNDERSTANDING OF COSMOLOGY
465	RISHABH AGARWAL	NILADRI SARKAR	IN DEPTH STUDY OF THE NEGF PROCEDURE FOR NANO-SCALE DEVICE SIMULATION.
466	PALASH TRIPATHI	SRIJATA DEY	PHOTO ASSISTED STM
467	PRAGATI RATAN	KULDIP SINGH SANGWAN	THE ENVIRONMENTAL IMPACTS OF RECYCLING LITHIUM-ION BATTERIES.
468	ANKUR MITTAL	D BANDYOPADHYAY	APPLICATION OF MICROWAVE IN DEFENSE.
469	ADITYA VIJAYKUMAR	BISWANATH LAYEK	GAUGE THEORY IN PARTICLE PHYSICS
470	KUNAL SAMAR	D BANDYOPADHYAY	APPLICATION OF MICROWAVE IN DEFENSE.
471	RAJSHIKHAR GUPTA	MANJULADEVI V	ELASTIC CONTINUUM MODEL FOR NEMATIC LIQUID CRYSTAL
472	DHAIRYA MITTAL	NILADRI SARKAR	APPLICATION OF NEGF FOR STUDYING GRAPHENE BASED DEVICES.
473	PRANESH ANUBHAV	MADHUKAR MISHRA	STUDY OF HYPERLOOP TRANSPORTATION
474	ARJAV NAG	NILADRI SARKAR	A SURVEY OF ABSTRACT AND FUNCTION SPACES
475	RAHUL SHARMA	TAPOMOY G SARKAR	COSMOLOGICAL PERTURBATION THEORY
476	NITYASA MISHRA	TAPOMOY G SARKAR	GEOMETRIC PHASES IN QUANTUM MECHANICS
477	MOHAMMAD SHERAJ	NAVIN SINGH	FIBRE-BUNDLE MODEL FOR POLYMER STRETCHING.

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<b>Design Project</b>			
478	RAGHAV KUMAR	NAVIN SINGH	THE FIBER BUNDLE MODEL AND FRACTURE MECHANISM
479	NAMITHA SURESH	RISHIKESH VAIDYA	STUDIES IN SPECIAL TOPICS IN QUANTUM MECHANICS
480	SOMA MISHRA	RISHIKESH VAIDYA	STUDIES IN SPECIAL TOPICS OF QUANTUM MECHANICS
481	TANIYA	SUSHILA RATHORE	TRANSGENDER PORTRAYAL AND REPRESENTATION IN FILM
482	HARSH KANODIA	RAJESH MEHROTRA	CHROMATIN REMODELING AND STRESS RESPONSE
483	KAUSTUBH TRIPATHI	ARVIND KUMAR SHARMA	TRANSPORT AND REACTION PROCESSES IN LOOP REACTORS
484	VINAYAK PATHAK	RAMAN SHARMA	TECHNICAL DIFFICULTIES ASSOCIATED WITH THE CARBON CAPTURE SEQUESTRATION
485	SHUBHANGI JASORIYA	ARVIND KUMAR SHARMA	INDUSTRIAL SAFETY AND HEALTH
486	SHASHWAT MISHRA	P CHATTOPADHYAY	FOAMS APPLIED FOR SOIL REMEDIATION
487	RAHUL ANIL KUMAR	SONAL MAZUMDER	RHEOLOGY IN MEDICINES
488	SHASHWAT SHIVAM JHA	ARVIND KUMAR SHARMA	EQUATIONS OF STATE: DEVELOPMENT AND APPLICATIONS
489	MURTAZA HAIDARY	RAMAN SHARMA	MEMBRANE BIO-REACTOR FOR WASTE WATER TREATMENT
490	VENKAT ASHRITH J.R	BAHURUDEEN A	DEVELOPMENT OF SUGARCANE BAGASSE ASH BLENDED PERVIOUS CONCRETE
491	ISHA SHYAM NARSARIA	AK SARKAR	LOCATION ALLOCATION OF FACILITIES
492	ANURAG AGRAWAL	G MUTHUKUMAR	LIQUEFIED SOIL PROPERTIES AND RELATED FAILURES
493	NIKHIL GARG	AMIT GOEL	EFFECTS OF CLIMATE CHANGE ON TRANSPORTATION AND POTENTIAL SOLUTIONS OF THE PROBLEM
494	DIVYANSHU SHANKAR	BAHURUDEEN A	METHODS FOR CHARACTERIZATION AND PARTICLE FITTING OF CONCRETE.
495	ABHISHEK KUMAR JHA	G MUTHUKUMAR	ANALYSIS OF FRP REINFORCED CONCRETE STRUCTURE.
496	PRATEEK ARORA	BAHURUDEEN A	REVIEW ON SOPHISTICATED CHARACTERIZATION TECHNIQUES
497	VIKAS GANG	AMIT GOEL	EMPLOYEMENT GENERATION IN ROAD SECTOR
498	YALAMANCHILI SRI GANESH	SHAMSHER B SINGH	DEPTH OF CARBONATION OF CONCRETE
499	RISHI BADOLA	G MUTHUKUMAR	SOIL STRUCTURE INTERACTION (MODELLING AND BEHAVIOUR)
500	ONKAR ASHISH	BAHURUDEEN A	DEVELOPMENT OF SUGARCANE BAGASSE ASH BLENDED PERVIOUS CONCRETE
501	VEDANT JAGDISH PATIL	SHAMSHER B SINGH	STRUCTURAL HEALTH MONITORING
502	VIVEK KUMAR	MANOJ KUMAR	STUDY OF GEOTHERMAL ENERGY POTENTIAL IN INDIA
503	ANMOL RATHI	SHIBANI K JHA	GROUND WATER CONTAMINATION
504	BHARAT KUMAR GANDHI	R. SRINIVAS	ANALYSIS OF WATER QUALITY OF MIDDLE STRETCH OF GANGA USING MULTI CRITERIA DECISION MAKING TOOLS.
505	AIRSON	SOMDATTA BHATTACHARYA	IMBIBING OF MORALS VALUES THROUGH PRIMARY EDUCATION
506	SATTI LIKIL REDDY	SHAMSHER B SINGH	DEPTH OF CARBONATION OF CONCRETE

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<b>Design Project</b>			
507	SHREYAS PRANAV	BAHURUDEEN A	A COMPREHENSIVE REVIEW ON THE USE OF SUGARCANE BAGASSE ASH AS A CONSTRUCTION MATERIAL.
508	SUBHAM THAKUR	DIPENDU BHUNIA	ARTIFICIAL NEURAL NETWORKING TO MEASURE COMPRESSIVE STRENGTH OF CONCRETE
509	TUSHAR GUPTA	AMIT GOEL	NANOTECHNOLOGY IN CONSTRUCTION
510	NISHIT JOSEPH	RAVI KANT MITTAL	ECONOMIC SOLUTIONS TO GEOTECHNICAL ENGINEERING
511	VAIBHAV JAIN	SHAMSHER B SINGH	STRUCTURAL HEALTH MONITORING
512	DEVANSHU SHRIVASTAVA	ANIL RAI	MUSIC AND SPIRITUALITY
513	HARSH SRIVASTAVA	BAHURUDEEN A	A COMPREHENSIVE REVIEW ON VARIOUS INTERNATIONAL STANDARDS, SPECIFICATIONS FOR QUALITY ASSURANCE OF CONCRETE INGREDIENTS.
514	AYUSH AMAN GUPTA	RAVI KANT MITTAL	RECENT DEVELOPMENTS IN SOIL IMPROVEMENT TECHNIQUES
515	HARSH	BAHURUDEEN A	SERVICE LIFE PREDICTION OF REINFORCED CONCRETE STRUCTURES
516	ANKUSH KUMAR	R. SRINIVAS	ANALYSING THE CO- RELATION BETWEEN THE FLOW AND QUALITY OF RIVER GANGA.
517	PIYUSH KUMAR	R. SRINIVAS	SUSTAINABLE MANAGEMENT OF GANGA RIVER BASIN.
518	AMAN BANSAL	R. SRINIVAS	ANALYZING THE IMPACT OF INDUSTRIAL WASTE WATER ON WATER QUALITY OF RIVER GANGA.
519	RICHA PRIYADARSHI	SHAMSHER B SINGH	STRUCTURAL HEALTH ASSESSMENT AND REHABILITATION
520	KABIL BHARGAVA	RAVI KANT MITTAL	ECONOMICAL SOLUTION IN FOUNDATION ENGINEERING
521	Tripti Tripathi	MAHESH ANGIRA	MATERIAL SELECTION OF RF MEMS DEVICES
522	SATYAM SINHA	SUREKHA BHANOT	HAND GESTURE RECOGNITION AND CLASSIFICATION USING MACHINE LEARNING TECHNIQUES AND CLASSIFIER COMBINATION
523	HEMA TEJA KRISHNA	KAVINDRA KANDPAL	TRANSPORT MODELLING OF OXIDE THIN FILM TRANSISTOR.
524	VISHV SHRAVA SHARMA	ARNAB HAZRA	STUDY OF THERMAL SENSORS AND MOTION SENSORS TO RECTIFY ITS CURRENT LIMITATIONS
525	GADODIA CHAITANYA PRAMOD	HARI OM BANSAL	STUDY OF WAVE ENERGY SYSTEMS AND THEIR EFFICIENT CONTROL.
526	RISHABH BHARDWAJ	PRADYUMN CHATURVEDI	STUDY OF FUEL CELL BASED POWER GENERATION
527	JETTI SAI GOWTAM CHANDRAHASA	PRAVEEN KUMAR A V	EQUIVALENT CIRCUIT MODELLING OF COMPACT MICROWAVE ANTENNAS
528	ANANT ANURAG	AVINASH GAUTAM	STUDY OF ALGORITHMS FOR MULTI-ROBOT TERRAIN EXPLORATION
529	AMEYA MAHESH DHAMANASKAR	ARNAB HAZRA	PERFORMANCE COMPARISON OF MULTIPLE NANO STRUCTURE BASED GAS/VAPOUR SENSOR DEVICE.
530	KUNAL GUPTA	SUREKHA BHANOT	APPLICATION OF NEURAL NETWORKS IN MOBILE ROBOT MOTION
531	GATTANI AKSHAY GOPALKRISHNA	PAWAN K AJMERA	MULTIMODAL BIOMETRICS
532	VAIBHAV GUPTA	PARIKSHIT K SINGH	RAINFALL PREDICTION USING WNN AND COMPUTATIONAL INTELLIGENCE

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
533	SHASHANK SHEKHAR	PRAVEEN KUMAR A V	ANTENNA DESIGN FOR ASTRONOMICAL APPLICATIONS
534	NIKHIL VERMA	JL RAHEJA	DETERMINING THE HEADCOUNT THROUGH A DOOR FOR REAL TIME APPLICATIONS USING IMAGE PROCESSING AND IOT TECHNIQUES
535	MAYANK PANDEY	DHEERENDRA SINGH	STUDY AND DEVELOPMENT OF IMAGE PROCESSING ALGORITHMS FOR CROWD MANAGEMENT.
536	MANASA PUDIPEDDI	MAHESH ANGIRA	STUDY OF RF MEMS TECHNOLOGY BASED RESONATORS
537	SHUBHAM SHANDILYA	HARI OM BANSAL	STUDY OF TIDAL ENERGY SYSTEM AND THEIR EFFICIENT CONTROL.
538	NIHAL M	SUREKHA BHANOT	AN A.I. AGENT LEARNS TO PLAY A GAME
539	AYESHA VERMANI	ASHISH MISHRA	STUDY OF PROCESSOR ARCHITECTURE FOR IMAGE PROCESSING.
540	SIDDHARTH K	SANJAY SINGH	COMPARATIVE ANALYSIS OF DIFFERENT FEATURE SELECTION METHODS FOR FACIAL EXPRESSION RECOGNITION
541	SAGAR SETH	PAWAN K AJMERA	COMPARATIVE ANALYSIS OF DIFFERENT FEATURE EXTRACTION METHODS FOR FACIAL EXPRESSION RECOGNITION
542	DHAMANE KIRAN SHANTINATH	HITESH DUTT MATHUR	APPLICATIONS OF MACHINE LEARNING AND AI IN SMART GRID TECHNOLOGY
543	PRINCE GOYAL	SANJAY SINGH	FACIAL EXPRESSION RECOGNITION USING PCA, ICA, LDA AND THEIR VARIANTS WITH HMM CLASSIFIER.
544	ANANT RUNGTA	ANIL KUMAR	STUDY OF FLEXIBLE ELECTRONICS
545	RAHUL SINGLA	SUREKHA BHANOT	USE OF AI TO ASSIST ELDERS WITH COGNITIVE IMPAIRMENT.
546	VIMA GUPTA	ASHISH MISHRA	STUDY OF PROCESSOR ARCHITECTURE FOR IMAGE PROCESSING
547	ADARSH KUMAR SADHUKHA	NIDHI CHATURVEDI	HEMT BASED CIRCUITS FOR HIGH POWER APPLICATION
548	AYUSH SAWARNI	HITESH DUTT MATHUR	APPLICATIONS OF MACHINE LEARNING AND AI TECHNIQUES IN SMART GRID
549	S.HARIHARAN	DEVESH SAMAIYA	COMPARISON OF THE REQUIREMENTS AND IMPLEMENTATION OF HIGH-SPEED VISION ALGORITHMS.
550	NIKHIL VINAY SHARMA	NAVNEET GUPTA	TRANSPORT PHYSICS AND DEVICE MODELLING OF POLYCRYSTALLINE ZNO BASED TFTS.
551	PATIL SANJANA ATUL	AJAY AGARWAL	EFFECT OF SURFACE PARAMETERS ON THE SENSITIVITY OF METAL OXIDES TO GASES
552	GARVIT AGRAWAL	HITESH DUTT MATHUR	DEMAND SIDE ENERGY STORAGE SYSTEM MANAGEMENT IN SMART GRID.
553	TORANE ADITYA SANJAY	HARSHAVARDHAN S	OPTICAL CHARACTER RECOGNITION AND FINGERPRINT IDENTIFICATION USING IMAGE PROCESSING.
554	MANDAR KHAPEKAR	AMIT GOEL	AUTONOMOUS NON-DESTRUCTIVE TESTING
555	KARTIKEY SHAHI	K SOLOMON RAJU	IMAGE PROCESSING USING VHDL/VERILOG
556	ANKUR SHARMA	NAVNEET GUPTA	SELECTION OF ELECTROMAGNETIC INTERFERENCE(EMI) SHIELDING MATERIALS USING COMPUTATIONAL MATERIAL TECHNOLOGY.



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<b>Design Project</b>			
557	ABHI JAIN	DHEERENDRA SINGH	STUDY AND DEVELOPMENT OF IMAGE PROCESSING ALGORITHMS FOR CROWD MANAGEMENT.
558	ABHISHEK GOEL	K SOLOMON RAJU	ALGORITHM OPTIMIZATION FOR HIGH SPEED VISION SYSTEM
559	AKHIL JAINI	PRAVEEN KUMAR A V	ANTENNA DESIGN FOR ASTRONOMICAL APPLICATIONS
560	ADITYA MANGLIK	SUREKHA BHANOT	IMPLEMENTATION OF NEURAL NETWORKS BASED SOLUTIONS FOR THE TRAVELLING SALESMAN PROBLEM.
561	TANMAY UTKARSH	NAVNEET GUPTA	ELECTROMAGNETIC MODELLING OF A THIN WIRE USING METHOD OF MOMENTS TECHNIQUE
562	SHUBHAM GUPTA	K SOLOMON RAJU	IMAGE PROCESSING USING VHDL/VERILOG
563	Ravish Kumar	MURALI PALLA	MODELING FAILURE IN MATERIALS
564	SANCHIT HIRA	JITENDRA S RATHORE	COMSOL SIMULATION OF PIEZOELECTRIC MICROSTRUCTURES UNDER LOW REYNOLDS NUMBER FLOW CONDITIONS
565	SUYASH KHARE	ANIL RAI	MUSIC AND SPIRITUALITY.
566	MINTOO RAI	KUMAR NEERAJ SACHDEV	A STUDY OF ARISTOTLES POLITICAL PHILOSOPHY
567	MOHANISH GOEL	MURALI PALLA	MODELING FAILURE IN MATERIALS
568	RITESH YADAV	KULDIP SINGH SANGWAN	STUDY OF REVERSE LOGISTICS
569	AMAN PRATIK	ANIL JINDAL	THERMODYNAMIC ANALYSIS OF MECHANICAL DEVICES
570	SHOMBIT DHAR	TANU SHUKLA	ANALYSIS OF ADVERTISEMENTS AND SOCIAL MESSAGES THROUGH SOCIAL MEDIA.
571	VARUN MAHESH	SHARAD SRIVASTAVA	ACOUSTIC EMISSION BEHAVIOUR OF HYBRID COMPOSITE LAMINATES
572	ROHIT SUBRAMANIAM	JITENDRA S RATHORE	STUDY OF STRESSES AND DEFLECTIONS OF A BRANCHED MICRO CANTILEVER
573	GAURAV SHIKHAR GANDHI	SANDEEP DHAR	HYBID LIFING METHODS FOR WIND TURBINES
574	SARTHAK BISHT	RAJNEESH CHOUBISA	TO STUDY THE OVERT BEHAVIOR SHOWN DURING SELF-DIRECTED E-LEARNING.
575	SHASHVAT SANGWAN	RAVI INDER SINGH	ENHANCEMENT OF EFFICIENCY FOR IC ENGINES
576	KONDAKINDHI BHARGAV REDDY	M S DASGUPTA	FATIGUE STRESS ANALYSIS AND LIFE PREDICTION OF A FEW POPULAR CAR WHEEL DESIGNS UNDER RADIAL LOADS IN ANSYS USING FINITE ELEMENT ANALYSIS(FEA)
577	ANIKET AJAY LAD	MANOJ SONI	DEMAND SIDE MANAGEMENT ASSESSMENT FOR ROOFTOP SOLAR
578	SHUKLA YASH SANDEEP	AMIT GOEL	AUTONOMOUS NON-DESTRUCTIVE TESTING.
579	VASU SHARMA	SANDEEP DHAR	HYBRID LIFING METHODS FOR WIND TURBINES
580	ADITYA RELHAN	RAVI INDER SINGH	EFFECT OF HEAT TRANSFER ON IC ENGINE WALLS
581	B SAICHARAN	P SRINIVASAN	ANALYSIS OF PISTON AND CYLINDER TEMPERATURE DISTRIBUTION TEMPERATURE IN AN INTERNAL COMBUSTION ENGINE
582	BAJI MARTHI	RAVI INDER SINGH	UNDERHOOD FLOW SIMULATION OF AN AUTOMOBILE

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<b>Design Project</b>			
583	VISHWESH RAVI SHRIMALI	JITENDRA S RATHORE	MATLAB SIMULATION OF BEAM MADE OF PIEZOELECTRIC MICROSTRUCTURES UNDER LOW REYNOLDS NUMBER FLOW CONDITIONS.
584	HARSH SHARMA	MANOJ SONI	DEMAND SIDE MANAGEMENT WITH VARIOUS ENERGY EFFICIENT OPTIONS
585	SIDDHARTH	SACHIN U BELGAMWAR	APPLICATION OF CNT REINFORCED COMPOSITES
586	VARUN TRIPATHI	JITENDRA S RATHORE	STUDY OF PIEZOELECTRIC ENERGY HARVESTING
587	SUGUN TEJ INAMPUDI	RAVI INDER SINGH	UNDERHOOD FLOW SIMULATION OF AN AUTOMOBILE
588	NAMBURI SAI SIDHARTHA	SOMDATTA BHATTACHARYA	CAN SCHOOLS PRODUCE MORAL UPRIGHTNESS: UNDERSTANDING THE PRESENT SCHOOL EDUCATION SYSTEM IN INDIA.
589	VARUN KAUSHIK	ANIL JINDAL	THERMODYNAMIC ANALYSIS OF MECHANICAL DEVICES
590	VIVEK SHARMA	RAJEEV TALIYAN	TO STUDY THE ANIMAL MODELS FOR SCREENING OF ANTI-HYPERTENSIVE AGENTS.
591	ARJUN MAHENDRU	ARCHANA K K	MARKETING ANALYSIS OF TEMOZOLOMIDE
592	SATYANARAYAN PATEL	ATISH T R PAUL	PATENT ANALYSIS OF ANTI-OBESITY DRUGS.
593	NINA JAIN	DEEPAK CHITKARA	NANOCARRIER BASED SYSTEMS FOR DELIVERING SIRNA/MIRNA FOR TREATMENT OF CANCER.
594	MOHIT GUPTA	ARCHANA K K	MARKETING ANALYSIS OF ABRAXANE
595	VIVEK CHOURASIA	ANIRUDDHA ROY	NANOPARTICLE ASSISTED BRAIN TARGETED DRUG DELIVERY
596	AYUSH RATHORE	ARCHANA K K	SMART MATERIALS FOR DRUG DELIVERY SYSTEM
597	PRIYANSHI BATRA	ANIL JINDAL	PHYSICOCHEMICAL CHARACTERIZATION OF SOLID LIQUID NANOPARTICLES
598	ABHISHEK BANSAL	DEEPAK CHITKARA	CANCER NANO THERAPEUTICS FROM BENCH TO BEDSIDE
599	AISHWARYA NIGAM	ANIL JINDAL	APPLICATION OF QUALITY BY DESIGN APPROACH IN DEVELOPMENT OF NANOPARTICLES
600	VAIBHAV	ANIRUDDHA ROY	TO STUDY COMBINATION THERAPY OF CANCER.
601	KIRTI SINGH	RAJEEV TALIYAN	MOLECULAR MECHANISM OF HEPATIC ISCHEMIA REPERFUSION INJURY.
602	PRANAV PRAKASH	ANIRUDDHA ROY	FACTORS CONTROLLING THE PHARMACOKINETICS, BIODISTRIBUTION AND INTRA TUMORAL PENETRATION OF NANOPARTICLE
603	NIKITA SRIVASTAVA	ANIL GAIKWAD	STUDY OF ULCERATIVE COLITIS
604	NANDINI KHANNA	RAJEEV TALIYAN	TO STUDY ADVANCED PHARMACOLOGICAL APPROACHES RELATED TO CARDIOVASCULAR DISEASES (HEART TRANSPLANT AND ANGIOPLASTY)
605	ADITYA DESWAL	ANIRUDDHA ROY	NANOPARTICLE MEDIATED GENE THERAPY OF CANCER
606	TASKAR SHIVANI SHISHIR	SUNIL KUMAR DUBEY	TECHNOLOGY BASED SOLUTIONS TO SOME OF THE CHALLENGES FACED BY THE SOCIETY.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
607	AKASH SINGH	RAJEEV TALIYAN	EFFECT OF CURCUMIN(CURCUMINOID MIXTURE) ON ALZHEIMERS DISEASE
608	KAUSHIK RAMESH IYENGAR	ANIRUDDHA ROY	NANOPARTICLE THERAPY FOR ALLERGY AND INFLAMMATORY DISEASES
609	DEEKSHA KHANNA	DEEPAK CHITKARA	NANOTECHNOLOGIES BASED APPROACHES FOR TREATMENT OF PSORIASIS
610	RITUPARNA PRAHARAJ	SUNIL KUMAR DUBEY	PRINCIPLES AND APPLICATIONS OF LIQUID CHROMATOGRAPHY AND MASS SPECTROMETRY
611	RAHUL UDHWANI	RAJEEV TALIYAN	TO STUDY THE EFFECT OF HYPERTENSION DURING PREGNANCY AND ITS MANAGEMENT..
612	NIVYA SHARMA	RAJEEV TALIYAN	TO STUDY THE LINK BETWEEN TYPE 2 DIABETES MELLITUS AND BRAIN ISCHEMIC STROKE.
613	NIVYA SHARMA	DEEPAK CHITKARA	COLON DRUG DELIVERY SYSTEMS
614	RASHI PANSARI	SUNDARESAN RAMAN	INTEGRATING LIGAND BASED DRUG DESIGN AND STRUCTURE BASED DRUG DESIGN USING COMPUTER GRAPHICS.
615	MEGHNA GOYAL	DEEPAK CHITKARA	NANO PARTICULATE PLATFORMS FOR DELIVERY OF ANTIRETROVIRAL DRUGS.
616	ROHAN AGARWAL	RAJEEV TALIYAN	TO STUDY THE PATHOGENESIS AND MANAGEMENT OF TRAUMATIC BRAIN INJURY
617	KUSH GUPTA	SUNIL KUMAR DUBEY	NETWORK ANALYSIS AND DESIGN OF SUPPLY CHAIN WITH IMPORT-EXPORT POLICIES IN PHARMACEUTICALS.
618	AYUSH VIJAYVARGIA	S MURUGESAN	BACTERIAL DRUG RESISTANCE.
619	EESHA DINKAR	ANIL GAIKWAD	DIABETES : A NEUROLOGICAL PERSPECTIVE
620	ANANNYA SIRCAR	ANIL GAIKWAD	ANALYSIS OF EPIGENETIC CHANGES INDUCED BY COSMETICS
621	Koteru Asha	SAILAJA NANDIGAMA	GENETIC MODIFICATIONS OF SEEDS USING BIOTECHNOLOGY AND THEIR EFFECT ON BIODIVERSITY
622	Rupasmita Devi	SOM SUKLA MAITI	CLASSIFICATION OF EEG SIGNALS OBTAINED THROUGH BCI(BRAIN COMPUTER INTERFACE).
623	Muskaan Verma	PANKAJ VYAS	STUDY OF APPLICATIONS OF SOFTWARE FMEA(FAILURE MODES AND EFFECT ANALYSIS)APPROACHES FOR THE DIFFERENT ARCHITECTURAL LANGUAGES.
624	Muskaan Verma	PANKAJ VYAS	STUDY OF THE APPLICATIONS OF SOFTWARE FMEA(FAILURE MODES AND ERROR ANALYSIS)APPROACHES FOR DIFFERENT ARCHITECTURAL LANGUAGES
625	Supriya Agarwal	SHAN BALASUBRAMANIAM	AUTOMATIC ANSWER CHECKING APPLICATION
626	KADIYALA SAI MANOJ	ANIL KUMAR SAINI	BANK TELEMARKEETING SUCCESS PREDICTION.
627	AASISH RAMPALLI	ANIL KUMAR SAINI	BANK TELEMARKEETING SUCCESS PREDICTION
628	SHIV KUMAR K	K S RAJU	DEVICE DRIVER SOFTWARE FOR SHM EMBEDDED SYSTEMS USING LINARO LINUX.
629	MALLIKARJUN SWAMY	LAVIKA GOEL	AN ANALYTICAL STUDY OF NATURE INSPIRED COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR GEO-SPATIAL FEATURE EXTRACTION

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
630	SHIVAM AGARWAL	K S RAJU	DEVICE DRIVER SOFTWARE FOR SHM EMBEDDED SYSTEM USING LINARO LINUX.
631	GUNJAN AGGARWAL	SANTANU CHAUDHARY	OBJECT RECOGNITION USING SEMI-SUPERVISED LEARNING
632	MAAZ MOMBASAWALA	VIRENDRA S SHEKHAWAT	DATA DISSEMINATION TECHNIQUES IN DELAY TOLERANT VEHICULAR NETWORKS USING MOBILITY PATTERNS.
633	SHIVAM GUPTA	VIRENDRA S SHEKHAWAT	DATA SHARING APPLICATION DESIGN FOR OPPORTUNISTIC NETWORKS.
634	RAHUL BANERJI	DHIRAJ	DISPARITY MAP GENERATION FROM STEREO SCENES
635	TUSHAR AGARWAL	JL RAHEJA	DETERMINING THE HEADCOUNT IN CROWDED PLACES FOR REAL TIME APPLICATIONS USING IOT
636	DIVAKAR VERMA	H.D.SHARMA	AUTOMATED MICRO MOTION CONTROL USING ARTIFICIAL INTELLIGENCE TECHNIQUES
637	PRANAV MISRA	ANANTHA KRISHNA CHINTANPALLI	EFFECT OF HEARING LOSS ON VOWEL IDENTIFICATION IN NOISE
638	RISHABH JOSHI	RAHUL BANERJEE	INVESTIGATIONS INTO ADAPTIVE LEARNING AND INTRA-BSN ROUTING ASPECTS OF BITS LIFEGUARD WEARABLE COMPUTING SYSTEM
639	NEERAJ VARSHNEY	DHIRAJ	DISPARITY MAP GENERATION FROM STEREO SCENES
640	AKANKSHA DARA	H.D.SHARMA	AUTOMATED MICRO MOTION CONTROL USING ARTIFICIAL INTELLIGENCE TECHNIQUES.
641	AMEESHA MITTAL	RAHUL BANERJEE	INVESTIGATION OF IMPACT OF OPEN SOURCE SOUTH BOUND APIS VS PROPRIETARY SOUTH BOUND APIS ON CONTROLLER SWITCH LINK.
642	M SHARAT CHANDRA	RAHUL BANERJEE	INVESTIGATION OF COEXISTENCE OF OPEN-SOURCE AND PROPRIETARY CONTROLLERS IN MULTI-DOMAIN SDN
643	VIDHI JAIN	RAHUL BANERJEE	INVESTIGATIONS INTO COEXISTENCE OF OPEN SOURCE AND PROPRIETARY SWITCHES IN SDN NETWORK.
644	ARPIT PANDA	K SOLOMON RAJU	DEVELOPMENT OF SIGNAL PROCESSING MODULES USING PYTHON
645	CHILAKA RAMAKRISHNA	ATANENDU SEKHAR MANDAL	MATHEMATICAL MODELING FOR THE DEVELOPMENT OF RETINOTOPIC MAPS FOR EDGE DETECTION.
646	ANUMULA HARISH REDDY	ANIL KUMAR SAINI	SYSTEM FOR PREDICTING THE POPULARITY OF ONLINE NEWS.
647	GARLAPATI SRI VENKATA NAGA ANOOP	ANIL KUMAR SAINI	SYSTEM FOR PREDICTING THE POPULARITY OF ONLINE NEWS.
648	DIVYANSH GUPTA	SUNITA SINGHAL	RESOURCE MANAGEMENT IN CLOUD COMPUTING
649	A ESHWAR RAM	ASHISH RUNTHALA	HEURISTICALLY SELECTING THE BEST SET OF CORRECT TEMPLATES AMONG A PRE-SCREENED RELIABLE SET TO CONSTRUCT AN ACCURATE TARGET STRUCTURE OF A PROTEIN
650	A ESHWAR RAM	VIRENDRA S SHEKHAWAT	DATA DISSEMINATION IN VEHICULAR NETWORKS
651	SURPANI HARI VENKATA KRISHNA	ATANENDU SEKHAR MANDAL	MATHEMATICAL MODELING FOR THE DEVELOPMENT OF RETINOTOPIC MAPS FOR EDGE DETECTION.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
652	RISHABH MITTAR	AVINASH GAUTAM	STUDY AND IMPLEMENTATION OF SOME MULTI ROBOT SLAM ALGORITHM(S)
653	SHUBHAM RAHUL NAGARIA	VIRENDRA S SHEKHAWAT	MESSAGE COMMUNICATION APPLICATION DEVELOPMENT USING WI-FI DIRECT.
654	SHREYA CHATURVEDI	A. S. MANDAL	COGNITIVE ARCHITECTURE FOR SENSORY PROCESSING
655	DIVANSHU AGGARWAL	SANTANU CHAUDHARY	OBJECT RECOGNITION USING SEMI-SUPERVISED LEARNING.
656	PULKIT GUPTA	ASHISH RUNTHALA	UNDERSTANDING PROTEIN SEQUENCE ALIGNMENT THROUGH THEIR STRUCTURAL INFORMATION
657	RAGHAV MANTRI	LAVIKA GOEL	AN ANALYTICAL STUDY OF NATURE INSPIRED COMPUTATIONAL INTELLIGENCE TECHNIQUES FOR GEO-SPATIAL FEATURE EXTRACTION
658	RAGHAV BHARTIA	YASHVARDHAN SHARMA	SARCASM DETECTION FOR SENTIMENT ANALYSIS USING DEEP LEARNING
659	HARSHITA PRABHA	AJAY AGARWAL	EFFECT OF SURFACE PARAMETER ON THE SENSITIVITY OF METAL OXIDES TO GASES
660	CHERAL KHANDEDIYA	TANU SHUKLA	EDUCATION FOR SCHOOL STUDENTS
661	HIMANSHU GUPTA	SANGEETA SHARMA	ANALYSIS OF THE ECOSYSTEM OF DIGITAL MARKETING
662	KANIKA GUPTA	SOM SUKLA MAITI	CLASSIFICATION OF EEG SIGNALS OBTAINED THROUGH BCI(BRAIN COMPUTER INTERFACE).
663	AKSHAY PRADIP MUNDRA	PAWAN K AJMERA	INTERACTIVE SCREEN FOR LAPTOP AND MOBILE
664	VISHAK REVIRAJ	RR MISHRA	STUDIES IN GENERAL THEORY OF RELATIVITY AND COSMOLOGY
665	VIVEK GUPTA	MAHESH ANGIRA	MATERIAL SELECTION FOR MEMES DEVICES.
666	HARSH NIJHAWAN	ARNAB HAZRA	NANO-MATERIAL BASED SOLID STATE VAPOUR SENSORS DEVICES FOR BREATH ANALYSIS.
667	SHIVANI MITTAL	SOM SUKLA MAITI	CLASSIFICATION OF EEG SIGNALS OBTAINED THROUGH BCI (BRAIN COMPUTER INTERFACE)
668	MAYUR MAHAJAN	K SOLOMON RAJU	IMAGE PROCESSING USING VHDL/VERILOG.
669	KUSH AGARWAL	HARI OM BANSAL	TUNING OF MAXIMUM POWER POINT TRACKING CONTROLLER
670	EKMUN SINGH GULATI	SANJAY SINGH	FACIAL EXPRESSION RECOGNITION USING PCA ICA LCA AND THEIR VARIANTS WITH HMM CLASSIFIER.
671	RISHABH SHARMA	SANGEETA SHARMA	ANALYSIS OF VARIOUS ASPECTS OF DIGITAL MARKETING
672	MANISHA JHA	A K GIRI	DEFICIT, INFLATION AND FINANCIAL DEVELOPMENT
673	MAGULURI YOGESWARA REDDY	HARSHAVARDHAN S	IMAGE COLOURIZATION
674	ADITYA UKARANDE	PRADYUMN CHATURVEDI	STUDY AND SIMULATION OF SWITCHING LOSSES IN POWER ELECTRONIC CONVERTERS
675	SRISHTI KHATRI	SUREKHA BHANOT	STUDY THE APPLICATIONS AND SCOPE OF ARTIFICIAL INTELLIGENCE TOOLS AND TECHNIQUES USED IN THE HEALTHCARE SECTOR
676	ESHAN TYAGI	DHEERENDRA SINGH	STUDY OF NATURE INSPIRED ARTIFICIAL INTELLIGENCE TECHNIQUES APPLICATION TO ENGINEERING

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
677	TARUN BEDI	PRADYUMN CHATURVEDI	STUDYING THE DIGITAL CONTROL TECHNIQUES FOR AC MOTORS.
678	NIKITA SAHASRABUDDHE	ABHIJIT R ASATI	EXPLORATION OF DATA STRUCTURES IN C++.
679	DIVYA ANAND SINHA	HARI OM BANSAL	POWER MANAGEMENT IN PLUG-IN HYBRID ELECTRIC VEHICLES USING FUZZY LOGIC
680	KAVISH BATHIJA	HITESH DUTT MATHUR	STUDY AND IMPLEMENTATION OF DEMAND SIDE MANAGEMENT IN PRESENT SCENARIO AND IN INDIAN CONTEXT
681	PRAKHAR SRIVASTAV	PARIKSHIT K SINGH	RAINFALL PREDICTION USING WNN AND COMPUTATIONAL INTELLIGENCE
682	ABHISHEK SAHU	AMIT GOEL	AUTONOMOUS NON-DESTRUCTIVE TESTING
683	DIVY SAXENA	DHEERENDRA SINGH	STUDY OF INFEASIBILITY DRIVEN EVOLUTIONARY ALGORITHM (IDEA) FOR ENGINEERING DESIGN OPTIMIZATION
684	SAGNIK MAJUMDER	K SOLOMON RAJU	DEVELOPMENT OF SIGNAL PROCESSING MODULES USING PYTHON
685	NAMAN SEHGAL	DEVESH SAMAIYA	COMPARISON OF THE REQUIREMENTS AND IMPLEMENTATION OF HIGH-SPEED VISION ALGORITHMS.
686	PRITHVI SANKAR	NEETU YADAV	E-COMMERCE BUSINESS MODELS: A COMPARATIVE ANALYSIS
687	MANISH AGRAWAL	DHEERENDRA SINGH	STUDY OF NATURE INSPIRED ARTIFICIAL TECHNIQUES AND ITS APPLICATION IN ENGINEERING
688	SHUBHAM GUPTA	SHASHIKANT SADISTAP	WASTE MANAGEMENT USING ELECTRONICS TECHNIQUES.
689	SIDDHARTH V IYER	VIRENDRA S SHEKHAWAT	DATA DISSEMINATION IN VEHICULAR NETWORKS
690	RAHUL AGRAWAL	HARSHAVARDHAN S	OBJECT RECOGNITION AND VEHICLE TRACKING IN A VIDEO.
691	TUSHAR SHARMA	SRINIVAS KOTA	METHODS OF SUSTAINABLE MANUFACTURING AND MEASURING SUSTAINABILITY
692	SAKSHAM BHATIA	SRINIVAS KOTA	SUSTAINABLE MANUFACTURING TECHNIQUES AND SUSTAINABLE SYSTEM DESIGN
693	PRANAV KUMAR NEMA	ANIL RAI	INDIAN MUSIC AND CULTURE
694	SACHIN KUMAR KIRAN	SRIKANTA ROUTROY	APPLICATION OF NON-TRADITIONAL OPTIMIZATION TECHNIQUES IN SUPPLY CHAIN INVENTORY PROBLEM.
695	SIDDHARTH RAJEEV KUMAR SINGHAL	SATYENDRA KR SHARMA	SCHEDULING OF FLIGHTS
696	NILESH NARANIWAL	SATYENDRA KR SHARMA	SCHEDULING OF FLIGHTS
697	DEVESH GOMBAR	SRIKANTA ROUTROY	APPLICATION OF NEURAL NETWORK FOR DEMAND FORECASTING.
698	RISHABH GUPTA	SRIKANTA ROUTROY	APPLICATION OF NON-TRADITIONAL OPTIMIZATION TECHNIQUES IN SUPPLY CHAIN INVENTORY PROBLEM
699	CHIRAG BHARDWAJ	P SRINIVASAN	THERMAL PROCESSING OF MATERIALS (ESPECIALLY STEEL) AND RESULTANT CHANGES IN THEIR PROPERTIES.
700	RAMANDEEP SINGH	SRIKANTA ROUTROY	APPLICATION OF NON-TRADITIONAL OPTIMIZATION TECHNIQUES IN SUPPLY CHAIN INVENTORY PROBLEM.
701	KHANDELWAL RUCHIR	SATYENDRA KR SHARMA	DIAGNOSIS OF SUPPLY CHAIN PROBLEMS AT CHETAK PIPES PVT. LTD.
702	NINKESH NEEMA	SRIKANTA ROUTROY	SUPPLY CHAIN MANAGEMENT

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
703	DEEPTANSHU AGARWAL	SUDESHNA M CHOU DHURY	ROLE OF LONG NON-CODING RNAS IN EMT (EPITHELIAL TO MESENCHYMAL TRANSITION.
704	KUSHAL TRIPATHI	PRABHAT NATH JHA	WASTE DEGRADATION BY MICROBES
705	SUHAIL KHAN	LALITA GUPTA	STUDY OF MOSQUITO NERVOUS SYSTEM AND IDENTIFYING CHEMICALS THAT ATTRACT MOSQUITO.
706	SHUBHAM CHOU DHARY	SUDESHNA M CHOU DHURY	ROLE OF MICROBIOME IN CANCER PREVENTION
707	UMANG GARG	LALITA GUPTA	MOSQUITO ATTRACTANT VS MOSQUITO REPELLANT.
708	STUTI MAHESHWARI	LALITA GUPTA	TYPES OF VIRUSES TRANSMITTED BY AEDES MOSQUITOES.
709	NIPUN VATS	PRABHAT NATH JHA	SYNTHETIC MICROBIOLOGY:PROSPECTS AND POTENTIAL.
710	AESHVARYA MITTAL	SANJEEV KUMAR	AUTOIMMUNITY(IMMUNOLOGY)
711	SHARAD YADAV	RAJESH MEHROTRA	ANALYSIS OF CIS REGULATORY ELEMENTS AND THEIR INTERACTION WITH TRANSCRIPTION FACTOR INVOLVED IN THE ABIOTIC STRESS TOLERANCE IN PLANTS
712	AKSHAT MISHRA	SHILPI GARG	IDENTIFICATION OF MICROORGANISMS TO RECTIFY LIQUEFACTION OF SOIL.
713	SANYUKTA SINGHAL	VISHAL SAXENA	BIOLOGY AND ITS RELATION TO SOIL EROSION AND CONSERVATION
714	KSHITIZ GUPTA	BHAGAVATULA VANI	EVOLUTION OF COMMUNICATION BEHAVIOR OF MAMMALS
715	SAMBHAV JAIN	RAJESH MEHROTRA	PLANTS RESPONSE TO BIOTIC AND ABIOTIC STRESS
716	SURBHIT JOHRI	RAJESH MEHROTRA	MICROARRAY ANALYSIS OF TGAC ACROSS ARABIDOPSIS THALIANA.  PLEASE SUGGEST ME THE PROCEDURE FOR REGISTERING FOR THE COURSE.
717	ISHAN SHREYASH	SUDESHNA M CHOU DHURY	EVOLUTION AND CANCER
718	MEDHA VIDYOTMA	RAJESH MEHROTRA	COMPARATIVE ANALYSIS OF FOUR PLANT GENOMES FOR CIS-ACTING ELEMENTS.
719	MEDHA VIDYOTMA	RAJESH MEHROTRA	COMPARISON OF CIS-REGULATORY ELEMENTS INVOLVED IN AMINO ACID TRANSPORTERS ACROSS FOUR PLANT GENOMES.
720	SAHIL TYAGI	SANDHYA MEHROTRA	ANALYSIS OF AUTOTROPH PHYLOGENY USING GENOME SEQUENCE OF RUBISCO LARGE SUBUNIT.
721	SAHIL SHARMA	LALITA GUPTA	REMOTE SENSING AND GIS BASED DETECTION SYSTEM OF MOSQUITO BORN DISEASES.
722	ANINDITA SINGHAI	SANDHYA MARATHE	TO UNDERSTAND THE DIFFERENT MODELS OF ANIMAL BEHAVIOR
723	ATUL JALA	BHAGAVATULA VANI	EVOLUTION OF AGGRESSIVE BEHAVIOR IN MAMMALS
724	SALONI SINHA	SHIBASISH CHOWDHURY	INTERACTIONS BETWEEN M-RNA AND MI-RNA
725	SNEHA MAHESH	RAJESH MEHROTRA	SIGNAL PERCEPTION AND TRANSDUCTION UNDER STRESS CONDITIONS
726	ABHISHEK BHARDWAJ	AJAY KUMAR PANI	STUDY ON TUBERCULOSIS.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
727	KARTHIK SURESH	SHAMIK CHAKRABORTY	STUDY OF QUANTUM DOTS AND ITS APPLICATIONS IN LED AND LASERS.
728	SIDDHARTH SHANKAR TRIPATHI	SHAMIK CHAKRABORTY	USE OF QUANTUM MECHANICAL TUNNELLING TO TRY TO EXPLAIN DIFFERENT BIOLOGICAL PHENOMENONS AND REACTIONS.
729	MAITRI SHASTRI	INDRESH KUMAR	ORGANIC CATALYSIS:AMINE CATALYSIS-EXTENSION TO CONJUGATED ENAMINES
730	TUSHAR KAUSHIK	SUBIT KUMAR SAHA	CLASSICAL FIELD THEORY APPROACH TO NON-EQUILIBRIUM THERMODYNAMICS
731	ASHIMA AILAWADI	ARUN KUMAR VAISH	UNDERSTANDING THE DYNAMICS OF SUBSIDY AND ITS IMPACT. IDENTIFYING WAYS TO SYNERGISE THE GOVERNMENT SCHEMES FOR SUBSIDY DELIVERY MECHANISM.
732	PRATEEK BEHERA	ARCHANA KULKARNI	TRADE INTEGRATION IN EU AND BREXIT
733	ABHINAV MISHRA	GEETILAXMI MOHAPATRA	THE IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON CO2 EMISSIONS AND ECONOMIC GROWTH : AN EMPIRICAL ANALYSIS FOR INDIA
734	HARSH GOYNKA	GEETILAXMI MOHAPATRA	THE IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON CO2 EMISSIONS AND ECONOMIC GROWTH : AN EMPIRICAL ANALYSIS FOR INDIA
735	ADITI SINHA	OMVIR CHAUDHRY	ANALYZING THE EFFICIENCY OF INDIA'S PUBLIC SECTOR.
736	MANTRI KARAN SUNIL JYOTI	ARCHANA KULKARNI	EXCHANGE RATE MISALIGNMENT AND ITS IMPACT ON GROWTH
737	ANANYA DHAKA	OMVIR CHAUDHRY	STUDYING THE INVESTOR BEHAVIOR THROUGH SCHEDULED ANNOUNCEMENTS AND THEIR IMPACT ON STOCK PRICES USING EVENT STUDY METHODOLOGY.
738	PARTH DOGRA	ARUN KUMAR VAISH	ANALYSIS OF JAN DHAN YOJNA
739	SAHIL KUMAR	PRADEEP KR H KESKAR	ADVANCED TOPICS IN LINEAR ALGEBRA
740	RISHABH GUPTA	SHIVI AGARWAL	STUDY OF FUZZY NEURAL NETWORK
741	GOVIND MITTAL	SHIVI AGARWAL	FUZZY LOGIC AND NEURAL NETWORKS
742	APURVA MITTAL	SHIVI AGARWAL	A STUDY ON REAL LIFE APPLICATION OF DATA ENVELOPMENT ANALYSIS.
743	ADITYA BHARAT SHAH	RAKHEE	IMPLEMENTATION OF SCHEDULING ALGORITHMS USING PYTHON.
744	ANMOL BHATIA	RAKHEE	STUDY OF DISCRETE TIME QUEUES:APPLICATION TO COMMUNICATION NETWORKS
745	KARAN MAKHIJA	PRADEEP KR H KESKAR	ADVANCED TOPICS IN LINEAR ALGEBRA
746	G ASHWIN	SHIVI AGARWAL	A STUDY ON REAL LIFE APPLICATION OF DATA ENVELOPMENT ANALYSIS
747	MANAN SINGHAL	RAKHEE	STUDY OF DISCRETE TIME QUEUES:APPLICATION TO COMMUNICATION NETWORKS
748	PRATEEK BHUTANI	NILADRI SARKAR	STUDY OF SOME IMPORTANT NUMERICAL METHODS IN ELECTRODYNAMICS.
749	TANMAY VERMA	AMOL HOLKUNDKAR	STUDY OF ELECTRON AND ION ACCELERATION BY LASER-PLASMA INTERACTION.
750	SUMIT GODARA	TAPOMOY G SARKAR	COSMOLOGICAL BACKGROUND EVOLUTION
751	ABHISHEK SETHI	J N BANDOPADHYAY	QUANTUM RANDOM WALK



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
752	KUMAR RISHABH	NILADRI SARKAR	STUDY OF NUMERICAL METHODS IN ELECTRODYNAMICS
753	AKSHAY GOLECHHA	CHANDRA SHEKHAR	HYPERSPECTRAL IMAGE PROCESSING
754	SMRITI JOSHI	NILADRI SARKAR	IN DEPTH STUDY OF CLASSICAL ELECTRODYNAMICS WITH EMPHASIS ON GREENS FUNCTION METHOD.
755	AAKANKSHA AGARWAL	VIRENDRA SINGH NIRBAN	CROSS-CULTURAL COMMUNICATION IN MODERN ORGANIZATIONS
756	AARUSHEE RANGRA	NAVIN SINGH	STUDY OF BIO-POLYMER AND MEMS APPLICATIONS
757	REETIKA SRIVASTAVA	SUBHASH N KARBELKAR	SCATTERING OF ELECTROMAGNETIC RADIATION IN ASTRONOMY.
758	SUNITA BUGALIA	D D PANT	UV VISIBLE SPECTROSCOPY OF MOLECULES.
759	ANJALI GUPTA	ANUPAM YADAV	A STUDY OF THE ETHICAL ISSUES IN COMPUTER AND INFORMATION TECHNOLOGY
760	GARVIT BHOMIA	SAILAJA NANDIGAMA	INDUSTRIALISATION AND ENVIRONMENTAL DEGRADATION IN INDIA.
761	NISHANT RATHORE	SUSHILA RATHORE	OBJECTIVITY AND IMPARTIALITY: REFLECTION ON THE PRESENT MEDIA DISCOURSE.
762	ANKIT RAJ	RAJNEESH CHOUBISA	JOB CRAFTING BEHAVIOUR IN BANKING SECTOR. AN INVESTIGATIVE STUDY
763	ARUN KUMAR	RAJNEESH CHOUBISA	JOB CRAFTING BEHAVIORS IN BANKING SECTOR:AN INVESTIGATIVE STUDY.
764	SNEHA MANDAD	SANGEETA SHARMA	WOMEN EMPOWERMENT: ENTREPRENEURIAL INITIATIVE
765	SAROJ MAHERIA	SANGEETA SHARMA	WOMEN EMPOWERMENT THROUGH ENTREPRENEUR INITIATIVE
766	SATYAKI ROY	BHAGAVATULA VANI	POTENTIAL BIOTECHNOLOGICAL STRATEGIES FOR THE CLEANUP OF HEAVY METALS AND METALLOIDS
767	BHANSALI ABHINAV ARVIND	PAWAN K AJMERA	INTERACTIVE SCREEN FOR LAPTOPS AND MOBILES
768	PADHYE MOHIT YOGESH	LUCKY SHARAN	FIBER OPTIC COMMUNICATION AND WDM
769	AGARWAL VAIBHAV SUNILKUMAR	K HARI BABU	SOFTWARE NETWORKING
770	JAYENDRA AGRAWAL	RAJDEEP CHOWDHURY	NANOPARTICLE FORMULATION AND DRUG DELIVERY OF AN ANTI-CANCER DRUG
771	ARCHIT JAIN	JL RAHEJA	IMPLEMENTING SLAM(SIMULTANEOUS LOCALIZATION AND MAPPING) USING A KINECT DEPTH SENSOR
772	SAHIL GUPTA	PARIKSHIT K SINGH	INTERNET OF THINGS- A CASE STUDY FOR SMART CITIES
773	SAMAKSHI TIWARI	SHIBASISH CHOWDHURY	BIRD AND PLANT DIVERSITY MAP OF BITS CAMPUS

### NEW COURSES INTRODUCED IN THE YEAR 2016

**New / Modified Courses:**

S.No.	Course No.	Course Title & Description	L	P	U
1.	BITS F225	Environmental Studies	3	0	3
2.	BITS F317	Theoretical Neuroscience	3	0	3
3.	CE F345	Computational Geomechanics	3	0	3
4.	CE G562	Advanced Concrete Technology			4
5.	CHE F422	Petroleum Refining Technology	3	0	3
6.	HSS N301T	Elements of Dance	1	1	2
7.	MATH F378	Advanced Probability Theory	3	0	3
8.	MATH F423	Introduction to Algebraic Topology	3	0	3
9.	MATH F424	Applied Stochastic Process	3	1	4
10.	MATH F492	Wavelet analysis and applications	3	1	4
11.	PHY F316	Musical Acoustics	3	0	3
12.	PHY F378	Plasma Physics and its Applications	3	0	3
13.	PHY F379	Thin Film Technology	3	0	3

### INVITED TALKS ARRANGED BY INVITED SCHOLARS IN THE DEPARTMENT

1. Dr. Ravindra D. Gudi, Professor, Department of Chemical Engineering, Indian Institute of Technology Mumbai delivered a talk on Nonlinear identification and Control of Chemical Processes 22<sup>nd</sup> April, 2016.
2. Dr. Aniruddha (Ani) Desai, Director for Centre for Technology Infusion, La Trobe University, Melbourne, delivered a research talk on "Developing Innovative Smart Sensor Technology for High Impact Applications", February 29, 2016.
3. C. Pandu Rangan, Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Madras, delivered an informative talk on "Computational Intelligence" on 26<sup>th</sup> August, 2016.
4. Santanu Chaudhury, Director CEERI Pilani and Professor: CSE IIT Delhi, delivered a special lecture on Applied Aspects of Contemporary Machine Learning on 14<sup>th</sup> November, 2016.
5. Nair Hari 2016 Lecture on "Gandhi and the race debate" Thu 20 October 2016 Sri Venkateswara College, University of Delhi
6. Nair Hari 2016 Lecture sesión titled "Gandhi y la cuestión de raza" at Seminario Universitario de Estudios Asiáticos, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México 11 Oct 2016 (via video conference).
7. Nair Hari 2016Lecture sesión titled "Secularismo y nacionalismo religioso en el siglo XX en el contexto de la partición e Independencia de la India" at Seminario Universitario de Estudios Asiáticos, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México 27 Sep 2016 (via video conference).
8. Dr. Sailaja Nandigama : Dilemma of Development: Challenges in providing food security and safety for the poor.in the Bilateral workshop between BITS Pilani University, Pilani Campus and Tel Aviv University on "Food Security and Safety". Held in BITS PILANI, Pilani Campus on 21-22 November, 2016.
9. Department of Humanities and Social Sciences organizedsecond time the national theatre Festival Melange on 5-7 February 2016. It was a self-funded programme.
10. Dr. RajeshwariNarendran delivered an invited talk on Job Interviews for Business Communication students on 4<sup>th</sup> November, 2016.
11. Department of Humanities and Social Sciences organizedhas provided the platform and intellectual support to the student community to host the TEDx Talks on 24 January 2016.
12. Prof. Dharendra Bahuguna, Department of Mathematics, Indian Institute of Technology, Kanpur delivered a talk on the topic "The method of lines to non-local initial boundary value problems" on 29-03-2016.
13. Prof. N.S.N. Sastry, ISI Benguluru, delivered a talk on the topic "Finite simple groups and their geometries" on 11-06-2016.
14. Prof. Mukul Mathur, Sr. Prof. SMS Medical College, delivered lecture on, "Role of Pharmacist In Health Care System: Present challenges" on the accassion of Pharmacist Day celebrations (24 th September 2016).
15. Prof. BG Nagavi (Dean, RAK College of Pharmaceutical Sciences, Ras Al Khaimah, UAE) delivered the Prof. B M Mithal Memorial lecture on "Pharmacy Education & Practice in UAE" on the accassion of BM Mithal Memorial Lecture & Award Ceremony (18 Nov 2016).
16. Prof. Surekha Bhanot attended a workshop on "Intelligent & green buildings" on Oct 25, 2016, By Johnson Controls
17. Dr. Nilanjan Chattaraj attended a workshop on "Intelligent & geen buildings" on Oct 25, 2016, By Johnson Controls
18. Dr. Nilanjan Chattaraj attended "National workshop on outcome based learning using pedagogy framework model" organized by Teaching Learning Centre, BITS Pilani, Pilani Campus in collaboration with Centre for Educational Technology, Indian Institute of Technology (IIT), Kharagpur, 28-29 November 2016
19. Dr. Praveen Kumar A.V. participated in 'IEEE Indian Antenna Week', a 5 day workshop on advanced antenna technology, Thiagarajar College of Engineering, Madurai, June 2016

20. Dr. B. Sainath participated in the Teaching and Learning Workshop organized by teaching and learning center (TLC), BITS Pilani, Pilani Campus during Jan.7-9, 2016.
21. Prof. Parameshwar K Iyer, IIT Guwahati deliver talk on New Conjugated Materials for ptoelectronic Devices, Sensors and Theranostics, 16/09/2016.
22. Dr. Parwez Alam, Post Doctoral Research Fellow, Hong Kong University of Science and Technology.deliver talk on Syntheses of Red to Near IR Aggregation Induced Emissive iridium(III) metal complexes and its application in mitochondrial staining, 16/09/2016.
23. Prof. S. K. Mehta,Punjab University.,deliver talk on Exploring Nanostructure Morphology and Dispersibility Using Self Assembly Driven Metallomicelles,04/11/2016.
24. Prof. Rajender S. Verma, Cincinnati, Ohio, USA and andRegional Centre of Advanced Technologies and Materials, Palacky University, Olomouc, Czech Republic, Greener routes to Organics and Nanomaterials:Sustainable Applications of Magnetic Nanocatalysts and Modified Graphitic Carbon Nitrides in Catalysis and Environmental Remediation., 29/11/2016.
25. Dr. Omvir Singh, Director-Chemistry, IZEN Biociences Pvt. Ltd., Ir(I)-Phosphoramidite Complex Catalyzed Regio- and Enantioselective Decarboxylative Allylic Substitution Reactions, 19/02/2016.
26. Prof. Chebrolu Pulla Rao, Department of Chemistry, IIT Bombay, Mumbai, Science Behind Technology: Engineering Supramolecular Systems for Different Applications including Chemosensors, 02/09/2016.
27. Mr. V. Ramkumar, Partner-Cedar Consulting, delivered lecture on Leadership, Department of Management, 5-6 March 2016.
28. Mr. Amit Sinha Roy, VP - Marketing & StrategyTata Communications, delivered lecture on Marketing, Department of Management, 5-6 March 2016.
29. Dr. J. K. Sharma, Head CRM, Jagsonpal Pharmaceutical Ltd. 30 Years of Corporate experience in product and brand management and CRM., delivered lecture on Neuro-marketing and branding,Department of Management, 5-6 March 2016.
30. Mr. Rahul Chandra, MD - Helion Ventures, delivered lecture on Finance, Department of Management, 5-6 March 2016.
31. Mr. Vineet Sharma, Talent Acquisition Head, NBC Bearings, delivered lecture on HR & Talent Management, Department of Management, 5-6 March 2016.
32. Ms. Amandeep Kaur, Marketing Communication Head, Myntra, delivered lecture on Digital marketing, Department of Management, 5-6 March 2016.
33. Mr. Amit Sharma, Assistant Vice President – Mall Business Future Market Networks Ltd., Mumbai,delivered lecture on Retail Marketing, Department of Management, 21-24 March 2016.
34. Mrs. Aparna Sharma, Country Head-Human Resources at Lafarge India (Cement, Ready Mix Concrete, Aggregates & KAM Projects, delivered lecture on Campus to Corporate, Department of Management, 22-24 April 2016
35. Prof. Krishnamurthy ,Bindumadhavan, Faculty Off-campus, BITS Pilani, Hyderabad Campus, delivered lecture on Financial Accounting, Department of Management, 24-26 Oct' 2016
36. Prof. Krishnamurthy Bindumadhavan, Faculty Off-campus, BITS Pilani, Hyderabad Campus, delivered lecture on Financial Accounting, Department of Management, 21-24 Nov'2016
37. Mr. S.P. Sethi, Ex-Secretary to Government of India and Sr. Prof at National University of Singapore, delivered lecture on Sustainability & Finance, Department of Management, 29-30 Nov' 2016.
38. Mr. Sitaramanjaneyulu, Senior Principal Scientist, Pavement Evaluation Division, CSIR-Central Road Research Institute (CRRRI), New Delhi delivered an invited talk on "Pavement Management Systems & HDM-4", during his visit to BITS Pilani on 19<sup>th</sup> September, 2016
39. Satish Sharma, Professor, University of Regina delivered an invited talk on "Research on Weather interaction with highway traffic volume in cold regions" at BITS Pilani during November 15-19, 2016.
40. Mr. Manjunath Rao Assistant Engineer, ATKINS INDIA (Pvt.) Ltd. Bangalore, delivered an invited talk on "MX Road" during September 2016.
41. Dr. R.D. Garg, Professor of Geomatics at IIT Roorkee delivered as invited talk on "Recent Trends in Geoinformatics Engineering" during his visit to BITS Pilani on 26<sup>th</sup> August. 2016

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2016****Second Semester 2015-16**

S.No	ID No	Name	Title	Supervisor	Department
1.	2011B1A8783P	Shivangi Singh	Effect Of Silver Nanoparticles On Biofilm Formation	Jitendra Panwar	Biological Sciences
2.	2011B1A1798P	Sneha Suman	Zno-Based Nanoparticles As Potential Antibacterial Agents: Synthesis And Characterization	Dr. Slavica Stankic, Institute Des Nanosciences De Paris, University Pierre And Marie Curie, Paris, France	Biological Science
3.	2011B1A1836P	Sarthak Tiwari	Lactoferrin And Lactoperoxidase	Uma S. Dubey	Biological Sciences,
4.	2011B1A 855P	Binay Krishna Shivam	Comparitive Sequence Analysis Of Camel Milk Proteins	Uma S. Dubey	Biological Sciences,
5.	2011B1A4829	Shashank Pandey	Functional Genetics And Genomics Of Asian Elephant [Elephas Maximus]	Sandhya Marathe (Co-Supervisor, Off-Campus Thesis)	Biological Sciences
6.	2011B1A1831P	John Rajan Mavelly	Host Responses In Complicated Malaria	Ashis Kumar Das	Biological Sciences
7.	2011B1A3799P	Nitish	Mi-Rna Sequencing Analysis	Shibasish Chowdhury	Biological Sciences
8.	2011B1A2828P	Varis Kumar Kalia	Mi-Rna Sequencing Analysis	Shibasish Chowdhury	Biological Sciences
9.	2011B1A3827P	Ashutosh Vishwakarma	Analysis Of Genome Based Reconstruction Of Metabolic Model Of lak692 <i>Spirulina</i> C1.	Shibasish Chowdhury	Biological Sciences
10.	2011B1A4815P	Harsh Lailer	Analysis Of Genome Based Reconstruction Of Metabolic Model Of lak692 <i>Spirulina</i> C1.	Shibasish Chowdhury	Biological Sciences
11.	2011B1AB840P	Bhanu Kharbanda	Application Of Machine Learning In Bio-Molecular Recognition	Shibasish Chowdhury	Biological Sciences
12.	2011B1A1858P	Anurag Prasad	Mi-Rna Binding Site Prediction Using Machine Learning And Application In Chemical Engineering	Shibasish Chowdhury	Biological Sciences
13.	2011B3A1374P	Ankit S. Rao	Preparation Of Fe-Tio2 Via Sol Gel Technique Gor Biomeical Applications	Dr. Banasri Roy	Chemical
14.	2011B2A1748P	Ishwarpreet Singh Boparai	Chemical Looping Combustion Modeling In Aspen Plus	Dr. Raman Sharma	Chemical
15.	2011B2A1623P	Siddhath Kawadiya	Bofilters For Remediation Of Air	Dr. Marc Deshusses	Off-campus
16.	2012A1PS462P	Piyush Chauhan	Biofuels And Biocatalysis	Mr. Kulbir Singh Chauhan	Off-campus
17.	2012A1TS434P	Ananthu	Nanofluids	Prof. T. Pradeep	Off-campus

S.No	ID No	Name	Title	Supervisor	Department
		Mahendranath			
18.	2012A1TS487P	G. Anoj Winston	Combustion Engineering & Thermodynamic Modelling In Ic Engines	Prof. Thomas Esch	Off-campus
19.	2011B2A1623P	Siddharth Kawadiya	Odor Control In Fecal Sludge Management	Dr. Bharti Khungar	Chemistry
20.	2011B2A1748P	Ishwarpreet Singh Boparai	Aspen Plus Simulation Of Crude Distillation Unit	Dr. Bibhas R Sarkar & Dr. Raman Sharma	Chemistry
21.	2011B2A2729P	Abhinav Gaur	Studies In Conversion Of Glycerol Carbonate To Its Chloro-Derivatives	Dr. Bibhas R Sarkar	Chemistry
22.	2011B2A2754P	Prashant Tripathi	Studies On Native Chemical Ligation	Dr. Rajeev Sakhujia	Chemistry
23.	2011B2A2787P	Anant Mehrotra	Synthesis Fo Size Dependent Palladium Nanoparticles And Use As A Catalyst	Dr. Surojit Pande	Chemistry
24.	2011B2A3713P	Sankalp Pandey	Study And Analysis Of The Effects Of Mg <sup>2+</sup> Doping Conductivity Lithium Silica Glasses Prepared By Sol-Gel Processes	Dr. S C Sivasubramanian	Chemistry
25.	2011B2A3757P	Balakrishna B	Aggregation Induced Emission (AIE) Active Molecules Embedded In Functionalized Mesoporous Silica	Dr. I R Laskar	Chemistry
26.	2011B2A3763P	Aastha Dewan	Studies On Catalyse Activities Of Transition Metal Complexes Insatrapped In Microporus Materials	Dr. Saumi Ray	Chemistry
27.	2011B2A3797P	Vaibhav Jain	Solvation Dynamics And Rotational Relaxation Of C-480 In Mixed Micelles Of Gemini Surfactants And Ionic Liquid	Dr. S K Saha	Chemistry
28.	2011B2A4689P	Krishanu Pranad Batsya	Synthesis And Docking Studies Of Tacrine Derivatives As Drugs Against Alzeheimer's Disease	Dr. Paritosh Shukla	Chemistry
29.	2011B2A4792P	Ashish Kumar Yadav	Develop Inventory Management System For Chemicals In Lab And Web Tool For Learning Few Concepts Of Chemistry	Dr. Bharti Khungar	Chemistry
30.	2011B2A5764P	Vaibhav Singh	Docking Studies Of Quinoline Carboxylic Acid And Derivatives	Dr. Paritosh Shukla	Chemistry
31.	2011B2A8669P	Tanveer Singh Viridi	Synthesis And Effect Of Gold Nanoparticles Appurted On Gc <sub>3</sub> N <sub>4</sub> On Epoxydation Of Olefins	Dr. Bibhas R Sarkar	Chemistry
32.	2011B2A8782P	Swamil Mahajan	Formation And Electrical Property Studies Of Glass Formed Through Sol-Gel Route	Dr. S C Sivasubramanian	Chemistry
33.	2011B2AB758P	Rohit Anand	Application Of D-Glucose Derived Cu(II) Complexes In Catalysis	Dr. Ajay K Sah	Chemistry

S.No	ID No	Name	Title	Supervisor	Department
34.	2012B2TS991P	Manupal Yadav	Biological Studies Of Amino Acid Derived N-Glycoconjugates	Dr. Ajay K Sah	Chemistry
35.	2011B2A4517P	Sudharshan K Y	Catalysis Of Hydrogan Evolution Reaction Using Molybdenum Disulphide Nanoparticles	Dr. Surojit Pande	Chemistry
36.	2011B1A2875P	Jaspreet Singh	Bio-Degradation Of Plastics Using Microbial Organisms	Dr. Anupam Singhal & Dr.Rajesh Mehrotra	CED
37.	2011B4A2607P	Shashank M	Participative Management Of A City-Road Network Using Crowd Sourced Smartphone Data	Dr. AMIT GOEL	CED
38.	2012A2PS658P	Mohd. Shabbiruddin Khan	Seismic Analysis And Design Of High Rise Structures	Dr. MANOJ KUMAR	CED
39.	2012A2TS006P	Senriwapang	Geothermal Reservoir Simulation Studies	Dr. SHIBANI K JHA	CED
40.	2012A2PS009P	Soumya Sandipa	A Parametric Study Of Curved And Skewed Concrete I Girder Bridges	Dr. MANOJ KUMAR	CED
41.	2012A2PS611P	Priyamvada Agarwal	A Parametric Study Of Curved And Skewed Concrete T Beam Bridges	Dr. MANOJ KUMAR	CED
42.	2012A2PS241P	Aishwarya Gupta	A Parametric Study Of Curved And Skewed Concrete Box Girder Bridges	Dr. MANOJ KUMAR	CED
43.	2011B4A2714P	Kartik Goyal	Prediction Of Strength Of Improved Soils Using Soft Computing Tools.	Dr. RAVIKANT MITTAL	CED
44.	2011B3A2594P	Rahul Bansal	Risk Assessment Of Infrastructure Project	Dr. RAVIKANT MITTAL	CED
45.	2011B3A405P	Vineet Chaudhary	Disaster Management-A Case Study On Chennai Floods	Dr. G. MUTHUKUMAR	CED
46.	2012A2TS399P	Inampudi Chaitanya	Monitoring A Multi-Storey Building Using Building Information Modelling (Bim) Software	Dr. G. MUTHUKUMAR	CED
47.	2012A2TS4355P	Birramjeet Singh Mann	Study Of Pollution Level Of River Yamuna And Suggest Possible Ways Of Course Correction.	Dr. SHIBANI K JHA	CED
48.	2011A7PS021P	Shambhavi	Pattern Recognition	Vandana Agarwal	CS&IS
49.	2011B3A7415P	Sakshi Bansal	Machine Learning, Data Mining, Image Processing	Navneet Goyal	CS&IS
50.	2011B4A7687P	Abyoudaya Agrawal	Data Structures And Algorithms, Intelligent Tutoring Systems	S Balasubramaniam	CS&IS
51.	2011C6TS644P	Pruthviraj Pentam	Scheduling Algorithms For Multi Processors	Mayuri Digalwar	CS&IS
52.	2012A7PS022P	Satyaki Upadhyay	Data Mining (Clustering)	Poonam Goyal	CS&IS
53.	2012A7PS038P	Nitin Labhishetty	Data Mining, Compiler Construction	Navneet Goyal	CS&IS
54.	2012A7PS062P	J.Bhargav Raju	Computer Networks, Data Mining	K. Hari Babu	CS&IS
55.	2012A7PS114P	Shikhar Brajesh	Parallel Computing, Data Mining, Compilers	Shan Balasubramaniam	CS&IS
56.	2012A7TS044P	Jashanjot Kaur	Programing Languages	Shan	CS&IS

S.No	ID No	Name	Title	Supervisor	Department
				Balasubramaniam	
57.	2012A7TS055P	Saurabh Maurya	Parallelization, Data Mining Algorithms	Navneet Goyal	CS&IS
58.	2012C6PS650P	Vivek Kishore Choudhary	Parallel Algorithms	Poonam Goyal	CS&IS
59.	2012C6TS365P	Yash Sinha	Software Defined Networking	K Hari Babu	CS&IS
60.	2012C6TS436P	Shikhar Vashishth	Data Science, Programming Language Design, Parallelization	Navneet Goyal	CS&IS
61.	2012A7TS094P	Krishna Chaitanya	Authentication Scheme For Vehicular Ad Hoc Network(Vanet)	Sk Hafizul Islam	CS&IS
62.	2012A7TS184P	S Gokula Krishnan	Sensor Networks And Analysis Of Streaming Data	Rahul Banerjee	CS&IS
63.	2012A7PS119P	Shubham Rathi	Gambling Strategies And Application In Financial Markets	Omvir Choudhary	Mgmt.
64.	2011B3A7365P	Suhani Jain	Impact Of Algorithmic Trading On Indian Financial Markets	A.K. Giri	Eco & Fin
65.	2011B3A1374P	Ankit S Rao	Techno-Economic Analysis Of Solar Photovoltaic Power Plant In Rajasthan	Prof. Nvm Rao	Economics & Finance
66.	2011B3A2498P	Prasant Kiran	Assessing The Government Policies Pertaining To Indian Start-Ups Ecosystem	Dr. Jyoti	Economics & Finance
67.	2011B3A3553P	Subhi Agarwal	Analysis Of Volatility Of Bse Sensex Returns Using Models Of Conditional Heteroskedasticity	Mr. Rajan Pandey	Economics & Finance
68.	2011B3A7415P	Sakshi Bansal	Age In Variant Face Recognition	Dr. Udayan Chandra	Management
69.	2011B3A7479P	Shiva Manne	Evaluating Public Sector Performance & Efficiency In Developing Economies	Dr. Omvir Chaudhary	Economics & Finance
70.	2011B3A7604P	Avinash Kumar Singh	Measuring Effects Of Supply Chain Design On Firm Performance	Dr. Satyendra K Sharma	Management
71.	2011B3A8513P	Gaurav Dadhich	Effect Of Fiscal Deficit And National Saving On Economic Growth In Emerging Economies	Dr. Omvir Chaudhary	Economics & Finance
72.	2011B3A8595P	Pankaj Dhariwal	A Comparative Analysis Of Short Term And Long Term Economic Growth Indicators For Emerging Economies	Dr. Omvir Chaudhary	Economics & Finance
73.	2011B3A7483P	Divya Shakti	Infrastructure Financing In India: A Detailed Analysis	Prof. Nvm Rao	Economics & Finance
74.	2011B3A7536P	Karthik Singal	Determinants Of Public Private Partnership In India: An Empirical Analysis	Prof. Nvm Rao	Economics & Finance
75.	2011B3A7602P	Sankalp Bhatia	An Empirical Study Examining The Relationship Between Macroeconomic Variables And Fiscal Sustainability: A State Wise Analysis	Prof. Nvm Rao	Economics & Finance
76.	2011B3A7395P	Utsav Mishra	Impact Of Pricing Strategies In Retail Business	Dr. Satyendra K Sharma	Management
77.	2011B3C7585P	Anirudh Mishra	Indian Housing Finance	Dr. Omvir Chaudhary	Economics &



S.No	ID No	Name	Title	Supervisor	Department
			Sector: Role Of Hfcs And Scbs		Finance
78.	2012A8PS351P	C Sudevan	Study Of Rf And Beam Parameters Of A C-Band Linac For Low Energies	Dr. Praveen Kumar A. V.	EEE
79.	2012A8TS346P	Matam Sreekar Raghotham	Computational Model Predictions Of Level-Dependent Changes In Vowel Identification	Dr. Ananthakrishna	EEE
80.	2011B2A3789P	Akshit Johri	Facts Controller And Techniques For Their Optimal Location	Dr. Hari Om Bansal	EEE
81.	2011B3A8600P	Rohit Saxena	Microwave Materials Characterization Using Cavity Techniques	Dr. Praveen Kumar A. V.	EEE
82.	2012A8PS306P	Dev Wiseman Pinto	100 Gbps And Beyond	Ms.Vinita Tiwari	EEE
83.	2012A8PS320P	Gaurav Adwani	High Speed Transmission In Optical Network	Ms.Vinita Tiwari	EEE
84.	2011B4A8699P	Mantinder Jit Singh	Household Classification Using Electricity Consumption Date	Dr. Surekha Bhanot	EEE
85.	2012A3PS172P	G V S S Kalyan	Comparative Analysis Of Sram Based On Mosfet, Finfet And Fd-S01 Technology	Mr. Nitin Chaturvedi	EEE
86.	2012A3PS178P	Pratik Bhandari	Design And Implementation Of An L2 Cache In Verilog	Mr. Nitin Chaturvedi	EEE
87.	2012A3TS075P	Aditya Sharma	Asynchronous Distributed Stochastic Convex Optimization	Mr. Ashish Mishra	EEE
88.	2013A3PS133P	Prakhar Kumar	Frequency Shift Cmos Bio-Sensor	Dr.V.K.Chaubey	EEE
89.	2012A3PS074P	Anshuman Mishra	Deploying Hybird Software Defined Networks In Campus Networks	Dr. A. Asati	EEE
90.	2012A3PS067P	Aditya Harit	An Automatic Facial Emotion Recognition System	Dr. K. K. Gupta	EEE
91.	2012A3TS218P	Arnav Varma	Non Linear Motion Tracking	Dr. K. K. Gupta	EEE
92.	2011B3A8544P	Shashvat Tripathi	Matlab/Simulink Implementation And Analysis Of Space Vector Pulse Width Modulation Tecchnique	Dr. Pradyumn Chaturvedi	EEE
93.	2011B3A3582P	Nikita Choudhary	Power Dissipation In Sequential Circuits With And Without Clock Gating	Dr. A. Asati	EEE
94.	2012A3PS121P	Konakalla Sai Ganesh		Dr. Anu Gupta	EEE
95.	2011B 3A8588P	Vinayak Kesarwani	Implementation Of Power Electronics Inverter Using Multilevel Carrier Control Method	Dr. Pradyumn Chaturvedi	EEE
96.	2011B3A3530P	Aditya Pillai	Power Electronics Controller Using Simulink	Dr. Pradyumn Chaturvedi	EEE
97.	2011B4A8688P	Palak Jain	Design Of Fuzzy Logic Controlled Active Power Filter	Dr. Pradyumn Chaturvedi	EEE
98.	2011B4A3611P	Richa Sharma	Fuzzy Logic In Data Development Analysis (Dea)	Dr. H. D. Mathur	EEE
99.	2011B4A8695P	Pratibha Agarwal	Wireless Communications	Ms. Vinita Tiwari	EEE

S.No	ID No	Name	Title	Supervisor	Department
			And Repairable System – Bayesian Approach		
100.	2011B3A3528P	Gautum Shah	Future Pricing In Electricity Market	Dr. H. D. Mathur	EEE
101.	2012A8TS297P	Vinod Subramanian	Using Rhythm Features For Song Segmentation	Dr. Alexander Lerch	EEE
102.	2011B1A8867P	Bhargav Jha	Guidance And Control Of Mobile Robots: Cooperative Guidance For Defending An Aircraft	Dr. Tal Sharma	EEE
103.	2011B5A8624P	Steffie Ann Thayil	Commissing And Optimizing The Atlas Fast Tracker Data Formatter	Dr. Lauren Tompkins	EEE
104.	2012D2TS971P	Ved Prakash	Job Satisfaction, Job Crafting Behaviors & Organization Effectiveness Relationship In An Indian Sample	Dr. Rajneesh Choubisa	Humanities & Social Sciences
105.	2011B4A7584P	Ashish Dalal	Functional Data Analysis	Prof. C. B. Gupta	Mathematics
106.	2011B4AB718P	Shashank Gupta	Lean Maintenance	Prof. Aditya Parida/Dr. Chandra Shekher	Mathematics
107.	2011B4A4634P	Rohit Tipnis	Exploratory Data Analysis	Prof. Milind Sohoni/ Dr. Sumanta Pasari	Mathematics
108.	2011B4A4698P	Akul Bajaj	Literature Review And Analysis Of Fuzzy Based Machine Repair Problem	Dr. Chandra Shekhar	Mathematics
109.	2011B4A8670P	Shardul Vikram Singh	Perturbation Techniques For Ordinary Differential Equations And Partial Differential Equations	Dr. Ashish Tiwari	Mathematics
110.	2012B4PS955P	Rishikesh Sharma	Water Quality Management Of River Ganga Using Conventionally Available Software	Dr. R. Srinivas/ Dr. Shivi Agarwal	Mathematics
111.	2011B4A4693P	Anantim Raj	Numerical Solution Of Singularly Perturbed Boundary Value Problems	Dr. Devendra Kumar	Mathematics
112.	2012B4TS984P	Shubhangi Sikaria	Performance Assessment Of Financial Sector By Data Development Analysis	Dr. Shivi Agarwal	Mathematics
113.	2011B4A3717P	Prakrut	Study Of Time Varying Loss Waiting Queues	Dr. Rakhee	Mathematics
114.	2011B4A7331P	Abhishek Modi	Development And Implementation Of Mathematical Models To Mine Insights From Logs	Prof. Gopal Srinivasa/ Devendra Kumar	Mathematics
115.	2011B4A7680P	Siddhart Bhatia	Multilingual Systems Automatic Discovery Of Potential Code Switching Point: A Mathematical Analysis	Prof. Rajiv Kumar	Mathematics
116.	2011B4A4722P	Nishant Sharma	Modelling A Flying Bird	Dr. Amol Marathe/Prof. Rajiv Kumar	Mathematics
117.	2011B1A4696P	Prateek Jain	Design Optimization Of Cardiovascular Stent Using Fea.	Ashish Runthala	Mechanical
118.	2011B1AB840P	Bhanukharbanda	Application Of Machine Learning In Bio Molecular Recognition	Shibasish Chowdhury, Girish Kant	Mechanical

S.No	ID No	Name	Title	Supervisor	Department
119.	2011B1AB859P	Anand Shankar	Design Optimization Of Cardiovascular Stent Using Fea.	Ashish Runthala	Mechanical
120.	2011B2AB745P	Uppalaveeravenkata S.	Physical Characterization Of Microspheres By Microscopy And Predictive Modeling	Sharadshrivastava	Mechanical
121.	2011B3A4382P	Prabeenghadia	Supply Chain Management In Banking Industry Credit Management And NPA Resolution	Satyendra Kr. Sharma	Mechanical
122.	2011B3A4493P	Abhiram Patankar	State Of Art In Autonomous Vehicles	Srinivas Kota	Mechanical
123.	2011B3A4570P	Sujeeth Ganta	Modeling Resilience Of Tenkload Transportation Using Bayesian Networks	Satyendra Kr. Sharma	Mechanical
124.	2011B3A4614P	Nikhil Bhutada	Benchmarking Of Benchmarking Models For Lean Manufacturing.	Girish Kant	Mechanical
125.	2011B5A4444P	Tanayveer Singh Bhatia	Prototyping A Portable And Assordable 3-D Prints	Srinivas Kota	Mechanical
126.	2011B5AB362	Manan Mehrotra	Web Based Tool For Virtual Manufacturing	Placid Ferreira	Mechanical
127.	2012A4TS043P	Harisankar R.	Compliant Mechanism To Roll & Characterize Biological Cells.	Murali Palla	Mechanical
128.	2012A4TS141P	Kshitiz Gupta	Characterization Of Rapid Electro Kinetic Trap Stiffness	Steve T. Wereley	Mechanical
129.	2012A4TS170P	Vijay Sankar A.	Parametric Study Of Friction Stir Welding	M.S.Dasgupta	Mechanical
130.	2012A4TS186P	Braj Kishore	Development Of Strategy To Enhance Green Capability Of Indian Steel Supply Chain	Srikantaroutroy	Mechanical
131.	2012A4TS217P	Rajathkantharaj	Correlated Microstructure And Thermal Conduction In Granular Material Packing	Timothy S. Fisher	Mechanical
132.	2012A4TS223P	Anandparwal	Gesture Based Manipulation Of Industrial Manipulator	B K Rout	Mechanical
133.	2012A4TS227P	Nikhil Gupta	Development Of Strategies To Enhancing Green Capability Of Indian Mining Industry	Srikantaroutroy	Mechanical
134.	2012A4TS236P	Chaitanya Karwa	Compliant Mechanism To Roll & Characterise Biological Cells.	Muralipalla	Mechanical
135.	2012A4TS256P	Dhruvtandon	Innovative Application Of Drone Technology	M.S.Dasgupta	Mechanical
136.	2012A4TS280P	Jeevan G.A	Numerical Simulation Of Two-Phase Electro Hydrodynamic	Shyam Sunder Yadav	Mechanical
137.	2012A4TS286P	Nimit Kothari	Surrogate Modeling Of Thermo-Elastic Stresses In Threaded Fasteners	Rakesh K Kaparia	Mechanical
138.	2012A4TS287P	Chetananand	Development Of A Framework For Implementation Of Telemedicine In India	R.P.Mishra	Mechanical
139.	2012A4TS289P	Sahib Singh Dhanjal	Path Planning In Robots	Sandeep Dhar, Avinashgautam	Mechanical
140.	2012A4TS298P	Taizoonchunawal	Chaos Control And Energy	Maryam Ghandchi	Mechanical

S.No	ID No	Name	Title	Supervisor	Department
		a	Harvesting From Ambient Vibrations	Tehrani	
141.	2012A4TS323P	Vineet Gupta	Towards The Conceptual Framework For Integrating Product Development With Supply Chain	Srinivas Kota	Mechanical
142.	2012A4TS330P	Abhishek Banerjee	Effects Of Flexible Fairings On The Loads On A Cylinder	Rajeev K. Jaiman	Mechanical
143.	2012A4TS370P	Anand Shekhar	Internalizing The Externalities Of Coal Based Power Plants In India	P.Srinivasan	Mechanical
144.	2012ABTS103P	Shubhamabrol	Development Of FMFA/FMCA Model For Mechanical System	R.P.Mishra	Mechanical
145.	2012ABTS620P	Ricky Lohkar Pradhan	Developing Benchmarking Models For Supplier Development	Srikantaroutroy	Mechanical
146.	2012ABTS648P	Arjun Ekbote	Study And Optimization Of Ram Extruder For Recycling Pet	K.S.Sangwan	Mechanical
147.	2012ABTS695P	Yuganshu Jain	Exploratory Study On The Process Of Frugal Innovation	Muralipalla	Mechanical
148.	2011	Prashant Kiran	Assessing The Government Policies Pertaining To Indian Start Ups Ecosystem	Dr. Jyoti Dr. Arun Kumar	Management
149.	2011B4A5465P	Sanchit Mittal	Design And Characterization Of Novel Drug Delivery System Of A Selected Drug	Dr. Gautam Singhvi	Pharmacy
150.	2011A5C7893P	Abhay Tyagi	Preformulation And Formulation Studies Of Risperidone	Dr. Sunil Dubey	Pharmacy
151.	2011A5C7508P	Jayant Aggarwal	Design Of Nanoparticulate Drug Delivery System Of A Selected Drug	Ms. Archana Khosa	Pharmacy
152.	2011A5C7012P	Shubham Aggarwal	Design Of Nanoparticulate Drug Delivery System Of A Selected Drug	Ms. Archana Khosa	Pharmacy
153.	2011A5C7889P	Niyati Tiwari	Natural Products/Pancreatic Lipase Inhibition Of Natural Products	Dr. Atish T. Paul	Pharmacy
154.	2012A5PS901P	Aanchal Verma	Development Of Synergistic Combination From Selected Medicinal Plants Against Obesity	Dr. Atish T. Paul	Pharmacy
155.	2012A5PS895P	Abhishek Mittal	To Understand How Unprompted Children 'S Ideas Are Mapped Across The Geography Of The Region And What Possible Relationship Emerge Between These Ideas And The Challenges Encountered By The Children In The Region	Prof. Anil K Gupta & Dr. Atish T. Paul	Pharmacy
156.	2011A5TS892P	Snehasis Panda	The Impact Of Internet On Marketing And Hr Strategies Of The Healthcare Sector	Prof. Bishakha Majumdar & Dr. Anil Jindal	Pharmacy
157.	2011B5A2592P	Akshat Singhal	Shape And Thickness	Dr. S. Ganopadhyay	Physics

S.No	ID No	Name	Title	Supervisor	Department
			Dependent Resistivity Of Thin Films For Device Application		
158.	2011B5A2659P	Sameer Telang	Some Studies On Microstructure Of Concrete Containing Silica Fumes	Prof. Anshuman Dalvi	Physics
159.	2011B5A3376P	Rohan Mehta	Simulation Of Helix Coil Transition In Biopolymers In Crowded Solution	Dr. Navin Singh	Physics
160.	2011B5A3557P	Milind Sah	Absorption And Fluorescence Spectroscopic Studies In Micellar Systems.	Prof. D. D. Pant	Physics
161.	2011B5A3610P	Kaustubh Nawade	Chemisorptions Effect Of Oxygen On The Geometries, Electronic And Magnetic Properties Of Small Size Ti (N = 1-6) Clusters	Prof. D. Bandyopadhyay	Physics
162.	2011B5A4420P	Vaibhav Manchanda	Fluid Flow Analysis In Nuclear Reactors And Subsystems	Dr. Madhukar Mishra	Physics
163.	2011B5A4563P	Pankaj Kumar Maurya	Designing Of 4-Probe Spring Loaded Contacts For Four Probe Resistivity (Thin Film Resistivity Measurement)	Dr. Subhashis Gangopadhyay	Physics
164.	2011B5A4654P	Ruchir Dwivedi	Effect Of Brownian Motion On The Transient Dynamics Of Anisotropic Particles In Simple Shear Flow	Dr. Tapomoy G. Sarkar,	Physics
165.	2011B5A4676P	Anmol Bansal	Development Of An Econophysics Model For Financial Analysis And Diagnosis	Dr. Madhukar Mishra	Physics
166.	2011B5A4683P	Shaurya Malhotra	Computational Study Of Rna/Dna Hairpins By Shaurya Malhotra	Dr. Navin Singh	Physics
167.	2011B5A5625P	Arpit Sharma	Flying Wing Reshaping For Fuel Efficiency	Dr. Niladri Sarkar	Physics
168.	2011B5A7574P	Tushar Anupam	Chemisorptions Effect Of Oxygen On The Geometries, Electronic And Magnetic Properties Of Small Size Fe (N = 1-6) Clusters	Prof. D. Bandyopadhyay	Physics
169.	2011B5A7645P	Raghav Gupta	Floquet Engineering Of Artificial Potentials : Study Of 2d Electron System	Dr. Tapomoy G. Sarkar	Physics
170.	2011B5A7656P	Sameer Kedia	Understanding Of Complex Non-Linear Dynamics And Their Application Through Simulation	Prof. Rakesh Choubisa	Physics
171.	2011B5A7672P	Bhaskar Singhal	Chemisorptions Effect Of Oxygen On The Geometries, Electronic And Magnetic Properties Of Small Size Cr (N = 1-6) Clusters	Prof. D. Bandyopadhyay	Physics
172.	2011B5A7677P	Abhishek Yadav	Laser-Atom Interaction And High Harmonic Generation	Dr. J. N. Bandyopadhyay	Physics
173.	2011B5A7679P	Armanjeet Singh	Dipole Moment Calculation Using Solvatochromic Shift Method And Study Of Metal Quenching Of Fluorescence.	Prof. D. D. Pant	Physics

S.No	ID No	Name	Title	Supervisor	Department
174.	2011B5A8466P	Rohit Upreti	Electromagnetic Cloaking	Prof. R. R. Mishra,	Physics
175.	2011B5A8620P	Kshitij Saxena	India's 3-Stage Civil Nuclear Programme	Dr. Madhukar Mishra	Physics
176.	2011B5A8627P	Rachit Jain	Statistics Based Stock Price Fluctuation	Dr. Madhukar Mishra	Physics
177.	2011B5A8637P	Abhishek Sharma	Studying Geodesic Congruences Using Raychaudhuri Equations	Dr. Tapomoy G. Sarkar	Physics
178.	2011B5A8653P	Vipin Pritimani	Quantum Tunnelling In Nuclear Fusion	Dr. Madhukar Mishra	Physics
179.	2011B5A8657P	Gurbeer Sandhu	Ionic Liquid Dispersion Effects In Some Solid Ionic Systems	Prof. Anshuman Dalvi	Physics
180.	2011B5AB445P	Himanshu Hansaria	Object Recognition Using Sos Representation	Prof. R. K. Gupta	Physics
181.	2011B5AB667P	Ashfaque Ahmad Bari	Chemisorptions Effect Of Oxygen On The Geometries, Electronic And Magnetic Properties Of Small Size Vn Clusters.	Dr. Srijata Dey	Physics
182.	2011B5TS477P	Atindra Nair	Extinction Determination Using Near-Infrared Observations	Dr. Kaushar Vaidya	Physics
183.	2012B5TS490P	Malay Singh	Studying Weak Values Using Superconducting Quantum Circuits	Prof. R. Vijay Raghavan, Tifr, Mumbai	Physics
184.	2012B5TS986P	Hitesh Agarwal	Electrical Transport In 2d Materials And Their Heterostructures	Prof. Mandar Deshmukh, Tifr, Mumbai	Physics
185.	2011B5A2639P	Anirudh Sharma	Understanding The Relation Between Molecular Clouds And Young Open Clusters	Prof. Wen-Ping Chen, National Central University, Taoyuan, Taiwan	Physics
186.	2011B5A4681P	Rajat Sharma	Development And Integration Of An Adaptive Ambient Interior Lighting In A Vehicle	Supervisor: Dr. Patric Jahn, Kit, Karlsruhe, Germany	Physics

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S.No	ID No	Name	Title	Supervisor	Department
1.	2012B1A2829P	Masoom Desai	Modified Ghee Residue Protein as a Novel Biosorbent for Water Purification	Dr. Suresh Valiyaveetil B.Vani	NATIONAL UNIVERSITY OF SINGAPORE, Biological Sciences, BITS
2.	2012B1A3817P	Geetika Garg	Study of the effect of high pH on growth of cyanobacteria - <i>Synechocystis</i> spp. PCC6803 and <i>Arthrospira platensis</i> NIES- 39	B.Vani	Biological Sciences, BITS
3.	2012B1A3805P	Akshay Jadiya	Comparative study of the effect of pH on growth of Cyanobacteria <i>Synechocystis</i> spp. PCC6803 and <i>Arthrospira platensis</i> PCC7345	B.Vani	Biological Sciences, BITS
4.	2012B1A3843P	Ankur Bharadwaj	Therapeutic potential of	Uma S. Dubey	Biosciences

S.No	ID No	Name	Title	Supervisor	Department
			Herbal Rajsthani plants of Local origin in Cancer		
5.	2012B1A7840P	Aakriti Jha	Studying Salmonella Infection	Sandhya Marathe	Biological Sciences
6.	2012B1A8813P	Srabasti Nandi	Soundscape patterns in an urban landscape	Sandhya Marathe (Co-supervisor, Off-campus thesis)	Biological Sciences
7.	2012B1A4786P	Rishabh Singh	A microfluidic device for studying the endothelial tube formation in presence of A2BR, p38 MAPK inhibitors and Paclitaxel for triple negative breast cancer	Dr Hadi Shafiee and Dr Rajdeep Chowdhury	Brigham and Women's Hospital, Harvard Medical School, Cambridge, USA
8.	2012B1A4761P	Anish Vasan	Developing A Microfluidic Chip-Based Diagnostic Device for Viruses	Dr Hadi Shafiee and Dr Rajdeep Chowdhury	Brigham and Women's Hospital, Harvard Medical School, Cambridge, USA
9.	2012B1A1794P	Daksh Dutta	The causal role of parietal brain rhythms in visuospatial selective attention	Dr. SridharanDevarajan (Supervisor); Dr. Shilpi Garg (Co-supervisor)	Centre for Neuroscience, IISc Bangalore; Biological Sciences, BITS Pilani campus
10.	2012B1A7801P	Prabodh Agarwal	High Performance Computing in Molecular Dynamics	Shibasish Chowdhury	Dept. Of Biological Sciences
11.	2012B1A2808P	Tadrish Kumar Singh	Ranking of Features Involved in mi-RNA mRNA Interaction	Shibasish Chowdhury	Dept. Of Biological Sciences
12.	2012B5A1711P	Amey Pathak	Neuro-Fuzzy Modeling of Debutanizer Column	Dr. Ajaya Kumar Pani	Chemical
13.	2013A1PS511P	Kumar Siddharth	Modeling of Debutanizer Column by nonlinear regression technique	Dr. Ajaya Kumar Pani	Chemical
14.	2012A1TS359P	Akshit Seth	Rotating Liquid Masses held by surface tension and self-gravity: An extension to granular material	Dr. Ishan Sharma/ Dr. Suresh Gupta	Department of Mechanical Engg., IIT Kanpur, India
15.	2013A1PS541P	Sudarshan Vijay	Testing and Characterization of thermal sprayed coatings with super-hydrophobic properties	Dr. Nicole Markocsan/ Dr. Banasri Roy	Department of Engg. Sc., University West, 46181 Trollhattan, Sweden
16.	2012B2A1394P	Uttaran Basak	Synthesis of 2D nanosheets of Fe, Ru and Os and their application	Dr. Surojit Pande	Chemistry
17.	2012B2A1621P	Kaveri Singh	Carbonylation of glycerol	Dr. Bibhas R Sarkar	Chemistry
18.	2012B2A1774P	Rrahul Bhardawaj	Aggregation induced emulsion compounds mediated dilection of toxic	Dr. Inamur R Laskar	Chemistry

S.No	ID No	Name	Title	Supervisor	Department
			substances and exploring their mechanism		
19.	2012B2A2438P	Archit Aggarwal	Characterization of supplementary cementing materials	Dr. Bibhas R Sarkar	Chemistry
20.	2012B2A3773P	Kashish Mittal	Computational modeling of semi-conductor devices such as o-tft	Dr. Prashant U Manohar	Chemistry
21.	2012B2A4710P	Jeffrey George	Glycerol to epichlorohydrin process.	Dr. Bibhas R Sarkar	Chemistry
22.	2012B2A4737P	Akshay Venkatesh	Gemini surfactant induce denaturation and renaturation of proteins	Dr. Subit K Saha	Chemistry
23.	2012B2A4749P	Isukapalli Sai Vamsi Krishna	Strategic design and synthesis of aggregation induced emission (AIE) materials for bio-applications	Dr. Inamur R Laskar	Chemistry
24.	2012B2A4785P	Vibhanshu Grover	Study of stability and optical properties of AIE molecules solubilized in micelles of general surfactants	Dr. Inamur R Laskar	Chemistry
25.	2012B2A7758P	Archit Gadhok	Exploring and predicting conduction properties of ionic liquids using machine learning techniques	Dr. Bharti Khungar	Chemistry
26.	2012B2A7771P	Akash Sharma	Predicting Crystallinity of molecular materials using Machine Learning	Dr. Bharti Khungar	Chemistry
27.	2012B2A7781P	Pulkit Shukla	Predicting bio-degradability of materials using models of machine learning	Dr. Bharti Khungar	Chemistry
28.	2012B2A8660P	Biplab Nayak	Preparation and characterization of polymer thin films	Dr. Bharti Khungar and Dr. Anshuman Dalvi	Chemistry
29.	2012B2A8742P	Atul Anand	Inclusion of electrostatic contribution to the DFT based stabilization energy components	Dr. R K Roy	Chemistry
30.	2012B342414P	Pankaj Lamba	Durability Testing of Concrete with Partial Replacement of Marble Dust/Admixture	Dr. DIPENDU BHUNIA	CED
31.	2013A2PS123P	Parth Sutaria	Costing and estimation of Pavement/Life cycle cost Analysis of Flexible and Rigid Pavements	Dr. AMIT GOEL	CED
32.	2013A2TS442P	Pranesh Srivastava	Employment Generation through road construction sector.	Dr. AMIT GOEL	CED
33.	2013A2TS598P	Sumit Agarwal	A Brief Survey of Interpolation techniques and their application in calculating Geotherms	Dr. SHIBANI KHANRA JHA	CED
34.	2013A2PS623P	Tandon Abhilash Borthakur	A Scenario Based Water Quality Modelling of River Ganges by Incorporating Impact of Open Drains.	Mr. R. SRINIVAS	CED
35.	2013A2TS491P	Aditya Gajanan Deshmukh	Sustainability	Dr. RAJIV GUPTA	CED
36.	2012B1A2802P	Shikhin Garg	A Development of framework for IOT on Construction site to	Prof. Ren Jye Dzung (Dr. RAJIV GUPTA)	(OFF CAMPUS)



S.No	ID No	Name	Title	Supervisor	Department
			monitor productivity and Safety.	Co- Supervisor)	National Chhiao Tung University Taiwan
37.	2012B3A7463P	Ajinkya Hemant K.	Parallelization Of Density Based Stream Clustring	S. Balasubramaniam	CS&IS
38.	2012C6PS643P	Kanwardeep Singh	Performance Analysis Of Various Hybrid Sdn Models	K Haribabu	CS&IS
39.	2013A7PS029P	Pratyush Kar	Workload Prediction In Cloud Data Centers Based On User Behavior Modelling	S. Balasubramaniam	CS&IS
40.	2013A7PS109P	Mudit Marda	Approximation Algorithmfor Scheduling Problem	Abhishek Mishra	CS&IS
41.	2013A7PS173P	Akhilesh Sudhakar	Parallelization Of Alogorithms For Artificial Intelligence	S. Balasubramaniam	CS&IS
42.	2013A7PS183P	Abhinav Mehta	Food Safety Using Computer Vision Techniques	Sundaresan Raman	CS&IS
43.	2013A7TS114P	Anirudh Bhutani	Framework For Safe Storage Of Food Based On Nature Inspired Intelligence	Lavika Goel	CS&IS
44.	2011A7TS094P	Gaddam Venkata Sainath	Soa Architecture For Arcd Services	K Haribabu	CS&IS
45.	2011A7PS052P	Bomma Reddy Tharun	Estimating Queue In Sdn	K Haribabu	CS&IS
46.	2012B3A3408P	Naman Singhal	Identification and implementational of an ICT based solution to increase the operational efficiency of the small/mid-income retailer	Dr. Jyoti	Management
47.	2012B3A3467P	Gautam Singh	Review of service quality in banking sector	Dr. Arun Kumar	Management
48.	2012B3A3148P	Aman Varma	Algorithmic trading: review of algorithm	Dr. Udayan Chandra	Management
49.	2012B3A3600P	Somya Gupta	Algorithmic trading	Dr. Udayan Chandra	Management
50.	2012B3A4590P	Anirudh Sridhar	The study of consumer stock market behaviour by consequence of prospect theory	Prof. NVM Rao	Economics & Finance
51.	2012B3A7316P	Bansod Deven Girish	Establishing finance – growth linkage using a financial conditions index(FCI) approach	Dr. A.K. Giri	Economics & Finance
52.	2012B3A7466P	Subham Singh	Long and short run relationship in foreign equity markets: An empirical investigation	Mr. Rajan Pandey	Economics & Finance
53.	2012B3A7496P	Saahil Khetan	A sectoral study of Non Performing Assets in India	Dr. Krishna M	Economics & Finance
54.	2012B3A7479P	Saloni Chandak	The impact of energy subsidy reforms on poverty, inequality, carbon dioxide emissions and GDP in India	Dr. Geetilaxmi Mohapatra	Economics & Finance
55.	2012B3A7526P	Harsharn Kaur	Service quality in telecommunication in India	Dr. Arun Kumar	Management
56.	2012B3A7570P	Anchit Jain	Managing Gen Y workforce:Challenges and opportunities for the organisation	Sarvesh Satija	Management
57.	2012B3A7522P	Subham Arora	Advertisement Effectiveness Index in the e-commerce sector	Dr. Arun Kumar	Economics & Finance

S.No	ID No	Name	Title	Supervisor	Department
58.	2012B3A7593P	Deepnshu Singh	Impact of climate change on macro economics policies in developing nations	Dr. A.K. Giri	Economics & Finance
59.	2012B3A7735P	Samish Bedi	A quantitative discret stock price prediction engine based on automated financial news analysis for Indian stock markets	Mr. Rajan Pandey	Economics & Finance
60.	2012B3A7750P	Ram Karnani	Fuel subsidies : impacts and reforms	Dr. A.K. Giri	Economics & Finance
61.	2012B3A7792P	Ashutosh Bhatt	Novel measures to revive recessive economies	Prof. NVM Rao	Economics & Finance
62.	2012C7A1751P	Karthikan C	A study on volatility pattern: observation from the indian stock market	Mr. Rajan Pandey	Economics & Finance
63.	2012B3A7563P	Ashish Tilokani	Risk assessment of sponsored computer science research projects through Bayesian Belief Network	Dr. Satyendra K Sharma	Economics & Finance
64.	2012B2A3756P	Vandita Kamath	Modeling and simulation of FinFET device	Dr. V K Chaubey	EEE
65.	2012B5A8565P	Shalini Mitra	Thin film solar cell	Dr. Navneet Gupta	EEE
66.	2013A8PS273P	Nishant Shahi	Study of image contrast enhancement using QDHE	Dr. K. K. Gupta	EEE
67.	2013A8PS438P	Falguni Agrawal	Detection and diagnosis of breast cancer using mamogram images	Dr. K.K. Gupta	EEE
68.	2013A8PS393P	Saksham Khunteta	The aeling higher education in India	Dr. Dheerendra Singh	EEE
69.	2012A3B1149P	Sonali Gupta	Effect of various micro cantiliver shapes for MEMS based sensing	Dr. Navneet Gupta	EEE
70.	2012B4A8624P	Aritra Das	Charge based modelling of MOSFET in the depletion region A compact approach	Dr. V K Chaubey	EEE
71.	2013A8PS162P	Geetika Kaur Bagga	Type 1 nd GA based interval type 2 fuzzy logic controller for robotic manipulator control	Mr.Parikshit Kishor Singh	EEE
72.	2012B2A3780P	Aastha Agarwal	Areal surveillance to estimate crowd count	Dr. Dheerendra Singh	EEE
73.	2013A3PS312P	Aditya Shetty	64 QAM OFDM based IR LED FSO communication system	Dr. Rahul Singhal	EEE
74.	2012B3A3437P	Pranjal Gupta	Crowd estimation using convolution neural network	Dr. Dheerendra Singh	EEE
75.	2012B2A3764P	Saransh Mehta	Image intrest point detection and object matching	Dr. K K Gupta	EEE
76.	2012B1A8811P	Kunal Jindal	Automatic library preps for florecent in situ sequencing using a programmable thermofludic cyber	Dr. George M Church	EEE
77.	2013A3PS281P	Amrita Bhowmick	EEG analysing mechanosensation in sensory neurons	Dr. Paul Heppenstall	EEE
78.	2012B4A3173P	Satwik Prabhu K	Rate distortior for Binary auto regressive process	Dr. Stefano Rini	EEE
79.	2012B5A3554P	Saurjya Sarkar	Drum onset based percussive effect	Dr. Joshua Reiss	EEE
80.	2013A3TS229P	Hardik Malhotra	Design and Inplement DBSCASV on multi threaded and hybrid architecture	Dr. Stephane Vialle	EEE
81.	2013A3PS214P	Nihar Dasari*	Arrhythmia detection in	Dr. Axel Jantsch	EEE

S.No	ID No	Name	Title	Supervisor	Department
			electrocardiogram using Neural network		
82.	2013A8PS353P	Rahul Kumar Budhwani	Near threshold stochastic computing for fault tolerant and low power architectures	Dr. Olivier Sentieys	EEE
83.	2012B4A1677P	Divyam Jain	A STUDY OF DISCRETE TIME QUEUES WITH NEGATIVE CUSTOMER ARRIVALS	Dr. Rakhee	Mathemaics,
84.	2012B4A2704P	Rahul Jain	Mathematical and Analytical Modelling of User Behavioral Data for Maximizing the Affiliate Revenue Generation	Mr. Kamran Akhtar	Mathematics
85.	2012B4A3381P	Garima Dhanania	Study and Implementation of Distributed Multi-Robot Localization Techniques	Mr.Avinash Gautam	Mathematics
86.	2012B4A3622P	Rajeev Dutt Misra	Stochastic Modelling of Wind and Solar Power Generation	Dr. Sumanta Pasari	Mathematics
87.	2012B4A3642P	Mohit S	Fractional Calculus & its Application in PID Controllers	Dr. Trilok Mathur	Mathematics
88.	2012B4A3721P	Sakshi Bhargava	Theoretical Investigation and Analysis of Polygonal Patch Antennas	Dr. Sangita Yadav	Mathematics
89.	2012B4A4587P	Vaibhav	Design of Supply Chain Inventory Driver Using non Traditional Optimization Techniques	Dr. Srikanta Routroy	Mathematics
90.	2012B4A4610P	Sanchit Samnani	Application of Fuzzy TOPSIS	Dr. Shivi Agarwal	Mathematics
91.	2012B4A4623P	Ayush Jain	Application of Fuzzy in Supply Chain Management	Dr. Shivi Agarwal	Mathematics
92.	2012B4A4623P	Akshat Khandelwal	Implementation of Fuzzy SCM	Dr. Shivi Agarwal	Mathematics
93.	2012B4A7258P	Swaraj Dalmia	Logic in Games	Dr. Rakhee	Mathematics
94.	2012B4A7333P	Akath Singh Dua	Social Network Analysis	Dr. Rajiv Kumar	Mathematics
95.	2012B4A7445P	Radhika Pasari	Large Scale Graphs	Dr. Rajiv Kumar	Mathematics
96.	2012B4A7495P	Gautam Singhnia	Applications of Fractional Order ODEs & PDEs and their Numerical Solutions	Dr. Devender Kumar	Mathematics
97.	2012B4A7640P	Dhairya Sangoi	A Study of Network Loss and Delay Characteristics	Dr. Rakhee	Mathematics
98.	2012B4A7662P	Pankhuri Kumar	Application of Genetic Algorithm in Fuzzy Systems	Dr. Shivi Agarwal	Mathematics
99.	2012B4A7691P	Rishabh Singh	Study and Implementation of algorithm for Multi-task allocation in the presence of uncertainties	Mr. Avinash Gautam	Mathematics
100.	2012B4A7702P	Swarnim Singhal	Clustering in Weighted Graphs	Dr. Rajiv Kumar	Mathematics
101.	2012B4A7703P	Devashish Mathur	Using Hidden Markov Models for estimating stock parameters	Dr. Rakhee	Mathematics
102.	2012B4A7708P	Harish Tundwal	An Automatic Text Summarization Method	Dr. Sumanta Pasari	Mathematics
103.	2012B4A7714P	Jaiwant Rawat	Hamiltonian Cycle in Planar Graphs	Dr. Rajiv Kumar	Mathematics
104.	2012B4A7819P	Amitayush Thakur	Study and Implementation of Multi-Robot SLAM on a Learn of three turble bots	Dr.Sudeept Mohan	Mathematics
105.	2012B4A7827P	Lokesh Jain	Clustering in Graphs	Dr. Rajiv Kumar	Mathematics
106.	2012B4A8613P	Sikhar Agarwal	Mathematical Modelling of Biological Systems	Dr. Balram Dubey	Mathematics
107.	2012B4A8666P	Mehak	Application of Fuzzy DEA in	Dr. Shivi Agarwal	Mathematics

S.No	ID No	Name	Title	Supervisor	Department
			Real Life Sector		
108.	2012B4A8678P	Keshav Raheja	Quantum Transport Modelling & Simulation of Nanometer Scaled MOSFET Devices	Dr. Yiming Li	Mathematics
109.	2013B4PS487P	Abhishek Inamdar	Representation Theory	Dr. Chandrasheel Bhagwat	Mathematics
110.	2013A4PS398P	Divyanshkhattak	RANS calculations of liquid film thickness distributions in subchannel& nuclear fuel rod bundle	Michael Horst Prasser, P. Srinivasan	Mechanical
111.	2013A4TS127P	Jeet Desai	To develop and examine efficiency of shape and topology optimization for a Genstic design	Rafael Estevez, AmolMarathe	Mechanical
112.	2012B4AB727P	Romanch Arya	Development of modular production system for experience laboratory	K.S.Sangwan, Christoph Herrmann	Mechanical
113.	2013ABPS205P	Devina Jain	Resource Efficiency Management in Production	K.S.Sangwan, Christoph Herrmann	Mechanical
114.	2012B5A4579P	Mukul	Numerical Simulation of the thermal management system of a kystron tube's spent electron beam	Shyam Sunder Yadav	Mechanical
115.	2013ABPS193P	Viven Sharma	Development & implementation of RCM model in manufacturing industry (case study)	Rajesh P. Mishra	Mechanical
116.	2013A4PS407P	Shubhamhorane	Numerical Simulation of Taylor couette flow (fluid Mechanics)	SyamSuner	Mechanical
117.	2012B1A4851P	Tanmaykulshrestha	Study of various aspects related to Manufacturing, agriculture and Health Care supply chain.	SrikantaRoutroy	Mechanical
118.	2013A4PS086P	Akshay Sunil Honrao	Bifurcation and chaos in 100F non-smooth oscillators with parametric excitation	Amol M. Marathe	Mechanical
119.	2013A4PS257P	Shriramravindraa shirgade	Bifurcation and Chaos in stick-slip oscillator	Amol M. Marathe	Mechanical
120.	2013A4PS334P	Shashwat Chopra	Modeling and Analysis of post-harvest Agriculture supply chain	SrikantaRoutroy	Mechanical
121.	2012B1AB790P	Suryanshrastogi	Understanding Bio-mimetics with respect to product design	Srinivas Kota	Mechanical
122.	2012A4PS301P	Afzal Ahmed Khan	Inventory Management (Supply Chain management)	Anil Jindal, Satyendra Kr. Sharma	Mechanical
123.	2012B1A4814P	Harshit Sharma	Solar Thermal Engineering	M.S.Soni	Mechanical
124.	2012B1A4803P	Devamjhanwar	Optimization of mold design in casting using simulation software	P.Srinivasan	Mechanical
125.	2012B3A3408P	Namansinghal		Dr. jyoti	Management
126.	2012B3A3467P	Gautam Singh		Dr. Arun Kumar	Management
127.	2012B3A3481P	Amanverma		Dr. UdayanChanda	Management
128.	2012B3A3600P	Somya Gupta		Dr. UdayanChanda	Management
129.	2012B3A7526P	Harsharn Kaur		Dr. Arun Kumar	Management
130.	2012B3A7570P	Anchit Jain		Dr. SarveshSatija	Management

S.No	ID No	Name	Title	Supervisor	Department
131.	2012B3A7522P	Shubham Arora		Dr. Arun Kumar	Management
132.	2012B5A2604P	Arun Pillai	Ion Conducting polymers, preparation and characterization.	Anshuman Dalvi	Physics
133.	2012B5A3405P	Anurag Pallaprolu	High frequency periodic driving of 2D electron systems and ploquet engineering of gauge structures.	T.G. Sarkar	Physics
134.	2012B5A3476P	Vedant Mahulkar	Pure Sn Clusters : A DFT study	D. Bandyopadhyay	Physics
135.	2012B5A3576P	Harsh Varshney	Melting dynamics of short DNA	Navin Singh	Physics
136.	2012B5A3651P	Mohit Bhardwaj	Analysis and construction of radio telescope for studying virus astrophysical objects in radio	D. Bandyopadhyay	Physics
137.	2012B5A7447P	Kharbade Ashlesh Sanjay	Molecular dynamics Simulation of molecular crowders and its role in DNA unzipping	Navin Singh	Physics
138.	2012B5A7521P	Gunjan Kumar Singh	Investigations on dark energy and dark matter	Madhukar Mishra	Physics
139.	2012B5A7589P	Rajath S	Localization in 2D electron systems (Study of using floquit analysis)	T.G. Sarkar	Physics
140.	2012B5A7682P	Balkrishna Shrivastava	Hybrid Sn Clusters of A DFT study	D. Bandyopadhyay	Physics
141.	2012B5A7848P	Saurabh Kumar	DNA unzipping in crowded cell enviroment	Navin Singh	Physics
142.	2012B5A3663P	Kunjesh D Agashiwala (Off-Campus)	Study of graphene based high mobility devices	Mandar M Deshmukh	Physics
143.	2012B5A2709P	Naman Munot (Off-Campus)	Optical properties of aerosoles relating number concentration of atmospheric aerosoles in Delhi	Gajala Habib	Physics
144.	2012B5A3697P	Anamika Aggarwal (Off-Campus)	Run 2 LHC data analysis in the non resonent channel for dihggs- > 2GAMMA2D in CMS	Dr. S. Ganjour	Physics
145.	2012B5A3645P	Vatsal Panwar (Off-Campus)	Stars with Debrin disks as members of star moving groups.	Dr. Wing-Hnen Ip	Physics
146.	2012B5A3553P	Souradeep Bhattacharya (Off-Campus)	Stars with Debrin disks as members of star moving groups.	Dr. Wen-Ping Chen	Physics
147.	2012B5A3546P	Rohit Goel (Off-Campus)	Modeling & Design of 2D – TMD mosfet and Tunneling FET's	Dr. Y. Li	Physics

**LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2016**

II Sem 2015-16					
S.No.	ID No	Name	Title	Supervisor	Department
1.	2014H129011P	Mohd. Azeem Khan	Real time expression analysis of stress responsive genes in <i>E. coli</i> K12 exposed to mycogenic silver nanoparticles	Jitendra Panwar	Biological Sciences, BITS Pilani, Pilani Campus
2.	2014H129012P	A . Naga Sarada	Insight into the expression of Ezrin protein in Gestational Trophoblastic Tumors	Dr. Priya Srinivas and Dr Rajdeep Chowdhury	Rajiv Gandhi Centre for Biotechnology (RGCB), Thycaud Post, Poojappura, Thiruvananthapuram - 695 014 Kerala, India
3.	2011B1A2830P	Aayush Aggarwal	A Detailed Analysis of microRNA expression patterns in hepatocellular carcinoma	Dr Rajdeep Chowdhury	BITS, Pilani
4.	2014H129005P	Nandita Sharma	Characterizing the role of CRISPR-Cas System in Salmonella Pathogenesis	Prabhat Nath Jha	Biological Science
5.	2014H129014P	R. Divya	Metabolic Characterization of Selected Desert Plants for Medicinally Important Flavonoids and related metabolites	Pankaj Kumar Sharma	Biological Sciences
6.	2014H129013P	ASHWIN VENKATESHVARAN	IDENTIFICATION OF NOVEL CONSENSUS MOTIFS IN <i>Plasmodium falciparum</i>	Ashis Kumar Das	Biological Sciences
7.	2014H129003P	JYOTI KASHYAP	Elucidation Of Alkaline Tolerance Mechanism In <i>Arthrospira platensis</i> NIES 39	Shibasish Chowdhury	Dept. Of Biological Sciences
8.	2014H129002P	K. M. Satish	Role of EHD2 and Rab GTPases recycling of CAVI to the Plasma Membrane	Prof. Christophe LAMAZE, Institut Curie - Centre de Recherche, France (Supervisor) Prof. Vishal Saxena, BITS Pilani (Co-Supervisor)	Chemical Biology of Membranes and Therapeutic Delivery (France); Dept. of Biological Sciences (India)
9.	2014H101017P	Nitin Krishna Sai L	Cold Model Study of Re-circulating Fluidized Bed	Dr. Raman Sharma	Chemical
10.	2014H101018P	Garima Verma	Development of an	Dr. Smita	Chemical

II Sem 2015-16					
S.No.	ID No	Name	Title	Supervisor	Department
			Efficient System for De fluoridation of drinking water using Nano-adsorbent.	Raghuvanshi	
11.	2014H101019P	T. Princy Sharon	Modeling and Simulation of various chemical engineering systems.	Dr. Suresh Gupta	Chemical
12.	2014H101020P	Amrita Preetam	Experimental and theoretical studies of dye from industrial waste water using bioremediation.	Dr. Suresh Gupta	Chemical
13.	2014H101021P	Nadkarni Shradha Mangesh	Use of Nano-adsorbent for treatment of industrial wastewater.	Dr. Suresh Gupta	Chemical
14.	2014H101022P	Ramesh Kumar	Super hydrophobic glass coating for automobile application.	Dr. Sonal Mazumder	Chemical
15.	2014H101023P	Dhrumil Gandhi	Implementation of Advance controller in PCT-40 using lab view.	Dr. H. K. Mohanta	Chemical
16.	2014H101024P	Annie C. Jenifer	Detailed kinetic modeling of reforming of coke oven gas.	Dr. H. K. Mohanta & Dr. Srinivas Appari	Chemical
17.	2014H101025P	Snehal Banore	Removal of heavy metals from industrial waste water using bioremediation process.	Dr. Arvind K. Sharma & Dr. Suresh Gupta	Chemical
18.	2014H101026P	Sachin Tomar	Cold model study of recirculating fluidized bed (RCFB) reactor.	Dr. Raman Sharma	Chemical
19.	2014H101027P	D. N. S. Hemanth Kumar	Modeling and simulation of biomass gasification using ASPEN Plus.	Dr. Pratk N. Sheth	Chemical
20.	2014H101028P	Ketan Jangir	Foam characterization of higher chain alcohols with anionic surfactant sodium lauryl sulfate.	Dr. Pradipta Chattopadhyay	Chemical
21.	2014H101029P	Bhawna Singh	Processing and characterization of bulk textured BIMEVOX for intermediate temperature (K600°C) SOFCr application.	Dr. Banasri Roy	Chemical
22.	2014H101030P	S. V. Siva Krishna	Reactive extraction of products obtained from CO <sub>2</sub> mitigation.	Dr. Smita Raghuvanshi	Chemical
23.	2014H101031P	Akanksha Pathak	Developing of metal doped bismuth Veradale nano catalyst system for the production of hydrogen form ethanol.	Dr. Banasri Roy & Dr. H.K. Mohanta	Chemical
24.	2014H101032P	Manish Chauhan	Characterization and optimization studies of high chain alcohols aqueous foam by using different foaming agents and additive.	Dr. Pradipta Chattopadhyay	Chemical
25.	2014H101033P	Anamika Tiwari	Development and characterization of zinc	Dr. Banasri Roy	Chemical

<b>II Sem 2015-16</b>					
<b>S.No.</b>	<b>ID No</b>	<b>Name</b>	<b>Title</b>	<b>Supervisor</b>	<b>Department</b>
			doped titanium oxide for biomedical applications.		
26.	2014H101034P	Chelikani Sowmya	Modeling and simulation of liquid-solid fluidized bed for adsorption process.	Dr. Arvind K. Sharma	Chemical
27.	2014H101035P	Ashish K. Deewangan	Synthesis and characterization of dmg polymer nanoparticles.	Dr. Sonal Mazumder	Chemical
28.	2014H101036P	Harshvardhan Singh	A Comparative study of the effect of training set design techniques on data driven model of different industrial data sets.	Dr. H. K. Mohanta & Dr. Ajaya K. Pani	Chemical
29.	2014H101037P	Indu Sharma	Modelling and simulation of fixed bed downdraft gasifier using ANSYS FLUENT.	Dr. Pratk N. Sheth	Chemical
30.	2014H101038P	Sunil Varkey	NMEOR nanoparticle based microbial enhanced oil recovery	Dr. Sonal Mazumder	Chemical
31.	2014H101039P	Harshal J. Dongre	Removal of TCE and PCE using bio-filtration technique.	Dr. Smita Raghuvanshi	Chemical
32.	2014H101040P	Suman Choudhary	Modelling & Simulation of fixed bed Pyrolysis of Jatropha de-oiled cake.	Dr. Pratk N. Sheth	Chemical
33.	2010HS43461P	GAURAV TYAGI	Potential of marble slurry as a mineral admixture in concrete	Dr. ANSHUMAN	CED
34.	2011HS43451P	HARISH KUMAR MULCHANDANI	Displacement based design of the building	Prof. MANOJ KUMAR	CED
35.	2004H130069P	ANIMESH SAIKIA	Study on the speed and lateral placement on horizontal curves	Dr. PRASANTA SAHU	CED
36.	2014H130072P	VAIBHAV BAJPAI	Developing freight generation model for restaurants in the Delhi-NCR region	Dr. PRASANTA SAHU	CED
37.	2014H130068P	ANIRBAN GUHARROY	Estimating the effect of crowding on mode choice and its associated cost.	Dr. PRASANTA SAHU	CED
38.	2014H130065P	AGNIVESH. P	Understanding the freight movements generated from establishments	Dr. PRASANTA SAHU	CED
39.	2014H130066P	BITLA YASHWANATH	Evaluation of sugarcane bagasse as a construction material	Dr. BAHURUDEEN A	CED
40.	2014H144050P	MAHIMA SHRIVASTAVA	To determine durability performance of sugarcane bagasse ash blended cement.	Dr. BAHURUDEEN A	CED
41.	2014H130071P	VISHNU MOHAN	Comparison of gap acceptance of an intersection in day and night.	Prof. A.K. SARKAR	CED
42.	2014H130063P	PIYUSH SHARMA	A study on feasibility and	Dr. AMIT GOEL	CED



II Sem 2015-16					
S.No.	ID No	Name	Title	Supervisor	Department
			effect of adding PCM in HMA.		
43.	2014H143061P	NIKAM AMOL SHIVAJI	Performance based seismic design of RCC multistory building.	Prof. MANOJ KUMAR	CED
44.	2014H143051P	PERI ADINAG ABHISHEK	Post buckling response, failure and strength of functionally graded plates with and without cutouts.	Prof. SHAMSHER BAHADUR SINGH	CED
45.	2014H143057P	NISHANT RATHI	Influence of shear cores in response of high rise structures.	Dr. MANOJ KUMAR	CED
46.	2014H144044P	P.V.PONABALA MOORTHI	Mathematical modelling of concrete using wave attenuation.	Prof. SHAMSHER BAHADUR SINGH	CED
47.	2014H143059P	GOHAR AYUB	Evaluating the properties of concrete by using polypropylene fibres.	Dr. MANOJ KUMAR	CED
48.	2014H144049P	LALU SAHEB. K.	Accessibility of alternative materials for Indian cement plants.	Dr. BAHURUDEEN A	CED
49.	2014H144043P	SOUMYA KAR	Designing, developing analyzing and implementation of a crop-water management system.	Dr. RAJIV GUPTA	CED
50.	2014H144048P	B.SWETHA MALIKA	Understanding weather interaction with road traffic volume in heterogeneous conditions.	Dr. PRASANTA SAHU	CED
51.	2014H144041P	MUTHUKUMAR. M	Evaluation of cable car as a feeder system for metro/sub-urban rail transmits case study: Chennai, India	Prof. A.K. SARKAR	CED
52.	2014H143060P	RAHUL MADHU	Analytical study of ductility improvement of RCC frames by incorporating steel fiber reinforced concrete in plastic hinge zone	Dr. MANOJ KUMAR	CED
53.	2014H103089P	Dhanashree N P	Information Retrieval/Machine Learning	Poonam Goyal	CS&IS
54.	2014H103092P	Kalgi Patel	Pattern Recognition, Artificial Intelligence and Biological Computing	Lavika Goel	CS&IS
55.	2014H103105P	Nikhil S	Concurrent Data Structures, Distributed Computing	S. Balasubramaniam	CS&IS
56.	2014H103109P	Mayank Gupta	Data Mining, Machine Learning and Image Processing	Poonam Goyal	CS&IS
57.	2014H112186P	Surya Prakash Singh	Big data, Data mining, Information retrieval	Yashvardhan Sharma	CS&IS
58.	2014H112188P	Yaduveer Singh	Provenance, BigData	Asma Rani	CS&IS
59.	2014H112193P	Nishant Kumar	NLP,IR,BigData and Data Mining	Yashvardhan Sharma	CS&IS

<b>II Sem 2015-16</b>					
<b>S.No.</b>	<b>ID No</b>	<b>Name</b>	<b>Title</b>	<b>Supervisor</b>	<b>Department</b>
60.	2009HD03586P	Nitin Varyani	Programming of distributed linux kernel and its virtualization to the user as a single entity	S Balasubramaniam	CS&IS
61.	2010HS23044P	Shruti Inamdar	Time synchronization protocols for wireless sensor network – A survey	Ms.Vinita Tiwari	EEE
62.	2014H140128P	Manish Kumar	9413307791	Dr. K. K. Gupta	EEE
63.	2010HS41319P	AlokSaxena	Molecular Dynamics Simulation of Polymer Grapheme Nano Composite	MuraliPalla	Mechanical
64.	2014H106142P	AkshaySarda	Review of Cryogenic Machining for Titanium alloys	A.K.Digalwar	Mechanical
65.	2014H106145P	Aditya Potnis	Simulation of flow Through Exhaust System using finite Volume Method	Shyam Sunder Yadav	Mechanical
66.	2014H106146P	Vijay Chauhan	Energy and Energy Analysis of Oxy fluidized bed combustor	Ravi Inder Singh	Mechanical
67.	2014H106147P	Nisha Tamar	Numerical Modeling and Simulation of Latent heat Thermal Energy Sto. System	M.S.Soni	Mechanical
68.	2014H106149P	Peeyush Kulkarni	Micro fluidic Device for Single cell Capture and Retrieval	J.S.Rathore	Mechanical
69.	2014H106154P	V.C.Aravindan	Design and Simulation of CSP power Plant	M.S.Soni	Mechanical
70.	2014H106155P	Darsan A.S.	CFD Analysis of Cyclone and flue gas cooker of oxy fired fluidized bed combustor using coal and Biomass	Ravi Inder Singh	Mechanical
71.	2014H106156P	Abhyuday Singh Banafer	Simulation of Scroll Expander	M.S.Dasgupta	Mechanical
72.	2014H141116P	VidyadharPatil	Phase field modeling of crack propagation in Bio-Inspired Composite using hyper elastic Constitutive Equations	MuraliPalla	Mechanical
73.	2014H141117P	Tanmay Gupta	Molecular Dynamics Simulation of Polymer Grapheme Nano Composite	MuraliPalla	Mechanical
74.	2014H141119P	Ajinkya Jayant Tathe	Dynamic Modeling and Balancing Horizontal Axis Washing Machine	Sandeep Dhar	Mechanical
75.	2014H142132P	AstajyhotiBehera	Development of Strategy for Indian Agriculture supply Chain to enhance its productivity	SrikantaRoutroy	Mechanical
76.	2014H142136P	Shekhada Ankit	Reliability Oriented outlook for a high service life Mechanical Component using	R.P.Mishra	Mechanical

II Sem 2015-16					
S.No.	ID No	Name	Title	Supervisor	Department
			German wear		
77.	2014H149244P	KirtiPagariya	Advertising techniques adopted by startups	Dr. Arun Kumar Dr. Jyoti	Management
78.	2014H149241P	Nikhil	Success and failure of SME's	Dr. Satyendra Sharma	Management
79.	2014H147203P	M.S. Seshank	Natural compounds induced p53 conformational reactivation in RITS "Mutants"	Dr. Atish T. Paul	Pharmacy
80.	2014H146219P	Tushar Date	Development and evaluation of lipid polymer hybrid nanoparticle of docetaxel for cancer treatment.	Dr. Deepak Chitkara	Pharmacy
81.	2014H146218P	Ishit Kothari	Development and evaluation of nanocarrier for combined delivery of docetaxel and alpha lipoic acid in advanced metastasis breast cancer	Dr. Deepak Chitkara	Pharmacy
82.	2014H146213P	Shelly Sinha	Design and evaluation of nanoparticulate delivery system of a selected drug	Ms. Archana Khosla	Pharmacy
83.	2014H147206P	L. Naga Rajiv	Design, molecular docking and molecular dynamics studies of a novel chemical scaffold as Cathepsin D inhibitors	Dr. Hemant R. Jadhav	Pharmacy

I Sem 2016-17					
S.No.	ID No	Name	Title	Supervisor	Department
1.	2015H101016P	DHIVYA P	Development of soft sensor for methyl/ethyl acetate reactive distillation system.	Prof. Hare Krishna Mohanta	Chemical
2.	2015H101017P	POORNIMA K	Targeted drug delivery using nanoparticles.	Prof. Suresh Gupta	Chemical
3.	2015H101018P	PADARTHI KRISHNA YASHWANTH	Hydrogen production using Ni/Sn catalysts.	Dr. Banasri Roy	Chemical
4.	2015H101019P	YUKTI	Development of compact and economically via metallic nano-particles fixed bed for treatment of industrial wastewater.	Prof. Suresh Gupta	Chemical
5.	2015H101020P	PRATISHTHA RATHORE	Experimental and theoretical study on production of hydrogen rich gas from biomass.	Dr. Pratik N Sheth	Chemical
6.	2015H101021P	LATA JOSHI	Flow pattern in loop reactors.	Prof. Arvind Kr. Sharma	Chemical
7.	2015H101025P	VIKASH KUMAR	Design and development of novel biomass cook-stove.	Dr. Pratik N Sheth	Chemical
8.	2015H101026P	CHAVA RAMA KRISHNA	Life cycle assessment of bio-fuels	Dr. Smita Raghuvanshi	Chemical
9.	2015H101027P	PATIL BHAGYESHA SUNIL	Nano-catalyst (metal) system for low	Dr. Banasri Roy	Chemical

			temperature vapour phase reforming of ethanol		
10.	2015H101028P	DHAGE SUMIT BANSILAL	Bioremediation of soil contaminated with waste engine oil.	Dr. Amit Jain	Chemical
11.	2015H101029P	ABHISHEK MISHRA	Operating conditions of Re-circulating Fluidized bed reactor.	Dr. Raman Sharma/ Dr. Arvind Kr. Sharma	Chemical
12.	2015H101030P	SHRUTI GUPTA	Syngas production by reforming of biogas over Ni-based catalyst monolithic	Dr. Srinivas Appari	Chemical
13.	2015H101032P	PRIYA	Detailed kinetic modeling of catalyst poisoning & regeneration.	Dr. Srinivas Appari	Chemical
14.	2015H101033P	DEEPIKA SHANMUKHA HEGDE	CFD Simulation and process refinement of fluid catalytic cracking.	Dr. Priya C Sande	Chemical
15.	2011HS43451P	HARISH KUMAR MULCHANDANI	Performance Based Design Structure by developing collapse fragility curves	Dr. MANOJ KUMAR	CED
16.	2010HS43412P	ARUSHI SHEORAN	Partial replacement of fine aggregate by base metal tailing in concrete	Dr. ANSHUMAN	CED

**LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2016**

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
<b>Biological Sciences</b>	
1. PDS-1000/HE system	
2. Biohazard Safety Cabinet	
3. Plant Growth Chamber	
4. Autoclave/Steam Sterilizer	
5. Beckman Flow Cytometer	
6. Refrigerated Centrifuge	
7. Sorvall LYNX 4000 Superspeed Centrifuge	
8. Thermofisher Scientific Multiskan GO with Cuvette	
9. Thermoscientific Multiskan GO with Cuvette 100	
10. Deep Freezer	
11. CO2 Incubator (3)	
12. Vacuum Pump 100 lit HRP-100	
13. P.C. Assembly; arcnet coaxial interf; RGF	
14. P.C. Assembly; arcnet coaxial driver; RGG	
15. USB Arcnet Adapter	
16. Multiparameter Meter Kit	
17. Tri Clean Pro System	
18. Oxygraph Plus System	
19. Sorvall	
20. Digital color cooled camera system	
<b>Chemical Engineering</b>	
1. Programmable Spin Coating System	
2. Pilot Plant for column bioleaching	
3. Rotary Vacuum Pump	
4. Benchtop Freeze Dryer	
5. Laboratory Graphic LCD	
6. Magnetometer	
7. Muffle Furnace Microprocessor	
<b>Chemistry</b>	
1. Electrochemical Analyzer	
2. Cell System	
3. Hot Air Oven	
4. Semi Micro Balance	
5. Fume Hoods (6)	
6. Melting Point Apparatus	
7. Autoclave	
8. Acid Digestion Vessel	
9. Melting Point Meter	

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
10. UV Spectrometer (3)	
11. Fan Base Frame	
12. Four Year Transform Infra Red SpectroPhotometer	
<b>Civil Engineering</b>	
1. Oven Digital	
2. Footing (Plate Load) Test Setup	
3. Dynamic (Plate Load) Test Setup	
4. Benchtop Meter	
5. Fluoride ionplus Sure-Flow Combination, Epoxy Body Electrode, with BNC Connector	
6. Multifunction DAQ Device	
7. Miniature Instrumented Impulse Hammer	
<b>Computer and Peripherals:</b>	
1. 2 U Rack	WILPD
2. Color Printer (3)	Director Branch, Physics, IPC
3. Black Printer (3)	ARCD, Chemistry, CSIS
4. 3D Printer	Mechanical
5. Desktop (56)	Chemistry, Mechanical, Civil, CSIS, Management, IPC
6. Workstation (5)	Chemical, Mechanical, EEE
7. Dell Server (6)	IPC
8. Laptops (3)	WILPD
9. Master/Head Node	IPC
10. Advanced Spartan 6 Based Controller	EEE
11. NoteBook (2)	Mechanical,IPC
12. OBU (On Board Equipment) (2)	CSIS
13. RSU (Road Side Equipment)	CSIS
14. Data Acquisition System	WILPD
15. Switch (4)	IPC, WILPD, CSIS
16. NetFPGA 1G CML (4)	CSIS
17. 1 GbE Switch, optional uplinks/stacking	CSIS
18. HIA 100ix 24 online DPU (2)	IPC
<b>Computer Software</b>	
1. Mathworks Suite of Solution (TAH)	IPC
2. Maple Software	Mechanical Engg
3. Netsim Standard (2)	EEE, CSIS
4. OC Sim: Fiber Optic Communication Systems Modules	EEE
5. IBM SPSS Statistics and User License	EEE
6. Hostel Student In and Out Management System	SWD
7. Red Hat Enterprise Linux Server	EEE
8. Rolta Geomatica Total Educational Suite (5)	Civil
9. ProDyn Software	WILPD
10. COMSOL Multiphysics Software	Civil
11. Cube Compact Research Licenses	Civil

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
12. Manufacturing Simulation Software Kit (5 Users)	WILPD
13. Systat 13 Software (4 Users)	Chemical Engg.
14. Decision Tools Suite Industrial v 7.0	Management
15. ANSYS Academic Research CFD (5 Users)	Mechanical Engg
16. Hostel Student Leave Management System	SWD
17. Upgradation of Siemens communication system from Hipath (4)	IPC
18. Comsol Multiphysics Research License	Mechanical Engg
19. Comsol Multiphysics Class Kit License	Mechanical Engg
20. CR 2500iNG-XP Appliance (2)	IPC, WILPD
21. ANSYS Academic Research CFD	Chemical Engg.
22. Thermal-Fluid Simulation Kit	WILPD
23. Phoenix WinNonlin Annual Named	Pharmacy
24. AspenOne for Universities	Chemical Engg.
25. Symica EDA (AMS) Design Tool Kit	EEE
<b>Electrical engineering:</b>	
1. Multi-Function Rotor Experiment Benck Kit	
2. 3 Phase Induction Motor	
3. Level Control Laboratory Trainer	
4. Digital Control System Trainers	
5. 3-Phase IGBT based Inverter Stack (2)	
6. RF Power Meter	
7. Visual TCAD & Genius Device Simulator (3)	
8. Picoammeter/Voltage Source	
9. Benchmark Commlab-T (10)	
10. High Precision LCR Meter	
11. Single-vessel Dip Coating System	
12. Oscilloscope	
13. Digital Oscilloscope	
14. Power Measurement Bundle	
<b>Mechanical Engineering</b>	
1. Spot Fume Extractor System	
2. Basic Machinery Fault Simulator System	
3. Annular Ceramic Shear Tri-axial Accelerometer	
4. Loan Cell 5kN	
5. Driven Tool Holder – Radial and Axial (5)	
6. Reynold's Apparatus	
<b>Pharmacy</b>	
1. CO2 Incubator	
2. Biosafety Cabinet	
3. Magnetic Stirrer	
4. Waters GPC System	
5. HPTLC System With System Manager	
6. Flash Chromatography System (2)	

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
7. Spectrofluorimeter with T-Format anisotropy with accessories	
8. Fume Hood	
9. Ultra-Low Temperature Freezer	
10. Manual Microtome	
11. Blade Holder	
12. Vaccum Pump (2)	
13. Sorvall ST 8R small Benchtop centrifuge	
14. Autoclave	
15. Flowcell	
16. Triple Quadrupole GC-MS/MS	
17. Heidolph Rotary Evaporator	
18. Chiller	
<b>Physics</b>	
1. Single Channel Amplifier	
2. Polymer Film Making Equipment	
<b>Other</b>	
19. UPS 6 KVA - (2)	IPC
20. UPS 60 KVA	Bio
21. Commercial Motorized Treadmill	SWD
22. Commercial Cross Trainer	SWD
23. Coagulation Analyser	Medical Centre
24. Smartzone 100 with 4 GigE ports with WatchDog Support(3)	IPC
25. Multipurpose Single Disc Scrubber	Vfast & Cafeteria
26. Paper Shredder Machine	PMRU (Repro)
27. Lamination Machine	PMRU (Repro)
28. Bibliotheca SmartStation TM100	Library
29. Bibliotheca Smartserv TM 1000	Library
30. Laser Range Finder (2)	CSIS
31. Projectors (3)	IU, Mechanical
32. Handheld Camcorder	WILPD
33. RFID Security Gate	Library
34. Multipurpose Staff Station (2)	Library
35. Inventory Device	Library
36. Mini Offset Printer	Repro
37. CMOS Camera	CSIS
38. Asynchronous Motor Generator system set up	WILPD
39. Permanent Magnet System	WILPD
40. DC Motor Generator system setup	WILPD
41. Synchronous Motor Generator system setup	WILPD
42. Remote lab Based Process trainer	WILPD
43. Remote Lab based PLC trainer	WILPD
44. Camera & Lighting setup	WILPD
45. Air Conditioning System	Librarian



**CUMULATED LIST OF BOOKS PUBLISHED UNDER THE AUTHORSHIP OF BITS FACULTY**

**A. Text Books**

S.No.	Author	Title	Publisher	Year
<b>Bio Sciences</b>				
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
<b>Chemical</b>				
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
<b>Chemistry</b>				
23.	Choudhari, Roy T.	Basic Engineering Thermodynamics	Tata McGraw Hill, Bombay	1973

S.No.	Author	Title	Publisher	Year
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 process industries: advanced techniques	Discovery Pub. House	1998
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
<b>Civil Engineering</b>				
29.	Gupta, Rajiv	Construction planning & technology Second Edition	CBS New Delhi	2014
30.	Ghoshal, S.	Microprocessor based system design	Macmillan	1996
31.	Ghoshal, S.	Computer-Aided analysis & design	PHI	1997
32.	Moondra, H.S. & Gupta, Rajiv	Laboratory manual for civil engineering	CBS, New Delhi	2000
33.	Kumar, Kamlesh	Basic Geotechnical Earthquake Engineering	New Age International Publishers, Limited, New Delhi.	2006
34.	Raju, K.S.	Prediction in Ungauged Basins for Sustainable Water Resources Planning and Management	Jain Brothers, New Delhi	2007
35.	Kulkarni, D.M. & A.K. Sarkar	Engineering graphics with AutoCAD	PHI, New Delhi	2009
36.	K. Srinivasa Raju & D. Nagesh Kumar	Multicriterion Analysis in Engineering and Management	PHI Learning Pvt. Ltd., New Delhi.	2010
37.	K. Srinivasa Raju & A. Vasani (Ed.)	Sustainable Water Resources Management and Impact of Climate Change	B.S. Publications, Hyderabad.	2010
38.	Singh, S. B.	Analysis and Design of FRP Reinforced Concrete Structures,	McGraw-Hill Education Pvt. Ltd., New Delhi	2014
<b>Computer Science</b>				
39.	Mathur, A.P., Arora K.S., Reddy U.S.	Introduction to Pascal	Tata McGraw Hill, New Delhi	1983
40.	Mathur, A.P.	Introduction to Microprocessors (Third Ed.)	Tata McGraw Hill, New Delhi	1989
41.	Sharan, S.N.	Fundamentals of Expert System	CBS, New Delhi	1993
42.	Banerjee, Rahul	Architecture and Conceptual Design of the Unix System	Khanna Publishers	1993
43.	Banerjee, Rahul	Internetworking Technologies: An Engineering Perspective	Prentice Hall of India	2003
44.	Ghosh, S.	Programming in C	Prentice Hall of India	2004
<b>Electrical &amp; Electronics Engineering</b>				
45.	Maheshwari, L.K., Anand, M.M.S.	Laboratory Manual for Introductory Electronics Experiments	New Age International Publisher	1979
46.	Jain, R.P.	Modern Digital Electronics	Tata McGraw Hill, New Delhi	1984
47.	Jain, R.P., Anand, M.M.S.	Digital Electronics	Tata McGraw Hill, New Delhi	1984
48.	Ramanan, K.V.	Functional Electronics	Tata McGraw Hill, New Delhi	1984
49.	Iyer, T.S.K.V.	Circuit Theory	Tata McGraw Hill, New Delhi	1985
50.	Nagrath, I.J., Kothari, D.P.	Modern Power System Analysis (Second Ed.)	Tata McGraw Hill, New Delhi	1989
51.	Nagrath, I.J.	Basic Electrical Engineering	Tata McGraw Hill, New Delhi	1991
52.	Maheshwari, L.K., Kapoor, A.	Digital Electronics	McMillan India, New Delhi	1992
53.	Khare, R.P.	Analysis Instrumentation	CBS, New Delhi	1993
54.	Nagrath, I.J., Kothari, D.P.	Power Systems Engg.	Tata McGraw Hill, New Delhi	1994

S.No.	Author	Title	Publisher	Year
55.	Nagrath, I.J., Kothari, D.P.	Theory and Problems of Electrical Machines (TMH outline series)	Tata McGraw Hill, New Delhi	1996
56.	Nagrath I.J., Kothari, D.P.	Electric Machines (Second Ed.)	Tata McGraw Hill, New Delhi	1997
57.	Nagrath, I.J.	Electronics: Analog and Digital	Prentice-Hall of India, New Delhi	1998
58.	Nagrath, I.J. Kothari, D.P.	Theory and Problems & Basic Electrical Engineering	Prentice-Hall of India, New Delhi	1998
59.	Nagrath, I.J. Sharan, S.N. Ranjan, R. Kumar, S.	Signals and Systems	Tata McGraw Hill, New Delhi	2001
60.	Anand, M.M.S.	Electronics Instruments & Instrumentation Technology	PHI	2003
61.	Ghosh, S.	Fundamentals of Electrical and Electronics Engineering	Prentice Hall of India	2003
62.	Khare, R.P.	Fiber Optics and Optoelectronics	Oxford University Press	2004
63.	Bansal, R.C.	One Chapter in the Book Electric Vehicles	CRC Press	2005
64.	Ghosh, S.	Electrical Machines	Pearson Education	2005
65.	Maheshwari, L.K., Anand, M.M.S.	Analog Electronics	Prentice Hall of India, New Delhi	2005
66.	Maheshwari, L.K., Anand, M.M.S.	Laboratory experiments and PSPICE simulations analog electronic	Prentice-Hall of India	2006
67.	Bhattacharya, D.K., Sharma, Rajnish	Solid State Electronic Devices	Oxford University Press, New Delhi	2007
68.	Surekha Bhanot	Process Control-principles and applications Rejuvenation without medicines	Oxford University Press	2008
69.	Khare, R.P., Dixit, R.K.	[English translation of ' <i>Bina Aushadhiyon ke Kayakalp</i> ' (in Hindi) by Pt Shriram Sharma Acharya]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
70.	Shambhudass, Khare, R.P.	Companions in Solitude [English translation of ' <i>Sunsan ke Sahachar</i> ' (in Hindi) by Pt Shriram Sharma Acharya – Translation by V. A. Shivshankaran]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
71.	Navneet Gupta	Principles of Material Science and Engineering	Dhanpat Rai & Co., New Delhi	2001
72.	Navneet Gupta	Semiconductor Materials and Devices	Dhanpat Rai & Co., New Delhi	2006
73.	Navneet Gupta	Fundamentals of Electronic Devices	Dhanpat Rai & Co., New Delhi	2009
74.	L.S. Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
75.	William Stallings & V K Chaubey (adaptation)	Wireless Communications Networks	Pearson Education Second Edition Indian Subcontinent adaptation	2009
<b>English</b>				
76.	Krishna Mohan, Manerjee, Meera	Developing Communication Skills	MacMillan India Ltd., New Delhi	1990
77.	Sharma, R.C. Krishna Mohan	Business Correspondence and Report Writing (2nd Ed.)	Tata McGraw Hill, New Delhi	1994
78.	Krishna Mohan, Raman, Meenakshi	Effective English Communication	Tata McGraw-Hill, New Delhi	2000
79.	Raman, Meenakshi, Sharma, Sangeeta	Technical Communication: Principles and Practice	OUP, New Delhi	2004
80.	Raman, Meenakshi [Ed.]	English Language Teaching	Atlantic Publishers and Distributors Ltd, New Delhi	2004
81.	Raman, Meenakshi, Singh, Prakash	Business communication.	Oxford University Press	2006
82.	Lata, Pushp Sanjay	Communicate or Collapse	Prentice Hall of India, New Delhi	2007

S.No.	Author	Title	Publisher	Year
83.	Kumar Krishna, M., Sharma Sangeeta	Frozen Ripple	Future Publishers, Howrah	2007
84.	Sarangi, J., Mishra Vinod	Explorations in Australian Literature	Sarup and Sons, New Delhi	2007
85.	Raman, Meenakshi Sharma , Sangeeta	Technical Communication – Principles and Practice. For Gujarat Technological University	OUP, New Delhi.	2008
86.	Raman, Meenakshi Sangeeta Sharma	Technical Communication: English Skills for Engineers	OUP, New Delhi.	2009
87.	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
88.	Pushp Lata and Sanjay Kumar	Communication Skills	Oxford Higher Education	2011
89.	Chauhan Gajendra S.	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015
90.	Sharma Sangeeta,	Technical Communication- Principles and Practice (Coauthor)	Third Edition. OUP: New Delhi.	2015
91.	PushpLata	Co-author, <i>Communication Skills</i> ,	Second Edition, New Delhi: Oxford University Press (OUP),	2015
92.	Sharma Sangeeta	Soft Skills- An integrated approach to maximize personality. Coauthor	Wiley: New Delhi.	2015
<b>Engineering</b>				
93.	Nagrath I.J., Madan Gopal	Systems : Modelling and Analysis	Tata McGraw Hill, New Delhi	1982
94.	Nagrath I.J., Madan Gopal	Control Systems Engineering (Second Ed.)	Wiley Eastern, New Delhi	1982
95.	Subramanian, K.R.V., Kadayam, S.R.	System Simulation: An Introduction to GPSS	CBS Publishers, New Delhi	1992
96.	Gupta, A.	Systems Analysis	CBS, New Delhi	1993
97.	Bansal, R.C., Bhatti, T.S., Kothari, D.P.	Small Hydro Power System	Dhanpat Rai and Company	2004
98.	Ghosh, S.	Control Systems: Theory and Applications	Pearson Education	2004
99.	Gupta, Rajiv, Nagrath, I.J.	Introduction to Systems	New Age International Publishers	2005
100.	Ghosh, S.	Network Theory: Analysis and Synthesis	Prentice Hall of India	2005
<b>Humanistic Studies</b>				
101.	Prakash, Nirupama, Dash, Motilal	Conflict Resolution: Peace Development	Jain Brother, New Delhi	2004
102.	Dash, Motilal, Dhyani, Umesh	Entrepreneurship Culture	Allied Publishers, New Delhi	2005
103.	Sachdev, K.N.	Ethics: A Virtue Theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
104.	Sachdev, K.N., Maharana, S.K.	Perspectives on Indian Ethics	Icon Publishers, New Delhi	2007
105.	Maharana, Suryakant	Bhārthari 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
106.	Prakash, Nirupama	Safe motherhood in globalized world	Routledge, London	2009
<b>Instrumentation</b>				
107.	Anand, M.M.S.	Electronic Instruments and Instrumentation Technology	Prentice Hall, New Delhi	2004
<b>Mathematics/Physics</b>				
108.	Bose, R.K.,	Methods of Mathematical Physics	Tata McGraw Hill, New Delhi	1984

S.No.	Author	Title	Publisher	Year
	Joshi, M.C.			
<b>Mathematics</b>				
109.	Krishnamurthy, V., Mainra, V.P., Arora, J.L.	Introduction to Linear Algebra	Affiliated East-West Press Pvt. Ltd., New Delhi	1976
110.	Pant, J.C.	Project Management: CPM, PERT, CERT with Linear Programming (Third Ed.)	Jain Brothers, New Delhi	1994
111.	Patnaik, R.K.	Calculus - Differential and Integral	CBS Publishers, New Delhi	1994
112.	Pant, J.C.	Introduction to Optimization: Operations Research (Fifth Ed.)	Jain Bros., New Delhi	2000
113.	Prasad, Devi	Introduction to Numerical Analysis	Narosa, Publishing House	2005
114.	Johnson, R.A., Gupta, C.B.	Miller and Freund's Probability and Statistics For Engineers	Pearson Education, New Delhi	2005
115.	Prasad, Devi	Elementary linear algebra.	Narosa Publishing House	2006
116.	Ganesh, M.	Introduction to fuzzy sets and fuzzy logic.	Prentice-Hall of India	2006
117.	Mishra, B.N., Mishra, B.K.	Optimization: linear programming	Ane Books	2006
118.	Dubey, Balram	Introductory Linear Algebra	Asian Books, New Delhi	2007
119.	Gupta, C.B.	Quantitative Methods	Asian Books, New Delhi	2007
120.	Sathpathi, D.K., Mishra, B.K.	Mathematical Modeling	Ane Books India, New Delhi	2007
121.	Ganesh, M.	Basics of Computer Aided Geometric Design : An Algorithmic Approach	IK International Publishing house Pvt. Ltd., New Delhi	2008
122.	Gupta, C.B., Mallik, K.	Engineering Mathematics-I	New Age Publications, New Delhi	2008
123.	Gupta, C.B., Mallik, K.	Engineering Mathematics-II	New Age Publications, New Delhi	2008
124.	Gupta, C.B.	Application of Optimization in Operations Research	IK International Publishing house Pvt. Ltd., New Delhi	2008
125.	Sharma, B.K.	A Text Book of Engineering Mathematics II	Asian Books Pvt. Ltd., New Delhi	2008
126.	Gupta, C.B.	Advanced Mathematics	NAIL, New Delhi	2009
127.	Krishnamurthy, V.	Combinatorics - Theory and Applications	East-West Press Pvt. Ltd., New Delhi. Also republished by Ellis Horwood, U.K.	1985, 1986
128.	CB Gupta, SR Singh and Sandeep Kumar	Advanced Discrete Structure	IK International, New Delhi	2010
129.	DS Chauhan, KN Singh, Paresh Vyas, Rakesh Pandey, Subhash Yadav, Trilok Mathur	Beez Ganita (Algebra)	Vardhman Mahaveer Open University, Kota	2010
130.	SP Goyal, AK Goyal, Vimlesh Soni, Sunil Saxena, Trilok Mathur	Sammishra Vishleshan (Complex Analysis)	Vardhman Mahaveer Open University, Kota	2010
131.	Gupta, Kantesh, Garg, Atul, Shekhawat, K.S., Shekhar Chandra, and Goswamy, Pranay	<i>Differential Equations, Calculus of Variations and Special Functions</i>	Vardhman Mahaveer Open University, Kota	2010
132.	Gupta, C.B., Singh S. R. and Kumar, Mukesh	Engineering Mathematics	Tata MCGraw Hill Education, New Delhi	2015
<b>Management Studies</b>				
133.	Dhyani, Umesh, Dash, Motilal, Kumar, Arya	Grass Roots Entrepreneurship-Strategy for Development	Jain Book Agency	2004
134.	Sharma, Sangeeta, Singh, Raghuveer	Advertising: Planning and Implementation.	Prentice-Hall of India	2006
135.	Anubhavananda Swami, Kumar, Arya	Management with Difference	Ane Books India, New Delhi	2007
136.	Bhat, Anil, Kumar, Arya	Management – Principles, Processes	OUP, New Delhi.	2008

S.No.	Author	Title	Publisher	Year
		and Practices		
137.	Chaudhary, Omvir & Singh, Prakash	Principals of Management	New Age International Publishers	2011
138.		<i>Mechanical Engineering</i>		
139.	Vaishwanar, R.S., Lakshmi-narayanan, V.	A Textbook of Practical Geometry (Ninth Ed.)	Jain Brothers, New Delhi	1992
140.	Mittal, R..K., Nagrath, I.J.	Robotics & Control	TMH	2003
141.	Parasar, B.S.N., Mittal, R.K.	Workshop Practice	Prentice Hall of India	2003
142.	Mittal, R.K., Sharma, N.N.	Emerging Mechanical Technology	RPS Press, Chennai	2007
143.	Prakash, Ravi	Nondestructive Testing Techniques	New Age Int. Publishers, New Delhi	2007
144.	Parashar, B.S.N.	Cellular manufacturing systems	PHI, New Delhi	2009
<b>Pharmacy</b>				
145.	Parimoo, P.	Textbook of Medicinal Chemistry	CBS, New Delhi	1995
146.	Mithal, B.M.	Textbook of Pharmaceutical Formulation (Sixth Ed.)	Vallabh Prakashan, New Delhi	1997
147.	Mithal, B.M.	Textbook of Forensic Pharmacy (Tenth Edition)	Vallabh Prakashan, New Delhi	1998
148.	Parimoo, P.	Pharmaceutical Analysis	CBS, New Delhi	1998
149.	Mithal, B.M., Saha, R.N.	Handbook of Cosmetics	Vallabh Prakashan, New Delhi	2000
150.	Sriram, D. Yogeewari, P.	Medicinal Chemistry	Pearson Education, New Delhi	2007
<b>Physics</b>				
151.	Srivastava, Rajesh & Choubisa, Rakesh	Atomic and Molecular Physics	Narosa Publishing House	2011
<b>Science &amp; Technology</b>				
152.	Mitra, C.R., Mandke, Parimal	S & T in Action	Prentice Hall, New Delhi	1988
153.	Mitra, C.R., Mandke, Parimal	Managing S&T – Conceptual Design of Management Tasks	Wiley Eastern Ltd, New Delhi	1989
<b>Economics &amp; Finance</b>				
154.	Machiraju, H.R.	Working of Stock Exchanges in India	Wiley Eastern, New Delhi	1994
155.	Machiraju, H.R.	Principles and Practice of Merchant Banking	Wiley Eastern, New Delhi	1994
156.	Arya Kumar and Anil Bhat	Principles of Management- Competencies/Processes/ Practices/ 2 <sup>nd</sup> edition of the book	Oxford University	2016
<b>B. Other Than Text Books</b>				
157.	Misra, S.D.	Amarakosh with Krishnamitra's Commentry in Sanskrit	Indira Prakashan, Patna	1972
158.	Sharma, R.C.	An approach to King Lear	McMillan, Madras	1975
159.	Mehta, H.C.	Science and Society in the University	Jain Bros., New Delhi	1976
160.	Prasad, S.N.	Studies in Gunedhya	Choukhamba Or-ientalia, Varanasi	1977
161.	Gaur, V.P.	Mahatma Gandhi : A study of his Message of Non- violence	Sterling, New Delhi	1977
162.	Krishna Mohan (Ed.)	Higher Education – A BITS Experiment	BITS, Pilani	1977
163.	Tewary, V.K.	Mechanics of Fibre Composites (International Edition)	Wiley Eastern, New Delhi John Wiley, New York	1978
164.	Prasad, S.N.	Katha Sarit Saagar Tatha Bhartiya Sanskriti	Choukhamba Or-ientalia, Varanasi	1978
165.	Krishna Mohan,	A Practice Book of English	Ram Prasad & Sons, Agra	1978

S.No.	Author	Title	Publisher	Year
166.	Chatterjee, B. Misra, S.D.	Structure & Composition Advait Vedantamen Abhasavada	Indira Prakashan, Patna	1979
167.	Srivastava, G.P., Tiwari, S.Y.	Special Relativity (Hindi)	Rajasthan Hindi Granth Akadami, Jaipur	1979
168.	Mandke, V.V.	BITS Practice School, A case study in Industry- University Collaboration	BITS, Pilani	1980
169.	Krishna Mohan (Ed.)	Practice School: A New Concept in Higher Education	BITS, Pilani	1980
170.	Sharma, R.C. & others	Scientific Contexts	Tata McGraw Hill, New Delhi	1980
171.	Prasad, S.N.	Kalyanamalla's Anangaranga on Indian Erotics	Choukhamba Ori-entalia, Varanasi	1982
172.	Sharma, R.C. (Ed.)	Modern India, Shifting Perspectives, in honour of Dr. C.R. Mitra	S. Chand & Co., Delhi	1982
173.	Gulati, R.R.	Monochrome & Coloured Television	Wiley Eastern, New Delhi	1983
174.	Chaturvedi, P.D.	Language through Literature	Parshad Prakashan, Delhi	1986
175.	Mitra, C.R., Iyer, T.S.K.V., Krishnamurthy, V., Mandke, V.V., Subramanian, H., Venkateswaran, S., Arora, R.P., Maheshwari, L.K., Mandke, Parimal, Day, Smarit, Mitra, A.	'Challenge and Response' Towards New Education Policy and Beyond	Wiley Eastern, New Delhi	1986
176.	Misra, S.D.	Modern Researches in Sanskrit	Dr. Veermani Pd. Upadhyaya Feli- citation Volume, Indira Prakashan, Patna	1987
177.	Gaur, V.P.	Studies on Nehru	Sterling Publishers, New Delhi	1987
178.	Rai, R.S., Mehrotra, R.C.	Elements Old & New (in Hindi)	N.C.E.R.T.	
179.	Rai, R.S.	Elements – Old & New	NCERT, New Delhi	1990
180.	Rai, R.S.	Applications of Nuclear Radiations	NCERT, New Delhi	1990
181.	Chaturvedi, P.D., Krishna Mohan, Pathak, S.N. (Ed.)	An Improbable Achievement – BITS – A profile of Change	Wiley Eastern Ltd., New Delhi	1990
182.	Krishnamurthy, V.	Culture, Excitement and Relevance of Mathematics	Wiley Eastern Publications, New Delhi	1990
183.	Krishnamurthy, V.	Ten Commandments of Hinduism	Wiley Eastern	1994
184.	Misra, S.D.	Madhya-Siddhanta Kaumudiderpana	Krishnadas Academy, Varanasi	1996
185.	Gupta, S.P.	A practical guide to the construction of low cost Typhom Resistant Housing (Second Ed.)	Building & Social Housing Foundation. Coalville, UK	1997
186.	Gupta, S.P.	Disaster mitigation in Asia and the Pacific	Asian Development Bank, Manila Philippines	1997
187.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics	Prentice Hall of India	2004
188.	Sharma, Sangeeta, Singh, Raghuvir (Guest Ed.)	International Journal of Communication (Vol. 14)	Bahri Publications, New Delhi	2004
189.	Raman, Meenakshi [Ed.]	Critical Perspective in American Literature	Atlantic Publishers and Distributors Ltd., New Delhi	2005
190.	Raman, Meenakshi, Sharma, Sangeeta, Mishra, Binod [Ed.]	Communicating at Work Shifting Paradigms and Emerging Trends	Jain Brothers, New Delhi	2005
191.	Mishra, Binod [Ed.]	Existential Concern in Novels of Mulk Raj Anand	Adhyayan Publishers & Distributors, Delhi	2005
192.	Ghosh, S.	Control Systems for the JNTU	Pearson Education	2005
193.	Sachdev, Kumar Neeraj	Ethics: A Virtue-theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005

S.No.	Author	Title	Publisher	Year
194.	Dhyani, Umesh	Global corporate executives 63 mantras	Allied Publishers	2005
195.	Srivastava, R.C. Nagappa, A.N.	Surface Activity in Drug Design	Elsevier	2005
196.	Dash, S.S.	Pricing in the Telecommuni-cation Sector in India.	Academic Excellence, Delhi	2006
197.	Mishra, Binod, Kumar, Sanjay (Ed.)	Indian Writings in English.	Atlantic Publishers, New Delhi	2006
198.	Raman, Meenakshi	New Dimensions of English Poetry: Impact of Science and Technology.	Indus Valley Publishers, Jaipur	2006
199.	Mishra, Binod	Explorations in Australian literature.	Sarup & Sons Publishers, New Delhi	2006
200.	Mishra, Binod	Critical Response to Feminism.	Sarup & Sons Publishers, New Delhi	2006
201.	Mishra, Binod	Grammar in Use (A series of three books for Class VI, VII and VIII)	Arvind Publications, Meerut.	2006
202.	Ghosh, Smarajit	Signals and systems	Pearson Education	2006
203.	Fatmi, S.N.	Social Ecology and Agrarian Classes	Icon Publications, New Delhi	2006
204.	Modak, Pintu, Pareek, R.P.	Exercise and Diabetes Cardiovascular Disease and Obesity.	Jain Brothers, New Delhi	2006
205.	Gupta, S.P., Gupta, R.R. (Ed.)	QSAR and Molecular Modeling Studies in Heterocyclic Drugs I	Springer Verlag, Berlin	2006
206.	Parashar, B.S.N.	Elements of Manufacturing Processes	Prentice Hall of India	2006
207.	Modak, Pintu	Stretch and relax	Khel Sahitya Kendra, New Delhi	2009
208.	Krishna Mohan, Meenakshi Raman	Advanced Communicative English	TMH, New Delhi	2009
209.	Raman, Meenakshi	Soft Skills: Cornerstone of Professional Success	Jain Brothers, New Delhi	2009
210.	Raman, Meenakshi, Sangeeta Sharma	Communication skills for Mumbai University	OUP, New Delhi	2009
211.	Raman, Meenakshi, Sangeeta Sharma	Professional Communication for UPTU	OUP, New Delhi	2009
212.	Raman, Meenakshi, Sangeeta Sharma	Communicative English for BPUT	OUP, New Delhi	2009
213.	Sharma, Sangeeta	Pester power effect of advertising on Children	CIPS, Jaipur	2009
214.	Sharma, Sangeeta & Binod Mishra	Communication Skills for engineers and scientists	PHI, New Delhi	2009
215.	Mishra, Binod & Gajendra S. Chauhan	Communication in a globalised world	Authors Press, New Delhi	2009
216.	Lata, Pushp & Sanjay Kumar	Communicate to conquer	PHI, New Delhi	2009
217.	Raman, Meenakshi & Sharma, Sangeeta	Technical Communication	Oxford Higher Education	2011
218.	Geetha, B. & Sarwal, Amit	Exploring Science Fiction	SSS Publications, New Delhi	2011
219.	Modad, Pintu & Debnath, KK	Science of Sports Training: A Comprehensive Approach	Sports Publications, New Delhi	2011
220.	Swami Anubhavananda & Arya Kumar	Ethics in Management - Insights from Ancient Indian Wisdom 2nd Edition	ANE Books Pvt Ltd	2014
221.	Leonard.S.Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
<b>C. Books/Book chapter</b>				
222.	Jagadeesh Anmala	Mixing and Bimolecular Reactions in Heterogeneous Porous Media Flows:	LAP Lambert Academic Publishing, Germany	2010



S.No.	Author	Title	Publisher	Year
223.	Jagadeesh Anmala	Transport, Mixing and Reactions Rainfall-Runoff Modeling Using Artificial Neural Networks and Physically-based Model: Theory, Simulation, and Results	LAP Lambert Academic Publishing, Germany	2010
224.	D. Sriram, P. Yogeeswari	Medicinal Chemistry	Pearson Education, II edition	2010
225.	A. Sajeli Begum, A. B. Ray, M. Sahai	Non-conventional Lignans: Coumarinolignans, Flavonolignans and Stibenolignans” Progress in the Chemistry of Organic Natural Products	Springer Wien NewYork	2010
226.	Nagesh Kumar, D. K. Srinivasa Raju and Falguni Baliarsingh	Modeling for Flood Control and Management, in Natural and Anthropogenic Disasters: Vulnerability, Preparedness and Mitigation	M.K. Jha, Springer, The Netherlands and Capital Publishing Company, New Delhi,	2010
227.	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
228.	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
229.	Vishal Saxena, Manoj Kannan, Shilpi Garg	Genetic Engineering Techniques, Course BIO C418		2013
230.	R N Saha, Garima Balwani, Vibhu	Transmucosal Drug Delivery: Role of Nanoparticulate Systems	Studium Press LLC, USA	2014
231.	Pandey A, Kulkarni YA and Gaikwad AB	Curcumin: The epigenetic therapy (Chapter-6)	Elsevier	2016
232.	Yogesh A. Kulkarni, Mayuresh S. Garud, R S Gaud, Anil Bhanudas Gaikwad	Recent developments in using plant derived natural product as tubulin inhibitors for the management of cancer (Chapter-27)	Elsevier	2016
233.	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Ozaa, Anil Bhanudas Gaikwad	Diabetes, diabetic complications and Flavonoids (Chapter-5)	Elsevier	2016
234.	Kalyani H. Barve, Yogesh A. Kulkarni, Anil Bhanudas Gaikwad	Nutraceuticals Therapeutic Agents for Inflammation (Chapter-7)	Elsevier	2016
235.	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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2. Babu, B.A. "Electronics, Instrumentation, and Control (E&IC) in Chemical Engineering", IMAGE-2005, Annual Magazine of Instrumentation Forum, BITS, Pilani, pp. 23-24, 2005
3. Banerjee, S. and Nozaki, S. Chapter V, Few-electron Memory: Fabrication, Operations and Challenges, Handbook of Semiconductor Nanostructures and Nanodevices, Edited by A.A. Balandin and K.L. Wang, American Scientific Publishers, Los Angeles, 2005.
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5. Bansal, R.C. Electric Vehicles in Handbook of Automotive Power Electronics and Motor Drive”, Edited by Dr. Ali Emadi, CRC Press, May 2005
6. Bhat A.K. Between the Lines, Vol. 1, Feb. 2005
7. Bhat, A.K. Creativity and Entrepreneurship in Knowledge Era, Phoenix- (Interface), pp.1-3, 2005
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10. Giri, A.K. Determinants of Demand for Money in India, Issues in Financial Developments, Edited by S.K Sham Bhat, pp. 259-318, Serials publication, Delhi, 2005
11. Giri, A.K. Search for Stable Money Demand Function for India: A Cointegration Approach Studies in Macroeconomics and Welfare, Ed. by BB Bhattacharya and Arup Mitra, Academic Foundation, New Delhi, pp.143-170, 2005
12. Kole, P.L., and Saha, R.N. Rifapentine – A New Edge to Tuberculosis Therapy, [www.pharmaarticles.net](http://www.pharmaarticles.net). 1<sup>st</sup> May 2005
13. Kumar, A. Reinventing Effective Leadership, In the book on HR Interventions in the Global Competitive Regime, Ed Charles Xavier, Adhikari C S, Murthy Ramana B V, Excels Books, 2005
14. Kumar, A. e- Banking - Emerging Challenges to Indian Banks, Economics and Finance Association Annual Issue on Money Matters 2005
15. Kumar, A. Entrepreneurial Opportunities in Knowledge Economy, Phoenix - Special Issue brought out by Management Association during INTERFACE 2005. Between the Lines, Monthly Newsletter of Management Group, April 2005
16. Kumar, A. Managing Change in the Financial Industry through Convergence, Between the Lines, Monthly Newsletter of Management Group, April, 2005
17. Kumar, A. Entrepreneurship Development for Employment of Youths, Between the Lines, Monthly Newsletter of Management Group, April 2005
18. Kumar, A., and Dhyani, U. Nurturing an Entrepreneurship Culture through Academia, University News, Vol. 42, 2004
19. Kumaran, V. and Chandran, S. Documentation as Tool to Improve Communication and Productivity in Pharmaceutical Manufacturing Industry; In, Communicating at Work: Shifting Paradigms and Emerging Trends, Eds. Raman M., Sharma S., Mishra B.; Jain Brothers, New Delhi, pp. 149-161, 2005
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35. Sharma, S. Stark Reality in Musings Vol. IV, pp. 26, 2005
36. Sharma, S. Scaling the Inner Parnassus: Unlocking the Creativity, pp 21-22, Phoenix, Souvenir, 2005

## SENIOR OFFICERS AT PILANI CAMPUS

### University Wide:

- Vice-Chancellor:** Prof. Souvik Bhattacharyya  
**Registrar:** Prof. S.C. Sivasubramanian (Acting)  
**Chief Financial Officer:** Mr. Arun Khetan  
**Dean, Academic Research (Ph.D. Programme):** Prof. Sanjay Kumar Verma  
**Dean, Academic and Resource Planning:** Prof. S. Balasubramaniam  
**Dean, Admissions:** Prof. S. Gurunaryanan  
**Dean, Faculty Affairs:** Prof. R. Mahesh  
**Dean, International Programmes and Colloboration:** Prof. Suman Kapur  
**Dean, Practice School:** Prof. Niranjan Swain  
**Dean, Sponsored Research and Consulting:** Prof. Sunil Bhand  
**Dean, Work Integrated Learning Programmes:** Prof. S. Gurunaryanan

### Campus Wide:

- Director:** Prof. Ashoke Kumar Sarkar  
**Dean, Administration:** Prof. S.C. Sivasubramanian  
**Dean, Instruction:** Prof. S. Gurunaryanan  
**Associate Dean, Academic and Resource Planning:** Prof. Hitesh Datt Mathur  
**Associate Dean, Academic Registration and Counselling:** Prof. Bijay Kumar Rout  
**Associate Dean, Academic Research:** Prof. Hemant Ramanlal Jadhav  
**Associate Dean, Admissions:** Prof. Hari Om Bansal  
**Associate Dean, Faculty Affairs:** Prof. Anshuman Dalvi  
**Associate Dean, Instruction:** Prof. Srikanta Routroy  
**Associate Dean, International Programmes and Collaboration:** Prof. Dalip Kumar  
**Associate Dean, Practice School:** Prof. P. Srinivasan  
**Associate Dean, Practice School:** Prof. (Ms.) S. Sindhu (Off-campus Centre at Bangalore)  
**Associate Dean, Sponsored Research and Consulting:** Prof. Hemant Ramanlal Jadhav (Officiating)  
**Associate Dean, Student Welfare Division:** Prof. Kumar Neeraj Sachdev  
**Associate Dean, Work Integrated Learning Programmes:** Shri K. Venkatasubramanian  
**Associate Dean, Work Integrated Learning Programmes:** Prof. Anil Kumar  
**Associate Dean, Work Integrated Learning Programmes:** Prof. G. Venkiteswaran, (Off-campus Centre at Chennai)

**UNIT CHIEFS**

<u>UNIT</u>	<u>NAME</u>
1. Centralised Purchases	Prof. N.V. Muralidhar Rao
2. Computer Assisted Housekeeping & General Adm.	Prof. S.C. Sivasubramanian
3. Estate Management	Prof. Anshuman
4. General Administration	Vacant
5. Information Processing Centre	Prof. Janardan Prasad Misra
6. Instrumentation	Prof. Surekha Bhanot
7. Placement	Prof. Mani Sankar Dasgupta
8. Publications & Media Relations	Shri Giridhar M. Kunkur (Officiating)
9. Software Development & Educational Technology	Prof. Rahul Banerjee

**HEADS OF DEPARTMENTS**

<u>DEPARTMENT</u>	<u>NAME</u>
1. Biological Sciences	Prof. Prabhat Nath Jha
2. Chemical Engineering	Prof. Hare Krishna Mohanta
3. Chemistry	Prof. Bharti Khungar
4. Civil Engineering	Prof. Ravi Kant Mittal
5. Computer Science & Information Systems	Prof. Rahul Banerjee
6. Economics & Finance	Dr. Arun Kumar Vaish
7. Electrical & Electronics Engineering & Instrumentation	Prof. Navneet Gupta
8. Humanities & Social Sciences	Prof. Gajendra Singh Chauhan
9. Management	Dr. Leela Rani
10. Mathematics	Prof. Balram Dubey
11. Mechanical Engineering	Prof. P. Srinivasan
12. Pharmacy	Dr. Anil Gaikwad Bhanudas
13. Physics	Prof. Anshuman Dalvi

**PROFESSOR IN-CHARGE**

<u>CENTRE</u>	<u>NAME</u>
1. Teaching Learning Centre	Prof. Rahul Banerjee

**FACULTY-IN-CHARGE/OFFICIAL**

<u>CENTRE/SECTION/ENTITY</u>	<u>NAME</u>
1. Accounts & Finance Section	Shri Satyen Sharma (Head)
2. Alumni Affairs	Prof. Hari Om Bansan (Faculty-in-charge)
3. Centre for Innovation, Incubation & Entrepreneurship	Dr. Jyoti (Faculty-in-charge)
4. Educational Technology Support (SDETU)	Dr. Virendra Singh Shekhawat (Faculty-in-charge)
5. First Degree Admission Tests	Prof. Hari Om Bansal (Faculty-in-charge)
6. Higher Degree Admission Tests	Prof. Hitesh Datt Mathur (Faculty-in-charge)
7. Infant Care Center	Prof. Poonam Goyal (Faculty-in-charge)
8. Institute Functions	Dr. Sarvesh Satija (Faculty-in-charge)
9. Library	Shri Giridhar M. Kunkur (Librarian)
10. Medical Centre	Dr. R.P. Pareek (Faculty-in-charge)
11. Pay Roll Processing (CAHU)	Dr. Yashvardhan Sharma (Faculty-in-charge)
12. Projection Systems and Instrumentation Services (IU)	Dr. Karunesh Kumar Gupta (Faculty-in-charge)
13. Publicity and Branding	Dr. Gajendra Singh Chauhan (Faculty-in-charge)
14. Reprography Section	Dr. Virendra Singh Nirban (Faculty-in-charge)
15. Security Section	Shri Kishore Singh (Chief Security Officer)
16. Societal Development	Prof. Sangeeta Sharma (Faculty-in-charge)
17. Teaching Learning Centre	Prof. S.K. Choudhary (Faculty-in-charge)
18. Transport Services Section	Dr. Abhijit K. Digalwar (Faculty-in-charge)
19. Workshop	Prof. Kuldip Singh Sangwan (Faculty-in-charge)

**CHIEF WARDEN**

Prof. Shibasish Choudhury

**WARDENS**

**BHAWAN**

1. Ashok
2. Bhagirath
3. Krishna & Gandhi
4. Meera
  
5. Malviya - A,B,C
6. Ram & Malaviya - D
7. Rana Pratap
8. Shankar
9. Sir C.V. Raman
10. Srinivasa Ramanujan
11. Vishwakarma
12. Vyas

**NAME**

Dr. Rajesh Prasad Mishra  
Dr. Shuvendu Narayan Patel  
Dr. Nitin Chaturvedi  
Prof. (Ms.) Surekha Bhanot  
Prof. (Ms.) Kusum Lata  
Dr. Sachin U Belgamwar  
Dr. Dipendu Bhunia  
Dr. R. Raghunathan  
Dr. Arun Kumar Jalan  
Dr. Paritosh Shukla  
Dr. Virendra Singh Shekhawat  
Mr. Jitendra Singh Rathore  
Dr. Sunil Jumar Dubey

**NON-RESIDENT WARDENS**

**BHAWAN**

1. Ashok
2. Bhagirath
3. Day Scholars
4. Krishna
5. Malaviya
6. Meera
  
8. Ram & Malaviya - D
7. Rana Pratap
8. Shankar
9. Sir C.V. Raman
10. Srinivas Ramanujan
11. Vishwakarma & Gandhi
12. Vyas

**NAME**

Dr. Harikrishanan Gopinadhan Nair  
Dr. Murali Palla  
Dr. Ravi Kant Mittal  
Dr. Devendra Kumar  
Dr. Biswanath Layek  
Prof. Devika  
Dr. Sailaja Nandigama  
Dr. Shamik Chakraborty  
Prof. Prabhat Nath Jha  
Dr. Bibhas Ranjan Sarkar  
Dr. Paul Atish Tulsiram  
Dr. Rajdeep Chowdhury  
Dr. Srinivas Kota  
Dr. Ashish Tiwari

**LIBRARIAN**

Shri Giridhar M. Kunkur

**HEAD, ACCOUNTS & FINANCE**

Shri Satyen Sharma

BITS Pilani

# annual report 2016

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**Part B2: K.K. Birla Goa Campus**

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## BITS PILANI - KK BIRLA GOA CAMPUS

### B2.1 SENIOR OFFICERS

1. Prof. Raghurama G. (Director)
2. Prof. Ashwin Srinivasan (Deputy Director)

#### 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 2015-16	-	-	FT - 09(05) PT - 01(01)	<b>10(06)</b>
First Semester 2016-2017	605(65)	40(16)	FT - 16(08) PT - 12(02)	<b>673(91)</b>

*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 2015-2016, 219 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 2015-16, **18** students ((i) Within same tier :**15**; (ii) Integrated First Degree to Higher Degree : 1, (iii) Higher Degree to Ph.D.: **2** 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 2015-2016	12 Jan 16	16 May 16	77
First Semester 2016-2017	1 Aug 16	14 Dec 16	82
Summer Term 2015-2016	21 May 16	16 July 16	49

### B2.5 COURSES OFFERED

The number of courses, offered during the year 2016 is as follows:

	Number of Courses offered
Second Semester 2015-2016	289
First Semester 2016-2017	279
Summer Term 2015-2016	8



During the year, the following new courses were introduced.

Sr.No	Comp code	Course No	Course Title
1	022123	BIO G544	BIOREMEDIATION & BIOMETA
2	021377	BIOT F422	NANOBIOTECHNOLOGY
3	021375	BIOT F424	FOOD BIOTECHNOLOGY
4	021619	BITS F424T	THESIS
5	022165	BITS G563T	DISSERTATION
6	020753	BITS G619	PROFESSIONAL PRACTICE
7	022152	CHE G558	Chemical Process Optimization
8	021577	CHEM F327	ELECTROCHEM FUNDA & APPL
9	022035	CHEM G541	CHEM APP OF GROUP THEORY
10	022037	CHEM G558	ELEC STRUCTURE THEORY
11	021321	CS F314	SOFT DEV FOR PORT DEVICE
12	022186	ECON G541	ECON SYSTEM ANALYSIS
13	021290	ME F491	SPECIAL PROJECTS
14	021334	BITS F312	NEURAL NET & FUZZY LOGIC
15	021339	BITS F464	MACHINE LEARNING
16	021379	BITS F467	BIOETHICS & BIOSAFETY
17	021545	FIN F313	SECUR ANAL & PORTFOL MGT
18	021810	ME F423	MICRO-FLUIDICS & ITS APP
19	022106	CS G520	ADVANCED DATA MINING
20	022182	HSS F356	SOCIAL MOVEMENTS AND PROTEST P
21	022191	MATH F424	APPLIED STOCHASTIC PROCESS
22	022203	MGTS F433	ADVERTISING & SALES PROMOTION

## 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 2015-2016	2812
First Semester 2016-2017	2879
Summer Term 2015-2016	621

Details of Registration of students for the Second Semester 2015-2016 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 2015-2016	I Semester 2016-2017
1.	Total number of students under the purview of ACB at the beginning of the semester	92	120
2.	No. of students declared out of its purview at the end of the semester	31	79
3.	No. of students who left the Institute during the semester	40	0
4.	No. of new students who came under the purview of ACB at the end of the semester	63	51
5.	Total No. of students under the purview of ACB during the next semester	120	92

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

### (a) Award of Degrees

During the year, a total of 634 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
79 <sup>th</sup> Award (vide Board of Governors meeting)	
79.1 held on 01.04.16	6(1)
79.2 held on 05.07.16	751(150)
79.3 held on 05.07.16	1(0)
80 <sup>h</sup> Award (vide Board of Governors meeting) 80.01 held on 27.8.16	8(0)
80 <sup>th</sup> Award	
80.02 held on 30.11.15	1(1)
80.03 held on 30.11.15	4(2)
80.04 held on 30.11.15	2(1)
80.05	30(5)
80.06	2(0)
80.01, 80.02, 80.03, 80.04, 80.05,80.06 (subject to approval from vide Board of Governors meeting in its next meeting)	
<b>Total:</b>	<b>805(160)</b>

Statistical details of these degrees are given in 'Annexure B2-5, Annexure B2-6'

### (b) Award of Medals

For Academic Year 2015-2016

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 2015-2016 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: 575)						
1	2011B5A3258G	VISHAKHA GUPTA	F	9.76	FIRST	GOLD
2	2012A4TS134G	SHAH UJASH DIPAKBHAI	M	9.66	SECOND	SILVER
3	2012A3TS163G	DAVE MIHIKA HIMANSHU	F	9.60	THIRD	BRONZE
4	2012A7PS487G	VASUNDHARA BHARGAVA	F	9.60	THIRD	BRONZE

**B2. 9 CAMPUS INTERVIEWS AND PLACEMENT****SEMESTER II 2015-16**

Number of companies which conducted campus interviews	97
No of interviews	3519
No of offers made	352

**SEMESTER I 2016-17**

Number of companies which conducted campus interviews	54
No of interviews	1900
No of offers made	175

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 31 December 2016): **16**

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	<b>07</b>
<b>Assistant Professors</b>	<b>09</b>
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department :** Dr. Judith M. Braganca

**Contact details (email):** judith@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 44

**Number of Project Fellows:** 20

**Ph.D. Degree awarded during the year: 04**

- Ms. Purnima Singh (ID. No – 2010PHXF811G) defended his Ph.D thesis titled *Studies on Microbial Diversity and Biotechnological Potential of Selected Polar Organisms*. She worked under the supervision of Prof. Prof.Utpal Roy
- Mr. Rajesh Pasumarthi (ID. No – 2010PHXF433G) defended his Ph.D thesis titled *Hydrocarbonoclastic Bacteria and the Strategies for Improving Biodegradation*. He worked under the supervision of Prof. M.Srikanth
- Ms. Archana Sharma (ID. No –2010PHXF434G) defended her thesis titled *An Advanced Three - Dimensional Macroporous Polymeric Matrix for Tissue Engineering Applications*. She worked under the supervision of Prof. Vijayashree Nayak
- Mrs. Vaishnavi Tushar Unde (ID. No –2008PHXF005G) defended her Ph.D thesis titled *Biocatalytic Production of Commercial Textile Dye - Indigo*. She worked under the supervision of Prof. M.Srikanth

**Ph.D. Thesis Submitted during the year: 06**

- Mr. Yogesh Walawalkar (ID No. 2012PHXF016G) submitted his Ph.D thesis titled *Understanding Chronic Persistence of Salmonella enterica serovar Typhi within the Gallbladder*. He worked under the supervision of Prof. Vijayashree Nayak.

2. Ms. Priyanka Dwivedi (ID No. 2011PHXF401G) submitted her Ph.D thesis titled Development of Novel Tissue Engineering Strategies to Treat Osteoarthritis. She worked under the supervision of Prof. Vijayashree Nayak
3. Mr. Kablian M (ID No.2008PH29009G) submitted his Ph.D thesis titled Microbial diversity of Halophilic Archaea and Bacteria in Solar Salterns and Studies on the Production of Antimicrobial/Antiarchaeal Substances. He worked under the supervision of Prof. Judith Braganca.
4. Ms. Pallavee Srivastava (ID No.2011PHXF002G) submitted her Ph.D thesis titled Biological synthesis of metallic and metal sulphide nanoparticles using halophilic archaea and bacteria. She worked under the supervision of Prof. Meenal Kowshik .
5. Ms. Ketaki R Deshmukh (ID No.2010PH29011G) submitted her Ph.D thesis titled Synthesis of Lanthanide doped Hydroxyapatite Nanoparticles for Applications in Biomedicine and Molecular Biology. She worked under the supervision of Prof. Meenal Kowshik
6. Ms. Shruti Balaji (ID No.2009PHXF418G) submitted her Ph.D thesis titled Elucidation of the function of Molecular Regulators of Human Pancreatic development. She worked under the supervision of Prof. Anasuya Ganguly .

**A. Sponsored Research activities:**

**(i) Ongoing projects: 18**

1. Kundan Kumar Identification and characterization of abiotic stress responsive With No Lysine (WNK) kinase in rice (*Oryzasativa* L.) ,SERB Rs.22.65 Lakhs , 3 years
2. Malabika Biswas, Cloning and characterization of the promoters of Staphylococcs aureus temperate bacteriophage,  $\phi$  11 . ,BRNS 24 Lakhs,3 years.
3. Veeky Baths, Project Title: Protein-Ranking and Novel Intervention Strategies against Mycobacterium tuberculosis using Graph Theory and Bioinformatics Resources ,DST 8.6 Lakhs, 3 years.
4. Srikanth Mutnuri Analysis of Metabolically Active Bacterial Species In Anaerobic Digesters , CSIR, 17 lakhs,3 years.
5. Srikanth Mutnuri ,Bio-Catalytic Production of a Commercial Textile Dye-Indigo, DSTE, Goa, 5lakhs,3 years.
6. Indrani Talukdar, Alternative splicing in signal transduction and diseases; a genome wide approach DST SERB, 20lakhs, 3years.
7. Arnab Banerjee , Regulation of hypothalamic gonadotropin releasing hormone expression by putrescine, 22.3 lakhs,3 years.
8. Utpal Roy, Microbial Diversity & Biotechnological Potentials of some Polar , DST-WOS, 17.65 lakhs,3 years.
9. Vijayashree Nayak EMT regulation and TGF  $\beta$ cell signalling in gall bladder disease ,DST ,37.6 Lakhs, 3 years.
10. Srikanth Mutnuri , Empowered septic tank as decentralized wastewater treatment system , DBT BIRAC - Bill and Mellinda Gates foundation,67 Lakhs,3years.
11. Utpal Roy , Purification & Characterization of Antimicrobial Compound with special reference to Candida albicans and Cryptococcus neoformans, DST,11 lakhs. 3 years.
12. Angshuman Sarkar and Co PI: Indrani Talukdar , Study the effects of quinacrine (QC) on regulation of Rho like small-GTPase and apoptosis in human lung and breast cancer cell lines cultured in vitro , DBT , 24.55 (Initial) Lakhs. 3 years.
13. Veeky Baths Home automation and smart wheel chair based on Electroencephalography (EEG) signals produced in brain Cognitive Science Research Initiative DST , 39lakhs , 3years.
14. Dibakar Chakrabarty and Co PI: Angshuman Sarkar , Studies on Anticoagulant and Platelet Aggregation Inhibitors from Indian Cobra Venoms. , DBT,36.544 Lakhs , 3 Years.
15. Srikanth Mutnuri , Development and Demonstration of two decentralized wastewater treatment plants Centre of Research Excellence in Waste, Water and Energy Management (CORE WWE) - BITS Pilani ,32 Lakhs , 3 years.
16. Indrani Talukdar, Role of alternate splicing modulators in differentiation of embryonic stem cells into specific lineages , BITS- "additional competitive grant for new faculty, 8 Lakhs ,3 Years.

17. Co-PI Utpal Roy, "Development of a Field-deployable Biosensor for Bacterial sensing in potable water" Water Core Project, BITS CORE WWE) - BITS Pilani, 41 Lakhs , 3 years.
18. Malabika Biswas , Studies on the gene regulation involved in the lytic-lysogenic switch in *Staphylococcus aureus* temperate bacteriophage Phi11 , DST-SERB, 21 Lakhs. 3years.

**(ii) Projects sanctioned during the year: 7**

1. PI: Kundan Kumar, Co-PI: Utpal Roy, Screening, Isolation and Identification of Novel Antimicrobial Compounds from Potential Mangroves of Goa , CSIR , 22 lakhs, 3 years.
2. Srikanth Mutnuri , Network project on Decentralized Grey/Waste Water Treatment & Recycling - *Collaborative Networking Research PROJECT* between BITS Pilani Goa, IISc Bengaluru, IIT Kharagpur, NIT Suratkal, TATA Steel, INRA, Narbonne, France, Ecole de mines, Nantes France, Jean Voisin, France, CEFIPRA, 9 lakhs, 2 years
3. PI Srikanth Mutnuri, Co I : Anasuya Ganguly, Developing Bioactive Compound-Enriched Functional Food Ingredients from *Dillenia indica* and valorization of its pomace , DBT under North East Twinning Program in collaboration with Assam Agricultural University, Total project Rs 89.91 lacs, BITS - Rs 32 lacs 3 years.
4. PI Srikanth Mutnuri , Pilot study, testing the use and production of Terra Preta and other soil improving products like Struvite / PROM *Collaborative CONSULTANCY PROJECT with Technical University Hamburg Harburg and International Water Management Institute, Colombo, Sri Lanka* , German Technical Cooperation (GIZ , Rs55 lacs, 3 years.
5. PI Srikanth Mutnuri , Collaborators: Prof Hoffman and Dr. Clement Cid, Caltech , Onsite electrochemical wastewater treatment and recycling technology Collaborative Research PROJECT with CALTECH, USA, Bill and Melinda Gates foundation , 29 lacs, 2 years.
6. PI Srikanth Mutnuri , Co I : Kundan Kumar and Anasuya Ganguly , Goa Biodiversity Technical Support Group , Goa State Biodiversity board.

**(iii) Projects completed this year: NIL**

**B. Publications : 23**

1. Chouhan OP, Bandekar D, Hazra M, Baghudana A, Hazra S, Biswas S Effect of site-directed mutagenesis at the GGEEF domain of the biofilm forming GGEEF protein from *Vibrio cholerae* AMB Express. 2016 Mar;6(1)
2. Shruti Balaji · Yu Zhou · Anasuya Ganguly · Emmanuel C. Opara · Shay Soker The combined effect of PDX1, epidermal growth factor and poly-L-ornithine on human amnion epithelial cells' differentiation BMC Developmental Biology (2016) 16:8
3. Diprati G. Khandare, Mainak Banerjee, Rishabh Gupta, Nupur Kumar, Anasuya Ganguly, Deepak Singh, and Amrita Chatterjee - Green synthesis of a benzothiazole based 'turn-on' type fluorimetric probe and its use for the selective detection of thiophenols in environmental samples and living cells, RSC Advances 2016, 6, 52790–52797
4. Ketaki R. Deshmukh, Sutapa Roy Ramanan, Meenal Kowshik - Low-temperature-processed biocompatible Ag-HAp nanoparticles with anti-biofilm efficacy for tissue engineering applications, Journal of Sol-Gel Science and Technology, DOI 10.1007/s10971-016-4149-2, 2016.
5. Kshipra Naik, V Girish Chandran, Raghavan Rajashekar, Sachin Waigaonkar and Meenal Kowshik - Mechanical properties, biological behaviour and drug release capability of nano TiO<sub>2</sub>-HAp-Alginate composite scaffolds for potential application as bone implant material, Journal of Biomaterials applications, DOI: 10.1177/0885328216661219, 2016.
6. Aamudram A, Mangalassery BM, Kowshik M, Patincharath N, Varier GK - Passive permeability and effective pore size of HeLa cell nuclear membranes, Cell Biol Int. 2016 Jun 23. doi: 10.1002/cbin.10640, 2016
7. Ketaki Deshmukh · M. Monsoor Shaik , Sutapa Roy Ramanan Meenal Kowshik - Self-Activated Fluorescent Hydroxyapatite Nanoparticles: A Promising Agent for Bioimaging and Biolabeling, CS Biomater. Sci. Eng, DOI: 10.1021/acsbiomaterials.6b00169, 2016.
8. M Monsoor Shaik and Meenal Kowshik - Novel melt-down neutralization method for synthesis of chitosan-silver scaffolds for tissue engineering applications, Polymer Bulletin, DOI 10.1007/s00289-015-1522-1, 2016.
9. Vaishnavi Unde and Srikanth Mutnuri - Comparative study of production of Bio-Indigo by *Pandoraea* sp. in a two phase -Fed batch and continuous bioreactor, Carbon – Science and Technology, 8, 40-46 , 2106.

10. Meghanath Prabhu and Srikanth Mutnuri - Anaerobic Co-digestion of Sewage Sludge and Food Waste, Waste management and research, 34 307-315, 2016.
11. AnantYadav, PiyushChoudhary, NeelamAtri, Sebastian Teir, SrikanthMutnuri - Pilot project at Hazira, India, for capture of carbon dioxide and its biofixation using microalgae, Environmental Science and Pollution Research, Epub ahead of prin, 2016.
12. Amal Raj, Rajesh Pasumarthi, SrikanthMutnuri - Effect of rhamnolipid on biodegradation of hydrocarbons in non aqueous phase liquid (NAPL), Bioremediation journal, accepted, 2016.
13. Jayashree, K. Tamilarasan, M. Rajkumar, P. Arulazhagan, K.N. Yogalakshmi, M. Srikanth, J. Rajesh Banu - Treatment of seafood processing wastewater using upflow microbial fuel cell for power generation and identification of bacterial community in anodic biofilm, Journal of Environmental Management, 180-351-358, 2016.
14. M. Baveja ,K.Neha. Kiran , D. Chakrabarty - Hemotoxic Activity Of Sea-Star Coelomic Fluid (abs.) Toxicon , 116 (2016) 80. Published, 2016.
15. A. Rastogi, D. Chakrabarty - Anticoagulant activity of barrel jellyfish *Rhizostoma pulmo* tentacle extract(abs.), Toxicon 116 (2016) 85, Published, 2016.
16. J.S. Pathan, A. Martin, D. Chakrabarty, A. Sarkar - Cytotoxic Effect Of Russell's Viper Venom (Rvv) in Human Alveolar Adeno-Carcinoma Cells (A549) Cultured In Vitro.(abs.), Toxicon 116 (2016) 84, Published, 2016.
17. DibakarChakrabarty and Angshuman Sarkar - Cytotoxic Effects of Snake Venoms, Snake Venoms, DOI : 10.1007/978-94-007-6648-8\_34-1, 2016.
18. Chandrasekhar Chanda, Angshuman Sarkar and DibakarChakrabarty - Novel thrombolytic protein from Cobra venom with Anti-Adhesive Properties, Archives of Biochemistry and Biophysics 590,20-26, 2016.
19. Walawalkar, Yogesh D., Yatindra Vaidya, and Vijayashree Nayak. "Response of Salmonella Typhi to bile-generated oxidative stress: implication of quorum sensing and persister cell populations." Pathogens and Disease 74.8 (2016)
20. Walawalkar, Yogesh D., Yatindra Vaidya, and Vijayashree Nayak. "Alteration in TGF- $\beta$  receptor expression in gallbladder disease: implications of chronic cholelithiasis and chronic Salmonella typhi infection." Gastroenterology Insights 7.1 (2016).
21. G. Ravindran, D. Chakrabarty and A. Sarkar. Cell specific regulation of p53 mRNA expression induced by cadmium. Animal Cells and Systems (TACS) (Accepted in Dec. 2016).
22. M K Koley, Om Prakash Chouhan, S Biswas, J Fernandes, A Banerjee, A Chattopadhyay, B Varghese, P T. Manoharan, A P Koley. Spectroscopic, electrochemical and DNA binding studies of some monomeric copper(II) complexes containing N2S(thiolate)Cu core and N4S(disulfide)Cu core.. Inorganica Chimica Acta xxx (2016) xxx-xxx. 2016.
23. A Banerjee and J Fernandes. Obesity and Infertility. ISSRF NewsLetter Special Issue 19; 56-58. 2016.

#### C. Conferences attended/papers presented : 03

1. Dr. Judith Braganca, presented a paper 'Biosynthesis of polyhydroxyalkanoates by Halophilic Archaea' at the 11th International Congress on Halophilic Microorganisms, Halophiles 2016 in San Juan, Puerto Rico from May 22nd to May 27th 2016.
2. Dr. Vijayashree Nayak, presented a paper :Chronic S.typhi persistence in gall bladder:implication of quorum sensing and persisters, Gut Microbiome 2016, An international perspective, 21-22 Oct,2016. Kasturba Medical college, Manipal.
3. Dr. Judith Braganca attended a workshop on Nomenclature of Archaea and Bacteria by Prof. Aharon Oren, The Hebrew University of Jerusalem, Israel at the Microbial Type Culture Collection, Pune in September 2016.

#### D. Books Published/Edited during the year: NIL

#### E. Conferences, Seminars & Workshops conducted:

1. BIRAC workshop on Bio-Entrepreneurship, grant-writing & intellectual property management BIRAC, BITS Pilani, K K Birla Goa Campus, Key People involved were Dr. Satyaprakash Dash Dr. Shirshendu Mukherjee Dr. Vineeta Jindal DSTE Goa February 18<sup>th</sup> and 19, 2016.

**F. Invited Talks given by BITS faculty: 3**

1. Dr. Srikanth Mutnuri delivered an Invited talk "Empowered septic tank for decentralized wastewater systems" at Transformative Technologies portfolio, July 18 -22, 2016, Seattle, USA, organized by Bill and Melinda Gates foundation
2. Dr. Srikanth Mutnuri delivered Invited talk ""Decentralized biogas digesters for waste management" in the ISTE workshop on "Engineering Management Strategies for Sustainable Development" at Don Bosco College of Engineering, Goa on 10th May 2016.
3. Invited talk "Types of hazardous wastes, their treatment and disposal" One- Day Seminar on Hazardous and Medical Waste organized by Goa Chamber of Commerce and Industry on 19<sup>th</sup> February 2016.

**G. Invited talks arranged in the department: 7**

1. Dr. Padmanabh Rataboli, MD, MBBS , Director Professor, Department of Pharmacology, Goa Medical College, Bambolim, Goa, Role of Institutional Ethics Committee , 24 February 2016.
2. Dr. Hans Richnow, Head, Department of Isotope Biogeochemistry, Helmholtz Centre for Environmental Research - UFZ, Leipzig, Germany , ProVIS - Visualization of microbial mediated biochemical processes , 17th February 2016.
3. Prof. Sudhir Krishna , Professor, NCBS Bangalore, Understanding heterogeneity, stemness and metastasis in human cancer progression" 14 April 2016.
4. Prof. Anjali A. Karande, IISc Bangalore, Feasibility of using Glycodelin in the management of graft rejection , 16th September 2016.
5. Dr. Srini Kaveri, Director, CNRS Office for Science and Technology, India, Embassy of France, Antibodies : The story of Good and Bad Samaritans , 19th September 2016.
6. Dr. Gopal Kundu, Scientist 'G', National Centre for Cell Science, Pune "Notch1-MAPK Signaling Axis regulates Cancer Stem Cell-Mediated Melanoma Growth and Angiogenesis" , 21st October 2016.

**H. Awards and recognitions won by faculty and students:**

1. OmPrakashChouhan awarded DAAD Sandwich Fellowship for carrying out part of his Ph.D. work in Max Delbruck Centre, Berlin from 1st August 2016.
2. Dr. Srikanth Mutnuri and Dr. Anasuya Ganguly's start up Bactreat Environmental Solutions LLP was awarded DBT BIRAC Sparsh grant for the project titled "Resource recovery from septage"
3. Divya Bandekar was awarded the DBT CTEP Travel Grant and the ICCMB, Prague Travel Grant in July 2016
4. Judith Braganca was awarded the DBT-CTEP Travel Grant to attend the 11th International meeting of Halophiles 2016, San Juan, Puerto Rico, USA in May 2016
5. Vijayashree Nayak Best poster-Faculty at "Gut Microbiome 2016-An international perspective. Kasturba Medical college, Manipal.
6. Ansie Martin was awarded DBT CTEP travel grant for her participation in an International Nanoscience symposium in USA.
7. Dr. Angshuman Sarkar was awarded a fellow by the 'All India Cell Biology Society'.

**I. Faculty Development, International Collaboration & Industry Immersion**

1. Microbial Diversity in bilge oil contaminated sites using Stable isotope probing under Prof Max Haggblom, Rutgers University, USA under Indo US Research Professorship programme of American Society for Microbiology- Dr Srikanth Mutnuri; \$5000, Completed.
2. Empowered septic tank as decentralized wastewater treatment system" DBT BIRAC – Bill & Mellinda Gates foundation Principal Investigator in collaboration with Ghent University. Prof. Srikanth Mutnuri; 67 lacs (2014-2016).

**J. Significant new equipments/experimental facility added during the year:**

1. Server and work station.
2. -80C Freezer

**K. Departmental association/club activities:** The Biological Sciences Association organized its Annual Get – together and interaction with Faculty and students of the Department on 17<sup>th</sup> November 2016.

**B2.10.2 Department: Chemistry**

Number of faculty members (as on 31 December 2016): 16

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	09
<b>Assistant Professors</b>	4 + 1 (DST-INSPIRE Faculty)
<b>Lecturers</b>	-
<b>Visiting Faculty</b>	-

**Head of the Department:** Dr. Anjan Chattopadhyay, Associate Professor**Contact details (email):** anjan@goa.bits-pilani.ac.in**Number of PhD Scholars:** 22(Full Time) + 1 (Part Time)**Number of Project Fellows:** 04**No. of Post Doctoral Scientists& Researchers:** 03**Ph.D. Thesis awarded during the year:** 03**Ph.D. Thesis Submitted during the year:** 03**A. Sponsored Research activities:****(i) Ongoing projects:**

<b>Name of Investigator</b>	<b>Title of Project and duration</b>	<b>Amount sanctioned (Rs)</b>	<b>Funding Agency</b>
Dr. N.N. Ghosh	“Development of polymer-ferrite (and/or grapheme) nanocomposites having high thermal stability and microwave absorption property for Radar Absorbing Coating Application” ERIP/ER/1305004/M/01/1523 3 years	14,59,000	DRDO
Dr. N.N. Ghosh Coinvestigator: Dr. P. Parameswaran	“Investigations on microstructures of hard-soft ferrite nanocomposites and influence of microstructures on their properties” CSR/Accts/2014-15/671, 3 years	263400	UGC-DAE
Dr. Arunashree Panda Mentor: Dr. R. N. Behera	“Chalcogen containing azomethinamacrocycles and bicycles: synthesis, characterization, metal complexes and theoretical investigations of nature of intramolecular interactions between divalent chalcogen and nitrogen atoms”,SR/WOS-A/CS-04/2014 (G) 3 years	17,10,000	DST WOS
Prof. Sunil Bhand Coinvestigator: Prof A P Koley MrGautamBacher PCs: Dr. V K Suri Dr. R. Balasubramaniam Shivam Mishra AshwinRathod (ALL from Precision Engineering division, BARC, Mumbai)	“Development of a field portable devise for the analysis of environmental contaminants in water” 36(2)/14/25/2014-BRNS 3 years	24,13,800	BRNS
Prof. Sunil Bhand	“Novel micro biosensor device for heavy	1,00,000	RRCAT



Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Coinvestigator: Mr. GautamBacher Principal Collaborator: Mr. Vishal Dhamgaye (RRCAT, Indore) Dr. G. S. Lodha (RRCAT, Indore)	metal analysis in vegetables” CSR-IC-BL-40/CRS-137-2014-15/1233 2 years		indore and UGC DAE consortium Indore
Prof Sunil Bhand is PI from BITS Goa (Co-PI Dr GautamBacher EEE). [Consortium of CDAC Kolkata, BITS PilaniK.K.Birla Goa Campus, Jadavpur University Kolkata]	“Development of sensing system for residual pesticide and harmful chemical detection in fruits and vegetables “VegFruitSens” Aug. 2016-Jul 2018.	2,12,00,000.00 (BITS funding-53,50,000.00)	R.D Tata Trust
Dr. Subhadeep Banerjee	“Development of $\beta,\beta'$ -edge fused $\pi$ -elongated donor-acceptor porphyrin possessing Near-IR optical” spectra SB/FT/CS-085/2013,3 years	22,60,000	DST-FT
Dr. Tanmoy Mondal	“Nonadiabatic molecular processes on threefold electronic degeneracies” DST/INSPIRE Faculty Award /2013,5 years	35,00,000	DST- Inspire
Dr. Venkatesan S.Thimmakonda	Structures and energetics of C <sub>7</sub> H <sub>2</sub> and C <sub>9</sub> H <sub>2</sub> Isomers:Quantam Chemical studies SERB/F/3698/2015-16 3 years	23,23,000	SERB
Dr. P. Bhavana	“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” EMR/2016/002367 ,3 years	28,22,820	SERB
Dr. Mainak Banerjee	“A comprehensive study on mechanochemicals <sup>2</sup> C-H bond activation in five-membered heteroaromatics in a Ball-Mill: Can first row transition elements be a potential replacement of late transitional elements—a question to investigate; (EMR/2016/002253); 3 years; ongoing from 28-12-16	30, 60,000	SERB

## (ii) Projects sanctioned during the year\*:

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Prof Sunil Bhand is PI from BITS Goa (Co-PI Dr GautamBacher EEE). [Consortium of CDAC Kolkata, BITS PilaniK.K.Birla Goa Campus, Jadavpur University Kolkata]	“Development of sensing system for residual pesticide and harmful chemical detection in fruits and vegetables “VegFruitSens” Aug. 2016-Jul 2018.	2,12,00,000.00 (BITS funding-53,50,000.00)	R.D Tata Trust
Dr. P. Bhavana	“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” EMR/2016/002367 ,3 years	28,22,820	SERB

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. Mainak Banerjee	"A comprehensive study on mechanochemicals p <sup>2</sup> C-H bond activation in five-membered heteroaromatics in a Ball-Mill: Can first row transition elements be a potential replacement of late transitional elements—a question to investigate; (EMR/2016/002253); 3 years; ongoing from 28-12-16	30,60,000	SERB

\*These sanctioned projects are mentioned under the ongoing projects, as well.

**(iii) Projects approved during the year:**

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. R. N. Behera	"Computational Study of the Catalytic Mechanism of some Diaryldiselenide-based Glutathione Peroxidase Mimetics (EMR/2016/003210), 3 Years	16,42,280	DST-SERB
Dr. K. P. Jayadevan (Co-PI) R. N. Behera	"Experimental and Computational Study of Boron doped TiO <sub>2</sub> and ZnONanocrystals"	21,93,200	DST-SERB

**(iv) Projects completed this year:**

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. N.N. Ghosh Coinvestigator: Dr. Mainak Banerjee	"Preparation of Magnetically Separable, Mesoporous TiO <sub>2</sub> Catalyst and Study of their Catalytic Properties" 02(0147)/13/EMR-II 3 years	19,04,800	CSIR
Dr. P. Bhavana	"An Investigation on Derivatives of mesoTetrathienylporphyrin as dye sensitized Solar cells" 02(0076)/12/EMR-II 3 years	17,11,080	CSIR
Dr. Mainak Banerjee Coinvestigator: Dr. Rahul Banerjee (NCL, Pune)	"Synthesis of metal-organic-porous material based efficient chiral heterogenous catalysts by post synthetic modification and their applications in asymmetric reactions" 02(0075)/12/EMR-II 3 years	22,25,580	CSIR
Dr. N. N. Ghosh Prof. Sunil Bhand Dr. C. K. Mitra UK counterpart Prof. Paul Antony Milner, University of Leeds	"Development and characterization of nanomaterials for biosensors and biocatalysis" INT/DST/INT/UK/P-41/2012 2 years	26,32,000	UKIERI-DST
Prof. Sunil Bhand	"Bio- Sensory Computing for Detection of Pesticide in Tea". DR-22(5)/XIIPan Project/Bio-sensor/2015 3 months	5,50,000	Tea Board, India

**B. Publications: 34**

1. Hrishikesh Joshi, SivaramapanickerSreejith, Ranjan Dey and Mihaiela C. Stuparu, "Host-guest interaction between corannulene and  $\gamma$ -cyclodextrin: Mass spectrometric evidence of a 1:1 inclusion complex formation", RSC Advances Communications, 6,110001-110003(2016).
2. Akanksha Saini, Shahswat Verma, Aditya Harshvardhan and RanjanDey, "Two new models for viscosity prediction of binary, ternary and higher order liquid mixtures", RSC Advances, 6, 113657–113662(2016).
3. AkankshaSaini, Hrishikesh Joshi, KratikaKukreja and RanjanDey, "A study of viscometric, optical and interfacial properties of binary and ternary liquid mixtures",Journal of Molecular Liquids, 273,165-173(2016).
4. K Narendra, T Srinivasa Krishna, B Sudhamsa, RanjanDey and M SarathBabu,"Thermophysical and optical studies of molecular interactions in binary mixtures of diethyl carbonate with aromatic compounds at temperatures from 298.15K to 323.15K", Journal of Chemical Thermodynamics, 103,17-299(2016).
5. RanjanDey, AkankshaSainiandHardikHingorani,"A Modified Frenkel Approach for Viscometric Prediction of Binary and Multicomponent Liquid Mixtures", RSC Advances,6, 43838-43843(2016).
6. J V Srinivasu, K Narendra, RanjanDey, B SubbaRao,"Theoretical Evaluation of Speed of Sound in Binary Liquid Mixtures", International Journal of Advanced Research in Physical Sciences,3(6),7-14(2016).
7. Atul Sharma, Aruna Chandra Singh, GautamBacher, Sunil Bhand, "Recent Advances in Aptamer- Based Biosensors for Detection of Antibiotic Residues" (Invited review) Aptamers and Synthetic Antibodies, Vol.2, Iss.2, Pages 43-54
8. Deshmukh, R. A., Joshi, K., Bhand, S. and Roy, U, "Recent developments in detection and enumeration of waterborne bacteria: a retrospective minireview". Microbiology Open. (2016)
9. Atul Sharma, akhtarhayat, Rupesh Kumar Mishra, GaeleCatanante, Shakir Ahmad Shahid, Sunil Bhand and Jean-Louis Marty "Design of fluorescence aptaswitch based on the aptamer modulated nano-surface impact on the fluorescence particles" RSC Adv, 6, 65579-65587 (2016),. DOI: 10.1039/C6RA10942J
10. Atul Sharma, GaëlleCatanante, Akhtar Hayat, Georges Istamboulie, Ines Ben Rejeb, Sunil Bhand, Jean Louis Marty "Development of structure switching aptamer assay for detection of aflatoxin M1 in milk sample" Talanta 158, 35–41 (2016),
11. Manu Jose, P. T. Aswathi, K. Sriram, PriyadarshiniParakh, HalanPrakash,SatyajitShukla, Ion-exchange bonded  $H_2Ti_3O_7$ nanosheets-based magnetic nanocomposite for dye removal via adsorption and its regeneration via synergistic activation of persulfate. RSC Adv., 6, 80133 (2016).
12. Gokulakrishnan Subramanian, Akhil Mohammed, HalanPrakash,Determination of persulphates using N, N-diethyl-p-phenylenediamine as colorimetric reagent: Oxidative colaration and degradation of the reagent without bactericidal effect in water. Chemical Engineering Journal, 286, 223–231 (2016) ,
13. T. Mondal, "Origin of distinct structural symmetry of the neopentane cation in the ground electronic state compared to the methane cation" Phys. Chem. Chem. Phys. 18, 10459-10472 (2016).
14. SrimantaHalder, PurushothamanBhavana, "Conformational and regioselective aspects on the photodegradation of organic pollutants by  $TiO_2$  composites of derivatives of meso-tetrathien-2-ylporphyrin" Journal of Molecular Structure, 1120, 62-69 (2016).
15. Anjan Chattopadhyay, Praveen Saini and RiddishPandharkar "Exploring the isomerization paths of push-pull hexatrienes" RSC Advances 6 88433-88442 (2016).
16. Praveen Saini, Mainak Banerjee and Anjan Chattopadhyay "A Computational Investigation of the Photochemical Reaction Path of some Synthesized and Experimentally Analyzed Small-Chain Conjugated Nitrones" J. Phys. Chem A 120 396-406 (2016).
17. Banerjee, S., Chattopadhyay, A., Saini, P., Singh, K. S. 'Synthesis and Optical Properties of 1,4- and 1,2-Dicyanodibenzodioxins Possessing Donor- $\pi$ -Acceptor Architecture' Synlett. 27, 799-804 (2016).
18. Banerjee, S.'Phenazines as chemosensors of solution analytes and as sensitizers in organic photovoltaics' Arkivoc, 2016, (i), 82-110.
19. Sharma, M. Banerjee, S., Zeller, M. Brückner, C. "Fusion and Desulfurization Reactions of Thiomorpholinochlorins" J. Org. Chem. 81, 12350-12356 (2016),
20. Shankar B. Dalavi and Rabi N. Panda, "New Synthetic Methodology and Magnetic Properties of fcc Co-Ni Nanostructured Alloys Embedded in KIT-6 Matrix", Journal of Materials Research, 31(16), 2430-2437 (2016).

21. Pragnya P. Mishra, M. Manivel Raja and Rabi N. Panda, "Novel Synthesis and Nanostructure Controlled Magnetic Characteristics of  $\epsilon$ -Fe<sub>3</sub>N and  $\gamma'$ -Ni<sub>x</sub>Fe<sub>4-x</sub>N (0.2 ≤ x ≤ 0.8) Nitrides", *Journal of Superconductivity and Novel Magnetism* 29(5), 1347-1356 (2016).
22. Pragnya P. Mishra, M. Manivel Raja and Rabi N. Panda, "Enhancement of magnetic moment in Co substituted Nanocrystalline  $\epsilon$ -Co<sub>x</sub>Fe<sub>3-x</sub>N (0.2 ≤ x ≤ 0.4) synthesized by modified citrate precursor route", *Materials Research Bulletin*. 75, 127-133 (2016).
23. Greg Anderson, Raghu N. Behera, Ravi Gomatam, "A Theoretical Approach to Engineering a New Enzyme", *Journal of Physics: Conference Series*, 738, 012013 (2016).
24. V. S. Thimmakonda, "The Equilibrium Geometries of Heptatriynylidene, Cyclohepta-1,2,3,4-tetraen-6-yne, and Heptahexaenylidene" *Comput. Theoret. Chem.* 1079, 1-10 (2016).
25. Diprati G. Khandare, Mainak Banerjee, Rishabh Gupta, Nupur Kumar, Anasuya Ganguly, Deepak Singh and Amrita Chatterjee, "Green synthesis of a benzothiazole based 'turn-on' type fluorimetric probe and its use for the selective detection of thiophenols in environmental samples and living cells", *RSC Adv.*, 2016, 6, 52790–52797.
26. Meenakshi Rana, Nidhi Singla, Amrita Chatterjee, Abhishek Shukla, Papi Chowdhury, "Investigation of nonlinear optical (NLO) properties by charge transfer contributions of amine functionalized tetraphenylethylene" *Optical Materials*, 62, 80-89 (2016).
27. Zigmee T. Bhutia, Geethika Prasanna kumar, Avijit Das, Malabika Biswas, Amrita Chatterjee and Mainak Banerjee, "A Facile, Catalyst-Free Mechano-Synthesis of Quinoxalines and their In-Vitro Antibacterial Activity Study", *Chemistry Select*, slct.201601672, accepted
28. Debabrata Moitra, Barun Kumar Ghosh, Madhurya Chandel, Narendra Nath Ghosh, "Synthesis of a BiFeO<sub>3</sub> nanowire-reduced graphene oxide based magnetically separable nanocatalyst and its versatile catalytic activity towards multiple organic reactions" *RSC Advances* 6, 97941–97952 (2016).
29. Debabrata Moitra, Madhurya Chandel, Barun Kumar Ghosh, Raj Kumar Jani, Manoj K Patra, Sampat Raj Vadera, Narendra Nath Ghosh, "A Simple 'in situ' Co-precipitation Method for Preparation of Multifunctional CoFe<sub>2</sub>O<sub>4</sub>-Reduced Graphene Oxide Nanocomposites: Excellent Microwave Absorber and Highly Efficient Magnetically Separable Recyclable Photocatalyst for Dye Degradation." *RSC Advances* 6, 76759- 76772 (2016).
30. BK Ghosh, S Hazra and NN Ghosh, Synthesis of Cu@CF@SBA15: A Versatile catalysts for (i) reduction of dyes, trifluralin, Synthesis of (ii) DHPMs by Biginelli reaction and (iii) 1,2,3-triazole derivatives by 'Click reaction Catalysis Communications. 80, 44–48 (2016).
31. Mayank Pandey, Girish M Joshi and Narendra Nath Ghosh, Electrical Performance of Lithium Ion Based Polymer Electrolyte with Polyethylene glycol and Polyvinyl alcohol Network *International Journal of Polymeric Materials* 65 [15] 759–768 (2016).
32. D Moitra, BK Ghosh, M Chandel, RK Jani, MK Patra, SR Vadera, NN Ghosh, Synthesis of a Ni<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub>-RGO nanocomposite: an excellent magnetically separable catalyst for dye degradation and microwave absorber *RSC Advances* 6, 14090-14096 (2016).
33. Rupam Debnath, Debraj Dhar Purkayastha, Subhenjit Hazra, Narendra Nath Ghosh, Chira R Bhattacharjee, Jayashree Rout, 'Biogenic synthesis of antioxidant, shape selective gold nanomaterials mediated by High altitude lichens' *Materials Letters* 169, 58–61 (2016).
34. Bhanudas Naik, Debabrata Moitra, Desagani Dayananda, Subhenjit Hazra, Barun Kumar Ghosh, Sivankutty Vadakkethonippurathu Prasad, Narendra Nath Ghosh "A facile method for preparation of TiO<sub>2</sub> nanoparticle loaded mesoporous  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>: An efficient but cost-effective catalyst for dye degradation" *Journal of Nanoscience and Nanotechnology* 16, 8544-8549 (2016).

#### Patents:03

1. Vinok Kumar Suri, R. Balasubramanian. Shivam Mishra, Shrinkhla Ghildiyal, Girish Pai, D. S. Joshi, Mansee Rathore, Sunil Bhand, Souvik Pal. Title : A micro-trench based biochip device for screening of infectious diseases using Gold nano-particles / nano-coating - [Indian Patent Application No. 3620/MUM/2015 - Jointly by BARC, MGM Mumbai and BITS Pilani. Published 05-02-2016 No. 6/2016
2. Bhand Sunil, Chandra Sudhir, Pandya Hardik, Bacher Gautam, Kanungo Lizy "Device for detection and analysis of Mycotoxins" UK Patent application Publication number GB2531924, Published on 04 May 2016.

3. Halan Prakash, Parakh Priyadarshini, Subramanian Gokulakrishnan, Prasad Panzade Filed as Indian, Patent Application no. 201611017381. "A bactericidal composition and a method for disinfecting water under visible light irradiation" Filed on 18 May 2016.

**C. Conferences attended/papers presented: 24**

1. Mainak Banerjee, "Mechanochemistry"—A facile approach for the construction of Heterocyclic scaffolds, National conference on Organic Chemistry in Sustainable Developments: Recent Advances and Future Challenges (OCS 2016), August 29-30, 2016, BITS Pilani, Rajasthan.
2. Greg Anderson, Raghu N. Behera and Ravi Gomatam, A Theoretical Approach to Engineering a New Enzyme, 5th International Conference on Mathematical Modeling in Physical Sciences, Athenes, Greece, May 23-26, 2016.
3. Arunashree Panda and Raghu Nath Behera, A Computational Study on the Effect of Substituents on the Antioxidant activity of Glutathione Peroxidase Mimics, 5th International Conference on Research Frontiers in Chalcogen Cycle Science & Technology (G16 Asian), Goa, India, Dec 19 – 21, 2016.
4. Ram U. Gawas, Mainak Banerjee and Amrita Chatterjee, Green chemical synthesis of Benzimidazole based highly Selective "Turn-on" type fluorimetric probe for detection of perborate in aqueous media, Symposium on Recent Advancements in Chemical Sciences and Research Scholar Meet-2016 in BITS PILANI, K K BIRLA A CAMPUS, 13<sup>th</sup> November, 2016.
5. Akanksha Saini, Hardik Hingorani and Ranjan Dey, A modified Frenkel approach for viscometric prediction of binary and multicomponent liquid mixtures, Symposium on Recent Advancements in Chemical Sciences and Research Scholar Meet-2016, 13<sup>th</sup> November, 2016, BITS Pilani K K Birla Goa Campus. (Best poster Award)
6. Praveen P Rangnath, Kartikeya Tiwari, Aditya Prakash Pandey and Ranjan Dey, A Study of Ultrasonic and Optical Properties of binary liquid Mixtures, Symposium on Recent Advancements in Chemical Sciences and Research Scholar Meet-2016, 13<sup>th</sup> November, 2016, BITS Pilani KK Birla Goa Campus
7. Praveen Saini and Anjan Chattopadhyay, Photochemical oxaziridine conversion and thermal E-Z isomerization processes of fluorescent  $\alpha$ -(2-naphthyl)-N-methylnitron: A Computational Study, at INDO-UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016), BITS-Pilani, K.K.Birla Goa Campus, 11-12 Jan 2016.
8. Akanksha Saini, Hardik Hingorani and Ranjan Dey, A Novel method for Viscometric Prediction of Binary and Multicomponent Liquid Mixtures, INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016), January 11-12, 2016.
9. S. Bhand, U. Roy, G.K. Mishra, R. Deshmukh, G. Bacher, A label-free biosensor for analysis of Escherichia coli and Salmonella in potable water, Presented at BIOSENSORS 2016 May 27-29, Gothenburg Sweden 2016.
10. A.C. Singh, G. Bacher, B. Danielsson, S.Bhand, Ultrasensitive detection of 17 $\beta$ -Estradiol in water using electrochemical impedance spectroscopy, presented at WORLD BIOSENSOR CONGRESS- May 27-29, Gothenburg Sweden 2016.
11. Aruna Chandra Singh, Souvik Pal, R. Balasubramaniam, Sunil Bhand, Zinc oxide nanoparticles enhanced sensitive detection of Organophosphates residues in water, presented at 1st International Conference on Nanoscience and Nanotechnology (ICNAN' 16) VIT University, Vellore; October 19-21, 2016
12. Arun Kumar Prusty, Sunil Bhand, Molecular imprinted polymer coated pencil graphite electrode based electrochemical capacitive sensor for 2,4-D estimation in water, presented in 1st International Conference on Nanoscience and Nanotechnology, (ICNAN' 16) VIT University, Vellore; October 19-21, 2016
13. Atul Sharma, Akhtar Hayat, Rupesh Kumar Mishra, Gaëlle Catanante, Sunil Bhand, Jean Louis MARTY, Design of a nanomaterial based fluorescence aptaswitch using aptamer modulated nano-surface impact on the fluorescence particles, presented in Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet 2016 organized on 13<sup>th</sup> November at BITS, Pilani-KK Birla Goa Campus, INDIA .
14. Atul Sharma, Gaëlle Catanante, Akhtar Hayat, George Istamboulie, Sunil Bhand and Jean Louis Marty, Structure signaling aptasensing platform for detection of aflatoxin M1 in milk, presented in AMAN-2016 organized by BITS- Pilani K. K. Birla Goa Campus jointly with University of Leeds, UK from 11-12<sup>th</sup> January 2016.
15. Aruna Chandra Singh, Gautam Bacher, Sunil Bhand, An electrochemical impedimetric immunosensor for ultrasensitive detection of estragon in water, presented in Symposium on Recent Advancements in

Chemical Sciences and RSC Research Scholar Meet 2016 organized on 13<sup>th</sup> November at BITS, Pilani-KK Birla Goa Campus, INDIA .

16. Barun Kumar Ghosh, Debabrata Moitra, Madhurya Chandel and Narendra Nath Ghosh 'A facile route for preparation of magnetically separable (mTiO<sub>2</sub>@CF)<sub>x</sub>RGO<sub>(1-x)</sub>nanocomposites and its photocatalytic activity towards degradation of various dyes under visible light' 2<sup>nd</sup> INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016) in collaboration with Univ of Leeds, UK BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
17. D. Moitra, B. K. Ghosh, M.Chandel, R. K. Jani, M. K. Patra, S. R. Vadera and N. N. Ghosh, Synthesis of Ni<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub>-RGO nanocomposite: An excellent magnetically separable catalyst for dye degradation and Microwave absorber, 2<sup>nd</sup> INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016) in collaboration with Univ of Leeds, UK BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
18. Madhurya Chandel, Harshit Sinha, Harshdeep Singh Hora, Barun Kumar Ghosh, Debabrata Moitra, Narendra Nath Ghosh, Synthesis of magnetic separable CuFe<sub>2</sub>O<sub>4</sub> and RGO@CuFe<sub>2</sub>O<sub>4</sub>nanocatalysts for reduction of various synthetic dyes, 2<sup>nd</sup> INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016) in collaboration with Univ of Leeds, UK BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
19. (3<sup>rd</sup> Prize for poster paper) Souvik Pal, Narendra Nath Ghosh, Paul A. Millner, Sunil Bhand, 'A turn off fluorosencenanosensor for analysis of Pb<sup>2+</sup> in water, 2<sup>nd</sup> INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016) in collaboration with Univ of Leeds, UK BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
20. Samyak Dhole, Debabrata Moitra, Narendra Nath Ghosh, ' Density functional study of prototypical multiferroicbismuth ferrite, Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet-2016 at BITS Pilani, KK Birla Goa Campus 13th November 2016
21. D. Moitra, M.Chandel, B. K. Ghosh, R. K. Jani, M. K. Patra, S. R. Vadera and N. N. Ghosh, A Simple 'in situ' Co-precipitation Method for Preparation of Multifunctional CoFe<sub>2</sub>O<sub>4</sub>-Reduced Graphene Oxide Nanocomposites: Excellent Microwave Absorber and Highly Efficient Magnetically Separable Recyclable Photocatalyst for Dye Degradation, Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet-2016 at BITS Pilani, KK Birla Goa Campus 13th November 2016
22. Barun Kumar Ghosh, Harshita Lulla, Madhurya Chandel, Narendra Nath Ghosh, Ag nanoparticle immobilised mesoporous TiO<sub>2</sub>-Cobalt Ferrite nanocatalyst: A versatile, magnetically separable and reusable catalyst, Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet-2016 at BITS Pilani, KK Birla Goa Campus 13th November 2016 .
23. Madhurya Chandel, Harshit Sinha, Harshdeep Singh Hora, Barun Kumar Ghosh, Debabrata Moitra, Narendra Nath Ghosh, Synthesis of magnetic separable CuFe<sub>2</sub>O<sub>4</sub> and RGO@CuFe<sub>2</sub>O<sub>4</sub>nanocatalysts for reduction of various synthetic dyes, Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet-2016 at BITS Pilani, KK Birla Goa Campus 13th November 2016
24. Dr. N. N. Ghosh, Development of Novel Synthetic Routes for Preparation of Variety of Nanostructured materials: Magnetic Nanoparticles, Advanced Nanocatalysts, Graphene oxide based nano-composites and their Applications' 2<sup>nd</sup> INDO- UK INTERNATIONAL WORKSHOP ON ADVANCED MATERIALS AND THEIR APPLICATIONS IN NANOTECHNOLOGY (AMAN 2016) in collaboration with Univ of Leeds, UK BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
25. Banerjee, S. 'Push-pull dicyanodibenzodioxins – a new class of planar polycyclic heteroaromatic hydrocarbons with UV to visible optical spectra and weak fluorescence' at Recent Developments and Applications in Chemical Sciences (RDACS 2016) 20-21 May, 2016, at Department of Chemistry, National Institute of Technology, Agartala

#### D. Books Published/Edited during the year: 01

1. Chemiluminescence and Fluorescence Optical Biosensor for the Detection of Aflatoxins in Food, (Chapter 7)

Sunil Bhand, LizyKanungo and Souvik Pal, Food Biosensors, 2016, 161-181.

DOI:10.1039/9781782623908-00161

Food Biosensors , Editors: MinhazUddin Ahmed, Mohammed Zourob, Eiichi TamiyaPublished by Royal Society of Chemistry <http://pubs.rsc.org/en/content/ebook/978-1-78262-361-8#!divbookcontent>

**E. Conferences, seminars & workshops conducted: 04**

1. 2<sup>nd</sup> Indo- UK International Workshop on Advanced Materials and their Applications in Nanotechnology (AMAN 2016) in collaboration with Univ of Leeds, UK at BITS Pilani, KK Birla Goa campus January 11- 12, 2016.
2. Symposium on Recent Advancements in Chemical Sciences and RSC Research Scholar Meet-2016 (13<sup>th</sup> November 2016 at BITS Pilani, KK Birla Goa Campus).
3. BRNS-AEACI Twelfth School on Analytical-Chemistry (SAC-12), organized by Board of Research in Nuclear Sciences (BRNS) and Association of Environmental Analytical Chemistry of India (AEACI) in collaboration with Department of Chemistry, BITS Pilani K K Birla Goa Campus during Nov., 15-22.
4. The 4th International Conference on Advanced Oxidation Processes (AOP-2016) was held at BITS Pilani, K K Birla Goa Campus, from 17-20 December 2016. AOP-2016 conference was organized by BITS Goa campus in association with the Society of Environmental Chemistry and Allied Sciences (SECAS)

**F. Invited Talks given by BITS faculty: 07**

1. Prof. Sunil Bhand Delivered invited talk: Miniaturized sensor for monitoring antibiotic residues in water "TECO Networking conference under EU-India Research and Innovation partnership" Nov. 16-17, 2016 Habitat Place, N Delhi India.
2. Prof. Sunil Bhand Delivered Mentor Lecture: Environmental Analysis-Challenges and opportunities at "INSPIRE Internship Science Camp 2016 at Christ College Rajkot Oct. 22, 2016, Sponsored by Department of Science & Technology N Delhi. <http://www.christcollegerajkot.edu.in/Inspire-2016-Day-2/>
3. Prof. Sunil Bhand Delivered Invited talk: Nanomaterials based biosensors: applications in environmental and clinical analysis, at 1<sup>st</sup> International Conference on Nanoscience and Nanotechnology, organized by Centre for Nanotechnology Research VIT Vellore, 19-21 Oct. 2016.
4. Prof. Sunil Bhand delivered Invited Lecture: Chemiluminescence Probes for optical biosensing in environmental analysis, BRNS-AEACI Twelfth School in Analytical Chemistry (SAC-12) Nov. 15-22, 2016 BITS Goa.
5. Dr. Mainak Banerjee delivered Lecture: "Mechanochemistry"—A facile approach for the construction of Heterocyclic scaffolds" in a national conference OCSD, held in Pilani during 29<sup>th</sup> – 30<sup>th</sup> August, 2016.
6. Dr. Amrita Chatterjee delivered lecture: Chemo-dosimeter the reaction based chemical sensor for heavy metal, anions and gases in BARC Mumbai, 10<sup>th</sup> November, 2016.
7. Dr. N. N. Ghosh delivered lecture: New and Novel Synthetic Routes for Preparation of Variety of Nanostructured materials and their Applications, at University of Tartu, Estonia Mon 12.09.16

**G. Invited talks arranged in the department: 02**

1. Guest Lecture by Prof. Horst Koppel, University of Heidelberg, Germany (December 12, 2016).
2. Lecture by Dr. Sandeep Chaudhary, Malaviya National Institute of Technology, Jaipur (March 21, 2016)

**H. Awards and recognitions won by faculty and student**

1. Prof. Sunil Bhand has been presented "Joseph Wang Award 2015", by Cognizure publishing in recognition of his research excellence in the area of Analytical Chemistry (Announced in 2016).
2. Dr. N.N. Ghosh received Visiting Scholar award for teaching in Erasmus Mundus Joint Master Degree programme EACH - Excellence in Analytical Chemistry in University of Tartu, Estonia.
3. Dr. N.N. Ghosh received Visiting Professor position from University of Leeds, UK.
4. Prof Sunil Bhand was invited as expert in the area of Biosensors for evaluation of Indo French Project proposals in Sept 2016 jointly funded by BIRAC and CEFIPRA
5. Prof Sunil Bhand became the founding Honorary Secretary and Life member of the Indian Institute of Metals –Goa Chapter in Sep. 2016.
6. Dr. Ranjan Dey received Visiting Associate Professorship from National Taiwan University of Science and Technology (NTUST), Taipei, Taiwan.
7. Dr. Halan Prakash Awarded EACH visiting scholarship to teach at University of Tartu, Estonia under Erasmus + program. Visited University of Tartu between 02.10.2016 – 14.10.2016, and taught a course on Analytical Methods in Advanced Oxidation Process based water treatment.

8. Dr. Halan Prakash was Selected as Guest Editor for the publishing the special issue "AOP-2016 at BITS Pilani K K Birla Goa Campus" in the reputed journal of Environmental Chemical Engineering.

#### **I. Faculty Development, International Collaboration & Industry Immersion**

1. Dr. Mainak Banerjee: Industry Immersion to Syngenta Bioscience Pvt. Ltd. (June-July, 2016)
2. Dr. R.N. Behera: Co-Chair, "5th International Conference on Research Frontiers in Chalcogen Cycle Science & Technology (G16 Asian)", Organized by UNESCO-IHE and NITK Surathkal in association with BITS Pilani – Goa Campus and IIT Guwahati, Dec 19 – 21, 2016 at Goa, India.
3. Dr. Amrita Chatterjee: Industry Immersion to NIO Goa . (June-July, 2016)
4. Dr. HalanPrakash collaborated with Prof. Clara Comuzzi, University of Udine, ITALY and student exchange. Ms. Merlyn Thandu, Postdoctoral Fellow from University of Udine, ITALY who worked under supervision of Dr. HalanPrakash at BITS Pilani K K Birla Goa Campus between May, 2016 and November 2016.
5. Dr. Ranjan Dey Visited National University of Singapore(NUS), Nanyang Technical University (NTU), Singapore and National Taiwan Univeristy , Taiwan and Chung Yuan Christian University, Taoyuan, Taiwan to discuss Student and Faculty Exchange and joint Research Collaborations.
6. Dr. Ranjan Dey reviewed papers for Journal of Chemical Thermodynamics, Journal of Molecular Liquids, Journal of Solution Chemistry and International Journal of Thermophysics. He was invited to Review Papers for CMSE 2016, Global Conference on Material Science and Engineering, held in Taiwan in October 2016.
7. Prof. Sunil Bhand visited the Swedish Incubator company Acromed Invest AB Lund Sweden for two weeks during June 2016 to carry out joint research and technology development in the area of nano-sensors.
8. A technology for sensing of pesticide residues in tea was successfully developed by Prof Sunil Bhand (BITS, Goa) jointly with CDAC Kolkata and TRA Jorhat. The technology using a prototype was demonstrated to about 50 large and small tea growers at TRA Jorhat on June 30, 2016 in Assam. The work was financially supported by the Tea Board, Ministry of Commerce and Industry.
9. Dr. N.N. Ghosh was invited by Professor Ivo Leito to deliver an invited talk and collaborative research at University of Tartu, Estonia. Department of Chemistry (9<sup>th</sup> -14<sup>th</sup> September 2016)
10. Dr. N.N. Ghosh was invited by Professor G F Fernando for collaborative research related to Newton Research Collaboration Programme award at University of Birmingham, UK. School of Metallurgy and Materials (19<sup>th</sup> July 2016 to 28<sup>th</sup> July 2016). Visit was sponsored by: Royal Academy of Engineering, UK
11. Dr. N.N. Ghosh was invited by Professor Paul Millner for collaborative research related to DST-UKIERI project at University of Leeds, UK: School of Biomedical Science (30<sup>th</sup> January 2016 to 06<sup>th</sup> February 2016). Visit was sponsored by: DST-UKIERI project grant.

#### **J. Significant new equipments/experimental facility added during the year**

1. Guoy Balance, MSB-Auto, SHERWOOD SCIENTIFIC LTD, UK installed.
2. Benchtop NMR, Oxford Instruments (Order placed)

#### **K. Departmental association/club activities: Department seminars delivered by students and faculty :**

##### **Talks given by the faculties**

- Dr. N.N. Ghosh delivered a talk on "Novel Synthetic Routes Developed by Ghosh's Group for Preparation of Variety of Nanostructured materials: Magnetic Nanoparticles, Advanced Nanocatalyst, Graphene oxide based nano-composites and Their Applications"
- Dr. Venkatesan Thimmakonda delivered a talk on "Molecules in my laptop, others' laboratories and in interstellar space?"
- Dr. Mainak Banerjee delivered a talk on " Mechanochemistry—A facile approach for the construction of Heterocyclic scaffolds"
- Dr. Ranjan Dey delivered a talk on "Molecular Interaction Studies employing Prediction of Transport, Optical and Interfacial Properties for Binary, Ternary and Higher Order Liquid Mixtures"



**B2.10.2 Department: Chemical Engineering**

Number of faculty members (as on 31 December 2016): 14

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	05
<b>Lecturers</b>	04
<b>Non-tenure track Adjunct Professor Honorary Visiting Professor</b>	01 01

**Head of the Department: Prof. S. S. Baral****Contact details (email):** ssbaral@goa.bits-pilani.ac.in**Number of PhD Scholars:** 04 (full time), 03 (part time)**Number of Project Fellows:** 06**No. of Post-Doctoral Scientists:** 00**Ph.D. Thesis awarded during the year:** 00**A. Sponsored Research activities:****(i) Ongoing projects: 08**

<b>Name of the Investigator</b>	<b>Title of the project and duration</b>	<b>Amount sanctioned (Lakhs)</b>	<b>Funding Agency</b>
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	Seawater desalination using refrigeration (3 years)	382.21	GAIL (India) Limited
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	Experimental and Simulation Studies on Coke Mitigation in Petroleum Refinery Systems (3 years)	132.97	Centre for High Technology (CHT)
Asima Shaukat	Rheological dynamics of polymer-layered silicate/ graphene nanocomposites (3 years)	35 (7 lakhs per year)	INSA INSPIRE, DST
Jegatha Nambi Krishnan	Ion selective sensors for heavy metal ion detection in water medium	15 (5 years) (After Review of Opera Award Assessment, on 3 <sup>rd</sup> year, it has been extended for the remaining period upto 10/9/2018 and the grant has been revised to Rs.3.60 lakhs per year)	BITS Pilani (OPERA Award)
Sutapa Roy Ramanan (PI) Dr. Meenal Kowshik (Co-I)	Synthesis of hydroxyapatite based biocompatible functional magnetic nanoparticles and investigation of its interaction with biomolecules	Rs.45000	UGC-DAE-CSR and BARC Mumbai
Dr. Meenal Kowshik (PI) Sutapa Roy Ramanan (Co-PI)	Lanthanide doped hydroxyapatite based nanomaterials for theranostics applications: Sensing, Imaging, and Therapeutics	Rs.3964771	DST
Dr. S. S. Baral	Development of efficient bioleaching process for the metal recovery from spent catalysts,	Rs. 26,56,600/	Department of Biotechnology, Government of India.
Dr. S. S. Baral	Investigating the effect of co-digestion and advanced sludge pre-treatment methods on the	Rs.27,48,860/-	Department of Biotechnology, Government of

Name of the Investigator	Title of the project and duration	Amount sanctioned (Lakhs)	Funding Agency
	anaerobic conversion potential of the organic wastes (As Co-Investigator)		India

**(ii) Projects sanctioned during the year: 04**

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
Srinivas Krishnaswamy	Unmixed Reforming (UMR) of Methane for Hydrogen Production – Approved on 8 <sup>th</sup> Nov 2016	56.111	DST-SERB
Asima Shaukat	Visco-elastic, visco-plastic and thixotropic behavior of biogreases and its influence on lubrication (tribological) performance, 3 years	54.673	DST-SERB, Govt. of India
Jegatha Nambi Krishnan	Chlorine resistant Nano Enhanced Polymer Blend Membranes, 3 years	3174281	DST - SERB
Jegatha Nambi Krishnan	Ion Selective Sensor for Arsenic Detection in Water medium, 2 years	2 lakhs	DSTE, Govt. Of Goa

**(iii) Projects approved during the year (new): \_\_\_\_\_****(iv) Projects completed this year: 02**

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	High - efficiency energy conversion in steam boilers using unmixed combustion	31.05 (Thermax) (DST) and 4.00 (Thermax)	DST / Thermax Ltd. Pune
Jegatha Nambi Krishnan	Electroless Deposition of Metallic Nanostructures on Metallic Substrates for Sensor Applications, 2 years	2 lakhs	BITS Pilani, RIG Grant

**B. Publications: 17**

- Amol Deshpande, Srinivas Krishnaswamy & K. N. Ponnani, "Pulsed Micro-reactor: An alternative to estimating kinetic parameters of non-catalytic gas-solid reactions", Chemical Engineering Research & Design, 117, (2017), 382 – 393 (in press)
- Manjuri K. Koley, Om Prakash Chouhan, Sumit Biswas, Joseph Fernandes, Arnab Banerjee, Anjan Chattopadhyay, Babu Varghese, Periakaruppan T. Manoharan and Aditya P. Koley: Spectroscopic, electrochemical and DNA binding studies of some monomeric copper(II) complexes containing N<sub>2</sub>S(thiolate)Cu core and N<sub>4</sub>S(disulfide)Cu core. Inorganica Chimica Acta, Elsevier, vol. 456, 179-198, (2017).
- Ravi Teja, Debopamaa Debnath, Arnika Jain and Manjare S D, "Modeling and Simulation of PBI based High Temperature Proton Exchange Membrane Fuel Cell" accepted for publication in Journal of Materials Today Proceedings, Elsevier Publication, 2016.
- Probal Guha, Tanmay Netke, Manjare S D, "Mathematical Modeling of Bitumen and Oil Shale Extraction Using Supercritical Fluid" Published in the book (chapter no 28) titled "Recent Advances in Chemical Engineering" published by Springer Science Singapore 2016, PP 257-268 (ISBN 978-981-10-1632-5), DOI 10.1007/978-981-10-1633-2\_28.
- Banal Shashwat and Manjare S D, "Theoretical Investigation on the Performance of Multicomponent Distillation Column for the Separation of Hydrocarbon Mixture Using Inside out Approach" International Journal of Chemical Engineering and Applications" Volume 7, No 4, 282-286, 2016 (doi: 10.18178/ijcea.2016.7.4.590).
- Banal Shashwat and Manjare S D "Detailed Simulation Approach of a Multicomponent Distillation Column using Inside Out Method: A Review" International Journal of Chemical Engineering, Vol.9, No.2 (2016)

7. Manjare S D, Mohite R J "Cradle-to-gate and Gate to Gate Approach for Life Cycle Assessment of the Fertilizer Production" International Journal of Environmental Pollution Control and Management, Vol.8, No.2 (2016)
8. G. Surendran, S. S. Baral, Selection of suitable adsorbent for the removal of Cr(VI) by using Objective Based Multiple Attribute Decision Making (MADM) method, International Journal of Chemical Engineering and Applications, Accepted.
9. S. S. Baral, K. Raja Shekar, V. Viswanathan, G surendran, Dissolution Kinetics of Cerium from red mud, Separation Science and Technology, Accepted, 2016 Taylor Francies (IF 1.083)
10. A.S.Sai Pavan and Sutapa Roy Ramanan, A study on corrosion resistant graphene films on low alloy steel, Appl Nanosci., 19th April 2016, DOI 10.1007/s13204-016-0530-2.
11. Low-temperature-processed biocompatible Ag-HAp nanoparticles with anti-biofilm efficacy for tissue engineering applications, Ketaki R. Deshmukh, Sutapa Roy Ramanan, Meenal Kowshik, J Sol-Gel Sci Technol, DOI 10.1007/s10971-016-4149-2.
12. Self-activated fluorescent hydroxyapatite nanoparticles:a promising agent for bio-imaging and bio-labeling, Ketaki Deshmukh, M Monsoor Shaik, Sutapa Roy Ramanan, and Meenal Kowshik, ACS Biomaterials Science and Engineering, DOI: 10.1021/acsbiomaterials.6b00169
13. Vaishnavi Unde, Srikanth Mutnuri, Sachin Waigoakar, "Experimental investigation of bio-indigo produced by *Pandoraea sp.*" *Indian Journal of Biotechnology*.(Communicated)
14. Vaishnavi Unde, Srikanth Mutnuri,"Comparative study of production of Bio-Indigo by *Pandoraea sp.* in a two phase -fed batch and continuous bioreactor", Carbon- Science and Technology, 8-1 (2016), 40-46.
15. V. Dhanya Ram and M.Chidambaram,, 'Identification of Centralised Controlled Multivariable Systems,' *Indian Chemical Engineer*, 58 (3),240-254, 2016.<http://dx.doi.org/10.1080/00194506.2015.1029285>
16. Performance enhancement using multiple cryogenic desublimation based pipeline network during dehydration and carbon capture from natural gas, A Ali, K Maqsood, A Redza, K Hii, ABM Shariff, S Ganguly, Chemical Engineering Research and Design, IChemE London, 109, 519-531, 2016.
17. Effect of solvent on nanostructure and thermoelectric properties of bismuth, C Kuls, P Dhara, M Mitra, K Kargupta, S Ganguly, D Banerjee, Indian Journal of Physics 90 (5), 557-562, 2016.

**Patents: 00**

**C. Conferences attended/papers presented: 25**

1. Amol Deshpande, Srinivas Krishnaswamy, Krishnaswamy Ponnani, Modeling of Unmixed Combustion based packed bed reactor system used for heat transfer applications, 69th Annual session of IChE, CHEMCON – 2016, Anna university, Chennai, December 27 – 30, 2016 (Accepted for oral presentation and proceedings)
2. Manjuri Kumar, Om Prakash Chouhan, Sumit Biswas, Joseph Fernandes, Arnab Banerjee, Angshuman Sarkar, Aditya P. Koley: Mixed ligand Cu(II)/Zn(II) complexes containing heterocyclic bases show enhanced DNA binding activity and cytotoxicity. Indo-UK International Workshop on Advanced Materials and their applications in nanotechnology: (AMAN 2016), BITS-Pilani, K.K. Birla Goa Campus, 11-12 January 2016
3. Manjuri Kumar, Two days workshop on Environmental Management System. BITS-Pilani, K.K. Birla Goa Campus in collaboration with Goa State Pollution Control Board. 20-21 st Oct 2016
4. Manjuri Kumar :Catechol Oxidase Activity of some mononuclear Cu(II) Complexes containing N-S Donor ligands. Fourth International Conference on Advanced Oxidation Processes (AOP-2016) Dec 17-20 2016.
5. G. Surendran, S. S. Baral, optimization of Cr(VI) adsorption process using statistical design of experiments, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India.
6. G. Surendran, S. S. Baral, process technology for removal of Chromium by using sludge from pig iron industry, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India.
7. G. Surendran, S. S. Baral, Kinetics, isotherm and mechanism study on treatment of Cr(VI) contaminated water using coconut leave, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India.
8. G. Surendran, S. S. Baral, Treatment of Cr(VI) contaminated wastewater by *Sorghastrum Nutans* (L) Nash (natural grass.), 11<sup>th</sup> Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2016), Conference, 4<sup>th</sup> – 9<sup>th</sup> September, 2016, Lisbon, Portugal.

9. S. S. Baral, P. V. Rao, G. Surendran, Pretreatment of organic composite waste mixtures for enhanced biomethanation, 11<sup>th</sup> Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2016), Conference, 4<sup>th</sup> – 9<sup>th</sup> September, 2016, Lisbon, Portugal.
10. Hanish Gupta and Manjare S. D on Sustainable Development of Energy, Water and Environment System, held at Lisbon, Portugal, Sep 4-9, 2016, pp 206. ., "Improvement in Isooctane production process via introduction of Mass Exchange Network (MEN), published in the proceedings of *International Conference*
11. Tanmay Singhal and Manjare S. D., "Absorption of CO<sub>2</sub> from Coal Based Thermal Power Plant Using Monoethanolamine (MEA) Solution", published in the proceedings of *International Conference on Sustainable Development of Energy, Water and Environment System*, held at Lisbon, Portugal, Sep 4-9, 2016, pp 395.
12. Tanmay Singhal and Manjare S. D., "Modelling Studies on Reactive Absorption of SO<sub>2</sub> From Flue Gas in Coal Based Thermal Power Plant", published in the proceedings of 5<sup>th</sup> *International Conference on research frontiers in chalcogen cycle science and technology*, organized by UNESCO-IHE, NIT Surathkal held at Goa, December 19-21, 2016, pp 46.
13. Chayan Anand; Manasvi Nandwana and Sampatrao D. Manjare., "An overview of current status of sulfur oxides emissions and reduction technologies", published in the proceedings of 5<sup>th</sup> *International Conference on research frontiers in chalcogen cycle science and technology*, organized by UNESCO-IHE, NIT Surathkal held at Goa, December 19-21, 2016, pp 27.
14. Garad N M and Sampatrao D Manjare, "Environmental Management Tools for Sustainable Development" published in the proceedings of 10<sup>th</sup> ISDSI (Indian Subcontinent Decision Sciences institute) *International Conference* held at Nasik, December 28-30, 2016, pp 68-69.
15. G. Surendran, S. S. Baral, optimization of Cr(VI) adsorption process using statistical design of experiments, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India.
16. G. Surendran, S. S. Baral, process technology for removal of Chromium by using sludge from pig iron industry, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India. Won the best oral presentation under the category of adsorption.
17. G. Surendran, S. S. Baral, Kinetics, isotherm and mechanism study on treatment of Cr(VI) contaminated water using coconut leave, CHEMCON-2016, 28<sup>th</sup> -30<sup>th</sup> December, 2016, Chennai, India.
18. G. Surendran, S. S. Baral, Treatment of Cr(VI) contaminated wastewater by Sorghastrum Nutans (L) Nash (natural grass.), 11<sup>th</sup> Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2016), Conference, 4<sup>th</sup> – 9<sup>th</sup> September, 2016, Lisbon, Portugal. Won the Best Exhibit award.
19. S. S. Baral, P. V. Rao, G. Surendran, Pretreatment of organic composite waste mixtures for enhanced biomethanation, 11<sup>th</sup> Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2016), Conference, 4<sup>th</sup> – 9<sup>th</sup> September, 2016, Lisbon, Portugal.
20. Suprabhat Bhagavathula, Joshi Manasi Satchit, Sutapa Roy Ramanan and Jegatha Nambi Krishnan\*, "Fabrication and characterization of Nanoporous Gold film Electrode", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2015), NIT Warangal, India.
21. S. Bhagavathula, S. R. Ramanan, S. K. Kim and J. N. Krishnan\*, "Fabrication of Electroless Plated Nano Porous Gold Film for Heavy Metal Ion Detection in Sensor Applications", 2015 TechConnect World Innovation Conference and Expo (NanoTech-2015), Gaylord National Resort and Convention Center, National Harbor, Washington, D. C., U. S. A.
22. Manasi Joshi, Swastic, Jaya Krishna Vemula, Kumar Priyadarshi, Aparna Deshpande, Sutapa Roy Ramanan, Jegatha Nambi Krishnan\*, "Nanocharacterization Studies on Surface Modified Nanoporous Gold Films for Sensor Applications", 2016 TechConnect World Innovation Conference and Expo (NanoTech-2016), Gaylord National Resort and Convention Center, National Harbor, Washington D. C., U. S. A.
23. Manasi Joshi, Swastic, Jaya Krishna Vemula, Kumar Priyadarshi, Aparna Deshpande, Sutapa Roy Ramanan, Jegatha Nambi Krishnan\*, "Nanocharacterization Studies on Surface Modified Nanoporous Gold Films for Sensor Applications", 2016 TechConnect World Innovation Conference and Expo (NanoTech-2016), Gaylord National Resort and Convention Center, National Harbor, Washington D. C., U. S. A.
24. Arivarasi, R. A. Kumar\* and J. Nambi Krishnan, "Design and Material characterization for 3D printed Sensor", 9th International Conference on Circuits, Systems and Signals" (CSS'16), Dubrovnik, Croatia.
25. Arivarasi, R. A. Kumar\* and J. Nambi Krishnan, "Design and Material Characterization of Potassium Gold Cyanide Immersed Layers for 3D Printing Nano Sensor", World Congress on Engineering and Computer

Science, International Conference on Electrical Engineering and Applications (ICEEA'16), San Francisco, U. S. A.

**D. Books Published/Edited during the year: 4**

1. A Book chapter (No. 28) on "Mathematical Modeling of Bitumen and Oil Shale Extraction Using Supercritical Fluid" Published in the book titled "Recent Advances in Chemical Engineering" published by Regupathi et al. (eds.), Springer Science + Business Media Singapore 2016, PP 257-268 (ISBN 978-981-10-1632-5), DOI 10.1007/978-981-10-1633-2\_28.
2. Prepared course material on "International Organization for Standardization (ISO) 14000", for proceedings of the two days workshop on Environmental Management Systems for Industries in Goa, held at BITS Pilani K K Birla on 20<sup>th</sup>-21<sup>st</sup> October 2016.
3. Prepared course material on "Life Cycle Assessment", for proceedings of the two days workshop on Environmental Management Systems for Industries in Goa, held at BITS Pilani K K Birla on 20<sup>th</sup>-21<sup>st</sup> October 2016.
4. Prepared course material on "Environmental Audit", for proceedings of the two days workshop on Environmental Management Systems for Industries in Goa, held at BITS Pilani K K Birla on 20<sup>th</sup>-21<sup>st</sup> October 2016.

**E. Conferences, seminars & workshops conducted: 02**

1. Conducted Two days Workshop on Environmental Management Systems on 20th-21st October 2016.  
Coordinator: Prof. S.D. Manjare  
Joint Coordinator: Prof. Saroj Sundar Baral
2. Three Days Workshop on Molecular Dynamics: Basics & Application on 19th -21st November 2016

**F. Invited Talks given by BITS faculty: None**

**G. Invited talks arranged in the department: 07**

**I. Speaker: Prof. Philip Jaeger**

Managing Director of Eurotechnica GmbH, Germany.

Topic 1: Interfacial properties at elevated pressures in processes of enhanced oil and gas recovery

Date and Time: 4th October 2016.

Topic 2: Production of Antibactericidal Biomaterials by a combined supercritical extraction and impregnation process

Date and Time: 5th October 2016.

**II. Speaker: Dr. Pratik Swarup Dash**

HEAD (COAL & COKE MAKING RESEARCH GROUP), R&D, Tata Steel

Date and Time : 16th September 2016, Friday

Topic: Dull Grey To Sparkling Black

**III. Speaker: Dr. K. Marutiram**

Head R&D and Scientific services, JSW

Topic: Will of Steel

Date: 21th April 2016

**IV. Speaker: Professor M. M. Sharma, FRS, Emeritus Professor of Eminence, Institute of Chemical Technology, (Deemed University), Mumbai**

Topic: Cleaner and Greener is Smarter; Conversion of Liabilities into Assets

Date and Time: Wednesday, 6th April 2016

**V. Speaker: Prof. Aniruddha B. Pandit, Department of Chemical Engineering, Institute of Chemical Technology, Mumbai (India)**

Topic: Environmental Management: Way to the Era of Sustainability

Date and Time: Wednesday, 6th April 2016

**VI. Speaker: Prof. Vilas G. Gaikar, Bharat Petroleum Chair Professor of Chemical Engineering Department of Chemical Engineering, Institute of Chemical Technology (ICT),**

Topic: Basics of Molecular modeling and its applications in separation-process

Date and Time: 19th November 2016

**VII. Speaker: Mr. Ranjit Singh Chugh, Chief Manufacturing Officer, Zuari Industries, Goa  
Topic: Chemical Engineer & Process Industry. Leadership role Specialist Chemical/Process Engineer**

Date and Time: Wednesday, 6th April 2016

**H. Awards and recognitions won by faculty and student**

1. Mr. G. Surendran and Prof. Saroj Sundar Baral have won 'Best Poster Award' for "Kinetics, Isotherm and Mechanism Study for Treatment of Cr(VI) Contaminated waste water using Sorghastrum Nutans(L) Nash-Natural grass" at 11th SDEWES Conference, Lisbon Portugal September 4-9, 2016..
2. Dr. Jegatha Nambi Krishnan has been awarded International Travel Support for attending NanoTech 2016 TechConnect World Innovation Conference from INSA/CICS
3. Dr. Asima Shaukat has been awarded 'Early Career Research Award 2016', DST-SERB, Govt. of India
4. Dr. Jegatha Nambi Krishnan has been awarded 'Early Career Research Award 2016', DST-SERB, Govt. of India
5. Ms. Parul Sahu and Prof. Srinivas K - Awarded 1<sup>st</sup> place in poster presentation in the category 'Heat Transfer' for 'Study of U-tube Scraped Crystallizer for Desalination' at 69<sup>th</sup> Annual Session of IChE, CHEMCON 2016, Chennai December 27-30 2016
6. Mr. G. Surendran and Prof. Saroj Sundar Baral - Awarded 1<sup>st</sup> place in paper presentation in the category 'Adsorption' for 'process technology for removal of Chromium by using sludge from pig iron industry ' at 69<sup>th</sup> Annual Session of IChE, CHEMCON 2016, Chennai December 27-30 2016

**I. Faculty Development, International Collaboration & Industry Immersion : None****J. Significant new equipments/experimental facility added during the year:**

1. Anton Paar Physica 302 Rheometer (Order is placed, yet to receive the Item)
2. GC

**K. Departmental association/club activities:**

1. IChE Goa Regional Centre Inaugurated on 6<sup>th</sup> April 2016
2. Several invited talks arranged in Association with IChE Goa regional Centre.

**Other activities:** NA

**B2.10. 4 Department: Computer Science & Information Systems**

Number of faculty members (as on 31 December 2016): 20

Senior Professors, Professors	02
Associate Professors	03
Assistant Professors	06
Lecturers	09
Visiting Faculty	00

Head of the Department: **Dr. B. M. Deshpande**Contact details: *bmd@goa.bits-pilani.ac.in*

Number of PhD Scholars: 25 [5 (Full Time) + 10 (lecturers) + 10 (Part Time)]

Ph.D. Thesis Submitted during the year: 04

**A. Sponsored Research activities:**Total number of Sponsored Projects in the department: **08**. Details are given below.**(i) Ongoing projects: 3**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Addressing Challenges in Application Development for Heterogeneous Computing Platform for Speedup and Power Efficiency	Prof. Santonu Sarkar	Science and Engineering Research Board (SERB), Govt of India	37.55	Nov.2014- Nov.2017
2	Home automation and smart wheel chair based on Electroencephalography (EEG) signals produced in brain	Dr. Veeky Baths (with Prof. Bharat Deshpande as co-PI)	Cognitive Science Research Initiative (CSRI) of DST	39	July 2015 - July 2018
3	Applications of High Performance Computing to Software Engineering and Data Analytics	Prof. Ashwin Srinivasan	Additional Competitive Research Grant	14	2015-2017

**(ii) Projects sanctioned during the year: 2**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Development of Remotely Configurable Arbitrary Ramp Generator for Frequency Modulated Continuous Wave Reflectometry	Prof. Neena Goveas (with Dr. Amlan Prince as co-PI)	BRNS	28 lakhs	2016 - 2019
2	Secure Vehicular Communication and Routing In Future Intelligent Transportation Systems (ITS)	Dr. Debasis Das	Science & Engineering Research Board (SERB)	49.73	2016 - 2019

**(iii) Projects completed this year: 3**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Implementation of Wireless Sensor Network for Process Monitoring of GAIL's Pipeline	Prof. K. R. Anupama (with Prof. Neena Goveas and Dr. Lucy J. Gudino as Co-Investigators)	GAIL	98.78	Oct.2014 - Jan 2016
2	A Cost-Effective Approach of Making Software Dependable	Prof. Santonu Sarkar	Accenture Technology Labs	16	Aug.2015 - Aug.2016
3	Neutron Stars as a Source of Potential Continuous Gravitational Wave Emitter	Dr. T.K. Jha (with Dr. Sanjay Sahay as co-PI)	BRNS	17	Jun 2013 - Jun 2016

**B. Publications:(Journals). 15**

- Debasis Das and Rajiv Misra, "IntersectionCast: Approximation Algorithm for MultiDirectional Broadcast Storm in VANETs", International Journal of Communication Networks and Distributed Systems (IJCNDS), Switzerland, Inderscience Enterprises Ltd., Vol. 18, 2016, pp. 1-20.
- Sreyash Ratna Tripathi, Shreya Mahabala Alva and Debasis Das, "Algorithm for Leader Node Selection in Vehicular Adhoc Networks(VANETs) at Road Intersection", International Journal on Future Computer and Communication (ICFCC 2016), Singapore, Vol. 5, 2016, pp. 1-6.
- T. Virajita Sharma, Usha Kiran Singh, and Debasis Das, "Connected Dominating Set Based Node Centrality in Wireless Networks", International Journal on Future Computer and Communication (ICFCC 2016), Singapore, Vol. 5, 2016, pp. 1-6.
- R.K. Roul and S.K. Sahay, Cluster labelling using chi-square-based keyword ranking and mutual information score: A hybrid approach. Accepted in Inderscience, Int. J. Intelligent Systems Design and Computing, 2016.
- Aruna Govada and S.K. Sahay, A Communication Efficient and Scalable Distributed Data Mining for the Astronomical Data. [SCle] Elsevier, Astronomy and Computing, Vol. 16, pp. 166 - 173, 2016
- Ashu Sharma and S.K. Sahay, An effective approach for classification of advanced malware with high accuracy. International Journal of Security and Its Applications, Vol. 10, No. 4, pp. 249-266, 2016
- R.K.Roul, Shubham Rohan Asthana and Mit Shah and Dhurvesh Parikh, Detection of spam web pages using content and link-based approach, Indian Academy of Sciences(SADHANA), Springer, Vol. 41, No. 2, pp. 193-202, February-2016
- R.K.Roul, S.R. Asthana and G Kumar, Study on suitability and importance of multilayer extreme learning machine for classification of text data, Soft Computing, Springer, Vol 20, No 6, pp. 1-18, June-2016
- R.K.Roul, S.R. Asthana and G Kumar, Spam Web Page detection using combined content and link features, International Journal of Data mining Modeling and Management (IJDM), Inderscience, Vol 8, No.3, pp. 209-222, Sep-2016
- R.K.Roul, Detecting Spam Web Pages using Multilayer Extreme Learning Machine: International Journal of Big Data Intelligence (IJBDI), Inderscience, Nov-2016
- Soumyadip Bandyopadhyay, Dipankar Sarkar, Chittaranjan A. Mandal, Kunal Banerjee, Krishnam Raju Duddu: A Path Construction Algorithm for Translation Validation Using PRES+ Models. Parallel Processing Letters 26(2): 1-25 (2016)
- Abhinandan H. Patil, Neena Goveas, Krishnan Rangarajan, Regression Test Suite Prioritization using Residual Test Coverage Algorithm and Statistical Techniques, J. Education and Management Engineering, 5, 32-39 (2016)
- Subhajit Datta, Santonu Sarkar, ASM Sajeew, How Long Will This Live? Discovering the Lifespans of Software Engineering Ideas, IEEE Transactions on Big Data, vol.2, Issue 2, 124-137, 2016



14. Rama Kaalia, Ashwin Srinivasan, Amit Kumar, Indira Ghosh, ILP-assisted de novo drug design. *Machine Learning* 103(3): 309-341 (2016)
15. R.R. Swain, T. Dash, P.M. Khilar, An Effective Graph-theoretic approach towards Simultaneous Detection of Fault(s) and Cut(s) in Wireless Sensor Networks, *International Journal of Communication Systems*, 2016; Publisher: John Wiley & Sons. [SCI I.F.: 1.099] (*accepted; Dec 11, 2016*)

**C. Conferences attended/Papers presented: 48**

1. Trupil Limbasiya and Debasis Das, "Secure Message Transmission Algorithm for Vehicle to Vehicle (V2V) Communication", IEEE TENCON 2016, Technologies for Smart Nation, Nanyang Technological University, Singapore, 22-25 November, 2016, pp. 1-6.
2. Debasis Das and Amrithesh Kumar, "Algorithm for Secure Cloud Computing Is Based On Homomorphic Encryption And Multi-Party Computation", 12th International Conference on Innovations in Information Technology (IIT), Al Ain, Abu Dhabi, United Arab Emirates, 28-30 November, 2016, pp. 1-6.
3. Pushkar Sharma, Usha Kiran Singh, T. Virajita Sharma, and Debasis Das, "Algorithm for Prediction of Links using Sentiment Analysis in Social Networks", ACM 7th International Conference on Computing, Communications and Networking Technologies (ICCCNT), University of North Texas, USA, July 5-8, 2016, Vol. 29, pp. 1-6.
4. Amrithesh Kumar and Debasis Das, "Efficient Algorithm for Routing in Dynamic Wireless Networks", ACM 7th International Conference on Computing, Communications and Networking Technologies (ICCCNT), University of North Texas, USA, July 5-8, 2016, 2016, Vol. 28, pp. 1-6.
5. Akshita Bhandari, Ashutosh Gupta and Debasis Das, "A framework for Data Security and Storage in Cloud Computing", 2016 International Conference on Computational Techniques in Information and Communication Technologies (ICCTICT)-2016, IPU, New Delhi, India, pp. 1-8.
6. Sreyash Ratna Tripathi, Shreya Mahabala Alva and Debasis Das, "Algorithm for Leader Node Selection in Vehicular Adhoc Networks (VANETs) at Road Intersection", The 8th International Conference on Future Computer and Communication (ICFCC 2016), Hong Kong, April 28-30, 2016.
7. Akshita Bhandari, Ashutosh Gupta and Debasis Das, "Secure Algorithm for Cloud Computing and Its Applications, IEEE Confluence 2016, Amity University, New Delhi, India, pp. 1-6.
8. T. Virajita Sharma, Usha Kiran Singh, and Debasis Das, "Connected Dominating Set Based Node Centrality in Wireless Networks", The 8th International Conference on Future Computer and Communication (ICFCC 2016), Hong Kong, April 28-30, 2016.
9. Sheekesh S, Abhimanyu Zala, Keerthi Chavan G and Neena Goveas, Customizable Holter monitor using off-the-shelf components, ICACCI (2016)
10. TSRK Prasad, K Sathyanarayanan, Sukriti Tiwari, Neena Goveas & B. M. Deshpande, t-CSA: A fast and flexible CSA Implementation, COMSNETS 2016
11. TSRK Prasad, Dhruv Shekhawat, Sukanto Guha, Neena Goveas and Bharat Deshpande, (2016) Analysis of Impartial Quality Measurements on Indian Broadband Connections, 22nd National Conference on Communications (NCC 2016), 4 – 7 March, 2016, IIT Guwahati, India
12. Mit Shah, Dhruvesh Parikh & Bharat Deshpande, (2016) Movie Recommendation System Employing Latent Graph Features in Extremely Randomized Trees, 2nd International Conference on Information and Communication Technology for Competitive Strategies, 4-5 March 2016, India
13. Kunal Banerjee, Soumyadip Banerjee, Santonu Sarkar, Data-race detection: the missing piece for an end-to-end semantic equivalence checker for parallelizing transformations of array-intensive programs, 3rd ACM SIGPLAN International Workshop on Libraries, Languages, and Compilers for Array Programming, 2016
14. Santonu Sarkar, Developer Productivity in HPC Application Development: An Overview of Recent Techniques, 29-30, ACM Workshop on Software Engineering Methods for Parallel and High Performance Applications, 2016
15. N Tiwari, U Bellur, S Sarkar, M Indrawan, Identification of critical parameters for MapReduce energy efficiency using statistical Design of Experiments, The Twelfth Workshop on High-Performance, Power-Aware Computing (HPPAC'16), 2016
16. M Chadha, A. Srivastava, S Sarkar, Unified Power and Energy Measurement API for HPC Co-processors, 35th IEEE Intl. Performance Computing and Communications Conference (IPCCC) 2016

17. Nidhi Tiwari, Umesh Bellur, Santonu Sarkar and Maria Indrawan, CPU Frequency Tuning to Improve Energy Efficiency of MapReduce Systems, The 22nd IEEE International Conference on Parallel and Distributed Systems (ICPADS) 2016
18. Ashu Sharma and S.K. Sahay, An investigation of the classifiers to detect android malicious apps., Accepted in International Congress on Information and Communication Technology (ICICT 2016), Proceeding will be published in Springer, Advances in Intelligent Systems and Computing, 2016.
19. R.K. Roul and S.K. Sahay, Importance of ML-ELM feature space in semi-supervised Clustering. Accepted in 9th International Conference on Machine Learning and Computing (ICMLC 2017), Proceedings series by ACM and will be archived in the ACM Digital Library.
20. Aruna Govada, Varsha S. Thomas, Ipsita Samal, S. K. Sahay, Distributed multi-class rule based classification using RIPPER. Accepted in 16th IEEE International Conference on Computer and Information Technology (CIT, 2016). Proceedings will published by IEEE Computer Society Press proceedings published by IEEE Computer Society Press.
21. R.K. Roul and S.K. Sahay, Semi-supervised Clustering using Seeded-k Means in the Feature Space of ELM. Accepted in 13th International IEEE India Conference (INDICON, 2016). Proceedings will be published in IEEE Xplore, 2016.
22. R.K. Roul and S.K. Sahay, Combining Apriori Approach with Support Based Count Technique to Cluster the Web Documents. Accepted in ICCIDM, proceedings will be published in Springer Advances in Intelligent Systems and Computing, 2016. 1
23. Aruna Govada and S.K. Sahay, Covariance estimation for Vertically partitioned data in a Distributed environment. Springer, Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, Studies in Computational Intelligence, Vol. 653, pp 151-164, 2016. Proceedings, 17th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD), 2016.
24. S.K. Sahay and Ashu Sharma, Grouping the executables to detect malwares with high accuracy. Elsevier, Procedia Computer Science, Vol. 78, pp. 667 - 674, 2016.
25. Ashu Sharma, S.K. Sahay, Abhishek Kumar, Improving the detection accuracy of unknown malware by partitioning the executables in groups. Springer, Advances in Intelligent System and Computing, p. 421, 2016; Proceedings 9th ICACCT.
26. R.K. Roul and S.K. Sahay, K-means and Wordnet based Feature Selection Combine with Extreme Learning Machines for Text Classification. Springer, LNCS, Distributed Computing and Internet Technology, Vol. 9581, p. 103, Proceedings 12th ICDCIT, 2016.
27. Shivam Verma, Rohit Omanwar, Sreejith V, Meera GS, "A Smartphone Based Indoor Navigation System" Accepted for publication in Proceedings of 28th International Conference on Microelectronics IEEE-ICM 2016, 17-20 Dec. 2016, Cairo, Egypt (Indexed in Scimago, Hindex:13)
28. Yash Gogia, Eejya Singh, Shreyash Mohatta, Sreejith V, "Multi-modal Affect Detection for learning applications", Accepted for publication in Proceedings of Technologies for Smart Nation IEEE TENCON 22 - 25 Nov 2016, Singapore
29. Meera G Sujatha, Vaibhav Gupta, Priya S Sekhar, Sreejith V, K.R. Anupama. "An Efficient Mobile Sink Routing in Wireless Sensor Network Using Dynamic Steiner Tree", Accepted for publication in Proceedings of 10th IEEE International Conference on Advanced Networks and Telecommunications Systems -IEEE ANTS 6-9 Nov 2016, BANGALORE
30. Sreejith V, Suriyadeepan R, Anupama KR and Lucy J Gudino. "DS-MMAC: Dynamic Schedule based MAC for Mobile Wireless Sensor Network," 31st ACM Symposium on Applied Computing (SAC) Pisa-Italy - 2016 April 4 -8 2016
31. Sreejith V.; Prateek Khandelwal.; K.R. Anupama.; Lucy J Gudino. "Mobility vector based neighbour selection in mobile WSN with multichannel MAC," 8th IEEE COMSNETS 2016 - Poster Track, Bangalore, India. Jan-2016
32. R.K.Roul and J.K.Sahoo, Multilayer Extreme learning machine in the domain of Semi-supervised clustering, 9th ACIIDS-2016, Japan, (accepted for publication in LNAI, as well as in Studies in Computational Intelligence (SCI) of Springer)
33. R.K.Roul and Pranav Rai, A New Feature selection technique combined with ELM feature space for text classification, 13th ICON-2016 (accepted for publication in ACL Anthology)
34. R.K.Roul, A. Srivastav and A.Bhalla, Commonality-Rarity Score Computation, 8th FIRE-2016, pages 37-41

35. R.K.Roul and J.K.Sahoo, Classification of Research Articles Hierarchically: A New Technique, 3<sup>rd</sup> ICCIDM-2016, Advances in Intelligent Systems and Computing, Springer
36. Soumyadip Bandyopadhyay, Kunal Banerjee, Implementing an Efficient Path Based Equivalence Checker for Parallel Programs. SEM4HPC@HPDC 2016, Page 3-10
37. Kunal Banerjee, Soumyadip Banerjee, Santonu Sarkar, Data-race detection: the missing piece for an end-to-end semantic equivalence checker for parallelizing transformations of array-intensive programs. ARRAY@PLDI 2016: Page 1-8
38. Soumyadip Bandyopadhyay, Dipankar Sarkar, Chittaranjan A. Mandal, An efficient path based equivalence checking for Petri net based models of programs. ISEC 2016: 70-79
39. Biju Raveendran, Shubhangi K Gawali, DPS: A Dynamic Procrastination Scheduler for Multi-core/Multi-processor Hard Real Time Systems, in Proceedings of the 3rd IEEE International Conference on Control, Decision and Information Technologies (CoDIT'16), April 2016, Malta.
40. Biju Raveendran, Parag Panda, Geeta Patil, "A Survey on Replacement Strategies in Cache Memory for Embedded Systems", 2016 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER 2016), 13 – 14 August 2016
41. Deepika Vatsa, Sumeet Agarwal, Ashwin Srinivasan, Learning transition models of biological regulatory and signaling networks from noisy data. The Third ACM IKDD *CODS* 2016: 9:1-9:6
42. Sarmimala Saikia, Lovekesh Vig, Ashwin Srinivasan, Gautam Shroff, Puneet Agarwal, Richa Rawat, Neuro-Symbolic EDA-Based Optimization Using ILP-Enhanced DBNs. CoCo@NIPS 2016
43. Ashwin Srinivasan, Gautam Shroff, Lovekesh Vig, Sarmimala Saikia, Puneet Agarwal, Generation of Near-Optimal Solutions Using ILP-Guided Sampling. CoRR abs/1608.01093 (2016)
44. Mahadev A Gawas, Lucy J Gudino, KR Anupama, Cross layered adaptive cooperative routing mode in mobile ad hoc networks, 22nd Asia Pacific Conference on Communications, APCC 2016, Jakarta Indonesia, pp. 462-469
45. KR Anupama, LJ Gudino, Mahadev Gawas, Cross layer adaptive congestion control for best-effort traffic of IEEE 802.11 e in mobile ad hoc networks, 10th International Symposium on Communication Systems, Networks and Digital Signal Processing, CSNDSP 2016, Prague, Czech Republic, pp. 1-6
46. Mahadev Gawas, LJ Gudino, KR Anupama, Cross layer multi QoS metric routing for multimedia traffic in 802.11 E over MANETs, The Eighth International Conference on Ubiquitous and Future Networks, Vienna, Austria, ICUFN 2016, pp. 582-587
47. Mahadev Gawas, LJ Gudino, KR Anupama, Adaptive Cross Layered Cooperative Routing Model in Mobile Ad Hoc Networks, European Conference on Networks and Communications (EUCNC) 2016. Greece, Athens.
48. T. Nayak, T. Dash, D.C. Rao, P.K. Sahu, Evolutionary Neural Networks versus Adaptive Resonance Theory Net for Breast Cancer Diagnosis," In Proc: International Conference on Informatics and Analytics (ICIA'16), Pondicherry, India (August 25-26, 2016), Publisher: ACM.

**Posters: NIL****Patents:**

1. Gagan Mohan Goel, Geetika Goel, Rajeshwari Ganesan, Santonu Sarkar, METHOD AND SYSTEM FOR MONITORING HEALTH OF A VIRTUAL ENVIRONMENT, Patent No. 20160077948, US, Publishing Date 17/03/2016
2. Nidhi Tiwari, Santonu Sarkar, METHOD FOR IMPROVING ENERGY EFFICIENCY OF MAP-REDUCE SYSTEM AND APPARATUS THEREOF, Patent No. 20160078069, US, Publishing Date 17/03/2016

**D. Books Published/Edited during the year:****Book Chapters**

1. S. Sarkar, INTERNET OF THINGS— ROBUSTNESS AND RELIABILITY, pp. 201-2016, Internet of Things: Principles and Paradigms, Elsevier, 2016
2. Debasis Das, Amrithesh Kumar and Subhasis Das, Effective and Efficient Routing Protocol for Multi-hop Wireless Networks, Lambert Academic Publishing, Germany, June, 2016.

**E. Conferences, seminars & workshops conducted**

1. Microsoft Azure Discovery Workshop held on 28th and 29th September 2016

2. Workshop conducted on High Performance Computing on Monday 14th Nov 2016

**F. Invited Talks given by BITS faculty: Nil.**

**G. Invited talks arranged in the department:**

1. Probabilistic Annotation Framework: Knowledge Assembly at Scale with Semantic and Probabilistic Techniques by Dr. Larisa Soldatova, Brunel University, London, 9<sup>th</sup> March 2016
2. Computing Exponentially Faster: Implementing a Nondeterministic Universal Turing Machine Using DNA by Professor Ross King, Department of Computer Science, University of Manchester, 8<sup>th</sup> March 2016
3. What makes Alpha-Go, go? by Dr. Raghav Singh, IBM Research, Mew Delhi, 27<sup>th</sup> April 2016
4. Logical structure in social algorithms by Prof. R Ramanujam, IMSc Chennai, 15<sup>th</sup> & 16<sup>th</sup> November 2016
5. Parallel Computing with GPUs in Real Time Diagnostic Medical Ultrasound Imaging by Ismayil Guracar, Siemens USA. 21<sup>st</sup> Nov. 2016
6. Problems and Results on Uniform Hypergraphs by Dr. Saswata Shannigrahi, IIIT Delhi, 30<sup>th</sup> Nov. 2016.

**H. Awards and recognitions won by faculty and students**

- Early Career Research Award from Science & Engineering Research Board (SERB), Department of Science & Technology(DST), Govt. of India, New Delhi, India, March, 2016.
- Prof. Bharat Deshpande, Invited by Microsoft Research to attend Microsoft Annual Summit at Seattle, USA.

**I. Faculty Development, International Collaboration & Industry Immersion**

**J. Significant new equipments/experimental facility added during the year:**

**Research lab with the following facilities was setup:**

**K. Departmental association/club activities:**

**Center of Technical Education (CTE)** which meet the demands of students to be trained in specific technologies. Around 5 courses were offered in each semester. Over 300 students registered for these courses.

**B2.10. 5 Department: Economics**

Number of faculty members (as on 31 December 2016): **09**

Senior Professors, Professors	None
Associate Professors	1
Assistant Professors	6
Lecturers	1
Guest Faculty	1

**Head of the Department:** Dr. Aswini Kumar Mishra

**Contact details:** 0832-2580-258

aswini@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 15

**Ph.D. Thesis Submitted during the year:** One

**A. Sponsored Research activities:**

**(i) Ongoing projects:**0

**(ii) Projects completed this year**

**Project Title:** Mining Closure, Economic Disruption & Local Level Sustainability: A Case Study of Goa, India

**Principal Investigator-** Dr. Aswini Kumar Mishra; Co PI- Dr. Debasis Patnaik

**Funding Agency-**ICSSR, New Delhi

**Funding Amount-** Rs.9 lakhs

**Project Duration-**2 years

**B.1. Publications in Journals (No. 21)**

1. A.K.Mishra and Viral M Paramar 'Changing Contours of Income Stratification and Decomposition of Income Inequality: Evidence from Recent Longitudinal Survey in India' in Journal of Quantitative Economics, the official journal of The Indian Econometric Society (TIES) published by Springer International Publishing(First Online: 09 September 2016)
2. A. K. Mishra, G. Rao, A Monga and B. Vishwanath 'Assessing Competitiveness in Emerging Asian Economies: Role of Governance and Infrastructure and Lessons for India', in Emerging Economy Studies (A Sage Publication) Vol.2, No.1,pp.72-90 (May 2016).
3. A.K. Mishra, B. Vishwanath, M. Sahoo & A. Kar "Make in India: Challenges in Bringing a Manufacturing Revolution to India" in JBIMS Spectrum (A Journal of Jamnalal Bajaj Institute of Management Studies, University of Mumbai) Vol.IV, No. 1, Page 405-420, ISSN: 2320-7272 (Jan-June 2016).
4. A. K. Mishra, G. Rao and B. Vishwanath 'An Assessment of Competitiveness in Emerging Asian Economies with Special Reference to India', in International Journal of Economic Policy in Emerging Economies (An Inderscience Publication-"C" rank in ABDC Journal List) Vol. 9(2), pp. 127-144(2016).
5. Mridula Goel & Jyoti Tikoria, 'Reflections on business incubation processes in a technical university', Journal of Management and Entrepreneurship 10, Issue 4, 2016.
6. Debdulal Thakur, Shrabani Mukherjee (2016) 'Parent's Choice Function for Ward's School Continuation in Rural India: A Case Study in West Bengal', co-authored with Shrabani Mukherjee, Margin-Journal of Applied Economic Research Vol.10, Issue 1 ,Pp.119-142, SAGE Publication, 2016, UK-India.
7. Debdulal Thakur (2016): 'Budget Advocacy, West Bengal and Us', Mulyayan, Vol3, Issue 8, ISSN-2347-6168, February, 2016,Kolkata.
8. Debasis Patnaik , Rishab Goel (2016):'Impact of Foreign Aid on Growth of African nations', International Organization of Scientific Research (IOSR) Journal of Economics and Finance on Feb 3 2016, Vol-? Issue? Pp.?
9. Debasis Patnaik ,Sanath (2016) :'Data Gaps in Health Sector' ,Artha Vijana (Accepted)
10. Debasis Patnaik ,Akshay Surendra (2016): 'A Hedonic pricing technique to Valuation of Biodiversity in Mining Area in Goa' ,International Journal in Advanced Research in Management and Social Sciences,Vol 5, No.5, May 2016 ISSN:2278-6236; Impact Factor:6.284;. (published in Greenfield A R Publishing House)
11. Debasis Patnaik, Annie Pillai (2016): 'Indian Tax System', Asian Journal of Empirical Economics,.Accepted for publication.
12. Debasis Patnaik, Aman Asija (2016): 'Momentum and Contrarian Effects in Indian Stock Markets: A Behavioral Finance Approach' , Behavioral and Experimental Finance Journal, UK , Accepted for Publication.
13. Debasis Patnaik, Abhijeet Selvi (2016): 'Valuation Testing Post- Mergers and Acquisition scenario in Indian companies',Journal of Commerce and Social science,Vol-?,Issue-? Pp.?
14. Prasad, Ch.V.V.S.N.V, & Prabhdesai, R., : "What drives SME explorative-exploitative alliance formation: An integrated perspective", International Journal of Business Innovation and Research, (Accepted)
15. Prabhdesai, R., Prasad, Ch.V.V.S.N.V, & Boon Chuan Ang . : Exploring Emerging Latin America: Implications for German Companies Using Spain as a Springboard Country", Global Business Review, Vol. 18:5, (Accepted).
16. Rajorshi Sen Gupta (in press): 'Intellectual Property Protection and Technology Management in Outsourcing Projects', International Journal of Manufacturing Technology and Management, Inderscience, Scopus Indexed, 2014 SJR (SCImago Journal Rank) Score: 0.18
17. Rajorshi Sen Gupta (2016): 'Economics of Survival Post Trade Secret Misappropriation: Business Insights from Single Firm Event Study on Lexar Media', Journal of Advanced Research in Law and Economics, Volume VII, Issue 3(17), Summer 2016, pp. 521-534, ASERS Publishing, Scopus Indexed, 2014 SJR (SCImago Journal Rank) Score: 0.2
18. Rajorshi Sen Gupta (2016): 'Make in India initiative and Affordability of Medicines,Mulyayan, 4(2), 2016, ISSN: 2347-6168, pp. 27-31
19. Pawaskar, P., Mridula Goel. (in press). Enhancing the effectiveness of marketing a tourist destination using satisfaction analysis. International Journal of Business and Systems Research (Scopus indexed).

20. Pawaskar, P., Mridula Goel (2016): 'Improving the efficacy of destination marketing strategies: a structural equation model for leisure travel', Indian Journal of Science and Technology, 9(15), pp.1-11(Scopus indexed).
21. Anoop S Kumar, B Kamaiah (2016): Efficiency, on-linearity and Chaos: Evidences from BRICS Foreign Exchange Markets', Theoretical and Applied Economics ,1(606), pp.103-118.

**B.2. Books Published/Edited/Chapters in Books during the year(No. 4):**

1. Mridula Goel & Yash Sharma (2016):, 'Need and challenges in minimizing wastes in a SME automotive firm: Case study of Janus Auto,'ET cases.
2. Debasis Patnaik,Aalap Tripathy (?):'Developing a Dynamic Framework to Test the Relationships among Stock Market Returns, Production and Consumption in Finite Time -(Using Excel and Neural Networks)',in Prof V V N Somayajulu (Eds),Chapter 13,Himalaya Publishing House.
3. Anoop S Kumar, B kamaiah (2016): 'On dynamical structure of the Indian Banking Sector Indices', Emerging Trends in Banking Sector, edited by R K Mishra et.al., Published by IPE Hyderabad.
4. Somnath Mazumdar and A. Scionti and Anoop S Kumar (2016): 'Adaptive Resource Allocation for Load Balancing in Cloud', Cloud Computing Principles, Systems and Applications, Springer.

**B.3. Conference Proceedings (Full-length Paper only) (No.6):**

1. Debasis Patnaik, Utkarsh Tiwari (2016): 'Portfolio Optimization through VAR', Published in Conference Volume of Mathematical, Computational Conference on Social Sciences Education (MCCSSE) at Shenzhen, China on 30-31 October 2016 .
2. Pawaskar, P., Mridula Goel (2015):'An Investigation of International and Domestic Tourist Satisfaction with Goa: Implications for Destination Marketing', International Conference on Evidence Based Management, Department of Management, BITS Pilani Rajasthan Campus, Conference Proceedings pg: 196-206.
3. Pinky Pawaskar, Debjyoti Biswas (2012): 'Effectiveness of Advertisements - 30 seconds v/s 15 seconds' advertisement', Inclusiveness and Innovation Sustainable Growth Challenges in Emerging Economics, Conference proceedings, pp 604 – 614.
4. Anoop S Kumar,Somnath Mazumdar(2016), Statistical Analysis of a Data Center Resource Usage Patterns: A Case Study (Springer Lecture notes in Computer Science , I3CS 2016, NEHU, Shillong
5. Anoop S kumar, Somnath Mazumdar (2016) Forecasting HPC Workload Using ARMA Models and SSA (IEEE), ICIT 2016, IIIT Bhubaneswar
6. Anoop S kumar, Somnath Mazumdar (2016): Forecasting Data Center Resource Usage: An Experimental Comparison With Time-Series Methods, Springer , SoCPAR 2016, VIT Vellore

**C. Presentations in Seminar/Conference/Workshop(No. 16):**

1. A.K. Mishra (with Viral M Parmar) Economic Well-being and Income Inequality in India: A Note on the Rural-Urban Divide at Third Annual India Human Development Survey(IHDS) Data User Conference organised by University of Maryland and NCAER, New Delhi at Neemrana Fort-Palace, Rajasthan, during March 16-18, 2016.
2. Prasad, Ch.V.V.S.N.V (2016): "Information and Communication Technology (ICT) Usage and Secondary School Teachers in India", Singapore 7th International Conference on " Business, Economics, Social Science & Humanities- BESSH-2016" February 25-26, 2016 Singapore.
3. Prabhdesai, R., Prasad, Ch.V.V.S.N.V (2015): The Antecedents of SME Alliance Formation: A Theoretical Approach, Singapore 7th International Conference on " Business, Economics, Social Science & Humanities- BESSH-2016" February 25-26, 2016 Singapore.
4. Debdulal Thakur (2016): 'Rural Development in West Bengal- A PFM perspective', invited lecture as 'resource person' at University Grants Commission (UGC) sponsored National Seminar at Pingla College, Medinipur, West Bengal on 29<sup>th</sup> & 30<sup>th</sup> November 2016.
5. Debdulal Thakur (2016): Economic Governance in India: A Brief Overview', invited Lecture at Summer School on Public Policy and Governance organized by Institute for Sustainable Development and Governance (ISDG)and Mahatma Gandhi University (Kerala) held at Bodhigram (Adoor), Kerala,30th April to 3rd May 2016.
6. Debasis Patnaik (2016): Initiated and Co -ordinated Presentation Sessions on " Organizations of Public Enterprises and Possibilities of Collaboration with Institutes of Higher Learning" by Dr Madhukar Gupta, Additional Secretary, Ministry of Public Enterprises and heavy Industry and Mrs Kiran Soni, Gupta,

Additional Secretary, Ministry of Skill Development and Additional Secretary, Ministry of Youth Affairs and Sports at the behest of the Vice Chancellor Prof V S Rao and our Director Prof Punnekat.

7. Debasis Patnaik (2016): Engaged in Discussion with Mr Dheeraj Raja Ram, Founder, MU SIGMA on 7<sup>th</sup> Jan 2016 on Developing Course on Business Analytics. Participated and Delivered a Vote of Thanks during his address to students on importance of Data Analytics and How to Develop Entrepreneurial Qualities in TP Lecture Hall at 5.00PM.
8. Debasis Patnaik (2016): Accepted the Invite for Talk in ONGC on eve of Public Sector Day and Delivered Two Talks on 12th April 2016 on (a) Importance of PSUs in the Age of Globalization (b) Techno Economic Challenges in Oil and Gas Sector.
9. Debasis Patnaik (2016): Presented a 'Case Study on Energy Infrastructure for Smart Cities' as part of the Workshop Presentation In The Workshop /Conference on 'Integrating Societal Impact in Research strategy' in the Univ of Copenhagen organized by AESIS as part of Univ Collaboration among Univ of Copenhagen, AARHUS, Finland, Univ of Stockholm, etc. from Nov 15-18 in Copenhagen, Denmark. Also, presented 'Reflections for the New University Model' in Concluding Remarks and Valedictory Presentations on 18<sup>th</sup> Nov 2016.
10. Anoop S kumar, Md. Zikrullah Khan and B Kamaiah (2016) Co-integration among Emerging European Forex Markets: A Wavelet Approach at 52nd Annual conference of the Indian Econometric Society, IIM Kozhikkode, 4-6 Jan, 2016.
11. Anoop S kumar, S Anandarao (2016) Causal Nexus between Money Supply and Price level: Evidence for India at 52nd Annual conference of the Indian Econometric Society, IIM Kozhikkode, 4-6 Jan, 2016
12. Anoop S kumar, B Kamaiah (2016) Co-movement among Asian Forex markets: Evidence from Wavelet Methods, 5th International Conference on Applied Econometrics, ICFAI Business school, Hyderabad, July 2016.
13. Anoop S kumar, Somnath Mazumdar (2016) Statistical Analysis of a Data Center Resource Usage Patterns: A Case Study, at I3CS 2016, NEHU Shillong, November 2016
14. Anoop S kumar, Somnath Mazumdar, Forecasting HPC Workload Using ARMA Models and SSA, at ICIT 2016, Bhubaneswar, Dec 2016
15. 15. With Somnath Mazumdar, Forecasting Data Center Resource Usage: An Experimental Comparison with Time-Series Methods, SoCPAR 2016, Vellore Dec 2016
16. 16. ANoop S kumar, B Kamaiah (2016) Adaptive Market Hypothesis: Evidence From Indian Equity Market, 53rd Annual Conference of The Indian Econometric Society, NISER Odisha, Dec 2016

#### **D. Talks/Seminar/Conference Organized by the Department (No.5):**

1. BITS Goa Economics Conclave (12<sup>th</sup>-13<sup>th</sup> March 2016)
2. Workshop on "Essential workflows of ArcGIS Desktop" on 29th-30th November, 2016. Invited resource person- Mr. Sailesh Chintalapudi from *Esri India Technologies Ltd.*, Bangalore.
3. Invited Talk on "Career Prospects in Data Sciences" by Mr. Sidhartha Shishoo from Genpact on 8th October, 2016.
4. Invited Talk on "Career in Civil Services: Empowering for Change (Perspectives from Within)" by Mrs Nila Mohanan, IAS, Collector, North Goa and Dr Sachin Shinde, IAS, Collector, South Goa.
5. Invited Talk by Mr Ram Mohan Menon on 'GST and Its Implications' on 6<sup>th</sup> October 2016.

#### **E. Significant new equipment / experimental facility added during the year:**

Subscription of new databases like EPWRFITS, INDIASTAT, CMIE, Arc-GIS, etc.

#### **F. Departmental association/club activities (No. 9).**

1. Dr. Anoop S Kumar delivered an Invited Lecture at Azim Premji University, Bangalore on Financial Economics, 18 March, 2016.
2. Dr. Debdulal Thakur acted as a Visiting Professor of Economics, Rajalakshmi School of Business, Chennai, June 2016 to October 2016.
3. Dr. Debdulal Thakur Nominated by SRC (BITS-Pilani) along with Prof. Ranjan Dey to attend the annual Board of Directors meet of the Piramal Foundation held at Baggar, Rajasthan during 2nd and 3rd December 2016.

4. Dr. Debdulal Thakur was Coordinator for the visit by the European Union Delegation to India in BITS-Pilani, K.K. Birla Goa Campus on 23rd September 2016. A delegation of 10 EU delegation from various EU countries visited the campus and interacted with the leadership team of BITS-Pilani.
5. Dr. Debdulal Thakur Chaired a session at University Grants Commission (UGC) sponsored National Seminar at Pingla College, Medinipur, West Bengal on 29<sup>th</sup> & 30<sup>th</sup> November 2016.
6. Dr. Debasis Patnaik participated as Special Invitee by the Ministry of Corporate Affairs, Government of India to the Workshop on Corporate Governance conducted by Indian Institute of Corporate Affairs under the Ministry of Corporate Affairs, Government of India on 1<sup>st</sup> Dec -2<sup>nd</sup> Dec in Hotel Ibis Styles, Goa.School of Corporate Governance and Public Policy conducted a CG Programme for Officials of Ministry of Corporate Affairs.
7. Dr. Debasis Patnaik participated by Invitation in LSE Summit Sessions on (a)Medical Ethics, (b)Global Finance and (c)Civil Liberties on 29<sup>th</sup> and 30<sup>th</sup> Jan 2016 in ICG- Cidade da Goa.
8. Dr. Debasis Patnaik inducted for the Fourth Time [and by Election] into the Executive Committee of the Goa Management Association (GMA) for the year 2016-2018.
9. Dr. Debasis Patnaik inducted into Cochin University's M.A. Economics Question Setters Panel from Dec 2016 onwards.

#### **B2.10.6 Department: EEE and E&I**

##### **Department: Electrical, Electronics and Instrumentation Engineering**

Number of faculty members (as on 10 January 2017): 24

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	00
<b>Assistant Professors</b>	09
<b>Lecturers</b>	10
<b>Professor Emeritus</b>	01

**Head of the Department:** Prof. M. K. Deshmukh

**Contact details:** mkd@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 20(08 Lecturers +08 Full time students + 04 Part Time)

**Ph.D. Thesis Submitted during the year:** 03

1. Mr. Pravin Mane, PSRN 334
2. Mr. Sarang Dhongdi, PSRN 376
3. Mrs. Femi R, PSRN 430

#### **Sponsored Research activities: 03**

1. "Pilot Project on Implementation of Wireless Sensor Network for Process Monitoring of GAIL's Pipeline", Prof. K.R.Anupama, Principal Investigator, in collaboration with GAIL India (Ltd), Bhiwadi, Rajasthan.(February, 2015- August, 2017).
2. "FPGA Based Fuzzy Logic Pico motor Controller for Laser Beam Pointing Stability Correction", A Amalin Prince, Principal Investigator, DAE-BRNS, July 2015, project duration of two years.
3. "Development of Remotely Configurable Arbitrary Ramp Generator for FMCW Reflectometry, PFRC-BRNS", Dr Neena Goveas, Dr. A.Amalin Prince, 2 Years, **Project Approved** and 28 Lakh.

#### **B. Publications: 09**

The faculty of the department published papers in international/national refereed journals during the year.

1. Alope Saha, Dipankar Pal and Mahesh Chandra, "A Benchmarking of DPL based 8b×8b novel wave-pipelined multiplier", Int. Jl. of Electronics Letters, pp1-14, International, Feb 2016
2. Femi, Anita Agrawal and Shibu Clement, "An FEM Study of the Electrothermal Properties of Microelectrical Contacts for Application in the Design of Arcless Switches", IEEE Transaction on Components, Packaging and Manufacturing Technology, vol.6, No.3, pp. 407- 417, International, Mar 2016.



3. R. Femi, Anita Agrawal and Shibu Clement, "An FEM Study of the Effect of Temperature on the Design of Reliable Micro Electrical Contact", *Sensors & Transducers*, Vol. 202, Issue 7, pp. 51-58, International, Jul 2016
4. Nishil Talati, Saransh Gupta, Pravin Mane and Shahar Kvatinsky, "Logic Design Within Memristive Memories Using Memristor-Aided IoGIC (MAGIC)", *IEEE Transactions on Nanotechnology*, vol. 15, no. 4, pp. 635-650, International, Jul 2016
5. Saif N., Aditya S., Prince A.A. and Anita A., 'Feature selection and classification, methodology for the detection of knee-joint disorders', *Computer Methods and Programs in Biomedicine*, vol.127, pp. 94-104, International, Apr 2016
6. Anupama, K., et al. (2016). Cross layer adaptive congestion control for best-effort traffic of IEEE 802.11 e in mobile ad hoc networks. *Communication Systems, Networks and Digital Signal Processing (CSNDSP)*, 2016 10th International Symposium on, IEEE
7. Pradeep Chavan, L.R. Naik, P.B. Belavi, Geeta Chavan, C.K. Ramesha and R.K. Kotnala, *Studies on Electrical and Magnetic Properties of Mg-Substituted Nickel Ferrites*, *Journal of Electronic Materials* DOI: 10.1007/s11664-016-4886-6, 2016
8. A Venkatesan, C K Ramesha and E S Kannan, *In situ reduced graphene oxide interlayer for improving electrode performance in ZnO nanorods*, *J. Phys. D: Appl. Phys.* 49 (2016) 245301 (7pp)
9. Nitin Sharma et al. "Multi-objective Subchannel and Power Allocation in Interference-Limited Two Tier OFDMA Femtocells Networks", *IEEE Systems Journal*, Vol 10(02), 544-555, 2016 (Impact factor 1.746) Book Chapters

#### C. Conferences attended/papers presented: 14

1. Avireni Srinivasulu and Dipankar Pal, "CCII+based novel waveform generator with tunable grounded resistor/capacitor", 21st IEEE-Int. Conference on Applied Electronics, to be held in University of West Bohemia, Plzen, Czech Republic, IEEE, 06-08 Sep 2016. (Accepted),
2. Shashidhara Mecha Kotian and K. N. Shubhanga, "Design of a Subsynchronous Damping Controller Using a Dynamic Phasor-Based Model of TCSC", *IEEE International Conference on Power & Energy Systems: Towards Sustainable Energy (PESTSE 2016)*, Bangalore, India, Received "M. H. Rashid" Best Paper Award, IEEE, 21-23, Jan 2016.
3. Prince A.A., Siram G., Verma P.K., George P. and Raju D., 'Efficient Implementation of Empirical Mode Decomposition in FPGA Using Xilinx System Generator', 42nd IEEE Industrial Electronics Conference (IEEE IECON 2016), Florence, Italy, IEEE, IEEE, 24-27 Oct 2016 (Accepted)
4. Sreekrishna R.R., Saif N. and Prince A.A., "Real Time Cascaded Moving Average Filter for Detrending of Electroencephalogram Signals", 5th IEEE International Conference on Communication and Signal Processing (ICCSP'16), Chennai, India, IEEE, IEEE, 6-8 Apr 2016,
5. Saif N., Sreekrishna R.R. and Prince A.A., "Analysis of Knee Joint Vibration Signals Using Ensemble Empirical Mode Decomposition", *Elsevier Procedia Computer Science*, vol.89, pp. 820-827., Elsevier, Aug 2016
6. S. Nagaraju, V. Rege, L. J. Gudino and C. K. Ramesha, *Realistic directional antenna suite for Cooja simulator*, Twenty third National Conference on Communications (NCC 2017) IIT Madras, Chennai (submitted)
7. Vikas V. Khairnar, C. K. Ramesha and Lucy J. Gudino, *A Reconfigurable Microstrip Cross Parasitic Patch Antenna With Two-dimensional Beam Scanning, Capability* IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Bengaluru, 2016
8. Rajalekshmi Kishore, Ramesha C K, George Joseph and Eshaan Sangodkar, - *Waveform and Energy Based Dual Stage Sensing Technique for Cognitive Radio using RTL-SDR*, 2016 Annual IEEE India Conference (INDICON), IISC Bangalore, Dec. 16th -18th, 2016, pp. 1-6.
9. Rajalekshmi Kishore, C.K. Ramesha, K.R. Anupama, - *Bayesian Detector Based Superior Selective Reporting Mechanism for Cooperative Spectrum Sensing in Cognitive Radio Networks*, *Procedia Computer Science*, 6th International Conference on Advances in computing & Communication (ICACC), Kochi, Sep. 7th-8th, Vol 93, 2016, pp. 207-216, ISSN 1877-0509, <http://dx.doi.org/10.1016/j.procs.2016.07.202>.
10. R. Kishore, Ramesha C K and T. Sawant, - *Superior Selective Reporting mechanism for cooperative spectrum sensing in cognitive radio networks*, 2016 International Conference on Wireless

Communications, Chennai, March 23 Signal Processing and Networking (WiSPNET)th ,2016, pp. 426-431.doi: 10.1109/WiSPNET.2016.7566169.nd -25

11. Paavni Shukla, Pravin M Singru and Narayan Manjrekar," A Study of H infinity and H2 synthesis for Active Vibration Control", accepted for publication in 4th International Conference on Advances in Control and Optimization of Dynamical Systems to be held in NIT Trichy on Feb 1-5, 2016 , published by Science direct (<http://www.sciencedirect.com/science/article/pii/S2405896316301252>)
12. Praveen G. B. and Anita Agrawal, "Multi-stage Classification and segmentation of brain tumor", IEEE 3rd International conference on computing,for sustainable global development, INDIACOM, pp1628-1632, 2016 Delhi, India
13. Ruma Ghosh, Sumita Santra, M. K. Deshmukh, Prasanta Kumar Guha, "Highly Efficient H<sub>2</sub> Sensors Using Reduced Graphene Oxide-Pt Composites at Room Temperature", International Conference on Nanomaterials and Nanotechnology – 2016 at VIT, Vellore.
14. C. Balakrishna Moorthy, M. K. Deshmukh, "Assessment of Wind Power Potential in a Region of Goa, India", 2016 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES) at Trivandrum, Kerala

#### **D. Books Published/Edited during the year: book chapter published**

Nitin Sharma, A. Anpalagan and M. Obaidat (Mohammad Obaidat, Petros Nicosopolitidis, Faouzi Zarai Editors of the book) "Modeling and Simulation of Computer Networks and Systems" **Elsevier's publication.**

#### **E. Patents:**

#### **F. Conferences, seminars & workshops conducted:**

Workshop on Cadence, Mentorgraphics & Synopsys", 06-May-2015 to 20- May- 2016, DSTE, IEEE- Bombay Chapter, DST.

#### **G. Invited Talks given by BITS faculty:**

1. Speaker: **Prof. M. K. Deshmukh,**

Topic: Enabling Energy Enterprise for Sustainable Development

Date: 17<sup>th</sup> Oct 2016

Location: Short Term Training Programme "Energy Options for Sustainable Future (EOSF-2016)" at Department of Technical Education, Govt. of Goa, Porvorim, Goa

2. Speaker: **Prof. M. K. Deshmukh,**

Topic: Design development of roof Top SPV system

Date: 13<sup>th</sup> April 2016

Location: 2 days Seminar on "Power Electronics – A key technology for Renewable Energy system" at Rajiv Gandhi College of Engineering & Research, Nagpur

#### **H. Invited talks arranged in the department: None**

#### **I. "Awards and recognitions won by faculty and students:**

Dr.Shashidhara Mecha Kotian-POSOCO Power System Award (PPSA) 2016.

#### **J. Faculty Development, International Collaboration & Industry Immersion:**

Name of the faculty : A Amalin Prince

PSRN : G0107

Duration : 12-06-2016 to 25-06-2016

Organization : Institute for Plasma Research (IPR), Gandhinagar, Department of Atomic Energy

Broad area of work done: Study of Frequency Modulated Continuous Wave Reflectometer for Plasma Density Profile Evaluation

#### **K. Significant new equipments/experimental facility added during the year:**

1. NI SDR USRP 2920 (4 nos) Bundle with accessories.
2. OctoClock 8 Channel Clock Distribution System (10 MHz Ref and PPS) - Ettus Research
3. Matlab Campus License

4. Image Processing Module for the FPGA (AES-FMC-HDMI-CAM-G)
5. Image Processing Module for the FPGA (AES-CAM-ON-P1300C-G)
6. SoC FPGA, Model (EK-Z7-ZC706-G)
7. 7-inch ZED Touch Display kit & Accessories (AES-ALI3-ZED-G)
8. MEMS+ Library for Cadence
9. Homer Pro (software 10 users perpetual license)
10. Meteodyn WT Basic (1 Yr Academic License)
11. windsim 8 (50 users perpetual)
12. KEIL MDK-Plus Edition Node Locked Licenses -10 Numbers
13. KEIL MCBSTM32F400 Evaluation board - 6 Numbers
14. Tektronix DSO TBS1072B-EDU (14 Nos)
15. AFG3022B (25MHz, 2 Channel) Tektronix, (8 Nos)
16. Aplab Dual Power Supply LQ6324T,

**L. Departmental association/club activities/workshop attended:**

**B2.10.7 Department: Humanities and Social Sciences**

Number of faculty members (as on 31 December 2016): 15

<b>Professor</b>	1
<b>Associate Professors</b>	3
<b>Assistant Professors</b>	7
<b>Lecturers</b>	2
<b>Visiting Associate Professor</b>	1
<b>Visiting Assistant Professor)</b>	1

**Head of the Department: Meenakshi Raman**

**Contact details(email):** mraman@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 16 (lecturers 3 ( 1 WILP) + Full time 6 + Part time 8)

**Ph.D. Thesis Submitted during the year: 1**

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 02 Details are given below.

**(i) Projects Sanctioned this year : 1**

Principal Investigator : DR. R P. Pradhan

Funding Agency : ICSSR

Amount : 15 Lacs

Title : Agenda 2020: India's Maritime Infrastructure, Governance & Naval Diplomacy

**(ii) Ongoing Projects : 1**

Cross Cultural Communication : An empirical analysis of Cross Cultural Communication Variables in Indian Industries and Academia	Major UGC Project	Basavadatta Mitra	Rs. 6,50,000/-	2013-2015
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**(ii) Projects completed this year:**

**Consultancy Project**

Topic : Technical Writing Training Programme

PI / Coordinator : Meenakshi Raman

Instructors: Shalini Upadhyay, Layla Mascarenhas, Meenakshi Raman

Agency : CIPLA Biotec, Verna, Goa

Duration : 9 weeks ( 12 July 2016 – 5 October 2016)

Amount : 6.55 Lacs

## B. Publications:

### International Journals (13)

S.No.	Faculty	Title	Journal Details
1	Alex, Rayson K	A akam do Quadro Cinemático: Questões Emergentes nos Estudos Indianos em Ecocinema / The akam of the Cinematic Frame: Raising Questions on Indian Ecocinema Studies	<i>Animalia Vegetalia Mineralia</i> 3.6 (2016): 25-30. (ISSN 2183-265X)
2	Bhattacharya Amitendu	Parricide	Muse India (Vol. 68, July-August 2016 Issue)
3	Bhattacharya Amitendu	Two Poems of Hafeez. (Accepted)	Jalandhari <i>IUP Journal of English Studies</i>
4	Datta Nilak	Paradise Discourse and the Caribbean Tourist Gaze: Angelique Nixon's Resisting Paradise (Accepted)	<i>Callaloo</i> . The Johns Hopkins UP
5	Cheruvath Reena.	Need for a shift from philanthropic to humanistic approach to Corporate Social Responsibility: With special reference to the New Act 2013 of CSR in India(Accepted)	<i>Annals of Public and Cooperative Economics</i> , John Wiley & Sons (Indexed in SCOPUS and Thomson Reuters)
6	Cheruvath Reena.	Does attending classes help foster human values in college students? (Accepted)	<i>Active Learning in Higher Education</i> , Sage Publication. Indexed in Thomson Reuters, Scopus)
7	Cheruvath Reena.	Engineering, technology and science disciplines and gender difference: A case study among Indian students" (Accepted)	<i>European Journal of Engineering Education</i> , Routledge publication (Indexed in Thomson Reuters, Scopus)
8	George, Anoop	The Good Sense of the Modern: Revisiting Heidegger's Social Ontology	Proceedings of The Asian Conference on Ethics, Religion & Philosophy 2016, pp. 119-129. (ISSN: 2187-476X).
9	R. P. Pradhan	Factory Asia and East Asian Economic Conundrum: Does India Fit In?	World Focus, Vol. XXXVII, No.3, March 2016. www.worldfocus.in
10	RP Pradhan; Jajati K. Pattnaik	Chabahar to Sagarmala: Making Sense of India's External & Hinterland Sea Lane Prospects	World Focus (Accepted for the forthcoming volume)
11	Raman Meenakshi and Anjani Srikanth Koka	Developing Soft Skills in Engineering Students for better Employability in IT Industry : Academicians' Perspective"	International Journal of Language, Literature and Humanities, ISSN 2321-7065, Vol IV, Issue III, March 2016.Pp. 580-594
12	Upadhyay, S and Upadhyay, N.	A Multi-Criteria Decision Framework to Measure Spiritual Intelligence of University Teachers.	Procedia Computer Science 91, 591-598
13	Upadhyay, S and Upadhyay, N.	Investigating foreign language learning: examining anxiety associated with English language acquisition in the Asian ESL. (accepted)	The Asian EFL Journal

### National Journals (8)

Sr. No.	Faculty	Title	Journal details
1	Bhattacharya Amitendu	Five Poems by Sukanta Bhattacharya (Accepted for publication)	Journal of the School of Language, Literature and Culture Studies , Jawaharlal Nehru University, New

			Delhi
2	Bhattacharya Amitendu	Two Poems of Hafeez. (Accepted)	Jalandhari IUP Journal of English Studies
3	Datta Nilak	The Literature of Resistance: Review of Dalit Literatures in India (Accepted)	The IACLALS Journal. ISSN 2395-1206.
4	Cheruvath Reena	Analysis of the issue of engineering and technological students' class absenteeism- A case study.	The Indian Journal of Technical Education, 38(2): 77-85.
5	Geetha, K.A.	Not a Literature of Lament : An Analysis of Emerging themes and Trends in Tamil Dalit Literature	IUP Journal of English Studies Vol 10 : 3
6	Geetha, K.A. & Priyanshu Gupta	Cultural in Context – Divergences in Rural and Urban Consumer Behavior	International Journal of Communication Vol 25 : 1-2 (2015) 77-95
7	George, Anoop	Modernity, Technology And Reductionism: Heidegger And The Disenchantment Of The Late Moderns. (Accepted for publication)	Indian Philosophical Quarterly, Vol. 41, No. 1-4, (pp. 149-162), October 2015. (ISSN – 0376 – 415 X)
8	Jajati K. Pattnaik and R. P. Pradhan	Chabhar: In the Grand Chess Board of India's Geo Strategic Calculus	Mainstream, VOL. LIV, No 31, New Delhi July 23, 2016 <a href="http://www.mainstreamweekly.net/article6553.html">http://www.mainstreamweekly.net/article6553.html</a>

### C. Books Published/Edited during the year (3)

S.No.	Faculty	Title	Book details
1	Alex, Rayson & S. Susan Deborah (Eds.)	<i>Ecodocumentaries: Critical Essays</i>	London and New York: Palgrave Macmillan; ISBN 978-1-137-56224-1 eBook ISBN 978-1-137-56224-1
2	Cheruvath Reena, Rayson K. Alex, GyanPrakash & Susan Deobera (Eds.)	Eco-Cultural Ethics	Lexington Press, New York. (In Press)
3	Raman Meenakshi and Sangeeta Sharma	Technical Communication (JNTU Edition)	Oxford University press, New Delhi

### Chapters in Books (7)

Sl.No.	Faculty	Title of the chapter	Book details	ISBN
1	Alex, Rayson K., S. Susan Deborah and K.S. Samuel Moses	Eco-exoticism in Thorny Land: Invasion of Cheemakaruvil.	Ecodocumentaries: Critical Essays .London and New York: Palgrave Macmillan. Pp. 189-202.	ISBN 978-1-137-56224-1 eBook ISBN 978-1-137-56224-1
2	Alex, Rayson K. and S. Susan Deborah.	Introduction: The Ethics of Relationships in Social Documentaries.	Ecodocumentaries: Critical Essays. London and New York: Palgrave Macmillan. Pp.01-08	ISBN 978-1-137-56224-1 eBook ISBN 978-1-137-56224-1
3	Alex, Rayson K.	tinai-Documentation as Ecocultural Ethnography: My Experience with Mudugar	Ecodocumentaries: Critical Essays. London and New York: Palgrave Macmillan. Pp.188-203	ISBN 978-1-137-56224-1 eBook ISBN 978-1-137-56224-1

4	Cheruvalath Reena	Teaching ethics to engineering students in India: Issues and challenges,	Sa Contemporary Ethical Issues in Engineering Ed. Satya Sundar Sethy, IGI Global Publishing, USA. pp.121-132	ISBN: 9781466681309
5	Geetha, K.A.	Shifting Terrains : The Fashioning of the Tamil Dalit Subject	ReReadings on Dalit Identity : History, Literature and Religion Ed. Swaraj Basu Orient Blackswan: Hyderabad, pp.261-279	ISBN 978-81-250-6090-1
6	Kenneth Bo Nielson and Solano Da Silva	Golden or Green? Growth Infrastructures and Resistance in Goa	TeTereza Kuldova & Mathew Varghese, Urban Utopias: Excess and Expulsion in Neoliberal South Asia, Palgrave Macmillan	Forthcoming (accepted for publication)
7	Pradhan, R.P.	India's Foreign Policy Framework and Indo-Pak Relations	”, An Outline of Indian Foreign Policy And Relations, (eds) Biswanath Chakraborty & Debashish Nandy, January 2016, Mitram, Kolkota.	ISBN No: 978-93-80036-84-7 <a href="https://www.academia.edu/24394152/Indias_Foreign_Policy_Framework_and_Indo-Pak_Relations">https://www.academia.edu/24394152/Indias_Foreign_Policy_Framework_and_Indo-Pak_Relations</a>

#### D. Conferences attended/papers presented: (India)

##### Conferences Abroad ( 14)

Sl.No	Faculty	Title of the Paper	Details	Dates
1	Amitendu Bhattacharya	Universities at the Crossroads and the Humanities at a Dead-End: What is the Way Forward?	17th Triennial Conference of the Association for Commonwealth Literature and Language Studies held at Stellenbosch University, South Africa	10-15 July 2016
2	Amitendu Bhattacharya	A Poet of/for India: The Rediscovery of Kabir through the Translations by Rabindranath Tagore and Arvind Krishna Mehrotra	ASIAN TRANSLATION TRADITIONS CONFERENCE 7 organized by the Monash Asia Institute and the School of Languages, Literatures, Cultures and Linguistics at Monash University Melbourne, in partnership with the Universiti Kebangsaan Malaysia, and hosted at the Monash University Malaysia Campus in Kuala Lumpur	26-29 September 2016
3	Anoop George	The Good Sense of the Modern: Revisiting Heidegger's Social Ontology	International Conference on Ethics, Religion and Philosophy, International Academic Forum, The Art Center, Kobe, Japan	31 March-03 April 2016
4	Anoop George	Engaging With Modernity: Revisiting The Ontology Of The Self As A Meaning Giving Being	International Conference for Social Sciences and Humanities, International Journal of Arts and Sciences, University of London, UK	08-11 November 2016
5	Meenakshi Raman	Importance of Effective Communication in Healthcare Settings : Students' Perspectives.	81 <sup>st</sup> Annual International Conference of ABC (Association of Business Communication). Albuquerque, New Mexico, USA	19-22 October 2016
6	Rayson K Alex	"Nature-culture-sacred continuum in the ecodocumentary, Have you Seen the Arana?"	International Conference on "Transmediating Culture(s)?" Department of English, University of Szczecin, Poland	17-19 November 2016
7	Reena Cheruvalath	Meta-moral cognition and social relationship: A theoretical perspective	International Conference for Social Sciences and Humanities. International Journal of Arts and Sciences. University of London, UK	8-11 November 2016
8	Reena Cheruvalath	Internet Neutrality, Social Justice And Ethics: A Kantian Perspective	The Asian Conference on Ethics, Religion & Philosophy. The International Academic Forum. The Art Centre of Kobe, Japan.	31 March-03 April, 2016

Sl.No	Faculty	Title of the Paper	Details	Dates
9	R P Pradhan	TPP & Factory Asia: Case of India Trade Creation or Trade Diversion?	East Asian Economic Association (EAEA) Bandung, Indonesia	5-6 November 2016.
10	Shalini Upadhyay and Nitin Upadhyay	A Multi-Criteria Decision Framework to Measure Spiritual Intelligence of University Teachers	Asan, South Korea ITQM and Hoseo University, South Korea	16-18 August 2016
11	Shalini Upadhyay and Ranjit Rodrigues	“Investigating Foreign Language Learning: Examining Anxiety Associated with English Language Acquisition in the Asian ESL Context”	TESOL and University of Mataram in Lombok, Indonesia.	August 11-13, 2016
12	Solano Jose Da Silva	Urban Commons and Commoning ( attended)	Urban Commons and Commoning' Cape Town, South Africa	30 May- 03 June 2016
13	Solano Jose Da Silve, Palmer, Henrietta & Low, Iain	Urban commons in the Neoliberal Global Order: Commoning as Counteraction	17th N-AERUS Conference: Governing, Planning and Managing the City in an Uncertain World. Comparative Perspectives on Everyday Practices at the School of Public Administration (SPA) at University of Gothenburg, Gothenburg, Sweden.	17-19 November 2016
14	William Henry Spates	Contact Zones: Chios, the Mahonesti, and the Formation of English Long-Distance Trading Companies in Richard Hakluyt's Diverse Voyages and Principal Navigations”	10 <sup>th</sup> IDEA Conference, Bogazici University, Istanbul, Turkey.	April 2016)

#### Conferences in India (10)

Sl. No.	Faculty	Title of the Paper	Details of conference	Dates
1	Amitendu Bhattacharya	The 'Fictions' of Fatima Bhutto and Tamsila Ao: Epistemologies of Violence	International Seminar on “Politics, History and Fiction in South Asia with Special Focus on Pakistan and North East India” , Department of English, Gauhati University	25-27 February 2016
2	Amitendu Bhattacharya	Gastronomy and the Making of the Bengali Bhadrakok (in absentia)	International Conference on “The Culture of Food: Literature and Society” organized by the Departments of English and Travel & Tourism, M.E.S. College of Arts and Commerce, Goa	25-27 February 2016
3	Amitendu Bhattacharya	Food, Hindu Bourgeoisie, and the Cosmopolitan Imagination in Colonial Bengal	XIX International Conference on “Materialities: Objects, Matter, Things” jointly organized by the Forum on Contemporary Theory, Vadodara and the Department of English, Doon University, Dehradun	18-21 December 2016
4	Amitendu Bhattacharya	Tagore and the Global Environmental Crisis ( In absentia)	International Conference on “Re-Thinking Environment: Literature, Ethics, Praxis” organized by the Postgraduate Department of English, Berhampur University, Odisha	28-30 December 2016
5	Anoop George	“Progress, Promise and Problems: Revisiting the Art of Techne.”(Paper presented)	Life-World and Consciousness, The Centre for Phenomenological Studies (Sponsored by the Indian Council of Philosophical Research (ICPR), New Delhi.), Department of Philosophy, Loyola College Chennai	03-05 March 2016
6	Geetha B	Analysis of Mira Nair's “Monsoon Wedding” using the GeM framework.	International Congress on English Grammar (ICEG-2016). Department of English, Guru Nanak Dev University Amritsar (Punjab) INDIA in	08-12 February 2016

			collaboration with Systemic Functional Linguistics Association, Hyderabad	
7	Geetha B	Minimalism in Abbas Kiarostami's films.	National Level Media Seminar on Cinema, Christ University, Bangalore.	04-05 August 2016
8	Rayson K Alex	"Indigenous Cosmopolitics-poetics in Indian Food Documentaries"	International Conference on "The Culture of Food: Literature and Society Departments of English and Tourism, M.E.S. College for Arts and Commerce, Goa. The Queeny, Goa	25, 26 and 27 February 2016
9	William Henry Spates	"Hamlet's Journey into the Uncanny Valley: Post-Humanism, Digital Humanities, and the Dialectics of Inevitability"	Indira Gandhi National Center for the Arts (New Delhi, India,	December, 1 <sup>st</sup> -3 <sup>rd</sup> , 2016)
10	William Henry Spates	"'Watching the Detectives': DFR and R Pearson's Coefficient Analysis of Shakespeare and Critical Anxieties",	Shakespeare, Digital Archiving, and Textual Computing Symposium, School of Cultural Texts and Records, Jadavpur University (Kolkata, India	November, 29 <sup>th</sup> , 2016)
11	William Henry Spates	"Stockfish, Clipfish, and Carp: The Exotic Literary Lives and Afterlives of Medieval and Early Modern Seafood"	International Conference on "The Culture of Food: Literature and Society Departments of English and Tourism, M.E.S. College for Arts and Commerce, Goa. The Queeny, Goa	25, 26 and 27 February 2016

#### E. Conferences, seminars & workshops conducted : 2

##### The department organized two conferences

- National Symposium on Digital Humanities, September 2016 ( Coordinators: William Henry Spates, Amitendu Bhattacharya; Participants : 30). Experts : Prof.Sukanta Chaudhury, Prof.Supriya Chaudhuray, Jadavpur University, Kolkata; Dr. Padmini Ray Murray ( Sriшти Design Institute, Bangalore; Dr. D. Venkat Rao, The English & Foreign Languages University, Hyderabad; Mr.Orijit Sen, Graphic Novelist, Goa
- Workshop on Film Making and Script Writing, 18-20 March 2016 ( Coordinators: Geetha B, Rayson K Alex, Amitendu Bhattacharya) Participants : 45. Experts : Mr.Abhaya Simha, National Award Winning Film Director; Mr.NAM Ismail, Script Writer, Bangalore.

#### F. Invited Talks / workshops given/ conducted by BITS faculty (11)

S.No.	Faculty	Title of the lecture/workshop	Venue	Dates
1	Basavadatta Mitra	Networking the Triple Helix of Competitiveness	Industry Institute Sahyog-2016, Glow India Initiative of ATEC at Father Agnel Polytechnic, Verna, Goa	11 March 2016
2	Geetha B	workshop in Film Appreciation	Guru Nanak Dev University Amritsar (Punjab)	08 February 2016
3	Geetha B	Censorship in Cinema Panelist for discussion	Seminar on Cinema, Christ University, Bangalore	04-05 August 2016
4	Meenakshi Raman	Elements of Effective Scientific and Technical Writing	Workshop for 40 research scholars at IIT Ropar	28-29 November 2016
5	Meenakshi Raman	Isabella or The Pot of Basil : Psychological Face of Love	inaugural ceremony of Sanskriti, literary club inauguration at MES College, Goa	14 September 2016
6	Meenakshi Raman	Writing : An Essential key to Academic and Professional Progress	seminar on Writing Centre: An Instrument to improve writing skills of students Organized by Writing Centre, Student Support Services, Chowgule College, Goa	12 August 2016
7	Meenakshi Raman	Integrated Language Learning through Dictogloss" and " Corss cultural variations in Communication"	English refresher course organized by the UGC Human Resource Development Centre, Goa University	12-15 March 2016
8	Rayson K Alex	"Nature-culture-sacred	University of Warsaw, Poland	21 November 2016



		Continuum as Ecocultural Ethnography: My Experience with the Mudugar"		
9	Rayson K Alex	Resource Person for a workshop on Practical Ecocriticism	Dr. K.N. Modi University, Newai, Rajasthan	18 March 2016
10	Reena Cheruvalath	Interdisciplinary education: Philosophy and Practice	National Workshop on 'Quality enhancement in Higher Education: The role of Inter-disciplinary Teaching Learning and Research, sponsored by NAAC. Nirmalagiri College, Koothuparambu, Kerala	22-23 January 2016
11	R P Pradhan	Between Soft State & Emerging Giant: India's Narrative of Democracy, Development & Good Governance	National Seminar On "Democracy, Development and Good Governance", Organized by Department of Political Science, Neelamadhav Mahavidyalaya, Kantilo, Odisha, (Key Note Address)	19-20 November 2016

#### G. Invited talks arranged in the department: (9)

No.	Speaker	Affiliation	Topic	Date
1	Mr. Rahul Basu	Founder & CEO, Ajadé and is now a member of Goa Foundation; Mines, Minerals & People (MM&P); India Network for Basic Income (INBI) and the Goenchi Mati Movement.	Who owns Minerals? How could they be managed? The Goenchi Mati Proposal	28-Sep-16
2	Mr. SaumyanandaSahi	Independent film maker and Former Student of Film and Television Institute of India, Pune	Film screening: Remembering Kurdi	26-Aug-16
3	Dr. Aaron lobo	GIZ, Indo- German Biodiversity Programme	Documentary screening: Chora Island: a place, its people and the project	28-April-16
4	Mr.Abhaya Simha	Film Maker	Introduction of Film as a medium	18 March 2016
5	Mr.NAM Ismail	Script Writer	Image Aesthetics in Digital Era	18 March 2016
6	Prof.Feda Yousef Al-Tamimi	Associate Professor of Linguistics and Speech Sciences at Jordan University of Science and Technology	Medical Machines in Language-Speech Assessment	15-Mar-16
7	Prof.Ravi Shankar	Executive Director of Drunken Boat and faculty at City University of Hong Kong	Intersection of Digital Media with Print Publication	05-Feb-16
8	Prof. Rukmini Bhaya Nair	Professor of Linguistics and English at the Indian Institute of Technology in Delhi	Chat Rooms and Class Rooms	04-Feb-16
9	Prof. SaurabhDube	Professor of History at the Centre for Asian and African Studies, El Colegio de México	Subjects of Modernity	13-Jan-16

#### H. Awards and recognitions won by faculty and students:

**Basavadatta Mitra**---Since July,2016, appointed Team Leader,for one of the verticals-Project-based Evaluation,under Education Committee,Goa Chamber of Commerce and Industries,responsible for auditing Internship Programmes of State Engineering Curriculum.

**Meenakshi Raman** has been appointed for the second term ( 2016-2019) as a member of Board of Studies, Goa University, for English.

As an expert, **Rayson K Alex** was invited to organize tiNai Ecofilm Festival (Edition 3) at Dr. K.N. Modi University, Newai, Jaipur, Rajasthan on 17, 18 March 2016 (Coordinator: Mr. Saikat Banerjee).

**R.P.Pradhan** received ICSSR Project Grant of Rs. 15Lakh for the project titled Agenda 2020: India's Maritime Infrastructure, Governance & Naval Diplomacy.

**I. Faculty Development, International Collaboration & Industry Immersion:**

Conducted a Training Program in technical Writing for the officers of CIPLA Biotec, Verna , Goa during 12 July-05 October 2016 ( Coordinator: Meenakshi Raman; Sessions : Meenakshi Raman, Shalini Upadhyay, Layla Mascarenhas)

**J. Significant new equipments/experimental facility added during the year:** Nil.

**K. Departmental association/club activities:** NA

**B2.10.8 Department: Mathematics**

Number of faculty members (as on 31 December 2016): 16

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	12
<b>Lecturers</b>	02
<b>Adjunct Faculty</b>	01

**Head of the Department:** Dr Prasanna Kumar N

**Number of PhD Scholars:** 11 (6 FT+4PT+1L)

**Ph.D. Thesis Submitted during the year:** 1

**A. Sponsored Research activities:**

**(i) Ongoing projects:**

- Project Title: Studies on neighborhood magic graphs (Completed in June-2016)  
Principal Investigator: Dr. T. Singh  
Sponsor: Department of Science & Technology, Govt. of India.  
Amount: Rs. 12.69360 Lakhs (2013-)
- Project Title: Establishment of Scientific computation Laboratory  
Principal coordinator: Dr. Dhanumjaya  
Sponsor: DST-FIST  
Amount: Rs.37.5 Lakhs (2014-)

**(ii) Projects sanctioned during the year: Nil**

**B. Books Published/Edited during the year:**

**Faculty Members joined: NIL**

**Invited lectures/talks delivered by faculty members:**

- Dr. Alpesh Dhorajia delivered an invited talk on Serres's Problem on Projective Modules, 2<sup>nd</sup> National Conference on "Algebra, Analysis and Fuzzy Mathematics", in the Department of Mathematics, School of Mathematical Sciences, North Maharashtra University Jalgaon, Maharashtra, during January 29-30, 2016
- Dr. Dhanumjay delivered an invited talk on "Mixed Discontinuous Galerkin Finite Element Methods for the fourth order nonlinear parabolic problems" in National Conference on Computational and Theoretical Partial Differential Equations (CCT-PDE 2016) during October 5-7, 2016 at National Institute of Technology Goa, India. (with Amiya Kumar Pani)

3. Dr. Mayank Goel delivered an invited talk and Chief Guest for two day national seminar on "Applied Statistics and Quantitative Finance" organized by the Post Graduate Department of Statistics, Govt. Victoria College Palakkad, Kerala, during December 8-9, 2016.

### C. Research Publications:

#### • Journals (International)

1. Alpesh Dhorajia and Jimmy M. Morzaria: Domination in total graphs of small rings, *Discrete Mathematics, Algorithms and Applications*, 8 (2016) 4.
2. Jessica Pereira, T. Singh and S. Arumugam: On  $(k, d)$ -hooked Skolem graceful graphs, *Journal of Combinatorics, Information and System Sciences*, 41 (2016) 7-15.
3. B. Pradeep and S. Thangavelu: On the chaotic behavior of the Dunkl heat semigroup on weighted  $L_p$  spaces, accepted by *Israel Journal of Mathematics*.
4. B. Pradeep, Luz Roncal and S. Thangavelu: Mixed norm estimates for the Cesaro means associated with Dunkl-Hermite expansions, accepted in *Trans. Amer. Math. Soc.*
5. Prasanna Kumar, On Turan's Inequality for Complex Polynomials, *Note di Matematica*, 36(1) (2016) 55-62.
6. G. C. Samanta and B. K. Bishi: Universe described by Kaluza-Klein space time with viscous modified cosmic chaplygin gas in general relativity. *Iran Journal of Science and Technology; Transactions A; Science*, 40 (2016) 245.
7. Mohan N.C. and Prabal Paul, On some weighted zero-sum constants, *International Journal of Number Theory*, accepted for publication, (2016).

#### • Journals (National) : Nil

#### • Proceedings in Conferences

1. 1. Jessica Pereira, T. Singh and S. Arumugam: *m-Gracefulness of graphs*, *Lecture Notes in Computer Science* 9602 (2016) 289-298.
2. Mayank Goel and J.K. Sahoo, Portfolio Risk Management using Signed Graphs, proceedings of International conference on computational physics, mathematics and its applications (ICCPMA2016), Page 109-117, which held at Tokyo, Japan during November 7-8, 2016.
3. C.S. Singh, A.K. Singh and J.K. Sahoo, Mess-Less Numerical Scheme Based on Matrices for Integro-Differential Equation, proceedings of International conference on computational physics, mathematics and its applications (ICCPMA2016), Page 118-128 which held at Tokyo, Japan during November 7-8, 2016.

### D. Paper presentations in International/National Conferences:

1. Jessica Pereira Presented paper entitled "*m-Gracefulness of graphs*", International Conference on algorithms and discrete applied mathematics-2016, organized by Department of Futures Studies, University of Kerala, Thiruvanthapuram, February 18-20, 2016.
2. G. C. Samanta presented a paper entitled "Bulk viscous universe in modified gravity" in 10<sup>th</sup> spontaneous workshop on hot topics in modern cosmology which was held at Institut d'Etude Scientifique de Cargèse (IESC) Corsica 9th – 14th May, 2016 Cargese, France.
3. Amit Setia, Vaishali Sharma, Yucheng Liu presented a paper entitled "Haar Based Numerical Solution of Fredholm-Volterra Fractional Integro-differential Equation with Nonlocal Boundary Conditions" in ICNPAA World Congress - 2016: Mathematical Problems in Engineering, Aerospace and Sciences, 5 - 8 July 2016 at University of La Rochelle, France.
4. Amit Setia, Bijil Prakash and A.S. Vatsala presented a paper entitled "Numerical Method to Solve Cauchy Type Singular Integral Equation With Error Bounds in ICNPAA World Congress - 2016: Mathematical Problems in Engineering, Aerospace and Sciences, 5 - 8 July 2016 at University of La Rochelle, France.
5. P. Dhanumjaya and K. Balaji presented a paper entitled "Discontinuous Galerkin Finite Element Methods for the One-Dimensional Rosenau Equation" in National Conference on Computational and Theoretical Partial Differential Equations (CCT-PDE 2016) during October 5-7, 2016 at National Institute of Technology Goa, India.
6. P. Dhanumjaya and S. K. Bhal presented a paper entitled "Orthogonal Spline Collocation Methods for the One-Dimensional Parabolic PDEs with Interfaces" in National Conference on Computational and Theoretical Partial Differential Equations (CCT-PDE 2016) during October 5-7, 2016 at National Institute of Technology Goa, India.

7. Alpesh Dhorajia delivered a talk on "Dominating Parameters of Certain Graphs" at the 30th Midwestern Conference on Combinatorics, Cryptography, and Computing during October 14–16, 2016 at the campus of Illinois State University in Normal, Illinois.
8. Mayank Goel presented research paper entitled: "Portfolio Risk Management using Signed Graph" in "International Conference on Computational Physics, Mathematics & its Applications"(ICCPMA 2016) held at Tokio, Japan, during November 7-8, 2016.
9. C.S. Singh, A.K. Singh and J.K. Sahoo presented a paper entitled "Mess-Less Numerical Scheme Based on Matrices for Integro-Differential Equation" in International conference on computational physics, mathematics and its applications (ICCPMA2016) which held at Tokyo, Japan during November 7-8, 2016.
10. J.K. Sahoo and Akhil Balaji presented a paper entitled "Optimizing Support Vector Machines for Multi-class Classification" in international conference on advances in computing and data sciences (ICACDS 2016) which held at Ghaziabad, India during November 11-12, 2016.
11. P. Dhanumjaya and K. Balaji presented a paper entitled "Discontinuous Galerkin Finite Element Methods for the two-Dimensional Rosenau Equation" in International Conference on "Recent Advances on Theoretical and Computational Partial Differential Equations" held at Panjab University, Chandigarh during 05-09 December, 2016
12. P. Dhanumjaya and S. K. Bhal presented a paper entitled "Orthogonal Spline Collocation Methods for the one-Dimensional Parabolic PDEs with Interfaces" in International Conference on "Recent Advances on Theoretical and Computational Partial Differential Equations" held at Panjab University, Chandigarh during 05-09 December, 2016
13. R.K. Roul and J.K. Sahoo presented a paper entitled "Classification of Research Article Hierarchically: A new Technique" in 3<sup>rd</sup> international conference on computational intelligence in data mining (ICCIDM 2016) which held at KIIT, Bhubaneswar, India during December 10-11, 2016.

#### **E. Workshops Attended:**

Jesica Pereira participated in the "Indo-Hungarian School on Discrete Mathematics", jointly organized by Dept. Of Computer Sc. School of Mathematical Sciences RKM Vivekananda University Belur Math, Howrah; Department of Futures Studies University of Kerala Thiruvananthapuram Kerala and Alfred Reyni Institute of Mathematics Hungarian Academy of Sciences Budapest Hungary, held in Thiruvananthapuram, February 15-16, 2016.

#### **F. Books Published/Edited during the year: Nil.**

#### **G. Conferences, seminars & workshops conducted in the department:**

1. Organized a three day national level workshop on "R with Application to Quantitative Finance", August 26-28, 2016, Conveners: Mayank Goel and J K Sahoo. Funded by Department of Mathematics, BITS Pilani K K Birla Goa Campus. Around 35 people from industry/academia participated.

#### **H. Invited talks arranged in the BITS:**

##### **I. Invited talks arranged in the department:**

☒ December 10, 2016. Prof. Komatsu Takao, School of Mathematics and Statistics, Wuhan University, Wuhan, P. R. China, delivered a lecture on "Euler Numbers and Related Numbers and their Applications".

☒ November 18-22, 2016, Prof. V. Sree Hari Rao, Executive Director, International Center for Interdisciplinary Research Innovation, Hyderabad delivered lecture series on the following topics:

- Science with a Humane Face - Infectious Diseases -A Social Commitment.
- Periodic Solutions for Dynamical Systems.
- Mathematical Support for a New Perspective of Image Construction Technology.

☒ November 12, 2016. Prof. C. R. Pradeep, Department of Mathematics, Channabasaveshwara Institute of Technology, Gubbi, Karnataka (Former faculty at Department of Mathematics, Indian Institute of Science, Bangalore) delivered a lecture on "Algorithmic techniques and puzzles".

☒ October 8, 2016. Dr. (Mrs.) Mukti Acharya, Retd. Professor and Ex. HOD, Department of Applied Mathematics, Delhi, Technological University, Delhi delivered a lecture on "Balanced Signed Graphs and Applications in Social Psychology"

☒ October 6, 2016. Prof. A. K. Nandakumaran, Department of Mathematics, Indian Institute of Science (IISc) Bangalore delivered lectures on "Qualitative Analysis of Ordinary Differential Equations"

☒ April 8, 2016, Prof. S. Arumugam, Member, Program Advisory Committee - Mathematical Sciences, Science and Engineering Research Board (SERB) delivered a lecture on "Preparation of Research Project Proposals to Funding Agencies".

☒ April 1-2, 2016, Prof. Mythily Ramamswamy, Professor, TIFR Center for Applicable Mathematics, Bangalore delivered lecture series on the following topics:

- Some Problems from Stabilization of Fluid Flows.
- The Story of Optimal Control.

☒ March 22, 2016, Dr. Debajyoti Nandi, Visiting fellow, Chennai Mathematical Institute, Chennai delivered a lecture on "Representation Theory + VOA = Partition Identities".

☒ March 8, 2016, Prof. Graeme Fairweather, Mathematical Reviews, American Mathematical Society, U.S.A. delivered a lecture on "Sixty Years of Alternating Direction Implicit (ADI) Methods - A Personal Retrospective".

☒ March 4, 2016, Prof. Suresh M. Hegde, Department of Mathematics & Computational Sciences, National Institute of Technology, Karnataka delivered a lecture on "A Solution of the Erdos-Faber-Lavasz Conjecture".

☒ February 11, 2016, Prof. Amitava Bhattacharya, Professor, School of Mathematics, Tata Institute of Fundamental Research Mumbai delivered a lecture on "The Art of Counting".

☒ February 11, 2016, Prof. V. Sree Hari Rao, Executive Director, International Center for Interdisciplinary Research & Innovation, Hyderabad delivered a lecture on "Infectious Diseases - A Predictive Modeling Approach".

☒ February 10-13, 2016, Prof. V. Sree Hari Rao, Executive Director, International Center for Interdisciplinary Research & Innovation, Hyderabad delivered lecture series on the following topics:

- Inspire, Invigorate and Innovate: The Present and Future Challenges.
- Stimulations in Simple Dynamical Systems.
- Cross-Diffusion in Ecology: A Modelling Perspective.

#### **J. Achievements/Awards by the Faculty members:**

1. Dr. Mayank Goel received Ahlfors award for the best seminar presentation in the Department of Mathematics.
2. Dr. G. C. Samanta received International Travel Support from SERB-DST, Govt. of India, 2016
3. Dr. G. C. Samanta awarded Asia Pacific Center for Theoretical Physics (APCTP) grant for attending conference at the University of Sydney, Australia, Nov. 28-Dec. 02, 2016.
4. Dr. Prasanna Kumar visited Auburn University, Auburn, USA as Visiting Associate Professor for Fall-2016.

#### **K. Faculty Development, National/International Collaboration & Industry/ University immersion:**

1. Under university immersion program, Dr. Anil Kumar, visited School of Mathematical and Physical Sciences, University of Newcastle, University Drive, Callaghan NSW 2308 Australia from May 21<sup>st</sup> to July 22<sup>nd</sup>, 2016 under the University Immersion program. There I worked with Dr. Bishnu Prasad Lamichhane on numerical computation of optimal control problems involving partial differential equations.
2. Dr. Alpesh Dhorajia visited University of Alberta, Department of Mathematics, Edmonton, Alberta, Canada, October 2016.

#### **Collaborations:**

##### **Prasanna Kumar**

- Prof. N. K. Govil, Department of Mathematics and Statistics, Auburn University USA.
- Prof. Gerhard Schmeisser Department Mathematik, FAU Erlangen-Nürnberg, Germany.

##### **P. Dhanumjaya**

- Prof. Graeme Fairweather (Senoir Editor in AMS, USA).
- Prof. Veerappa Gowda (TIFR-CAM, Bengalore).
- Prof. Amiya Kumar Pani (IIT Bombay).

**Prabal Paul:**

- Dr. Mohan Namdev Chintamani (Department of Mathematics and Statistics, University of Hyderabad, has visited our department several times for possible research collaboration).
- Dr Prabal Paul has also visited University of Hyderabad, Harish Chandra Research Institute, Allahabad, Indian Statistical Institute, Kolkata, on research collaboration.

**L. Significant new equipments/experimental facility added during the year:**

DST-FIST Level-1 Scientific Computing Lab. Is made functional

**M. Departmental association/club activities:**

April 10, 2016, Third Department Day/MATHFEST was celebrated. Prof. S. Arumugam, Member, Program Advisory Committee - Mathematical Sciences, Science and Engineering Research Board (SERB) was the chief guest. He delivered a special lecture on Srinivasa Ramanujan.

**N. Any other information: nil****B2.10.09 Department: Mechanical Engineering**

Number of faculty members (as on 31 December 2016) :

<b>Senior Professors, Professors</b>	1
<b>Associate Professors</b>	2
<b>Assistant Professors</b>	7
<b>Lecturers</b>	5
<b>Visiting Faculty</b>	1

**Head of the Department:** Dr. Shibu Clement

**Contact details:** *shibu@goa.bits-pilani.ac.in*

**Number of PhD Scholars:** 3 Full time + 2 Lecturers + 7 Part-time = 12

**Ph.D. Thesis Submitted during the year: 3**

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 05. Details are given below.

**(i) Ongoing projects: 03**

Sr.No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
1	Gaurav Singh	Simulation of simultaneous rock fractures at multiple scales, 3 years	30.00 lakhs	Ministry of Mines
2	Ranjit S Patil	Study and Analysis of Fluid Dynamics and Heat Transfer Characteristics in Circulating Fluidized Bed Heat Exchanger with Novel Designs of Heat Exchanger	27.66 Lakhs	SERB-DST
3	Karthikeyan	Flow investigation through $\mu$ ED-milled metallic micro channels	21.21 lakhs	SERB-DST

**(ii) Projects sanctioned during the year: 1**

Sr. No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
1	Gaurav Singh	Simulation of simultaneous rock fractures at multiple scales, 3 years	30.00 lakhs	Ministry of Mines

**(iii) Projects completed this year: 1**

Sr. No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
1	P M SINGRU	RO RO OF C130 J AIRCRAFT	15,79,000	LOCKHEAD MARTIN CO USA

**B. Publications: 11**

Sl. No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication	National/ International
1	Pravin Singru,	Development of an Experimental Model for a Magnetorheological Damper Using Artificial Neural Networks (Levenberg-Marquardt Algorithm)	Advances in Acoustics and Vibration	2016	Article ID 7027259	6	MAY	2016	International
2	Akshay Sundar, Hancel P. V., Pravin Singru, Radhika Vathsan	Acoustic analysis and characterization of Indian musical instrument: Ghumot	Journal of Measurements in Engineering	4	3	122-132	August	2016	International
3	Akshay Sundar, Hancel P. V., Pravin Singru, Radhika Vathsan	Study of Sarasvati Veena – a South Indian musical instrument using its vibro-acoustic signatures	Journal of Vibro Engineering	18	5	3362-3368 August	August	2016	International
4	Satish Mullya and G Karthikeyan	Dielectric flow observation at inter-electrode gap in micro-electro-discharge-milling process	IMechE Part B	In press					international
5	T. Gupta, B. Kewlani, K. D. Mali	"Study on the Use of Boundary Characteristic Orthogonal Polynomials in Determining the Fundamental Frequency of Rectangular Plates with Bidirectional Linear Thickness Variation	Applied Mechanics and Materials	852		518-524	September 2016	2016	international
6	Keya Ghonasgi, Kalpit Bakal, Kiran D. Mali	A Parametric Study On Free Vibration of Multi-Perforated Rectangular Plates, in Procedia Engineering	Procedia Engineering	144		60-67	May 2016	2016	international
7	M. Sreedhar Babu, S. Clement and N.K.S. Rajan	Fuel conversion benefit of Producer gas over Gasoline - An experimental analysis	Energy Procedia	100		203-209	November, 2016	2016	international
8	M. Sreedhar Babu, S. Clement and N.K.S. Rajan	Development and Testing of a Laboratory Scale Induction System for a Bottled Producer gas Fuelled IC Engines	Applied Mechanics and Materials	852		659-665	September, 2016	2016	international
9	Femi R, Agrawal A and Clement S.	An FEM study of the effect of temperature on the design of reliable micro electrical contact	Sensors & Transducers	202	7	51-58		2016	international
10	R. Femi, Anita Agrawal and Shibu Clement	An FEM Study of the Electrothermal Properties of Microelectrical Contacts for Application in the Design of Arcless Switches	IEEE Transaction on Components, Packaging and Manufacturing Technology	6	3	407-417	March 2016	2016	international

Sl. No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication	National/International
11	Kiran C.P. and Shibu Clement	X-abilities and attributes based decision making in evaluation and selection of a turbine blade material	International Journal of Materials, Mechanics and Manufacturing	4	1	17-24	January 2016	2016	international

**C. Conferences attended/papers presented: 10**

Sl. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National/International
1	Y.Y. Xu, X.H. Tang, Q.S. Liu & G. Singh	Three-dimensional simulation for the rock fragmentation induced by TBM with GFEM	Recent Advances on Rock Engineering (RARE)	Bengaluru	16/10/2016-18/10/2016	International
2	G. Singh	Crack growth rate via inclusion of timescale distinction in hydrogen cracking	24th International Congress of Theoretical & Applied Mechanics (ICTAM)	Montreal, Canada	21/08/2016-26/08/2016	International
3	S. Govilkar, A. Patil & G. Singh	An Experimental Study into the Role of Friction Between Crack Faces in Compressive Fracture	2nd International Conference and Exhibition on Fatigue, Durability and Fracture Mechanics	Bengaluru	28/09/2016-30/09/2016	International
4	H. Garg & G. Singh	Solution of two-parameter cohesive zone model using Chebyshev polynomials for singular integral equation	61st Congress of Indian Society of Theoretical & Applied Mechanics (ISTAM)	Vellore	11/12/2016-14/12/2016	International
5	M. G. Kalola, Mahesh Dasar, K. P. Shete, R. S. Patil	Effect of Novel Swirling Perforated Distributor on Fluid Dynamic Characteristics of Circulating Fluidized Bed Riser	ASME 2016 Power and Energy Conference	North Carolina, USA	26/06/2016-30/06/2016	International
6	Tanmay Gupta, Bhagat Kewlani, Kiran D. Mali*	Study on the Use of Boundary Characteristic Orthogonal Polynomials in Determining the Fundamental Frequency of Rectangular Plates with Bidirectional Linear Thickness Variation	International Conference on Mechanical Engineering Design (ICMED 2016)	Chennai.	25/04/16-26/04/2016	International
7	Iniyani N. Kulkarni D M and Savio D.S.A Lourenço	Mechanical performance of dental implants: comparison of Titanium vs. Zirconia"	3rd International Conference on BioTribology (ICoBT 2016).	Imperial College of London (UK)	11-15-Sep-2016	International
8	A.C. Kulkarni, Kulkarni D. M. and Dube A.	Experimental investigation of wear for hip implant material using designed and developed screening devices	3rd International Conference on BioTribology (ICoBT 2016).	Imperial College of London (UK)	11-15-Sep-2016	International
9	Parth Chaturvedi and Varinder Singh	Simulation and Optimization of a supply chain system	9th ISDSI (Indian Subcontinent Decision Sciences Institute) International conference, GIM, Goa, paper no. 215	Goa	Jan 2-4, 2016	International
10	Palash Dhir and Varinder Singh	Implementing Analytics in a Case of e-business	10th ISDSI (Indian Subcontinent Decision Sciences Institute) International conference, MET BKC, Nashik GIM, Goa, paper no. 242	Nashik	Dec 28-30, 2016	International

**D. Books Published/Edited during the year: 02**

Sr. no.	Name of publication/Name of the book	Details
1	International Journal of Vibroengineering	Dr. Kiran Mali Reviewed paper



2	Management and Production Engineering Review	Dr. Varinder Singh reviewed papers for this journal
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**E. Conferences, seminars & workshops conducted: 03**

S. No.	Title	Date	Description
1	one-day workshop on INTRODUCTORY COURSE ON ASME SECTION VIII DIVISION 1 (UNFIRED PRESSURE VESSELS).	10-04-2016	Resource Person : Dr. Dipak K Chandiramani (B. Tech. (Hons.), M. Tech. and Ph.D. degrees in Mechanical Engineering IIT Kharagpur) authorized Inspector Supervisor of ASME Certification Mark stamped vessels   Faculty co-coordinators : Dr. PL Ramkumar, Dr. Kiran D Mali
2	Inauguration of Goa Chapter of Indian Institute of Metals	25-09-2016	Lecture by President of Indian Institute of Metals, Prof. Indranil Manna, Director of IIT Kanpur.
3	10th ISDSI International Conference	28-30 Dec, 2016	Dr. Varinder Singh was Program Committee Member

**F. Invited Talks given by BITS faculty: 02**

Sl. No.	Authors	Host	Title	Date
1	Gaurav Singh	Advanced Systems Laboratory, DRDO	Topics in Fracture Mechanics	25/11/2016
2	Karthikeyan	TATA motors, Supply chain event	SCM New Trends	14/08/2016

**G. Invited talks arranged in the department: 01**

S.No.	Speaker	Topic	Date
1	Mr. Kedar Hendre (TATA Technologies)	Introduction to Crash and Safety Analysis	17/11/2016

**H. Awards and recognitions won by faculty and students: 02**

Sl. No.	Name	Association/Society member
1	P M Singru has won best paper third prize for his paper "Modeling of a Magneto-Rheological (MR) Damper using Genetic Programming" in IPROMM 2016 held at Visvesvaraya National Institute of Technology, Nagpur from December 22-23, 2016	Association of Machines and Mechanisms
2	Ranjit S Patil has been invited as Session Co-Chair in the ASME POWER & ENERGY CONFERENCE 2016 held during 26-30th June, 2016 at Charlotte Convention Center, Charlotte, North Carolina, USA	ASME

**I. Faculty Development, International Collaboration & Industry Immersion: 02**

Sr. No.	Name of Faculty	Name of the programme	Collobrator	Duration date and month
1	Kiran D Mali	Two Days National Workshop on Computational Dynamics	NIT Surathkal	26-27th September 2016
2	Shibu Clement, Pravin M Singru	Workshop on Computational Mathematics and Finite Element Method	NIT Goa	1-11 July 2016

**J. Significant new equipments/experimental facility added during the year:2016**

Significant equipment added during this year is as follows:

S.No.	Particulars
1	Fog Generator, Features: Output: 20,000 cu.ft/min
2	AIR ROTAMETER
3	NG ROTAMETER
4	SOFTWARE: i) MSC Motion Bundle- Adams, Adams/Car, Easy 5 - (150 Licences), ii) FTire modules - (5 Licences)
5	SOFTWARE - Moldex3d Solutions - eDesign Package - Educational Perpetuity

6	Altair HyperWorks Software - Altair Research License Software (with Unlimited Nodes) Altair Research License Software includes: HyperMesh, HyperGraph, HyperView, MotionView, Radioss Linear, HyperForm, Radioss Non-Linear, Hypermath, MotionSolve, HyperStudy, OptiStruct, HyperXtrude & AcuSolve
7	Data Acquisition System with accessories (NI Products )a) cDAQ-9178, Compact DAQ Chassis (8 slot USB), b) Power Cord, 250V, 10A, c) NI 9214 16-Ch Isothermal TC, 24-bit C Series Module, d) NI 9212, Ch-Ch Isolation, 24-Bit, 100 S/s, 8-Ch, thermocouple C Series Module, e) NI 9203 Screw Terminal, +/-20 mA, 16-Bit, 200kS/s, 8-Ch, AI C Series Module, f) NI 9927, Strain Relief and Operator Protection for 10-pos Screw Term
8	100 kN Median Test System
9	SOFTWARE: SIMULIA Academic Teaching Suite which provide access to Abaqus, I-Sight, Tosca and Fe-Safe with node limitation of 2.5 lakh nodes
10	2 Component Laser Doppler Velocimetry (LDV) System
11	Booster Air Compressor, , Input pressure 1kg, Output pressure up to 10 kg , Output air 450 m3/hr.
12	Academic TAH License for MATLAB
13	a) SIMULIA Academic Abaqus Research Base License – Qty:1, b) SIMULIA Academic Research Suite Additional License – Qty:4
14	8 Channel Sound Power Measurement System along with Vibration Sensors & Accessories
15	Traverse for Existing LDV System [3-Axis Traverse System, 600 x 600 x 600 mm, includes mounting base, 3-axis controller

#### K. Departmental association/club activities:

The following students association has arranged different activities under following categories.

##### (i) MESA:

- Organized the Department Week for Mechanical Engineering Department in first week of Jan, 2016
- Total of 5 events were organized for students on Department Day. Events included Design Challenge, Quiz, Simulation Challenge, Design and Build Open Showcase and Coding Challenge
- Invited talk by Mr. Shailesh Phatak, Assistant General Manager, Corporate Business Excellence, TATA Motors was organized.
- A series of workshops was conducted on Computational Fluid Dynamics: Basic Theory and Turbulence Modelling; Computation Fluid Dynamics using ANSYS Fluent; FEA (Solid Mechanics) using ANSYS Workbench; Pressure Vessel Design and ASME Codes.
- A two-day training program on ABACUS was conducted under the guidance of Mr. P. Vignesh from EDS Technologies.
- An interactive session with Head of the department for the improvement of the teaching learning was organized.
- An informative session by experts regarding placements, internships, etc was conducted.
- MESA elections for the post of Coordinator and Secretary were conducted for the academic year 2016-17.
- A certified workshop on Altair Hypermesh '16 was organized for all the students.
- Organized a workshop on Spud Gun Making and RC Car basics in association with Quark
- A talk on Crash and Safety Analysis by Mr.Kedar Hendre, professional working with Tata Technologies was organized with the help of Dr. Kiran Mali.

##### (ii) Society of Automotive Engineering (SAE):

- Thanks to the continued support of Director Dr. Sasikumar Punnekkat, Department of Mechanical Engineering, Dr. Shibu Clement, Dr. R. S. Patil and Workshop Staff, SAE club was given a new room for the club in front of the IC Engines Lab.
- Team Grease Monkeys – BAJA of SAE BITS Goa successfully completed the manufacturing of the second BAJA vehicle of the campus on Feb. 9, 2016.
- Team Grease Monkeys – BAJA participated in the main event of SAE BAJA India 2016 at Indore, and cleared the technical inspection and figure of eight test for the first time.

4. Unveiling and showcase session of the second BAJA Vehicle 'The Avibhuj' outside B-dome was organized. Inauguration was done by the Director of the campus.
5. Induction for the new team of BAJA was conducted. A new team comprising of 25 members was formed.
6. The newly formed team for BAJA completed their design for the 3rd BAJA Vehicle of campus by May 2016.
7. The BAJA team participated in the virtual event of SAE BAJA India 2017 held at Chirst University, Bangalore in the month of June. The team successfully cleared the virtual event, being eligible to participate in the final Main Event and our design and improvements were appreciated by all the judges. Only 150 teams were given the opportunity to fabricate their vehicles out of a total of 415 teams.
8. Team Grease Monkeys – SUPRA successfully completed the manufacturing of their second Formula Vehicle and participated in the main event of the SAE SUPRA held at the Formula – 1 track of India, Buddh International Circuit in Noida in the month of July, 2016.
9. Club inductions were held for the first and second year students in the month of August. 88 students were inducted into the club after a written test and interview.
10. Unveiling and showcase of the second Formula Vehicle was done in the auditorium during Department Orientation by the Director of the campus.
11. Induction for the new team of SAE SUPRA was conducted. A new team comprising of 25 members was formed.
12. SAE Club in association with Centre for Technical Education organized a course on 'Vehicle Design and Dynamics' from August to December, 2016 and received a turnout of 34 students.
13. SAE Club organized a lab visit of the IC Engines Lab for the students of Automotive Mechanics under the guidance of Dr. Kiran Mali.
14. An invited talk was organized on 'The exciting world of motorsports and the technical support that makes it happen' by Padma Shri Mr. Narain Karthikeyan, India's first F1 driver on 20th November, 2016.
15. Team Grease Monkeys – SUPRA have completed the design of their 3rd Formula Vehicle and will start with the manufacturing of the vehicle.
16. Team Grease Monkeys – BAJA have completed the manufacturing of their 3rd BAJA vehicle and will start with the testing of the vehicle.

**(iii) Team Robocon:**

1. The Asia-Pacific Robot Competition (ABU Robocon) is a Pan Asia-Oceania University robotics competition. Students compete to design and build robots to complete a specialized task within a set period of time.
2. A 17 member team of undergraduate students from disciplines such as Mechanical, EEE, ENI was formed to participate in National round of ROBOCON held at Pune in March 2016.
3. Problem statement for ROBOCON 2016 was "Clean Energy Recharging the World". The team had to build two robots; Eco Robot and Hybrid Robot. The team began working from August 2015 in ERC room.
4. The team used design thinking methodology with emphasis on making and testing lots of prototypes before finalizing designs.
5. The team made efficient use of Machining tools in workshop such as lathe, mill etc. and 3D printer for their manufacturing needs.
6. The team is making use of electro-pneumatic actuation, omni-directional wheeled motion, BLDC motors, various sensors like laser, RGB, Proximity and Image processing etc. to build and test robots.
7. The team secured 32nd rank out of 100 participating teams in ROBOCON 2016.
8. Currently the team is working on ROBOCON 2017 themed: "The landing disc".

**(iv) Aerodynamics Club:**

1. Participated in IIT-Delhi's technical festival and won the 1st prize in the quadcopter competition.
2. Held written and P.I. induction rounds and admitted 67 new members into the club.
3. Organised open-for-all lectures on topics such as Aerodynamics, Avionics, Design and RC Flying. Also began with mentored projects and training for the new inductees.
4. Successfully presented two completed projects at an IEEE 'Tech Talk' event attended by 400+ students.
5. Built a brand new 3D Printer and 3D Scanner for the club to use and restructured the existing workspace. A new handbook for RC enthusiasts was published.
6. Organised an invited talk by Colonel Ananthanarayan on 'Indoor Flight' and a short workshop for the same.

7. Demonstrated a Trainer Plane and a Twin-Boom Model Aircraft to young students from Zari during Joy of Giving Week in association with Nirmaan.
8. The club demonstrated its projects at NIT Goa on the inaugural day of their technical festival. A short presentation of our club was given on stage by the members.
9. The club took amazing aerial shots of Waves '16 using a self-built quadcopter.
10. The club successfully participated in three events at IIT-Bombay's Techfest. One of the teams managed to secure a very well-deserved 8th place (out of 90) in the quadcopter competition. The club also made a powered glider (for Boeing's competition) and a model submarine.
11. The Aerodynamics Club is currently working on a Solar-UAV, V-22 Osprey, I.C. Engine Plane and a 4-Axis CNC Foam Cutter.
12. The club will soon conduct a three-day quadcopter-building workshop. 17 teams (including 4 teams from outside BITS) have registered for the same. It will also conduct a brand new case study event on air crashes during Quark '17.

#### B2.10.10 Department: Physics

Number of faculty members (as on 31 December 2016): 15

Senior Professors, Professors	01
Associate Professors	05
Assistant Professors	09
Lecturers	00
Visiting Faculty	00

Head of the Department: Dr. Toby Joseph

Contact details: toby@goa.bits-pilani.ac.in

Number of PhD Scholars: 11

Ph.D. Thesis Submitted during the year:

A. Sponsored Research activities:

Total number of Sponsored Projects in the department: 04. Details are given below.

(i) Ongoing projects:

1. **Project title:** Improving the energy conversion efficiency of Solar Cells using Spin Caloritronics

**Principle Investigator (PI):** E.S.Kannan

**Co-PI:** None

**Funding agency:** Department of Science and Technology

**Funding amount:** 22 Lakhs

**Project Duration - 3 Years, Started Date:** 25/11/13

(ii) Projects sanctioned during the year

1. **Project Title:** Observational signals of quantum gravity in CMB

**Principal Investigator:** Kinjal Banerjee

**Funding Agency:** SERB

**Funding amount:** Rs 318528

**Project Duration:** 3 years Start date 18/1/2016

**(iii) Projects completed this year: (Nil)**

1. **Project Title:** Magnetotransport in magnetic tunnel junctions  
**Principal Investigator:** Dr. Ram Shanker Patel  
**Co-investigator:** None  
**Funding Agency:** Department of Science and Technology, Govt. of India, under Nano mission program  
**Funding amount:** Rs. 52.65 Lakhs  
**Project Duration:** 4 years, Started Date: 3/9/2012
  
2. **Project Title:** Photoluminescence Studies on Undoped and transition Metal Doped ZnO Nanoparticles  
**Principal Investigator:** Teny Theresa John  
**Co-investigator:** None  
**Funding Agency:** Department of Science & Technology, Govt. of India  
**Funding amount:**Rs. 22.34 Lakhs  
**Project Duration:** 3 years+ 6 months (extended), Started Date: 9/8/12
  
3. **Project Title:** Aspects of some astrophysical systems like supernovae and Neutron stars in the light of new physics  
**Principle Investigator (PI):** Dr. Prasanta Kumar Das  
**Co-PI:** Dr. T. K. Jha and Dr. C. Sharma  
**Funding agency:** DAE, BRNS, Govt. of India  
**Funding amount:** Rs. 17.51 Lakhs  
**Project Duration:** 3+1(extended) years, Starting date: 27<sup>th</sup> May, 2011 and date of completion is 31<sup>st</sup> October,2015.
  
4. **Project Title:** Probing new physics at high energy colliders  
**Principle Investigator (PI):** Prasanta Kumar Das  
**Funding agency:** CSIR, Govt. of India  
**Funding amount:** Rs. 13.50 Lakhs  
**Project Duration:** 3 years, Starting date: 15<sup>th</sup> January,2013
  
5. **Project Title:** Neutron stars as potential continuous gravitational wave emitter  
**Principle Investigator (PI):** Dr. Tarun Kumar Jha  
**Funding agency:** DAE-BRNS, Govt. of India  
**Funding amount:** Rs. 13.50 Lakhs  
**Project Duration:** 3 years, Starting date: 15<sup>th</sup> January,2013
  
6. **Project Title:** Searching for new physics in B meson decay  
**Principle Investigator (PI):** Chandradew Sharma  
**Funding agency:** BRNS, DAE, Govt.  
**Funding amount:** Rs. 18.02 Lakhs  
**Project Duration:**3 years, Started Date 30-10-13

**B. Publications:****Journals / Publications (National / International)**

1. Arunkarthick Samudram, Bijeesh M.Mangalassery, Meenal Kowshik, Nandakumar Patincharath, Geetha K. Varier (2016), Passive permeability and effective pore size of HeLa cell nuclear membranes. *Cell Biol Int*, 40: 991–998.
2. Dongsuk Lim, E S Kannan, Inyeal Lee, Servin Rathi, Lijun Li, Yoontae Lee, Muhammad Atif Khan, Moonshik Kang, Jinwoo Park and Gil-Ho Kim High performance MoS<sub>2</sub>-based field-effect transistor enabled by hydrazine doping *Nanotechnology International* 2016
3. Inyeal Lee<sup>1</sup>, Servin Rathi<sup>1</sup>, Lijun Li<sup>1</sup>, Dongsuk Lim, Muhammad Atif Khan<sup>1</sup>, E S Kannan and Gil-Ho Kim Non-degenerate n-type doping by hydrazine treatment in metal work function engineered WSe<sub>2</sub> field-effect transistor *Nanotechnology International* 2016
4. A. Venkatesan, C. K. Ramesha, and E. S. Kannan In-situ reduction of graphene oxide on vertically aligned ZnO nanorods for reliable electrical contacts *Journal of Physics D- Applied Physics International* 2016
5. A. Venkatesan, In-Yeal Lee, Servin, Rathi, Gil-Ho Kim, and E. S. Kannan Improving the hydrogen sensing properties of thermally reduced graphene oxide using tin oxide nanoflowers at low operating temperature *Semiconductor Science and Technology International* 2016
6. PANDA Collaboration (involves A V Kulkarni and P N Deepak) Feasibility studies of time-like proton electromagnetic form factors at PANDA at FAIR e-Print: arXiv:1606.01118 [hep-ex] *International* 2016
7. PANDA Collaboration (involves A V Kulkarni and P N Deepak) Feasibility study for the measurement of  $\pi N$  TDAs at PANDA in  $\bar{p}p \rightarrow J/\psi \pi^0$  e-Print: arXiv:1610.02149 [nucl-ex] *International* 2016
8. Selvaganapathy J, P. K Das and P. Konar Drell-Yan as an avenue to test noncommutative standard model at large hadron collider *Phys.Rev.D* 93:116003, 2016. *International* 2016
9. Anita R. Warriar, R. Jayakrishnan, Teny Theresa John, C. Sudha Kartha and K. P. Vijayakumar Study on optical, electronic and thermal properties of  $\beta$ -In<sub>2</sub>S<sub>3</sub> thin films using photothermal beam deflection technique *J Mater Sci: Mater Electron* 27, 3628-3636 *International* 2016

**C. Conferences attended / papers presented (National / International) International**

1. Thermal hysteresis in Seebeck coefficient of MoTe<sub>2</sub> crystals. Dhavala Suri, S. P. Dash, and R. S. Patel. 5th *International Chalcogen Conference*, 19-21 December 2016, Goa
2. Electron-electron scattering dominance in MoTe<sub>2</sub> crystals at low temperatures. Dhavala Suri, S. P. Dash, and R. S. Patel. 61st Annual conference on Magnetism and Magnetic Materials, New Orleans, Louisiana, October 31 - November 4, 2016
3. 'Effect of non-linear vector interactions in nuclear matter', by Tuhin Malik, Kinjal Banerjee, T.K. Jha. 2015, Published in *DAE Symp.Nucl.Phys.* 60 (2015) 878-879.
4. 'Modified chiral potential and neutron stars', by Tuhin Malik, Kinjal Banerjee, T.K. Jha and B. K. Agrawal. 2016, Published in *DAE Symp.Nucl.Phys.* 61 (2016) 872.
5. 'Modified chiral potential and neutron stars with hyperons' by Tuhin Malik, Kinjal Banerjee, T.K. Jha and B K Agrawal. 2016, Published in *DAE Symp.High Energy Phys Symposium*, 2016.
6. 'Neutron Stars with Delta Isomers', Debashree Sen and T.K. Jha, *DAE Symp.Nucl.Phys.* 61 (2016) 892.
7. 'Hyperon matter in Neutron Stars', Debashree Sen and T.K. Jha, *DAE Symp.Nucl.Phys.* 61 (2016) 894.
8. Fabrication of p-n junction using ZnO nanopillars and Cu<sub>2</sub>O thin films, Anu Roshini, A. Venkatesan and E. S. Kannan, *International Conference of Young Researches on Advanced Materials. IUMRS-ICYRAM* Dec11-15 2016. Bangalore.

**D. Books Published / Edited during the year:****E. Conferences, seminars & workshops conducted**

1. The department arranged a day long meeting of Physics researchers in Goa on 9th December. The meeting had around 50 participants from institutions in Goa. The keynote address was delivered by Prof. Mandar Deshmukh of TIFR, Mumbai. This was followed by short talk by some of the participants and a poster session by PhD students.

**F. Invited Talks given by BITS faculty:**

**Papers presented/ Invited Talks in conferences/ Workshop/ School:**

**G. Invited talks arranged in the department:**

1. Dr. C. Sudhir, Assistant Professor, Department of Physics, Goa University visited the Institute on 20-02-2016 . He delivered Lecture on “Plasmonics- Light at the nanoscale”
2. Prof. Bijay. K. Agarwal, Professor, Saha Institute of Nuclear Physics, Kolkata visited the Institute on 22-03-2016 “Journey from terrestrial Nuclei to extra-terrestrial Neutron star”
3. Dr. Satyanarayana, Scientific Officer (G), TIFR Mumbai India visited the Institute on 23-03-2016 . He delivered Lecture on “ based Neutrino Observatory-India’s very own mega science project”.
4. Prof. Deshdeep Sahdev, Professor, Department of Physics, IIT Kanpur visited the Institute on 02-04-2016. He delivered Lecture on “Towards a technological renaissance in India – case study of an innovative high tech start-up”.
5. Prof. Deshdeep Sahdev, Professor, Department of Physics, IIT Kanpur visited the Institute on 04-04-2016 . He delivered Lecture on “ Was our cosmic dawn extra-dimensional”.
6. Prof. Philips Diamonds, Director General SKA visited the campus along with other SKA dignitaries on 10 of November, 2016. Prof. Diamond delivered a public lecture titled: “From Dawn of Time to Life in Universe: How SKA will change our perception of the cosmos”
7. Prof. Mandar Deshmukh, Professor, Department of Physics, TIFR Mumbai visited the institute on 09-12-2016. He delivered a Lecture on nano structures as a keynote address during the Goa Physics Researchers Meeting

**Physics Department Seminar Series (Faculties and Students)****Topic : Dark Matter and Compact Mass**

Speaker : Dr. Tarun Kumar Jha, Assistant Professor

Date : 05-02-2016

**Topic : Science behind temples**

Speaker : Dr. E. S. Kannan, Assistant Professor

Date : 13-02-2016

**Topic :Direct detection of gravitational waves**

Speaker :Dr. Kinjal Banerjee, Assistant Professor

Date :29-02-2016

**Topic : Gravitational Bending of Light**

Speaker : Prof. A. V. Kulkarni, Professor

Date :04-03-2016

**Topic :Phenomenon of synchronization in Nature**

Speaker : Prof. Gaurav Dar, Associate Professor,

Date :11-03-2016

**Topic :Low temperature hydrogen gas sensor**

Speaker :A. Venkatesan, Research Scholar,

Date :18-03-2016

**Topic : Searches for Physics Beyond the standard model at LHC**

Speaker : Mr. J. Selvaganapathy, Research scholar

Date :15-04-2016

**Topic :The SUN**

Speaker :Dr. Tarun Kumar Jha Assistant Professor,

Date : 03/09/2016

**Topic : Two Photon-Photothermal microscopy : Application in Biomolecular imaging"**

Speaker : Mr. M. M. Bijeesh, PhD Scholar

Date :10/09/2016

**Topic :Spin Seebeck Effect in Magnetic Tunnel Junction**

Speaker : Dr. Ram Shankar Patel, Assistant Professor,

Date : 20-08-2016

**Topic :Binary Stars and Kleplerian Parameters**

Speaker :Mr. Tuhin Malik, PhD Scholar

Date :24-09-2016

**Topic :A few aspects of thermopower generation and thermoelectric materials"**

Speaker : Ms. Dhavala Suri, PhD Scholar

Date :01-10-2016

**Topic :Algebraic solution to Hydrogen Atom Problem**

Speaker :Prof. Raghunath Ratabole, Associate Professor,

Date :08/10/2016

**Topic :Extended  $U(1)_X$  Non-commutative Standard Mode Speaker :**

Mr. Selvaganapathy, PhD Scholar,

Date :15-10-2016

**Topic : " Neutron Stars with Hyperons"**

Speaker : Ms. Debashree Sen, PhD Scholar.

Date and : 22/10/2016

**Topic : " Implication of fermionic dark matter in the supernova SN1987A cooling "**

Speaker : Dr. Prasanta Kumar Das, Associate Professor.

Date: 19/11/2016

**Topic : " Introduction to Supersymmetry "**

Speaker : Ms. Akhila Mohan, PhD Scholar.

Date : 26/11/2016

**Topic : Investigating how the brain works : What can Magnetic Resonance Imaging (MRI) tell us?**

Speaker : Mr. Mayank

Date and Time " 10/12/2016

- H. Awards and recognitions won by faculty and students
- I. Faculty Development, International Collaboration & Industry Immersion:
- J. Significant new equipments / experimental facility added during the year:
- K. Departmental association / club activities:



**B2.11 DIVISION / UNIT/ CENTRE-WISE ACTIVITY****Alumni Affairs Division:****Alumni Affairs Division:****Distinguished Alumnus Award 2016:**

“BITS Pilani Distinguished Alumnus Award” in 2016 to the following alumni:

Prof. Alok Choudhary	John G. Searle Professor, Dept. of Electrical Engineering & Computer Science, Northwestern University - for <b>Academic Teaching and/or Research</b>
Prof. G Ravindra Kumar	Senior Professor, Tata Institute of Fundamental Research (TIFR), Mumbai - for <b>Academic Teaching and/or Research</b>
Mr. N S Parthasarathy	Co-Founder, President & COO, Mindtree Limited -for <b>Entrepreneurship</b>
Mr. Mathew Cherian	CEO, HelpAge India - for <b>Social Entrepreneurship</b>

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research.

**BITSians Day:**

The third edition of 'BITSians Day' was celebrated on 5<sup>th</sup> of August, 2016.

**Embryo & On-campus Lectures:**

Alumni Affairs Division of BITS Pilani K K Birla Goa Campus has organized 9 Embryo & On-campus talks from January – December, 2016. Details are as follows:

S. No	Date	Title Of The Talk	Speaker's Name
1	15 <sup>th</sup> Jan, 2016	BITS To Norway-Opportunities For Higher Studies In Chemical Engineering	Mr. Shareq Mohammed Nazir
2	2 <sup>nd</sup> Feb, 2016	Social Pressure	Mrs. Natalie Edwards
3	16 <sup>th</sup> Feb, 2016	CAT Champs	Abhishek Desai Siddharth Sridhar Arpit Sarda Kunal Konde
4	17 <sup>th</sup> Feb, 2016	Diversity And Demographics Of Distant Rock Worlds	Dr. Leslie Rodgers
5	7 <sup>th</sup> Mar, 2016	Entrepreneurship	Mr. Kartik Hosanagar
6	9 <sup>th</sup> Mar, 2016	CS: Competitive Coding & Machine Learning	Mr. Hari Prasad
7	15 <sup>th</sup> Mar, 2016	Why The Money That You Think Might Keep You Happy, Won't!!	Mr. Nishant Suri
8	8 <sup>th</sup> Apr, 2016	Opportunities In Aeronautical Industry - A Journey From Bits To HAL	Mr. Sanket Shah
9	9 <sup>th</sup> Apr, 2016	How To Build Awesome Things - An Intro To Product Management	Mr. Dalan Mendonca
10	6 <sup>th</sup> Aug, 2016	Distinguished Alumnus Awardee: N S Parthasarathy's Talk on Entrepreneurship	Mr. N S Parthasarathy
11	28 <sup>th</sup> Aug, 2016	Alumni summit 2.0	Mr. Kartik Aneja Mr. Rishabh Goel Mr. Ankit Taparia Mr. Sanchit Sethi Mr. Prakhar Bindal Mr. Bhaskar E V Mr. Nikhil Tavora
12	29 <sup>th</sup> Aug, 2016	How to finance your masters abroad?	Mr. Rishabh Goel
13	9 <sup>th</sup> Sep, 2016	Stand Out, Win Trust and Gain Credibility	Mr. Mark Bowden
14	10 <sup>th</sup> Sep, 2016	The Deoliwallahs	Mr. Dilip D'Souza

15	30 <sup>th</sup> Sep, 2016	Anchors weigh in on cytoplasmic dynein regulation	Ms. Vaishnavi Ananthanarayanan
16	6 <sup>th</sup> Oct, 2016	GRE Champs	Anmol Sahoo Priyanshi Vadalia Dharinee Bhandari and Rishabh Sethunathan
17	12 <sup>th</sup> Oct, 2016	BITS2MS/PhD	Vikas Goel Danish Khan Siddharth Gupta

**Alumni Visits:**

Name of the Alumnus	Batch	Profession	Purpose of visit
Aswini Kaarthik	1997	Analyst in Data Management Space	Personal Visit
Kaarthik Sivakumar	1993	Engineer	Personal Visit
Aditya Kambhampati	2004	Data Analytics Consultant	Campus Visit
R Ramanujam	1978	Theoretical Computer Scientist	Lectures
Vivek Ladha	1978	Industrialist	Casual
Smarajit Dey	1974	Executive/Academic	Campus Visit
Vaishnavi Ananthanarayanan	2004	Research Scientist	Delivering Lecture
Rishabh Goel	2009	Associate Relationship Manager	Alumni Summit 2.0 & Talk
Prakhar Bindal	2006	Entrepreneur	Alumni Summit 2.0
Sanchit Sethi	2008	Entrepreneur	
Nikhil Tavora	2010	Entrepreneur	
Ankit Taparia	2005	Entrepreneur	
Kartik Aneja	2008	Entrepreneur	
Bhaskar E V	1997	IRS	
Nithin Sebastian	2005	Pursuing MBA	Campus Visit
N S Parthasarathy	1978	Entrepreneur	DAA
Sanjay Singhai	1977	Founder & CEO	Exploring opportunities
Suresh Narasimhan	1979	Telecommunication executive	General
Sangamitra Kundu Narasimhan	1982	Museum Management	Travel
Sanket B shah	2005	Flight Test Engineer	Students Interaction
Vishrut Shukla	2005	Senior Product Manager	DAA meeting
Aditham G P	2006	IT	Campus Interviews

**Alumni Summit:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, BITS Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 28th of August, 2016. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Seven speakers who were invited for BITS Alumni Summit 2.0 are:

- Mr. Kartik Aneja, CEO and Co-Founder at Nayi Disha Studios.
- Mr. Rishabh Goel, Associate Relationship Manager at Prodigy Finance
- Mr. Ankit Taparia, Co-Founder of Teramatrix Technologies
- Mr. Sanchit Sethi, CEO and Founder of StayUncle
- Mr. Prakhar Bindal, CEO & founder of NameCart(formerly Axiom)
- Mr. Bhaskar E V, Under-Secretary to Ministry of Finance, Government of India
- Mr. Nikhil Tavora, Former Match Coordinator & Operations Executive at FC Goa

**Prof. Suresh Ramasamy Memorial Award 2016:**

The project idea 'Cosmic Ray Flux Measurement & Analysis' done by the students: Sanket Deshpande, Lucky Kapoor, Pankaj Tiple and Vibhav Joshi was selected for Prof. Suresh Ramaswamy Memorial Award 2016-17.

**Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani and Dhruv Shekhawat as recognition to their research work.

**Regular Activities:**

Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

**ACADEMICS AND RESOURCE PLANNING**

The Academics and Resource Planning (ARP) Division at the BITS Pilani, K K Birla Goa Campus looks after the introduction of new courses, change and addition to the pool of discipline electives, change in pre requisites, change in the course description, formulation of new minor programs, curriculum redesign and running of edX courses. Ever since its inception in the campus at the beginning of the year 2014, a number of activities have been carried out. An office for the same has been established with recruitment of a Non-Teaching Staff as an Office Assistant.

The Division has also been involved in the creation of the Departmental Committee on Academics (DCA) and the ccDCA members for the Goa Campus. The division also helped to enlighten the faculty members about edX courses and the mode of delivery and various aspects related to this teaching platform and pedagogy. Various actions related to introduction of a number of the courses in the edX platform including MOOCs, curriculum appraisal, new minor programmes etc. were taken up in the past year and several more are going to be taken up in the present year as part of Departmental activities.

Two Minor Programmes, one in Physics and the other one in Economics were introduced in the year 2016 by their respective departments.

A Number of Courses from various Departments were sent for Senate Approval in the Year 2016-17

**CURRICULUM REVIEWS HELD AT GOA CAMPUS:**

The following Curriculum Reviews were conducted for the academic year 2016-17.

- Curriculum Review for Chemistry Department was conducted on 20th of April, 2016 at K K Birla Goa Campus. The Team of External Experts visiting the Goa campus comprised of Prof. Amalendu Chandra, Department of Chemistry, IIT Kanpur, Prof. Samaresh Bhattacharya, Department of Chemistry, Jadavpur University, Prof. J. M. Khurana, Department of Chemistry, Delhi University and Dr. Vilas Dahanukar from Dr. Reddy's Laboratories Ltd.
- Curriculum Review for Computer Science and Information Systems (CS & IS) was conducted on 27<sup>th</sup> of August, 2016 at K K Birla Goa Campus. The Team of External Experts who visited our campus comprised of Prof. C Pandurangan, Department of Computer Science and Engineering, Indian Institute of Technology, Madras, Prof Y.N. Srikant, Department of Computer Science and Automation, Indian Institute of Science, Bangalore and Dr. HemaGopal, Vice President, Tata Consultancy Services Limited, Chennai.

**ACADEMIC RESEARCH DIVISION**

First Degree Thesis off Campus list Second Semester 2015-2016

S.No	Name of the student	ID No	Place of thesis work
1	Bhavan Jasani	2011B5A3305G	Nanyang Technological University, Singapore
2	Vaishnavi Narayanan	2011B4A8547G	National University Of Singapore, Singapore
3	Harikrishna Valiyath	2012A8PS383G	Absentia Virtual Reality Private Limited, Thane
4	Nihanth Subramanya	2012A3PS151G	Mozilla Corporation, USA
5	Vrushali Prasade	2012A3PS219G	Absentia Virtual Reality Private Limited, Thane
6	R. Sumukh	2012A3PS152G	Solar Energy Research Institute Of Singapore, National University Of Singapore, Singapore

S.No	Name of the student	ID No	Place of thesis work
7	Geethika P	2012B2PS619G	Monash University, Melbourne
8	Chirag Vartak	2012A3PS242G	IIIT Hyderabad
9	Sumit Tiwari	2011B4A8559G	Duronto Tech Pvt Ltd (Travelkhana.com), New Delhi
10	Sanjukta Krishnagopal	2011B5A4438G	Technische Universitat Berlin
11	Prajwal V P	2011B5A3096G	National Centre for Radio Astrophysics, Pune
12	Cariappa K S	2011B5A3440G	BITS- Pilani, Rajasthan
13	Ganesh R	2011B3A3323G	Abdul Lateef Jameel Poverty Action LAB(J-PAL) South Asia at IFMR, Chennai
14	Abhishek Saikia	2011B3A1372G	Capital Float (Zen Lefin Pvt Ltd), Bangalore
15	Mudit Badlani	2011B3A1262G	PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur
16	Shivesh Anand	2011B2A3637G	Khademhosseini Lab, Harvard-MIT Health Sciences & Technology, US
17	Abhishek Kumar Annamraju	2012A3PS118G	Tata Elxi Ltd. Bangalore
18	Anirudh Ravichandran	2011B4A3556G	Telecom Paristech, France
19	G.Amit Jamadagni	2011B4A3620G	Fudan University, China
20	Raunaq Vohra	2011B4A8521G	Tractable Ltd, United Kingdom
21	Prodyumna Kumar Mohanta	2012A4PS256G	National Tsing Hua University, Taiwan
22	Neeraj Joshi	2012A4PS336G	Spinny, Yellow Drive Technologies Pvt Ltd (Gurgaon, India)
23	Arpan Agrawal	2012A4PS203G	MSAS, Ecoworld Bengaluru (India)
24	Shriniket jakati	2011B5A4459G	Tirupati packaging, Daman
25	Chawla Karan Gansham	2012A4PS338G	National university Of Singapore, Singapore
26	Jiten saini	2010A4PS538G	Shapecrunch Technology pvt ltd, New Delhi
27	Prabhudatta Das	2010A4PS660G	MeraDoctor(Health Ventures Private Ltd), Maharashtra
28	MVS Sai Revanth	2012A4PS238G	SMS India, Gurgaon
29	Sanjeev Kannan	2012A4TS169G	Alstom transport Andhra pradesh
30	Keya ghonasyI	2011B4A4604G	IIT Bombay
31	Hrishikesh Joshi	2011B2A4589G	Nanyang Technological University, Singapore
32	Aditya Kandaswamy Aiyer	2011B5A4412G	TIFR Hyderabad
33	Jaya Tiwari	2011B4A4554G	IIT Kanpur
34	Aditya Sunil Joshi	2012A7PS004G	IIT Madras
35	Ritesh Kumar Singh	2012A7PS072G	Department of computer science & Information Technolgy University of Leipzig, Germany
36	Vandan Phadke	2012A7PS006G	Edurance International Group, Mumbai
37	Shubham Maheshwari	2011B5A3295G	Indian Institute Of Science, Bangalore
38	Bhavul Gauri	2011B4A7439G	Edurance International Group
39	Anshu Aviral	2011B5A7289G	Carnegie Mellon University, Pittsburgh USA
40	Palash Karia	2012C6PS 606G	MARA Studios Pvt. Ltd. Bangalore
41	Sugandhita	2011B1A8674G	IIS Bangalore

S.No	Name of the student	ID No	Place of thesis work
42	Manasi Prashant Kane	2011B1A8460G	Ecole Polytechnique Federale de Lausanne, Switzerland
43	Aditya Khanduri	2011B1A3679G	Niki.ai(Techbins Solutions pvt Ltd. Bangalore)
44	ADITYA AGARWAL	2011B5A4433G	IIT Hyderabad
45	Shardul Bhusari	2011B1A4666G	NTU, Singapore
46	Anurag kashyap	2012C6PS461G	NTU Singapore
47	Kunal Bajpai	2012A7PS075G	Center for Development of Adanced Computing, Pune
48	Amrita Suresh	2012A7PS054G	IIT, Bombay
49	Akshay Pai Raikar	2011B2A4651G	Ben Gurion University of the Negev, Israel
50	Meera Haridas	2011B2A1043G	Louisiana State University, USA
51	Ankur Agarwal	2011B4A4400G	Neurorobotics Laboratory, Beuth Hoscschule fur Technik Berlin Germany
52	Madhuri R Iyer	2011B4A4467G	Aker Powergas Subsea Pvt Ltd, Pune
53	Devansh Mehta	2011B4A4026G	Gala Precision Engineering PVt Ltd, Thane
54	Nipun Thamatam	2011B3A8495G	ISRO, Bangalore
55	Abhinav Gupta	2011B2A7611G	Carnegie Mellon University, USA
56	Tushar Nagarajan	2011B5A7432G	SERC, IISC, Bangalore
57	Nishanth Chandrasekhar	2011B5A3365G	Ilsc,Bangalore

**First Degree Thesis on Campus list Second Semester 2015-2016**

S.No	Student Name	ID No	Faculty Name	Organization
1	Kalpita Bakal	2012A4PS245G	Dr.Shibu Clement	Bits Pilani K.K Birla Campus
2	Saurabh A. Mahindre	2011B2A3658G	Dr.Sukanta Mondal	Bits Pilani K.K Birla Campus
3	Rituparna Ghosh	2012A7PS109G	Dr.Biju K Raveendra	Bits Pilani K.K Birla Campus
4	Mohana Bhattacharya	2011B2A7541G	Dr. Neena Goveas	Bits Pilani K.K Birla Campus
5	Sanskriti Dawle	2012A7PS083G	Dr. Neena Goveas	Bits Pilani K.K Birla Campus
6	Aman Karan Srivastava	2012A7PS126G	Dr. Neena Goveas	Bits Pilani K.K Birla Campus
7	Divya Verma	2011B1A8678G	R. Femi	Bits Pilani K.K Birla Campus
8	Shivank Mehra	2011B5A8292G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
9	Akash Deep Singh	2012A8PS321G	Dr Nitin sharma	Bits Pilani K.K Birla Campus
10	Rajat Mishra	2011B4A7564G	Dr. Radhika vathsan	Bits Pilani K.K Birla Campus
11	Mehta Deven Atul	2012A8PS384G	Dr. Debasis Patnaik,	Bits Pilani K.K Birla Campus
12	Animesh Choudhary	2012A3PS137G	Dr. Debasis Patnaik,	Bits Pilani K.K Birla Campus
13	Himanshu Jethani	2012A8TS364G	Dr. Mridula Goel,	Bits Pilani K.K Birla Campus
14	Sumit Jain	2012C6PS430G	Dr. Debasis Patnaik	Bits Pilani K.K Birla Campus
15	Mihir Kakrambe	2011B5A7437G	Mr. T.S.R.K. Prasad	Bits Pilani K.K Birla Campus
16	Palash Dhir	2011B2A4630G	Dr. Varinder Singh	Bits Pilani K.K Birla Campus
17	Adheesh Bhatia	2011B4A3535G	Dr.Tarkeshwar Singh	Bits Pilani K.K Birla Campus
18	Alwin Michael Tomy	2011B4A1588G	Dr.Saibal Gangully and	Bits Pilani K.K Birla Campus
19	Ronit Dutta	2011B3A8492G	Dr. Debasis patnaik	Bits Pilani K.K Birla Campus
20	Abhinav Arora	2011B1A4680G	Dr. Raviprasad Aduri	Bits Pilani K.K Birla Campus
21	Kajal Varma	2012A7PS009G	Dr. Santonu Sarkar	Bits Pilani K.K Birla Campus
22	Anmol Anand Panda	2012A7PS123G	Dr. Neena Goveas	Bits Pilani K.K Birla Campus
23	Shaurya Garg	2011B1A8691G	Dr. Arnab Banerjee	Bits Pilani K.K Birla Campus
24	Sarweshwer Gupta	2011B2A1595G	Dr. P. Bhavana	Bits Pilani K.K Birla Campus

25	Sushruth S	2012A7PS014G	Dr.Neena Gveas	Bits Pilani K.K Birla Campus
26	Onkar Suhas Samant	2012C6PS413G	Mr. Rajendra Kumar Roul	Bits Pilani K.K Birla Campus
27	Anugu Venkata Saith Reddy	2012C6PS468G	Mr. Rajendra Kumar Roul	Bits Pilani K.K Birla Campus
28	Anish Chattaraj	2012A1PS758G	Debasis Patnaik	Bits Pilani K.K Birla Campus
29	Kunal Konde	2012A8PS731G	Debasis Patnaik	Bits Pilani K.K Birla Campus
30	Abhinav Kumar Pandey	2012A4TS291G	Dr. Shibu Clement	Bits Pilani K.K Birla Campus
31	Vishakha Gupta	2011B5A3258G	Dr. Ram Shankar Patel	Bits Pilani K.K Birla Campus
32	Sundar Ganesh	2011B5A4313G	Dr.Shibu Clement	Bits Pilani K.K Birla Campus
33	Kailash Meiyappan	2012A7PS025G	Dr. Prabal Paul	Bits Pilani K.K Birla Campus
34	Samarth Kishnani	2012A4PS253G	Dr. Varinder Singh	Bits Pilani K.K Birla Campus
35	Krishna Gupta	2012A1PS531G	Dr. Jegatha Nambri Krishnan	Bits Pilani K.K Birla Campus
36	Shubham Gupta	2012A8PS683G	Dr.R.P.Pradhan	Bits Pilani K.K Birla Campus
37	Prithu Bhatnagar	2011B5TS380G	Dr. Kinjal Banerjee	Bits Pilani K.K Birla Campus
38	Ananth Narayan	2012A7PS507G	Dr.Prabal Paul	Bits Pilani K.K Birla Campus

**First Degree Thesis on Campus list Fiest Semester 2016-2017**

S.No	Student Name	ID No	Faculty Name
1	Abhinav Gupta	2013A8PS480G	Prof. Neena Goveas
2	Aditya Dave	2013A3PS133G	Dr. K.R.Anupama
3	Mohit Menghani	2013A3PS128G	Prof. M.K.Deshmukh
4	Akshar Gupta	2012B4A3737G	Dr. J.K.Sahoo
5	Swapnil Milind Mhatre	2012B5A8366G	Dr. E.S.Kannan
6	Varun Mathur	2013B5PS418G	Dr. Kinjal Banerjee
7	Kevin Abraham	2012B5A7530G	Dr. Radhika Vatsan
8	Sagnik Bhattacharya	2012B5A4329G	Dr. Prasanta Kr. Das
9	Shaikh Saif	2013A4PS183G	Dr. Neena Goveas
10	K. Balaje	2012B4A4443G	Dr. P dhanumjaya
11	Ankit Nanda	2013A4PS383G	Dr. Shibu Clement
12	Shubham Maheshwari	2013A4PS217G	Dr. Sachin Waigaonkar
13	Hajare Apurv Bhaskarrao	2013A4PS391G	Dr. Sachin Waigaonkar
14	Anuraag Gupta	2012B1A4594G	Dr. Sukanta Mondal
15	Prasun Anad	2012B1A1645G	Dr.Veeky Baths
16	Ankur Madiyan	2012B3A8440G	Dr.Debdulal Thakur
17	Tushar Singh	2012A3PS132G	
18	Shrey Pareek	2012B5A8276G	Dr. Anita Agrawal
19	Dharm Skandh Jain	2013A7PS696G	Dr.Raviprasad Aduri
20	Sanket Rajan Gupte	2013A7PS078G	Dr.Raviprasad Aduri
21	Neha Garg .	2013A8PS417G	DR.Gautam Bacher
22	Rempa l s Chaitanya .	2013A8PS831G	Dr.Chandram K
23	Kandregula S.S.Priyanka	2012B4A7616G	Dr.Prabal Paul
24	Krishnan G	2012A4A7207G	Dr.Aswin Srinivasan

**First Degree Thesis Off Campus list First Semester 2016-2017**

S.No	Name of the student	ID No	Place of thesis work
1	Parag Jain	2013A1PS585G	Uttar pradesh Expressway industrial Development Authority, Lucknow
2	Prithiv Natarajan	2013A1PS823G	Technische Universitat Braunschweig,
3	Devdutt Sharma	2012B5A1727G	IIT, Kharagpur
4	Vijit Maithel	2012B5A4716G	IISc, Bangalore
5	Akshay biniwale	2012A4B5299G	NUS, Singapore
6	M Ashwin Krishnan	2012B5B4247G	Radboud University, Nijmegen, Netherlands
7	sahil Tapiawala	2012B2A3495G	Singapore University of Technology and Design
8	Shashwat Verma	2012B2A4638G	NUS, Singapore
9	siddhant Baweja	2012B5A4548G	IIIT, Hyderabad
10	Joshi Kushal Rajendra	2013A4PS136G	NUS, Singapore
11	Sukirt	2013A4PS243G	IIT, Bombay
12	Kevin Agrawal	2013A4PS254G	IIT,Bombay
13	Hemaditya Malla	2013A4PS397G	Nanyang Technological University, Singapore
14	Parth Thakkar	2013A4PS022G	IIT,Kharagpur
15	Harnoor Singh	2013A4PS059G	IIT,Kharagpur
16	Aastha Shah	2013A4PS377G	Technische Universitat Braunschweig,
17	Sanmit Mukund more	2012B5A4717G	IIT,Bombay
18	Ambareesh Rathi	2012B4A4412G	TuDelft, Netharlands
19	Sanath Keshav	2013A4TS359G	Barcelona Supercomputing Center, Spain
20	Bhavya Aggarwal	2012B3A8411G	centre for International Trade & Development, New Delhi
21	Siddharth Sankaran Dinesh	2012B3A7519G	National Institute of Informatics, Japan
22	Chirag shekhar	2012B4A3545G	Institute of Econometrics , Westfalische Wilhelms-Universitat, Muenster
23	Shreyas Rajagopal	2012B4A4726G	IIT,Bombay
24	Rahil Parikh	2012B1A3696G	Politecnico Di Torino, Italy
25	P.Bharath Srinivas	2012B1A3700G	Technische Universitat Dresden
26	Varun chopra	2012B4A4517G	BIAS, Bremen, Germany
27	Karthik Srinivasan	2012B1A4652G	California Institute of Technology, Pasadena
28	Janani Durairaj	2012B1A7735G	Wageningen University, Netherlands
29	Radhika Nikam	2012B5A3427G	NUS, Singapore
30	Samyukta Ramnath	2012A3B5038G	Technische Universitat, Ilmenau
31	T Sai Ruthvik	2013A8PS489G	Institute Superieur D'electronique de ,Paris
32	Janvi Palan	2012B4A3712G	Politecnico Di Torino, Italy
33	Achint kumar	2012B5A3325G	Carleton University, canada
34	K S Bhargav Ram	2013A8PS145G	IIT,Bombay
35	Mandar Pradhan	2013A3PS008G	IISc, Bangalore
36	Syed Shamoail Haque	2013A8PS708G	Peeply Technologies pvt Ltd. Socialcops, New Delhi
37	Aayush Attri	2013A8PS378G	Carnegie Mellon University,Pittsburgh
38	Pritish Gautam Nahar	2013A3PS148G	NUS, Singapore
39	Shubham Sandeep Sarwate	2013A3PS316G	Carnegie Mellon University, USA
40	Tanvi Nitin Jadhav	2013A3PS305G	Technische Universitat Braunschweig,Germany

S.No	Name of the student	ID No	Place of thesis work
41	Devansh Raj	2012B1A3662G	AU-KBC Research Centre, Chennai
42	Naman Gupta	2012B3A8498G	University of california, San Diego
43	Ketan Pant	2013A8PS413G	IISc, Bangalore
44	Anusha Kamat	2013A8PS453G	PESIT, Bangalore
45	Riddhish Umesh Pandharkar	2012B2A3579G	Freie Universitat, Berlin
46	Ameya Riswadkar	2012A3B5042G	TIFR, Mumbai
47	Kshirsagar Rutuja Milind .	2012B4A3711G	University of Hyderabad
48	Abhay Sarda .	2012B2A3547G	Solar Energy Research Institute, Singapore
49	Yerramilli Subramanya Vamsi	2013A8PS303G	First green Pvt Ltd, Gurgaon
50	Savant Apoorva Avadhoot	2012B5A8419G	IIT,Bombay
51	Aashima Garg	2012B3A8464G	IIIT, Bangalore
52	Srikrishna V	2013A3PS244G	ParallelDots, Haryana
53	Siddharth Gupta	2013A7PS017G	University of Edinburgh
54	Yash Shirish Kasture	2012B4A7571G	University of Helsinki, Finland
55	Rohith.R	2013A7PS124G	Nanyang Technological University, Singapore
56	Bhargav Srinivisa Desikar	2013A7PS053G	INRIA Modal, France
57	Siddhartha Govilkar	2012B4A4452G	IIT Madras
58	Sumit Kumar	2012B1A1650G	JNU, Delhi
59	Hardik rajesh Hingorani	2012B2A1636G	Nanyang Technological University, Singapore
60	Aayush Chaturvedi	2012B3A8248G	Institute for Social and Economic change, Bangalore
61	Abhishek Srivastava	2012B4A7756G	Technische Universitat Munchen, Germany
62	Mohak Chadha	2012B4A7524G	Technische Universitat Dresden
63	Shreyash Mohatta	2012B4A7421G	TCS Innovation Labs, Gurgaon
64	Tanmay Netke	2012B2A1610G	Nanyang Technological University, Singapore
65	Roshan M Regy	2013A1PS646G	IIT, Madras
66	Vibha Nasery	2012B2A8639G	IISc, Bangalore
67	Shivesh Anand	2011B2A3637G	Harvard-MIT, Cambridge
68	N Bittu	2012B5A3514G	Quazar Technologies Pvt Ltd, New Delhi
69	S RamanaSubramanyam	2013A8PS467G	Telecom Paristech, Paris, France
70	Priyanka Bedarkar	2012B2A7586G	IISc, Bangalore
71	R.Srinath	2012B5A7560G	Vrije Universiteit Brussel, Belgium
72	Sraddha Barke	2013A8PS344G	TIFR, Mumbai

**Second Semester 2015-2016 M.E. (BITS G629T) 'DESSERTATION**

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2014H140037G	Dattatray Londhe	Over the air Programming of WSN mute Platform, with minimal turn off network time.	Prof. K.R Anupama	Bits Pilani K.K Birla Campus
2.	2014H123031G	Kundan Kumar	GNSS Receiver Design	Dr. Nitin Sharma	Bits Pilani K.K Birla Campus
3.	2014H129002G	Sundram S	In silico analysis of animal toxin target interactions	Sukanta mondal	Bits Pilani K.K Birla Campus



S.No.	ID No.	Name of student	Topic	Supervisor	Place
4.	2014H103020G	Prateek Khandelwal	Refactoring of GPU Kernels for optimal performance and verification	Prof Santonu sarkar	Bits Pilani K.K Birla Campus
5.	2014H103018G	Avi Bhargava	Understanding and implementation of machine learning algo. for detection of unknown malware	Dr S.k Sahay	Bits Pilani K.K Birla Campus
6.	2014H103016G	Indrajeet Khandekar	Efficient implementation of developed algo. For detection of unknown malware	Dr S.k Sahay	Bits Pilani K.K Birla Campus
7.	2014H103019G	Prashant	Energy Efficient Scheduling in multicore multi processor or RTS	Dr Biju K.R	Bits Pilani K.K Birla Campus
8.	2014H103023G	Alen K shabu	Performance improvement of multicore scheduler in homogenous and heterogenous systems	Dr Biju K.R	Bits Pilani K.K Birla Campus
9.	2014H101010G	Anubha Deo	Rheology of Poly-layered silicate clay nano composite	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
10.	2014H101015G	Narendra Chundi	Kinetics and Thermodynamics of gas hydrate systems	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
11.	2014H101011G	M. Dileep	Dynamic Matrix Control of a chemical system	Prof. Saroj S. Baral	Central salt and Marine Chemicals Research Institute, Gujrat
12.	2014H101013G	Geeta Dasila	Synthesis and Characterization of hydroxyapatite based sustained release nano fertilizer	Prof. Sutapa Roy Rmanan	Bits Pilani K.K Birla Campus
13.	2014H101012G	Haiom	Removal of Diclofenac sodium from waste water using adsorption process	Prof. S. D. Manjare	Bits Pilani K.K Birla Campus
14.	2014H101009G	Mohit Tiwari	Optimizing Biogas from waste water by anaerobic digestion	Prof. S. S. Baral	Bits Pilani K.K Birla Campus
15.	2014H123032G	Rahul Jaiswal	Statistical forecasting of Solar irradiance data analysis	Dr.Wilfred Walsh	NUS, Singapore

**First Semester 2016-2017 M.E. (BITS G629T) "DESSERTATION"**

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2015H101008G	Shubhangi Singh	Hybrid Desulfurization of high sulfur Indian coal	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
2.	2015H101009G	Shah Manovi Tailap	Molten Salt gasification of carbonaceous materials	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus

S.No.	ID No.	Name of student	Topic	Supervisor	Place
3.	2015H101014G	Subrejha J	Multilevel inferential control of reactor producing ethanol	Dr. Dhanya Ram V Dr. Saibal Ganguly	Bits Pilani K.K Birla Campus
4.	2015H101006G	Krupa Balakrishnan	Graphene Composite coatings for anticorrosion behaviour	Prof. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus
5.	2015H101007G	Vinay Kaushik	Effect of shapes and size of magnetic hydroxyapatite	Prof. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus
6.	2015H101010G	Rushabh Ketan Mewawala	Microwave assisted beneficiation of iron-ore	Dr. Saroj Baral	Bits Pilani K.K Birla Campus
7.	2015H101013G	Bhati M Khavir M Khalid	Tribological (lubrication) behaviour of biogreases	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
8.	2015H101011G	Shaifali Tyagi	A study of rheological dynamics exhibited by biogreases	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus

**CATEGORY-WISE DISTRIBUTION OF Ph.D. STUDENTS ON ROLLS DURING THE YEAR 2016**

S.No.	CATEGORY	NO. OF STUDENTS ON ROLL	
		II Sem 2015-2016	I Sem 2016-17
1.	Staff	26	23
2.	Staff (Pre-Ph.D course work)	0	0
3.	Research Scholars	141	159
	<b>GRAND TOTAL</b>	<b>167</b>	<b>182</b>

**I. Statistical Information for Ph.D. Programme**

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	16	16	15	01
I Sem. 2016-17	34	34	32	02
<b>Total</b>	<b>50</b>	<b>50</b>	<b>47</b>	<b>03</b>

**II. Statistical Information for Faculty Development Scheme**

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2015-16	0	0	0	0
I Sem. 2016-17	05	05	04	01
<b>Total</b>	<b>05</b>	<b>05</b>	<b>04</b>	<b>01</b>

**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)
	05		0		45

Discipline wise Break-up		Discipline wise Break-up	
EEE	1	Biosciences	09
		Chemistry	05
		Chemical	02
		EEE	07
		Mathematics	02
		Mechanical	09
		CSIS	07
		Lang. & Hum.	05
		Management & Eco &Fin.	02
		Pharmacy	0
		Physics	02
		Civil	0

## COMMUNITY WELFARE

**Faculty in charge: Prof. Radhika Vathsan, Department of Physics.**

The Community Welfare Unit facilitated the following activities during the calendar year 2016.

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 pharmacy is available at the medical centre and a lab collection point to provide diagnostic facilities has been functional with a tie-up with a local diagnostic laboratory, Ranbaxy and Thyrocare. The Medical Centre has state-of-the-art equipment such as Dental Chair, Digital X-ray machines, Tread mill (TMT), ECG machine, Lung function test, X-ray, Multiparameter monitors, Defibrillator, Syringe pumps.etc

A Cashless Medical Reimbursement Scheme has been operational to provide easily accessible medical care to the residents of the campus. The Scheme can be accessed through a health card, which can also be used to receive treatment for various medical and surgical ailments from the Specialists from Goa. Following are the specialties available for routine and on call basis for out-patient care – Gen. Medicine / Gen Surgery / Orthopaedics / Dermatology.

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.

The Child Care Centre on campus is operating as a playschool for infant children in the morning and a Day Care in the afternoon for providing invaluable support and care to the children of BITS faculty and staff. The center is run by 4 dedicated staff assisted by 3 maids. It is provided with all necessary facilities (toys, activities, educational material, infrastructure with outdoor play area, etc.). In addition, campus children are exposed to a variety of activities such as drawing, dance, karate, violin, roller-skating and mental arithmetic, for which classes by professionals are being conducted.

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. Various activities such as yoga and meditation, chanting of Vishnu Sahasranama, Sunderkand Path, Conducting of Holy Mass and choir practice. Classes for Hindustani music, Carnatic music, Western classical music, violin and guitar, as well as Bharatanatyam, Zumba etc are also being conducted.

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.

National and religious festivals like Republic day, Independence day, Lohri, Basant Panchami (which is also BITS Pilani Founder's Day), Holi, Ram Navami, Janmashtami, Ganesh Chaturthi, Onam, Durga Pooja, and Deepavali were celebrated with active participation of all the campus residents and students. During these festivals cultural performances of campus children and students were organized.

This year, a new initiative on forming a Socio-Cultural Association of teaching and non-teaching staff materialized. The aim was to create an appropriate forum to inform and promote faculty, NT staff and their family members' involvement in various activities, initiatives and efforts at the campus, regional, national and

international levels. The Association was received with great enthusiasm by campus members. A core committee formed of members of teaching and non-teaching staff came up with activities planned for the commingling of all staff. An end-semester dinner-cum-cultural event “Sangam” was organized on 7 May. It received enthusiastic participation in the form of cultural shows by staff, faculty and children. On 11 December, a “Fun Fair” was organized where staff members put up stalls of eats, drinks and handicrafts. There were fun and games, karaoke and spot prizes and the whole campus responded with great enthusiasm.

Srutilaya, the Indian Classical Music and Dance Society of the campus, also organized a variety of events. On 27 February, in association with ICCR, we presented an Odissi Dance concert by renowned exponents Shri Udaykumar Shetty and Smt Soumya Shetty, trained under the rich tradition of Shri Kelucharan Mohapatra. This performance was preceded short Bharatanatyam recital by Ms Sruti Balaj, PhD student with the Biology Dept, BITS Goa. On 28 February, we organized Thyagaraja Aradhana in which students, alumni and club members render Saint Thyagaraja's compositions as a tribute to him. On 2 October, we had a Veena Recital by Dr. Radhika Vathsan. On 15 October was Sursangam, a tribute concert to Prof. Suresh Ramaswamy one of the founding fathers of Srutilaya. Renowned artists perform in these events many of who are alumni. In this year's event we had Ustad Bahauddin Dagar on the Rudra-veena with Sanjay Pant Agle on Pakhawaj. It was preceded by Carnatic vocal by Alumni Sreecharan S., accompanied by Ramanujan N. on Mridangam and Pranav Palande on harmonium.

International Yoga Day was observed on 21 June with a lecture demonstration and live yoga session in the SAC.

Quark 2016, the 3-day annual techno-management festival, was held in February. Inaugurated by Mr Shail

Maniar, VP and MD, Sabre India, more than 1500 participants battled it out in various techno-management events as well as gaming and literary events. Workshops and exhibits drew large crowds. The speakers inspired the young minds, and the performances were a great way to end each fun-filled day.

In March, SPREE, the annual sports festival, stood testimony to some high-intensity games, good sportsmanship, and entertainment.

Waves 2016, the annual students' intercollege cultural festival was celebrated in November.

Student volunteers under the banner of Abhigyaan have been regularly holding classes in basic subjects for the underprivileged: children from Birla slums, of the security guards, gardeners and mess workers of the campus, and some special children. They organized a “Joy of Giving” (JoGW) week and a collection drive for donating used clothes and other articles to orphanages and old age homes. They also organized a “no food wastage” day in the messes on this day.

Wildlife enthusiast Benhail Antao, who is also an expert on snakes, came to campus for an interactive session. SLITHERS, as it was called, was a snake awareness program for all students and faculty, wherein everyone learnt about snakes found in and around the campus, how to handle them, and snake bite first-aid.

A beach cleanup drive was organised as a part of the Joy of Giving Week (JoGW), in association with NIRMAAN. Nirmaan has also conducted various events to recognize, thank and include the service communities in and around the campus, including the teachers, security guards, cleaning personnel etc. They organized a blood donation camp on campus and a free eye-checkup camp for the dwellers of Birla. They held career counseling and general awareness sessions in Birla, as well as “Street of Joy” and sky watching sessions with them.

## **INTERNATIONAL PROGRAMMES AND COLLABORATION DIVISION**

The objectives of the International Programmes and Collaborations division are as follows

- Identify and collaborate with 2 or 3 universities for large scale, high impact student and faculty exchange (100 students and 25 faculty members in 3-4 years)
- Work with other divisions to facilitate projects funded by international agencies
- In this regard, MoU was signed after delegation visit to partner university on both the sides.
- Two co operations are currently active
- Associated Partner in *Erasmus Mundus* Joint Master Degree (JMD) programme

### **Excellence in Analytical Chemistry (EACH).**

Partner in Erasmus + programme. Fully funded programme for 1 student visit for 5 months and 1 faculty visit for 7 days to Univ of Tartu and 1 faculty visit for 7 days and two students for 5 months each to Goa campus.

MoUs were also signed with

- **University of Perpignan**
- **University of Limoges, France**
- **University of NewCastle, Australia**
- **University of Tunghai, Taiwan**
- **The Great St.Petersburg Polytechnic University, Russia**

Department of Economics and International Programmes and Collaboration division of BITS

Pilani K K Birla Goa campus jointly organized EURAXESS Information Session on Friday 25th September 2015 at BITS-Pilani, K K Birla Goa Campus. The Objectives of the event were

The speakers were Dr.Vivek Dham EU Delegation to India, Dr.Srini Kaveri Director - CNRS Dr.Sandrine Maximillien, Scientific Attache - Emabssy of France Dr.Arhets Phillippe,Scientific Attache - Emabssy of France Mrs.AinhitzeBB, Country Coordinator Euraxess

158 participants attended

Collaboration with Labfab

- Goa campus in collabroation with French Embassy hosted Mr. Nicolas Hutchet who has a prosthetic hand developed at Labfab, France. He participated in Students Tech Festival – Quark
- Mechanical Engineering Department developed a prosthetic hand in collaboration with Labfab, France
- Thomas Meghe, Research Engineer from Labfab, France was invited for further discussions
- Associate Dean IPCD and Mr. Thomas Meghe attended a brainstorming session at French Embassy, Mumbai.

**French Embassy interested to collaborate with us on developing Labfab.**

#### **Invited Talks**

- Dr. Srini Kaveri, Director, Bureau CNRS, New Delhi, India, Gave a talk on ‘Antibodies : The story of Good and Bad Samaritans’ on 19<sup>th</sup> September, 2016.
- Prof Paul Bishop, Dean of Engineering Sciences at University of Rhode Island, Gave Talk on ‘The Future of Environmental Micro sensing’ and ‘The Impact of the Water: Energy Nexus on Water and Energy in the Near Future’ on 21<sup>st</sup> and 23<sup>rd</sup> November, 2016 respectively.
- Prof. Florent Chazarenc, Ecole des Mines de Nantes, France Gave Talk on ‘Use of treatment wetland systems for water pollution control design and implementation and ‘Treatment wetlands for domestic wastewater treatment : intensification vs extensification what are the trends for the future? On 23<sup>st</sup> and 25<sup>rd</sup> November, 2016 respectively.
- Prof. B.V.R Chowdari, Senior Executive Director, President’s office, Nanyang Technological University (NTU), Singapore and Prof. Bo Liedberg, Dean, Interdisciplinary Graduate School, NTU addressed the Faculties and Students on 29<sup>th</sup> Septeber, 2016

#### **Travel Grants**

Partial Travel grants were provided to selected students in both the semesters for their thesis / internships abroad.

#### **PRACTICE SCHOOL:**

During SEM II, 2015-16 and SEM I, 2016-17 522 first degree students and 18 higher degree students went for PS-II from Goa campus. The faculty members who were involved as PSII Instructor for the stations in Goa were Dr. Anita B Agarwal and Dr. Raviprasad Aduri.

During summer term 2016, total of 602 students went to 141 PS-1 stations from the Goa campus. A total number of 16 faculty members & 15 student co-instructors accompanied the students for PS-1. Total no. of stations opened by Goa campus students are 13.

#### **PS 1-2016 Faculty Members**

SR.NO	PSRN	FACULTY NAME
1	56	VARINDER SINGH
2	112	SHALINI UPADHYAY

SR.NO	PSRN	FACULTY NAME
3	298	K P. JAYDEVAN
4	310	SAROJ S. BARAL
5	343	AMIT SETIA
6	416	JAJATI KESHARI SAHOO
7	502	ETHIRAJULU SENTHAMARIA KANNAN
8	511	ALPESH M DHORAJIA
9	541	RAYSON K. ALEX
10	551	GAVAX JOSHI
11	618	ANOOP GEORGE
12	633	SHASHIDHARA KOTIAN
13	637	PRADEEP BOGGARAPU
14	652	VINAY BUDHRAJA
15	653	ABHILASH KUMAR TILAK
16	654	RAVINDRA SINGH SALUJA

**PS-1-2016 Student Co-Instructors**

Sr. No	ID	NAME
1	2012PHXF016G	YOGESH WALAWALKAR
2	2012PHXF011G	ASHU SHARMA
3	2012B5A4717G	MORE SANMJIT MUKUND
4	2015PHXP007G	RIYANKA SWAIN
5	2013B2A8770G	AKSHAY KUMAR JHA
6	2013B3A7309G	ABHIJITH S WARRIER
7	2013A8PS862G	TANISHA SHARMA
8	2013A8PS496G	PRANAV KUMAR
9	2015PHXP014G	JOSEPH FERNANDES
10	2013B3A7710G	PIYUSH DHINGRA
11	2013A4PS180G	GRANDHI CHINNI VENKATESH
12	2013B2A8941G	D. AKHILA DEVI
13	2014H101012G	HARIOM
14	2013B4A7381G	PANKAJ TIPLE
15	2012B1A4652G	KARTHIK SRINIVASAN

**PUBLICATIONS DIVISION:**

The Publications Division published the BITScan Semester Newsletter Issue 12 and 13 and the Convocation Proceedings 2016 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	Requested by
1	University Review	5 <sup>th</sup> - 7 <sup>th</sup> Jan 2016	Dean's Office
2	Campus visit - Prof. D P Singh, Director, NAAC	14 <sup>th</sup> - 18 <sup>th</sup> Jan 2016	Director's office
3	TEDx 2016	24 <sup>th</sup> - 26 <sup>th</sup> Jan 2016	Director's office
4	IIChe Inaugural Function -	5 <sup>th</sup> - 6 <sup>th</sup> April 2016	Prof. Saibal Ganguly

S.No.	Topic	Date	Requested by
	Prof. MM Sharma, Padma Bhushan		
5	CCFAC Meeting	29 <sup>th</sup> April - 3 <sup>rd</sup> May 2016	Dean's Office
6	Shiv Yog Shivir 2016	28 <sup>th</sup> May - 6 <sup>th</sup> June 2016	PR Office
7	Quiz competition- MaRRS Wordmaster Pvt Ltd	15 <sup>th</sup> June 2016	PR Office
8	Convocation 2016 Chief Guest: Hon. Defence Minister of India, Shri Manohar Parrikar	7 <sup>th</sup> August 2016	Director's Office
9	Coalescence 2016	4 <sup>th</sup> - 5 <sup>th</sup> Sept 2016	Dr. Mridula Goel
10	National Symposium: Digital Humanities, Perspectives and Challenges	9 <sup>th</sup> Sept 2016	Prof. Meenakshi Raman
11	IEEE workshop 2016	10 <sup>th</sup> - 11 <sup>th</sup> Sept 2016	Prof. Dipankar Pal
12	Campus visit by Indian Diaspora Youth - Bharat ko Jaaniye Yatra	15 <sup>th</sup> Sept 2016	Director's office
13	Inauguration of Indian Institute of Metals (IIM) Goa Chapter	25 <sup>th</sup> Sept 2016	Dean's Office
14	International Seminar & Workshop in Photography	3 <sup>rd</sup> - 6 <sup>th</sup> Oct 2016	BITSAA Office
15	Classical Musical Festival, Sursangam 2016 Performance by Ustad Baha'ud-din Dagar	15 <sup>th</sup> Oct 2016	Dr. Radhika V
16	Waves 2016- Annual Cultural Festival	3 <sup>rd</sup> – 6 <sup>th</sup> Nov 2016	Director's office
17	Symposium on 'Recent Advancements in Chemical Sciences and Research Scholar Meet-2016	11 <sup>th</sup> - 13 <sup>th</sup> Nov 2016	Dr. N N Ghosh
18	DAE School in Analytical Chemistry	15 <sup>th</sup> - 21 <sup>st</sup> Nov 2016	Dr. Sunil Bhand
19	Campus visit by Goan Diaspora Youth - 9 <sup>th</sup> Know Goa Programme	30 <sup>th</sup> Nov 2016	Director's office

## **B2.12 CENTRAL FACILITIES REPORT**

### **(I) CENTRAL LIBRARY**

The Library complex of BITS, Pilani – K K Birla Goa Campus comprises of a spacious building covering an area of 3512 m<sup>2</sup>. It is designed to provide several reading halls and a digital library with 11 public access internet terminals for convenient internet reference, 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 450 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. 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 2016, 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 36643 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 73 Indian Journals and 13 Foreign Journals in print, 18 online journals, 6 digital library packages for researchers of different disciplines. Digital library packages include IEL Online, ASME, ScienceDirect, AEA Journals, ProQuest, ACM Digital library. Apart from these, online access to more than 3000 journals through INFLIBNET is available to the Campus. 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.

### Other services

The Library has a collection of 35 educational video cassettes and 1342 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.

## (II) COMPUTER CENTRE

### (A) Computer Hardware

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 990	Intel Core i3 Processor,4GB RAM,500GB HDD	49	
06	Dell Optiplex 390	Intel Core i3 Processor,8GB RAM,500GB HDD	70	
07	Dell Optiplex 380	Intel Core 2 Duo Processor,2GB RAM,320GB HDD	28	
08	Dell Optiplex 360	Intel Core 2 Duo Processor, 2GB	37	



No.	Make	Configuration	Number	Area of utilization
		RAM,160GB HDD		Faculty members and Staff members for carrying out their academic teaching and research work
09	Dell Optiplex 330	Intel Core 2 Duo Processor,2GB RAM,160GB HDD	73	
10	Dell Optiplex 755	Intel Core 2 Duo Processor,2GB RAM,160GB HDD	66	
11	HP Compaq DX2700	Intel Core 2 Duo Processor,1GB RAM,80GB HDD	56	
12	HP Pavilion P6730IN	Intel Core i3 Processor,4GB RAM,1TB HDD, DVD ROM	2	
13	IBM Thinkcentre	Intel Pentium 4 Processor,250MB RAM, 40GB HDD, CD-RW ROM	100	
14	Lenovo G510	Intel Corei5 Processor,4GB RAM,500GB HDD	22	
15	LenovoThinkPad EdgeE430	Intel Core i3 Processor,4GB RAM,500GB HDD	5	
16	Dell Latitude E5430	Intel Core i3 Processor,4GB RAM,500GB HDD	18	
17	Dell Vostro 1550	Intel Core i3 Processor,4GB RAM,500GB HDD	31	
18	Dell Vostro 2420	Intel Core i3 Processor,4GB RAM,500GB HDD	9	
19	Dell Vostro 3550	Intel Core i3 Processor,4GB RAM,500GB HDD	60	
20	Dell Vostro 3500	Intel Core i3 Processor,4GB RAM,500GB HDD	25	
21	HP Tablet PC	Intel Core i3 Processor, 2GB RAM, 500GB HDD	4	
22	HP Elite Book Tablet 2730P	Intel Core i3 Processor, 2GB RAM, 500GB HDD	1	

**(B) Servers**

Sl. No.	Server	Make	Qty	Configuration	OS
<b>Network servers</b>					
1	DNS	DELL	2	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
2	DHCP	DELL	2	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
3	LDAP	DELL	1	[DELL PowerEdge T410, Quad Core 2.26 GHz 8 GB RAM, 500 GB HDD]	Cent OS
4	Cisco Works	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2000
<b>Communication Servers</b>					
1	Web Server	DELL IBM	3	[DELL PowerEdge T410, Quad Core 2.26 GHz 8 GB RAM, 500 GB HDD] [IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows 2003
2	Call Manager	Cisco	2	1 GB RAM, 40 GB HDD	Windows 2000
3	SWD Server	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
4	Cyberoam Report	IBM	1	[IBM x3650 M4 Single Processors(6 Core),32GB RAM, 500GB Hard Disk]	Fedora
<b>Academic Servers</b>					
1	Academic	IBM	1	[IBM x3650 M4	Fedora

Sl. No.	Server	Make	Qty	Configuration	OS
	FTP			Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	
2	Staff/ Faculty FTP	IBM	1	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Fedora
3	Mech (Ansys, MATLAB, ....)	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows XP2
4	Pro-E	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 8
5	Course Management (Moodle)	DELL	1	[DELL PowerEdge T410, Quad Core 2.0 GHz,8GB RAM, 500 GB HDD]	CentOS
6	BITSAT	DELL	3	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
<b>(C) COMPUTER CENTER (Central Facility)</b>					
Central Computing Lab, Zone I	DELL 7010 [Intel Core i7 Processor,8GB RAM,1TB HDD]	22	Windows 8 and Linux Office 2010, AutoCAD Modelsim, Xilinx		
	Dell Optiplex 9020 [Intel Corei7, 4th Gen, 8GB RAM, 1TB HDD]	50			
	Lenovo Edge73 [Intel Core i7,8GB RAM,500GB HDD]	28			
Central Computing Lab, Zone II	Dell Optiplex 3010 [Intel Core i3 / i5, 8GB RAM,500GB/1TB HDD]	60	Windows 8 and Linux, Office 2010, AutoCAD Modelsim, Xilinx		
	Dell Optiplex 990 [Intel Core i3,4GB RAM,500GB HDD]	40			
Central Computing Lab, Zone III	Dell Optiplex 390 [Intel Core i3,8GB RAM,500GB HDD]	40	Linux		
	Dell Optiplex 380 / 360 / 330 / 755 [Intel Core 2 Duo, 2GB RAM,320GB HDD]	60			
<b>(D) Operating System and Software Licenses</b>					
Windows	Windows 8	250			
Windows	Windows Server Standard 2008 / 2010	10			
Seqrite	Seqrite End point Security	600			
Microsoft Office	Office 2007 and Office 2010	250			

### 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 center & other public facility locations in the campus. There are 4000+ 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 CAT5 / CAT6 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 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 5 GB space, collaboration tool, file sharing, personal web-pages, calendaring system, etc.

### LAN Security

The LAN security is provided by Cyberoam 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 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

No.	Area	Bandwidth Allocated	Service Provider
01	Hostels, Guest House	200 Mps	GWave (150) Vodafone (50)
02	Institute Building, Staff Quarters	100 Mbps	Vodafone (100)
03	Cross Campus Teaching and Lectures/talks from BITS Alumni using web-based technology	45Mbps	Tata Tele Services

### Cross Campus Connectivity

No.	Area	Bandwidth Allocated	Service Provider
01	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Data center co-hosted at Mumbai for the ERP applications.	5 Mbps	Tata Tele Services
02	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Data center co-hosted at Mumbai for the BITS Connect 2.0 applications.	30 Mbps	Tata Tele Services

### Virtual Class Room (BITS Connect 2.0)

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 Conferencing Room (BITS Connect 2.0)

(III) Telepresence Director and Placement Office.conference room of 18 capacity have been set up at K K BIRLA Goa campus to 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. High end (CISCO EX 90) desktop systems are set up on the desk of.

### Workshop

The central workshop is equipped with following equipments purchased during the year 2016 are as follows:

S.No.	Particulars
1	Mastercam X9 Software
2	Lathe Tool Dynamometer, With Digital Multicomponent Force Indicator with 3 Independent Display for XYZ axis, Range: 200KgF.
3	Absolute Digimatic Height Gage, With absolute Linear encoder
4	Iron Worker Machine

5	PILLAR DRILLING MACHINE - ALL GEARED - HEAVY DUTY
6	GRANITE PLATE SIZE:600X450X100MM
7	TIG AC/DC Welding Machine – 200
8	WOOD TURNING LATHE MACHINE, 4.5 Ft. Heavy Duty Wood Turning Lathe Machine

**(iv) 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	500cumec
Water Storage Sump	1800 cumec . Three tanks of 600 cumec each
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	6 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
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.
AC Plant	660 TR load connected to main building includes class rooms, cubicles, computer centre, Library and Auditorium etc.
Sewage Treatment Plant	Capacity 600 cumec and treated water is used for campus garden watering
Hybrid Power	Installed one of 3.7 KW each and power generated from solar and wind is fed to street light.
Solar Power	6.5 KV solar panel placed over roof and is connected to street lights.
Solar Water Heater	47 nos of solar water heater in hostels
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****Main Building**

Three new labs are constructed for Physics, Chemistry and Biology near Wing C with a carpet area of 150 Sq m each. Scholar student area has been created to carry out their theoretical research work.

The Biology and EE labs are developed to accommodate research and academic purpose

**B2.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR**

SNo.	Asset Description	Location	Rate	Qty	Amount
1	Wooden Baggages Cabinet Rack	CC-219	117300	1	117,300
2	Wooden Tables with drawers	DST FIST Lab Behind CC lab	15500	8	124,000
3	Computer steel wheel chair with composite leather model AC-040	DST FIST Mathematics Dept	4387	25	109,687
4	Executive Chairs	New Project Office -in SAC	4965.05	22	

SNo.	Asset Description	Location	Rate	Qty	Amount
					109,231
5	Godrej bravo high back chair	Admn. Office	8187	24	196,488
6	Cockpit workstation with 60mm thick tiles base partition 1500*1500*600	server room	57142.85	7	400,000
7	Sofa in teakwood frame single seater size 750*750*750mm	Library Reading Room	19322.24	16	309,156
8	19mm marine ply grade 710 1mm laminate	Library Reading Room	163394.24	1	163,394
9	Solid core marine flushdoor 2050*900mm	Faculity cubicales Liabrary	19332.5	8	154,660
10	Main Table 600mm*1800mm*750mm	Faculity cubicales Liabrary	20691	8	165,528
11	Filling Cabinet	Faculity cubicales Liabrary	37620	8	300,960
12	Dice make task chair balck leather	Admn. Office	5500	25	137,500
13	Alkon shelving unit without door ASU1875*900*400 and kick plate	qty-1 Emergency Room and qty-1 Pharmacy	64921	2	129,842
14	Movie Chair 4leg base PC black without arms	All Hostels	3247	61	198,058
15	Orinet Fan energy saver 120mm white without regulator	CH-1 and CH-3	1440	286	411,840
16	Blue star make air cooled ceiling suspended ductable split AC 5.5 TR DSA661R1 with scroll compressor	CC UPS Room	128836	1	128,836
17	3HW18FB1 1 TR 3 STAR FB HT WALL SPLIT AC	Project Office	32827	4	131,307
18	1.5 ton Hitachi Make Logicool split AC	Chemcial Eng.A-104	35000	3	105,000
19	Split star 1.5 ton 3 star Split AC	Medical Centre	43306	3	129,918
20	Photosensor Moduel with Photomultiplier tube	B-109	153592	1	153,592
21	PMT power supply and amplifier	B-109	148772	2	297,543
22	Canon EOS 70D20 nMP digital SLR camera balck with ef s 18 135 mm is stm kit lens'	B-106	100749	1	100,749
23	Digital Thickness Monitor with sensor & accessories make Inficon Pte	SSP Lab B-108	283806	1	283,806
24	Nwxt4000d water colling accessory	SSP Lab B-108	482648	1	482,648
25	RF -3-XIII 300 watts ,ATN controller	Physic B-113	349077	1	349,077
26	Model 224 rotary electron beam source and power supply	Physic B-113	1541648	1	1,541,648
27	Laws of collison/demonstration track	Physic B-113	315492	1	315,492
28	Sandwich 1100*900-6.00 active vibration isolation platform based on sandwich TM technology	Central Instrumention A-104	2025484	1	2,025,484

SNo.	Asset Description	Location	Rate	Qty	Amount
29	Nano plus DLS practice potential analyzer	A-104	3637718	1	3,637,718
30	LCMS 8040 Ultra fast triple quadrupole mass spectrometer	IMA Lab	14302889	1	14,302,889
31	KEIL/ MCBSTM32F400UM E-ED kit	Embedded system lab A-307	26032	6	156,194
32	Aplab four output 0-32V/0-2A,5V/5A+ 12VTO+ 15V/0.5A Bench rack adaptable power supply	Instrumentation lab	16566	10	165,656
33	Digital Storage Oscilloscope 100MHz bandwidth	Analog & Digital Lab A-202	37350	14	522,900
34	Arbitrary Function Generator	Analog & Digital Lab A-202	23906	8	191,250
35	EK Z7 ZC706-G DEVELOPMENT KIT	A-205 Reconfigurable computing lab	259800	1	259,800
36	Interactive Projector	Mathematics Dept. DST FIST Lab	162500	1	162,500
37	Zen Air Makes Booster	Workshop	502308	1	502,308
38	Motion Blitze Sens Cube6 base unit	Workshop-Rsearch project Dr Ranjit Patil	472069	1	472,069
39	100KN median test system for fatigue test facility	W/S-108	3969715	1	3,969,715
40	Yamaha stage pass 400l	class room C-402,403 &404	65740	3	197,219
41	Dell Projector 1510x DLP @ & Brilliant colour TM technology 3D capable 3500ANSILumens (Max) contrast ratio 2100 typical XGA resolution of 1024*768 2.4 kg 8 watt. Speaker	A-602,A-504,503,C-304,305	42500	5	212,500
42	TM 2657P Full Automatic BPM	Medical Centre	112628	2	225,256
43	WIFI Softwareit's a machinery	CC office for Phase -1	4091581	1	4,091,581
44	A&H QU 32 Digital mixer	Auditorium	188910	1	188,910
45	A&H AB168 Audio Rack QU	Auditorium	72939	2	145,877
46	30280030Rush MH 4 beam martin lighting by harman	Auditorium	126438	2	252,876
47	90240000MAC QUANTUM PROFILE IN BARDBOARD MARTIN LIGHTING BY HARMAN'	Auditorium	380058	1	403,683
48	Fujikura 62S splicing machine	Server Room CC-119	235000	1	235,000
49	Dell power edge R530 server	server room for accounts	323113	1	323,113
50	Dell power edge R530 server	server room for SWD	323113	1	323,113
51	Canon DSLR Camera with accessories with lowerpro AW DSLR bag	CC-122 Language Lab( Humanities Dept0	149755	1	149,755
52	Ariam X real time PCR systems	C-103	750000	1	

SNo.	Asset Description	Location	Rate	Qty	Amount
	sYBR/FAM 516 mm optical cartridge				750,000
53	Cisco Catalyst, Universal k9 image, power supply-network switches	CS & IS A-200	101850	2	203,700
54	Extension WIFI all quarters-WS-C360-24TS-L	Server Room CC-119	101850	11	1,120,350
55	Extension WIFI all quarters-WS-C3650-24TS-L	Server Room CC-119	127050	4	508,200
56	Extension WIFI all quarters-WS-C3650-24TS-L	Server Room CC-119	34650	20	693,000
57	IBM Server	Server Room CC-119	376000	1	376,000
58	IBM Server QC xeon es 2407 v2 2.4GHZ	Admin office	145000	1	145,000
59	2 way full range 800 watts	Class room C-401,405 & A-605,602	39439	8	315515
60	Iron worker machine model WSP-65T with standard tools and accessories	Workshop	692244	1	692,244
61	Nexo LS 18 Lsub 18 sub bass for PS15/GEOS 12 flyable	Auditorium	136332	2	272,663
62	NXAMP4X1C powered digital TD Controller	Auditorium	233712	1	233,712
63	Cisco UC phone 7841	Computer centre	9450	20	189,000
64	IBM server X3630-M4-XEON E5	server room	202,000	1	202,000
65	DAS action 12M Monitor speaker	Auditorium	34344	6	206,064
66	Cisco IP phone CP-7841	server room	9450	14	132,300
67	EMC Storage VNX-5600 with below config	server room	3000000	1	3,000,000
68	Zen Air Makes Booster	Workshop	502308	1	502,308
69	3D printer-Ultimaker 2 extended +	EEE Mechanicla & Computer science	225750	1	225,750
70	David SLS 3 Scanner	EEE Mechanicla & Computer science	341250	1	341,250
71	CEL Robox	EEE Mechanicla & Computer science	182910	1	182,910
72	GDS 320 200Mhz 2 channels digital storage	EEE Mechanicla & Computer science	137693	1	137,693
73	AFG 3051 50 MHz arbitrary function generator	EEE Mechanicla & Computer science	119659	1	119,659
74	GSP 830 + Opt 01 3 GHz spectrum analyser with tracking generator	EEE Mechanicla & Computer science	369619	1	369,619
75	PSW 80-27 programmable DC power supply	EEE Mechanicla & Computer science	123607	1	123,607
76	Libelium eva-for minor experiments sandbox project	EEE Mechanicla & Computer science	516950	1	516,950
77	APT Thin Film Deposition systems	B-108	1197000	1	1,197,000

SNo.	Asset Description	Location	Rate	Qty	Amount
78	Plant growth chamber Microcontroller PID based cap.600 Ltr.	C-112 Bio Lab	335812	1	335,813
79	NI USB 6356 X series DAQ device with BNC termination	B-109	288914	1	288,914
80	Pillar drilling machine all geared heavy duty eifco brand model EP-50 AG	Workshop	415799	1	415,799
81	FMC Foga mezzanine card	A-205 EEE dept	205000	1	205,000
82	EDS analysis system with manual slide	A-103	2126103	1	2,126,103
83	High Performance Liquid chromatography	C-207	1995116	1	1,995,116
84	UV-VIS Spectrophotometer(ModelUV-3000)	A-104	315000	1	315,000
85	Micro Balance model CM2	C-207	562500	1	562,500
86	Semi Automated distillation analyser with accessories	A-102	198976	1	198,976
87	MSB Auto Susceptibility balance with specification measurig ranges and weighjt & length	C-207	1141228	1	1,141,228
88	Jasco UV VIS spectrophotometer model V-730IRM	C-114	1443801	1	1,443,801
89	Quanta 250 FEG scanning electron microscope including accessories	A-104	14952487	1	14,952,487
90	Data Acquisition system with accessories	Workshop 313/11	328545	1	328,545
91	Radio Educational lab station with vertical antena	A-201 Digitl Communication Lab	467460	2	934,920
92	Octoclock 8 channel clock distribution system (10Mhz ref & PPS)	A-201 Digitl Communication Lab	104580	1	104,580
93	Dry Freezer and accessory with rotational vaccum concentrator	C-112 Bio Lab	1094118	1	1,094,118
94	Excelitas SPCM RoHS complaint	B-109	809565	1	809,565
95	Thermo Scientific revco model EXF40086V Upright freezer	C-103	542658	1	542,658
96	Leica Ultramicrotome EM UC7 upgradable for eryo	A-103	6601375	1	6,601,375
97	Table Top stainless steel fume hood	A-104	157500	1	157,500
98	Next 300D Cf,water cooling accessory,TIC mains cable	B-108	338488	1	338,488
99	HP VC300r High pressure view chamber recirculating unit	A-102	1481207	1	1,481,207
100	Tiger Brand 500kg walk behind pitch Roller	Cricket Ground	172200	1	172,200
101	Ride on lawn mover model MTD 420/38 with collector	Cricket Ground	201244	1	201,244
102	Pitch Mower model pitch 550 with collector	Cricket Ground	173230	1	173,230



SNo.	Asset Description	Location	Rate	Qty	Amount
103	Water cooler cum purifier 80LPH & cooling 60LPH	A & C Mess	65500	2	131,000
104	Exhaust system for dosa & chapati	C Mess	208625	1	208,625
105	Exhaust system for Blower & steam Line	C Mess	208625	1	208,625
106	Dell Optiplex 3040 mini tower XCTO	CC-219	49350	46	2,270,100
107	Dell Optiplex 3040 mini tower XCTO	CS & IS Lab A-200	49350	33	1,628,550
108	Server EMC storage & file controllers gateway 3 24*7 academic storage campus data	Server Room	2500000	1	2,500,000
109	Dell Latitude 3460 CTO	Faculty Members	49585	15	743,775
110	Dell Latitude 3460 CTO	Faculty Members	49585	25	1,239,625
111	Dell Latitude 3460 CTO	Faculty Members	49585	25	1,239,625
112	Dell Latitude 3460 CTO	Faculty Members	49585	25	1,239,625
113	Dell Optiplex 3040 mini tower BTX	C--113 Physic Lab	42820	6	256,922
114	Dell Optiplex 3040 mini tower BTX	C--113 Physic Lab	51470	2	102,939
115	Lenovo Idea centre A740 27-desktop AIO PC with touchscreen	Director's Office	113925	1	113,925
116	Dell Precision tower 7810XCTO Base	Dr Ranjit patil_mechanical dept.	233864	1	233,864
117	HP Laserjet MFP M725 DN Mono Printer P/n-CF066A	Accounts Office B-104	225750	1	225,750
118	APC UPS SRC10KUXI-12V,65AH	A-104	256978	2	513,956
119	Numeric 10 kVA true online double conversion UPS System with DC power pack	Embeded system A-307	125000	1	125,000
120	120KVA Frame	CC UPS Room	280875	1	280,875
121	20 KVA Power Module	CC UPS Room	152250	5	761,250
122	Battery Set	CC UPS Room	192150	2	384,300
123	11KVA feeder towards parallel line from 33kVA substaation New academic block	Project office	3271689	1	3,271,689
124	Cadence software	Microelectronic Lab CC-123	929837	1	929,837
125	Academic permanent single user	EEE dept. CC-123	101611	1	101,611
126	Academic Tah Licence for Matlab	EEE,Mech. Eng.,physic and mathemicts	1329555	1	1,329,555
127	Intel PCL999LFAE05X1Z software XE	CS&Is A-200	795488	1	

SNo.	Asset Description	Location	Rate	Qty	Amount
	cluster edition for linux				795,488
128	Deployment services	CS&IS A-200	230000	1	230,000
129	SIMULIA academic abaqus research base additional models and licenses	Mechanical Engg Dept kept in CC qty 1 & 4	258702	4	1,034,806
130	NSS data for eco. Dept.	Economics B-310	273198	1	273,198
131	EC Economic Census	Economics B-310	193036	1	193,036
132	Winhome 10 singl olp nl acdmc legalization getgenuine	CC	7077	113	799,677
133	Cadence software	Microelectronic Lab CC-123	929837	1	929,837
134	MSC Motion Bundle adams	Workshop	350000	1	350,000
135	Moldex3d solutions e design packages	Workshop	335000	1	335,000
136	MEMS+Library for cdence simulation	Microelectronic Lab CC-123	485300	1	485,300
137	Mastercam X9 educational on Hasp	Workshop	17574	20	351,471
138	Altair Hyper Works units	Workshop	100380	5	501,900
139	Origin Pro ver2016	B-113-Physic	151200	1	151,200
140	SIMULIA academic teaching	Computer centre CC	362965	1	362,965
141	ArcGis for Desktop Basic (CU) Spatial	Economics Dept	274850	1	274,850
142	Rsoft optSIM v 2014.09 software single user	EEE Dept.	147000	1	147,000
143	Academic permanent single user	EEE dept. CC-123	101611	1	101,611
144	Nvivo 11 pro	Eco dept-A-302	155700	1	155,700
145	cWIP JV 31.03.16	Server Room Partition	548,685		548,685
146	cWIP JV 31.03.17	Mathematics Lab	354,970		354,970
147	cWIP JV 31.03.18	Dr Veek baths nero bio tech lab	479,561		479,561
148	cWIP JV 31.03.19	EEE Lab Wing A	433,369		433,369
149	cWIP JV 31.03.20				
150	Racold Solar Water Heater 500LPD FPC		380,016		380,016
	<b>Total cost of Equipment</b>				<b>126,516,728</b>

## B2.15 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVAL

AC promotes the student activities, games and sports like Cricket, Football, Tennis, Squash, Volleyball, Basketball, Badminton, Chess, Carom, Pool, and Table Tennis. SAC also promotes extra-curricular activities for students, faculty and their dependents in the campus. Daily training in football and cricket is conducted for the institute team. New Squash court has been constructed

The cricket and football ground out field has been re-laid and been developed to higher standard. Up gradation of gymnasium has been done by installing latest machines and other equipment's. The gymnasium functions strictly under the guidance of a trainer for safety measures.

### Sports Achievements 2016 - SPREE – 2016

- Institute Tennis TEAM A – Winners in Annual Sports meet of BITS Pilani K.K.Birla Goa Campus “Spree” March 2016
- Tennis TEAM B – Runner's Up Sin Annual Sports meet of BITS Pilani K.K.Birla Goa Campus “Spree” March 2016
- Chess team won the finals in BITS Pilani K.K.Birla Goa campus annual sports festival “spree” March 2016

### Open tournaments – 2016

- Tennis team Runner's Up – ARENA 2016, BITS Hyderabad Sports Fest(Tennis Event)
- Institute Tennis team won the BITS Pilani Hyderabad Sports festival tennis event February 2016.
- Institute Basketball Girls Team won the KJ Somaiya sports festival in Girls basketball tournament Beating IIT Bombay Girls Basketball team in the finals , February 2016
- Siddhartha Mohan and Chirag Ramdas won the all Goa doubles Badminton championship April 2016
- Rachit Aiyappa won the all Goa Tennis Tournament Organized by Goa Tennis Association at Cidade Goa, Panjim April 2016

### November – 2016

- Badminton Boys team won the final at BITS Pilani Dubai, Dubai Campus Annual sports meet November 2016
- Basketball Girls team lost in the finals (Runner-Up) at the BITS Pilani Dubai, Dubai Campus Annual sports meet November 2016
- Badminton Girls team lost in the finals at the BITS Pilani Dubai, Dubai Campus Annual sports meets November 2016. Emerged as Runner- up in the championship
- Goa Football Association (GFA) IIIrd Division League Mormugao Zone –BITS Pilani K.K.Birla Goa Campus Institute Football (Men's) Team Runners –Up and Qualified for the GFA IInd Division league

### Award of Scholarship to Students

SCHOLARSHIP	NO. OF. STUDENTS (figures indicates no. of awards in 2016)	AMOUNT
INSTITUTE'S MERIT & MCN SCHOLARSHIP	1015	43414154
MERIT SCHOLARSHIP TO INTERNATIONAL STUDENTS	34	4617128
STUDENT AID FUND FINANCIAL ASSISTANCE	14	781950
ADITYA BIRLA GROUP SCHOLARSHIP	1	65000
SCH FROM BITSAA INTERNATIONAL	6	223400
OTHER SCHOLARSHIP	4	232887
<b>TOTAL :</b>	<b>1074</b>	<b>49334519</b>

#### **Note :**

- Students are also in receipt of scholarship like INSPIRE, KVPY, NTS and other scholarships from state government etc.

**Teaching Learning Centre**

During the year 2016, 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 2016.

1. The website of TLC was enriched with many new resources. Some articles discussing areas such as the effect of new practices in specific courses as well as the possibilities and methods of improving teaching-learning processes were published through active participation of faculty members of KK Birla Goa Campus. Links to many new video/audio resources for motivating/guiding the educators were also provided in the website.
2. Dr. Varinder Singh, Faculty in Charge of TLC at BITS Pilani KK Birla Goa Campus was invited to participate in the symposium of Global Learning Council visited NUS, Singapore during April 12-13, 2016 to participate in the international deliberations on improvement possibilities in teaching-learning processes. Global Learning Council has many leading universities of the world as its members and it was initiated by Carnegie Mellon University, USA.
3. Dr. Varinder Singh also participated in a National Convention on Future of Classroom Teaching held at BITS Pilani Pilani Campus during Sep 30-Oct 1, 2016
4. Workshop on effective teaching and learning was organized during 4<sup>th</sup>-6<sup>th</sup> Jan, 2016 as well as on 4<sup>th</sup>-5<sup>th</sup> Nove, 2016 for newly joined faculty members across different disciplines at BITS Pilani KK Birla Goa Campus. First workshop was jointly conducted by TLC members, senior faculty members including Prof. K. E. Raman as well as an external expert Dr. Rajendra Joshi. Prof. Lakshmi Narayan Samavedam from NUS, Singapore also joined some sessions through skype. The first workshop was opened to older faculty members as well and many members participated with enthusiasm. The second workshop was mainly conducted by TLC members along with few additional senior faculty members
5. Intensive teaching workshop for 18 new faculty members was also organized with sessions spread across several weeks during February-April, 2016.
6. TLC workshop for TA's from M.E. and Ph.D. programs was organized on Sep 10, 2016.
7. TLC Teaching seminar series was started through first lecture by Prof. A V Kulkarni on several attributes and skills that one must acquire to be an effective teacher.

## LIST OF ANNEXURE

<b>Annexure No.</b>	<b>Particulars</b>	<b>Page No.</b>
Annexure B2-1	Name and designation of Senior Office Bearers	B2: A1
Annexure B2-2	Details of admissions made during the year 2016	B2: A3
Annexure B2-3	Statement showing the number of candidates who have been permitted in the academic year 2015-2016 to pursue various dual degree programmes under various priorities	B2: A4
Annexure B2-4	Number of students registered	B2: A5
Annexure B2-5	Statement of degrees awarded	B2: A8
Annexure B2-6	80 <sup>th</sup> award of degrees to be approved by the 65 <sup>th</sup> meeting of the board of governors	B2: A10
Annexure B2-7	List of the organisation which conducted campus interviews list of the companies visited semester II, 2015-16	B2: A11

Annexure `B2-1'  
( 2 Pages)  
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**NAME AND DESIGNATION OF SENIOR OFFICE BEARERS OF GOA CAMPUS**

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
1.	631	Raghurama G.	EEE / Director	Director	Sr. Professor
2.	620	Ashwin Srinivasan	Computer Science & Information Systems / Deputy Director	Deputy Director	Sr. Professor
3.	95	Sunil Bhand	Chemistry / Sponsored Research and Consulting Division	Dean	Professor
4.	6	D.M. Kulkarni	Mechanical Engineering / General Administration	Dean	Professor
5.	7	M.K. Deshmukh	EEE	HOD	Professor
6.	367	Meenakshi Raman	Humanities & Social Sciences	HOD	Professor
7.	52	Judith Maria Braganca	Biological Sciences	HOD	Associate Professor
8.	77	Prasanna Kumar N.	Mathematics	HOD	Associate Professor
9.	78	Bharat M. Deshpande	Computer Science & Information Systems	HOD	Associate Professor
10.	85	Anjan Chattopadhyay	Chemistry	HOD	Associate Professor
11.	180	Shibu Clement	Mechanical Engineering / Workshop	HOD / Ex-Officio	Associate Professor
12.	636	Saibal Ganguly	Chemical Engineering	HOD	Professor
13.	120	Toby Joseph	Physics	HOD	Assistant Professor
14.	338	Aswini Kumar Mishra	Economics	HOD	Assistant Professor
15.	3	Aditya P. Koley	Chemistry / Instruction Division	Associate Dean	Professor
16.	10	Neena Goveas	Computer Science & Information Systems / Academic Registration & Counseling Division	Associate Dean	Associate Professor
17.	80	Srikanth M.	Biological Sciences / International Programmes and Collaboration	Associate Dean	Associate Professor
18.	94	Sutapa Roy Ramanan	Chemical Engineering / Faculty Affairs	Associate Dean	Professor
19.	104	Raghunath A. Ratabole	Physics / Work Integrated Learning Programmes	Associate Dean	Associate Professor
20.	108	K.R. Anupama	EEE / PS Division	Associate Dean	Professor
21.	122	Ranjan Dey	Chemistry / Academic Resource Planning	Associate Dean	Associate Professor
22.	185	Sampatrao Dagu Manjare	Chemical Engineering / Admissions	Associate Dean	Associate Professor
23.	237	Prasanta Kumar Das	Physics / Academic Research Division	Associate Dean	Associate Professor
24.	333	C.K. Ramesha	EEE / SWD	Associate Dean	Assistant Professor
25.	68	Srinivas Krishnaswamy	Chemical Engineering / Centre for Innovation, Incubation & Entrepreneurship (CIIE)	PIC	Professor

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
26.	33	Meenal Kowshik	Biological Sciences / Media & Publicity	FIC	Associate Professor
27.	62	Radhika Vathsan	Physics / Community Welfare	FIC	Associate Professor
28.	56	Varinder Singh	Mechanical Engineering / Teaching Learning Centre	FIC	Assistant Professor
29.	82	Veeky Baths	Biological Sciences / Alumni Affairs	FIC	Assistant Professor
30.	107	A. Amalin Pirnce	EEE / Placement	FIC	Assistant Professor
31.	328	Mridula Goel	Economics / Centre for Innovation, Incubation & Entrepreneurship (CIIE)	FIC	Associate Professor
32.	371	K.R. Biju	Computer Science & Information Systems / Computer Centre	FIC	Assistant Professor
33.	414	Angshuman Sarkar	Biological Sciences / Student Welfare Division	Chief Warden	Associate Professor
34.	9	Anand K. Patil	Purchase & Stores & Estate	IC	Estate Manager
35.	50	Anuradha Voolapalli	Library	IC	Deputy Librarian
36.	230	Raghavendra K.M.	Medical Centre	IC	Chief Medical Officer
37.	612	S. Baskar	Finance	IC	Head - Accounts
38.	658	Sailesh Narayan Mohanty	General Administration	IC	Deputy Registrar Registrar
39.	668	Arjun C. Halarnkar	Public Relations	IC	Public Relations Officer

**NAMES OF WARDENS OF GOA CAMPUS**

S. No.	GPSRN	Name	Hostel	Activity
1	414	Angshuman Sarkar	CH1	Chief Warden Cum Warden
2	333	C.K. Ramesha	AH8	Warden
3	211	P. Bhavana	CH4	Warden
4	556	Arnab Banerjee	CH2	Warden
5	565	Ravi Prasad Aduri	AH7	Warden
6	482	Ranjit S. Patil	AH6	Warden
7	511	Alpeshkumar M. Dhorajia	AH1	Warden
8	114	Sanjay K. Sahay	CH6	Warden
9	363	Mainak Banerjee	CH3	Warden
10	72	Ch.V.V.S.N.V. Prasad	AH4	Warden
11	21	Vikas V. Chaudhari	AH3	Warden
12	310	Saroj S. Baral	AH2	Warden
13	318	Halan Prakash	AH5	Warden
14	606	K.A. Geetha	CH5	Warden

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2016****(a) Second Semester 2015-16****Doctoral Programmes:**

Ph.D.	10(06)
	<u>10(06)</u>

**(b) First Semester 2016-17****Doctoral Programmes:**

Ph.D.	26(10)
	<u>26(10)</u>

**1. Integrated First Degree Programmes**

	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>Group A</b>			
B.E.			
Chemical	56(10)	317	301
Computer Science	101(09)	385	358
Electrical & Electronics	83(09)	358	331
Electronics & Instrumentation	80(10)	357	312
Mechanical	69(03)	369	322
	<u><b>389(41)</b></u>		
<b>Group B</b>			
M.Sc.			
Biological Sciences	43(06)	305	297
Chemistry	43(02)	309	300
Economics	44(08)	339	315
Mathematics	44(05)	350	310
Physics	42(03)	354	307
	<u><b>216(24)</b></u>		
<b>Group C</b>			
M.Sc.			
Information Systems			
<b>Total :</b>	<u><b>605(65)</b></u>		

**2. Higher Degree Programmes :**

M.E.	
Biotechnology	07(07)
Embedded Systems	07(04)
Computer Science	08(00)
MicroElectronics	12(03)
Chemical Engineering	05(02)
<b>Total</b>	<u><b>39(16)</b></u>

**3. Doctoral Programmes :**

Ph.D. – Full Time	08(08)
Ph.D. – Part Time	10(02)

**SUMMARY**

	II Semester 2015-16	I Semester 2016-17
<b>On-Campus Programmes</b>		
Integrated First Degree Programmes	-	605(65)
Higher Degree Programmes	-	39(16)
Doctoral Programmes	10(06)	26(10)
<b>Total</b>	<u><b>10(06)</b></u>	<u><b>670(1)</b></u>



**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE  
ACADEMIC YEAR 2016-2017 TO 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	Total
B1	12	6	10	2	14	<b>44</b>
B2	10	7	7	5	9	<b>38</b>
B3	3	12	7	19	6	<b>47</b>
B4	7	9	7	16	7	<b>46</b>
B5	2	9	11	8	6	<b>36</b>
<b>Total</b>	<b>34</b>	<b>43</b>	<b>42</b>	<b>50</b>	<b>42</b>	<b>211</b>

**OTHER PRIORITIES (Transfer)**

Programmes* From ↓ To →	A1	A3	A4	A7	A8	B1	B2	B3	B4	B5	Total
A1	-	-	-	-	-	-	-	2	-	-	<b>2</b>
A3	2	-	-	1	-	-	-	-	-	-	<b>3</b>
B4	-	-	-	2	-	-	-	-	1	-	<b>3</b>
B5	-	-	-	1	-	-	-	-	-	-	<b>1</b>
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>15</b>

**\*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,

AA: B.E. Electronics & Communication,

AB: B.E. Manufacturing,

B1: M.Sc. Bio. Sciences

B2: M.Sc. Chemistry

B3: M.Sc. Economics,

B4: M.Sc. Mathematics,

B5: M.Sc. Physics,

C2: M.Sc. General Studies,

C6: M.Sc. Information Systems

C7: M.Sc. Finance.

Annexure `B2-4'  
(3 Pages)  
Ref. AR 2016, Page No.B2-2

### NUMBER OF STUDENTS REGISTERED

#### Second Semester 2015-2016

Programme	2010	2011	2012	2013	2014	2015	Total
Chemical			51(13)	62(11)	51(6)	76(6)	<b>240(36)</b>
EEE			74(10)	82(12)	98(12)	83(10)	<b>337(44)</b>
Mechanical	2(0)	1(0)	75(1)	77(2)	72(4)	73(1)	<b>300(8)</b>
Computer Science		2(1)	77(15)	91(10)	99(14)	100(10)	<b>369(50)</b>
Electronics & Instrumentation		1(0)	78(13)	83(16)	62(6)	84(8)	<b>308(43)</b>
<b>M.Sc. (Hons)</b>							
Biological Science		32(10)	34(13)	30(5)	29(4)	44(4)	<b>169(36)</b>
Chemistry		34(6)	32(9)	31(5)	32(5)	44(6)	<b>173(31)</b>
Economics		39(9)	32(7)	47(4)	60(7)	47(5)	<b>225(32)</b>
Mathematics		37(9)	36(6)	43(4)	56(10)	47(9)	<b>219(38)</b>
Physics		33(6)	28(3)	36(4)	52(3)	45(3)	<b>194(19)</b>
<b>M.Sc. (Tech)</b>							
Information Systems	1(0)		41(10)				<b>42(10)</b>
<b>Total</b>	<b>3(0)</b>	<b>179(41)</b>	<b>558(100)</b>	<b>582(73)</b>	<b>611(71)</b>	<b>643(62)</b>	<b>2576(347)</b>

#### B. Higher Degree Programmes

Programme	2014	2015	Total
<b>M.E.</b>			
Biotechnology	7(4)	5(3)	<b>12(7)</b>
Design Engg.			
Embedded System	5(1)	8(0)	<b>13(1)</b>
Software Systems			
Chemical Engg.	6(2)	8(5)	<b>14(7)</b>
Microelectronics	7(1)	7(1)	<b>14(2)</b>
Computer Science	8(2)	8(4)	<b>16(6)</b>
<b>Total</b>	<b>33(10)</b>	<b>36(13)</b>	<b>69(23)</b>
<b>Grand Total</b>			<b>2645(370)</b>

**First Semester 2016-2017**

Programme	Year of Admission								Total
	2009	2010	2011	2012	2013	2014	2015	2016	
<b>A. Integrated First Degree Programmes</b>									
<b>B.E.(Hons.)</b>									
Chemical	-	-	-	2(0)	63(11)	51(6)	75(5)	56(10)	<b>247(32)</b>
EEE	-	-	-	9(2)	82(12)	98(12)	81(9)	83(9)	<b>353(44)</b>
Mechanical	-	-	-	2(0)	77(2)	72(4)	72(1)	69(3)	<b>292(10)</b>
Computer Science	-	-	-	3(0)	87(9)	99(14)	105(11)	101(9)	<b>395(43)</b>
Electronics & Instrumentation	-	-	-	3(0)	81(16)	62(6)	84(8)	80(10)	<b>310(40)</b>
<b>M.Sc. (Hons)</b>									
Biological Science	-	-	-	35(13)	30(5)	29(4)	44(5)	43(6)	<b>181(33)</b>
Chemistry	-	-	2(0)	31(8)	32(5)	31(5)	39(4)	43(2)	<b>178(24)</b>
Economics	1(0)	-	-	31(7)	47(4)	60(7)	48(4)	44(8)	<b>231(30)</b>
Mathematics	-	-	1(1)	35(6)	43(4)	56(10)	48(10)	44(5)	<b>227(36)</b>
Physics	-	-	4(0)	28(3)	36(4)	53(3)	42(4)	42(3)	<b>205(17)</b>
<b>M.Sc. (Tech)</b>									
Information Systems	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1(0)</b>	<b>-</b>	<b>7(1)</b>	<b>179(39)</b>	<b>578(72)</b>	<b>611(71)</b>	<b>638(61)</b>	<b>605(65)</b>	<b>2619(309)</b>

**B. Higher Degree Programmes**

Programme	Year of Admission			Total
	2014	2015	2016	
<b>M.E.</b>	-	-	-	-
Biotechnology	-	5(3)	7(7)	<b>12(10)</b>
Design Engg.	-	-	-	-
Embedded System	-	8(0)	7(4)	<b>15(4)</b>
Software Systems	-	-	-	-
Chemical Engg.	-	8(5)	6(2)	<b>14(7)</b>
MicroElectronics	1(0)	7(1)	12(3)	<b>20(4)</b>
Computer Science	-	8(4)	8(0)	<b>16(4)</b>
<b>Total</b>	<b>1(0)</b>	<b>36(13)</b>	<b>40(16)</b>	<b>77(29)</b>

**Grand Total 2696(338)**

**C. PhD Programmes**

	Year of Admission									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Semester II 2015-2016	3(2)	8(4)	16(8)	14(7)	19(9)	49(19)	21(4)	37(15)		<b>167(68)</b>
Semester I 2016-2017		8(4)	12(5)	13(7)	19(10)	49(18)	20(2)	36(14)	26(10)	<b>183(70)</b>
Summer term 2015-2016	2(1)		1(1)							<b>3(2)</b>
<b>Grand Total</b>	<b>5(3)</b>	<b>16(8)</b>	<b>29(14)</b>	<b>27(14)</b>	<b>38(19)</b>	<b>98(37)</b>	<b>41(6)</b>	<b>73(29)</b>	<b>26(10)</b>	<b>353(140)</b>

**Summer Term 2015-2016**

Programme	Year of Admission				
	2011	2012	2013	2014	Total
Chemical	-	2(0)	-	51(6)	<b>53(6)</b>
EEE	-	1(0)	1(0)	95(12)	<b>97(12)</b>
Mechanical	-	-	-	72(4)	<b>72(4)</b>
Computer Science	-	-	1(0)	99(14)	<b>100(14)</b>
Electronics & Instrumentation	-	-	1(0)	62(6)	<b>63(6)</b>
<b>M.Sc. (Hons)</b>					
Biological Science	-	-	2(1)	28(4)	<b>30(5)</b>
Chemistry	-	-	-	31(5)	<b>31(5)</b>
Economics	-	-	-	60(7)	<b>60(7)</b>
Mathematics	-	-	-	54(10)	<b>54(10)</b>
Physics	-	-	10(1)	48(3)	<b>58(4)</b>
<b>M.Sc. (Tech)</b>					
Information Systems	-	-	-	-	-
<b>Total</b>	-	<b>3(0)</b>	<b>15(2)</b>	<b>600(71)</b>	<b>618(73)</b>

Annexure `B2-5'  
(2 Pages)  
Ref. AR 2016, Page No.B2-3

### STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	No. of degrees
	79th Award 05.04.16, 05.07.16, 05.07.16	80th Award 27.08.16, 27.08.16, 08.10.16, 24.11.16
<b>(i) Integrated First Degree</b>		
<b>B.E.(Hons.)</b>		
Chemical	11(1)	1(0)
Chemical (with Practice School)	59(15)	50
Electrical and Electronics	23(5)	4(1)
Electrical and Electronics (with Practice School)	80(12)	10(2)
Mechanical	39(5)	2(0)
Mechanical (with Practice School)	73(1)	
Computer Science	22(5)	4(0)
Computer Science (with Practice School)	91(25)	2(0)
Electronics and Instrumentation	22(6)	3(1)
Electronics and Instrumentation (with Practice School)	89(15)	
<b>M.Sc.(Hons.)</b>		
Biological Sciences	8(3)	-
Biological Sciences (with Practice School)	24(7)	-
Chemistry	9(3)	1(0)
Chemistry (with Practice School)	24(4)	-
Economics	6(0)	-
Economics (with Practice School)	34(9)	-
Mathematics	16(4)	1(0)
Mathematics (with Practice School)	19(4)	1(1)
Physics	17(2)	1(0)
Physics (with Practice School)	14(4)	-

Degrees	No. of degrees	No. of degrees
	79th Award 05.04.16, 05.07.16, 05.07.16	80th Award 27.08.16, 27.08.16, 08.10.16, 24.11.16
<b>M.Sc.(Tech.)</b>		
Information Systems	6(0)	-
Information Systems (with Practice School)	35(10)	-
<b>Sub Total</b>	<b>721(140)</b>	<b>35(5)</b>
<b>(ii) Higher Degree</b>		
<b>M.E.</b>		
Chemical Engineering	4(2)	2(0)
Computer Science	5(1)	-
Microelectronics	2(0)	1(0)
Biotechnology	1(0)	-
Embedded Systems	1(0)	-
Computer Science (with Practice School)	3(1)	-
Microelectronics(with Practice School)	4(1)	-
Biotechnology (with Practice School)	6(4)	-
Embedded Systems (with Practice School)	4(1)	-
<b>Sub Total</b>	<b>30(10)</b>	<b>3(0)</b>
<b>Ph.D</b>	<b>7(1)</b>	<b>9(4)</b>
<b>Total</b>	<b>758(151)</b>	<b>47(9)</b>

**SUMMARY**

Award	79 <sup>th</sup> Award	80 <sup>th</sup> Award	Total
Integrated First Degree	721(140)	35(5)	756(145)
Higher Degree	30(10)	3(0)	33(10)
<b>Ph.D</b>	<b>7(1)</b>	<b>9(4)</b>	<b>16(5)</b>
<b>Total</b>	<b>758(151)</b>	<b>47(9)</b>	<b>805(160)</b>

**Note:** The numbers in brackets indicate number of female students.

Annexure `B2-6'  
(1 Pages)  
Ref. AR 2016, Page No.B2-3

**80<sup>th</sup> AWARD OF DEGREES TO BE APPROVED BY THE 65<sup>th</sup> MEETING OF  
THE BOARD OF GOVERNORS**

(No. in brackets indicates no. of female students)

<b>Programme</b>	<b>Dist</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E.(Hons.)(Chemical)(with Practice School)	0	2	3	5(0)
B.E.(Hons.)(Chemical)	0	0	1	1(0)
B.E.(Hons.)(Electrical and Electronics)(with Practice School)	0	2	8	10(2)
B.E.(Hons.)(Electrical and Electronics)	0	3	1	4(1)
B.E.(Hons.)(Mechanical)	0	2	0	2(0)
B.E.(Hons.)(Computer Science)	0	4	0	4(0)
B.E.(Hons.)(Computer Science)(with Practice School)	0	0	2	2(0)
B.E.(Hons.)(Electronics and Instrumentation)	0	3	0	3(1)
M.Sc.(Hons.)(Physics)	0	1	0	1(0)
M.Sc.(Hons.)(Chemistry)	0	1	0	1(0)
M.Sc.(Hons.)(Maths) (with Practice School)	0	0	1	1(1)
M.Sc.(Hons.)(Maths)	0	0	1	1(0)
<b>Sub - Total</b>	<b>0</b>	<b>18</b>	<b>17</b>	<b>35(5)</b>
M.E (Microelectronics)				<b>1(0)</b>
M.E (Chemical)				<b>2(0)</b>
Ph.D.				<b>9(4)</b>
<b>TOTAL</b>				<b>47(9)</b>

**Note:** Numbers in brackets indicate total females

Annexure `B2-7'  
(4 Pages)  
Ref. AR 2016, Page No.B2-4

**LIST OF THE ORGANISATION WHICH CONDUCTED CAMPUS INTERVIEWS**

**LIST OF THE COMPANIES VISITED SEMESTER II, 2015-16**

SR.#	Company visited	Number of students		Sector
		Interviewed	Offers	
1	[24]7 ILABS	4	1	ET
2	ABOVE SOLUTIONS	25	1	IT
3	AMAZON DEVELOPMENT CENTER	114	16	IT
4	AKIRA CONSULTING	2	1	CO
5	ARM	4	2	ET
6	BARCLAYS TECHNOLOGY CENTER	36	5	BF
7	BEEHYV	41	4	IT
8	BAIN CAPITAL	1	1	CO
9	BINANI	46	2	CH
10	BITMAPPER	13	1	MF
11	BLUE JEANS NETWORK INDIA PVT. LTD.	4	2	IT
12	BORL	76	4	MF
13	BYJU	1	1	OT
14	CA TECHNOLOGIES	34	4	IT
15	CAPGEMINI	27	7	IT
16	CAPILLARY TECHNOLOGIES	46	9	IT
17	CARWALE (AUTOMOTIVE EXCHANGE)	3	1	IT
18	COGNITIVE SCALE	1	1	OT
19	CISCO	55	1	ET
20	CAPITAL FLOAT	2	1	CH
21	CITYFLO	109	4	IT
22	CREDIT SUISSE	11	8	BF
23	DELL	50	5	CO
24	DELHIVERY	46	4	CO
25	DIRECT I	66	2	IT
26	DBOI	3	3	BF
27	DREAMWORKS ANIMATION	3	2	IT
28	EMC CORP	6	6	IT
29	ERICSSON R&D	2	2	ET
30	EXOTEL	44	2	IT
31	EXPONENTIA DATA	1	1	IT
32	FIORANO SOFTWARE TECHNOLOGIES	29	1	IT
33	FLIPKART INDIA PVT LTD	20	2	IT
34	FRACTAL ANALYTICS	83	8	CO
35	GEOMETRIC	1	1	MF
36	GREYORANGE INDIA PVT LTD	130	6	ET
37	HEADOUT	56	1	IT
38	HSBC	84	2	IT
39	HERE MAPS	1	1	IT
40	HONEYWELL	38	1	CH
41	HOURGLASS RESEARCH	45	5	CO



SR.#	Company visited	Number of students		Sector
		Interviewed	Offers	
42	IBM	1	1	IT
43	IDEAS SAS	2	1	CO
44	IMI MOBILE	1	2	IT
45	INDUS VALLEY PARTNERS	44	3	IT
46	INFOSYS	36	18	IT
47	INSTAMOJO	106	2	IT
48	INTUIT	71	5	IT
49	JDA SOFTWARE SOLUTIONS	2	1	IT
50	JP MORGAN INVESTMENT BANKING	129	11	BF
51	KLIMB	1	1	OT
52	KPMG	64	8	BF
53	LINKEDIN	103	0	IT
54	LEXINNOVA	105	5	IT
55	MODOR INTELLEGEENCE	1	1	IT
56	MEDIA IQ DIGITAL	4	4	CO
57	MOFIRST	93	4	IT
58	MORGAN STANLEY ADVANTAGE SERVICES	10	0	IT
59	MORNING STAR	1	1	IT
60	MYNTRA	3	4	IT
61	NEXTGEN	2	2	IT
62	NOMURA	2	2	IT
63	NUCLEUS SOFTWARE EXPORT LTD	23	5	IT
64	NVIDIA GRAPHICS	10	4	ET
65	NUTANIX	2	1	IT
66	OPEN WORLD MONEY	70	3	IT
67	ORACLE INDIA PVT LTD	105	16	IT
68	ORBEES CONSULTING	124	3	IT
69	QUALCOMM	31	1	ET
70	RAO IIT	18	4	OT
71	ROADRUNNR	94	4	IT
72	REFLEXIS SYSTEM	5	5	IT
73	RELIANCE PETROCHEMICALS	12	4	S & M
74	ROVI CORPORATION	103	2	IT
75	SABRE	14	8	CO
76	SAPIENT	12	3	IT
77	SOCIAL COPS	1	1	CO
78	STELLAR SOFTWARE TECHNOLOGIES	4	1	IT
79	SULZER	39	1	MF
80	S.M.SYSTEMS	1	1	IT
81	TATA MOTORS	70	5	MF
82	TRESVISTA FINANCIAL SERVICES	19	6	BF
83	TEXAS INSTRUMENTS	19	4	ET
84	THOMSON REUTERS	54	1	ET
85	THOROGOOD ASSOCIATES	157	2	CO
86	TARGET	157	3	IT

SR.#	Company visited	Number of students		Sector
		Interviewed	Offers	
87	TONBO IMAGING PVT LTD	2	1	IT
88	UNITED HEALTH GROUP	49	4	IT
89	UNIKKAPPS SOLUTION	1	1	IT
90	VIBRANT ACADEMY	9	1	OT
91	VIRTUSA	58	19	IT
92	VOLVO EICHER	1	1	CH
93	WALMART LABS	7	2	IT
94	WIPRO	15	2	IT
95	ZINNOV MANAGEMENT CONSULTING PVT. LTD.	1	1	CO
96	ZS ASSOCIATES	80	23	CO
97	ZOOM CAR	8	1	IT

**Summary**

<b>Total No. of Companies:</b>	97
<b>Total No. of Students Interviewed:</b>	3519
<b>Total No. Appointments offered including multiple offers:</b>	352

**Legend:**

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO: Consulting, ET: Electronics, BF: Banking Finance, EL: Electrical, S & M - Sales & Marketing.

IT- Compulsory for Computer Science / Information System and Optional for Electricals and Electronics / Electronics & Instrumentation, CH- Chemical, MF - Mechanical, CO - open for all, ET - Electrical and Electronics / Electronics & Instrumentation, S&M - open for all

**LIST OF THE COMPANIES VISITED SEMESER I, 2016-17**

SR.#	Company Visited	Number of students		Sector
		Interviewed	Offers	
1	INTUIT	2	2	IT
2	NUTANIX	2	2	IT
3	MATHWORKS INDIA PRIVATE LIMITED	18	2	IT
4	MICROSOFT	3	3	IT
5	AMAZON	75	4	IT
6	DIRECTI	44	3	IT
7	D E SHAW	54	5	IT
8	ARCESIUM	45	3	IT
9	MORGAN STANLEY	60	9	CO
10	PAYPAL	49	2	IT
11	ARISTA NETWORKS	19	2	IT
12	EMC2	31	1	IT
13	JIVOX	46	2	IT
14	SOCIETE GENERALE	25	5	BF
15	TEXAS INSTRUMENTS	87	3	ET
16	QUALCOMM	82	5	ET
17	ROHM SEMICONDUCTORS	66	4	ET
18	JOHNSON'S CONTROLS (MECH-6, ET-6)	72	12	MF
19	ORACLE	86	8	IT
20	AFFINE ANALYTICS	32	4	IT
21	ZS ASSOCIATES	74	10	CO

SR.#	Company Visited	Number of students		Sector
		Interviewed	Offers	
22	INTEL	30	0	ET
23	BARCLAYS	50	11	BF
24	CA TECH	57	4	IT
25	SABRE	50	4	IT
26	GE	8	0	ET
27	FIORANO	23	1	IT
28	FUTURE'S FIRST	59	2	BF
29	L & T	33	3	MF
30	CYPRESS SEMICONDUCTORS	1	1	ET
31	TRESVISTA	74	3	BF
32	SEAGATE	29	3	ET
33	SKF	39	1	ET
34	ADM AGRO	33	0	CH
35	MU SIGMA	83	4	CO
36	TATA MOTORS	34	6	MF
37	NSE-IT	36	1	IT
38	CGI	35	7	IT
39	INTELLECT DESIGN	24	4	ET
40	REDPINE SIGNALS	18	3	ET
41	GREATWEST GLOBAL BUSINESS SERVICES	28	4	IT
42	FRESHDESK	28	0	IT
43	GRAM POWER	14	1	ET
44	CASAAMORE INTERNATIONAL	29	1	OT
45	TATA ADVANCED SYSTEMS	21	4	MF
46	NUCLEUS SOFTWARE	2	0	IT
47	NETAPP	2	2	IT
48	BROWNTAPE	25	2	IT
49	CAPGEMINI	5	1	CO
50	MEDIATEK	10	0	ET
51	NUMADICS	5	1	ET
52	RAO IIT ACADEMY	21	9	OT
53	RELIANCE	20	1	S&M
54	THERMAX	2	0	CH

**Summary**

Total No. of Companies:	54
Total No. of Students Interviewed:	1900
Total No. Appointments offered:	175

**Legend:**

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO: Consulting, ET: Electronics, BF: Banking Finance, EL: Electrical, S & M - Sales & Marketing.

IT- Compulsory for Computer Science / Information System and Optional for Electricals and Electronics / Electronics & Instrumentation, CH- Chemical, MF - Mechanical, CO - open for all, ET - Electrical and Electronics / Electronics & Instrumentation, S&M - open for all.

**BITS Pilani**

# **annual report** 2016

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**Part B3: Hyderabad Campus**

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**B3.1 SENIOR OFFICERS AND APPOINTMENTS****(a) Senior Officers**

- a. Prof. G Sundar, Senior Professor and Director, BITS Pilani Hyderabad Campus
- b. Prof. M B Srinivas, Professor and Dean - Administration
- c. Prof. Suman Kapur, Senior Professor and Dean, International Programmes and Collaboration Division (University Wide)
- d. Prof. Niranjan Swain, Professor and Dean, Practice School Division; (University Wide)

**(b) New appointments**

- a. Ms. P V Soumya, Accounts Manager (Placements)
- b. Mr. Keshav S, Training & Development Manager
- c. Mr. Biju Rajan, Manager, Placements
- d. Mr. M Venkatesh, Manager – MEP Projects
- e. Mr. V S Varmesh, Commercial Manager (Projects)
- f. Mr. Pradeep Ranjan Singh Deo, Dy. General Manager – Operations
- g. Mr. B Badrinath, Facilities Manager – Civil
- h. Mr. Varun Singh, Operations Manager

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	
<b>Second Semester 2015-16</b>	-	-	-	-	-	-	15	8	18	3	<b>33 (11)</b>
<b>First Semester 2016-17</b>	659	100	66	28	11	6	27	12	18	6	<b>781 (152)</b>
<b>Grand Total</b>											<b>814 (163)</b>

**B3.3 DUAL DEGREE AND TRANSFERS**

During the Year 2016, a total no of 144 students (out of 149 offers : Priority 1 – 140, Other Priorities - 4) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given **Annexure2 (Part B1)**.

**TRANSFERS:**

During the Year 2016, a total no of **18** students (11 transfers + 7 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 **Annexure2 (Part B1)**.

**VERTICAL TRANSFERS:**

During the year 2016, Two (2) students were permitted to transfer from First Degree to Higher degree and 1 student was permitted to transfer from Higher Degree to Ph.D. Programme 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 2015-2016	13.01.2016	02.05.2016	87
First Semester 2016-2017	02.08.2016	28.11.2016	94
Summer Term 2015-2016	22.05.2016	11.07.2016	44

**B3.5 COURSES OFFERED**

The number of courses, offered during the year 2016 are as follows:

	Number of Courses Offered
Second semester 2015-2016	348
First Semester 2016-2017	342
Summer Term 2015-2016	31

**During the year the following new courses are added**

Second semester 2015-2016	15
First Semester 2016-2017	4

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 2015-2016	3279
First Semester 2015-2016	3322
Summer Term 2016-2017	897

Details of Registration of students for the First Semester 2014-2015 are given in **Annexure 4 (Part B3)**.

**B3.7 ACADEMIC AND PROFESSIONAL COUNSELLING****II Semester 2015-2016**

There were **55** students under the purview of the Academic Counselling Board (ACB) at the beginning of the First Semester 2015 – 2016. At the end of First Semester 2015 – 2016, **27** 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. **37** new cases came under the purview of ACB at the end of First Semester 2015 - 2016. The total number of students who are under the purview of ACB at the beginning of Second Semester 2015-2016 is **65**.

**I Semester 2016-2017**

There were **65** students under the purview of the Academic Counselling Board (ACB) at the beginning of the Second Semester 2015 – 2016. At the end of Second Semester 2015 – 2016, **47** 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. **49** new cases came under the purview of ACB at the end of Second Semester 2015 - 2016. The total number of students who are under the purview of ACB at the beginning of First Semester 2016-2017 is **67**.

		II Semester 2015-16	I Semester 2016-17
1.	Total number of students under the purview of ACB at the beginning of the semester	55	65
2.	No. of students declared out of its purview at the end of the semester	27	47
3.	No. of students who left/transfer the Institute during the semester	28	18
4.	No. of new students who came under the purview of ACB at the end of the semester	37	49
5.	Total No. of students under the purview of ACB during the next semester	65	67

**B3.8 AWARD OF DEGREES**

Convocation was conducted on Sunday 14<sup>th</sup> August, 2015, Chief Guest Dr. S. Christopher, Secretary, Department of Defence Research and Development & Director General, DRDO and the Vice Chancellor Prof. Souvik Bhattacharyya have participated in the Convocation of the campus for award of various degrees (First Degree, Higher Degree and Ph.D) to 765 students.

**LIST OF INTEGRATED FIRST DEGREE PROGRAMMES FOR AWARD OF MEDALS**

S. NO.	NAME and ID NO	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
1	ADITYA CHANDRASEKAR 2012A7PS278H	M	9.93	FIRST	GOLD
2	A SAI DARSHAN 2012A1PS487H	M	9.73	SECOND	SILVER
3	P SARGUNA JANANI 2012A7PS148H	F	9.68	THIRD	BRONZE

During the year, a total of 765 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
<b>FIRST DEGREE</b>							
1.	Chemical Engineering	37	-	-	-	-	37
2.	Civil Engineering	35	-	-	-	-	35
3.	Electrical & Electronics Engineering	67	-	-	-	-	67
4.	Mechanical Engineering	56	-	-	-	-	56
5.	B. Pharmacy	13	-	-	-	-	13
6.	Computer Science Engineering	87	-	-	-	-	87
7.	Electronics and Instrumentation	38	-	-	-	-	38
8.	Electronics and Communication	82	-	-	-	-	82
9.	Manufacturing Engineering	32	-	-	-	-	32
10.	Biological Sciences	-	35	-	-	-	35
11.	Chemistry	-	33	-	-	-	33
12.	Economics	-	40	-	-	-	40
13.	Mathematics	-	41	-	-	-	41
14.	Physics	-	32	-	-	-	32
15.	Information Systems	-	-	47	-	-	47
<b>Sub-Total</b>							<b>675</b>
<b>Higher Degree</b>							
16.	M.E. Computer Science	-	-	-	8	-	8
17.	M.E. Biotechnology	-	-	-	9	-	9
18.	M.E. Embedded System	-	-	-	7	-	7
19.	M.E. Design Engineering	-	-	-	7	-	7
20.	M.E. Structural Engineering	-	-	-	7	-	7
21.	M.E. (Mechanical with specialization in Thermal Engineering)	-	-	-	6	-	6
22.	M.Pharm (with specialization in Pharmaceutics)	-	-	-	5	-	5
23.	M.Pharm (with specialization in Pharmaceutical Chemistry)	-	-	-	1	-	1
24.	M.E. Information Security	-	-	-	10	-	10
<b>Sub-Total</b>							<b>60</b>
25.	<b>Ph.D</b>					<b>30</b>	<b>30</b>
<b>Grand Total</b>		<b>447</b>	<b>181</b>	<b>47</b>	<b>60</b>	<b>30</b>	<b>765</b>



**B3.9 CAMPUS INTERVIEWS AND PLACEMENT**

Number of companies which conducted campus interviews	170
No of interviews	10083
No of offers made	528

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 Biological Sciences****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>2</b>
<b>Associate Professors</b>	<b>5</b>
<b>Assistant Professors</b>	<b>3</b>
<b>Lecturers</b>	<b>0</b>
<b>Visiting Faculty</b>	<b>0</b>

**Head of the Department:** K. Naga Mohan

**Contact details:** Email: MohanKN@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 30

**i. Sponsored Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Anaerobic co-digestion of food waste and organic fraction of municipal solid waste for the production of biogas and concomitant use of biogas as fuel for cooking and spent slurry as fertilizer.	P. Sankar Ganesh	Centre of Research Excellence in Waste, Water & Energy, BITS Pilani	50	2014-2019
2.	Novel biomarker responses to validate acute toxicity of engineered nanoparticles and their physicochemical interactions in earthworm as a model bio indicator of nano(eco)toxicology.	P. Sankar Ganesh	Department of Biotechnology, Government of India	14.07	2013-2016
3.	A point of Care (POC) device for detection of antibiotic sensitivity of uropathogens in human urine	Prof. Suman Kapur	DBT-BIRAC	45	2014-2016
4.	Project cooperation between School of Innovation, design and Engineering, Mälardalens högskola and Birla Institute of Technology and Science- Pilani	Prof. Suman Kapur (Co-PI)	The Swedish Council for Higher Education	80000 SEK	2015-2016
5.	AC impedance measurement on two dimensional origami structures of various shapes	Prof. Suman Kapur (Co-PI)	CSIR	22.3	2013-2016
6.	Adenovirus-delivered RNAi as an antiviral strategy against dengue.	Prof. Swaminathan	DBT	59.7	2014-2017

7.	Delineating the impact of plant growth promoting rhizobacteria on plant polyamine metabolism: novel insights into plant-PGPR interactions	Dr. Sridev Mohapatra	DST	25	2013-2016
8.	Characterization of a mouse embryonic stem cell model to study the effects of increased levels of DNA methyltransferase 1 (DNMT1) on abnormal neurogenesis	Dr Kommu NagaMohan	DST	40.38	2014-2017
9.	Development of a cost-effective membrane and DNA chip-based detection of mutations with multiple drug-resistance tuberculosis	Dr Kommu NagaMohan	DST	69.16	2014-2017
10.	Transgenic Embryonic stem cell models for studying the role of elevated levels of DNMT1, and DNMT3A in neuropsychiatric disorders.	Dr Kommu NagaMohan	DBT	25.0	2014-2017
11.	Automated Detection of abnormal copy number variants in human diseases	Dr Kommu NagaMohan	DBT-BIRAC	49.9	2014-2016

#### Projects sanctioned during the year

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Co-treatment of domestic septage and municipal solid waste landfill leachate using dry-thermophilic anaerobic digestion for the production of bioenergy and biofertilizer	P. Sankar Ganesh	Biotechnology Industry Research Assistance Council	28	2016-2018
2.	Maintenance of Sanitation and Solid Waste Management for Swachh Andhra Pradesh	P. Sankar Ganesh	Municipal Administration and Urban Development, Government of Andhra Pradesh	3.5	2016

#### ii. Publications:

- Current Developments in Mass Production of Microalgae for Industrial Applications, S. Ramachandran, P. Sankar Ganesh, V. Sivasubramanian, B. G. Prakash Kumar, Environmental Sustainability Using Green Technologies, ISBN: 9781498753050, CRC Press, Taylor & Francis, 2016.
- Dibyendu Rakshit, Santosh K. Sarkar, Kamala K. Satpathy, Palani Sankar Ganesh, Nallamuthu Godhantaraman, Jayanta K. Biswas, Diversity and Distribution of Microzooplankton Tintinnid (Ciliata: Protozoa) in the Core Region of Indian Sundarban Wetland, Clean – Soil, Air, Water 44: 9999, 1, 2016.
- Diti A. Shah, Sunetra Sen, Shalini A., Daipayan Ghosh, Minakshi Grover, Sridev Mohapatra. An auxin secreting *Pseudomonas putida* rhizobacterial strain that negatively impacts water-stress tolerance in *Arabidopsis thaliana*. In press.
- Imran Khan, Jayati Ray Dutta and Ramakrishnan Ganesan, *Lactobacillus* sps. Lipase mediated poly ( $\epsilon$ -caprolactone) degradation, International Journal of Biological Macromolecules, Elsevier, 95, 2017, pp. 126-131. DOI:10.1016/j.ijbiomac.2016.11.040.
- Imran Khan, Jayati Ray Dutta and Ramakrishnan Ganesan, Enzymes's action on materials: Recent trends, accepted in Journal of Cellular Biotechnology, 1, 2015/16, pp. 131-144, DOI 10.3233/JCB-15013 IOS Press.

6. S. Kalidasan, A. Santhana Krishna Kumar, Vidya Rajesh, N. Rajesh, "The journey traversed in the remediation of hexavalent chromium and the road ahead towards greener alternatives - A perspective", *Coordination Chemistry Reviews*, 317, (2016), 157-166.
7. Madhu Poornima Mamidala, N. Rajesh, Vidya Rajesh, " Mass Spectrometric evaluation of neurotransmitter levels in IMR 32 cell line in response to Ayurvedic medicines", *Rapid Communication in Mass Spectrometry*, 30, (2016), 1413-1422.
8. C.N.Rahul, K. Shiva Krishna, Atul P. Pawar, Vidya Rajesh, "In silico approach to ascertain the calcium dependent role of *Plasmodium falciparum* SERA 5", *Journal of Biomolecular Structure and Dynamics*, DOI: 10.1080/07391102.2015.1129988.
9. Manasi, N. Rajesh, Vidya Rajesh, " Evaluation of genetic basis of heavy metal resistance in an isolate from electronic industry effluent", *Journal of Genetic Engineering and Biotechnology*, (Article in Press), DOI:10.1016/j.jgeb.2016.02.002 (2016).
10. T. Sathvika, Manasi, Vidya Rajesh, N. Rajesh, " Prospective application of *Aspergillus* sps. immobilized in sodium montmorillonite to remove toxic hexavalent chromium from waste water", *RSC Advances*, 5, (2015), 107031 - 107044.
11. Akshay Bhatnagar, Marcin Apostol and Debashree Bandyopadhyay, "Amino acid function related to its embedded protein microenvironment: A study on disulphide-bridged cysteine", *Proteins: Structure, Function and Bioinformatics*, 2016, 84, 1576-1589
12. Sheik saleem Pasha; Pradip Das; Nigam P. Rath; Debashree Bandyopadhyay; Nikhil R. Jana, Inamur R. Laskar, "Water Soluble Luminescent Cyclometalated Platinum(II) Complex - A Suitable Probe for Bio-imaging Applications", *Inorganic Chemistry Communication* (2016), 67, 107-111.
13. Mohan KN. Stem Cell Models to Investigate the Role of DNA Methylation Machinery in Development of Neuropsychiatric Disorders. *Stem Cells Int.* 2016;2016:4379425. doi: 10.1155/2016/4379425.
14. Sharma P, Banerjee R, Narayan KP (2016) Data for stable formulation of steroid hormone receptor-targeted liposomes for cancer therapeutics (Data Article) *Data in Brief.* 27;7:428-31
15. Sharma P, Banerjee R, Narayan KP (2016) Mineralocorticoid receptor mediated liposomal delivery system for targeted induction of apoptosis in cancer cells. *BBA Biomembranes* 1858 (2): 415-21.

### iii. Conferences attended/papers presented:

1. Evaluating the effects of TiO<sub>2</sub> nanoparticles on cholinergic and antioxidant defensive systems in earthworm, *Eisenia fetida*, B. Siva Prasad, S. Aarathi Menon, P. Sankar Ganesh, National Conference on Recent Advances in Biotechnology, Sreenidhi Institute of Science and Technology, Hyderabad, 20th October, 2016.
2. Assessing Sub-lethal Effects of Gold Nanoparticles on Oxidative Stress and Neurotoxicity in Earthworm, *Eisenia fetida*, B. Siva Prasad, S. Aarathi Menon, P. Sankar Ganesh, Society of Environmental Toxicology and Chemistry Asia/Pacific 2016 Conference, National University of Singapore, September 2016.
3. Behavior and Fate of Engineered Gold Nanoparticles in Environmentally Relevant Aquatic Media: A Clue to Predict the Toxicity of Nanoparticles in Marine Environment, B. Siva Prasad, S. Aarathi Menon, P. Sankar Ganesh, S. K. Sarkar, International Conference on Aquatic Resources and Sustainable Management, Science City, Kolkata, February 2016.
4. Integrated 'Omics' of Coelomic Fluid: An Attempt to Understand Phenomics of TiO<sub>2</sub> Nanoparticle Toxicity, Siva Prasad Bitragunta, Sankar Ganesh Palani, Conference: 55th Annual Meeting of Society of Toxicology, New Orleans, LA, March 2016.
5. Agglomeration of Engineered TiO<sub>2</sub> Nanoparticles: Cellular Uptake and Genotoxicity, Siva Prasad Bitragunta, Aarathi Menon Sankar, Santosh Kumar Sarkar, Sankar Ganesh Palani, 5th Young Environmental Scientist Meeting, Gainesville, FL, USA February, 2016.
6. Sathvika T, Amitesh Soni, Kriti Sharma, Manasi, Vidya Rajesh, N. Rajesh, "Synergistic effect of nitrogen fixing bacteria immobilized in a carbonaceous material (MWCNT) for the sequestration of hexavalent chromium", 5th Symposium on advanced Biological Inorganic Chemistry, Kolkata, January 7th - 11th, 2017.
7. Riya Rakshit, C.N.Rahul, Vidya Rajesh, " Structural modelling of *Plasmodium falciparum* moving junction complex RON proteins and identification of inter RON interaction sites" , International Conference on Structure based Drug Designing and Applications to Infectious Diseases, Hyderabad, 1st Feb - 5th February, 2016.
8. T. Sathvika, S. Akhil, Manasi, Vidya Rajesh, N. Rajesh, " Nitrogen fixing bacteria (*Rhizobium*) immobilized in clay as a sustainable option for the removal of hexavalent chromium from waste water", ICMG, IISc, Bangalore, 17th Feb - 20th Feb, 2016.
9. Akshay Bhatnagar, Sruthi Varanasi, Dhruv Ghiya, G.G.S. Chaitanya, Debashree Bandyopadhyay protonation and deprotonation reaction of aspartic acid side chain modulated by the surrounding dielectric

medium - ab initio quantum chemical studies on aspartic acid in sixteen different solvents and two protein structures", 60th Annual Biophysical Society Meeting 2016. Los Angeles, California, 27th February to 2nd March 2016

- Suma C, Prakruthi, B, Thanmayi, R.R., Kiranmayi V, and Bandyopadhyay, D, "Kolkata resisted H1N1 swine flu virus in recent past: A bioinformatics study" 16th international conference on Bioinformatics (INCOB2016), Singapore, 21st to 23rd September, 2016.

**iv. Invited Talks given by BITS faculty:**

- Toxicology in the era of nanotechnology, P. Sankar Ganesh, National Conference on Recent Advances in Biotechnology, Sreenidhi Institute of Science and Technology, Hyderabad, October, 2016.
- Novel challenges posed by emerging contaminants on bioprocessing of wastewater: Implications of engineered nanoparticles, P. Sankar Ganesh, Advances in bioprocess engineering-practical approach for today's bioprocess challenges, Kasturba Gandhi Degree & PG College for women, Hyderabad, November, 2016.
- Keynote Address: Techniques for identification of copy number variants in the human genome in the Workshop on "Multiplex Ligation dependent Probe Amplification and its Application", Prof. K. N. Mohan, Thiagarajar College, Madurai, January 2016.
- Copy number variants of unknown significance: Role of 15q11.2 CNVs in neuropsychiatric disorders and other abnormal phenotypes. Institute of Genetics, Hyderabad (New Frontiers in Diagnosis and Management of Genetic Diseases), K.N. Mohan, January 2016.
- Variants of Uncertain Significance: The conundrum of 15q11.2 CNVs. K.N. Mohan, NISER Bhubhaneshwar, November 2016.

**v. Invited talks arranged in the department:**

Presenter	Details of the Talk	Department	Date
Prof. Rakesh Kumar	MTA1 Master Coregulator in Cancer and Beyond	George Washington University, USA	20-02-2016
Dr. Suresh Arya	Synthetic Biology, HIV/AIDS	NCI, NIH, USA	13 to 16-02-2016
Prof. Abhijit Chakrabarty	Clinical Proteomics of Hemoglobin disorder	Saha Institute of Nuclear Physics	26-08-2016
Dr Souvik Maithy	Chemical tools to silence microRNA: Opportunities and Challenges	Institute of Genomics and Integrative Biology	5-11-2016

**vi. Awards and recognitions won by faculty and students**

- Prof. P. Sankar Ganesh was provided Travel Grant by Society of Environmental Toxicology and Chemistry to co-chair the session on Global perspectives in Toxicological Risk Assessment of Nanoparticles in Environment in the conference in the Asia Pacific 2016 Conference held in September 2016, at National University of Singapore.
- Mr. Akshay Bhatnagar was awarded travel grant by DBT to attend 60th Annual Biophysical Meeting at Los Angeles, California, USA
- 2) Prof. Suman Kapur was awarded #100 Women Achiever in Innovation Science and Technology by the Ministry of Women and Child Development, Government of India (January 2016).
- Prof, Suman Kapur has received country-wise patent support (for UK, USA and Europe) by ICMR for glucose testing.

**vii. Faculty Development, International Collaboration & Industry Immersion**

**viii. Significant new equipments/experimental facility added during the year:**

**ix. Departmental association/club activities:**

- The second year students of ME Biotechnology visited Dr. Reddy's Biologics facility at Bachupally, Hyderabad, on 26th October, 2016, as part of their industry exposure.

**x. Major maintenance, renovations or new construction reports:**

**xi. Major equipments acquired during the year:**

- KEL PLUS Automatic Nitrogen /Protein Estimation System
- Fluorescent Microscope 12.0 lakhs

**B3.10.2 Chemical Engineering****I. Number of faculty members**

Senior Professors, Professors	----
Associate Professors	2
Assistant Professors	6
Lecturers	1
Visiting Faculty	---

**Head of the Department:** Dr. Srikanta Dinda

Contact details: 040 - 66303-586; E-mail: srikantadinda@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 13

**II. Sponsored Research activities**

Department has eight ongoing projects worth Rs. 1.93 crores funded by various funding agencies such as DBT, DST, CSIR, BIRAC, DRDO and BITS-Pilani.

**Ongoing projects:**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Development of Synthetic Resin Product	Prof. Srikanta Dinda	DST	22	Aug. 2013 (36 months)
2.	Treatment of Nitrogenous Waste using Microalgae and its Utilization for Production of Biofuels and Other Value Added Products	Dr. Asma Ahmed	BITS-Pilani	45	Feb. 2014 (36 months)
3.	3-D Printer Filaments that are Biomaterial-Based and Eco-Friendly	Dr. Karthik Chethan V.	BIRAC	34	June 2014 (24 months)
4.	Biofuels from lignocellulosic biomass waste: Biosolubilization and biomethanation of Lignin	Dr. Asma Ahmed	DST	27.2	July 2014 (36 months)
5.	Nano-scale Characterization of Human Hair Fibres by using Indentation Technique	Dr. Ramesh Babu Adusumalli	DST	29.9	Aug. 2014 (36 months)
6.	Bioconversion of Coal Rejects to Biogas and Humic Acid	Dr. Asma Ahmed (Ardee Hi-Tech Pvt. Ltd., Vizag.)	DBT	1.8	Sept. 2015 (12 months)
7.	Characterization of Fibre / Matrix interface in Advanced Composites	Dr. Ramesh Adusumalli	ASL (DRDO)	9.96	Aug. 2015 (12 months)
8.	Studies on CO <sub>2</sub> Capture from Flue Gases using Regenerable Solid Adsorbents	Prof. Srikanta Dinda	CSIR	23	Oct. 2015 (36 months)

**Projects sanctioned during the year: NIL**

**III. Publications**

1. B. Sreenivasulu, I Sreedhar, B M Reddy, K V Raghavan, "Stability and Carbon Capture Enhancement by Coal Fly -ash Doped Sorbents at a High Temperature", Energy and Fuels, (2016), <http://dx.doi.org/10.1021/acs.energyfuels.6b02721>

2. I.Sreedhar, R.Vaidhiswaran, Bansil M Kamani, A.Venugopal, "Process and Engineering Trends in Membrane based Carbon Capture", *Renewable and Sustainable Energy Reviews*, 68, 2017, 659-684 (<http://dx.doi.org/10.1016/j.rser/2016.10.025>)
3. I Sreedhar, Y Kirti Kishan, "Process Standardization and kinetics of Ethanol Driven Biodiesel Production by Transesterification of Ricebran Oil", *International Journal of Industrial Chemistry*, 7 (2), 2016, 121-129.
4. B.Sreenivasulu, Ishan Vyas, Bansil M Kamani, I Sreedhar, K V Raghavan, "Effect of Composition, Synthesis Protocol and Pellet size of Cost Effective Adsorbents doped with Flyash on Carbon Capture", *International Journal of Environmental Science and Development*, 7(11) 2016, 801-804.
5. Srikanta Dinda, Vijay Ravisankar, Palak Puri, Development of Bio-epoxide from Nahor (*Mesua ferrea* Linn) Oil, *Journal of the Taiwan Institute of Chemical engineers*, 2016, 65, 399-404.
6. Appala Naidu U, Srikanta Dinda, Development of poly-cyclohexanone resin material for coating applications, *Materials Today Proceedings*, 2016, 3, 3838-3843.
7. Srikanta Dinda, Nikhil S. Reddy V., Ramesh babu A. Bio-epoxide and Bio-adhesive from Plant oil, *Korean journal of Chemical Engineering*, 2016, 33, 2915-2922.
8. Appala Naidu U, Srikanta Dinda, Pravallika K, Karthik C. V., Preparation and charecterization of ketonoc polymer for coating applications, *Progress in Organic Coatings*, 2016, 99, 251-262.
9. Chinthala Praveen K., Sukumar Mandal, Gopal Ravichandran, Srikanta Dinda, Amit V. Gohel, Ashwani Yadav, Asit kumar Das, Development of a FCC catalyst/additive combination with high tolerance to calcium contamination from lower cost feedstock. *Catalysis*, PTQ, 2016, 21 57-63.
10. Rohith Puntambekar, Madhuri Pydimalla, Srikanta Dinda, Ramesh Adusumalli, Characterization of Heartwood and Sapwood, *J Indian Acad Wood Sci*, 2016, 13, 8-15.
11. Transient Analysis of DMFC anode, Sai Darshan and Balaji Krishnamurthy, *Electrochimica Acta*, 191, (2016), 317.
12. Jakob Schwiedrzik, Rejin Raghavan, Markus Rüggeberg, Silla Hansen, Juri Wehrs, Ramesh B. Adusumalli, Tanja Zimmermann & Johann Michler. Identification of polymer matrix yield stress in the wood cell wall based on micropillar compression and micromechanical modelling. *Philosophical Magazine: Part A Materials Science*; DOI: 10.1080/14786435.2016.1235292; 2016
13. Aparna S, Purnima D, Ramesh Babu Adusumalli. A Review on Various Compatibilizers and Its Effect On Mechanical Properties of Compatibilized Nylon Blends. *Polymer-Plastics Technology and Engineering*; DOI: 10.1080/03602559.2016.1233280; 2016.
14. Shubham Mishra, Chandrakala Kunchi, Karthik Chethan Venkateshan, Ravi Chandra Gundakaram, Ramesh Babu Adusumalli. Nanoindentation and Tensile testing of Human Hair Fibres. *Journal of Materials Science* 51(22) 10191-10204; 2016.
15. P. Madhuri, Nikhil Sainath V, Jayanty S, Adusumalli R.B. Pulp and Black Liquor Characterization of Subabul wood after kraft cooking; *IPPTA (Indian Pulp and Paper Technology Association) - The Official International Journal*; 28 (2); 130-142; SCOPUS Indexed, SJR: 0.12; 2016.
16. Improved Ammonium Removal from Industrial Wastewater through systematic adaptation of wild type *Chlorella pyrenoidosa*. Ahmed, A. Nimmakayala, J., Ramesh, A (2016) *Water Science and Technology* doi: 10.2166/wst.2016.507
17. Degradation of Lignin in Agricultural Residues by locally isolated fungus *Neurospora discreta*. Pamidipati, S. & Ahmed, A. (2016). *Appl Biochem Biotechnol* doi:10.1007/s12010-016-2302-6
18. Koli, A. C., Subhedar, P. B., Pamidipati, S. and Gaikar, V. G. (2016), Mathematical model for reactive recovery of invertase by chemical permeabilization of baker's yeast. *J. Chem. Technol. Biotechnol.*, 91: 1266–1273. doi:10.1002/jctb.4716

#### IV. Book Published: Chapter in Books

1. Srikanta Dinda, Nikhil S. Reddy V., Appala Naidu U., S. Girish, *Materials, Energy and Environment Engineering*, Springer nature, 2016, ISBN: 978-981-10-2674-4.
2. Ramesh Babu Adusumalli, Karthik Chethan V, Wolfgang Gindl-Altmutter. *Micromechanics of Cellulose Fibres and their Composites*. *Wood is Good: Current Trends and Future Prospects in Wood Utilization*; ISBN 978-981-10-3115-1; Editors: Pandey, K.K., Ramakantha, V., Chauhan, S.S., Kumar, A.A.N; Springer Singapore.

**V. Conferences attended/papers presented**

1. B. Sreenivasulu, Ishan Vyas, I Sreedhar, K V Raghavan, "High Temperature Carbon Capture by Coal fly ash enriched Limestone", International Congress on Recent Advances in Chemistry and Chemical Engineering, JNTU Hyderabad, July 2016.
2. Appala Naidu Uttaravalli, Poornima Karthikeyan, Srikanta Dinda, Resin Synthesis and its Compatibility Studies, CHEMCON-2016, Chennai, India, 27-30 December, 2016, pp-1242.
3. Poornima Karthikeyan, Appala Naidu Uttaravalli, Srikanta Dinda, Development of Polymeric Material from Cyclic-ketones for Coating Applications, International Conference on Material Sciences (SCICON' 16), Coimbatore, India, 19-21 December, 2016.
4. Appala Naidu U., Srikanta Dinda, Development of mathematical model to predict polymer properties, International conference on polymer processing and characterization (ICPPC 2016), 9-11 Dec, 2016, Kerala, India, pp-34
5. Appala Naidu U., Srikanta Dinda, Characterization of Ketonic Resin, SCHEMCON-2016, 10-11 September, BVRIT, Hyderabad.
6. Srikanta Dinda, Appala Naidu U. Functional polymer for coating applications. EMN Meeting-Dubai-2016, 1-4 April, Dubai, UAE.
7. Appala Naidu U., Srikanta Dinda Development of Poly-cyclohexanone resin material for coating applications, International Conference on Material Research and Applications (ICMRA-2016), 11-13 March 2016, Hyderabad, India.
8. "Modeling of crystalline behaviors of PP/coir and PP/EPDM composites using artificial neural networks". Shivani Lodha and D. Purnima. The 3rd Indo-Austrian Symposium on Advances in Materials Engineering, Mumbai, 19<sup>th</sup> and 20<sup>th</sup> December 2016. (Accepted)
9. "Characterization of PP Based Blends and Composites". Nitisha Mittal and D. Purnima. The 3rd Indo-Austrian Symposium on Advances in Materials Engineering, Mumbai, 19<sup>th</sup> and 20<sup>th</sup> December 2016. (Accepted)
10. "Effect of Temperature on Mechanical Properties of (Nylon 6) PA6 / Talc Composite". Namrata Verma, S. Aparna and D. Purnima. The 3rd Indo-Austrian Symposium on Advances in Materials Engineering, Mumbai, 19<sup>th</sup> and 20<sup>th</sup> December 2016. (Accepted)
11. "Comparison of Mechanical Properties of Organic and Inorganic Filler Reinforced Nylon Composites", Avasarala Satya Teja, S. Aparna and D. Purnima, Proceedings of SCHEMCON-2016, Hyderabad, September 10-11, 2016.
12. D. Purnima, R.B. Adusumalli, Sourav Agarwal and S. Aparna. Prediction of Modulus of Natural Fiber Reinforced Thermoplastic Composite. Proceedings of 14th ISAMPE National Conference on Composites (INCCOM-14), Hyderabad, January 22-23, 2016. Pp: 30-39.
13. Rijul Nayani, Sharada Prabhakar, Anu Anna Abraham, Venkateshan. K, R.B. Adusumalli. Characterization of PAN Carbon Fiber Thermoset Composites. Proceedings of 14th ISAMPE National Conference on Composites (INCCOM-14), Hyderabad, January 22-23, 2016, Pp: 240-245.
14. Anirudh Rayaprolu, Rijul Nayani, R.B. Adusumalli. Wetting and interface in Composite Materials. First Andhra Pradesh Science Congress, Tirupathi, Jan. 21-23, 2016.
15. P. Madhuri, Bipin Chakravarthy P, Nikhil S. Reddy, R.B Adusumalli. Delignification wood and characterization of pulp. First Andhra Pradesh Science Congress, Tirupathi, Jan. 21-23, 2016

**VI. Invited Talks given by BITS faculty:**

1. Srikanta Dinda: Invited Talks on Functional polymer for coating applications. EMN Meeting-Dubai-2016, 1-4 April, Dubai.
2. R.B. Adusumalli and Karthik Chethan. Characterization of PAN Carbon fiber thermoset Composites. ISAMPE National Conference on Composites, organised by DRDO, Jan. 22-23, 2016, Hyderabad.
3. R.B. Adusumalli and Karthik Chethan. Characterization of Fibre-Matrix interface in Advanced Composites. CEP Training program on 'Recent Advances in Aerospace Composites. 25th July 2016. ASL Auditorium, Hyderabad.

**VII. Invited talks arranged in the department:**

1. Invited Talk by Ms. K V Kalyani on 8th Feb, 2016, on Cement Manufacture-Process and Energy Perspective
2. Invited talk by Dr. RMVGK Rao on 15th Feb, 2016, on Polymer Matrix Composites- Opportunities for Chemical Engineers as Interfacial Engineers

- 3D Printing of Metals: Challenges and Opportunities by Prof. Upadrasta Ramamurthy from IISc, Bangalore, Nov. 24, 2016.
- Advances in size reduction operations in process industries by Dr. D. V. Ramana Rao from Institute of Particulate Technology International, 29 Aug. 2016.
- Conventional zeolites and Hierarchical Materials for Methanol to olifine and biotransformation by Dr. V. R. Reddy Marthala from Erlangen catalysis Research Center, Germany, 22-Aug 2016.

#### VIII. Awards and recognitions won by faculty and students

- Mr. A. Sai Darshan, received B.V. Raju Memorial Award for Outstanding Student from BITS Pilani Hyderabad campus. He received the award from Indian Institute of Chemical Engineers (IICHE-HRC), July 2016.
- Mr. A. Sai Darshan, received Silver Medal from BITS Pilani Hyderabad campus. August 2016.

#### IX. Faculty Development, International Collaboration & Industry Immersion

#### X. Significant new equipments/experimental facility added during the year.

Sheet Former, Micro GC and Gas Distribution Panel, Autoclave, Granulator,

#### XI. Departmental association/club activities:

The association organized a fresher's party to welcome the first year students and also released the magazine 'Equilibria' in April 2016. Association of Chemical Engineers (ACE) was actively involved in ATMOS – Annual Technical Fest of BITS Pilani Hyderabad Campus, October 2016. As part of The ATMOS, students and faculty were actively involved in conducting Quiz, Paper presentation, technical games such as Canonwars, Workshops such as Petroleum Refining Process, Aspen Plus Process Modeling and Prototyp3D-Sculpting the future one layer at a time.

#### XII. Major maintenance, renovations or new construction reports:

A new room was constructed for keeping some instruments.

#### XIII. Major equipment acquired during the year:

Sheet Former, Micro GC and Gas Distribution Panel, Autoclave, Granulator,

### B3.10.3 Chemistry

#### Number of faculty members

Senior Professors, Professors	2
Associate Professors	6
Assistant Professors	6
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Prof. Manab Chakravarty

Contact details: manab@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 23

#### A. Sponsored Research activities:

##### Ongoing projects

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Photocurable organic-inorganic hybrid precursors for the fabrication of metal oxide micro/nanostructures	Ramakrishnan Ganesan	DST	26 lakhs	2013-2016
2.	Development of suitably customized polymers and clay based adsorbents for the effective removal of chromium from e-waste	N Rajesh	DST	43 lakhs	2013-2016



SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
3	Localization of flexible polymer chains on chemically heterogeneous surfaces	K Sumithra	CSIR	9 lakhs	2013-2016
4	Synthesis of modified TosMIC & BetMIC for use as key reagents in the synthesis of boronated heterocycles	Anupam Bhattacharya	CSIR	18.10 lakhs	2013-2016
5	Structure Based Rational Design and Synthesis of Mycobacterium tuberculosis inhibitors	KVG Chandra Sekar	DST	22 lakhs	2014-2017
6	Finding Aggregation-induced emission active materials : design, synthesis and photophysical studies of sterically hindered triarylethenes and Tetraarylethenes	Manab Chakravarty	DST	38.38	2014-2017
7	Laboratory investigation and field application towards the effective defluoridation of water using appropriately tailored sorbents	N.Rajesh	DST	26.67	2012-2016
8	Towards metalloneurochemistry inside a niosome : a fluorescence spectroscopy approach	Amit Nag	DST	24.98	2014-2017
9	Photocatalytic NO <sub>x</sub> abatement: From Mechanism and Materials Properties to Catalytic Performance	Sounak Roy	DST	24.48	2014-2017
10	Investigation of magneto-optical effect in composite magneto-plasmonic nanostructures for sensing applications	Balaji Gopalan (Co-PI)	DST	33.2	2013-2016
11	Investigation of magneto-optical effect in composite magneto-plasmonic nanostructures for sensing applications	Krishnan Rangan (Co-PI)	DST	33.2	2013-2016
12	Investigation of the folding of Cysteine-rich Neurotoxins in Ionic Liquid by Molecular Dynamics Simulation and Quantum Mechanical Calculations	Durba Roy	DST	25.28	2015-2018
13	Synthesis of Iron Oxide Nanoparticles for Propellant Applications	Balaji Gopalan	Premier Explosives	12.15	2016-2017

#### Projects sanctioned during the year

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Synthesis of Iron Oxide Nanoparticles for Propellant Applications	Balaji Gopalan	Premier Explosives	12.15	2016-2017

#### B. Publications:

1. M. Zubair K. Baig, G. Pallikonda, P. Trivedi, R.N. Prasad T., B. Ghosh and Manab Chakravarty, Metal-free arylation to access distinct anthracenylphosphonates and anticancer activities for these and allied phosphonates, *ChemistrySelect*, 1, 4143, 2016.
2. Pawar, S.; Akula, M.; Labala, S.; Venuganti, V.K.; Bhattacharya, A. and Nag, A, Zn<sup>2+</sup> sensing in aqueous micellar solution using modified bipyridine-based "Turn-On" fluorescent probes and its application in bioimaging, *Chem Plus Chem (Early View)*; DOI: 10.1002/cplu.201600382.
3. M. B. Zubair Khalid, Gangaram Pallikonda, R. N. Prasad Tulichala and Manab Chakravarty, Oxy-Wittig Reactions of 1-Naphthyl(aryl)methylphosphonates: A New Approach to Naphthylarylketones, *Tetrahedron*, 2016, 72, 2094.

4. G. Pallikonda and Manab Chakravarty, Benzylic Phosphates in Friedel-Crafts Reactions with Activated and Unactivated Arenes: Access to Polyarylated Alkanes, *J. Org. Chem.* 2016, 81, 2135.
5. Mahalakshmi Naidu K., Srinivasarao, S., Agnieszka, N., Ewa, A-K., Chandra Sekhar, K.V.G., Seek potent anti-tubercular agents: Design, synthesis, anti-tubercular activity and docking study of various ((triazoles/indole)-piperazin-1-yl/1,4-diazepan-1-yl)benzo[d]isoxazole derivative, *Bioorg. Med. Chem. Lett.* 2016, 26, 2245-2250.
6. Suresh, N., Surendar, C., Bhaskara Rao, B., Mallika, A., Nishant J., Chandra Sekhar, K. V. G., Synthesis and biological evaluation of pyrrolo[2,3-b]pyridine analogues as antiproliferative agents and their interaction with calf thymus DNA, *Eur. J. Med. Chem.* 2016, 114, 220-231.
7. Suresh, A., Suresh, N., Misra, S., Krishna Kumar, M.M., Chandra Sekhar, K.V.G., Design, Synthesis and Biological Evaluation of New Substituted Sulfonamide Tetrazole Derivatives as Antitubercular Agents, *ChemistrySelect*, 2016, 1, 1705-1710.
8. Nagesh, H.N., Suresh, A., Reddy, M.N., Suresh, N., Subbalakshmi, J., Chandra Sekhar, K.V.G., Multicomponent cascade reaction: dual role of copper in the synthesis of 1,2,3-triazole tethered benzimidazo[1,2-a]quinoline and their photophysical studies, *RSC Adv.*, 2016, 6, 15884-15894.
9. Shivani Sharma, N. Rajesh, Synergistic influence of graphene oxide and tetraoctylammonium bromide (frozen ionic liquid) for the enhanced adsorption and recovery of palladium from an industrial catalyst, *J. Environ. Chem. Eng* 2016, 4, 4287-4298.
10. Shivani Sharma, Chia-Ming Wu, R.T. Koodali, N. Rajesh, An ionic liquid-mesoporous silica blend as a novel adsorbent for the adsorption and recovery of palladium ions, and its applications in continuous flow study and as an industrial catalyst, *RSC Adv.*, 2016, 6, 26668-26678.
11. T. Sathvika, Manasi, V. Rajesh, N. Rajesh, Adsorption of chromium supported with various column modelling studies through the synergistic influence of *Aspergillus* and cellulose, *J. Environ. Chem. Eng* 2016, 4, 3193-3204.
12. M.P. Mamidala, V. Rajesh, N. Rajesh, Mass spectrometric evaluation of neurotransmitter levels in IMR 32 cell line in response to Ayurvedic medicines, *Rapid Commun. Mass Spectrom.*, 2016, 30, 1413-1422.
13. S. Kalidhasan, A.S.K. Kumar, V. Rajesh, N. Rajesh, The journey traversed in the remediation of hexavalent chromium and the road ahead toward greener alternatives—A perspective, *Coordination Chem. Rev.* 2016, 317, 157-166.
14. Shivani Sharma, N. Rajesh, Augmenting the adsorption of palladium from spent catalyst using a thiazole ligand tethered on an amine functionalized polymeric resin, *Chem. Eng. J.* 283 (2016) 999–1008.
15. Thigulla, M. Akula, P. Trivedi, B. Ghosh, M. Jha, A. Bhattacharya, Synthesis and anti-cancer activity of 1, 4-disubstituted imidazo[4,5-c]quinolines. *Org. Biomol. Chem.*, 14, 876-883, 2016.
16. Raghavaiah, P., Kuladeep, R., Narayana, Rao, D., Jyothilakshmi, A., Srujana, P., Subbalakshmi, J. "Bis- (1-(2-Amino ethyl)piperidino), (2-(2-Amino ethyl)pyridino) and (1-(2-Amino ethyl)pyrrolidino) substituted dicyanoquinodimethane: Consequences of flexible ethylene spacers with heterocyclic moieties and amine functionalities". (2016). *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, Volume 72, Part 5, pages 709-715.
17. T. Nakamura and S. Jayanty, "Poly (4-styrenesulfonate) templated polyaniline-carboxymethyl cellulose blend: morphology and surface resistivity of the spin coated films" *Soft Materials*, 2016, 14(4), 309-315.
18. Madhuri, P., Nikhil Sainath, V., Jayanty, S., Adasumalli, R. B. "Pulp and Black Liquor Characterization of Subabul Wood after Craftcooking" *IPPTA-The Official International Journal of The Indian Pulp and Paper Technical Association*, 2016, Vol. 28, No. 2 page 26-38. ISSN-0379-5462, ZDBID-791524X
19. Jyothi Lakshmi, A.; Shantanu, K.; Jayanty, S.\* (Chapter in Book: Publication date November 2016) *Synthesis and Characterization of Templated polyanilines: A New Class of Polymeric Materials: Chapter 14, Functionalized Engineering Materials and Their Applications*, Apple Academic Press, CRC, Taylor and Francis Group.
20. Mahesh Akula, P. Yogeewari, D. Sriram, Mukund Jha and Anupam Bhattacharya Synthesis and Antitubercular Activity of Fused Thieno-/Furo-quinoline Compounds *RSC Adv.*, 2016, 6, 46073-46080
21. Talapunur Vikramaditya, Mukka Saisudhakar and Kanakamma Sumithra Computational study on thermally activated delayed fluorescence of donor-linker-acceptor network molecules *RSC Adv.*, 2016, 6, 37203-37211

#### Patent

Balaji Gopalan, Ramakrishnan Ganesan, Srinivasa Rao and Ravikiran Nagarjuna, A simple large scale preparative methodology for synthesis of MO @M (MO = Fe<sub>3</sub>O<sub>4</sub>, Al<sub>2</sub>O<sub>3</sub> etc.; M = Pd, Ag, Au, and alloy of these metals) core-shell nanoparticles, Indian Patent: Appl.No. 201611017377.

**C. Conferences attended/ papers presented:**

- N.Rajesh "Biopolymer-ionic liquid interactions in environmental remediation" during the academic visit to Japan Advanced Institute of Science and Technology (JAIST), Ishikawa, Japan May 14-19, 2016
- N.Rajesh "Tuning the properties of biopolymers for remediation of heavy metals from industrial effluents, at Sixth International Conference on "Metals in Genetics, Chemical Biology and Therapeutics (ICMG-2016)" held at Indian Institute of Science, Bangalore during Feb 17-20, 2016.
- N.Rajesh, Sustainable adsorbents for environmental remediation-An overview, International conference on recent advances in chemistry and chemical engineering ICRAE-2016 at JNTUH, Hyderabad, during July 11-13, 2016.
- N.Rajesh, Evaluating the potential of sustainable adsorbents for chromium detoxification- An Overview, 35<sup>th</sup> Annual Conference at Indian Council of Chemists, College of Engineering, Pune, 22-24 December 2016,
- T. Sathvika S.Akhil, Manasi, Vidya Rajesh, N. Rajesh, Nitrogen fixing bacteria (Rhizobium) immobilized in clay as a sustainable option for the removal of hexavalent chromium from waste water, presented at International Conference on Metals in Genetics, Chemical Biology and Therapeutics (ICMG-2016), IISC on Feb 17<sup>th</sup> to 20<sup>th</sup>, 2016.
- Prof. Manab Chakravarty attended International Conference on Stereochemistry-2016, Sao Paulo, Brazil.
- Dr. Durba attended the conference RAMS- 2016, held at University of Hyderabad, March, 2016
- Dr. Amit attended the conference RAMS- 2016, held at University of Hyderabad, March, 2016
- Dr. Manab attended the conference RAMS- 2016, held at University of Hyderabad, March, 2016
- Prof. Jayanty Subbalakshmi attended and presented Poster on "Synthesis and Characterization of 7,7-bis(thiomorpholino)-8,8-dicyanoquinodimethane fluorophore" at the Conference on Emerging Materials (CEMAT-2016) held at the Indian Institute of Science, Bangalore during 18-19<sup>th</sup> July, 2016 in Association with Materials Research Society of India (MRSI).
- Dr. Subhas Ghosal attended and Sessioned Chair in the International Conference on Computational Modelling of molecules and materials (CM3, 20-22 Oct 2016).
- Dr. Amit Nag on Gold nanoparticle induced enhancement of molecular fluorescence for Zn<sup>2+</sup> detection in aqueous niosome solution, The International Conference on Fiber Optics and Photonics (PHOTONICS 2016) at IIT Kanpur during 04<sup>th</sup> to 08<sup>th</sup> Dec, 2016.

**D. Invited Talks given by BITS faculty:**

- Invited lecture by Prof. N.Rajesh on Tuning the properties of biopolymers for remediation of heavy metals from industrial effluents at Sixth International Conference on "Metals in Genetics, Chemical Biology and Therapeutics (ICMG-2016)" held at Indian Institute of Science, Bangalore during 17<sup>th</sup> to 20<sup>th</sup> Feb, 2016.
- Invited lecture by Prof. N.Rajesh on Biopolymer-ionic liquid interactions in environmental remediation at Japan Advanced Institute of Science and Technology, Japan during 14<sup>th</sup> to 19<sup>th</sup> May, 2016.
- Invited lecture by Prof. Anupam Bhattacharya on Selective Zn<sup>2+</sup> & F<sup>-</sup> detection with fused pyrrolo-quinoline systems: Importance of pyrrole at National Conference on Recent Developments and Applications in Chemical Sciences, NIT-Agartala, Tripura during 20<sup>th</sup> to 21<sup>st</sup> May, 2016.
- Invited lecture by Dr. Subhas Ghosal at 5th World Congress on Advance Materials (WCAM 2016), held in Chongqing China, June 4-6, 2016.
- Invited lecture by Prof. N.Rajesh on Sustainable adsorbents for environmental remediation-An overview at International conference on recent advances in chemistry and chemical engineering ICRAE-2016 at JNTUH, Hyderabad during 11<sup>th</sup> to 13<sup>th</sup> July, 2016.
- Invited lecture by Prof. Manab Chakravarty on Friedel-Crafts Reactions of Benzylic Phosphates: Access to Polyarylated Alkanes at Room Temperature at International Conference on Stereochemistry-2016, Sao Paulo, Brazil during 18<sup>th</sup> to 19<sup>th</sup> August, 2016.
- Invited lecture by Dr. Amit Nag on Gold nanoparticle induced enhancement of molecular fluorescence for Zn<sup>2+</sup> detection in aqueous niosome solution, The International Conference on Fiber Optics and Photonics (PHOTONICS 2016) at IIT Kanpur during 04<sup>th</sup> to 08<sup>th</sup> Dec, 2016.
- Invited lecture by Dr. Subhas Ghosal at the "Theoretical Chemistry Symposium", held at University of Hyderabad, Dec .14-17, 2016.
- Invited lecture by Dr. Durba Roy at the "Theoretical Chemistry Symposium", held at University of Hyderabad, Dec. 14-17, 2016.

**E. Invited talks arranged in the department:**

- Talk on Protein - inorganic hybrid nanomaterials by Prof. Chebrolu Pulla Rao from Department of Chemistry, Indian Institute of Technology Bombay on 31st Aug, 2016.
- Talk on Biomembranes: Where Physics, Chemistry, Biology and Medicine Meet by Prof. Amitabha Chattopadhyay from C.C.M.B., Hyderabad on 14th Oct, 2016.
- Talk on Nonadiabatic Chemical Dynamics by Prof. Susanta Mahapatra from Hyderabad Central University, Hyderabad on 26th Oct, 2016.
- Talk on Organic and Inorganic materials for solar cells by Prof. Ravindranathan Thampi from School of Chemical and Bioprocess Engineering, University College Dublin, U.K. on 22th Nov, 2016.

**F. Awards and recognitions won by faculty and students**

- Prof. Manab Chakravarty received International Travel Grant from SERB, India.
- Prof. N. Rajesh got recognition by RSC through formal induction in the reviewer panel for RSC Advances.
- Prof. Jayanty Subbalakshmi stands as a member of National Advisory Board Committee at CCRS and also acts as Joint Secretary at CCRS.
- Prof. Jayanty Subbalakshmi stands as a research review committee member at Dr.K.V.Rao Scientific Society.
- Prof. Jayanty Subbalakshmi was invited as judge for the "SPARK 2015-2016" conducted by Dr. K.V.Rao Scientific Society on 30th January, 2016.
- Prof. Jayanty Subbalakshmi was invited as judge for the "Annual research awards 2015-2016" held on 19th March, 2016 by Dr. K. V. Rao Scientific society (KVRSS).
- Dr. Subhas Ghosal Sessioned Chair in the International Conference on Computational Modelling of Molecules and Materials (CM3, 20-22 Oct 2016).

**G. Faculty Development, International Collaboration & Industry Immersion**

- Prof. N. Rajesh visited Japan Advanced Institute of Science and Technology, Japan during May 14-19 2016 to explore possible collaboration with BITS.
- Synthesis and Characterization of Oxalate Bridged Ni-Cu Bimetallic Complex, Krishnan Rangan and S.M.K. Praneeth and Manjeeth Kolli Venkata, 17th National Workshop on Challenges in Catalysis Science and Technology (CCST-2016), June 23-25, 2016, CSIR-IICT, Hyderabad
- Rigaku Oxford Diffraction, Krishnan Rangan, Rigaku Oxford Diffraction **Indian User Meeting Workshop** October 18-19, 2016, Department of Chemistry, IIT Bombay.
- Dr. Amit Nag participated in industry immersion for 5 weeks in Quazar Technologies, New Delhi. He worked on the project titled 'Scanning Tunneling Microscopy of Vesicles'.

**H. Significant new equipments/ experimental facility added during the year:**

Single Crystal and powder X-ray diffractometer (from central analytical lab).

**I. Departmental association/ club activities:****Organized**

- guest lectures by eminent scientists (3-4 per semester)
- Events in annual technical festival ATMOS (CHEM Hunt, Anatomy of Murder, quiz, paper presentations, etc)
- One issue of Elixir Magazine every semester
- Highlights of recent breakthrough in science as bi-weekly news letter (CHEMazine)
- Information about available scholarship/internship and research opportunities

**J. Major maintenance, renovations or new construction reports: NA****K. Major equipments acquired during the year:**

Placed order for Uv-vis Spectroscopy; High end computers, VASP

**B3.10.4 Civil Engineering****Number of faculty members**

Senior Professors, Professors	2
Associate Professors	4
Assistant Professors	6
Lecturers	1
Visiting Faculty	None

**Head of the Department: Prof. Sridhar Raju**

**Contact details: 040-66303682 Email: sridhar.raju@hyderabad.bits-pilani.ac.in**

**Number of PhD Scholars: 15**

**A. Sponsored Research activities:****Ongoing projects:**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	"Integrated Urban Flood Management in India: Technology-Driven Solutions"	Prof K S Raju	ITRA	(INR 27.97 Lakhs)	3 Years (November 2013 – July 2017)
2	"Performance Evaluation of backfill soils partially replaced with building derived materials"	Dr. Anasua Guharay and Dr. Arkamitra Kar	DST-SERB	(INR 24.44 Lakhs)	3 Years (September 2016 – September 2019)

**Projects sanctioned during the year:**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	"Performance Evaluation of backfill soils partially replaced with building derived materials"	Dr. Anasua Guharay and Dr. Arkamitra Kar	DST-SERB	(INR 24.44 Lakhs)	3 Years (September 2016 – September 2019)

**B. Publications:**

- Venu Malagvelli, Rajnish Singh Parmar and P N Rao "Thermal Conductivity and Impact Resistance of Concrete Using Partial Replacement of Coarse Aggregate with Rubber" Jordan Journal of Civil Engineering, Accepted, (Vol.10.No.2, 2016)
- Dhruv Sood, Digambar Kumbhar, P. N. Rao (2015), An Experimental Study on Fly-ash Based Cement Composite Panels Reinforced with Varying Number Mesh Layers, International Journal of Futuristic Trends in Engineering & Technology.
- K.Srinivasa Raju and D.Nagesh Kumar (2016) Selection of Global Climate Models for India using Cluster Analysis, Journal of Water and Climate Change, IWA Publishing, UK, Vol. 7, No. 4, pp. 764-774. DOI:10.2166/wcc.2016.112.
- D.V.Morankar, K.Srinivasa Raju, A.Vasan and L.Ashoka Vardhan (2016) Fuzzy Multiobjective Irrigation Planning using Particle Swarm Optimization, Journal of Water Resources Planning and Management, ASCE, Vol. 142, No. 8, pp. 05016004 1-11, DOI: 10.1061/(ASCE)WR.1943-5452.0000657.
- K.Srinivasa Raju, Sonali P and D.Nagesh Kumar (2016) Ranking of CMIP5 based Global Climate Models for India Using Compromise Programming, Theoretical and Applied Climatology, Springer.DOI:10.1007/s00704-015-1721-6,
- D.V.Morankar, K.Srinivasa Raju and A.Vasan (2015) Optimal Reservoir Operation Considering Conjunctive Use of Water Resources, i-manager's Journal of Civil Engineering, Vol.5, No.3, pp.38-44.
- Shishir Gaur, K.Srinivasa Raju, D.Nagesh Kumar and D.Graillot (2015) Multiobjective Fuzzy Optimization for Sustainable Groundwater Management using Particle Swarm Optimization and Analytic Element Method. Hydrologic Processes, Wiley InterScience, Vol.29, No.19, pp.4175-4187. DOI:10.1002/hyp.10441.

8. K.Srinivasa Raju and D.Nagesh Kumar (2015) Ranking General Circulation Models for India Using TOPSIS, *Journal of Water and Climate Change*, IWA Publishing, UK, Vol.6, No.2, pp. 288-299. DOI:10.2166/wcc/2014.074.
9. Venkat Ramayya Varanasi, Vinayaka V Ram, Sankranthi Krishnaiah, Amarendra S Kumar (2015), "Performance of VG30 Paving Grade Bitumen Modified with Polyphosphoric Acid at Medium and High temperature regimes", *Construction and Building Materials*, Elsevier, Volume 105, February 2016, 157–164 pp
10. Rathish Sathyabama Arumugam, Vishal Garg, V.Vinayaka Ram (Corresponding author) Aviruch Bhatia, Optimizing roof insulation for roofs with high albedo coating and radiant barriers in India, *Journal of Building Engineering* 2(2015) April 2015, pp:52–58
11. Abhijeet S. Gandage, V. Vinayaka Ram, A. B. Yaswanth, P. Kumar Thota, and Sankalp Gupta (Nov-Dec, 2015), 'Thermal Conductivity Studies for Self-Consolidating Concrete with Sand and Fly Ash Variation', *ACI Materials Journal*, Vol. 112, No.06. pp. 709-721
12. Venkat Ramayya V., V Vinayaka Ram, S. Krishnaiah, Amarendra Kumar Sandra (2016), "Experimental Assessment of Dense Bituminous Macadam (DBM) Binder Course with the binder modified with Poly Phosphoric Acid", *International Journal of Pavement Research & Technology (IJPRT)*, Elsevier (Under Review)
13. Venkat Ramayya V., V Vinayaka Ram, S. Krishnaiah, Sridhar Raju, P.V.R. Sastry, S. Jayanth Reddy (2016) "Job Mix Formulation for Bituminous Concrete Grading II Mixture using C# Programming", submitted to the *International Journal of Pavement Research and Technology (IJPRT) Elsevier Journals Manuscript No:IJPRT\_2016\_164 (Under Review)*
14. D.V.Morankar, KS Raju, A.Vasan and L.Ashoka Vardhan., "Fuzzy Multiobjective Irrigation Planning using Particle Swarm Optimization", *Journal of Water Resources Planning and Management*, ASCE, 142 (8), 2016.
15. DV Morankar, KS Raju and Vasana A., "Optimal Reservoir Operation Considering Conjunctive Use of Water Resources", *i-manager's Journal of Civil Engineering*, 5(3), 38-44, 2015.
16. Jagadeesh Anmala, R. H. Mohtar 2015, Cauchy solution of the Kinematic Wave Shallow Water Equations using Square Grid Finite Element Method, *ASCE, Journal of Hydrologic Engineering*, 20(12), 04015042, DOI: 10.1061/(ASCE)HE.1943-5584.0001241.
17. Jagadeesh Anmala, O.W.Meier, A.J. Meier and S.Grubbs 2015, A GIS and an Artificial Neural Network Based Water Quality Model for a Stream Network in Upper Green River Basin, Kentucky, USA, *ASCE, Journal of Environmental Engineering*, 141(5), 04014082, DOI: 10.1061/(ASCE)EE. 1943-7870.0000801.
18. Dawid D'Melo, Sridhar Raju, Subhendu Bhattacharya and Sathish Subramani, "Self-assembly of amorphous sulphur in bitumen–sulphur mixtures and its impact on properties" (2016), *Construction and Building Materials Vol 126*, pp 976-982.
19. GuhaRay, A. and Baidya, D.K. (2015) "Reliability coupled Sensitivity based Seismic Analysis of Gravity Retaining Wall using Pseudo-Static Approach", *International Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, doi: 10.1061/(ASCE)GT.1943-5606.0001467, Vol. 142 (6), pp. 04016010 – 1-13.
20. GuhaRay, A. and Baidya, D.K. (2015) "Reliability based Analysis of Cantilever Sheet Pile Walls backfilled with different soil types using Finite Element Approach", *International Journal of Geomechanics*, ASCE, 06015001, pp. 1-11, doi 10.1061/(ASCE)GM.1943-5622.0000475.
21. GuhaRay, A., (2015). "Soil Mechanics", for Gujarat Technical University, Tech-Max Publications (ISBN 978-93-5224-127-9).
22. GuhaRay, A., (2016). "Geotechnics and Applied Geology", for Gujarat Technical University, Tech-Max Publications (ISBN 978-93-5224-220-7).
23. S. Kalidindi, M. Vecha, A. Kar, and T. Raychoudhury, "Aluminum-cerium double-metal impregnated activated carbon: a novel composite for fluoride removal from aqueous solution", *Water Science & Technology: Water Supply* | in press | 2016.
24. Kar, A., Ray, I., Unnikrishnan, A., and Halabe, U. B., 2016, "Prediction Models for Compressive Strength of Concrete with Alkali-Activated Binders", *Computers and Concrete, An International Journal (Techno-Press)*, Vol.17, No.4, pp.523-539.
25. Kar, A., Ray, I., Halabe, U. B., and Unnikrishnan, A., 2016, "Physicochemical and Microstructural Characterizations of Alkali-Activated Binder Systems", *International Journal of Structural and Civil Engineering Research*, V. 5, No. 2.
26. Kar, A., Ray, I., Halabe, U. B., Unnikrishnan, A. and Dawson-Andoh, B., 2015, "Microstructural Characterizations of Alkali Activated Fly Ash and/or Slag Binder System", In *Proceedings of: UKIERI*

Concrete Congress, Concrete Research Driving Profit and Sustainability, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India, 2 - 5 November 2015, 16 pp.

27. Kar, A., Ray, I., Halabe, U. B., and Unnikrishnan, A, 2015, "Comparisons of Linear Regression Models for Properties of Alkali-activated Binder concrete", *European Scientific Journal*, V.11, No. 27, pp. 1 - 17.
28. Bharat Reddy R, Sai Gopi Nihal, Taneja A, Kalyana Rama J S "Comparative Study on the Lateral load Resistance of Multi-storied Structure with Bracing Systems", *Indian Journal of Science and Technology*, Vol 8(36), DOI: 10.17485/ijst/2015/v8i36/87536, December 2015 (Indexed in SCOPUS, SCI Impact Factor: 1.04).
29. J.S. Kalyana Rama, N. Reshmi, M.V.N. Sivakumar and A. Vasan, "Experimental Investigation and Numerical Validation on the Effect of NaOH Concentration on GGBS Based Self-compacting Geopolymer Concrete", *Advances in Structural Engineering, Materials -Volume 3*, Editor: Vasant Matsagar, Springer, ISBN: 978-81-322-2187-6, 2015, pp:1673-1686 (Indexed in SCOPUS).
30. J. S. Kalyana Rama, M.V.N. Sivakumar, A. Vasan, Chirag Garg and Shubham Walia, "A Review on Studies of Fracture Parameters of Self-compacting Concrete", *Advances in Structural Engineering, Materials - Volume 3*, Editor: Vasant Matsagar, Springer, ISBN: 978-81-322-2187-6, 2015, pp:1705-1712 (Indexed in SCOPUS).
31. J.S. Kalyana Rama and B.S. Grewal, "Evaluation of Efficiency of Non-destructive Testing Methods for Determining the Strength of Concrete Damaged by Fire", *Advances in Structural Engineering, Materials - Volume 3*, Editor: Vasant Matsagar, Springer, ISBN: 978-81-322-2187-6, 2015, pp:2567-2578 (Indexed in SCOPUS).

### C. Conferences attended/papers presented:

1. Sunu Cecil Edem, M. Padmavathi, V Padmavathi and P N Rao (2015), Seismic stability Analysis of Earth Filled dam- A Model study of the Left Embankment of Nagarjuna sagar Dam, India, International Conference on Land Slides and Slope Stability, 27-30<sup>th</sup> Septemebr, Bali, Indonesia.
2. Dhruv Sood. Digambar Kumbhar, and P. N. Rao, Flexural Testing of Fly ash based Cement Composite Panels Reinforced with Varying Number of Mesh Layers, UKIERI concrete congress, 2-5 November 2015, NIT, Jalandhar, India
3. Manjeeth Kolli, Shiva Kumar Patlolla and Neelakanteswarar Rao Paturu "An experimental Investigation on Engineered Cement Concrete reinforced with Glass and Recron-3s Fibers", International conference on Innovations in Structural Engineering, 14-16 December, 2015. Organized by Osmania University, Hyderabad.
4. Dhruv Sood. Digambar Kumbhar, and P. N. Rao " An Experimental study on Fly- ash based self-compacting Ferro cement Concrete", International conference on Innovations in Structural Engineering, 14-16 December, 2015. Organized by Osmania University, Hyderabad.
5. K.Srinivasa Raju, Gayam Akshara, Ajit Pratap Singh and A.Vasan, Application of Multiple Linear Regression as Downscaling Methodology for Lower Godavari Basin, International Conference on Water, Environment, Energy and Society (ICWEES-2016), Jointly Organised by AISECT University, India and Texas A & M University USA, March 15-18, 2016, Bhopal, India (Best Research Paper Award on the Conference Sub theme : Climate Change, Drought Assessment and Mitigation (CC & DAM))
6. V.Swathi, K.Srinivasa Raju and Ajit Pratap Singh, Application of Storm Water Management Model to an Urban Catchment, International Conference on Water, Environment, Energy and Society (ICWEES-2016), Jointly Organised by AISECT University, India and Texas A & M University USA, March 15-18, 2016, Bhopal, India.
7. K.Srinivasa Raju and D.Nagesh Kumar, Application of Data Envelopment Analysis for Ranking of Irrigation Subsystems, HYDRO 2015 International, 20th International Conference on Hydraulics, Water Resources and River Engineering, December 17-19, 2015, Roorkee, India, HYD-338 (Full Paper Published in CD-ROM)
8. K.Srinivasa Raju and D.Nagesh Kumar, Fuzzy Approach to Rank Global Climate Models, 5th International Conference on Fuzzy and Neural Computing (FANCCO 2015), December 17-19, 2015, Hyderabad, India, Volume 415 of the series *Advances in Intelligent Systems and Computing*, Springer, pp. 53-61.
9. V.Swathi, Sai Veena and K.Srinivasa Raju, Urban Growth Simulation: A Case Study, Proceedings of 2nd Two Day National Conference on Water, Environment and Society (NCWES), July 30-31, 2015, Hyderabad, India, pp. 612-616.
10. D.V.Morankar, K.Srinivasa Raju and A.Vasan, Optimal Integrated Water Resources Management for Khadakwasla Complex Reservoir, Proceedings of i-Manager's International Conference on Engineering and Technologies (IICET 2015), April 10-11, 2015, Trivandrum, India, pp.101-106. Awarded as Best Paper in Track III -Civil/Structural Engineering (Certificate of Appreciation)

11. R. Parameshwaran, V. Vinayaka Ram (2016), "Hybrid Nano Composite embedded PCM-based cement-mortar thermal storage material for energy efficient buildings" International Conference on Materials Science & Technology 2016 Structural, Constructional and Engineering Materials, University of Delhi, India DOI: 10.5185/icmtech.2016
12. K. Srinivasa Raju and Vasana A. "Optimal Reservoir Operation Using Multi objective Genetic Algorithms", Proceedings of International Conference on Technological Advances in Climate-Smart Agriculture and Sustainability (TACSAS2017) at Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded, Maharashtra, India during January 16-18, 2017.
13. Rajasugandha A., Yunus M. and Vasana A. "BIM – Review and Implementing its Application to a Residential Building", Proceedings of National Conference on Sustainable Materials and Management Systems in Civil Engineering (NCS2MCE2016) organized by Department of Civil Engineering, Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, India during December 15-16, 2016.
14. George J., Kalyana Rama J. S., Siva Kumar M. V. N., Vasana A. and Ramachandra Murthy A. "Influence of Notch to Depth Ratio on Fracture Process Parameters of Plain Concrete Beam Using Concrete Damaged Plasticity Model", Proceedings of Sixth International Congress on Computational Mechanics and Simulation (ICCMS 2016) at IIT Bombay organized and hosted jointly by Department of Civil Engineering, IIT Bombay and Department of Structural Engineering, Veermata Jijabai Technological Institute, Mumbai, under the auspices of Indian Association for Computational Mechanics (IndACM), pp. 509-512 during June 27 – July 01, 2016.
15. K.Srinivasa Raju, Gayam Akshara, Ajit Pratap Singh and Vasana A., "Application of Multiple Linear Regression as Downscaling Methodology for Lower Godavari Basin", Proceedings of the International Conference on Water, Environment, Energy and Society, Organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India, March 15 – 18, 2016. (Received the Best Paper Award)
16. Shubi Agarwal and A Vasana., "Computational Strategy for Structural Analysis, Design, and Optimization of Trusses Using Genetic Algorithm and Particle Swarm Optimization", Proceedings of the of 2016 IEEE 6th International Conference on Advanced Computing (IACC 2016), Bhimavaram, Andhra Pradesh, India, pp.203-207, 27-28 February 2016.
17. Sarana Hasanth K, Vasana A and Kalyana Rama J S., "Optimizing the strength characteristics of Self Compacting Concrete using ANN and Genetic Algorithm", Proceedings of the UKIERI Concrete Congress - Concrete Research Driving Profit and Sustainability, NIT Jalandhar, Nov 2-5, 2015.
18. DV Morankar, KS Raju and A Vasana., "Optimal Integrated Water Resources Management for Khadakwasla Complex Reservoir", Proceedings of the International Conference on Engineering and Technologies IICET 2015 Organized by i-manager Conferences, Trivandrum, April 10-11, 2015. (Received the Best Paper Award)
19. Tripathi, Satyendra and A Vasana, "Social Equity Impacts of Optimal Water allocation for Irrigation Management: Drivers and Implications", Proceedings of the International Conference on Managing Critical Resources: Food, Energy and Water organized by the Centre for Development and Environment Policy (CDEP), Indian Institute of Management Calcutta, Kolkata, India, April 9-11, 2015.
20. Ganbavale Mandar. P., Ankit Jain, Vasana A., and Kalyana Rama J, "Sustainable design of RC building portal frame through CO2 emission optimization using Cuckoo Search Algorithm", Proceedings of the International Conference on Sustainable Energy and Built Environment, Organized by School of Mechanical and Building Sciences, VIT, Vellore in associate with ASCE India Section, March 12-13, 2015.
21. Aaron D Vaz., and Vasana A, "Topology Optimization using Bi-directional Evolutionary Structural Optimization", Proceedings of the International Conference on Sustainable Energy and Built Environment, Organized by School of Mechanical and Building Sciences, VIT, Vellore in associate with ASCE India Section, March 12-13, 2015.
22. Prakash Mohan M M, Rajitha K and Murari R R Varma., (2016) "Influence of interferometric coherence derived canopy height in SEBAL(Surface Energy Balance Algorithm for Land" Proceedings of ISRS & ISG National Symposium on Recent Advances in Remote Sensing and GIS with Special Emphasis on Mountain Ecosystems conducted by ISRS & ISG, Dehradun (India) December 7 - 9, 2016.
23. Prakash, M., Rajitha, K., & Varma, M. R. R., (2016) Effect of Pixel to pixel variation of Zenith angles of Sun on different model parameters of SEBAL Proceedings of National Space Science Symposium held at VSSC Thiruvananthapuram, 9-12, February, 2016.
24. Kumar Gaurav, Prashant Sharma, Garv Malik, Shivani Surisetty S V, R.B. Adusumalli, Murari R. R. Varma Study of Suspended Particulate Matter in an Educational Institute in Suburban Region, India Proceedings of International Conference on Advances in Chemical Engineering (ICACE) - 2015, 20-22 December 2015, NITK Surathkal
25. K., Rajitha; M.M, Prakash Mohan; Varma, Murari R.R, "Effect of Cirrus Cloud on Normalized Difference Vegetation Index (NDVI) and Aerosol Free Vegetation Index (AFRI): A study based on LANDSAT 8 images,"



- Advances in Pattern Recognition (ICAPR), 2015, 8<sup>th</sup> International Conference on , vol., no., pp.1,5, 4-7 Jan. 2015. <http://dx.doi.org/10.1109/ICAPR.2015.7050710>
26. Suluguru, A.K., GuhaRay, A., Kar, A. and James, A. (2016) "Experimental Studies on Physical Properties and Strength Response of Construction and Demolition Wastes", Structural Engineering Convention, December 21 - 23, 2016, CSIR-SERC.
  27. GuhaRay, A. and Baidya, D.K. (2016) "Effect of Variation of Geotechnical Properties on Stability of Retaining Walls: a Case Study in Japan", 5th International Conference on Forensic Geotechnical Engineering, ASCE India Chapter, December 8-10, 2016, IISc Bangalore, Bengaluru, India.
  28. GuhaRay, A., Kiranmayi, CVSP and Rudraraju, S. (2016) "Effect of Variation of Soil Parameters on Behaviour of Stone Column Improved Ground", Indian Geotechnical Conference, 15-17<sup>th</sup> December, 2016, Chennai, India.
  29. GuhaRay, A. and Kiranmayi, CVSP. (2016) "Static Properties of Red Soil improved with Building Derived Concrete: a Preliminary Study", Indian Geotechnical Society, Kolkata Chapter, CGCRI, India, March 2016.
  30. GuhaRay, A., Tripathi, J. and Rakhunde, T. (2015) "Ground Improvement by Stone Columns in Pune Soil", Theme 13, 53rd Indian Geotechnical Engineers Conference, Pune, India, December 2015.
  31. GuhaRay, A. and Baidya, D.K. (2015) "Stability Analysis of Mechanically Stabilised Earth Walls: a Risk Factor based Approach", Theme 9, 53rd Indian Geotechnical Engineers Conference, Pune, India, December 2015.
  32. GuhaRay, A. and Baidya, D.K. (2015), "Risk Factor based Approach to Soil Property Variation: Peeping through Case Studies", 5IYGEC -2015, pg.597-605, Vadodara, India, March 14-15, 2015.
  33. GuhaRay, A. and Baidya, D.K. (2015), "Probabilistic Analysis of Anchored Sheet Pile Wall on Cohesionless Soil", 2015 Young Geotechnical Engineers' Symposium on Finite Element Methods) YGESFEM -2015, IIT Bombay, India, May 17-18, 2015.
  34. S. Ashok Kumar, A. Kar, A. GuhaRay, and N. James, "EXPERIMENTAL STUDIES ON PHYSICAL PROPERTIES AND STRENGTH RESPONSE OF CONSTRUCTION AND DEMOLITION WASTES", Structural Engineering Convention, CSIR-SERC, IIT Madras, Chennai, India, Dec 21-23, 2016.
  35. Sai Krishna P, Kalyana Rama J S "Influence of Bracing Systems on the Seismic Pounding of High Rise Structure , Structural Engineering Convention (SEC-2016), CSIR-SERC, Chennai, December 2016(Accepted).
  36. Reeti Sarkar, Ranjit Patil, Kalyana Rama J S, "Influence of Wind and Earthquake on A Single Modification High Rise Structure in Four Metro Cities of India, REDECON-2016, Bangalore, November, 2016.
  37. Stuti M., Varun K., Kalyana Rama J. S. and Ramachandra Murthy A "Numerical Studies on the Influence of Notch Depth and Location on the Natural Frequency of Indeterminate Beams", International Congress on Computational Mechanics and Simulation (ICCMS 2016) , July 2016, IIT Bombay
  38. George J., Kalyana Rama J. S., Siva Kumar M. V. N., Vasana A. and Ramachandra Murthy A. "Influence of Notch to Depth Ratio on Fracture Process Parameters of Plain Concrete Beam Using Concrete Damaged Plasticity Model", International Congress on Computational Mechanics and Simulation (ICCMS 2016) , July 2016, IIT Bombay
  39. Manjeeth Kolli Venkata, Bharath Reddy Rondla, Sri Kalyana Rama J " A study on the impact of inhibiting factors on the efficiency of project management in construction industry", Industry Academia Conference on Construction Management (IACCM - 2015), Organised by NICMAR, Hyderabad in association with National Academy of Construction, Hyderabad, Dec 4-5, 2015.
  40. Sarana Hasanth K, Vasana A, Kalyana Rama J S "Optimizing the strength characteristics of Self Compacting Concrete using ANN and Genetic Algorithm", UKIERI Concrete Congress 2015, NIT Jalandhar, Nov 2-5, 2015.
  41. Darshan Puajara, M Santosh Kumar, Kalyana Rama J S "Experimental study on the effect of Recycled Aggregates on the strength characteristics of GGBS based Geopolymer Concrete", UKIERI Concrete Congress 2015, NIT Jalandhar, Nov 2-5, 2015.
  42. Ganbavale Mandar. P., Ankit Jain, Vasana A., and Kalyana Rama J S, "Sustainable design of RC building portal frame through CO<sub>2</sub> emission optimization using Chuckoo search algorithm", Proceedings of the International Conference on Sustainable Energy and Built Environment, Organized by School of Mechanical and Building Sciences, VIT, Vellore in associate with ASCE India Section, March 12-13, 2015.

#### D. Invited Talks given by BITS faculty:

##### Prof. PN Rao has:

- Delivered Key note address for National conference on "Recent Trends in Civil Engineering", 20<sup>th</sup> Feb., 2015, organized by GITAM, Hyderabad.

- Delivered Key note address for National conference on "Water proofing technologies in construction industry", 28<sup>th</sup> Feb., 2015, organized by CMR CET, Hyderabad.
- Delivered Key note address for All India Seminar on "The Integrated Design Approach for Better Buildings ", 30<sup>th</sup> June, 2015, organized by The Institute of Engineers (INDIA), Hyderabad.

**Prof. KS Raju has:**

- Delivered Invited Lecture on Water Resources Modelling Approaches in Planning and Management, Jawaharlal Nehru Technological University, Hyderabad, November 1, 2016.
- Delivered Invited Lectures on Neural Network Applications in Civil Engineering on 21.10.2016 and Multiobjective Optimization in Irrigation Planning on 22.10.2016, National Workshop on Computer Applications in Civil Engineering, Vasavi College of Engineering, October 21-22, 2016.
- Delivered Invited Lecture on Multicriterion Decision Making in Irrigation Planning and Management, National Conference on Water Resources and Flood Management with Special Reference to Flood Modelling (WRFM -2016), Sardar Vallabhbhai National Institute of Technology, Surat, October 14, 2016.
- Delivered Invited Lecture on Ranking and Clustering of Global Climate Models, Three Day Short Course on Water Resources, Climate Change Impacts and Adaptation Strategies, International Institute of Information Technology, Hyderabad, July 21, 2016.
- Delivered Invited Lecture on Learning Opportunities in Civil Engineering, Department of Civil Engineering, Kakatiya Institute of Technology and Science (KITS), Warangal, February 29, 2016.
- Delivered Invited Lecture on Impact of Climate Change on Water Resources: Planning Aspects, Two Day National Conference on Disaster Preparedness, Mitigation and Reconstruction of Sustainable Society (DPMRSS), Centre of Excellence for Disaster Mitigation, Department of Civil Engineering, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, February 12, 2016.
- Delivered Invited Lecture on Fuzzy Logic, ANN, Optimization Techniques using MATLAB, Three Day Workshop on Engineering Research Methodology-2016, Department of Civil Engineering, Osmania University College of Engineering, January 30, 2016.
- Delivered Invited Lecture on Global Climate Models and Water Resources Planning: Case Study, Workshop on Urban Flooding, Department of Civil Engineering, National Institute of Technology, Warangal, December 10, 2015.
- Delivered Invited Lecture on Challenges in Urban Flood Modeling: Case Study of Hyderabad, Training Program on Urban Flood Management: Technology Driven Solutions, Birla Institute of Technology and Science-Pilani, Hyderabad Campus, November 21, 2015.
- Delivered Invited Lecture on Flood Modeling and Probability Assessment, Training Program on Urban Flood Management: Technology Driven Solutions, Birla Institute of Technology and Science-Pilani, Hyderabad Campus, November 20, 2015.
- Delivered Invited Lecture on Preparation of Research Proposals, One day Faculty Development Program on Research Proposals-Funding Agencies, Opportunities and Methodologies, CMR College of Engineering and Technology, Hyderabad, November 14, 2015.
- Delivered Invited Lecture on Introduction to Artificial Neural Networks and its Application in Water Resources Engineering, One day Workshop on Advances in Water Resources Engineering (AWARE 2015), RVR & JC College of Engineering, Guntur, September 26, 2015.
- Delivered Invited Lecture on Multicriterion Decision Making in Water Resources: Critical Perspective, Indian Institute of Technology, Hyderabad, September 22, 2015.
- Delivered Invited Lecture on Engineering Challenges for Knowledge Era, as part of 48th Engineers Day Celebrations, Hyderabad Metro Water Supply and Sewerage Board Engineers Association, Hyderabad, September 15, 2015.

**Prof. A. Vasan has:**

- Delivered an invited lecture on "Water Resources Modeling Approaches in Planning & Management" organized by the Institute of Science & Technology, JNTU, Hyderabad, November 01, 2016.
- Delivered an invited lecture on "Projection of Points, Straight lines and Plan of Residential Building" during the One Week Faculty Development program on Engineering Graphics with AutoCAD organized by Department of Mechanical Engineering, Methodist College of Engineering & Technology, Abids, Hyderabad, July 28, 2016.
- Delivered an invited lecture on "Engineering Graphics Using AutoCAD" organized by the Matrusri Engineering College, Saidabad, Hyderabad, July 21, 2016.
- Delivered an invited lecture on "Projection of Solids, Section of Solids, Development of Surfaces of Solids", during the one day Workshop on "Engineering Graphics Using AutoCAD" organized by the Department of

Civil Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad, October 09, 2015.

**Prof. Sridhar Raju has:**

- Key Note Speaker on “Long Lasting Pavements”, at the Conference on Sustainable Asphalt Pavements for Developing Countries, CRRI, New Delhi, March 11-12, 2016.
- Delivered a talk on “Plastic Waste in Road Construction, Advantages and Economic Considerations” at a “Half day seminar on solid waste management”, conducted by FTAPCCI, Hyderabad on 13th May 2016.
- Delivered lecture on “Harbour Engineering (Water Transportation)” at Vignana Bharathi Institute of Technology, Hyderabad on 24th August 2016.
- Delivered a talk on “Guidelines for Structural Evaluation for Strengthening of Flexible Pavements using Falling Weight Deflection and Benkelman Beam” at Indian Academy of Highway Engineers (IAHE), Noida, 11th November 2016.

**Dr. Anasua Guharay has:**

- Delivered a Guest Lecture on "Slope Instability and Stabilisation Methods" at Civil Engineering Department, Malla Reddy College of Engineering on 3rd March, 2016.
- Delivered a Lecture on "Finite Element Methods in Geomechanics" in a workshop "Analysis of Engineering Systems using FEM" organised by CADLAB, BITS-Pilani Hyderabad Campus in July 2016.
- Delivered a Guest Lecture on "Computational Modelling in Geomechanics" at Civil Engineering Department, Sidhartha College of Engineering, Vijaywada on 3rd October, 2016.

**Dr. Arkamitra Kar has:**

- Participated in Seminars of UKIERI Concrete Congress, Concrete Research Driving Profit and Sustainability, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India, 2 - 5 November 2015. Presented talk on "Microstructural Characterizations of Alkali Activated Fly Ash and/or Slag Binder System".

**Dr. Mohan S C has:**

- A talk on “Discover Yourself” at Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded on 11<sup>th</sup> October, 2016.

**Mr. Kalyana Rama J S. has:**

- Delivered an invited talk on "Role of Research Gate, Academia in Scientific research" , "Rating of Journals and Scientists" and "Research Funding Opportunities and Funding Agencies" during the workshop on Research Methodology, organized by Department of Civil Engineering, BITS Pilani-Hyderabad Campus, April 2016.
- Delivered an invited talk on "Finite element applications to Solid Mechanics and Composite Materials using ABAQUS" during a workshop "Analysis of Engineering Systems using FEM", organized by Central CAD Lab, BITS, Pilani-Hyderabad Campus, July, 2016.
- Attended Two day Advanced Course on Life Enhancement of RC Structural Components through Repair and Retrofit (RELIFE 2016), CSIR-SERC (Structural Engineering Research Centre), 22-23 September, 2016.
- Delivered an invited talk on "Numerical modeling using ABAQUS for Solid Mechanics problems" during a one week Faculty Development Program "Advanced Software Training in Civil Engineering", organized by Department of Civil Engineering, V R Siddhartha Engineering College, Vijayawada, 3-8 October, 2016.
- Delivered a Lecture on “Introduction to Finite Element Analysis” for PG and UG students at the Department of Civil Engineering, VRSEC.

**E. Invited talks arranged in the department:**

- Dr. Raj Kumar Gondle from UMASS-Lowell, MA, USA presented a talk on Application of finite element modeling to real-time civil engineering problems in August 2016. He explained a study on coupled multiphase fluid flow and geomechanical modeling of carbon dioxide (CO<sub>2</sub>) injection in an unmineable coal seam at a field sequestration site, and field monitoring of ground surface deformations by using high-precision tiltmeters and GPS units.
- Col. Sunil Tewari, Col. Sunil Tewari, Commander Works Engineer (Air Force) at Secunderabad, delivered a talk on Strengthening and Maintenance of Airfield Pavements as a part of the course CE F425 in September 2016. He shared some of the case studies from his experiences on evaluation of Airfield Pavements.
- Mr Ravi Kiran G, Mr Ravi Kiran from BASF delivered a talk on Admixtures for advanced concrete in September 2016. He explained in detail, different types of admixtures and their applications in civil engineering construction.

**F. Awards and recognitions won by faculty and students****Prof K S Raju, has received following awards/recognitions:**

- Associate Editor, ISH Journal of Hydraulic Engineering, Taylor & Francis, U.K
- Best Research Paper Award for the Paper Entitled Application of Multiple Linear Regression as Downscaling Methodology for Lower Godavari Basin on Conference Sub theme Climate Change, Drought Assessment and Mitigation (CC & DAM), International Conference on Water, Environment, Energy and Society (ICWEES-2016), Jointly Organised by AISECT University, India and Texas A & M University, USA, March 15-18, 2016, Bhopal, India. Co-authors for the Paper are Gayam Akshara, Ajit Pratap Singh, A.Vasan (Certificate of Appreciation)
- Prof. K Srinivasa Raju was awarded S.N.Gupta Memorial Award for Research Contribution to the field of Water Resources Engineering by Indian Society for Hydraulics, India.
- Chief Guest, National Workshop on Computer Applications in Civil Engineering, Vasavi College of Engineering, Hyderabad, October 21, 2016. (Inaugural Photo 1) (Inaugural Photo 2)
- Cited as "Frequent Reviewer" for year 2015, Journal of Hydrology, Elsevier (Journal of Hydrology Homepage Link)
- Subject Expert, Interaction Program with Faculty Members Teaching Engineering Mechanics, Vasavi College of Engineering, Hyderabad (Program held on May 3, 2016).
- Invited for Interaction Session for Curriculum Development for Civil Engineering third year, Department of Civil Engineering, Vasavi College of Engineering, Hyderabad, March 24, 2016.
- Subject Expert nominated by Kakatiya University, Warangal to conduct faculty recruitment interviews at Kakatiya Institute of Technology and Science(KITS), Warangal (Interviews conducted on February 29, 2016 at KITS Warangal)
- Subject Expert nominated by Jawaharlal Nehru Technological University (JNTU), Hyderabad to conduct faculty recruitment interviews at Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad (Interviews conducted on February 24, 2016 at GRIET Hyderabad)
- Judged Research Papers (belong to Civil Engineering) Presented during SUDHEE-2015 (A National Level Students Tech Fest), Chaitanya Bharathi Institute of Technology, Hyderabad, September 29, 2015

**Dr. Anasua Guharay, has received following awards/recognitions:**

- Early Career Research Award (DST-SERB), 2016.
- "2015 Outstanding Reviewer" Recognition from International Journal of Geomechanics, American Society of Civil Engineers (ASCE).

**Dr. Arkamitra Kar, has received following awards/recognitions:**

- Received 2015 BITS OPERA award.
- "2015 Valued Reviewer" recognition for Construction and Building Materials (ELSEVIER).

**G. Faculty Development, International Collaboration & Industry Immersion:**

- Dr. Murari R R Varma has participated in Faculty Development Workshop (FDW) 2015 - An initiative Indian School of Business (ISB), Hyderabad in collaboration with Andhra Pradesh Society of Knowledge Networks held on 7th and 8th February, 2015
- Prof Jagadeesh Anmala took part as a PS-I faculty at Servomax, India Pvt. Ltd and Lexicon Infotech Ltd., Hyderabad from May 22nd to July 16th 2015.
- Dr. Murari R R Varma took part in Industry immersion programme at Worley Parsons India, Hyderabad Office from May 25 to June 25 2015.

**H. Significant new equipment/experimental facility added during the year: Yes**

The civil engineering department at BITS-Pilani Hyderabad campus has acquired the actuator of capacity 25 tons funded by **DST-FIST** and the institute. The existing reaction-loading frame of capacity 200 tons for static load will be upgraded to support the actuator. The actuator system is controlled through an attached controller system which can also collect the response using the data logger. Also, the hydraulic service manifold was installed for manual pressure control. The actuator is operated using Hydraulic Power Unit of pressure capacity 3000psi (20.7 MPa). The chiller was procured to maintain the workable temperature of oil in the hydraulic unit. A cubicle was set up for the control system of the actuator.

**I. Departmental association/club activities:****Prof K S Raju and Prof A Vasan have organized following workshops:**

- Participated in the executive education programme on Building Excellence in Professional Higher Education Institutions organized by Centre for Executive Education, ISB Hyderabad during July 24-25, 2016.
- Co-Ordinator, Workshop on Research Methodology, Centre of Excellence in Water Resources Management, Department of Civil Engineering, Birla Institute of Technology and Science, Pilani-Hyderabad Campus, April 11-12, 2016.
- Co-Ordinator, Training Programme on Urban Flood Management: Technology Driven Solutions, Centre of Excellence in Water Resources Management, Department of Civil Engineering, Birla Institute of Technology and Science, Pilani-Hyderabad Campus, November 20-21, 2015 (Activities of the Training Program).
- Co-Ordinator, Workshop on Integrated Urban Flood Management in Hyderabad: Technology Driven Solutions, Centre of Excellence in Water Resources Management, Department of Civil Engineering, Birla Institute of Technology and Science, Pilani-Hyderabad Campus, October 31, 2015 (Activities of the Workshop).

**J. Major maintenance, renovations or new construction reports: Nil****K. Major equipment acquired during the year:**

- Brookfield DV 3T Rotational Viscometer was installed in the Highway Material Testing Laboratory for testing the viscosity of bitumen at higher temperatures (100- 180 °C)
- Fume hood for Environmental Laboratory
- Air quality monitoring equipment (Dust sampler) for Environmental Laboratory
- Plate Load test setup acquired to test the strength parameters of soil through the DST-SERB research grant received by Dr. GuhaRay and Dr. Kar
- Olympus SXZ7 stereo microscope acquired to conduct petrographic studies in the Concrete Technology Laboratory

**B3.10.5 Computer Science and Information Systems**

Number of faculty members

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>4</b>
<b>Assistant Professors</b>	<b>5</b>
<b>Lecturers</b>	<b>4</b>
<b>Visiting Faculty</b>	<b>2</b>

**Head of the Department:** Prof. N.L. Bhanu Murthy**Contact details:** Email: 040 – 6630-3558 Email:bhanu@hyderabad.bits-pilani.ac.in**Number of PhD Scholars:**

Full-time : 9

Part-time: 4

Aspirants: 1

Faculty: 7

**Total: 21****A. Sponsored Research activities:****Ongoing projects**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Design and Development of Digital Forensic Tools for Cloud IaaS	Dr. Geetha Kumari	DIT	54.96	2014-16

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
2	Lightweight Code Self-verification for Internet of Things (IoT) Devices	Prof. Chittaranjan Hota	DeitY-NWO	48.00	2015-19

**Projects sanctioned during the year:** Nil

#### **B. Journal Publications:**

1. V. Balaji, S. Anand, C. R. Hota, and G. Raghurama, Spectrum Hole Identification in IEEE 802.22 WRAN using Unsupervised Learning, EAI Endorsed Transactions on Wireless Spectrum, 16(7), Jan 2016, pp.1-8.
2. V Balaji, C R Hota, and G Raghurama, Spectrum Hole Prediction for Cognitive Radios: An Artificial Neural Network Approach, International Journal on Information Processing (IJIP Journal), Vol.10 (1), March 2016, pp. 52-66.
3. Snehanthu Saha, Neelam Jangid, Archana Mathur and Anand M Narasimhamurthy, DSRS: Estimation and forecasting of journal influence in the science and technology domain via a lightweight quantitative approach, Collnet Journal of Scientometrics and Information Management, June 2016, Volume 10, Issue 1, pages 41-70, Taylor and Francis, DOI 10.1080/09737766.2016.1177939
4. Chittaranjan Hota, Pratik Narang, and Jagan Mohan Reddy, Unwanted Traffic Identification in Large-scale University Networks: A Case Study, Big Data Analytics: Methods and Applications, Springer book chapter, pp. 163-187, October 2016.
5. BKSP Kumar Raju and G Geethakumari, "Event Correlation in Cloud: A Forensic perspective", Springer Computing Journal, November 2016, Volume 98, Issue 11, pp 1203–1224.
6. Pratik Narang, Chittaranjan Hota, and Husrev Taha Sencar, Noise-resistant mechanisms for detection of stealthy peer-to-peer botnets, Computer Communications, Elsevier, Vol. 96, Dec 2016, pp. 29-42.
7. Dr.G Geethakumari and BKSP Kumar Raju, Timeline based Cloud Event Reconstruction Framework for Virtual Machine Artifacts”, Special issue of Digital Communications and Networks, Elsevier Journal, 2016
8. Snehanthu Saha, Jyotirmoy Sarkar, Anand MN, Avantika Dwivedi, Nandita Dwivedi, Ranjan Roy, Bidisha Goswami; A Novel Revenue Optimization Model to address the operation and maintenance cost of a Data Center: Journal of Cloud Computing: Advances, Systems and Applications; Springer, 2016, 5(1), DOI 10.1186/s13677-015-0050-8
9. S. Panda, D. P. Mohapatra, “A Framework to measure Coupling using Static Change Impact Analysis”, International Journal of Business Information Systems, Inderscience Publishers, Vol. 23, No. 3, pp: 353-387, 2016.
10. S. Godbole, S. Panda, A. Dutta, D. P. Mohapatra, “An Automated Analysis of the Branch Coverage and Energy Consumption Using Concolic Testing”, Arabian Journal for Science and Engineering, DOI: 10.1007/s13369-016-2284-2, pp: 1-19, 2016.
11. S. Panda, D. Munjal, and D. P. Mohapatra, “A Slice-Based Change Impact Analysis for Regression Test Case Prioritization of Object-Oriented Programs”, Advances in Software Engineering, Hindawi Publishers, (<http://dx.doi.org/10.1155/2016/7132404>), 2016.

#### **C. Conferences attended/papers presented:**

1. PraveenVenkateswaran, Aruna Malapati, Maitreya Natu ,Vaishali Sadaphal,Towards Next- Generation Alert Management of Data Centers, COMSNETS 5-9th January 2016 Bangalore, India.
2. Jagan Mohan Reddy, and Chittaranjan Hota, Attack Identification Framework for IoT Devices, Third International Conference on Information Systems Design and Intelligent Applications, January 2016, Vol. 434, Advances in Intelligent Systems and Computing, Springer, pp. 505-513.
3. Dr. Geetha Kumari has attended Twelfth Annual IFIP WG 11.9 International Conference on Digital Forensics, New Delhi, India.
4. Sagi Sai Sruthi and G Geethakumari, "An Efficient Secure Data Aggregation Technique for Internet of Things Network: An Integrated Approach using DB-MAC and Multi-Path Topology" Proceedings of the 6th IEEE International Advance Computing Conference (IACC - 2016), 27-28 February 2016, India.
5. Meera G and G Geethakumari, "Event Correlation for Log Analysis in the Cloud" Proceedings of the 6th IEEE International Advance Computing Conference (IACC - 2016), 27-28 February 2016, India.
6. Balaji V, Tejas N, Chittaranjan Hota, and G Raghurama , “Cooperative Spectrum Sensing in Cognitive Radio: An Archetypal Clustering Approach” , IEEE International Conference on Wireless Communications Signal Processing and Networking (IEEE WiSPNET 2016), March 2016, India, IEEE Xplore.

7. D Radha Rani and G Geethakumari, "A Framework for Detecting Anti-forensics in Cloud Environment", Proceedings of the IEEE ICCCA- 2016 International Conference, 29-30 April 2016, India, Proceedings in IEEE Explore.
8. BKSP Kumar Raju and G Geethakumari, "An advanced forensic readiness model for the cloud environment", Proceedings of the IEEE ICCCA- 2016 International Conference, 29-30 April 2016, India, Proceedings in IEEE Explore.
9. Gokul Kannan Sadasivam, Chittaranjan Hota, and Anand Bhojan, Classification of SSH attacks using Machine learning algorithms, 6th International conference on IT convergence and security (ICITCS 2016), Prague, Czech Republic, Sept 2016, IEEE Xplore.
10. BKSP Kumar Raju and G Geethakumari, "Timeline based Cloud Event Reconstruction Framework for Virtual Machine Artifacts", Proceedings of the 4th IEEE International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2016), 22-24 September 2016, India. Proceedings to appear in IEEE Explore.
11. Meera G and G Geethakumari, "VMI-driven Forensic Aware Memory Monitoring System in the Cloud: A Concept Map", 4th IEEE International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2016), 22-24 September 2016, India.
12. Ramarao, P., Muthukumar, K., Dash, S. and Bhanu Murthy, N.L., 2016, April. Impact of Bug Reporter's Reputation on Bug-Fix Times. In 2016 International Conference on Information Systems Engineering (ICISE) (pp. 57-61). IEEE.
13. Muthukumar, K., Bhanu Murthy, N.L., Reddy, G.K. and Talishetti, P., 2016. Testing and Code Review Based Effort-Aware Bug Prediction Model. In Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (pp. 17-30). Springer International Publishing.
14. Prafulla Kalapatapu, Srihita Goli, Prasanna Arthum, Aruna Malapati, A Study on Feature Selection and Classification Techniques of Indian Music, The 7th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2016), Pages 125–131, September 19-22, 2016, London, United Kingdom
15. Mr. Gokul Kannan Sadasivam, Chittaranjan Hota, and Anand Bhojan, Classification of SSH Attacks using Machine Learning Algorithms, 6th International Conference on IT Convergence and Security (ICITCS 2016), 2016, Prague, The Czech Republic [DOI]
16. Tathagata Ray, Aruna Malapati and Bhanu Murthy Neti Lalita, Teaching Computer Programming using MOOCs in multiple campuses: Challenges and Solutions, The 8th IEEE International Conference on Technology for Education, Indian Institute of Technology Bombay, Mumbai, December 2-4, 2016
17. BKSP Kumar Raju, Bhupendra Moharil and G Geethakumari, "FaaS-eC: Enabling Forensics-as-a-Service for Cloud Computing Systems", Proceedings of the 9th IEEE/ACM International Conference on Utility and Cloud Computing (UCC), Shanghai, China, Dec 6-9, 2016.
18. Dr. Barsha Mitra, Shamik Sural, Jaideep Vaidya, and Vijayalakshmi Atluri, A Survey of Role Mining, ACM Computing Surveys (CSUR), Vol. 48(4), pages 50:1-50:37, 2016. URL: <http://dl.acm.org/citation.cfm?id=2871148>
19. Barsha Mitra, Shamik Sural, Jaideep Vaidya, and Vijayalakshmi Atluri, Mining Temporal Roles using Many-Valued Concepts, Computers & Security (COSE), Vol. 60, 2016 (DOI:<http://dx.doi.org/10.1016/j.cose.2016.04.002>). URL: <http://www.sciencedirect.com/science/article/pii/S0167404816300335>
20. Jagannath Singh, S. Panda, P. M. Khilar, D. P. Mohapatra, "A Graph-Based Dynamic Slicing of Distributed Aspect-Oriented Software", ACM-SIGSOFT, ACM, Vol. 41, No. 2, pp: 1-8, 2016.
21. Muthukumar, K., Amrita Dasgupta, Shirode Abhidnya and Bhanu Murthy, NL., On the Effectiveness of Cost Sensitive Neural Networks for Software Defect Prediction, 8th International Conference on Soft Computing and Pattern Recognition, SoCPaR 2016(Accepted), Springer International Publishing.
22. Muthukumar, K., Suri Srinivas, Aruna Malapati, and Bhanu Murthy, NL., Software Defect Prediction using Augmented Bayesian Networks, 8th International Conference on Soft Computing and Pattern Recognition, SoCPaR 2016(Accepted). Springer International Publishing.
23. Prof. Tathagata Ray, Aruna Malapati and N. L. Bhanu Murthy, have published in the following publication : "Teaching Computer Programming using MOOCs in multiple campuses: Challenges and Solutions" Proc. 8th IEEE conference on Technology For Education (T4E), 2-4th Dec 2016, IIT Powai, Mumbai, India.
24. BKSP Kumar Raju, Bhupendra Moharil and G Geethakumari, "FaaS-eC: Enabling Forensics-as-a-Service for Cloud Computing Systems", Proceedings of the 9th IEEE/ACM International Conference on Utility and Cloud Computing (UCC), Shanghai, China, Dec 6-9, 2016.
25. Surendra Singh, Sachin Tripathi, Suvadip Batabyal, "Secured Dynamic Scheduling Algorithm for Real-Time Applications on Grid," in 12th Intl. Conf. on Information Systems Security (ICISS) 2016, pp.283-300.

**D. Invited Talks given by BITS faculty:**

Name of the Faculty Member	Title of the Lecture(L) / Workshop(W) and Occasion ( if any )	Institution in which it was delivered / conducted	Duration / Date ( DD-MMM-YYYY )
Mr.KCS Murti	Modern trends in Embedded systems	VIT, Vellore, India.	Oct-2016
Prof. Chittaranjan Hota	Self-care healthcare using IoT and Bigdata analytics	Indo-Norwegian ICT workshop conducted at International Institute of Information Technology (IIIT), Hyderabad .	21-22, Jun-2016
Mr. Abhishek Thakur	"Information Security Challenges in Evolving Systems"	Verizon, Hyderabad	19 <sup>th</sup> Oct 2016
Prof. Anand Narasimha Murthy	Numerical optimization for the Image Computing group, on.	Canon R&D, Bangalore	March 18, 19, 2016

**E. Invited talks arranged in the department:**

1. Prof.Amit Sheth, Wright State University, USA, delivered an expert talk on "Search Engine Basics to Semantic Search", on 16, Feb-2016.
2. Albert Greenberg, Corporate Vice President, Microsoft, delivered an expert talk on "Hyperscale Networking in Microsoft Azure", on 18, Nov-2016.

**F. Awards and recognitions won by faculty and students****G. Faculty Development, International Collaboration & Industry Immersion****H. Significant new equipments/experimental facility added during the year:****I. Departmental association/club activities:****J. Major maintenance, renovations or new construction reports:****K. Major equipments acquired during the year:****B3.10.6 Electrical and Electronics Engineering****Number of faculty members**

Senior Professors, Professors	2
Associate Professors	4
Assistant Professors	10
Lecturers	9
Visiting Faculty	1
Emeritus Professor	1

**Head of the Department:** Prof. Y. Yoganandam

**Contact details:** 40 6630 3569

**Email:** yogi@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 42

**A. Sponsored Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Microfluidic-Diffusivity-meter: CO2 diffusivity sensor during Carbon Sequestration in the Oil reservoirs	Prof. Sanket Goel	SERB	21.91	Jan 2014 – Dec 2017
2	Frequency Estimation in Wideband Receivers with Under Sampling (FEWU)	Prof. Y.Yoganandam, Prof. SK Sahoo	DLRL	9.99	Jan 2016- Dec 2016



3	Physics based compact analytical modeling of double-gate fully depleted silicon-on-insulator tunnel field effect transistor devices and circuits at the nanoscale dimensions.	Dr. Surya Shankar Dan	BITS, OPERA	15	Jan 2016 - Dec 2021
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**Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Reconfigurable Dielectric Resonator Antenna for wireless applications	Dr Runa Kumari	RIG , BITS Pilani	2.0	2 years (March 2016-Feb 2018)

**B. Publications:**

#	Authors	Title	Journal	Pages	Vol	Year
1	Apurva Kumari, Subhendu Kumar Sahoo	Real time image and video deweathering: The future prospects and possibilities	Optik	829–839	127	2016
2	Pedinti Sankaran Venkateswaran, Abhishek Sharma, Santosh Dubey, Ajay Agarwal, Sanket Goel	Rapid and Automated Measurement of Milk Adulteration Using a 3D Printed Optofluidic Microviscometer (OMV)	IEEE Sensors Journal	3000 - 3007	16	2016
3	Vellaluru Neeharika, Prasant Kumar Pattnaik	Optical MEMS Pressure Sensors Incorporating Dual Waveguide Bragg Gratings on Diaphragms	IEEE Sensors Journal	681 - 687	16	2016
4	Kartik Arunachalam, Venkateswaran Sankaran Pedinti and Sanket Goel	Decentralized distributed generation in India: A review	Journal of Renewable and Sustainable Energy	25904	8	2016
5	Ravi Shankar Prasad, B. Yegnanarayana	Determination of glottal open regions by exploiting changes in the vocal tract system characteristics	Journal of Acoustical Society of America	666-677	140	2016
6	Sankara Rao Gollua, Ramakant Sharma, G. Srinivas, Souvik Kundu, Dipti Gupta	Incorporation of silver and gold nanostructures for performance improvement in P3HT: PCBM inverted solar cell with rGO/ZnO nanocomposite as an electron transport layer	Organic Electronics	79 - 87	29	2016
7	Pilkar R, Yarossi M, Ramanujam A, Rajagopalan V, Bayram MB, Mitchell M, Canton S, Forrest G	Application of Empirical Mode Decomposition Combined with Notch Filtering for Interpretation of Surface Electromyograms during Functional Electrical Stimulation	IEEE Trans Neural Syst Rehabil Eng. [Epub ahead of print]			2016
8	Venkateswaran Rajagopalan, Erik Pioro	Differential involvement of corticospinal tract (CST) fibers in UMN-predominant ALS patients with or without CST hyperintensity: A diffusion tensor tractography study	Neuroimage Clinical (Accepted)			2016
9	A. V. Pavan Kumar, Alivelu M. Parimi, K. Uma Rao	A Discrete PLL based Load Frequency Control of FLC based PV-Wind Hybrid power system With Real Time Data	International Journal of Power Electronics and Drive Systems (IJPEDS)		Vol. 7, No. 4	2016

**C. Conferences attended/papers presented:**

#	Authors	Title	Conference	Pages	Vol	Year
1	Pioro EP, Rajagopalan V	Sequential PET and MRI in a patient with ALS-FTD reveal worsening brain metabolism and cortical thinning with disease progression	7th International Symposium on Neuroimaging in ALS, Dublin, Ireland			Dec 11, 2016

#	Authors	Title	Conference	Pages	Vol	Year
2	Manu Gupta, Prof. B.V.V.S.N.Prabhakar Rao, Dr.Venkateswaran Rajagopalan	Brain Tumor Detection in conventional MR Images based on Statistical Texture and Morphological Features	15th IEEE International Conference on Information Technology (ICIT) 2016, IIT Bhubaneswar			December 22-24, 2016
3	Poornalakshmi U, Gautham D M S, Vishnuvardhan Iyer, Balasubramanian Malayappan, and Pattnaik P.K.	Variable Optical Attenuator Using X-Shaped Photonic Crystal Ring Resonator	13th International Conference on Fiber Optics and Photonics - PHOTONICS, 2016, IIT Kanpur			December 04-08, 2016
4	Poornalakshmi U, Balasubramanian Malayappan, Narayan K, and Pattnaik P.K.	Analysis of SOI based MEMS Actuated Waveguide Bragg Grating for Sensing and Communication Applications	13th International Conference on Fiber Optics and Photonics - PHOTONICS, 2016, IIT Kanpur			December 04-08, 2016
5	M. K. Kaushik, Y. Yoganandam, 2016	"Studies on Route Sustenance and Outage Probability in Cognitive Mobile Secondary User Networks," "Studies on Route Sustenance and Outage Probability in Cognitive Mobile Secondary User Networks,"	IEEE International Symposium on Embedded Computing and System Design (ISED), IIT Patna,			December 15-17, 2016.
6	Puranam Sai Akhil and Aivelu M. Parimi	Synchronization of Motion from Multiple Humans and Humanoid Robot based on Kinect V2	IEEE 11th International Conference on Industrial and Information Systems (ICIIS), IIT Roorkee, Uttarakhand			Dec.3-4, 2016,
7	M. T. L. Gayatri, Aivelu M. Parimi	Power Quality Conditioning of PV-Wind Microgrid to provide Harmonic Reactive Power Compensation Using Series APF	Aerospace Electronics Electrical Communication and Instrumentation 2016 (ASECI) 2016			22-23rd October 2016
8	Ramchandra Nittala , Aivelu M.Parimi , K. Uma Rao	A Real Time Application of IDVR for Improvement of Power quality	Aerospace Electronics Electrical Communication and Instrumentation 2016 (ASECI 2016)			22-23rd October 2016
9	T. Haripriya; Aivelu M. Parimi; U. M. Rao	Performance evaluation of DC grid connected solar PV system for hybrid control of DC-DC boost converter	IEEE 2016 10th International Conference on Intelligent Systems and Control (ISCO)			2016
10	SuyashYeotikar, Aivelu M Parimi, Y.V.D Rao	Automation of end effector guidance of robotic arm for Dental Implantation using Computer Vision	IEEE International conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER 2016), (NITK), Surathkal			13-14, August 2016
11	A.V. Pavan Kumar; Aivelu M. Parimi; K. Uma Rao,	Performance analysis of voltage regulated inverter for FLC based PV-wind hybrid power system with real time data	IEEE International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS),			2016
12	T Hari Priya; Aivelu M. Parimi; U. M. Rao	Performance evaluation of high voltage gain boost converters for DC grid integration	IEEE 2016 International Conference on Circuit, Power and Computing			2016

#	Authors	Title	Conference	Pages	Vol	Year
			Technologies (ICCPCT)			
13	A. V. Pavan Kumar; Alivelu M. Parimi; K. Uma Rao	A comparative analysis of Load Frequency Control Strategy of a Voltage Source Inverter for a stand-alone PV-Wind hybrid system	IEEE 2016 IEEE 6th International Conference on Power Systems (ICPS)			2016
14	M. T. L. Gayatri; Alivelu M. Parimi	Mitigation of supply & load side disturbances in an AC Microgrid using UPQC	IEEE 6th International Conference on Power Systems (ICPS),			2016
15	M.T.L.Gayatri and A. M. Parimi, A V Pavan	Utilization of Unified Power Quality Conditioner for voltage sag/swell mitigation in microgrid	IEEE 2016 Biennial International Conference on Power and Energy Systems: Towards Sustainable Energy (PESTSE),			2016
16	T. Hari Priya; Alivelu M. Parimi; U. M. Rao	Development of hybrid controller for photovoltaic based DC-DC boost converter in DC grid connected applications	2016 IEEE International Conference on Circuit, Power and Computing Technologies (ICCPCT),			2016
17	M.T.L.Gayatri and A. M. Parimi, A V Pavan	Microgrid reactive power compensation using UPQC with common DC link energy restored by PV array	2016 IEEE International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS),			2016
18	Y.V.D Rao, Alivelu M Parimi, D.S.P Rahul, Dikshant Patel, Y. V. Nitin Mythreya	Robotics in Dental Implantation	International Conference on Advancements in Materials for Manufacturing (ICAAMM-2016). Published in "Elsevier Materials Today Procedia			2016
19	Y. V. D Rao, Alivelu M Parimi, D. S. P. Rahul, Dikshant Patel, Y. V. Nitin Mythreya	Robotics in Dentistry	22 <sup>nd</sup> Conference On Mechanical Engineering and Technology , IIT (BHU), Varanasi			January 15-17, 2016
20	Chetan Vudadha, Sai Phaneendra P and M.B. Srinivas	An Efficient Design Methodology for CNFET based Ternary Logic Circuits	IEEE International Symposium on Nanoelectronic and Information Systems (IEEE-iNIS) -2016	6		2016

#### D. Invited Talks given by BITS faculty:

Name of the Faculty Member	Title of the Lecture(L) / Workshop(W) and Occasion ( if any )	Institution in which it was delivered / conducted	Duration / Date ( DD-MMM-YYYY )
Prof. Sanket Goel	Microfluidic devices for Biomedical and Energy Applications: Recent trend	Department of Biosciences and Bioengineering, IIT Guwahati	5 –Nov-16
	Towards Energy self-reliant and self-sustained India: Fostering Partnership between 3Ps – Public, Private	PRS University, Raipur	24-Sep-16

Name of the Faculty Member	Title of the Lecture(L) / Workshop(W) and Occasion ( if any )	Institution in which it was delivered / conducted	Duration / Date ( DD-MMM-YYYY )
	and People		
	From bench to field – Evolution of Micro-Devices in diverse domains	Instrument Society of India and IEEE, Green Park Hotel, Hyderabad	23-Aug-16
	Review on CardioWest Total Artificial Heart	MediCiti Institute of Medical Sciences, Hyderabad, Katriya Hotel, Hyderabad	15-Aug-16
	Triboelectric Nanogenerator	Biological Science Department, BITS-Pilani, Hyderabad Campus	22-Apr-16
	MEMS Based sensors – Design, fabrication and Characterization (two sessions)	Madhav Institute of Technology and Science (MITS), Gwalior, India	5-Mar-16
	Microfluidic Devices for Biochemical applications	Mahindra Ecole Centerle, Hyderabad	25-Feb-16
	Microfluidic/Lab-on-a-chip for various Biochemical applications	School of Mechanical Engineering, KAIST, Daejeon, Korea	13-Jan-16
	3D printed Microfluidic/Lab-on-a-chip for various Biochemical applications	School of Mechanical Engineering, Kyungpook National University, Daegu, Korea	11-Jan-16
	Microfluidic Devices for Biomedical Applications	BITS-Pilani, Hyderabad Campus, Hyderabad	5-Jan-16
Prof. S K Sahoo	Delivered invited talk at Gujarat technological University on 10th April 2015 Topic - Recent Trends on Multiplier Architecture		
Dr. Runa Kumari	Invited talk on: "Possible Realization of Dielectric Resonator Antenna" in a short term course on " Design & Simulation of Antennas and Microwave Devices" during 1st -8th June, 2016	Department of Electronics & Communication Engineering National Institute of Technology Rourkela-769008,INDIA	6th June 2016
Dr Alivelu M Parimi	Keynote Speaker for the 3rd National Conferences conducted by EEE, ECE and CSE titled "Recent Innovations In Electrical Engineering (NCRIEE-2K16)", Communications and Signal Processing & VLSI (NCCSPVLSI-2K16), Computational Intelligence, Computing & Networks (NCCICN-2K16) of Malla Reddy Engineering College Hyderabad	EEE	12th November, 2016.
	Conducted workshop on "Training on Electrical Safety and Arc Flash Hazards" Shantha Biomechanics at Medchal Hyderabad		9th August, 2016

**E. Invited talks arranged in the department:**

Presenter	Details of the Talk	Department	Date
Prof. R.N. Biswas, Visiting Faculty in the Department of Electrical Engineering at Shiv Nadar University, Noida	Convergence of Technologies – The key to future Engineering	EEE	30 ay 2016

**F. Awards and recognitions won by faculty and students**

- Prof. M.B Srinivas received Stanford Medical School Award on 14 October 2016.
- Prof. Sanket Goel received SERB Travel grant to present two oral papers at Photonics West to be held in San Francisco during 28 Jan - 2 Feb 2017.
- Dr. Souvik Kundu was shortlisted for National Scholar Science Fellowship-2016
- K. Naveen obtained 2nd rank in ECE stream and J Shashank obtained 28th rank in Instrumentation stream in GATE-2016
- Shirin Fathima received DAAD fellowship for summer internship at Germany.

**G. Faculty Development, International Collaboration & Industry Immersion**

- Prof. Sanket Goel has been invited as External PhD examiner, Department of Bioscience and Bioengineering, IIT Guwahati.
- Prof. Sanket Goel has been nominated as Member, Technical Evaluation Committee (TEC), National Institute of Nutrition (ICMR-NIN), Hyderabad
- Prof. Sanket Goel has been invited as Expert Member, Young Scientist Conference, India International Science Festival (IISF), December 2016, New Delhi
- Prof. Sanket Goel served in the Faculty selection committee, EEE department, Geethanjali College of Engineering and Technology, Hyderabad
- Prof. Sanket Goel served in the Faculty selection committee, EEE, Mahatma Gandhi Institute of Technology (MGIT), Hyderabad
- Prof. Sanket Goel was nominated as Member, Advisory Committee, National Workshop on Entrepreneurship in Renewable Energy Technologies, Pt. Ravishankar Shukla University, Raipur, 19-24 Sept 2016
- Dr. Alivelu Manga Parimi served in the Faculty selection committee, BOS member of EEE department, Vasavi College of Engineering and Technology, Hyderabad

**H. Departmental association/club activities:**

- A workshop on Home Automation based on IOT was conducted by experts from National Instruments during ATMOS 2016.
- i-navigate workshop was held by the students pre-ATMOS to encourage participation during ATMOS 2016. IN this event participant learnt about building navigation robots.
- Robowars, Quadcopter and law follower workshops were held pre-ATMOS and the events were organized during ATMOS 2016.
- Quark Expo : A competition was held on making hardware prototypes for various electrical applications was held during ATMOS 2016 in order to encourage students participation in electrical engineering stream.
- Talks by alumni and industry experts were held to orient students towards placement and higher studies.

**I. Significant new equipments /experimental facility added during the year:****J. Major equipments acquired during the year:****1. MEMS Lab, Instrument and Transducer Lab**

- Photolithography system (Laminator, UV box, Spin coater and Hot plate)
- Soft lithography setup (Plasma cleaner, Hot Air Oven, Desiccator)
- Electrochemical workstation
- Digital Viscometer

- Fluorescence Microscope and Digital Microscope
- Cutting Plotter
- 3D printers (SLA and FDM)
- Photomultiplier tube
- Digital Conductivity Meter

## 2. Nanoelectronics Lab

- Rapid Thermal Processing (RTP)
- Thermal Evaporator

## 3. Power System Lab:

- Solar and Wind Emulator.

**K. Major maintenance, renovations or new construction reports:** NA

### B3.10.7 Economics and Finance

Number of faculty members

Senior Professors, Professors	2
Associate Professors	Nil
Assistant Professors	10
Lecturers	Nil
Visiting Faculty	Nil

**Head of the Department:** DR. SUDATTA BANERJEE

**Contact details:** Email: sudatta@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 3

#### A. Sponsored Research activities:

**Ongoing projects :** NIL

**Projects sanctioned during the year:** NIL

#### B. Publications:

1. Dr. Sudatta Banerjee and Payal Mehta, 2016 "Determining the Antecedents of Job Stress and Their Impact on Job Performance: A Study Among Faculty Members", The IUP Journal of Organizational Behaviour, Vol. XV, No. 2, pp. 7-24.
2. Mahapatra, Mousumi Singha, Swati Alok, and Jayasree Raveendran. "Financial Literacy of Indian Youth: A Study on the Twin Cities of Hyderabad–Secunderabad." IIM Kozhikode Society & Management Review (2016): 2277975216667096.
3. Swati Alok, Mocherla, Jyothirmayee (2016), "Predicting the Behavioral Intention to Use ERP: An Empirical Study on the Manufacturing Industry", The IUP Journal of Operations Management, Vol. 15 Issue 1, pp.7-24.
4. Archana Srivastava and Mathur S.K. (2016), "Hypothesis in Trade Theory: Validity Check for India" in the *Methods and Applications in Trade Policy Research*, Pp 93-142, Athena Academic Publishers, U.K.
5. Kiran Kumar Kotha and Prof. Vijaya B Marisetty Market quality, market reforms and investor familiarity: Evidence from the Indian stock market. 2016. Law and Markets Review, 127- 132

#### C. Conferences attended/papers presented:

1. Dr. Sudatta Banerjee- "A Comparative Study of Determinants of Quality of Education in Private and Government Schools: A Case Study of the Schools of Burdwan, West Bengal," 52nd Annual Conference of the Indian Econometric Society (TIES) held in IIM Kozhikode, India, January 4-6, 2015.
2. Dr. Sudatta Banerjee- "Effects of Personality Traits on Facebook Behaviour" 53rd Annual Conference of the Indian Econometric Society (TIES) held in NISER Bhubaneswar, India, December 22-24, 2016

3. Swati Alok , "A Survey on Financial literacy of Indian Youth: A Study on Hyderabad-Secunderabad Twin Cities" in 52nd Annual Conference of *The Indian Econometric Society (TIES) at IIMK, Khozikode, (4-7 Jan, 2016)*
4. *Swati Alok*, "The Big Five personality dimensions and Facebook behaviour: A study on Indian youth" in 26th Annual Conference of National Academy of Psychology(NAOP) 2016 at *IIT Madras (29-31 December, 2016)*.
5. *Archana Srivastava*- Testing of Stolper-Samuelson Theorem for India – A Translog Production Function Approach, 53rd Indian Econometric Society Conference at (NISER), Khordha, Odisha, India, 22-24 Dec 2016.
6. Dr. C Hussain Yaganti, An analysis of time to maturity and volume effects on volatility:Commodity Futures Markets, 53rd Indian Econometric Society Conference at (NISER), Khordha, Odisha, India, 22-24 Dec 2016.
7. Dr. Mini Thomas P, Impact of Services Trade on India's Economic Growth and Current Account Balance: Evidence from post-reform period, 6th Annual Research Conference of Maastricht School of Management, Netherlands, 9 Sept 2016.
8. Dr. Mini Thomas P, Impact of Services Trade on India's Economic Growth and Balance of Payments: An Alternative Approach, 14th Development Dialogue at International Institute of Social Studies (ISS), Hague, Netherlands., 21-22 Nov 2016.
9. Nhung Do and Vijaya B Marisetty, Can Political Connections Help Nation Building in Emerging Markets? Evidence from Public-Private Partnerships in China and India. Emerging Markets Finance Conference,Mumbai, December 13- 17th 2016.
10. Dr. Thota Nagaraju, Does A Debt Relief Lead To Increased Precautionary Savings Evidence From A Policy Experiment, 53rd Indian Econometric Society Conference at (NISER), Khordha, Odisha, India, 22-24 Dec 2016
11. Dr. Thota Nagaraju, Evaluating Concentration, Competition, Efficiency and their relationship in the Indian banking sector since 1980, Indian Economic Association's 99th Annual Conference at S V University , Tirupathi., 27-29 Dec 2016.
12. Dr. Rishi Kumar, Presentation of paper "Local Governance in Tribal Dominated Areas-Improving Inclusiveness? A Case Study", 10th ICSSR-NRCT joint seminar on "Democracy and Governance in India & Thailand", 06-07 Sep 2016

#### **D. Invited Talks given by BITS faculty:**

1. Dr. Durgesh Chandra Pathak: Invited speaker for a Technical session in the 'International Carbon Credit Conference' (UGC sponsored) at the Post Graduate Department of Commerce and Research Centre of the Bharat Mata College, Kochi (29/08/2016 to 31/08/2016). The topic of talk was 'Carbon Credits: Efficiency versus Ethics'.
2. Dr C Hussain Yaganti, Delivered Lecture on " Predictive content of Futures Prices in Commodity Markets", Workshop on Applied Financial Econometrics, University of Hyderabad, 19-23 Sep 2016
3. Prof. Vijay B. Marisetty, delivered lecture on Market Microstructure, in Hyderabad Central University for the workshop on Applied financial econometrics, September 19 -23, 2016.

#### **E. Invited talks arranged in the department:**

1. Prof. Uday Bhate, managing partner and co-founder of a consultancy company delivered lectures in the workshop on "Business Analytics" which was organized by the Department of Economics and Finance on 12th November 2016.
2. S G Anil Kumar, CEO, Samunnathi Financial Intermediation and Services Pvt. Ltd., delivered a lecture on Microfinance, organized by the Department of Economics and Finance, 30 Aug 2016
3. Mr. Sunil K Daga, Founder, Enrich Investments, delivered a lecture on Investor Insights, organized by the Department of Economics and Finance, 23 Sept 2016

#### **F. Awards and recognitions won by faculty and students: Nil**

#### **G. Faculty Development, International Collaboration & Industry Immersion: Nil**

#### **H. Significant new equipments/experimental facility added during the year: Nil**

#### **I. Departmental association/club activities:**

1. Panel discussion on Britain's exit from EU(BREXIT) on 26th January 2016, moderated by Mr. Shamuel Tharu.
2. Panel discussion on Donald Trump's wins in US Presidential Elections on 11/12/2016.

3. Business Quiz conducted by RCBS Business School on 1st October 2016, 2 students were selected for finals at Kochi.
4. De-economist the blog of economics Association successfully published 3 editions by December 2016.
5. Panel cum open discussion on De-monetization was conducted on 10th November 2016.
6. Prof. Ranjeet Nambaduri from IIM-Indore visited Bits Pilani Hyderabad Campus on November 18th and educated the students about "Fellow Program in Management" at IIM Indore.
7. The Economics association conducted 3 events, Business Quiz, Court Room (Moot Court) and Paper Presentation during annual Techno management FestAtmos'16 (October 14-16) of BITS Hyderabad. Students from NALSAR, IIM Indore, GITAM took part in the paper presentation.
8. Prof. Sai Priya Kamath (Asst. Prof. of LSE) gave a talk on Conservatism by Auditors after Audit failures.

**J. Major maintenance, renovations or new construction reports: Nil**

**K. Major equipments acquired during the year: Nil**

### B3.10.8 Humanities and Social Sciences

**Number of faculty members**

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>2</b>
<b>Assistant Professors</b>	<b>4</b>
<b>Lecturers</b>	<b>1</b>
<b>Visiting Faculty</b>	<b>1</b>

**Head of the Department:** Prof. Sunny Jose

**Contact details:** Email: sunny@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 6

**A. Sponsored Research activities:**

**Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	NFAI Research Fellowship Project 2016	Olympia Bhatt	National Film Archives of India	85,000	12 months
2	Using CEFR based Bilingual Rating Scales to improve the Writing Ability of ESL Learners : A Multiple Case Study	Santosh Kumar Mahapatra	British Council	1, 48000	12 months

**Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Regenerating Tank systems for enhanced livelihoods: An evaluation of Mission Kakatiya (MK) project in Telangana	Srinvas Sajja	Indian Council for Social Science Research	40000	6 months

**B. Publications:**

- Arup Maharatna India's Cost of Evading 'Western Enlightenment' Mainstream 33-35 VOL LIV No 17, 2016
- Arup Maharatna On the Perils of Reforms in Higher Education on 'Neo-Liberal' Lines Journal of educational Planning and Administration 97-109 VOL XXX, No.2, 2016.
- Arup Maharatna Corruption and Immorality: An Illustration Mainstream 49-51 VOL LIII No 34, 2015.
- Maya Vinai My Gulf Dreams Re-Markings 108-109 VOL 15 No. 1, 2016



- Maya Vinai and M.G Prasuna Challenging the Stereotype of Political Neutrality: The Representation of Parsi Community in Selected Fictional Works The IUP Journal of English Studies Vol. XV No.2, 2016
- Maya Vinai and M.G Prasuna Revisiting Mythic Tales: In Conversation with Kavita Kane Re-Markings. Vol 15 No. 2, 2016
- Maya Vinai and M.G Prasuna Re- Mapping the Anxieties of the Gulf Diaspora: A study of Benyamin's Goat Days South Asian Review. 121-129 Vol. 36 No.2
- Santosh Kumar Mahapatra Tracking development of teachers' language assessment literacy online: a case study In Ensuring Quality in English Language Teacher Education (Ed. George Pickering and Professor Paul Gunashekar British Council, 2016.
- Santosh Kumar Mahapatra Providing Interactive Feedback through Voicethread for Improving Presentation Skills: A Case Study at BITS Pilani Hyderabad Campus The Journal of English Language Teaching, ELT@I, Volume 58/5, 2016.
- Santosh Kumar Mahapatra Teacher Assessment Literacy and Assessment of English in Secondary Schools In Integrating Technology and Culture: Strategies and Innovations in ELT Yking Books, 2016.

**C. Conferences attended/papers presented:**

- Maya Vinai Gauging the role of Socio-cultural events in selection of themes in Temple Art Forms like Krishnanattam and Koodiyattam Epic in India Centre for Comparative Literature, University of Hyderabad (HCU) held from 24- 26th August 2016 National 2016
- Santosh Mahapatra "Formative assessment is diluting the quality of students": Examining the Impact of School Assessment Culture on ESL Teachers' Classroom Assessment Practices, 3rd International ELT Conference, March 5 – March 6, 2016, Amity University, Lucknow. International, 2016.
- Shamuel Tharu "Wither Pax Academica: Violence in/on/by the University" "Human Sciences and the Future of the University" International, 2016

**D. Invited Talks given by BITS faculty:**

- 26th Feb 2016 Sunny Jose AN Sinha Institute of Social Studies Research Methodology for ST/SC Faculty Members in Social Sciences.
- 20th March 2016 Shamuel Tharu College of Air Warfare 40th Higher Air Command Course on Rise of Left Wing Extremism
- 03rd Dec 2016 Shamuel Tharu College of Air Warfare 39th Higher Air Command Course on Left Wing Extremism
- June 30 – July 2, 2016 Santosh Mahapatra " Developing Authentic Tasks Using Authentic Materials" – Invited to conduct a session at 11th International & 47th National ELT@I Conference in Hyderabad

**E. Invited talks arranged in the department:**

**F. Awards and recognitions won by faculty and students NIL**

**G. Faculty Development, International Collaboration & Industry Immersion NIL**

**H. Significant new equipment/experimental facility added during the year: NIL**

**I. Departmental association/club activities: NIL**

**J. Major maintenance, renovations or new construction reports: NIL**

**K. Major equipment acquired during the year: NIL**

**B3.10.9 Mechanical engineering Department****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>6</b>
<b>Assistant Professors</b>	<b>15</b>
<b>Lecturers</b>	<b>2</b>
<b>Visiting Faculty</b>	<b>1</b>

**Head of the Department:** Prof. Amit Kumar Gupta

**Contact details:** +91 40 66303518 **Email:** ak Gupta @hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 27

**A. Sponsored Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Development of an integrated approach for modeling and management of micro grid operations	Prof. S.S. Deshmukh	Additional Competitive Research Grant, BITS	9	2015-2017
2	Anaerobic co-digestion of food waste and organic fraction of municipal solid waste for the production of biogas and concomitant use of biogas as fuel for Cooking and spent slurry as fertilizer	Prof. S.S. Deshmukh (Co PI)	BITS Pilani	62	2014-2017
3	Structural health monitoring of wind turbines using a comprehensive condition monitoring scheme.	Dr. Sabareesh G R	Additional Competitive Research Grant, BITS	8.5	2015-2017
4	Heat Transfer modeling of cold water mist at the cutting zone using FSI model in machining of turbine blade materials	Dr. Phaneendra Kiran C	Additional Competitive Research Grant, BITS	9	2015-2017
5	Understanding forming behaviour of Ti6AL-4V material between 400-850 C in deep drawing set up	Prof. A K Gupta (Co PI)	DRDO	9.85	2015-2017
6	Novel Minimal-Solid Lubricant Mixture Application Method For Performance Improvement in Turning	Prof. N S K Reddy	SERC, DST	40.88	2013-2017
7	Develop and Test Certain 3D Printing Technologies to Produce Innovative Limbs at Affordable Costs for the Disabled in India.	Prof. Srinivasa Prakash Regalla	BIRAC, DBT	47.65	2015-2017

**Projects Completed during the year 2016**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1.	Formability study on constrained groove pressed extra deep drawn (EDD) steel sheets	Prof. A K Gupta	UGC-RA	34.2	2014-2016
2.	Design And Development Of An Interactive Decision Support System For Regional Energy Management	Prof. S.S. Deshmukh	UGC	6	2014-2016

**Projects sanctioned during the year 2016**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (in Lakhs)	Duration
1.	Simulation and Modelling to Minimize Porosity Level in Aluminium Castings by using Ultrasonic Stir Casting	Prof. N S K Reddy	L & N Structural Engineers (P) LTD	8.03	2016-2019
2.	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring techniques	Dr. Sabareesh G R	DST	26.04	2016-2019
3.	Hydrogen Storage in Mesoporous Polymer Derived Ceramics for Automotive Application	Dr. Sujith R	DST	42.38	2016-19
4.	Design and Thermal Analysis of Electronic Controller	Prof. Jeevan Jaidi	HBL Power Systems	2.5	April-June 2016
5.	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Prof. Amit Kumar Gupta	DRDO	45.6	2016-2019

**B. Publications:**

1. A K Gupta, T S Maddukuri, S K Singh (2016) "Constrained groove pressing for sheet metal processing", Progress in Materials Science, Vol. 84, pp 403–462.
2. R K Desu, H N Krishnamurthy, A Balu, A K Gupta, Swadesh Kumar Singh, (2016) "Mechanical properties of Austenitic Stainless Steel 304L and 316L at elevated temperatures" Journal of Materials Research and Technology Vol. 5 (1), pp 13–20.
3. K S Prasad, A K Gupta, Y Singh & S K Singh (2016) "A modified mechanical threshold stress constitutive model for austenitic stainless steels" Journal of Material Engineering and Performance, Vol. 25 (12), pp 5411–5423.
4. V V N Satya Suresh, S P Regalla & A K Gupta (2016) "Combined effect of thickness ratio and selective heating on weld line movement in stamped tailor-welded blanks", Journal of Materials and Manufacturing Processes, online, pp 1-5.
5. N Kotkunde, S Srinivasan, G Krishna, A K Gupta, S K Singh (2016) "Influence of Material Models on Theoretical Forming Limit Diagram Prediction for Ti-6Al-4V Alloy at Warm Condition", International Journal of Transactions of Nonferrous Metals Society of China, 2016; Vol. 26 (3), pp. 736–746.
6. N Kotkunde, A K Gupta, S K Singh (2016) "Formability Study of Ti-6Al-4V Alloy at Warm Condition", Journal of Advances in Materials and Processing Technologies, Vol. 1(1-2), pp. 210-222.
7. Nitin Kotkunde, G. Krishna, SK. Shenoy, A.K. Gupta, SK. Singh (2015) "Experimental and Theoretical investigation of forming limit diagram for Ti-6Al-4V alloy at warm condition", International Journal of Material Forming, 2015; pp. 1-12.
8. Sailendu Biswal, G.R.Sabareesh (2016) "Design and development of a wind turbine test rig for condition monitoring applications", IEEE Explore

**C. Conferences attended/papers presented:**

1. V N Balavignesh, B Balasubramaniam, N Kotkunde, "Numerical Investigations of Fracture Parameters for a Cracked Hydraulic Cylinder Barrel and its Redesign", 5<sup>th</sup> International Conference of Materials Processing and Characterization (ICMPC 2016) India.
2. N Kotkunde, A Balu, A K Gupta, S K Singh, "Development of Predictive Models for Formability Study of Ti-6Al-4V alloy at Elevated Temperatures", 5<sup>th</sup> International Conference of Materials Processing and Characterization (ICMPC 2016) India.

3. C. Srinivasu, S K Singh, G Jella, L Jayahari, N Kotkunde, A K Gupta, "Study of Limiting Dome Height and Temperature Distribution in Warm Forming of ASS304 Using Finite Element Analysis", 5<sup>th</sup> International Conference of Materials Processing and Characterization (ICMPC 2016) India.
4. N Kotkunde, G Krishna, A K Gupta, S K Singh, "Investigations of Marciniak-Kuczynski (M-K) Theoretical Model for Forming Limit Curve Prediction of Ti-6Al-4V Alloy", International Symposium on Engineering and Technology (ISET-2016) India.
5. P Reddy, K R C Murthy, Niranjan Ravuri, R. Parameshwaran, Y V D Rao, "Review of Design Aspects of Maryland Forceps", Recent Advances in Manufacturing and Robotics (RAMR-2016) India.
6. G M M Reddy, C P Kiran, "Experimental Investigation of Turning of Turbine Blade Material AISI 410 Under Minimum Quantity Cutting Fluid", 5<sup>th</sup> International Conference of Materials Processing and Characterization (ICMPC 2016) India.
7. G M M Reddy and C P Kiran, "A Review on Ecofriendly Cutting Fluids and Techniques Used in Material Cutting Operation", Recent Advances in Manufacturing and Robotics (RAMR 2016) India.
8. C J A Raj, C P Kiran, "Machining Of AISI 316 Steel Using Water Droplets As Cutting Fluid", Recent Advances in Manufacturing and Robotics (RAMR 2016) India.
9. M M Reddy, C P Kiran, "Investigating the Machining Performance of Turbine Blade Profile Using SiO<sub>2</sub> Nano Particle Based Eco-Friendly Cutting Fluid", XIII<sup>th</sup> International conference on high speed machining (HSM 2016) Metz, France.
10. S T Ahmad, S Datta, S K Singha, S P Datta, P K Das, "A Comparative Study of Temporal Evolution of Air And Steam Bubbles Emerging Out From An Orifice In A Quiescent Water Media", 9<sup>th</sup> International Conference on Multiphase Flow (ICMF-2016) Firenze, Italy.
11. R. Parameshwaran, V. V Ram, "Hybrid Nanocomposite Embedded PCM-Based Cement-Mortar Thermal Storage Material for Energy Efficient Buildings", Proceeding of International Conferences on Materials Sciences and Technology (ICMTECH 2016) India.
12. K Anwar, S S Deshmukh, "Modeling and Management of Microgrid, Its Future with Associated Barriers and Success Factors", Global Conference on Renewable Energy (2016) NIT Patna, India.
13. K Anwar, S S Deshmukh, R Kumbhare, M Shekhar, "Modelling of Solar Energy Potential Using Artificial Neural Network In Andhra Pradesh And Telangana, India", International Conference on Energy Systems and Developments, (2016) India.
14. A. Moldgy, R Parameshwaran, "Solar Thermal Energy Storage for Heating Applications - A Review, International Conference on "21st Century Energy Needs – Materials, Systems and Applications 2016", (ICTFCEN 2016), IIT Kharagpur, India.
15. A Moldgy, R Parameshwaran, "Study on Thermal Energy Storage Properties of Organic Phase Change Material for Waste Heat Recovery Applications", International Conference on Material Sciences (SCICON' 16), Coimbatore, India.
16. G Abhishek, V Ramsankar, M Sreesankaran, G R Sabareesh, N Jalaiah, Effect of Vehicle Body Geometry and Passive Drag Reduction Techniques on Drag Coefficients", 8<sup>th</sup> International Colloquium on Bluff Body Aerodynamics and Applications (2016) USA.
17. G R Sabareesh, J Wang, S Cao, M Matsui, Y Tamura, Studies on Interference Effects of Building Models Exposed to Tornado-Like Vortex", 8<sup>th</sup> International Colloquium on Bluff Body Aerodynamics and Applications (2016) USA.
18. M Das, A Agrawal, A Sonone, R Gupta, D Upadhyay, Y V D Rao, Arshad Javed, "Developing a Bioinspired Pole Climbing Robot", IEEE International Conference on Robotics: Current Trends and Future Challenges (RCTFC 2016), SASTRA University, India.
19. B Madhavi, S K Anvesh, and Jeevan Jaidi, "Finite Element Modelling of Friction Stir Welding Process to Study the Thermal Impact and Evolution of Stresses in Aluminium-alloy Plates", 6<sup>th</sup> International and 27<sup>th</sup> All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016) India.
20. A Priyadarshini, A Ratnaparkhi,, A Kumar, "FE Simulations of Uniaxial Tensile Tests of AA6082 at Different Strain Rates", International Conference in advancement in materials for manufacturing (ICAAMM 2016) India.
21. R Kumbhare, T Rajgaonkar, P Kichlu, A Priyadarshini, "Use of Taguchi analysis and GA for optimization of cutting forces and surface roughness in turning operation", (RAMR 2016), India.
22. C K Sagar, A Priyadarshini, "Prospects of high entropy alloys in aerospace applications", (RAMR 2016), India.

23. Prof. S P Regalla, "Hybrid Rapid Spinning And Incremental Sheet Metal Forming Of Extra Deep Drawing (Edd) Steel", Proceedings of the ASME 2016 International Mechanical Engineering Congress & Exposition, IMECE 2016, Nov 11-17, 2016, Phoenix, AZ, US, 2016.
24. Prof. S P Regalla, "Parametric Study of the Effect of Particles and Contaminants on the Static Response of a MEMS System", Proceedings of the ASME 2016 International Mechanical Engineering Congress & Exposition, IMECE 2016, Nov 11-17, 2016, Phoenix, AZ, USA, 2016.

#### D. Invited Talks given by BITS faculty:

1. Invited talk by Dr. Sujith R on the topic- "Non-destructive evaluation for damage tolerant design" at Vizag Steel Plant, Vishakapatnam, on 25th & 26th February 2016.
2. Invited talk by Dr. Sujith R on the topic- "Shape Memory Alloys" at National Seminar on Smart Materials (UGC), Trivandrum, on 9th March 2016.
3. Invited talk by Dr. Sujith R on the topic- "Energy Storage in Porous Ceramics" at Synapsis, Biology Department, BITS Pilani Hyderabad Campus, on 13th April 2016.
4. Invited talk by Dr. Sabareesh G R on the topic- "Understanding stationary and translating vortex flows and challenges in its laboratory simulation" at Iowa State University, USA, on 13th June 2016.
5. Invited talk by Dr. Sabareesh G R on the topic- "Effects of non-dimensional governing parameters on building internal and external pressures under a tornado-flow" at Texas Tech University, USA, on 15th June 2016.
6. Invited talk by Dr. Sabareesh G R on the topic- "Wind Resistant design for proposed LIGO observatory" at Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune, India, Dec 19-21, 2016

#### E. Invited talks arranged in the department:

1. Dr. Bade Simhachalam, Sr. GM, Murugappa Group delivered a lecture on the topic "Role of Engineer: Relevance of Engineers in Automotive and Aerospace Sectors" on 2<sup>nd</sup> February, 2016.
2. Mrs. Sharada Prabhakar Scientist 'F' DRDO delivered a lecture on the topic "Composite Product Development" on 1<sup>st</sup> April 2016.
3. Dr. Vijayabaskar Narayanamurthy, Scientist, DRDO delivered a lecture on the topic "Design, Development and Qualification of a Dome Opening Mechanism for flight vehicle" on 18<sup>th</sup> November 2016.
4. Prof. Ravindranathan Thampi, Professor. School of Chemical and Bioprocess Engineering, University College Dublin delivered a lecture on the topic "Recent research progress in renewable energy conversion and storage - Hydrogen production and energy storage" on 23<sup>rd</sup> November 2016.

#### F. Awards and recognitions won by faculty and students: Nil

#### G. Faculty Development, International Collaboration & Industry Immersion

Prof. M. Srinivas undergone university immersion at Environment and sustainability institute, ESI University of Exeter, Penryn campus U.K. for four weeks from 24.May 2016.

#### H. Significant new equipments/experimental facility added during the year:

Sl. No.	Name of the Lab	Equipment Ordered	Amount (Rs.)
1	Dynamics Lab	D-link microstrain indicator and receiver	1,40,000
2	IC Lab	Cleveland and Flash Point	32,025
3	Robotics Lab	Torque sensor	2,11,260
4		Vertical mounting Machine	1,18,617
5		Proximity Switch	26,827
6	Hydraulics Lab	Viscometer (Brookfield Rheometer DV3TLV+ Cone/Plate Model)	4,01,404
7		Laser sheet for flow visualization	2,76,000
8	CPDR Lab	David SLS-2-3D Scanner	2,82,082
9		Sense 3D Scanner	44,100
<b>Total Rs.</b>			<b>15,32,315</b>

**I. Departmental association/club activities:**

1. International Symposium on Wind Engineering & Wind Energy, 28 Jan 2016
2. One day workshop on Materials Characterization using Electron Backscatter diffraction technique, 14 Mar 2016
3. 2<sup>nd</sup> National Conference on Design and Manufacturing Technologies for Product Life Cycle, 19-20 Mar 2016
4. Recent Advances in Manufacturing and Robotics RAMR, 22-23 Apr 2016
5. 3-day workshop on Computational Fluid Dynamics, 11 - 13 Aug 2016
6. One day workshop on Hands on Microcontrollers, 5 Nov 2016

**J. Major maintenance, renovations or new construction reports: Nil****K. Major equipments acquired during the year:**

(Created based on the expenditures of more than 5 lakh)

Sl. No.	Equipment	Amount (Rs.)
1	Flame propagation and stability unit.	5,76,279
2	Fluidisation and Fluid Bed Heat Transfer Unit-Computer linked.	11,26,422
3	Micro Vickers Hardness Tester	9,54,045
4	Pultrusion Machine	7,57,890
5	Wind Emulator	6,91,800
6	Wind Energy Training System	5,54,400
7	Hydraulic Training Kit with Accessories	10,23,383
8	General bearing	6,50,000
9	Hotwire Anemometer (Mini CTA for Single channel)	5,96,000

**B3.10.10 Mathematics****Number of Faculty Members:**

Senior Professors, Professors	1
Associate Professors	4
Assistant Professors	9
Lecturers	0
Visiting Faculty	0

**Head of the Department:** Dr. Dipak Kumar Satpathi**Contact Details:** Tel: 040 - 6630 3507**Email:** dipak@hyderabad.bits-pilani.ac.in**Number of Ph.D. Scholars:** 09**A. Sponsored Research Activities:****Ongoing projects**

Sl.No.	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Bianchi type cosmological models in modified theories of gravitation	Bivudutta Mishra	SERB-DST	11.088	2014-2017
2	Construction of arbitrary tensor networks using cross	N. Kishore Kumar	NBHM	2.83	2015-2018

Sl.No.	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
	approximation				
3	Spectral element methods for elliptic and parabolic interface problems in $R^2$ on parallel computers.	N. Kishore Kumar	NBHM	13.59	2015-2018

**Projects sanctioned during the year**

Sl. No.	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Development of an encryption algorithm for secure transmission of color images	Dr. Manish Kumar	SERB-DST	15.08	2016-2019

**B. Publications:**

1. B. Mishra, P. K. Sahoo, Avinash Aman: Non-existence of Bianchi type IV space-time inmodified gravity, *International Journal of Pure and Applied Mathematics*, 108 (1), 13 - 21, 2016.
2. S. K. Tripathy, B. Mishra: Anisotropic solutions in  $f(R)$  gravity, *The European Journal of Physics Plus*, 131:273, 2016.
3. B. Mishra, Sankarsan Tarai, S. K. Tripathy: Dynamics of an anisotropic universe in  $f(R, T)$  theory, *Advances in High Energy Physics*, 2016, 8543560, 1 - 8, 2016.
4. P. K. Sahoo, B. Mishra, Parbati Sahoo, S. K. J. Pacif: Bianchi type string cosmological models in  $f(R, T)$  gravity, *The European Journal of Physics Plus*, 131:333, 2016.
5. P. K. Sahoo, A. Nath, S. K. Sahu: Bianchi type-III string cosmological model with bulk viscous fluid in Lyra geometry, *Iranian Journal of Science and Technology, Transaction A: Science*, 2015.
6. G. P. Singh, B. K. Bishi, P. K. Sahoo: Bianchi type-I bulk viscous cosmology with Chaplygin gas in Lyra Geometry, *Chinese Journal of Physics*, 54(6), 895 - 905, 2016.
7. G. P. Singh, B. K. Bishi, P. K. Sahoo: Scalar field and time varying cosmological constant in  $f(R, T)$  gravity for Bianchi type-I universe, *Chinese Journal of Physics*, 54(2), 244 – 255, 2016.
8. P. K. Sahoo: LRS Bianchi type-I string cosmological model in  $f(R, T)$  gravity”, *Fortschritte der Physik*, 64, 414 – 415, 2016.
9. G. P. Singh, B. K. Bishi, P. K. Sahoo: Cosmological constant  $L$  in  $f(R, T)$  modified gravity, *International Journal of Geometric Methods in Modern Physics*, 13, 1650058, 2016.
10. P. K. Sahoo, B. Mishra, S. K. Tripathy: Kaluza-Klein cosmological model in  $f(R, T)$  gravity with  $\Lambda(T)$ , *Indian Journal of Physics*, 90(4), 485 – 493, 2016.
11. P. K. Sahoo, S. K. Sahu, A. Nath: Anisotropic Bianchi-III cosmological model in  $f(R, T)$  gravity, *The European Physical Journal Plus*, 131:18, 1 - 10, 2016.
12. Narsimhulu Dunna, Addepalli Ramu, Dipak Kumar Satpathi: Similarity solution of spherical shock waves - Effect of viscosity, *Proyecciones Journal of Mathematics*, 35(1), 11 - 31, 2016.
13. Dipak Kumar Satpathi, K. Venkata Ratnam, A. Ramu: Model for mucus transport in the airways due to air motion: Effect of slipperiness, *International Journal of Biomathematics*, 9(5), 2016.
14. A. Ramu, Narsimhulu Dunna and Dipak Kumar Satpathi: Numerical study of shock waves in non-ideal magnetogasdynamics, *Journal of the Egyptian Mathematical Society*, 24(1), 116 - 124, 2016.
15. Pratishtha Shukla, Dipak Kumar Satpathi, Coalitional game theoretic model applied to relay spectrum sensing, *Proceedings of International Conference on Electrical, Electronics and Optimization Techniques*, 10.1109/ICEEOT.2016.7755493, IEEE Xplore, 2016.
16. Jagan Mohan Jonnalagadda: Solutions of fractional nabla difference equations existence and uniqueness, *Opuscula Math.*, 36(2), 215 - 238, 2016.
17. Jagan Mohan Jonnalagadda, D. Poornima and G. V. S. R. Deekshitulu: Discrete control systems of fractional order, *International Journal of Nonlinear Science*, 21(1), 37 - 46, 2016.

18. Jagan Mohan Jonnalagadda: Hyers-Ulam stability of fractional nabla difference equations, *International Journal of Analysis*, 2016, 7265307, <http://dx.doi.org/10.1155/2016/7265307>.
19. Jagan Mohan Jonnalagadda: Periodic solutions of fractional nabla difference equations, *Communications in Applied Analysis*, 20(4), 585 - 609, 2016.
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21. Sumit Kumar Vishwakarma, Runzhang Xu: G-type dispersion equation under suppressed rigid boundary: analytic approach, *Applied Mathematics and Mechanics*, Springer, 37(4), 501 - 512, 2016.
22. Sumit Kumar Vishwakarma, Runzhang Xu: Rayleigh wave dispersion in an irregular sandy earth crust over orthotropic mantle, *Applied Mathematical Modelling*, 40(19, 20), 8647 - 8659, 2016.
23. V. Kannan, Sharan Gopal: Homeomorphisms on compact metric spaces with finite derived length, *Applied General Topology*, 17(2), 129 - 137, 2016.
24. T. S. L. Radhika, T. Raja Rani, T. V. V. S. Madhavi, S. Sushanth: Power series method and asymptotic method for the stability of linear systems with time varying coefficients, *Journal of Basic and Applied Research International*, 15(2), 131 - 139, 2016.
25. T. Raja Rani, T. S. L. Radhika, Rajendar P: Comparison of HAM and numerical solutions for a free convection problem with variable fluid properties, heat source / sink and radiation, *Journal of Information and Optimization Sciences*, 37(3), 405 - 422, 2016.
26. Manish Kumar and Kashyap L. S. J. Josyula: An interlaced secure algorithm for RGB image encryption in wavelet packet domain, *International Journal of Wavelets, Multiresolution and Information Processing*, 14, 1650008-1-1650008-14, 2016.
27. Manish Kumar, Akhmad Iqbal and Pranjal Kumar, A new RGB image encryption algorithm based on DNA encoding and elliptic curve Diffie-Hellman cryptography, *Signal Processing*, 125, 187 - 202, 2016.

#### **C. Conferences attended/papers presented:**

1. Dr. Sharan Gopal presented the research paper on "Discrete Switch Dynamical Systems" in the International 82nd Annual Conference of Indian Mathematical Society held at University of Kalyani, West Bengal during 27<sup>th</sup> – 30<sup>th</sup> December, 2016.
2. Dr. Sumit Kumar Vishwakarma presented the research paper on "On Love frequency in an Orthotropic Crustal Layer" in the International Conference of the Indian Mathematics Consortium (TIMC) in cooperation with American Mathematical Society (AMS), BHU, Varanasi, during 14<sup>th</sup> - 17<sup>th</sup> December, 2016.
3. Prof. P. K. Sahoo visited Krakow, Poland to give an invited talk on "Kaluza - Klein dark energy model in the form of wet dark fluid in  $f(R,T)$  gravity" in the 3<sup>rd</sup> Conference of the Polish Society on Relativity held at Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, Krakow, Poland during 25<sup>th</sup> - 29<sup>th</sup> September, 2016.
4. Prof. B. Mishra delivered a talk entitled "Anisotropic Bianchi Type VI<sub>h</sub> Cosmological Models in Modified Gravity in the International Conference on Cosmology on Small Scales 2016 held at Institute of Mathematics of the Czech Academy of Sciences, Prague during 21<sup>st</sup> – 24<sup>th</sup> September, 2016.
5. Dr. Sharan Gopal delivered a talk entitled "A Note on Characterization of Sets of Periodic Points" in the 31<sup>st</sup> Summer Conference on Topology and its Applications held at University of Leicester, UK during August 2<sup>nd</sup> – 5<sup>th</sup>, 2016.
6. Prof. Michael Alphonse delivered a talk entitled "Domination on Circulant Graphs with Two Chord Length" in the 1<sup>st</sup> IMA Conference on Theoretical and Computational Discrete Mathematics held at The Enterprise Centre, University of Derby, UK during 22<sup>nd</sup> – 23<sup>rd</sup> March, 2016.
7. Prof. B. Mishra delivered a talk on "Two Fluid Anisotropic Dark Energy Cosmological Model in Bianchi type V Space - Time" in the cosmology session of "51<sup>st</sup> Rencontres de Morindo" held at La Thuile, Aosta Valley, Italy during 19<sup>th</sup> – 26<sup>th</sup> March, 2016. This visit was funded by ARIES.
8. Prof. P. K. Sahoo visited Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan to give an invited talk at the Yukawa International School on "Strings and Fields" on "Bianchi type string cosmological models in  $f(R, T)$  gravity" during 29<sup>th</sup> February – 4<sup>th</sup> March, 2016 with full funding support from Kyoto University.
9. Dr. Manish Kumar attended National Conference on Analysis and Applications (NCOAA - 2016, BHU) organized by Department of Mathematics, Institute of Science, Banaras Hindu University, Varanasi, India



during February 5<sup>th</sup> – 7<sup>th</sup>, 2016 and presented a paper entitled “An application of wavelets and ARIMA in Time Series Forecasting”.

10. Prof. B. Mishra delivered a talk entitled “Einstein - Rosen Cosmological Model in Modified Theory of Gravity” in the 2<sup>nd</sup> International Conference on Mathematical Sciences and Statistics (ICMSS - 2016) held at Universiti Putra Malaysia, Kuala Lumpur during 26<sup>th</sup> – 28<sup>th</sup> January, 2016.

#### **D. Invited Talks given by BITS faculty:**

1. Prof. A. Ramu delivered a talk entitled “Innovative Pedagogy for Teaching and Learning Engineering Mathematics” at JNTUH, Hyderabad during 29<sup>th</sup> - 30<sup>th</sup>, June 2016.
2. Prof. B. Mishra delivered a talk entitled “Anisotropic Dark Energy Cosmological Models” in National Conference on Recent Trends in Mathematics 2016 at Tata Institute of Social Sciences, Tuljapur during 15<sup>th</sup> -16<sup>th</sup> July, 2016.
3. Prof. P. K. Sahoo delivered a talk entitled “Big Rip singularity of LRS Bianchi type-I universe in  $f(R, T)$  gravity” in Frontiers in High Energy Physics at Institute of Mathematical Sciences, Chennai during 22<sup>nd</sup> - 25<sup>th</sup> March, 2016.
4. Dr. Manish Kumar delivered a talk entitled “Vector Calculus and its Applications in Engineering” at Department of Mathematics, School of Advance Sciences, VIT University, Vellore on 05<sup>th</sup> November, 2016.
5. Dr. Kishore Kumar N. delivered a talk entitled “Finite element methods” in Advanced Training Programme on Partial Differential Equations at BITS - Pilani Hyderabad Campus during 25<sup>th</sup> May – 14<sup>th</sup> June, 2016.
6. Dr. Kishore Kumar N. delivered a talk entitled “Tensor Decompositions and Applications” at Defense Institute of Advanced Technology, Pune on 19<sup>th</sup> April, 2016.
7. Dr. Kishore Kumar N. delivered a talk entitled “Tensor Decompositions” at Department of Mathematics, LNMIIT, Jaipur on 5<sup>th</sup> January, 2016.
8. Dr. Anil Nemilid delivered a talk entitled “Accurate and robust adjoint approach for aerodynamic optimization of unsteady turbulent flows” in 18<sup>th</sup> Aeronautical Society of India (AeSI) CFD Annual Symposium at National Aerospace Laboratory, Bengaluru, India during 10<sup>th</sup> – 11<sup>th</sup> August, 2016.
9. Dr. Anil Nemilid delivered a talk entitled “Development and application of an accurate adjoint approach for optimal active flow control” in Airbus Flight Physics - Indian University Meet at Airbus India, Bengaluru, India on 08<sup>th</sup> July, 2016.

#### **E. Invited talks arranged in the department:**

1. Prof. Dario Darji, University of Louisville, USA, delivered a talk entitled “Dynamics on Cantor Set” on 7<sup>th</sup> November, 2016.
2. Dr. Debasis Chakraborty, Technology Director, DRDL, Hyderabad, delivered a talk entitled “Numerical Simulation for Aero Propulsive Characterization of Missiles” on 4<sup>th</sup> march, 2016.

#### **F. Awards and recognitions won by faculty and students**

Prof. B. Mishra has been selected as a Visiting Associate of IUCAA (Inter University Centre for Astronomy and Astrophysics) for a period of three years (01.08.2016 - 31.07.2019).

#### **G. Faculty Development, International Collaboration & Industry Immersion**

Dr. T. S. L. Radhika visited Department of Bio - Medical Engineering, University of Wisconsin, Madison, USA for collaborative work on Mathematical Models for Arterial Stiffness in Small / Large Animals during 3<sup>rd</sup> June – 15<sup>th</sup> July, 2016. This visit was funded by BITS Pilani, Hyderabad under University Immersion Scheme.

#### **H. Significant new equipment/experimental facility added during the year:**

DST – FIST Lab (20 Desktop Computers with 1 Master Node and 2 Computational Nodes)

#### **I. Departmental association/club activities:**

##### **Pre ATMOS Events:**

##### **1. Name: MATLAB Workshop**

Date: 24<sup>th</sup>, 25<sup>th</sup> September, 2016.

##### **2. Name: Rubik's Cube Workshop**

Date: 1st, 2<sup>nd</sup> October, 2016.

**ATMOS Events:****1. Name: Paper Presentation**Date: 14<sup>th</sup> October, 2016.**2. Name: Cubing Atmosphere**Date: 15<sup>th</sup>, 16<sup>th</sup> October, 2016.**3. Name: nCrypton**Date: 16<sup>th</sup> October, 2016.**4. Name: Mathefia**Date: 16<sup>th</sup> October, 2016.**J. Major maintenance, renovations or new construction reports:****K. Major equipment acquired during the year:****B3.10.11 Pharmacy****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>02</b>
<b>Associate Professors</b>	<b>03</b>
<b>Assistant Professors</b>	<b>05</b>
<b>Lecturers</b>	<b>00</b>
<b>Visiting Faculty</b>	<b>00</b>

**Head of the Department:** D. Sriram

Contact details: 040 66303506

**Number of PhD Scholars:** 42**A. Sponsored Research activities:****Ongoing projects:**

<b>S. No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount</b>	<b>Duration</b>
1	Strategies against antibiotic resistance in Mycobacterium tuberculosis and Pseudomonas aeruginosa : new drugs for old targets and old drugs for new targets	Prof. D.Sriram	DBT, New Delhi	6192000	2014-2017
2	Non -Invasive Delivery of siRNA to treat Melanoma	Dr. Vamsi Krishna Venuganti	DBT, New Delhi	2284800	2014-2017
3	Enzymes from Purine and Pyrimidine Biosynthetic pathway as targets for the development of Mycobacterium tuberculosis drugs	Prof. P. Yogeewari	DBT, New Delhi	4822990	2014-2017
4	Cell Penetrating Peptide Octa-Arginine anchored, Multifunctional poly(amidoamine)Dendrimer to Promote delivery of chemotherapeutics in cancer	Dr. Swati Biswas	DBT, New Delhi	3703695	2014-2017
5	Transcutaneous delivery of liposomesirna complex to treat skin cancer	Dr. Vamsi Krishna Venuganti	DST, New Delhi	2926000	2013-2016
6	Development of Novel Compounds for the Treatment of Neural	Prof. P. Yogeewari	DST, New Delhi	604000	2014-2017

S. No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
	Complications of Diabetes				
7	D - a-Tocopherol conjugated co-polymer based micelles for improved delivery of chemotherapeutics with reversal of multiple drug resistance	Dr. Swati Biswas	DST, New Delhi	2240000	2014-2017
8	Structured-based Design of Orphan Nuclear Receptor Modulators to treat Diabetes and its complications by targeting RORalpha and Rev-erbalpha	Prof. P. Yogeeswari	ICMR, New Delhi	2161600	2014-2016
9	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: structure based drug design, synthesis and biological evaluation	Prof. D. Sriram	DST-Indo Polish	1189000	2015-2017
10	Tumor targeted nanomedicines for Photodynamic therapy	Dr. Swati Biswas	DST-Indo-Belarus	958000	2015-2017
11	Pharmacological evaluation of novel double stranded RNA dependent protein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	CSIR	716000	2015-2018
12	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	PI - Dr. Prashant Garg (LVPEI), Co-PI - Venkata Vamsi (BITS Hyderabad)	DBT - MRC	3500000	2015-2018
13	Design synthesis and biological evaluation of Mycobacterium tuberculosis serine/theonine protein kinase B (PknB) inhibitors	Prof. D. Sriram	DST	2761000	2015-2018
14	Role of double stranded RNA dependent protein kinase (PKR) in hypertension Mechanism and prevention	Dr. Arti Dhar	DST	2604000	2015-2018
15	Aripiprazole Sustained Release Injectable Depot Formulation	Dr. Swati Biswas Dr. Balaram Ghosh	Daewoong Pharmaceuticals	2200000	2015-2018
16	Design and Development of Isoform Selective HDAC3 Inhibitors for the Enhancement of Long-term Memory	Dr. Balaram Ghosh	Additional Competitive Grant, BITS Pilani	900000	2015-2018
17	Regulation of IL-1beta in neuropathic pain: role of NALP3 inflammasome, histone deacetylase and xanthine oxidase.	Dr. Onkar Kulkarni	Additional Competitive Grant, BITS Pilani	1000000	2015-2018
18	Evaluation of Novel Pharmacological Interventions Targeted at Methylglyoxal in Diabetic Cardiomyopathy	Dr. Arti Dhar	Additional Competitive Grant, BITS Pilani	1000000	2015-2018

#### Projects sanctioned during the year

S. No	Title of Project	Name of PI	Year of Sanction	Funding Agency	Amount in Rs.
1	Advancing Host-Directed Therapy For Tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof. D. Sriram	2016	DBT-Tata Innovation	27,00,000
2	Consultancy Project	Dr.V.V. Vamsi Krishna	2016	Intera Healthcare Private Limited	1830855

3	Consultancy Project	Dr. Balaram Ghosh	2016	SUN Pharma Advanced Research Company Ltd.	2900000
4	Consultancy Project	Dr. Balaram Ghosh	2016	Reddy's Lab	900000
5	Consultancy Project	Dr. Shrikant Charde	2016	Shahsi Phytochemical Ltd	574560
6	Pathogenesis of chronic renal injury and fibrosis	Dr. Onkar Kulkarni	2016	DBT-IYBT	7016800
7	Microorganism Based Product For Renal Injury Treatment	Prof. Sajeli Begum	2016	DST	2437000

**B. Publications:**

- Design, development of new synthetic methodology, and biological evaluation of substituted quinolines as new anti-tubercular leads. B. Tanwar, A. Kumar, P. Yogeeswari, D. Sriram, A.K. Chakraborti. *Bioorg. Med. Chem. Lett.* 26, 5960-5966, 2016.
- Design and development of new class of Mycobacterium tuberculosis L-alanine dehydrogenase inhibitors. R.S. Reshma, S. Saxena, K.A. Bobesh, V.U. Jeankumar, S. Gunda, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem.* 24, 4499-4508, 2016.
- Pharmacological evaluation of novel alagebrium analogs as methylglyoxal scavengers in vitro in cardiac myocytes and in vivo in SD rats. A. Dhar, M.P. Udumula, B. Medapi, A. Bhat, I. Dhar, P. Malapati, M.S. Babu, J. Kalra, D. Sriram, K.M. Desai. *Int. J. Cardiol.* 223, 581-589, 2016.
- A convenient synthesis and screening of benzosuberone bearing 1,2,3-triazoles against Mycobacterium tuberculosis. Y. Sajja, S. Vonguru, L. Jilla, H.R. Vulupala, R. Bantu, P. Yogeeswari, D. Sriram, L. Nagarapu. *Bioorg. Med. Chem. Lett.* 26, 4292-4295, 2016.
- Inhibitors of the Cysteine Synthase CysM with Antibacterial Potency against Dormant Mycobacterium tuberculosis. K. Brunner, S. Maric, R.S. Reshma, H. Almqvist, B. Seashore-Ludlow, A.L. Gustavsson, Ö. Poyraz, P. Yogeeswari, T. Lundbäck, M. Vallin, D. Sriram, R. Schnell, G. Schneider. *J. Med. Chem.*, 59, 6848-6859, 2016.
- Click-based synthesis and antitubercular evaluation of dibenzofuran tethered thiazolyl-1,2,3-triazolyl acetamides. G. Surineni, P. Yogeeswari, D. Sriram, K. Srinivas. *Bioorg. Med. Chem. Lett.* 26, 3684-3689, 2016.
- Synthesis and anti-mycobacterial activity of 1H-1,2,3-triazolylisonicotinohydrazides. Ch. Dayakar, P. Suman, K. Rajkumar, P. Yogeeswari, D. Sriram, B.C. Raju. *Ind. J. Chem (B)*, 55, 882-887, 2016.
- Engineering another class of anti-tubercular lead: Hit to lead optimization of an intriguing class of gyrase ATPase inhibitors. V.U. Jeankumar, R.S. Reshma, R. Vats, R. Janupally, S. Saxena, P. Yogeeswari, D. Sriram. *Eur. J. Med. Chem.* 122, 216-231, 2016.
- Targeting multiple response regulators of Mycobacterium tuberculosis augments the host immune response to infection. S. K. Banerjee, M. Kumar, R. Alokam, A. K. Sharma, A. Chatterjee, R. Kumar, S. K. Sahu, K. J. R. Singh, P. Yogeeswari, D. Sriram, J. Basu, M. Kundu, *Scientific Reports (Nature)* 6, Article number: 25851, 2016.
- Click-based synthesis and antitubercular evaluation of novel dibenzo[b,d]thiophene-1,2,3-triazoles with piperidine, piperazine, morpholine and thiomorpholine appendages. L. Pulipati, P. Yogeeswari, D. Sriram, S. Kantevari. *Bioorg. Med. Chem. Lett.* 26, 2649-2654, 2016.
- Synthesis, biological evaluation and structure-activity relationship of 2-styrylquinazolones as anti-tubercular agents, P. S. Jadhavar, T. M. Dhameliya, M. D. Vaja, D. Kumar, J. P. Sridevi, P. Yogeeswari, D. Sriram, A. K. Chakraborti. *Bioorg. Med. Chem. Lett.* 26, 2663-2669, 2016.
- Synthesis, molecular properties prediction and anticancer, antioxidant evaluation of new edaravone derivatives. N. Polkam, V. R. Ramaswamy, P. Rayam, T. R. Allaka, H. S. Anantaraju, D. Sriram, P. Yogeeswari, D. Gandamalla, N. R. Yellu, S. Balasubramanian, J. S. Anireddy. *Bioorg. Med. Chem. Lett.* 26, 2562-2568, 2016.
- Synthesis and antitubercular activity of fused thieno-/furano quinolone compounds. M. Akula, P. Yogeeswari, D. Sriram, M. Jha, A. Bhattacharya, *RSC Advances*, 6, 46073-46080, 2016.
- 3-D structural interactions and quantitative structural toxicity studies of tyrosine derivatives intended for safe potent inflammation treatment. A. Puratchikody, D. Sriram, A. Umamaheswari, N. Irfan. *Chemistry Central Journal* 10, 24, (DOI 10.1186/s13065-016-0169-9) 2016.

15. Cathepsin D inhibitors as potential therapeutics for breast cancer treatment: Molecular docking and bioevaluation against triple-negative and triple-positive breast cancers. H.S. Anantaraju, M.B. Battu, S. Viswanadha, D. Sriram, P. Yogeewari. *Mol Divers.* 20, 521-535, 2016.
16. Benzo[d]thiazol-2-yl(piperazin-1-yl)methanones as new anti-mycobacterial chemotypes: Design, synthesis, biological evaluation and 3D-QSAR studies. S. Pancholia, T.M. Dhameliya, P. Shah, P.S. Jadhavar, J.P.S. devi, P. Yogeewari, D. Sriram, A.K. Chakraborti. *Eur. J. Med. Chem.* 116, 187-199, 2016.
17. Design, Synthesis, and Molecular Docking Studies of a Conjugated Thiadiazole–Thiourea Scaffold as Antituberculosis Agents. E. Tatar, S. Karakuş, Ş.G. Küçükgülzel, S.Ö. Okullu, N. Ünübol, T. Kocagöz, E. DeClercq, G. Andrei, R. Snoeck, C. Pannecouque, S. Kalaycı, F. Şahin, D. Sriram, P. Yogeewari, İ. Küçükgülzel. *Biol. Pharm. Bull.* 39, 502–515, 2016.
18. Synthesis of new pyrazole-triazole hybrids by click reaction using a green solvent and evaluation of their antitubercular and antibacterial activity. N. Nayak, J. Ramprasad, U. Dalimba, P. Yogeewari, D. Sriram, H.S.S. Kumar, S.K. Peethamber, R. Achur. *Res. Chem. Intermediates.* 42, 3721-3741, 2016.
19. Synthesis and antimycobacterial screening of new N-(4-(5-aryl-3-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazol-1-yl)phenyl)-4-amide derivatives. N. Nayak, J. Ramprasad, U. Dalimba, P. Yogeewari, D. Sriram. *Chinese Chem. Lett.*, 27, 365–369, 2016.
20. Structure-Guided Discovery of Antitubercular Agents That Target the Gyrase ATPase Domain. V.U. Jeankumar, S. Saxena, R. Vats, R.S. Reshma, R. Janupally, P. Kulkarni, P. Yogeewari, D. Sriram. *ChemMedChem.* 11, 539-548, 2016.
21. Design, synthesis and biological evaluation of imidazo[2,1-b]thiazole and benzo[d]imidazo[2,1-b]thiazole derivatives as Mycobacterium tuberculosis pantothenate synthetase inhibitors. G. Samala, P.B. Devi, S. Saxena, N. Meda, P. Yogeewari, D. Sriram. *Bioorg. Med. Chem.* 24, 1298-1307, 2016.
22. Synthesis, Characterization and Biological evaluation of Bile acid-aromatic/heteroaromatic amides linked via amino acids as anti-cancer agents. D.S. Agarwal, H.S. Anantaraju, D. Sriram, P. Yogeewari, S.H. Nanjagowda, P. Mallu, R. Sakhuja. *Steroids*, 107, 87-97, 2016.
23. Ionic liquid promoted one-pot synthesis of thiazole-imidazo[2,1-b] [1,3,4]thiadiazole hybrids and their antitubercular activity. J. Ramprasad, N. Nayak, U. Dalimba, P. Yogeewari, D. Sriram. *Med. Chem. Commun.*, 7, 338-344, 2016.
24. Development of acridine derivatives as selective Mycobacterium tuberculosis DNA gyrase inhibitors. B. Medapi, N. Meda, P. Kulkarni, P. Yogeewari, D. Sriram. *Bioorg. Med. Chem.*, 24, 877–885, 2016.
25. Energy Based Pharmacophore and 3D QSAR Modeling Combined with Virtual Screening to Identify Novel Small Molecule Inhibitors of SIRT1. V. Pulla, S. Dinavahi, S. Viswanadha, D. Sriram, P. Yogeewari. *J. Chem. Inf. Model.*, 56, 173–187, 2016.
26. Design and Development of Mycobacterium tuberculosis Lysine  $\epsilon$ -Aminotransferase Inhibitors for Latent Tuberculosis Infection. P.B. Devi, S. Saxena, M. Chandran, J.P.S. devi, R. Yadav, R.R. Srilakshmi, P. Yogeewari, D. Sriram. *Chem. Biol. Drug Des.* 87, 265-274, 2016.
27. Synthesis of novel 5-[(1,2,3-triazol-4-yl)methyl]-1-methyl-3H-pyridazino[4,5-b]indol-4-one derivatives by click reaction and exploration of their anticancer activity. N. Panathur, N. Gokhale, U. Dalimba, P. V. Koushik, P. Yogeewari, D. Sriram. *Med. Chem. Res.* 25, 135-148, 2016.
28. Synthesis of new spirooxindole derivatives through 1,3-dipolar cycloaddition of azomethine ylides and their antitubercular activity. F. Rouatbi, M. Askri, F. Nana, G. Kirsch, D. Sriram, P. Yogeewari. *Tetrahed. Lett.* 57, 163–167, 2016.
29. Replacement of cardiotoxic aminopiperidine linker with piperazine moiety reduces cardiotoxicity? Mycobacterium tuberculosis novel bacterial topoisomerase inhibitors. K. A. Bobesh, J. Renuka, R. R. Srilakshmi, S. Yellanki, P. Kulkarni, P. Yogeewari, D. Sriram. *Bioorg. Med. Chem.* 24, 42–52, 2016.
30. Computational Sampling and Simulation Based Assessment of Novel Mycobacterium tuberculosis Glutamine Synthetase Inhibitors: Study involving Structure Based Drug Design and Free Energy Perturbation. P. S. devara, P. Yogeewari, V. Soni, P.B. Devi, V.K. Nandicoori, D. Sriram. *Curr Top Med Chem.* 16, 978-995, 2016.
31. The Small Molecule Indirubin-3'-Oxime Inhibits Protein Kinase R: Antiapoptotic and Antioxidant Effect in Rat Cardiac Myocytes. M.P. Udumula, B. Medapi, I. Dhar, A. Bhat, K. Desai, D. Sriram, A. Dhar. *Pharmacology.* 97, 25-30, 2016.
32. Cytotoxic constituents of Oldenlandia umbellata and isolation of a new symmetrical coumarin dimer. Senth Mahibalan, Poorna Chandra Rao, Rukaiyya Khan, Ameer Basha, Ramakrishna Siddareddy, Hironori Masubuti, Yoshinori Fujimoto, Ahil Sajeli Begum. *Medicinal Chemistry Research.* 25, 466-472, 2016.

33. Cytotoxicity of withasteroids: withametelin induces cell cycle arrest at G2/M phase and mitochondria mediated apoptosis in Non-small cell lung cancer A549 cells. P.C. Rao, M.F. J. Ali, Z. H. Jahromi, Saketh S, Sahai M, Ahil Sajeli Begum. *Tumor Biology*, 37(9), 12579-587, 2016.
34. Dermal wound healing potential of betaine and standardized alkaloid enriched ointment of *Evolvulus alsinoides* in albino rats, S Mahibalan, Maria Stephen, T N Rohan, Rukaiyya S Khan, A Sajeli Begum, *Pharmaceutical Biology*, 54(12), 2851-56, 2016.
35. Antifungal effect and protective role of ursolic acid and three phenolic derivatives in the management of Sorghum grain mold under field conditions, Ameer Basha, Sajeli Begum, Govardhanam Ragavendra, Mahibalan Senthil, Rukaiyya Khan, Ravi Sojitra, Santhosh Kumar, Asalla Srinivas, *Chemistry and BioDiversity*, 13(9), 1158-1164, 2016.
36. Medical devices and their approval procedure in India, Pabbati Sanjana, Hira Kirti and Sajeli Begum, *Int. J. Drug Reg. Affairs*, 4(3), 19-29, 2016.
37. Isolated flavonoids from *Ficus racemosa* stem bark possess antidiabetic, hypolipidemic and protective effects in albino Wistar rats, Amit K Keshari, Ghanendra Kumar, Priya S Kushwaha, Monika Bhardwaj, Pranesh Kumar, Atul Rawat, Anand Prakash, Balaram Ghosh, Sudipta Saha, *Journal of Ethnopharmacology*, 181, 252, 2016.
38. Recent advances in polymeric micelles for anti-cancer drug delivery, Swati Biswas, Preeti Kumari, Prit M Lakhani, Balaram Ghosh, *European Journal of Pharmaceutical Sciences*, 83, 184, 2016.
39. Dissecting structure-activity-relationships of crebinostat: Brain penetrant HDAC inhibitors for neuroepigenetic regulation, Balaram Ghosh\*, Wen-Ning Zhao\*, Surya A Reis; Debasis Patnaik; Daniel M Fass; Li-Huei Tsai; Ralph Mazitschek, Stephen J. Haggarty *Bioorganic Medicinal Chemistry Letters*, 26, 1265, 2016.
40. Light Controlled Modulation of Gene Expression by Chemical Optoepigenetic Probe, Surya A. Reis\*, Balaram Ghosh\*, J. Adam Hendricks, D. Miklos Szantai-Kis, Kenneth N. Ross, Justin Lamb, Willis Read-Button, Baixue Zheng, Hongtao Wang, Christopher Salthouse, Stephen J. Haggarty, Ralph Mazitschek, *Nature Chemical Biology*, 12, 317, 2016.
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43. The Immune System in Tissue Environments Regaining Homeostasis after Injury: Is "Inflammation" Always Inflammation?, Kulkarni OP, Lichtnekert J, Anders HJ, Mulay SR. *Mediators Inflamm.* 2016, 2856213, 2016.
44. Role of PKR as a potential target for treating cardiovascular disease, Dhar A, *Current Cardiology Reviews*, 21, 2016.
45. Alagebrium attenuates methylglyoxal induced oxidative stress, Dhar A, Dhar I, Bhat A, Desai K, *Life Science*, 146, 8-14, 2016.
46. Flaxseed and diabetes, Prasad K, Dhar A, *Current Pharmaceutical Design*, 146, 141-144, 2016.
47. Shweta Pawar, Mahesh Akula, Suman Labala, Venkata Vamsi Krishna Venuganti, Anupam Bhattacharya, Amit Nag. Zn<sup>2+</sup> sensing in aqueous micellar solution using modified bipyridine-based "Turn-On" fluorescent probes and its application in bioimaging. *ChemPlusChem* 10.1002/cplu.201600382 (early online).
48. Praveen K. Mandapalli, Suman Labala, Anup Jose, Shubhmita Bhatnagar, Renuka Janupally, Dharmarajan Sriram, Venkata Vamsi K. Venuganti. Layer-by-layer thin films for codelivery of TGF-beta siRNA and epidermal growth factor to improve excisional wound healing. *AAPS PharmSciTech* (early online, DOI: 10.1208/s12249-016-0571-6)
49. Suman Labala, Anup Jose, Venkata Vamsi K. Venuganti. Transcutaneous iontophoretic delivery of STAT3 siRNA using layer-by-layer chitosan coated gold nanoparticles to treat melanoma. *Colloids and Surfaces B: Biointerfaces* 146, 188-197 (2016).
50. Praveen K. Mandapalli, Suman Labala, Sumeet Chawla, Renuka Janupally, Dharmarajan Sriram, Venkata Vamsi K. Venuganti. Polymer - gold nanoparticle composite films for topical application: evaluation of physical properties and antibacterial activity. *Polymer Composites* (early online, DOI: 10.1002/pc.23885).
51. Anup Jose, Praveen K. Mandapalli, Venkata Vamsi K. Venuganti. Liposomal hydrogel formulation for transdermal delivery of pifendione. *Journal of Liposome Research* 26 (2), 139-147 (2016).

52. Praveen K. Mandapalli, Suman Labala, Jagadeesh Bojja, Venkata Vamsi K. Venuganti. Topical application of pirfenidone loaded chitosan-alginate layer-by-layer thin films to improve dermal wound management. *European Journal of Pharmaceutical Sciences* 83, 166-174 (2016).
53. Hypoxia-responsive co-polymer for siRNA delivery. Perche F, Biswas S, Patel NR, Torchilin VP. *Methods Mol Biol.* 2016; 1372: 139-62.
54. Xanthan gum stabilized PEGylated gold nanoparticles for improved delivery of curcumin in cancer. Muddineti OS, Kumari P, Ajarapu S, Lakhani PM, Bahl R, Ghosh B, Biswas S. *Nanotechnology.* 2016, 27(32), 325101.

#### C. Conferences attended/papers presented:

1. Screening of phyto-compounds to identify cytotoxic lead molecules against A549, MDA-MB and HT-29 cell lines and their isolation methods. Indian Pharmaceutical Congress, Visakhapatnam, Dec 16-18, 2016.
2. Synthesis of O-glucoside of natural cleomiscosin-A as TNF- $\alpha$  inhibitor, Indian Pharmaceutical Congress, Visakhapatnam, Dec 16-18, 2016.
3. Development of Histone Deacetylase (HDAC) Inhibitors as Anticancer Agents, National Conference on Advanced Therapeutics-2016 (ACT-2016), CSIR-IICT, Hyderabad, April 4th, 2016.
4. Cardioprotective effect of novel alagebrium analogs, SPRA, Hyderabad, 2nd July, 2016.

#### D. Invited Talks given by BITS faculty:

D. Sriram	Drug design strategies for the treatment of latent tuberculosis infection, National Conference on Advanced Therapeutics-2016 (ACT-2016), CSIR-IICT, Hyderabad, April 4th, 2016
Dr Balaram Ghosh	Poly( $\epsilon$ -caprolactone)-based polymeric micelles for the delivery of a histone deacetylase inhibitor as anticancer therapy, BIT group, (WCSM-2016) Singapore, March 4 – 6, 2016.
Dr Arti Dhar	High Carbohydrate diet, stress and hypertension, Winter Institute of Global Health (WIGH), BITS-Pilani, Hyderabad, 5th January, 2017

#### E. Recognition of Department

The Tata Trusts, Mumbai identified Department of Pharmacy, BITS Pilani Hyderabad Campus as premier Pharmacy School in India actively involved in teaching and research. The trust decided to offer merit fellowship worth Rs. 1 Lakh per annum to meritorious students of each year of B. Pharm (total of 5) and M. Pharm (2).

Bristol Meyers Squibb, a reputed US based Pharmaceutical company, recognized research excellence of Department and have decided to sponsor fee of one M. Pharm student for the entire duration of programme (approximately 4.05 lakhs).

#### F. Faculty Development, International Collaboration & Industry Immersion

Faculty members of Department are collaborating with

- Rutgers The State University of New Jersey, New Jersey Medical School, Newark, New Jersey, USA
- Instituto Nacional de Ciencia e Tecnologia em Tuberculosis, MCT/CNPq, Porto Alegre, Brazil
- Faculty of Medicine of Porto, Porto, Portugal
- Bogomoletz Institute of Physiology National Academy of Science, Ukraine
- Pasteur Institute, University of Lille, France
- Karolinska Institute, Stockholm, Sweden
- University of Saskatchewan, Canada
- Freie University, Berlin, Germany
- University of Texas Southwestern Medical Center, USA
- Institute of Medical Biology Polish Academy of Sciences, Poland
- Federal University of Pará, Belém, Brazil
- University of KwaZulu-Natal, Durban, South Africa
- Pontificia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, RS, Brazil
- Porto University, Portugal
- Bogomoletz Institute of Physiology, Kiev, Ukraine

- Belarusian State University, Belarus

#### G. Significant new equipment/experimental facility added during the year:

Following major equipment were added to various laboratories of the Department during the year.

Name of Equipment/ instrument	Make & model
Tablet punching machine	Parle Elizabeth
Biosafety cabinet	Thermo
Modular organ bath system	Heidelberg
CO2 incubator	Ependroff
Lyophilizer	Labconco

#### H. Departmental association/club activities:

Pharmaceutical association came up with three issues of PROBE magazine during the year 2016. This is a magazine that provides first degree, higher degree and PhD students an opportunity to wise their views on various scientific topics. Association conducted a freshmen orientation program for newly admitted B. Pharm and M. Pharm students.

#### B3.10.12 Physics

##### Number of faculty members

Senior Professors, Professors	02
Associate Professors	03
Assistant Professors	08
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Prof. P.K.Thiruvikraman

##### Contact details:

**Email:** thiru@hyderabad.bits-pilani.ac.in

**Phone:** 040-66303508

##### Number of PhD Scholars:

**Full Time:** 08

**Part-Time:** 04

#### A. Sponsored Research activities:

Department has five ongoing projects worth of 1.07 crore INR funded by funding agencies such as CSIR and DST.

##### Ongoing projects

S No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	AC Impedance Measurement of Structures of various shapes.	Prof. Souri Banerjee	CSIR	22.26	2013-2016
2	Development of magneto impedance sensor for Bio cells detection.	Dr. V. Satya Narayana Murthy	DST	22.68	2012-2016
3	Investigation of Magneto-optical effects in composite magneto-plasmonic nanostructures for sensing	Prof. Kannan Ramaswamy	DST	32.70	2013-2016



S No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
	application				
4	Study of De coherence and Entanglement in Non Linear Systems and Their Application	Dr.KVS Shiv Chaitanya	DST-FT	14.16	2013-2016
5	Gravitational waves from oscillations and instabilities in neutron stars	Dr. Sarmistha Banik	DST-Young Scientist	14.76	2014-2017

**Projects sanctioned during the year:** None

**B. Publications:**

1. B. Rajesh Kannan and B. Harihara Venkataraman, "Dielectric and Electrical Conductivity Characteristics of Undoped and Samarium Doped Ferroelectric SrBi<sub>2</sub>Ta<sub>2</sub>O<sub>9</sub> Ceramics Derived From Molten Salt Synthesis Route", *Ferroelectrics*, pp 110 – 119, 493, 2016
2. B. Rajesh Kannan and B. Harihara Venkataraman, "Dielectric relaxor and conductivity characteristics of undoped and samarium doped barium bismuth niobate ferroelectric ceramics", *Ferroelectric Letters*, (accepted, in print), 2016
3. S. Konar, M. Bagchi, D. Bandyopadhyay, S. Banik et. al. Neutron Star Physics in the SKA era: An Indian perspective, accepted for publication in *Journal of Astrophysics & Astronomy*, 37:36, 2016.
4. Y. V. Subba Rao, Aravinda N. Raghavan and Meenakshi. V, Fabrication and characterization of polyvinylidene fluoride microfilms for microfluidic applications, Vol.15, No.05,166001, *International Journal of Nanoscience*, 2016
5. N. V. S. S. Seshagiri Rao, V. Satya Narayana Murthy and YJVS.Ramakrishna Sharma "Magnetic force microscopy and simulation studies on Co<sub>50</sub>Fe<sub>50</sub> elliptical nanomagnets", *Bull. Mater. Sci.* 39 (2016)725.

**C. Conferences attended/papers presented:**

1. B.Rajesh Kannan and B.Harihara Venkataraman, "Interesting property studies of SrBi<sub>2</sub>Ta<sub>2</sub>O<sub>9</sub> and Sr(Bi<sub>0.95</sub>Sm<sub>0.05</sub>)<sub>2</sub>Ta<sub>2</sub>O<sub>9</sub> ferroelectric ceramics fabricated by molten salt flux method", *IEEE International Conference on the Application of Ferroelectric Materials*, Darmstadt, Germany, 21 - 25 August 2016
2. "Determining metrics for reconstruction of cornea using image processing and neural network modelling" Abishek Krishnan, P.K.Thiruvikraman, and C.Jagadesh Reddy, presented at Indian Eye Research Group ARVO-India Chapter 23rd Annual Meeting, July 30-31, 2016
3. Mixing through Vortex Shedding in a Microfluidic Channel: A numerical simulation study, Y. V Nitin Mythreya, Y. V. Subba Rao, Aravinda N. Raghavan and Meenakshi V, Oral presentation in the 5th Micro and Nano Flows conference series, MNF2016,10–14 September 2016, Politecnico di Milano, Italy
4. Fabrication and characterization of polyvinylidene fluoride microfilms for microfluidic applications, Y. V. Subba Rao, Aravinda N. Raghavan and Meenakshi V, Oral presentation in Recent Advances in Nano Science And Technology 2015 (RAINSAT2015), 8<sup>th</sup> - 10<sup>th</sup> July, 2015, Sathyabama University, Chennai.

**D. Invited Talks given by BITS faculty:** NIL

**E. Invited talks arranged in the department:**

1. "How to give a bad talk?" – Prof. Arnab Bhattacharya, Tata Institute of Fundamental Research, Mumbai, 17<sup>th</sup> November, 2016
2. "Let there be Light: From Oil lamps to LEDs" – Prof. Arnab Bhattacharya, Tata Institute of Fundamental Research, Mumbai, 17<sup>th</sup> November, 2016
3. " Internship and Collaboration Opportunities with LIGO-India "- Prof. Sanjit Mitra, Inter University Centre for Astronomy & Astrophysics, Pune and Prof. Rana Adhikari, California Institute of Technology, 22<sup>nd</sup> August, 2016

**F. Awards and recognitions won by faculty and students:**

Mr. Vishak (2012B5PS399H) secured 6<sup>th</sup> rank in Joint Entrance Screening Test (JEST) which is used for admission to many reputed research institutes in India. He subsequently joined the Ph.D program in IUCAA, Pune.

**G. Faculty Development, International Collaboration & Industry Immersion:** NIL

**H. Significant new equipment/experimental facility added during the year:**

Low temperature resistivity measurement setup

**I. Departmental association/club activities:**

Workshop on “Big Data in Astronomy” was conducted on 2<sup>nd</sup> October, 2016. The inaugural lecture in the workshop was given by Prof. Ajit Khembhavi, former Director of Inter University Centre for Astronomy & Astrophysics (IUCAA), Pune. The workshop was organized in collaboration with IUCAA, Pune.

**J. Major maintenance, renovations or new construction reports:** Nil**K. Major equipments acquired during the year:**

- a) Dynamic Mechanical Analyzer

**B3.11 DIVISION/UNIT/CENTER-WISE ACTIVITY HIGHLIGHTS****RESEARCH AND DEVELOPMENT**

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 **17** faculty members and **229** research scholars, pursuing Ph. D. programs in identified thrust areas.

**Ph.D. Qualifying Examination**

There are 20 research projects funded by various National and International funding agencies for about Rs.40653627. Details of approved research projects are enclosed in **Annexure 6** (Part B3).

Ph.D. qualifying examination was conducted at Hyderabad campus during the two semesters of 2016. **43** candidates were declared successful in this examination.

**Central Facilities Report:****LIBRARY**

The library is very spacious with 45000 sqft area in two floors, fully air-conditioned, with modern and comfortable furniture for the users. Library has a seating capacity of 450 readers. It remains open from 0900 to 2300 hrs on all working days (except National Holidays) and from 0900 to 1700 hrs during weekends and other holidays.

The library has migrated to KOHA Library Management Software for all its housekeeping activities from LIBSYS. 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 been 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.

**RFID Technology:** From July 2016, the Radio Frequency Identification (RFID) Technology for the books and self check-in/check-out was introduced. The key benefits of RFID Technology in our Libraries 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 of books; attending to reference queries, providing photocopies, inter library loans, etc for the faculty and students of the institute. 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 are there in the committee. The committee meets periodically and works very closely with the library in resources selection and co-ordinate the requirements of the department.

**Acquisition Section**

The Library has a collection of 30600 volumes and 1025 Springer engineering e books. 2500 new volumes were added to the existing collection this year 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 and Data Warehousing/ Mining. A good number of fiction, general reading books, and case studies in Management, latest editions of handbooks, encyclopedias, yearbooks and books which are useful for campus recruitment were also added this year.

### E-resources

Access to over 4117 e-journals and other important websites have been provided on the library site. E-journals of the following publishers were made available:

- American society of civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- IEEE Explore
- Science Direct
- ACM
- SciFinder
- Scopus
- JSTORE
- IOP (Institute of Physics)
- Nature

**Journals:** Presently the Library subscribes to 84 printed journals including foreign journals. Useful articles, news, newspaper clippings are displayed on the notice board for the information of the readers. Besides, articles authored by institute faculty are displayed in a prominent place in the library.

### Other Services

1. The library continues to keep the readers informed every week through 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 also through e-mail to the entire faculty. Special topical displays are also organized periodically.
2. The library facilitates in the Earn While You Learn Programme of the Institute wherein students assist in the library jobs like book data entry, spine labeling of books, bar-coding of books etc
3. Organized a Book Festival in association with Book Syndicate, our campus book store in October 2016. During the Book Festival faculty members were encouraged to suggest books for the library.
4. Free wireless internet (WIFI) access is available in the library

### Library Statistics

The Library collection is growing steadily. The following table shows some of the significant statistical data:

1	Current library holdings	30600
2	Average number of books issued per day	151
3	Average number of readers visiting the library per day	1242
4	Books added during the year	2500
6	Number of print Journals subscribed	84
7	E journals made available on library site	4117
8	CD-ROM Collection	1255
9	Educational Video/DVD Collection	102
10	Total number of reading seats in the library	450
11	Library membership	4050

### WORKSHOP

The Central Workshop imparts training to students and caters to the maintenance & fabrication needs of the Institute. Students' training involves training all first degree students through the course "Workshop Practice" by imparting skills in various manufacturing processes like machining, fitting, carpentry, smithy, foundry, sheet metal, electroplating, welding, etc. and two computer oriented exercises, CNC Programming using Pro-E and Master CAM softwares and Manufacturing Simulation using FlexSim software. For B.E. (Mechanical Engineering) and B.E. (Manufacturing Engineering) degree courses, students are also imparted in-depth training in various other courses such as "Production Techniques-I and II", "Manufacturing Processes" and "Computer Aided Manufacturing". Apart from routine maintenance and training, the workshop also accepts fabrication jobs concerning the project works of students and also technical support for TBI works.

The workshop housed in 1800 sqm built up area comprises of the following sections: Machine shop, Welding, Electroplating, Fitting, Smithy, Sheet Metal, Carpentry, Foundry, Metrology & CAM Lab. Major equipment include Vertical Machining Center (Bridgeport VMC GX600), 9 Lathes, 2 Shapers, 1 Radial Drilling Machine, 1 Universal Milling Machine with indexing attachment, 1 Cylindrical Grinding Machine with internal grinding attachment, 1 Tool and Cutter Grinder, 1 Pedestal Grinder, 1 Surface Grinder (HMT make), 1 Slotting Machine, 1 Open-Hearth Furnace for Smithy, 1 Gas-Fired Furnace for Foundry, 5 Wood-Working Lathes, 2 Arc-Welding equipment (1 Rectifier & 1 DC Welding Generator), 1 Oxy-Acetylene gas welding equipment, 1 Gauge Planner for wood works, Electroplating setup for zinc coating, Power Hacksaw and Metrology instruments. In addition, 1 CNC Lathe (HMT make), 1 Wire-cut EDM, 1 Hydraulic Press with 40 ton capacity and 1 TIG Welding equipment.

### COMMUNITY WELFARE UNIT

The community welfare unit (CWU) coordinates the welfare and recreational activities of the staff members of the institute and also the functioning of medical centre. We have a fully functional medical diagnostics lab in the medical centre that came into operation from November 2015. Clinic management software has been installed in the medical center to streamline patient information and records.

The community celebrated a week long Ganesh Puja and New Year in the stage in Children's Park. The celebrations ended with cultural performance from kids and adults in the community. Professionals visit the campus to teach musical instruments, classical dance, classical music and Yoga. Community Sports and games competition were organized for the second time for community members in the campus.

### B3.12 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS

The campus has been bustling with activities of various clubs and associations in which students actively participated.

#### Clubs:

The following established clubs have accelerated their activities by organizing various events and competitions on campus.

<ul style="list-style-type: none"> <li>• Astronomy Club</li> <li>• Bulls n Bears club</li> <li>• Crux Club</li> <li>• Dance Club</li> <li>• Dramatics Club</li> <li>• Shades Club</li> </ul>	<ul style="list-style-type: none"> <li>• English Language Activities Society (ELAS)</li> <li>• Journal Club</li> <li>• Music Club</li> <li>• Photography Club</li> <li>• Quiz Club</li> <li>• VFX Club</li> </ul>	<ul style="list-style-type: none"> <li>• Automation and Robotics Club</li> <li>• Martial arts Club</li> <li>• Media Arts and Design Club</li> <li>• Remote Control Club</li> <li>• Film Making Club</li> </ul>
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Apart from these clubs, there are regional associations which depict their unique culture and tradition through various regional celebrations. Also, the advent of societies has given students to work on their interests in an informal setting.

#### Scholarships:

During academic year 2015 -16 the following scholarships are awarded to the students of Hyderabad campus and the number of students who received are as follows:

Institute Merit Scholarships – 213 students

Institute Merit Cum Need Scholarships – 1319 students

BITSAA (Ashok Agarwal) Scholarship – 2 Students

#### Social and Environmental Activities:

There are many social organizations actively working on campus like NIRMAAN, SCIO, YUVA (Youth under visionary action), HOPE and ENACTUS.

We have various events/camps organized on campus like Govt. school adoption, Swach Bharat, Cloth Donation, Tree Plantation, Blood Donation, Campus Clean Up programs, Career Planning, Medical Camps, Campus Tour for School Students.

#### SCIO 2016:

Veda

**Vidya: Bless Orphanage**

SCIO Foundation BITS-Hyderabad chapter changed the scope of 'VIDYA' from schools to Orphanages even. We know there might be some or even one teacher in a school or a college to give some information about future even though it is small but who do Orphans have?

Mostly none.

So on 14/02/2016 we in this year started 'VIDYA' in an Orphanage, BLESS at Madhapur, Hyderabad.

**Vidya: Apple Convent high school**

SCIO conducted Vidya a career guidance workshop in Apple convent high school at Malkajgiri in Hyderabad by BITS-Hyderabad chapter on 15/02/2016.

**Vaidya (medical camp in rural areas): Lakshmapur**

A recent survey states that there is one Doctor for every 1,618 people in India, from this we can imagine how badly Indians are in need of Doctors we can't even imagine the position of backward villages. That is why SCIO Benevolent Foundation started conducting medical camp under the name of "VAIDYA" in backward villages getting fine number of Doctors who are specialized in various fields into the reach of poor and needy people. On 03/09/16 SCIO Benevolent Foundation, BITS-Pilani Hyderabad have conducted Vaidya in Lakshmapur. This camp is done in association with Apollo Hospitals Hyderabad which included General Physicians, Gynecologist, Cardiologist and Orthopedist and tests like Blood Pressure, GRBS, ECG etc. and also free Medicines are provided. More than 400 people suffering from various diseases are benefited by this Medical camp.

**Vidya: Lakshmapur Govt. High School**

A Vidya event is conducted on 3<sup>rd</sup> September 2016 for secondary school students of government high school in lakshmapur which mainly concentrated on after 10<sup>th</sup> and +2 work opportunities and various scholarships offered by Govt. for perusing higher studies.

**Veda 5.0:**

VEDA 5.0 held on Sunday, 25th of September 2016 reached out to around 500 students accompanied by faculty and parents. Chief-Guest, Mr. Ramana Sonti who is Economics professor and Guest of Honor, Mr. Raghuram Salguti who was the 3<sup>rd</sup> President of Students' Union BITS-Pilani Hyderabad Campus. The guest speakers include – Prof. Kannan Ramaswamy and Dr. P Sankar Ganesh who threw light on a career in Sciences and the prospects of interdisciplinary research, and Prof. Chethan Kumar and Prof. A. Vasan who focused on the engineering career and Prof. Vijayabhaskar Marisetty who focused on Economics and Finance career. The awe-inspiring talks by these speakers were followed by an aptitude test and an interaction session with students of BITS-Pilani Hyderabad campus. More than 600 students are benefited by this event.

**Vidya: (4 Sri Chaithanya Jr. Colleges Madhapur)**

On 3<sup>rd</sup> November 2016 VIDYA a workshop on various branches of Engineering and various prestigious National Universities is conducted by SCIO Foundation BITS-Hyderabad Chapter at four Sri Chaitanya colleges in Madhapur, Hyderabad. Around 200 students were benefited on this event.

**Vignan: Aga Khan Academy**

Educational trip was conducted for the students from Aga Khan Academy on November 12<sup>th</sup>, 2016 to the BITS-Pilani, Hyderabad Campus. The students were fascinated to see various engineering and science departments, and the laboratories associated to them. A one on one interaction about different branches available and the future prospects involved were discussed with them. Around 100 students of Aga Khan Academy are benefited.

**Pearl 2016**

The pearl inaugural ceremony kicked off with a bang with the music club bringing an amazing melody, mesmerizing the audience. The ceremony began on an auspicious note with the Saraswathy vandana and lamp lighting ceremony. The formal inauguration then started with the FOB Members and Club Secretaries being invited on the stage. Then came the welcome addresses by the cultural Secretaries, and the SU President, Mr. Prudhvi Potluri. Prof M.B Srinivas, Dean, administration, and Prof G Sundar, Director, Off - Campus Programmes and Industry Engagement then addressed the audience. The audience was then graced with inspiring inaugural addresses by the guests of honor Mr Prasad Devineni and Mr Sudhakar, followed by the felicitation of the guests with mementos. The formal inauguration was then brought to a close with the vote of thanks by the General Secretary of the SU, Mr. Kaushal Raut.

**Convocation-2016:**

Hyderabad campus Convocation was conducted on 14.08.2016, Chief Guest Dr. S. Christopher, Secretary, Department of Defence Research and Development & Director General, DRDO, Vice Chancellor Prof. Souvik Bhattacharyya have participated in the Fifth Convocation of the campus for award of various degrees [First Degree (675 Students), Higher Degree (60 Students) & Ph. D (30 Students)] who have qualified at the end of II Semester 2015-16.

Mr. Aditya Chandrasekar, 2012A7PS278H, Mr. A Sai Darshan, 2012A1PS487H and Ms. P Sarguna Janani, 2012A7PS148H were the winners of the gold, silver and bronze medal.

**ATMOS 2016**

The ATMOS 2016, the National Techno-Management fest of BITS, Pilani – Hyderabad campus was inaugurated on Thursday 13 October 2016 by Dr. Tessy Thomas, Project Director of Agni – V, DRDO, Hyderabad. Prof G Sundar, Director presided the inaugural function. ATMOS spanning over 3 days from 14 October brings a plethora of exciting contests, workshops, lectures and much more. Over 15000 students from all over India are expected to participate in ATMOS'16.

During the inaugural function, Prof. S. Venkateswaran faculty excellence award for 2015 has been awarded to Prof. P Yogeewari for her immense contributions to education, students and the institute by the Chief Guest Dr Tessy Thomas.

**NIRMAAN:**

Nirmaan is a constructive citizen movement for an empowered India, thereby making the world a better place to live in. Nirmaan was founded on 12<sup>th</sup> February, 2005 by a group of BITS-Pilani University students with a passion for humanity and to fulfill our responsibility towards our less privileged brothers & sisters.

Nirmaan BITS Hyderabad chapter now undertakes three verticals namely School Adoption Programme (SAP), Livelihood Initiatives, Community Development Initiatives. It also organizes a unique annual festival named 'Ignite'.

**Ignite'16:**

Ignite, the annual social festival of Nirmaan Organization, BITS Hyderabad Chapter, aimed at fulfilling the childhood of underprivileged and orphaned kids reached out 596 kids from different orphan homes in and around Hyderabad and were educated and entertained from 22<sup>nd</sup>–24<sup>th</sup> of January, sponsored by LAURUS Labs.

**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 of Pothaipally, Upparpally and SD Convent.

**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 100 students and a number of faculty and staff on the campus to become part of its activities.

**Manthan:**

Manthan'16 the NGO Conference took a tremendous leap in terms of participation and success. Manthan, organized during ATMOS'16 witnessed 40 people from 11 NGO's run by students in the city of Hyderabad. The conference aimed to exhibit the work of NGO's and also to brainstorm the solutions to the challenges being faced.

**Independence Day Celebrations at SAP:**

Sports and other activities were conducted at the schools of Pothaipally, Upparpally, Malkaram and girls hostel at SD convent. In a similar manner Children's day celebrations were also held at these schools.

**Clay Ganesh Making at SAP:**

To promote awareness about rising pollution of water due to immersion of idols made of POP we inculcated the habit of moving eco-friendly in the kids by conduction workshop on clay Ganesh making at schools of Pothaipally and Upparpally.

**Trip to Nehru Zoological Park:**

With reverence to the Father of Nation, Mahatma Gandhi, on the occasion of his birth anniversary, Nirmaan organized a trip for the kids 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> classes of Upparpally government high school with an idea of learning through observation. It was a great day where both students and volunteers had a great time witnessing the beauty of wild life. Immense care was taken to prevent any mishaps at the zoo by maintaining a 1:1 ratio of volunteers and children. Food and Transport were taken care by Nirmaan.

**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.

**Stall for ATMOS'16:**

Livelihood team at Nirmaan believes in helping unemployed women to stand up for themselves. In this direction, we were successful in bringing up a couple of women and putting up a food stall during ATMOS.

**Diwali Stall at Infosys:**

Multiple types of candles and cloth were prepared by the livelihood team and a stall was setup at Infosys campus in Gachibowli, Hyderabad.

**National Service Scheme (NSS):**

Three units of National Service Scheme are functional in BITS-Pilani, Hyderabad Campus (BPHC). Currently there are 300 volunteers consisting of 176 male and 124 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.
- On 9th December 2016, as part of Anti-corruption Day debates focusing on how corruption may take place in demonetization policy and also pros and cons of this policy etc. topics were organized.
- On 26th November 2016 to commemorate the Heroes of Mumbai attacks on the occasion of National Constitution Day a formal meet followed by faculty talk by Dr. Arti Dhar madam (NSS Programme officer BITS Pilani Hyderabad campus) was organized.
- On 20th November 2016, as part of "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.
- On the International Day of Tolerance (16th November 2016) a group meditation session was conducted.
- On 14th November 2016, sweets were distributed to less fortunate children on the occasion of Children's Day. In order to involve more students in engaging with social and environmental issues.
- On 30th October 2016, to support Crackers free and less pollution Diwali NSS BPHC introduced new event called "Lighting Diyas for a Cause". In this event every student has to light a lamp (Diya) and take resolution of service and try implementing it. Students participated actively in taking resolutions. Hope this would be a new beginning of service in their life. This program is just to add commitment and strength to your commitments on the holy occasion of Diwali
- On 15th, 16th and 17th October 2016, the NSS bi-annual Blood donation drive was conducted with over 216 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.
- On 10th October 2016, as part of Haritha Haram programme, NSS BPHC took a small effort to make our campus Green by planting Trees.
- On 25th September 2016, on the occasion of NSS Day a wide range of cultural activities were performed by students to promote the appreciation of diversity among them.
- 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.
- On 21st September 2016, on the occasion of World Peace Day student debates were conducted on a range of issues. A large number of students participated.
- On 2nd September 2016, as part of Introductory meet, all the new students joined in NSS were assembled and made to participate various interactive events in order to improve their communication skills and enhance their leadership qualities.
- On 17th August 2016, NSS organized a new event called INFOCUS, a photography event, in which students were given 3 different themes (patriotism, swatch Bharat, and afforestation). They can choose any theme and a take a photograph related to that theme and has to send us with a suitable caption. The winner were awarded.
- Over 75 students participated in the Swacch Bharath Program in Thumkunta Village on 15th August 2016. Also NSS has collaborated with Quiz club, BITS Pilani Hyderabad Campus and organised India Quiz which got an outstanding turnover of participants.
- 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 prizes.

- On 17th April 2016, NSS has organized an adventure and recreational trip to the Nehru Zoological Park in Hyderabad in order to promote togetherness and create a positive relation among the volunteers.
- On 22nd & 23rd January 2016, the annual VIHANG SPORTS AND CULTURAL PROGRAM FOR SCHOOL CHILDREN was conducted with over 7 schools participating in the sports and cultural events as well as counselling and careering guidance interactions that were held over two days.

#### **Sports Activities:**

##### **Arena 2016**

ARENA, the annual sports festival of BITS-Pilani Hyderabad campus was formally inaugurated on 28 January 2016 by Dr Tripuraneni Hanuman Chowdary, The former IT Advisor to Government of Andhra Pradesh. Acting Vice-Chancellor Prof. V S Rao presided over the function. ARENA was launched to bring out the sporting spirit in students from different parts of the country, and to create an opportunity for them to take part in various sporting disciplines, over a period of three days. Arena'16 will see over 3000 participants from all across the nation participating in many indoor and outdoor sports events, held for both boys and girls. The fest will offer a comprehensive entertainment and sportive atmosphere in campus during ARENA'16.

#### **STUDENT ACTIVITY CENTER:**

The SAC consists of State-of-the-art GYM for Boys and Girls. The Boys section is equipped with strength gaining single and multi-sections machines, electrical trainers and treadmills. While the Girls section consists of Cardio Fitness machines, including electrical trainers and treadmills.

Two Badminton courts was refurbished with LED Lighting & Anti skid painting on maple wood flooring, 5 Table Tennis tables, 16 carom boards, 30 chess sets and 3 Pool Tables are also available in the SAC.

Apart from indoor games Two Basketball courts with newly constructed spectator gallery, Two Tennis acrylic cushion surface courts are also available with chain link fencing and flood lights & newly constructed Cricket ground.

#### **LA LIGA:**

We have also had our own football league LA LIGA. With a huge participation, it helped in spreading football culture on campus.

#### **RIXA-16**

The Annual Inter Bhawan Sports Festival of BITS-Pilani, Hyderabad campus commenced on April.2016 saw the participation of students in different sports like Cricket, Football, Carom, Volleyball, Athletics etc.

#### **SPORTS ACTIVITIES:**

Students have shown great enthusiasm in making use of the sports facilities provided in the campus. Each hostel has facilities for indoor games like Table-Tennis, Chess and Caroms. There are two shuttle badminton courts and grounds for Volley-ball, Foot-ball, Hockey, Cricket, Throw Ball and Lawn Tennis. Physical Education Department of SWD has been conducting Inter bhawan friendly matches (RIXA- Inter Bhawan Championship).

#### **BPHC vs IIT-H**

BPHC witnessed two sporting giants of Hyderabad taking on each other with some spectacular performances. Teams gave some unprecedented performances in front of a phenomenal support from BPHC crowd.

In cricket scores were levelled by 1-1, BPHC won in Badminton, Table Tennis and basketball.

BPHC vs NALSAR cricket match resulted in win for BPHC.

Inter Year T-20 Tournament title was won by 4th year students.

#### **Blitzkreig'16**

An intra-college league commenced in October, 2016 comprising of all major sports in which the team are formed by auction basis. It's a place where teams fight their hearts out to be the champion.

#### **Cultural Activities:**

##### **Renaissance 2016:**

For the first time, An Inter Bhawan Cultural Competition was conducted from 4<sup>th</sup> November to 11<sup>th</sup> November. With a huge participation, the competitive spirit was evident from the enthusiasm from the students. The Culturals ensured that the extracurricular factor was well covered with the academics on campus.



**Shangri-La 2016:**

Shangri-La 2016 gave an opportunity for the students to show case their skills and this three day cultural extravaganza started with the Theatre Night, followed by the Music Night and the Dance Night on three different days. The trailers of Verba Maximus, the Annual Literary Festival and the Theme of Pearl'2017, the Annual Cultural Festival were revealed on the last day of Shangri-La.

**B3.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS****I. New Construction:**

1. Construction of additional 10 rooms done in Meera Bhavan.
2. Construction of 4 number of store rooms in E block cellar
3. Construction of Squash Court
4. Providing Paver blocks for walkway from Central work shop to E block.
5. Construction of Rotary pulp digester room for Chemical engineering department
6. Construction of Actuator room for Civil engineering department.
7. Foundation work for plate load testing machine at Civil engineering department
8. Construction of sitting gallery and chain link fencing at Cricket ground
9. Construction of toilets for Mess-1 staff.
10. Providing Work stations for SWD division.
11. Relocation of Volley ball court.

**II. Renovation and Maintenance:**

12. External painting for B & C type quarters, Ram bhavan, Shankar bhavan -Hostel blocks and at Director's residence, SAC, ESS 1, 2 & 3.
13. Painting to Fire hydrant pipes and rain water down take pipes.
14. C block Atrium flooring modification works.
15. Renovation works at Directors residence
16. Modification works-painting and flooring in Mess-1
17. Renovation of gas banks
18. Modification works at CAL laboratory
19. Solar lights provided along the periphery road of the campus.

**B3.14 MAJOR EQUIPMENT'S ACQUIRED DURING THE YEAR:**

During 2016 a lot of new equipment has been added to support academics, research and development. Details as per **Annexure 7** (Part B3).

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'Annexure B3-1'

(3 Pages)

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**ADMINISTRATIVE BODIES****The names and designations of senior officers of Hyderabad campus**

<b>Director</b>		
1.	Prof. G Sundar	Director
<b>Dean(s)</b>		
1.	Prof. M B Srinivas	Dean, Administration
2.	Prof. Suman Kapur	Dean, International Programmes and Collaborations Division (University Wide)
3.	Prof. Niranjan Swain	Dean, Practice School Division
<b>Associate Dean(s)</b>		
1	Prof. Souri Banerjee	Faculty Affairs
2	Prof. Vidya Rajesh	Academic Research
3.	Prof. P Yogeeswari	Sponsored Research and Consulting
4	Prof. P K Thiruvikraman	Academic and Resource Planning
5	Dr. P Sankar Ganesh	International Programmes and Collaboration
6	Prof. KVG Chandrasekhar	Practice School
7	Prof. Srinivas Prakash Regalla	WILP
8	Prof. Chittaranjan Hota	Admissions
9	Prof. A Vasani	Instruction
10	Prof. Morapakala Srinivas	Academic Registration and Counselling
11	Prof. Sandip Shridharrao Deshmukh	Student Welfare
<b>Head of Departments</b>		
1.	Prof. Srikanta Dinda	Chemical Engineering
2.	Prof. Sridhar Raju	Civil Engineering
3.	Prof. Y. Yoganandam	EEE
4.	Prof. Amit Kumar Gupta	Mechanical Engineering
5.	Prof. D Sriram	Pharmacy
6.	Prof. N. L. Bhanu Murthy	C S & I S
7.	Prof. Nagamohan Kommu	Biological Sciences
8.	Prof. Manab Chakravarty	Chemistry
9.	Prof. Sunny Jose G	Humanities & Social Sciences
10.	Prof. Sudatta Banerjee	Economics & Finance
11.	Prof. Dipak Kumar Satpathi	Mathematics
12.	Prof. P K Thiruvikraman	Physics

<b>Faculty-in-Charges</b>		
1.	Prof. Chittaranjan Hota	Information Processing Centre
2.	Prof. Y V Daseswara Rao	Engineering Services
3.	Dr. V Vamsikrishna Venuganti	Educational Hardware
4.	Dr. Chandu Parimi	Centre for Innovation, Incubation and Entrepreneurship (CIIE)
5.	Dr. Balaji Krishnamurthy	Placements
6	Dr. Meenakshi Vishwanathan	Community Welfare
7	Prof. Aravinda N Raghavan	Teaching Learning Centre (TLC)
<b>Other In-charges</b>		
1	Prof. R. Krishnan	Central Analytical Laboratory
2	Dr. Vikranth Kumar Surasani	Central CAD Laboratory
3	Mr. M S Uday Kumar	Publications & Media Relations
4	Prof. N. Suresh Kumar Reddy	Workshop
5	Dr. Raja Raja Varma Murari	Student Activity Center
6	Prof. P. N. Rao	Alumni Affairs
7	Prof. Chittaranjan Hota	Website
8	Prof. Srikanta Dinda	Occupational Safety & Health Administration (OSHA)
9	Dr. Meenakshi Vishwanathan	SPICMACAY
10	Mr. M S Uday Kumar	Library
<b>Coordinators</b>		
1	Dr. N Kishore Kumar	National Service Scheme
2	Prof. K S Raju	Centre of Excellence in Water Resources Management
<b>Hostel Resident Wardens</b>		
1	Dr Kumar Pranav Narayan	Chief Warden & Warden , Krishna Bhawan
2	Dr. Phaneendra Kiran Chaganti	Budh Bhawan
3	Prof. Sanket Goel	Gandhi Bhawan
4	Dr. Sounak Roy	Vyas Bhawan
5	Dr. Swati Biswas	Meera Bhawan
6	Mr. Syed Ershad Ahmed	Ram Bhawan
7	Dr. Naga Mohan Kommu	Shankar Bhawan
8	Prof. Manab Chakravarty	Malaviya Bhawan (Boys)
9	Ms. D. Purnima	Malaviya Bhawan (Girls)
<b>Hostel Non-Resident Wardens</b>		
1	Dr. Sashideep Gutti	Budh Bhawan
2	Dr. Kannan Ramaswamy	Shankar Bhawan
3	Dr. Kurra Suresh	Vyas Bhawan

4	Dr. Subhash Goshal	Malaviya Bhawan & Krishna Bhawan
5	Dr. Alivelu Manga Parimi	Malaviya Bhawan (Girls)
6	Dr. T S L Radhika	Meera Bhawan
7	Dr. Srikanta Dinda	Ram Bhawan
8	Dr. Sounak Roy	Gandhi Bhawan
<b>Hostel Superintendent</b>		
1	Mr. Haridas	Krishna Bhawan, Shanker & Ram Bhawan
<b>Asst. Hostel Superintendents</b>		
1	Mr. Santosh Pillai	Gandhi Bhawan, Buddh Bhawan & Vyas Bhawan
2	Mr. Shaik Areef Basha	Malaviya Bhawan (Boys)
3	Ms. M Anitha Santhosh	Malaviya Bhawan (Girls)
4	Ms. L. Vijitha (Office Assistant)	Meera Bhawan
<b>Professor(s) In-Charge:</b>		
1	Prof. Chittaranjan Hota	BITS Entrance Examinations

'Annexure B3-2'

(3 Pages)

Ref. AR 2016, Page No. B3-1

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2016****(A) Integrated First Degree Programmes at Hyderabad Campus:**

<b>FIRST DEGREE PROGRAMMES (Branch-wise break-up)</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
B.E.(Hons.): Chemical (A1)	45	33	12
B.E.(Hons.): Civil (A2)	49	43	6
B.E.(Hons.): Electrical and Electronics (A3)	71	60	11
B.E.(Hons.): Mechanical (A4)	60	58	2
B. Pharm.(Hons.) (A5)	23	10	13
B.E.(Hons.): Computer Science (A7)	122	109	13
B.E.(Hons.): Electronics & Instrumentation (A8)	39	34	5
B.E.(Hons.): Electronics and Communications (AA)	78	63	15
B.E.(Hons.): Manufacturing (AB)	25	21	4
M.Sc.(Hons.): Biological Sciences (B1)	25	24	1
M.Sc.(Hons.): Chemistry (B2)	28	22	6
M.Sc.(Hons.): Economics (B3)	34	27	7
M.Sc.(Hons.): Mathematics (B4)	31	29	2
M.Sc.(Hons.): Physics (B5)	29	26	3
<b>***Totals</b>	<b>659</b>	<b>559</b>	<b>100</b>
<b>*** Includes: 627 – BITSAT category, 28 – International Student category, 3 – Board Toppers and 1 – Special Dispensation</b>			

**(B) Higher Degree Programmes:**

<b>HIGHER DEGREE PROGRAMMES</b>	<b>Total</b>	<b>Boys</b>	<b>Women</b>
M.E. Biotechnology	7	3	4
M.E. Chemical	6	1	5
M.E. Civil (Structural Engineering)	8	7	1
M.E. Communication Engg.	8	5	3
M.E. Computer Science	9	5	4
M.E. Design Engineering	8	7	1
M. Pharm.(Pharmaceutical Chemistry)	0	0	0
M. Pharm.(Pharmaceutics)	11	2	9
M.E. Mechanical (Thermal Engg.)	9	8	1
<b>Totals</b>	<b>66</b>	<b>38</b>	<b>28</b>

**(C) Higher Degree (3 Year Integrated) Programme:**

	<b>Total</b>	<b>Male</b>	<b>Female</b>
M.E. in Computer Science (with specialization in Information Security)	<b>11</b>	<b>5</b>	<b>6</b>

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

Ph.D. Admissions: 2015-16 (II Semester)	Full Time			Part Time		
	Total	Boys	Women	Total	Boys	Women
Biological Sciences	2	0	2	4	3	1
Chemical Engg.	1	0	1	0	0	0
Chemistry	1	0	1	1	1	0
Civil	3	2	1	1	1	0
Computer Science	2	1	1	2	2	0
EEE	0	0	0	2	2	0
Humanities & Social Sciences	0	0	0	0	0	0
Economics & Finance, Management	0	0	0	4	3	1
Mathematics	1	0	1	0	0	0
Mechanical	2	2	0	2	2	0
Pharmacy	3	2	1	1	1	0
Physics	0	0	0	1	0	1
<b>Totals</b>	<b>15</b>	<b>7</b>	<b>8</b>	<b>18</b>	<b>15</b>	<b>3</b>

Ph.D. Admissions: 2016-17 (I Semester)	Full Time			Part Time		
	Total	Boys	Women	Total	Boys	Women
Biological Sciences	2	2	0	2	1	1
Chemical Engg.	2	1	1	3	2	1
Chemistry	1	0	1	3	2	1
Civil	1	0	1	2	2	0
Computer Science	1	0	1	1	1	0
EEE	5	4	1	1	1	0
Humanities & Social Sciences	2	0	2	2	1	1
Economics & Finance, Management	0	0	0	0	0	0
Mathematics	2	2	0	2	0	2
Mechanical	4	4	0	2	2	0
Pharmacy	7	2	5	0	0	0
Physics	0	0	0	0	0	0
<b>Totals</b>	<b>27</b>	<b>15</b>	<b>12</b>	<b>18</b>	<b>12</b>	<b>6</b>

**DUAL DEGREES:**

During the Year 2016, a total no of 144 students (out of 149 offers : Priority 1 – 140, Other Priorities - 4) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given below.

**Priority 1:**

	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total
B1	3	4	4	3	-	3	1	4	-	<b>22</b>
B2	5	5	2	3	-	9	2	1	1	<b>28</b>
B3	2	3	6	3	-	8	2	3	4	<b>31</b>
B4	1	1	4	4	-	10	4	6	2	<b>32</b>
B5	1	-	4	5	-	7	2	5	3	<b>27</b>
<b>Total</b>	<b>12</b>	<b>13</b>	<b>20</b>	<b>18</b>	<b>0</b>	<b>37</b>	<b>11</b>	<b>19</b>	<b>10</b>	<b>140</b>
<b>B4A1 : Offers given – 2, Offers taken – 1, Offers rejected – 1</b>										

**Other Priorities:**

	A1	A2	A3	A4	A5	A7	A8	AA	AB	B1	B2	B3	B4	B5	Total
A1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
A3	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
A4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
A5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A7	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
A8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
AB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4</b>
<b>A1AA: Offers given - 2; Accepted - 0, Rejected - 2</b> <b>A1A3: Offers given - 1; Accepted - 0, Rejected - 1</b> <b>A1B3: Offers given - 1; Accepted - 0, Rejected - 1</b>															

**TRANSFERS:**

During the Year 2016, a total no of **18** students (11 transfers + 7 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 below.

	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total
A1	-	-	-	1	-	-	-	2	-	3
A2	-	-	-	-	-	-	-	2	-	2
A3	-	-	-	-	-	1	-	-	-	1
A4	-	-	-	-	-	-	-	-	-	0
A5	-	-	-	-	-	-	-	-	-	0
A7	-	-	-	-	-	-	-	-	-	0
A8	-	-	-	-	-	1	-	1	-	2
AA	-	-	-	-	-	2	-	-	-	2
AB	-	-	-	-	-	-	-	-	-	0
B1	-	-	-	1	-	-	-	-	-	1
B2	-	-	-	-	-	-	-	-	-	0
B3	-	-	-	-	-	-	-	-	-	0
B4	-	-	-	-	-	-	-	-	-	0
B5	-	-	-	-	-	-	-	-	-	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>11</b>

	B1	B2	B3	B4	B5	Total
B1	-	-	-	1	-	1
B2	-	-	1	1	1	3
B3	-	-	-	-	-	0
B4	-	-	1	-	-	1
B5	-	-	1	1	-	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>7</b>

**VERTICAL TRANSFERS:**

During the year 2016, Two (2) students were permitted to transfer from First Degree to Higher degree and 1 student was permitted to transfer from Higher Degree to Ph.D. Programme at Hyderabad Campus.



Annexure B3-3'

(1 Page)

Ref. AR 2016, Page No. B3-2

**List of New Courses Introduced the Year 2016**

<b>Second semester 2015-2016</b>		
<b>Sl.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
011373	BIOT F347	IMMUNOTECHNOLOGY
011892	BITS F214	SCIENCE, TECH & MODERNITY
011862	BITS F219	PROCESS ENGINEERING
011893	BITS F399	HUM THEO OF SC & TECH
011379	BITS F467	BIOETHICS & BIOSAFETY
011232	CE F419	GEOTECH EQ ENG & MC FOUN
011236	CE F425	AIRPORT RAIL & WATERWAYS
011218	EEE F348	FPGA BASED SYS DESG LAB
011902	HSS F340	POST COLONIAL LITERATURE
011832	HSS F351	SOC & POL ECOLOGY
011872	MATH F445	MATHEMATICAL FLUID DYNAMICS
012170	MATH F456	COSMOLOGY
011880	ME F485	NUM TECH FOR FLOW & HEAT TRANS
011869	MST F332	MATERIALS PROCESSING
011932	MST F333	INTRODUCTION TO BIO MATERIALS

<b>First semester 2016-2017</b>		
<b>Sl.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
012188	ECON F418	QUAN ANALYSIS OF INTL TRADE
011855	EEE F474	ANTENNA THEORY AND DESIGN
011901	EEE F478	POWER SYSTEMS LAB
012063	MEL G622	INTRO TO ARTIF NEURAL NET

**BITS, PILANI - HYDERABAD CAMPUS**  
**NUMBER OF STUDENTS REGISTERED DURING THE YEAR 2016**  
**SECOND SEMESTER 2015 - 2016**

<b>DISCIPLINE</b>	<b>2007</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Sub Total</b>
Research Scholars	1	9	6	29	33	59	18	47	202
A1 - BE (Hons.) Chemical					36	47	40	56	179
A2 - BE (Hons) Civil					36	47	52	51	186
A3 - BE (Hons.) EEE					70	77	72	73	292
A4 - BE (Hons.) Mechanical					58	63	64	68	253
A5 - B. Pharm (Hons.)				4	9	2	9	21	45
A7 - BE (Hons.) Computer Science					89	120	146	144	499
A8 - BE (Hons.) Electronics & Instrumentation					40	38	29	37	144
AA - BE (Hons.) ECE				1	81	83	85	79	329
AB - BE (Hons.) Manufacturing					33	39	33	32	137
B1 - M.Sc. (Hons.) Biology			4	32	23	30	23	23	135
B2 - M.Sc. (Hons.) Chemistry				33	25	27	27	28	140
B3 - M.Sc. (Hons.) Economics				37	37	42	53	32	201
B4 - M.Sc. (Hons.) Mathematics				39	36	46	40	33	194
B5 - M.Sc. (Hons.) Physics				29	31	31	35	30	156
C6 - M.Sc. (Tech) Information Systems					48				48
<b>Sub-total (FD)</b>			4	175	652	692	708	707	2938

<b>DISCIPLINE</b>	<b>2007</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Sub Total</b>
H 101 - ME (Chemical Engineering)				2				6	<b>8</b>
H 103 - ME (Computer Science)							8	7	<b>15</b>
H 124 - ME (Communication Engineering)				1				8	<b>9</b>
H 129 - ME (Biotechnology)							8	8	<b>16</b>
H 140 - ME (Embedded System)							7	4	<b>11</b>
H 141 - ME (Design)							7	7	<b>14</b>
H 143 - ME (Structural)							7	8	<b>15</b>
H 146 - M.Pharm (Pharmaceutics)							6	5	<b>11</b>
H 148 - ME (Thermal)				1			6	7	<b>14</b>
H 313 - ME (Information Security)						10	9	7	<b>26</b>
<b>Sub-total (HD)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>10</b>	<b>58</b>	<b>67</b>	<b>139</b>
<b>TOTAL</b>	<b>1</b>	<b>9</b>	<b>10</b>	<b>208</b>	<b>685</b>	<b>761</b>	<b>784</b>	<b>821</b>	<b>3279</b>

**BITS, PILANI - HYDERABAD CAMPUS**  
**ACADEMIC REGISTRATION AND COUNSELLING DIVISION**  
**SUMMER TERM 2015 - 2016**

DISCIPLINE	2007	2012	2013		2014		2015	Sub Total
			On Campus	In PS I	On Campus	In PS I		
Research Scholars	1	3	1					5
A1 - BE (Hons.) Chemical			2	2		40	2	46
A2 - BE (Hons) Civil		2	4		1	51	1	59
A3 - BE (Hons.) EEE			13			72	4	89
A4 - BE (Hons.) Mechanical			5		1	62	6	74
A5 - B. Pharm (Hons.)						9		9
A7 - BE (Hons.) Computer Science			5	3		145	6	159
A8 - BE (Hons.) Electronics & Instrumentation		1	4			29	1	35
AA - BE (Hons.) ECE		1	8	1		84	8	102
AB - BE (Hons.) Manufacturing			3			29		32
B1 - M.Sc. (Hons.) Biology		3	16			23		42
B2 - M.Sc. (Hons.) Chemistry		1	11			27		39
B3 - M.Sc. (Hons.) Economics			20			53	3	76
B4 - M.Sc. (Hons.) Mathematics		2	16	1		39	1	59
B5 - M.Sc. (Hons.) Physics		1	16			35	3	55
C6 - M.Sc. (Tech) Information Systems		1						1
H 313 - ME (Information Security)					9		6	15
<b>GRAND TOTAL</b>	<b>1</b>	<b>15</b>	<b>124</b>	<b>7</b>	<b>11</b>	<b>698</b>	<b>41</b>	<b>897</b>

**BITS, PILANI - HYDERABAD CAMPUS**  
**ACADEMIC REGISTRATION AND COUNSELLING DIVISION**  
**FIRST SEMESTER 2016 - 2017**

<b>DISCIPLINE</b>	<b>2007</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Sub Total</b>
Research Scholars	1	9	6	24	29	55	18	43	45	230
A1 - BE (Hons.) Chemical					1	48	41	52	45	187
A2 - BE (Hons) Civil					1	47	52	49	49	198
A3 - BE (Hons.) EEE					3	75	72	72	71	293
A4 - BE (Hons.) Mechanical					2	63	64	70	60	259
A5 - B. Pharm (Hons.)						2	9	21	24	56
A7 - BE (Hons.) Computer Science					4	120	146	147	122	539
A8 - BE (Hons.) Electronics & Instrumentation					2	38	29	35	39	143
AA - BE (Hons.) ECE					2	82	85	82	78	329
AB - BE (Hons.) Manufacturing					1	39	33	31	26	130
B1 - M.Sc. (Hons.) Biology				2	22	30	23	21	28	126
B2 - M.Sc. (Hons.) Chemistry				1	24	27	28	25	28	133
B3 - M.Sc. (Hons.) Economics					37	42	53	36	34	202
B4 - M.Sc. (Hons.) Mathematics					34	45	40	35	31	185
B5 - M.Sc. (Hons.) Physics					28	31	35	29	29	152
C6 - M.Sc. (Tech) Information Systems					3	0	0	0	0	3
<b>Sub-total (FD)</b>			<b>0</b>	<b>3</b>	<b>164</b>	<b>689</b>	<b>710</b>	<b>705</b>		<b>2935</b>
H 101 - ME (Chemical Engineering)				2				6	6	14
H 103 - ME (Computer Science)								7	9	16
H 124 - ME (Communication Engineering)				2				8	8	18
H 129 - ME (Biotechnology)								8	7	15
H 140 - ME (Embedded System)								4	0	4
H 141 - ME (Design)								7	8	15
H 143 - ME (Structural)								8	8	16
H 146 - M.Pharm (Pharmaceutics)								5	11	16
H 148 - ME (Thermal)				1				7	9	17
H 313 - ME (Information Security)							9	6	11	26
<b>Sub-total (HD)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>66</b>		<b>157</b>
<b>TOTAL</b>	<b>1</b>	<b>9</b>	<b>6</b>	<b>32</b>	<b>193</b>	<b>744</b>	<b>737</b>	<b>814</b>		<b>3322</b>

'Annexure B3-5'

(5 Pages)

Ref. AR 2016, Page No. B3-4

**LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS JAN-DEC 2016**

SI No	Name of Company	Offers	CTC	No of Interviews
1	Accolite	2	1000000	41
2	Ace Academy	4	1200000	16
3	ADM Agro Industries	3	525000	53
4	Agrostar	1	800000	45
5	Aizant	3	387000	15
6	Amazon	8	2700000	153
7	Analinear	1	600000	21
8	Arcesium	2	2950000	102
9	ARM Embedded Technologies	1	975000	1
10	Ashoka Buildcon	3	500000	16
11	Ashoka Builders	0	450000	8
12	Atkins	0	706373	16
13	Aurobindo Pharma	3	360000	14
14	Balaxi Overseas	2	345000	5
15	Beckman Coulter	1	450000	1
16	BeeHyv	3	550000	63
17	BES Consultants	1	300000	5
18	Bharat Oman Refineries	1	540000	66
19	Blue Jeans	3	1000000	3
20	Bookmyshow	3	700000	109
21	Brown tape	1	600000	2
22	CA Technologies	6	900000	121
23	Cactus Communication	0	500000	64
24	Callhealth Services	3	600000	64
25	Campus Diarys	0	1800000	109
26	Capgemini	22	450000	102
27	Cassamore	2	450000	24
28	Cetas Health Care	2	450000	24
29	CGI	6	680000	27
30	Cisco	4	1437333	75
31	Cityflo	1	1000000	120
32	Commscope	0	600000	10
33	Credit Suisse	7	970000	7
34	CrowdChat	4	900000	108
35	Cyient	0	500000	18
36	Darashaw	1	450000	15
37	DE Shaw	3	2850000	109
38	Dell Business Analytics	5	700000	71
39	Direct i	6	2697880	120
40	Dr. Reddy's Laboratory	2	450000	5
41	Duraline	2	400000	16

SI No	Name of Company	Offers	CTC	No of Interviews
42	Easy Solutions	4	600000	44
43	Ecom Express	1	700000	13
44	EMC	8	1354233	153
45	Enlume	3	500000	27
46	Ericsson	2	950000	2
47	EXL Services	11	625000	143
48	Exotel	2	800000	79
49	EZE Software	4	800000	28
50	Fiber Link	2	900000	2
51	Fiorano	3	675000	56
52	Freshdesk	3	1030000	98
53	Future First	6	920000	286
54	General Electric	0	975000	110
55	Genpact	0	400000	21
56	Geny Medium	2	450000	31
57	GGK Technology	8	800000	144
58	Goldman Sachs	1	780000	1
59	Google	0	1000000	115
60	Grey Orange	3	1000000	113
61	Hackett Group	1	400000	29
62	Hero Motor Corp Ltd.	3	550000	15
63	Hewlett Packard	2	800000	52
64	Hitachi Consulting	4	900000	107
65	Houzify	2	1800000	110
66	Hyundai Mobis	3	650000	48
67	Hyundai Motors	0	600000	94
68	Idea Cellular	4	500000	34
69	Idea Forge	0	1200000	46
70	IMI Mobile	1	600000	1
71	iMomentous Mobile Solutions	2	600000	9
72	IMS Health	0	550000	5
73	Indus Valley Partners	2	1160000	82
74	Infoworks	3	1100000	112
75	Innopark	2	1000000	19
76	Intellect Design(Polaris)	5	500000	15
77	iRunway	4	800000	32
78	Jivox	3	1500000	43
79	Johnson Controls	9	750000	79
80	JP Morgan CIB	1	1400000	104
81	JP Morgan Investment Banking	4	800000	4
82	Kustom Made	0	1100000	120
83	L&T Construction	2	538000	63
84	L&T Metro	2	450000	15
85	LexInnova Technologies Pvt. Ltd.	7	1167000	207
86	MAQ Software	1	500000	6

SI No	Name of Company	Offers	CTC	No of Interviews
87	MarketFront	1	360000	15
88	Mathworks	1	1200000	24
89	MediaTek	2	2201436	36
90	Medium Healthcare Consulting	1	600000	1
91	Medplus health services	5	900000	120
92	Meritus Intelytics	2	600000	2
93	Metapointer Labs	2	500000	34
94	Microsoft IDC	10	2100000	151
95	Mofirst	2	1400000	110
96	Mordor Intelligence	8	450000	63
97	Morgan Stanley	6	1617000	259
98	MuSigma	13	450000	267
99	Mylan Lab	1	250000	1
100	MySmartPrice	1	1025000	1
101	Nanthealth	2	900000	90
102	National Payment Corp of India	0	514000	11
103	National Stock Exchange	1	600000	45
104	Netapp	0	1846309	8
105	New Age TechSci Research Pvt. Ltd.	0	600000	55
106	Next Education	13	1000000	90
107	NIIT Technology	1	700000	8
108	Nowfloats	0	2500000	83
109	Nucleus Software	1	1000000	54
110	Nutanix	4	3500000	80
111	NVIDIA	3	1140000	3
112	NXP Semiconductors	2	1119308	57
113	Open World Money	6	900000	240
114	Oracle India	25	2200000	250
115	Oracle - OFSS	9	560000	101
116	Oracle FAD	4	1200000	4
117	Orbees	5	600000	172
118	Paypal	1	2510000	85
119	Pokarna	1	600000	6
120	Practo	2	1994000	142
121	Puzzolana	1	350000	21
122	Qualcomm	19	1400000	124
123	RAAM Group	2	500000	25
124	Raksan Consulting	3	450000	13
125	Rao IIT	6	700000	18
126	Redpine Signals	2	680258	33
127	Report Garden Technologies	4	450000	4
128	Saavn Media	1	1400000	88
129	SAP Labs	7	900000	134
130	Securifi	2	700000	31



SI No	Name of Company	Offers	CTC	No of Interviews
131	Seagate	0	1000000	6
132	Shaadi.com	0	700000	17
133	Sierra-Cedar	4	450000	39
134	SKF	1	472000	17
135	Smartprix	0	2200000	144
136	Societe Generale Global Solution Center	8	850000	61
137	Sokrati	0	450000	48
138	Stayzilla	1	1500000	1
139	Steel Wedge Software	1	900000	1
140	Strand Life Science	2	375000	8
141	Swiggy	2	1000000	65
142	Synopsys India Pvt Ltd	2	1158240	88
143	Takshashila	3	600000	40
144	Tata Advanced Systems	3	393000	33
145	TATA Motors	4	616000	4
146	TCS	0	630000	43
147	Techsofpy	3	600000	49
148	Tejas Networks	3	800000	67
149	Teradata	1	1100000	50
150	Tesco	1	825000	1
151	Texas Instruments	2	1510000	106
152	Thomson Reuters	0	400000	13
153	Thornton tomasetti	1	575000	5
154	Thorogood	3	1100000	260
155	Tonbo Imaging	2	810000	2
156	Tresvista Financial Services	7	400000	73
157	Uber	1	268000	1
158	United Health Group	8	1198000	98
159	Uurmi	2	550000	29
160	Virtusa	7	500000	37
161	Wadhvani Foundation	1	315000	1
162	Walmart	4	1857700	201
163	Wipro	11	600000	37
164	Works Application	1	6000000(INT)	48
165	Zemoso	0	739000	81
166	Zocalo	0	650000	81
167	Zomato	0	1200000	121
168	ZS Associates	1	800000	1
169	Zuti	3	600000	16
170	Zynga Game Network India Pvt. Ltd	1	600000	1
<b>TOTAL</b>		<b>528</b>		<b>10083</b>

Branch	Placed %	Total Students	Placed Students	Job Offers	Max(LPA)	Avg(LPA)	Min(LPA)
<b>Registered Students</b>	76.74	662	508	528	3500000	1052428	250000
B.E. Chemical	66.67	54	36	37	1617000	628757	250000
B.E. Civil	69.44	36	25	26	1617000	642654	400000
B.E. CSE	95.56	135	129	136	3500000	1553629	450000
B.E. ECE	86.67	105	91	97	1612975	844418	400000
B.E. EEE	64.89	94	61	63	2950000	819716	360000
M.Sc. IS	100.00	23	23	24	2700000	1065869	450000
B.E. Mechanical	69.57	69	48	48	1100000	624260	350000
B. Pharmacy	62.50	8	5	5	600000	500000	450000
B.E. E&I	87.50	32	28	28	1198000	737511	400000
B.E. Manufacturing	50.00	28	14	16	1070000	540857	268000
M.Sc (Hons.) Biology	100.00	1	1	1	280000	280000	280000
M.Sc (Hons.) Chemistry	0.00	0	0	0	0	0	0
M.Sc (Hons.) Maths	0.00	0	0	0	0	0	0
M.Sc(Economics)	100.00	1	1	1	825000	825000	825000
M.Sc (Hons.) Physics	50.00	4	2	2	450000	382500	315000
M. Pharma	100.00	5	5	5	450000	395400	345000
M.E. Bio Technology	25.00	8	2	2	375000	375000	375000
M.E. Chemical Engineering	12.50	8	1	1	387000	387000	387000
M.E. Communication Engineering	100.00	9	9	9	1600000	1408333	700000
M.E. Computer Science	85.71	7	6	6	1596000	1381333	900000
M.E. Design	42.86	7	3	3	1200000	1050000	750000
M.E. Embedded Systems	75.00	4	3	3	1600000	1083333	750000
M.E. Information Security	88.89	9	8	8	2850000	950000	500000
M.E. Structural	87.50	8	7	7	1200000	682142	300000
M.E. Thermal	0.00	7	0	0	0	0	0

'Annexure B3-6'

(5 Pages)

Ref. AR 2016 Page No. B3-53

**RESEARCH PROJECT GRANTS**

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
1	Role of interleukin 22 in diabetic wound healing and regeneration	Dr. Onkar kulkarni	DST	Pharmacy	2726000	3 years	27.01.16
2	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring	Dr. G R Sabareesh	DST	Mechanical Engg.	2604000	3 years	14.03.16
3	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof. D. Sriram	DBT-Tata Innovation	Pharmacy	2700000	3 years	23.03.16
4	"Design and Thermal Analysis of Electronic Controller Mounted on Disc"	Prof. Jeevan Jaidi	M/s HBL Power Systems Ltd.,	Mechanical Engineering	249997	6months	15.04.16
5	Simulation and Modelling to Minimize Porosity level in Aluminum Castings by Ultrasonic Sir Casting	Prof.N S K Reddy	L & N Structural Engineers (P) Ltd	Mechanical Engineering	803200	3 years	02.04.16
6	"Analytical development studies for pharmaceutical products"	Dr.V.V. Vamsi Krishna	Intera Healthcare Private Limited	Pharmacy	1830855	2years	02.05.16
7	Frequency Estimation in Wideband receivers with under sampling	Prof. Yoganandam	DLRL	EEE	999413	9months	16.03.16
8	Screening of immunoglobulin gene sequences of interest	Prof. Suman Kapur	Consultancy Project	Biological Sciences	563886	6month later extension	01.05.16
9	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Prof. Amit Kumar Gupta	DRDO	Mechanical Engineering	4560000	3 years	02.05.16
10	Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin	Dr. Balaram Ghosh	SUN Pharma Advanced Research Company Ltd.	Pharmacy	2900000	2years	19.05.16
11	Development of an encryption algorithm for secure transmission of color images	Dr. Manish Kumar	DST	Mathematics	1508053	3 years	25.05.16
12	Regenerating Tank systems for enhanced livelihoods: An evaluation of Mission Kakatiya (MK) project in Telangana	Dr. Srinivas Sajja	ICSSR	Humanities & Social Sciences	30000	3 months	01.04.16
13	Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug	Dr. Balaram Ghosh	Reddy's Lab	Pharmacy	900000	3years	16.09.16
14	Performance evaluation of backfill soils partially replaced with building derived materials	Dr. Anasuya Guhary	DST	Civil Engineering	2443710	3years	12.09.16
15	"Hydrogen storage in mesoporous polymer derived	Dr. Sujith R	DST	Mechanical Engg	4238240	3years	27.09.16

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
	ceramics for automotive applications						
16	Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements	Prof .Puna Rao & Prof. Shrikant Charde	Shahsi Phytochemical Ltd	Pharmacy	574560	2years 4months	26.09.16
17	Synthesis of iron oxide nanoparticles for propellant fuel applications	Dr. Balaji Gopalan	Premier Explosives Limited	Chemistry	1215000	1year	01.09.16
18	Functional role of histone deacetylase 5 (HDAC5) in the pathogenesis of chronic kidney diseases and renal fibrosis	Dr. Onkar Kulkarne	DBT	Pharmacy	7016800	3years	30.09.16
19	Maintenance of sanitation and solid waste management for swachh Andhra Pradesh	Dr. Sankar Ganesh	Ascent Leadership & Management Consultants (P) Ltd,	Biological Sciences	350550	7months	15.10.16
20	Investigation on pro-inflammatory cytokine inhibitory low molecular weigh metabolites of Pseudomonas sp.ABS-36 for the treatment of renal injury	Prof. Sajeli Begum	DST	Pharmacy	2439363	3years	22.12.16

#### APPROVED PROJECTS DURING JANUARY - DECEMBER 2016

##### Details of the Sponsored Projects

###### Dr. Onkar Kulkarni:

- Title of the Project: Role of interleukin-22 in diabetic wound healing and regeneration
- Funding Agency: DST young scientist
- Status: On-going
- Objectivity: The objectives of the proposed study are
  - To understand the effect of hyperglycemia on IL-22 expression in diabetic wounds
  - To understand the role of IL-22 in diabetic wound healing
  - To design novel drug delivery system for IL-22 administration for diabetic wounds

###### Dr. G R Sabareesh

- Title of the Project: Studies on remaining useful life prediction considering Multicomponent failures in a wind turbine using prognostic health monitoring techniques
- Funding Agency: DST-SERB
- Status: On-going
- Objectives: To develop a remote online system capable of continuous tracking, and estimating the trend of failure in critical components such as bearings and gears in a wind turbine gear box and the interaction between these component failures. To estimate non-dimensional feature vectors capable of classifying a faulty vibration signature from a healthy vibration signature of a component irrespective of component size. To determine the remaining useful life of critical components such as gears and bearings in a wind turbine gear box, using data-driven approaches, considering variable speed, variable load and interaction between failures using vibration signatures.

###### Prof. D. Sriram

- Title of the Project: Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis
- Funding Agency: DBT-Tata Innovation
- Status: On-going

**Prof. Jeevan Jaidi**

1. Title of the Project: "300 kW Motor-Controller (as part of Propulsion System): Thermal Simulations and Analysis to Study Hot Spots"
2. Funding Agency: HBL Power Systems Pvt Ltd., Hyderabad.
3. Status: Completed (May – July 2016).
4. Objectives: To perform detailed thermal simulations and predict the "Hot Spots" on Controller-Shell surfaces for different motor speeds, Controllers (Derlin and MOSFET) and Controller capacities. Subsequently, based on the predicted peak temperatures on Controller surface, suggest the reliable and economical Controller for the 300kW Motor-Controller used as part of underwater propulsion system for defence application.

**Prof. N S K Reddy**

1. Title of the Project: Simulation and Modelling to Minimize Porosity Level in Aluminium Castings by using Ultrasonic Stir Casting
2. Funding Agency: L & N engineering PVT Limited
3. Status: On-going
4. Objectivity: The project will exploit its potential in casting, in order to meet the complex challenges of the world foundry development Strategy. The competitiveness will be increased via restructuring by shifting manufacturing objectives from cost orientation to optimal process. Finally, the most important fact, improving quality of casting in industrial production is a step into direction using for ultrasonic assisted casting process is essential for the future.

**Dr. V.V. Vamsi Krishna**

1. Title of the Project: Analytical development studies for pharmaceutical products
2. Funding Agency: Intera Healthcare Private Limited
3. Status: On-going

**Prof. Yoganandam**

1. Title of the Project: Frequency Estimation in Wideband receivers with under sampling
2. Funding Agency: DLRL
3. Status: On-going

**Prof. Suman Kapur**

1. Title of the Project: Screening of immunoglobulin gene sequences of interest
2. Funding Agency: Consultancy
3. Status: On-going

**Prof. Amit Kumar Gupta**

1. Title of the Project: Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment
2. Funding Agency: ARMREB, DRDO
3. Status: On-going
4. Objectivity: The project is intended to test a novel process of CGP on high strength materials, e.g., Ti-6Al-4V for armour applications. The intention of this project is to improve the mechanical properties of these materials by CGP and heat treatment processes, which in turn may improve the ballistic properties. The project is targeted on developing new novel process to improve the strength of the materials so that the thickness of the metals used in armour applications can be reduced, thereby increasing the mobility of the target application, while maintaining the equivalent or superior standard in protection.

**Dr. Balaram Ghosh**

1. Title of the Project: Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin
2. Funding Agency: SUN Pharma Advanced Research Company Ltd.
3. Status: On-going

**Dr. Manish Kumar**

1. Title of the Project: Development of an encryption algorithm for secure transmission of color images
2. Funding Agency: DST-SERB,
3. Status: On-going
4. Objectivity: Security of images becomes an important agenda in the present era. Keeping the digital information safe from being misused, is one of the major concerns. New methods are introduced every day to keep the data secure, but unauthorized persons (i.e. hackers or attackers) are always trying to break those methods or protocols to fetch the sensitive beneficial information from the data. Therefore, security of images is a critical issue to protect them from hackers. In this project, we will develop new, fast, and secure encryption algorithms with low computational cost for images to transmit through network efficiently and prevent it from being accessed by unauthorized people. Further, it is necessary to ensure the recovery of original information without any loss.

**Dr. Srinvas Sajja**

1. Title of the Project: Agrarian Transformation through Tank Regeneration: A review of Mission Kakatiya project in Telangana
2. Funding Agency: ICSSR-Southern Research Centre
3. Status: Completed.
4. Objectivity: An evaluation of the project based on the first 2 years of implementation, where role of community in the nature of works being undertaken was investigated.

**Dr. Balaram Ghosh**

1. Title of the Project : Formulation development and physico-chemical/in vitro/in vivo characterization of a nano-suspension formulation of an anticancer drug
2. Funding Agency: Reddy's Lab
3. Status: On-going

**Dr. Anusua GuhaRay**

1. Title of the Project : Performance evaluation of back fill soils partially replaced with building derived materials
2. Sponsoring agency: DST-SERB
3. Status: On-going
4. Objectivity: Geotechnical and material characterization of available local soil and building derived material separately (in progress, 1 conference paper presented). Experimental assessment of compaction characteristics of these materials at different mix proportions (in progress). Experimental assessment of shear strength behavior and resilient modulus of these materials at different mix proportions. Assessing the suitability of BDM-soil mixture as a foundation bed for embankments. Development of a numerical model to predict the behavior of BDM - backfill mixture.

**Dr. Sujith R**

1. Title of the Project: Hydrogen storage in mesoporous polymer derived ceramics for automotive applications
2. Sponsoring agency: DST
3. Status: On-going
4. Objectivity: : (i) Synthesis of mesoporous polymer derived ceramics  
(ii) Estimate the pore size and specific surface area of the pores  
(ii) Characterize the hydrogen storage capability of mesoporous ceramics

**Prof .Puna Rao & Prof. Shrikant Charde**

1. Title of the Project : Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements
2. Funding Agency: Shahsi Phytochemical Ltd
3. Status: On-going

**Dr. Balaji Gopalan**

1. Title of the Project : Synthesis of iron oxide nanoparticles for propellant fuel applications
2. Funding Agency : Premier Explosives Limited
3. Status: On-going

**Dr. Onkar Kulkarni:**

1. Title of the Project: Functional role of HDAC5 in the pathogenesis of chronic kidney disease and renal fibrosis
2. Funding Agency: DBT (IYBA 2015)
3. Status: On-going
4. Objectivity: The objectives of the proposed study are
  - a. To understand the functional role of HDAC5 in chronic renal injury and renal fibrosis
  - b. To evaluate the therapeutic potential of HDAC5 inhibitors in chronic renal injury and renal fibrosis

**Dr. Sankar Ganesh**

1. Title of the Project: Maintenance of Sanitation and Solid Waste Management for Swachh, Andhra Pradesh
2. Funding Agency: Municipal Administration and Urban Development, Government of Andhra Pradesh
3. Status: On-going
4. Objectivity: To guide the Urban Local Bodies of Government of Andhra Pradesh for effective implementation of Municipal Solid Waste Management Rules 2016 of the Government of India, National Green Tribunal directives and other relevant regulations in a systematic manner, with reference to source segregation, collection, transportation and scientific handling of solid waste and environmental safeguard measures.

**Dr. Sajeli Begum A**

1. Title of the Project: Investigation on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS-36 for the treatment of renal injury
2. Funding Agency: DST
3. Status: Sanctioned
4. Objectivity:
  - To isolate low molecular weight metabolites from the culture broth of Pseudomonas sp. ABS-36 strain
  - To perform cell based in-vitro assays on isolated compounds to identify pro-inflammatory cytokine inhibitory molecules targeting TNF- $\alpha$ , IL-1 $\beta$  and IL-6.
  - To study the effect of potential compounds (based on in-vitro result) under renal inflammatory animal models.

'Annexure B3-7'

(6 Pages)

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## List of Equipment procured in the year 2016

S.No	Item Description	Qty	Bill Amount	End user	Ledger Folder
1	DELL OptiPlex 3020 Mini tower BTX Base Intel core i5-4590 Quad core processor/8GB RAM/1TB HDD/18.5" LED Monitor with Win8.1	10 Nos	₹ 519,998.06	CAD Lab	Equipment
2	Microscope Equipments	01 Nos	JPY 800000, INR 438671	Civil Engg	Equipment
3	Thermo Scientific Thermolyne Benchtop Muffle Furnace	01 No	USD 3700, INR 250683	Mechanical Engg	Equipment
4	30W Street Light Fixture Make: Capart, Code: CAPLEDSL2535,	100 Nos	₹ 485,480.00	Ele Maintenance	Equipment
5	Arbitrary/Function Generator: 2Channel: 125Ms:25MHz MakeTektronix/AFG1022	22 Nos	₹ 637,560.00	EEE	Equipment
6	Mac Book Pro MJLT2HN/A (15" Retina Core i7 2.5 GHz/16GB/512GB/AMD Radeon R9 M370x w /2GB)	01 Nos	₹ 187,500.00	Prof Hota	Laptop
7	Supermasscolloider ultra fine friction Grinding Machine	01 Nos	JPY 2300000, INR 1256509	Chemical Engg	Equipment
8	Micro GC	01 Nos	USD 25759.57, INR 1754613	Chemical Engg	Equipment
9	Heidolph Magnetic Stirrers	01 Nos	Euro 1350 INR 99652	Dr Manab Chakravary	Equipment
10	Wacom DTH-2242 (Pen & Touch) 21.5"	02 Nos	₹ 300,720.00	ESD	Equipment
11	Software SIMULIA Academic Abaqus/CAE SIMULIA Academic Abaqus Analysis Tokens	01 Nos	₹ 343,500.00	CAD Lab	software
12	Software COMSOL Multiphysics & add on modules	01 Nos	₹ 737,485.00	CAD Lab	software
13	Software COMSOL Corrosion Module Geomechanics Module	01 Nos	₹ 237,600.00	CAD Lab	software
14	PSIM Simulation Software	01 Nos	₹ 403,240.00	EEE	software
15	Design Builder Software	01 Nos	INR 132548	CAD Lab	software
16	NI Equipment	01 Nos	₹ 1,240,915.00	EEE	Equipment
17	FDTD Solutions Latest Version academic	01 Nos	₹ 198,528.00	CAD Lab	software
18	Premium U410 Upright Freezer -86 Deg C Cap: 410L 14.5Cu.Ft.	01 nos	₹ 458,325.00	Biological Science	Equipment
19	Xerox Work Centre 5325 MFP Printer	01 Nos	₹ 147,000.00	Mathematics	Printer & Scanner
20	Mini Portable Tera Cell Casting Moule Mini Trans blot Module	01 Nos	₹ 198,960.00	Dr Arti Dhar	Equipment
21	Audio Video Equipment with accessories for Classroom	07 Nos	₹ 620,431.00	EEE	Equipment
22	DMi8 coded incl. Nosepiece	01 Nos	EURO 15300, INR 1502500	Dr Swati Biswas	Equipment
23	Hg gas discharge lamp 103 W/2	01 Nos	EURO 5450, INR 393518	Dr Swati Biswas	Equipment
24	Fiber Optika Light Runner Premium Kit with Accessories	02 Nos	₹ 1,060,000.00	EEE	Equipment
25	Dell Precision Tower 5810 XCTO Base	01 Nos	₹ 159,742.50	Dr Satish Kumar Dubay	Equipment
26	Lenovo x31100M5 server Lenovo Think Centre E73	02 Nos 03 Nos	₹ 238,694.00	EEE	Equipment
27	6KVA UPS System with batteries	01 Nos	₹ 120,516.00	Physics	Equipment
28	Microcontroller Based SRM with Drive Microcontroller Based PMBLDC with Drive	01 Nos 01 Nos	₹ 383,940.00	EEE	Equipment



S.No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	Microcontroller Based Stapper Motor with drive	01 Nos			
29	CNC Slant Bed Lathe -MTAB Industrial Control Model: XLTURN)	01 Nos	₹ 620,000.00	Central Workshop	Equipment
30	DELL Optiplex 3020 Minitower BTX Base Intel Corei5, 8GB DDR3,1TBHard Drive,	03 Nos	₹ 150,000.00	Mechanical Engg	Computers
31	Dell Optiplex minitower CTO Intel Core i3, 4GB DDR3, 500GB DDR Hard drive, 21.5" LED Monitor	03 Nos	₹ 109,409.00	EHD	Computers
32	Dell Power Edge R730 server Xenon E5, 8GB Ram, 600GB Hard drive	01 Nos	₹ 295,312.50	Mathematics	Computers
33	PowerEdge R730 Server xenon E5, 16GB RDIMM, 600GB SAS Hardisk	02 Nos	₹ 713,475.00	Mathematics	Computers
34	DELL Optiplex 3020 Minitower BTX Base Intel Corei5, 8GB DDR3,1TBHard Drive,	10 Nos	₹ 475,538.00	Mathematics	Computers
35	DELL Optiplex 3020 Minitower BTX Base Intel Corei5, 8GB DDR3,1TBHard Drive,	10 Nos	₹ 475,538.00	Mathematics	Computers
36	Tubular furnace 1200 Deg C Table top	01 Nos	₹ 120,225.00	Dr Sujith R	Equipment
37	1.5TR Split AC 3Star Model 3HW18FA with 4KVA stabilizer & Access 2TR Split AC 3Star Model: 3HW24FAX with 4KVA stabilizer & Access	01 Nos	₹ 544,250.56	Biological Science	Equipment
38	Upgradation of ANSYS Academic research CFD Software	01 Nos	₹ 289,999.00	CAL	software
39	Visiprep SPE Vacuum Manifold	01 Nos	₹ 164,880.00	Pharmacy Dept	Equipment
40	Shimadzu prominence Quaternary Gradient HPLC System with accessories	01 Nos	₹ 1,650,000.00	Dr V V Vamsi Krishna	Equipment
41	SMCT-SAI2-XIT7140A/Training module Components with Power Supply	01 Nos	₹ 201,467.00	Mechanical Engg	Equipment
42	Polariscope	01 Nos	₹ 134,681.00	Mechanical Engg	Equipment
43	Mechatronics System development Kit Accessories	01 Nos	₹ 764,174.25	Mechanical Engg	Equipment
44	Zed Developm;ent board with casing	14 Nos	₹ 543,900.00	EEE	Equipment
45	Dell Precision Tower 5810 XCTO Base Intel Xeon E5-1650v3, 32GB(4*8GB), 1TB ATA, 23.8" Monitor	01 Nos	₹ 150,000.00	Dr Supradeepan K	server
46	Samsung LCDs	03 Nos	₹ 155,605.50	ESD	Equipment
47	r Soft CAD GULv 2015.06 software 4 users	01 Nos	₹ 849,450.00	EEE	software
48	KEL PLUS automatic Nitrogen Protein Estimation system COD Module for COD Determination KEL PIUS Automatic Distillation	01 Nos	₹ 199,490.00	Dr P Sankar Ganash	Equipment
49	Dell Precision Tower 5810 XCTO Base	01 Nos	₹ 237,501.00	Biological Science	server
50	Mikes Speakers & stage Pass	37 Nos 6 Nos	₹ 877,226.00	ESD	Equipment
51	Heidolph Magnetic Stirrers set Spin bars Cylindrical	01 Nos	Euro 1988, INR 149868	Prof D Sriram	Equipment
52	EPSON LCD Projectors Model: EB-965H	02 Nos	₹ 118,599.00	ESD	Equipment
53	Laptop HP204G4 i3-5005U/4Gb DDR3/1TB SATA/Win 10 SL/14" LED/DVDRW/1 Year Onsite	03 Nos	₹ 114,345.00	Placements	Laptop
54	Wifi Access points and implimentation items	LS	₹ 1,612,277.00	IPC	Equipment
55	Blue Star 1.5TR Air Conditioner Model: 3HW18JBX with 4KVA Stabilizer	03 Nos	₹ 110,552.00	Medical Centre	Equipment
56	Dynamic Mechanic Analyzer	01 Nos	USD 48000, INR3265495	Physics	Equipment

S.No	Item Description	Qty	Bill Amount	End user	Ledger Folder
57	CCTV Cameras supply & Installation	01 Nos	₹ 1,131,016.00	ESD	Equipment
58	AV Equipments & Consum	LS	₹ 331,769.00	CAD Lab	Equipment
59	Thermal Evaporatation coating Unit	01 Nos	₹ 350,370.00	EEE	Equipment
60	Mini Spin Centrifuge	01 Nos	USD 7000, INR 467411	Pharmacy Dept	Equipment
61	DELL Optiplex 3020 Minitower BTX Base Intel Corei3, 4GB DDR3,500GBHard Drive, Ubuntu Linux 12.04, 21.5" monitor	05 Nos	₹ 160,487.00	IPC	Computers
62	Olympus Research Microscope	01 Nos	₹ 113,400.00	Biological Science	Equipment
63	CMOD Equipment	01 Nos	USD 3895, INR 263296	Civil Engg	Equipment
64	Brookfield Rheometer model DV3TRV	01 Nos	USD 8264 555473	Civil Engg	Equipment
65	CNG Sequntial kit LPG Sequntial Kit	01 Nos	₹ 110,000.00	Mechanical Engg	Equipment
66	Steam Power Plant Test Rig	01 Nos	₹ 2,435,874.38	Mechanical Engg	Equipment
67	Micro Focus Dual Generator Mo/Cu P200 Based Single Crystal small <olecule XRD Model XtaLab unit	01 Nos	JPY 37600000, INR 22319941	CAL	Equipment
68	X-Ray Diffraction system ultima IV with ULTIMA IV Goniometer include X Ray Tube	01 Nos	JPY 17940000, INR 10649461	CAL	Equipment
69	Leica TCS SP8 Spectral Congocal Laser Scanning Microscope with High Sensitivity Spactral GaAsP/HyD Dectector	01 Nos	EURO 230000, INR 16607210	CAL	Equipment
70	Nabertherm Tube furnace Model: R120/500/12 Std spec	01 Nos	Euro 3415, INR 250369	Dr Sounal Roy	Equipment
71	Water Chiller Cap: 140Kw	01 Nos	₹ 1,173,625.00	Civil Engg	Equipment
72	DPM 800 with Pressure Sensor Adapter & Tooling Device	01 Nos	₹ 1,225,110.00	Mechanical Engg	Equipment
73	ANSYS Academic Research Mechanical Unlimited Nodes 25 user	01 Nos	₹ 1,330,000.00	CAD Lab	software
74	Mini high performance computing ups & Rack (Master node, 24 Port GB Switch, CPU-CPU & CPU-GPU Computer Node)	01 Nos	₹ 1,510,000.00	Dr Durba Roy	Equipment
75	Blue star Water Cooler SDLX15150A	01 Nos	₹ 380,000.00	Maintenance Division	Equipment
76	Heidolph HEI VAP Value Digital G3 rotary Evaporator	01 Nos	Euro 5215, INR 390880	Chemistry	Equipment
77	Software	01 Nos	USD 5000, INR 302585	EEE	software
78	Radware Linkproof 1008 On demand Switch Active Key for Bandwidth Management	01 Nos	₹ 105,000.00	IPC	Equipment
79	Honda City Car 1.5VXMT Metallica	01 Nos	₹ 1,278,117.00	GAD	Vehicle
80	fluidized bed granualator cap: 0.5 to 5 Kg/Hr	01 Nos	₹ 300,000.00	Chemical Engg	Equipment
81	shimadzu prominence HPLC System	01 Nos	USD 34500, INR 2190540	CAL	Equipment
82	Solar PV and Wind Emulator Hybrid System with Dc Micro Grid	01 Nos	₹ 1,247,500.00	EEE	Equipment
83	Solar Winds network Performance Monitor SL250 Implementation Charges	01 Nos	₹ 682,532.00	IPC	software
84	Electrospinning Unit Model Super ES-2	01 Nos	₹ 694,825.00	Chemical Engg	Equipment
85	Eliza press Gen Next R & D Bi Layer Tablet Press	01 Nos	₹ 980,250.00	Pharmacy Dept	Equipment
86	Zero B Eco Smart 150LPH RO	01 Nos	₹ 126,000.00	Maintenance	Equipment

S.No	Item Description	Qty	Bill Amount	End user	Ledger Folder
				Division	
87	Embedded Evaluation Controller Board ARM-7 Trainer Kit	01 Nos	₹ 176,505.00	EEE	Equipment
88	HMT PRAGA Universal Tool & Cutte Grinding Machine	01 Nos	₹ 994,916.00	Central Workshop	Equipment
89	Lucas2 Cheat Compression Equipment	01 Nos	₹ 950,000.00	Medical Centre	Equipment
90	Double Beam UV -Vis Spectrophotometer (Prove 300 Spectroquant)	01 Nos	₹ 340,000.00	Civil Engg	Equipment
91	Qube XP-S Digital Cinema Server	01 Nos	₹ 369,340.00	ESD	Equipment
92	End Note Version X7 Softwer	01 Nos	₹ 107,078.00	CAD Lab	software
93	AV Equipment	01 Nos	₹ 1,240,183.00	WILP	Equipment
94	Software DSA TOOLS FOR VSAT, TSAT, SSAT	01 Nos	₹ 134,307.00	EEE	software
95	Jasco Digital Polarimeter	01 Nos	JPY 2325000, INR 1335250	CAL	Equipment
96	Epsilon 1for Academic with OMNIAN	01 Nos	EURO 33000, INR 2498991	CAL	Equipment
97	Vacuubrand Hybrid Vacuum Pump Bench Top Freeze dry System	01 Nos	USD 17999, INR 1225823	Dr Balam Ghosh & Pharmacy	Equipment
98	Solar Street Light 18W Dusk to Dawn Operation Complete System	18 Nos	₹ 450,000.00	Maintenance Division	Equipment
99	Jasco Circular Dichroism Spectrometer	01 Nos	JPY 8400000, INR 5196738	CAL	Equipment
100	Convection Drying	01 Nos	EURO 13888, INR 1026732	Mechanical Engg	Equipment
101	Air Blower for STP Everest Blower Make	01 nos	₹ 154,575.00	Maintenance Division	Equipment
102	Fusion Pulse 6, with accessories	01 Nos	₹ 1,575,000.00	Biological Science	Equipment
103	Eppendorf CO2 Incubator	01 Nos	₹ 440,000.00	Dr Onkar Kulkarni	Equipment
104	Quartz Cuvette Electro Optic Modulator & Power Supply	01 Nos	₹ 138,140.00	Dr Kannan Ramaswamy	Equipment
105	Tool Vibration Measuring Device	01 Nos	₹ 450,000.00	Central Workshop	Equipment
106	5HP Submersable Pump Borewell Pump 5HP	04 Nos	₹ 114,300.00	Maintenance Division	Equipment
107	Dell Precision Tower 5810 425w	01 Nos	₹ 148,899.00	Dr J Soumya	Computers
108	Hand Sheet Former SCA Type	01 Nos	₹ 356,095.00	Chemical Engg	Equipment
109	Servers (Avaya IP Office communication sys)	01 Nos	₹ 1,325,000.00	IPC	Equipment
110	Xerox Work Centre 5945- A3-B/W	01 Nos	₹ 265,585.00	SWD	Equipment
111	LCD Projector	05 Nos	₹ 292,146.00	ESD	Equipment
112	Bio Safety Cabinet LC-09 Microscope	01 Nos 01 Nos	₹ 400,000.00	Dr Arti Dhar	Equipment
113	2TR 5Star Inverter Technology Split AC Blue Star Make -2 Nos	02 Nos	₹ 134,709.00	CAL	Equipment
114	3D Printer Kit	01 Nos	₹ 412,818.00	EEE	Equipment
115	Autoclave Portable	01 Nos	₹ 116,655.00	Chemical Engg	Equipment
116	Spares for Sorvall ST 16R Centrifuge	01 Nos	€ 1536.8 INR 117145	Pharmacy Dept	Equipment
117	Olympus Trinocular Research Microscope	01 Nos	₹ 425,775.00	Biological Science	Equipment
118	Dell Precision Tower 3620 XCTO Base & 25" Monitor	01 Nos	₹ 134,955.99	Dr Manish Kumar	Computers
119	Water Coolers SDLX-8120 -5Nos	05 Nos	₹ 217,550.00	SWD	Equipment
120	Test rig for Evaluating alternate Fuels	01 Nos	₹ 754,750.00	Mechanical	Equipment

S.No	Item Description	Qty	Bill Amount	End user	Ledger Folder
				Engg	
121	RFID Solutions Bibliotheca RFID Smartadmin, Tagging service & Inst Charges	01 Nos	₹ 1,884,750.00	Library	Equipment
122	Matlab Software	01 Nos	₹ 1,204,880.00	CAD Lab	software
123	Xerox Work Centre 5325	02 Nos	₹ 294,000.00	ESD	Equipment
124	Software	01 Nos	USD 12000 INR 728856	EEE	software
125	Olympus Reaserch Microscope	05 Nos	₹ 165,375.00	Biological Science	Equipment
126	Prowess Multi User Lan	01 Nos	₹ 109,440.00	Economice	software
127	Motorised Tread Mill	03 Nos	₹ 600,000.00	SWD SAC	Equipment
128	Water Coolers SDLX-8120	10 Nos	₹ 435,100.00	SWD	Equipment
129	Steel Tank with Lid, Hydraulic Jack, pumping Unit, Data Acquisition System	01 Nos	₹ 553,500.00	Civil Engg	Equipment
130	Fans 1200mm	100 Nos	₹ 121,370.00	Maintenance Division	Equipment
131	Software PLAXIS 2D	01 Nos	₹ 591,525.00	Dr Anasva Guharay	software
132	4 Purifier Logic + Class II type A2 Biosafety Cabinet	01 Nos	USD 6600 INR 449560	Dr Onkar Kulkarni	Equipment
133	Four Channel Modular Bath System	01 Nos	EURO 21000, INR 1430415	Dr Arti Dhar	Equipment
134	DC Bridge Amplifier with SEN-02	01 Nos	EURO 1875 INR 144974	Dr Arti Dhar	Equipment
135	Micro Vickers Hardness Tester	01 Nos	₹ 954,046.00	Mechanical Engg	Equipment
136	Heidolph Rotovac 20 Vacuum Pump	01 Nos	Euro 3900, INR 295682	Pharmacy Dept	Equipment
137	NI My RIO Kits	14 Nos	₹ 171,303.00	EEE	Equipment
138	Aquaguard Classic Water purifier	25 Nos	₹ 211,250.00	Maintenance Division	Equipment
139	Cisco Switchs WS-C2960X-48TS-LL & 24TS-LL	05 Nos	₹ 404,512.50	IPC	Equipment
140	AVAYA 1608 IP Phones	30 Nos	₹ 243,000.00	IPC	Equipment
141	Intel Core i7, Asus Z170K Motherboard, 2TB, 16Gb DDR4, wireless Keyboard & Mouse,	01 Nos	₹ 140,850.00	SWD	Equipment
142	Spectrophotometer Pharo 100	01 Nos	₹ 199,500.00	Prof Suman Kapur	Equipment
143	Trone Camarero-DS300TR Work station	01 Nos	₹ 236,493.00	Chemistry	Equipment
144	Storage Rack, Atta Kneader wet Grinder Pulverizer Worktable	05 Nos 01 Nos 01 Nos 01 Nos 01 Nos	₹ 236,493.00	SWD	Equipment
145	Celfrost Freezer -25oC Upright Refrigerator FKG-320	01 Nos 01 Nos	₹ 115,550.00	Dr Onkar Kulkarni	Equipment
146	Magnesium Metal Stir Casting Furnace with Elcometer	01 Nos	₹ 732,800.00	Central Workshop	Equipment
147	Magnus Inclined Momocluar Microscope Model MLM	01 Nos	₹ 113,400.00	Pharmacy Dept	Equipment
148	David SLS -2 3D Scanner & Sense 3D Scanner	01 Nos	₹ 326,182.00	Mechanical Engg	Equipment
149	Sigma Delta ADC, Shipping	01 Nos	₹ 259,823.00	Dr Sabareesh G R	Equipment
150	Nebulizer Assy, DerectorPL, DSC Measuring Unit	01 Nos	USD 8755, INR 591838	CAL	Equipment
151	WACOM DTH-2242 21.5"Pen Monitor	02 Nos	₹ 291,900.00	ESD	Equipment

<b>S.No</b>	<b>Item Description</b>	<b>Qty</b>	<b>Bill Amount</b>	<b>End user</b>	<b>Ledger Folder</b>
152	Vacuum Oven	01 Nos	₹ 119,973.00	Chemical Engg	Equipment
153	Tower Safety Cabinet Model: 6010LEGS	01 Nos	USD 22750, INR 155619	Chemistry	Equipment
154	Apple Macbook Pro 15" Laptop	01 Nos	₹ 165,860.00	Prof D Sriram	Equipment
155	David SLS -2 3D Scanner	01 Nos	₹ 799,929.00	Dr Chandu Parimi	Equipment
156	Countess II FL each	01 Nos	USD 3024, INR 205980	Pharmacy Dept	Equipment
157	Sliding RTP Furnace Supply & Installation	01 Nos	₹ 481,800.00	EEE	Equipment
158	WSDA Basse 104SK Wireless USB Starter Kit, V-Link LXRS M Wireless 7 Channel analog input sensor node	01 Nos	₹ 138,710.00	Mechanical Engg	Equipment
159	Clear Air Vertical Laminar Airflow Benches In Ply-lam	01 Nos	₹ 107,914.00	EEE	Equipment

Annexure 'B3-8

(11 Pages)

Ref: AR 2016

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2016 IN HYDERABAD CAMPUS****Second Semester 2015-2016**

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2012A1TS484H	Shubham Mishra	Synthesis and self- assembly of monodispersed silver Nano- particles	Dr. Chandan Upadhyay/Dr. A. Ramesh Babu	Chemical Engineering
2	2011B2A1685H	Rudresh Gajanan Naik	Surface treatment of fibers using enzymes	Dr. D.Purnima	Chemical Engineering
3	2011B5A4544H	Vishal Ramesh	modeling laminated composites	Prof. Vadim Shapiro/ Dr. Arvind Raghavan	Physics
4	2011B5A7535H	Aditya Bhatia	Applying multivariate analysis to hunt for new physics in proton. Proton collisions	Dr.Seema Sharma/ Dr. Rahul Nigam	Physics
5	2011B5AA363H	Vivek Manu Kakani	Growth characterization and transport properties of bismuth selenide	Dr. Harihara Venkataraman/Dr. P. S. Anil Kumar	Physics
6	2011B5A3521H	Damineni Satya Phani Rahul	Analysis of Brownian motion using image analysis	Prof. Thiruvikraman	Physics
7	2012A3TS015H	Vineet Karimpil Cherian	Ultra-wide band low noise amplifiers	Dr. Samar Saha/Prof. M B Srinivas	EEE
8	2012A3TS247H	Manasi Dilip Muglikar	Development of camera and hardware system for embedded machine vision application	Dr.Sourabh Bodas/ Yoganandam	EEE
9	2012A3TS931H	Dolly Shahani	Design & implementation of a program read circuit for a multilevel resistive RAM array	Dr. Haseen Aziza/ Prof. M B Srinivas	EEE
10	2011AAA7121H	Akash Raj K N	Development and implementation of bays factors for ordinal tests	Prof.Eric-Jan Wagenmakers/Prof. Y. Yoganandam	EEE
11	2012A8TS328H	Dhaivat J Bhatt	Road curb detection to assist driverless car	Prof. Madhav Krishna/ Venkateshwaran Rajgopalan	EEE
12	2012AATS077H	Shashank Tripathi	Classification of Alzheimer disease progression using MRI images	Prof. Samuel Kadoury/Prof. Y. Yoganandam	EEE
13	2012A8TS423H	Mahavadi Kashyap	Artificial neural networks and its applications on financial markets	Dr. Sivarama /Subha Mada	EEE
14	2012A3TS094H	Manoharan Naidu	Determining optimal registration method for brain MRI of ALS patients	Dr. Venkateshwaran Rajagopalan	EEE
15	2012A3TS294H	Shuvam Gupta	Applications of power electronic transformers in Grid integration of renewable energy sources	Prof. G. Bhuvaneshwari	EEE
16	2012A8TS360H	Aakash Jain	PLC Implementation in the process of manufacturing plastic carry bags	Dr. Alivelu Manga Parimi	EEE
17	2012AATS144H	Jayanth. K	MEMS optical Gyroscope	Dr. Prashant Kumar Pattnaik	EEE
18	2012AATS131H	K.Swaminathan	Setting up the test-bed for internet of things	Prof. C. Hota	EEE
19	2012AATS030H	Aditya Nitin Raste	A feasibility study of establish PAN-India internet connectivity	Prof.Yoganandam	EEE

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
20	2011B4A3435H	P. Abishek Reddy	Design of low cost heterojunction solar cells	Dr. Souvik Kundu	EEE
21	2012A8TS405H	Maruthi Tejaswi	Multivariate analysis of the electronic industry	Dr. Ramana Sonti	EEE
22	2011B1A4737H	Dhruv Pramod Ghiya	Stability analysis of flutter in articulated fluid conveying pipes	Prof. Ranjan Mukherjee/Dr. Sankar Ganesh	Biological Sciences
23	2011B1A5709H	K Sai Goutham Reddy	Glycine repeats in head region of keratins	Dr. Debashree Bandopadhyay	Biological Sciences
24	2012A7TS157H	Vedang Patel	Automated human brain tractography segmentation using curvature points	Dr. Aditya Nigam/Prof. C. Hota	CSIS
25	2012A7TS831H	Naveen Kodali	Improved welfare bounds for posted price mechanisms in combinatorial auction setting	Prof. Ron Lavi/Tathagata Ray	CSIS
26	2012A7TS731H	Siddharth Dalmia	Exploitation of context of proper names recognition in diachronic audio documents	Dr. Irina Iilina/Dr. Aruna Malapathi	CSIS
27	2011B5A7536H	B Hareesh Gautham	Applications of big data techniques to astronomy	Prof. Ajit Kembhavi/Mr. Sanjeev Kumar Singh	CSIS
28	2012A7TS229H	G. Ashwin	Code profiling program analysis and security hardening in IOT	Prof. C. Hota	CSIS
29	2012A7TS044H	Dharur Sameer	IOT test BED	Prof. C. Hota	CSIS
30	2012A7TS056H	Abhishek Kaushik	Security in IOT	Prof. C. Hota	CSIS
31	2012A7TS046H	Korrapati Animesh	Entropy based qualitative analysis of song genre classification	Dr. Aruna Malapati	CSIS
32	2012A7TS151H	Vatsal Mehta	Application of discriminant analysis	Dr. Aruna Malapati	CSIS
33	2012A2TS271H	Siri Meghana	Application of Non-traditional optimization techniques to irrigation planning	Prof. K.S.Raju	Civil Engineering
34	2012A2TS432H	Avinash Soni	Construction management using building information modelling	Prof. Vasani	Civil Engineering
35	2012A2TS150H	Shubi Agarwal	Structural health monitoring under arbitrary loads using wavelet transform, pattern recognition and feature extraction technique	Dr. S C Mohan	Civil Engineering
36	2011B2AA533H	Rahul Toshniwal	Electronic structure properties of perovskite materials from first principle density functional theory	Dr. Subhas Ghosal	Chemistry
37	2011B2A1069H	Veerubhotla Venkata Raghuram	Synthesis and study of PEDOT-PSS templated polyaniline	Dr. Subhalakshmi	Chemistry
38	2012A5TS752H	V Asmitha	Vitamin E- Cholesterol based polymeric micelles for the delivery of chemotherapeutic drug curcumin	Dr. Swathi Biswas	Pharmacy
39	2012A5TS790H	Shreya Jain	Methoxy-poly (ethylene glycol) poly (lactide) micelles for the delivery of photosensitizer chlorin for photodynamic therapy for cancer treatment	Dr. Swati Biswas	Pharmacy
40	2012A5TS755H	K Kishore	Evaluation of Methylglyoxal scavengers using cell culture techniques	Dr. Arti Dhar	Pharmacy

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
41	2012A4TS142H	Abhishek Goyal	CFD studies on selection of elegant numerical frame work for mixing phenomenon in individual flotation cell	Dr. Jeevan Jaidi	Mechanical Engineering
42	2012ABTS611H	Shrivani Pandiya	FEA of tensite testing of composites	Dr. Amrita Priyadarshini	Mechanical Engineering
43	2012A4TS220H	M. Ankit	Study on hybrid nano-composite phase change thermal energy storage materials for heat recovery applications	Dr. Parameshwaran	Mechanical Engineering
44	2011B2A4590H	J.M. Madhoolika	Selection of materials for 3D printing compatible and for biomedical applications	Dr. Ramakrishna Ganesan	Mechanical Engineering
45	2011B5A4529H	Y.V. Nitin Mythreya	Model development and analysis of free well flow	Prof. Jeevan Jaidi	Mechanical Engineering
46	2011 B3A4629H	B.V. Plahari Reddy	Design and analysis of manyland forceps	Prof. Y. V. D. Rao	Mechanical Engineering
47	2012A4TS217H	Ravish Anant Kumbhare	Determination of empirical relationship between design parameter of integrated flexible pins of planetary gearbox for wind turnibes	Dr. Sabareesh G. R	Mechanical Engineering
48	2012A4TS279H	Viraj Panwar	Techno-Scientific and social impact of biogas plants	Prof. M Srinivas	Mechanical Engineering
49	2012A4TS935H	V.N. Balavignesh	Characterization and analysis of flow past tandem cylinders arrangement at low Reynolds	Dr. Supradeepan	Mechanical Engineering
50	2012A4TS331H	Kannaiah Balamangal Kumar	Performance analysis of micro and nan layered MOS2 coated parts using GMDH Algorithm	Prof. N.S.K Reddy	Mechanical Engineering
51	2012A4TS916H	Abhijeet Arote	Energy models for the evaluation of performance of building using SAP	Prof. S.S. Deshmukh	Mechanical Engineering
52	2012A4TS343H	Raja Sekhar Gandrakota	Evaluation of parameters for the development of universal green building index through MCDM techniques for a buildings life cycle	Prof. M Srinivas	Mechanical Engineering
53	2012A4TS329H	V. Siddharth	Review of wall climbing robots and novel design of a versatile wall climbing cot.	Prof. Y. V. D. Rao	Mechanical Engineering
54	2012A4TS149H	Anirudh Shankar	Study of nanomaterials dimensional effects on thermal storage properties of phase change materials for cooling and heating applications	Dr. R. Parameshwaran	Mechanical Engineering
55	2011B4A4594H	Poduvu yogeshwar Reddy	Constitutive flow stress simulation for Ti6Al4U and model validation of using finite element simulation	Prof. N.S.K Reddy	Mechanical Engineering
56	2012A4TS345H	Sree Sankaran Namboothiri	Effect of vehicle body Geometry and passive drag reduction techniques on drag coefficient	Dr. Sabareesh G. R	Mechanical Engineering
57	2012A4TS956H	Aastha Bisht	Plasma discharge based water purification	Dr. Ram Chandra Murthy K	Mechanical Engineering
58	2011B5A4531H	Nikhil Agarwal	Design and optimization of heat exchangers	Prof. Krishan Suresh/ Dr. Sabareesh G.R	Mechanical Engineering
59	2012A4TS349H	Venkata sai Chandrahas	Micro-Machining to familiar its with different micro	Dr. M. Rahman/Dr. Sabareesh G.R	Mechanical Engineering



S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
		Tanguturi	Machining process		
60	2012ABTS499H	Chirag Ishwar Sancheti	Development of rail traffic simulator for optimization of India Railways		Mechanical Engineering
61	2011B3A2538H	Butreddy Kiran Kumar	Consumer behavior study on organic food : A case study in Hyderabad	Dr. Swati Alok	Economics
62	2011B4A7564H	Jampani Kavya	Study of cosmological model and dark energy	Prof. Bivudutta Mishra	Mathematics
63	2011B4A7719H	K Charishma Bhavani	Modularity community structures in networks	R B Bapat/ Dr. V V Awasthi	Mathematics
64	2011B4A7640H	Praveen Venkateswaran	Optimization of DAG based systems	Dr. Maitreya Natu/ Dr. Jaganmohan	Mathematics
65	2011B4A4463H	Edara Sravanthi	Statistical analysis of genetic basis of human diseases and traits	Dr. P. T.V. Praveen Kumar	Mathematics
66	2011B5A7230H	Sudarshan Ghonge	Implementation of ensemble samplers with affine invariance in Bayesian hypothesis testing used in gravitational wave data analysis	Mr. Parameswaran Ajith/ Dr. Tathagata Ray	CSIS
67	2010B1A2651H	G.Ganesh Sai Chaitanya	Nano-material embedded PCM molar for green buildings	Dr. Vinayak Ram	Civil
68	2011B1A2720H	K.Vasundhara	Performance based evaluation of a structure	Prof. P.N.Rao	Civil
69	2011B2A5659H	Sai Rama GM	Evaluation of optimal models for investment in India pharmaceutical industry	Dr. Ramana Sonti	Pharmacy
70	2011B4A4423H	Kartheek Gaddam	Tribological analysis of various solid lubricants using four ball tribotester	Prof. N.S.K Reddy	Mechanical Engineering
71	2011B2A4690H	Samayamantula M.K. Praneeth	Simulations of wind turbine airfoil for different flow conditions	Prof. Jeevan Jaidi	Mechanical Engineering
72	2011B2A4512H	L. Madhavkrishnan	Mechanical properties of various phases of Silica	Prof. Yashoneth/ Dr. R. Parameswaran	Mechanical Engineering
73	2011B1A7697H	Shivasankar Kannan	Analysis of NSI proteins and creations of the MSA tool (Mega parser)	Dr. Debashree Bandopadhyay	Biological Sciences
74	2011B4A7470H	Mayur Hampiholi	Named entity recognition in twitter	Mr. Surender Singh Samanth	CSIS
75	2011B5A3520H	V.V.Raghunandhan	Design of a reconfigurable antenna for wireless communications	Dr. Runa Kumari	EEE
76	2011B3A2583H	Siddharth Kothari	Repair and rehabilitation of reinforced concrete buildings	Dr. Kalyana Rama J S	Civil Engineering
77	2011B3A2560H	Swetha K	Highway project feasibility analysis using HDM 4	Dr.Vinayaka Ram	Civil Engineering
78	2011B4A2551H	Aashish Vyas	Effect of ageing on was modified Bitumen	Dr. Sridhar Raju	Civil Engineering
79	2012A2TS400H	Pallav Sharma	Studies in climate change in the context of organic agriculture	Dr. A. Jagdeesh	Civil Engineering
80	2011B2A2606H	Kolli Venkata Manjeeth	Synthesis and study of light absorbing molecules	Prof. R. Krishnan	Chemistry
81	2011B2A3639H	Sudheer Kumar	Synthesis and study of light	Dr. Subhas Ghosal	Chemistry

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
		Mekala	absorbing molecules		
82	2011B4A1593H	Himanshu Rai	Modelling and Simulations of wet granulation process in a fluidized bed granulator	Dr. Vikranth Kumar Surasani	Chemical
83	2011B5A1532H	Shiva Vishnu Yerva	Polymer energy storage device with electrochromic function	Prof. R. Sujith	Chemical
84	2012A1TS506H	Himakar Prakash V	Characterization of crude oil	Prof. Srikanta Dinda	Chemical
85	2011B1A1707H	B Keshavanand Siddharth	Modelling of a microbial fuel cell	Dr. Balaji KrishnaMurthy	Chemical
86	2011B4A1654H	Joshi Shubhankar Ravindra	Mathematical modelling of glass forming systems	Dr. Karthik Chetan V	Chemical
87	2011B5A3511H	Abishek Krishnan	Determining metrics for reconstruction of cornea using image processing and neural network modeling	Prof. Thiruvikraman	Physics
88	2011B5A7550H	Ashwin Raghavan	Automated measurement of spectral domain -optical coherence tomography	Prof. Thiruvikraman	Physics
89	2011B5A1455H	Prasanth Sukumar	Optical data analysis of nova 1901	Dr. Rahul Nigam	Physics
90	2011B5A3537H	Patil Aashish Rao Saheb	Experimental study of faraday rotation enhancement in iron oxide nanowires to gold coating	Dr. Kannan Ramaswamy	Physics
91	2011B5A2486H	Vem Anirud Reddy	Study of Current induced domain wall motion on perm alloy Nano wires using micro magnetic simulations	Dr. V.S.N Murthy	Physics
92	2011B5A3494H	S V K S Sai Ram	A haronov Bohm effect due to series of solenoids	Dr. Shashideep Gutti	Physics
93	2011B2A5571H	A Rishi V	Synthesis of novel Benz oxazole derivatives for antituburiular activities	Prof. D.Sriram	Pharmacy
93	2011B3A3597H	Makkapati Sivaram	Study of novel materials based solar cells	Dr. Souvik Kundu	EEE
95	2011B2A3658H	Priyamvada Agrawala	Human Recognition and scene understanding	Prof. Pathapratimde	EEE
96	2011B4AA645H	C.S. Uday	Designing of efficient logarithmic converter	Mr. Syed Ershad Ahmed	EEE
97	2011B3AA598H	Neerav Savla	Efficient forecasting of stock market and DJIA 500 using artificial neural network models	Dr. S.K Sahoo	EEE
98	2011B3A3566H	Siddharth Mishra	Game theory application using mat lab	Prof. Prabhakar Rao	EEE
99	2012A3TS120H	J Sanjay	Modelling the viscosity of Nano suspension	Prof. Arvinda Raghavan	EEE
100	2011B5AA485H	Siddharth Manne	Physics based analysis of asymmetric gate Nano electronic fully-depleted semiconductor-on-insulator TFET devices and performance optimization	Prof. Prabhakar Rao	EEE
101	2011B4A4082H	Kakarala Yogeswara Naidu	Tribological analysis of various solid lubricants using Pin-on-Disc tribometer	Prof. N.S.K Reddy	Mechanical Engineering
102	2011B2A4623H	Sai Kiran Reddy	Analysis of share companies are spending their CSR capital		Mechanical Engineering
103	2011B4A2436H	Kota Sarana Hasanth	Study of Fractional differential equations	Dr. Jaganmohan	Mathematics

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104	2011B4A2591H	Kartikey Singh	Solutions of 1-D seismic wave equation using spectral element method	Dr. Kishore Kumar N	Mathematics
105	2011B4A7600H	Anjali Thakur	Study of love wave propagation in the earth's crust	Dr. V.Sumit Kumar	Mathematics
106	2011B4AA516H	Sushanth Sirupa	A Study on the lumped parameter model of the human circulatory system	Dr. T.S.L.Radhika	Mathematics
107	2011B4AA646H	Aashrey Kamal Sharma	Study of wave propagation in heterogeneous medium	Dr. V.Sumit Kumar	Mathematics
108	2011B4AA727H	Anurag Chakraborty	Determination of dominating set of circulate graphs	Dr. Michel Alphosa	Mathematics
109	2011B4A3438H	Maganti Akshay	Numerical solutions to differential equations	Dr. A. Ramu	Mathematics
110	2011B3A7390H	Venkata Sai Mandadapu	Determinants of economic growth and policy implications for group of twenty countries	Dr. Sudatta Banjerjee	Economics
111	2011B3A7601H	Vikrant Singh R Thakur	Construction of high frequency trading algorithm through simulation of stock	Dr. Rahul Nigam	Economics
112	2011B3AA561H	Vutukuri Amarsh	Determinants of economic growth and policy implications for the set of common wealth countries a panel data approach	Dr. Sudatta Banjerjee	Economics
113	2011B3AA558H	Markandey Niraj Sunil	An Econometric analysis of exchange rate in India	Dr. Hussain Yaganti	Economics
114	2011B1A2711H	Aditi Shrivastava	Self-healing of fly ash briquettes	Prof. Suman Kapur	Biological Sciences
115	2011B1A1732H	Pooja Maneesha Akkem	Bio Degradation of textile effluents using bacterial Isolates	Prof. Suman Kapur	Biological Sciences
116	2011B1AA723H	Lagan Kankane	Toxicological evaluation of dendrimers in earthworm	Dr. Sankar Ganesh	Biological Sciences
117	2011B1A4724H	T Vishaka	To study the Eco toxicity potential of polystyrene Nano particles in environmental sentinel, earthworm	Dr. Sankar Ganesh	Biological Sciences
118	2011B1A4736H	Vinay Keche	Anaerobic co-digestion of food waste and organic fraction of municipal solid waste for production of biogas	Dr. Sankar Ganesh	Biological Sciences
119	2011B1A1713H	Bibhu Prasad Tripathy	Characterization of human hair fibers using Nano indentation techniques	Dr. Sankar Ganesh	Biological Sciences
120	2011B1A7556H	Abhilash S	Estimation of solvent accessible surface area of proteins from PDB data base	Dr. Debashree Bandopadhyay	Biological Sciences
121	2011B1AA557H	Aditya Sri Charan P	Generating pipeline for Micro-Environment program and integrating it to VMD molecular visualization software	Dr. Debashree Bandopadhyay	Biological Sciences
122	2011B1AA704H	B V Sri Sai Chanakya	Prediction of C terminal tail structures of different keratin molecules	Dr. Debashree Bandopadhyay	Biological Sciences
123	2011B1A7695H	Mandava Ruthvik	Upgradation of Micro-Environment code into pythen script	Dr. Debashree Bandopadhyay	Biological Sciences
124	2011B1A3742H	Kandepu Manindra	Keratin tetramer structure prediction	Dr. Debashree Bandopadhyay	Biological Sciences

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
125	2011B1A3696H	Rapolu Thanmayi Reddy	Mutational analysis of swine flu proteins	Dr. Debashree Bandopadhyay	Biological Sciences
126	2011B1A2717H	Arvind Sunder	Optimization of therapeutics for cancer using molecular docking	Dr. Kumar Pranav Narayan	Biological Sciences
127	2011B1A3730H	Shashwat Khare	Targeted therapeutics for cancer	Dr. Kumar Pranav Narayan	Biological Sciences
128	2012A4TS081H	Jayasurya P.	Hamming in production	Prof. YVD Rao	Mechanical Engineering

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S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2013A2TS346H	Ketan Sethi	Development of framework for green building envelope material assessment	Dr. Murari Varma RR	Civil Engineering
2	2013A2TS477H	Abhilash Sarkar	Determination of shrinkage strain of concrete with alkali activated	Dr. Arkamitrakar	Civil Engineering
3	2013A2TS550H	Pallerla Saikrishna	Experimental investigation on self-compacting concrete based on Rheology of cement paste	Prof. A Vasana	Civil Engineering
4	2013A2TS565H	J Satyasimha Dharaneedhar	Design of stone matrix asphalt using warm mix technology	Prof. Sridhar Raju	Civil Engineering
5	2013A2TS571H	P H Hemanth Reddy	Influence of concrete mix characteristic length on minimum reinforcement of RC beams	Dr. Kalyana Rama JS	Civil Engineering
6	2013A2TS589H	Podilapu Chaithanya	Experimental investigation of self-compacting concrete with and without the addition of fibers	Prof. A Vasana	Civil Engineering
7	2013A2TS676H	Kaushal Dilip Raut	Chemical and physical characterization of building derived material	Dr. Arkamitrakar	Civil Engineering
8	2013A2TS806H	S Gireesh Kumar	Design of bituminous mixture for perpetual pavement	Prof. Sridhar Raju	Civil Engineering
9	2013A2TS820H	B Sriman Pankaj	Understanding and diagnosing various differences in hydrological model structures	Prof. K.S.Raju	Civil Engineering
10	2012A1TS422H	V Nikhil Sainath Reddy	Modelling and simulation of composite materials for engineered stone applications	Dr. Karthik Chetan/Dr. Chankradhar Nemani	Chemical Engg
11	2013ABTS735H	V. Venkat Sai Anurag	Design and development of medical equipment for laparoscopic surgery : many laud forceps	Prof. Y.V.D Rao	Mechanical Engineering
12	2013A4TS373H	Krishna Toshniwal	Development of MATLAB package and efficacy of bulge test for Ti-6AL-4V	Prof. A.K Gupta	Mechanical Engineering
13	2013A4TS002H	Anurag Vaidyanathan	Constrained groove pressing of extra deep drawing steel sheets	Prof. A.K Gupta	Mechanical Engineering
14	2013ABTS614H	Saifali M Satkhed	Multi objective scheduling on single machine	Prof. A.K Gupta	Mechanical Engineering
15	2012B5A4657H	Sai Jathin Dhulipalla	CFD simulations of microfluidics OU lab - on-chip technology for DNA synthesis	Prof. Jeevan Jaidi	Mechanical Engineering
16	2013A4TS341H	Abhishek Gaikwad	Numerical modelling of phase-change materials for thermal energy storage	Prof. Jeevan Jaidi	Mechanical Engineering

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
17	2012B1A4736H	G.Sairam	Alternate fuels in CI engines	Prof. S.S. Deshmukh	Mechanical Engineering
18	2012B5AB561H	V Srikanth Reddy	Analysis of process parameters in W-EDM wire cut process	Dr. Amritha Priyadarshani	Mechanical Engineering
19	2012ABA4431H	Aditya Kumar	Finite element analysis of slitting process	Dr. Amritha Priyadarshani	Mechanical Engineering
20	2013A4TS489H	Kaustav Bhandra	Effect of vehicle body geometry and variation of wind speed and yaw angle on non-dimensional aerodynamic coefficient of vehicle bodies exposed to cross wind	Dr. G.R. Sabareesh	Mechanical Engineering
21	2012B5AA909H	Anirudh Ramesh	Probing of nanostructure formation in Nano fluids using light scattering	Dr. John Philip/Dr. R. Sujith	Mechanical Engineering
22	2013A4TS079H	Srujana Rao	Magnetostrictive composite material for stress sensing applications	Prof. Doron Shilo/Prof. S.S. Deshmukh	Mechanical Engineering
23	2012B4A7748H	Bikkumala Karthik	Efficient discrete adjoin approach for a kinetic flux vector split scheme for compressible inviscid flows	Dr. N. Anil	Mathematics
24	2012B4A7949H	Sajal Agarwal	Accurate computation of aerodynamic sensitivities through algorithmic differentiation	Dr. N. Anil	Mathematics
25	2012B4AB388H	Yanamala Gnandev	Dynamic optimization applications to optimal control problem	Dr. K. V. Ratnam	Mathematics
26	2013B4TS672H	Ravuri Sairam	Stability analysis of a SLBQRS model for the spread of computer viruses under the effects of infected removable storage media and external computers	Dr. Dipak K Satpathi	Mathematics
27	2012B4A7498H	Adithya Murali	A study on algebraic automata Theory	Dr. Ramanujam/Dr. N. Anil	Mathematics
28	2012B4A7700H	VADREJU SAMHITA	Computation of feasible solution for integer programming problems	Dr. Mallikarjuna /Dr. P. T.V.Praveen	Mathematics
29	2013A3PS265H	S. Shruthi	Deposition and characterization of Zooial films for CIGS solar cell	Dr. Selvaraj Venkatraj/Prof. Sanket Goel	EEE
30	2013AATS325H	Koustubha Krishna V Pydimarri	Resource allocation in optical network	Dr. P K Pattnaik	EEE
31	2013A3TS425H	Rohit Goel	Design of analog to digital converters	Mr.Chetan Kumar	EEE
32	2012B1A3724H	Sanchit Mishra	Control and design of grid-connected voltage source inverter	Prof. G Bhuvaneswari /Dr.Souvik Kundu Prof. Bhim Singh	EEE
33	2013A3PS379H	N. Vijaytarang	PV powered SRM drives	Prof. G Bhuvaneswari & Prof. Bhim Singh /Dr.S R Zinka	EEE
34	2013AAPS114H	Saumya Kumar Saksena	BCI based unmanned aerial vehicles	Dr.S N Omkar /Dr.S R Zinka	EEE
35	2012B1AA750H	N Tanmaye	Cell phone based detection of infectious diseases on microfluidic platform	Dr.Hadi Shafiee /Dr.S R Zinka	EEE
36	2012B4AA587H	Chandak Prachi Pramod	Development of mobile device for health monitoring	Maryam Shojaei Baghini /Prof. M.B.Srinivas	EEE

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
37	2012AATS163H	Talluri Chandu	Investigation of physics governing tunnel field effect devices	Dr. Surya Shankar Dan	EEE
38	2012ABTS420H	G. Bhargav Kiran	Investigation of physics governing fully-depleted semiconductor-on-insulator single and double gate tunnel field effect devices	Dr. Surya Shankar Dan	EEE
39	2012B3AA633H	Upender Kataria	Inequality causes and consequences an Indian perspective within a global picture	Dr.Sudatta Banerjee	Economics
40	2012B5A7475H	P. Sai Ramyatha	Analysis of address compression techniques and effective detection measures to counter fragmentation attacks in the DoT environment	Dr. Geetha Kumari	CSIS
41	2012B1A7740H	M. Sree Nihit	Traffic congestion	Dr. Aruna Malapati	CSIS
42	2012B4A7879H	Shailaja Gollapudy	Bug prediction using evolutionary algorithms in software engineering	Prof. N.L. Bhanu Murthy	CSIS
43	2012B1A7744H	Srujan Jha	Optical character Recognition of printed form of devanagari script.	Dr. Aruna Malapati	CSIS
44	2012B1A7733H	Arjun Vijayvargiya	Constructing minimum connected dominating set	Prof. Anand M. Narasimha Murthy	CSIS
45	2013A7TS091H	Kundaliya Parth Krishnakumar	Data informed procedural modelling of street network	Dr. Gerhard Schmitt/Prof. Tathagata Ray	CSIS
46	2012A7A4022H	Sujeath Paredy	Augmented reality applications for the visually impaired	Dr. Manohar Swaminathan/Prof. Tathagata Ray	CSIS
47	2012B5A7625H	Vishal Athreya	Learning multi model image representation	Dr. R.Venkatesh Babu/Prof. Anand M. Narasimha Murthy	CSIS
48	2013A7TS180H	Vedula Sai Sanketh	Applying numerical optimization techniques in deep learning on image processing problems	Prof. Michael Zibulevsky/Prof. N.L. Bhanu Murthy	CSIS
49	2012B2A7942H	Abhijit Panda	Molecular dynamics simulation of organic molecules in complex chemical environment	Dr. Subhas Ghosal	Chemistry
50	2012B5AA628H	Arkadip Basak	CZT detector uniformities for high resolution X-Ray imager	Prof. Jonathan E Grindlay/Dr. Rahul Nigam	Physics
51	2012B5AA382H	Shraavan	Super conducting properties of co-deposited Nb and Cu thin films	Prof. Pratap Raychaudhuri/Prof. Sour Banerjee	Physics
52	2012B5A7850H	Rajas Jayant Joshi	Serving periodicities for variable astronomical objects	Dr. Rahul Nigam	Physics
53	2012B5A4477H	Sonitabh Yadav	Multi-component vibration conditions monitoring for a wind turbine gearbox	Dr. G.R. Sabareesh	Physics
54	2012B5A8612H	V. Chanikya Reddy	Acquisition and analysis of the cosmic ray data using detectors array using FPGA	Dr. Rahul Nigam	Physics
55	2012B5A3604H	Shah Manav Kamlesh	Exciton-Plasmon coupling in semiconductor quantum dots	Dr. AchantaVenugopal/Dr. Kannan Ramaswamy	Physics

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
56	2012A3B5308H	Sruthi V	Large scale chiro-plasmonic devices	Prof. Ambarish/Dr. Kannan Ramaswamy	Physics
57	2012B5AA921H	Vikas AG	Experimental study of GRB with UFFO space mission	Prof. Hung Park/Dr. Sarmistha Banik	Physics
58	2012B1AB961H	VV S Gargeya	Systems modeling for sustainability assessment of waste Re-utilization	Dr. Shweta Singh/Dr. Sankar Ganesh	Biological Sciences
59	2012B1A4727H	Karthik Vickramam	References standards for elasticity imaging	Dr. Timothy J Hall/Prof. Suman Kapur	Biological Sciences
60	2012B1A2894H	Aditya Rane	Role of curvatures and constraints in cell mechanobiology	Dr. Namrata Gundiah/Dr. Sankar Ganesh	Biological Sciences
61	2012B1A3586H	Shreya Kumar	A microfluidic platform for studying the interaction between immune cells and spheroids in 3D tumor microenvironment	Dr. Hadi Shafiee/Dr. Sankar Ganesh	Biological Sciences
62	2012B4A7958H	Divya Sanghi	Study of various image encryption	Dr. Manish Kumar	Mathematics
63	2013A2TS398H	Darshan Chauhan	Parametric studies on fracture properties of concrete using concrete damaged plasticity model	Mr. Kalyana Rama JS	Civil Engineering
64	2012B4A2824H	Vishal Annamaneni	Applications of AI techniques in hydrological modelling	Prof. Jagdeesh Anmala	Civil Engineering
65	2013A2TS627H	A Santosh Kumar	Impact of climate change of precipitation	Prof. K.S.Raju	Civil Engineering
66	2012A2TS450H	Dheeraj Guduri	Aging studies on bitumen	Dr. Vinayak Ram	Civil Engineering
67	2013A1TS638H	Ishan Vyas	Correlation between process parameters and mechanical properties of fungal biofilms	Dr. Asma Ahmed	Chemical Engineering
68	2013A5TS777H	E. Bhanu Teja Reddy	Synthesis of anti-TB compounds	Prof. Sriram	Pharmacy
69	2012B4A2692H	Kodali R S Veera Venkata Kamalakar	A study in symbolic dynamics	Dr. Sharan Gopal	Mathematics
70	2012B3AA599H	Polam Reddy Vineeth Reddy	Detection of air-Bourne radar	Dr.S K Sahoo	EEE
71	2012B5A3967H	Shivam Abhay Sharma	Classification of mammogram in to Bi-Rads using shape representation techniques	Prof. Prabhakar Rao	EEE
72	2012B3A3634H	Palash Singhal	Auction of 4G spectrum licenses	Dr.Runa Kumari	EEE
73	2012B3A1598H	Arjun Deshpande	Determinants of agricultural income	Dr.Durgesh Pathak	Economics
74	2012B3A7917H	K Swetha	Exchange rate dynamics - An empirical analysis	Dr C Hussain Yaganti	Economics
75	2012B3A7669H	N Uday Sai Jagannadh	Comparative analysis of neural networks and time series models	Dr C Hussain Yaganti	Economics
76	2012A7TS154H	Shivangi Shipra	Optimal Return oriented programming chain	Prof. Chittaranjan Hota	CSIS
77	2012B3A7474H	Aditya Nadimpalli	Use of machine learning approaches in analyzing the credit risks of Indian firms	Dr. Aruna Malapati	CSIS
78	2012B3A7557H	Sai Srikar Kuravi	Portfolio constructions using deep neural networks	Prof. Anand M. Narasimha Murthy	CSIS
79	2012B4A7939H	Pooja Sinha	Bug prediction using evolutionary algorithms in	Prof. N.L.Bhanu Murthy	CSIS

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			software engineering		
80	2012B3A7632H	G. Sudhindra Sarma	Financial distress prediction of Indian listed companies using machine learning techniques	Dr. Aruna Malapati	CSIS
81	2012B3A7652H	Aparajita Roy	Software defect prediction using machine-learning algorithm	Prof. N.L.Bhanu Murthy	CSIS
82	2012B2A7643H	Sagi Bhargavi	Machine learning applications in internet of things	Prof. Chittaranjan Hota	CSIS
83	2012B2A1821H	Shivam Mittal	Removal of pesticides using novel methods	Prof. N. Rajesh	Chemistry
84	2012B2A1866H	Ambuj Sharma	Catalysis using Au-Pd nanoclusters Ullmann coupling using Fe <sub>3</sub> O <sub>4</sub> @ Au-Pd catalyst	Dr. Ramakrishnan Ganesan	Chemistry
85	2012B2A7693H	Pooja Sahu	Synthesis of nano-crystalline WO <sub>3</sub> its characterization and photocatalytic application	Dr. Ramakrishnan Ganesan	Chemistry
86	2012B2AB878H	V. Srinivas Prasanth	PEM cells modelling and simulation	Dr. Subhas Ghosal	Chemistry
87	2012B2B1929H	M Praneet	Role of candida albicans in autism spectrum disorders	Dr. N. Rajesh	Chemistry
88	2012B5A7585H	Viren Jyothirgh	Fluid mixing in passive micromixer	Dr. Meenakshi	Physics
89	2012B5A7609H	K. Samuel Paul	Sensitivity enhancement in nuclear magnetic resonance spectroscopy of the liquid state . A theoretical and numerical investigation	Dr. Adonis	Physics
90	2012B5A7899H	Cheruvu Srujana	Point vortices and orthogonal polynomials and applications to quantum mechanical bound state problems	Dr. K.V.S Chaitanya	Physics



Annexure 'B3-9  
(2 Pages)  
Ref: AR 2016

**LIST OF HIGHER DEGREE DISSERTATION COMPLETED DURING THE YEAR 2016 IN HYDERABAD CAMPUS**

**Second Semester 2015-2016**

S.No	ID Number	Name	Title	Supervisor	Dept.
1	2014H146052H	Adithya Kathik BBN	Formulation and evaluation of tramadol extended release dosage form	Mr. Shubrata Kundu Prof. Shrikant charde	Pharmacy
2	2014H146051H	Eupa Ray	Preparation of cholesterol chitosan nanoaggregates for the delivery of anticancer drugs	Prof. Shrikant Charde	Pharmacy
3	2014H146050H	Paramita Saha	Particle engineering for masking the taste of using dose bitter API	M. Snehalatha / Prof. Punna Rao	Pharmacy
4	2014H146049H	Mrinalini Reddy S	Evaluation of different approaches for taste masking of a bitter drug	M. Snehalatha / Prof. Punna Rao	Pharmacy
5	2014H146054H	Avantika V Dalvi	Nasal formulation of vitamin D3 in-vitro characterization and pharmacy kinetic evaluation	Dr. Ambikanandan Misra/Prof. Shrikant Charde	Pharmacy
6	2014H146056H	Vengala Mounika	Formulation and evaluation of tolvagitave immediate release tablets	Dr. M. Lingam/Prof. Punna Rao	Pharmacy
7	2014H141027H	Akash A Shetty	Design and development of a seismometer release mechanism	Dr. A. Shankara/Dr. Sabareesh G R .	Mechanical Engineering
8	2014H141028H	Anirudh Kumar	Design and development of a deployable boom	Dr. Naren S/Prof. S.P . Regala	Mechanical Engineering
9	2014H140042H	Gagandeep Kaur	Study on radar emitter PRI deinter learning algorithm	Prof. Yoganandam	EEE
10	2014H129004H	Mir Quoseena	Genetic risk for nephropathy in diabetics	Prof. Suman Kapur	Biological Sciences
11	2014H129003H	Valpadashi Anusha Ramesh Rajamani	Effect of Pseudomonas putida GAP-P45 on physiological responses in oryza sativa and molecular responses in Arabidopsis thaliana under drought stress conditions	Dr. Sridev Mohapatra	Biological Sciences
12	2014H129008H	Komal	Optimization of granular photo bioreactors for large scale waste water treatment	Dr. Rajesh Kumar/Dr. Sankar Ganesh	Biological Sciences
13	2014H129002H	Aarathi Menon S	Toxicity assessment of gold nanoparticles using earthworm as sentinel	Dr. Sankar Ganesh	Biological Sciences
14	2014H129007H	Riya Rakshit	Genetic polymorphism studies of RON2 protein in India field isolates of malarial parasite plasmodium falciparum	Dr. Vidya Rajesh	Biological Sciences
15	2014H129006H	N V Alekhya Jayanthi	Excipient quality analysis and formulation recommendation for bio therapeutics	Dr. Murali Jayaraman/Dr. Jayati Ray Dutta	Biological Sciences

S.No	ID Number	Name	Title	Supervisor	Dept.
16	2013H313089H	Alish	Anomaly detection and correlation system	Mr. Harish Singh Negi/Prof. NL Bhanu Murthy	CSIS
17	2014H129001H	RESHMA J .	Developing functionalized supported lipid bilayer to activate T-cell signaling	Prof. Satyajit Mayor/Prof. Suman Kapur	Biological Sciences

**First Semester 2016-2017**

S.No	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2011HS01497H	JASRAJ PADHI	Crude oil characterization and property estimation	Dr. Srikanta Dinda	Chemical Engineering
2	2011HS01504H	PARUCHURI BIPIN CHAKRAVARTHY	Studies of Co2 capture from simulated flue gas	Dr. Srikanta Dinda	Chemical Engineering
3	2015H101010H	POORNIMA K	Development of Synthetic resin	Dr. Srikanta Dinda	Chemical Engineering
4	2015H101012H	RAMADURGA M ANIRUDDHA	Biomaterials in carbon capture synthesis characterization and performance studies	Dr. I Sreedhar	Chemical Engineering
5	2015H101013H	BITHUNSHAL U B	Numerical simulation of mineral trapping for CO2 Geo-sequestration in India geological formations	Dr. Vikranth K	Chemical Engineering
6	2015H101014H	PATIL NEHA SANJAY	A study on crude cracking and product analysis	Dr. Srikanta Dinda	Chemical Engineering
7	2015H101015H	SHIVANI MALIK	Biomaterials in carbon capture synthesis characterization and performance studies	Dr. I Sreedhar	Chemical Engineering
8	2015H101016H	MEGHA GUPTA	Removal of heavy metals from waste water by using green catalyst	Dr. I Sreedhar	Chemical Engineering
9	2015H129003H	NIVETHA SIVASANKARAN	Antimicrobial activity of lipase IMMOB (Lised Sliver nanoparticle on microbial strains	Dr. Jayati Ray Dutta	Biological Sciences
10	2015H129006H	ROSHINI B	Screening of steroid hormones for targeted therapeutics against cancer	Prof. K Pranav Narayan	Biological Sciences
11	2015H129008H	DIVYATA MANVATI	Role of Phosphorylation at the 445, Ser 448 o DMA P1 I in nuclear localization and cell cycle regulation	Prof. K. Naga Mohan	Biological Sciences
12	2015H129009H	ANITHA R	Consequences of molecular crowding on the structure and stability of the proteins	Dr. Ramakrishna Vadrevu	Biological Sciences

BITS Pilani

# annual report 2016

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**Part B4: Dubai Campus**

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**BITS PILANI, DUBAI CAMPUS****B4. HIGHLIGHTS FOR THE YEAR 2016**

1. On 28th January 2016, BPDC Library Staff organized "EBSCO Online Database (e-journals) Orientation and Live Demo Training. The training was handled by Mr. Ghais Najjar, Information Specialist.
2. On 7th February 2016, Mechanical Engineering Association (MEA), BPDC organized a talk "Quantum Mechanics and Physical Reality" by Prof. Ravi Gommatam, adjunct professor at BITS, Pilani, India.
3. On 7th February 2016, Chemical Engineering Students Association (ChESA), BPDC organized a talk on "Introduction to Scanning Electron Microscopy" by Mr. Noumaan Quresh, TESCANA ME (FZC), Sharjah, UAE.
4. On 18th February 2016, the CHIMERA, the Biotech Association of BPDC organized an Interactive session on "MTAI Master Coregulator in Cancer and Beyond" by Dr. Rakesh Kumar, Professor, School of Medicine and Health Sciences, George Washington University and on "Facts and fiction in modern biology : Membrane biology as a case in point by Prof. Sitaraman, Consultant, Formerly Dept. of Biotechnology (Retired), University of Pune.
5. Centre for Innovation, Incubation & Entrepreneurship), BPDC, on 22nd February 2016, organized an interactive session on "Indian School of Business - Young LEader's Programme" by Mr. Sanjay Dhingra, Associate Director, Admissions and Financial Aid, Indian School of Business.
6. On 24th February 2016, Mechanical Engineering Association (MEA), BPDC organized an interactive session with Dr. Husam R. Al Asmar, CEO, Eagle Industries.
7. On 25th February 2016, Centre for Innovation, Incubation & Entrepreneurship), BPDC, organized an interactive session on "Entrepreneurship, Startups and Incubation" by Prof. Anand Kusre, Professor In-Charge, Centre for Entrepreneurship, IIT Bombay.
8. On 28th February 2016, Department of Computer Science, BPDC a SEMINAR and LIVE DEMONSTRATION on "EMBEDDED LINUX" by Keshav Peswani & Neil Peswani, VPL INFOTECH & CONSULTANTS, Preet Vihar, Delhi.
9. On 29th February 2016, Centre for Innovation, Incubation & Entrepreneurship), BPDC, organized an interactive session on "Virtue based Compatibility of Business and Profession" by Dr. Kumar Neeraj Sachdev, Associate Professor, Department of Humanities and Social Sciences, BITS Pilani
10. On 9th March 2016, Chemical Engineering Students Association (ChESA) and the CHIMERA, the Biotech Association of BPDC organized an interactive talk on "Recent advances in computational drug design and Computational Biologics design" by Mr. R.Raghu, Vice President, Schrodinger Inc, USA.
11. On 13th March 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "From Mind to the Market place: Innovation through Global Collaboration" by Prof. Suresh Bhargava, FTSE, FNA, KIA Laureate, Distinguished Professor, DPVC(International Research), College of Science, Engineering & Health, Director - Centre for Advanced Materials and Industrial Chemistry (CAMIC), RMIT University, Melbourne, VIC.
12. From 15th to 17th March 2016, CSE department of BPDC conducted a workshop on "Cryptography" . Prof C. Pandurangan, from CSE department, IIT madras was the resource person.
13. From 15th-17th March, 2016 BPDC hosted ENGINuity '2016. 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. Our Director Prof. R. N. Saha inaugurated the event by lighting the lamp.
14. On 25th March 2016 morning Holi Festival Celebration was organized in BPDC. The Director with his family and Faculty and Staff and their family members participated in the event.
15. On 30th March 2016, ACM Student Chapter of BPDC organized an interactive talk "Machine Vision and Artificial Intelligence : will you be driving a car in your 30s? " by Mr. Saurabh Bodas, Research Scientist at NexusTec GmbH, an Alumnus of BITS Pilani, Goa Campus.
16. On 30th March 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "Polymers in the Modern World" by Jenö Muthiah, CEO, Alpha Coating Technology, Addison, Illinois.

17. From 30th-31st March, 2016, SHADES, the art club of BPDC hosted ARTEX' 16, the inter-college art exhibition. ARTEX comprises of Doodle God, Rangoli, Logo Design, Henna, Bling Art, Illusion D' Optica, Face Painting and exhibition of paintings KALAKRITI. Our Director Prof. R. N. Saha inaugurated the event by lighting the lamp.
18. On 4th April 2016 A free session on "Stress Free Living' was conducted from Art of Living team at BPDC G07 on Monday between 3.45 to 4.45 pm. The session included "Life skills to overcome stress, Yoga and Exercise and Meditation"
19. On 5th April 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "The Simulation of Light Olefin Selectivity from FCC Unit (Lab to Pilot to Commercial) by Dr. Srikanta Dinda, Associate Professor, BITS Pilani, Hyderabad Campus, India.
20. On 10th April 2016, TREBEL, the music club of BPDC, organized "Easter Musical Night" in the Auditorium, BPDC.
21. On 12th April 2016, Chemical Engineering Students Association (ChESA) of BPDC organized an interactive session on "Particle Based Simulations for Studying Molecular Systems" by Dr. Eldhose Iype, Assistant Professor, Chemical Engineering Department, BPDC.
22. From 15th and 16th April 2016, AOEE of EEE department, BPDC organized an ARDUINO workshop on "Building Smarter Homes". The workshop session was conducted by Mr. Talal Shaikh, Heriot-Watt University, Dubai.
23. From 19th-21st April, 2016, BPDC students hosted JASHN '16, the inter-college competition. JASHN, the annual inter-university cultural episode comprises of music, literary, photography, dance, drama fashion, War of DJs. The highlight of JASHN ' 16 was the performance of Arjun Kanungo is an Indian famous singer and composer.
24. On 3rd and 4th May 2016, BPDC Library Staff organized "BOOK DISPLAY" CBS Publishers and Distributors Pvt. Ltd, Delhi. The students visited the book display and few students purchased books for their personal use and faculty visited the book display and recommended books for the BPDC Library.
25. On 3rd May 2016, Director, BPDC Prof R. N. Saha inaugurated a new Petroleum Lab.
26. On 4th May 2016, The Social & Environment Club of BPDC organized a blood donation campaign in association with Al Wasl Hospital at our Campus.
27. On 10th May 2016, AOEE of EEE department organized a lecture on "INDUSTRIAL AUTOMATION with SCADA DEMONSTRATION (Bridging the gap between the theory & practical application)" by Mr. Chandradhar Prasad & Ms. Kriti Saxena, Sr.Engineers - Automation Projects, L & T Electrical and Automation FZE.
28. On 11th May 2016, the Annual Sports Day and Boxing Championship held at BPDC auditorium. The inter year boxing championship was held and the annual sports award were presented to students, staff and faculty by the Director, BPDC, Prof. R. N. Saha.
29. On 12th May 2016, The Social & Environment Club of BPDC organized a cultural event with the special needs kids. Painting, singing and dancing competition for kids were organized. Over 200 children from SNF Development Centre, Manzil Centre, Senses Center Residential and Day Care for Special Needs and Rashid Centre for Disabled who took part in an array of activities. At the end, all the children were also provided goodie bags sponsored by various supporting companies.
30. On 19<sup>th</sup> May, Student Welfare Division of BPDC organized Diro's Tea Party, the farewell to the final year students on 19th May 2016 at our campus
31. On 22nd May 2016, The Social & Environment Club of BPDC organized a event called "Bag of Love" for the MBM cleaning and security staff of BPDC.
32. On 16th August 2016, department of CSE organized an interaction with Prof. Venkatesh Srinivasan, Dept. of CSE, University of Victoria, Canada.
33. On 3rd September 2016, the "Convocation 2016" was held at BITS Pilani, Dubai Campus. Amidst great pride and honor, 421 students of the 13th batch of BITS Pilani, Dubai Campus, with Engineering Degrees in a magnanimous ceremony filled with professors, students and parents who cheered the occasion with thundering applause. The occasion was graced by the Chief Guest Mohammad Abdullah, Managing Director of the Dubai Knowledge Park and Dubai International Academic City at TECOM Group, Prof Souvik



Bhattacharya, Vice Chancellor of BITS Pilani, Prof R N Saha, Director BITS Pilani, Dubai Campus, Directors of other BITS Campuses, Members of the Board of Governors, Members of the Senate, Industry Partners, BITS Alumni, Faculty Members, friends and parents of the graduating students. During this prestigious event the degrees were conferred on 368 First Degree Graduates, 51 Higher Degree Graduates and two scholars, who completed their PhDs. First Degrees were awarded in the disciplines of Chemical, Electrical and Electronics, Mechanical, Computer Science, Electronics and Instrumentation, Biotechnology, and Electronics and Communication Engineering and Higher Degrees in the fields of Design Engineering, Microelectronics, Software Systems and MBA. SHREYAS SHIRISH PATWARDHAN, VISHANK BHATIA and ROHIT RAVISHANKAR were respectively awarded Gold, Silver and Bronze medals. Mr. ARJUN ARYA and ANKITA SRIVASTAVA were awarded the DIRECTORS MEDAL FOR ALLROUND ACHIEVEMENT. Ms. Salma Rizwi, Manager Community Services, DIAC, presented the DIAC Excellence Award to SHREYAS SHIRISH PATWARDHAN and G. PREETHY CHAND. The convocation ended with Oath by the graduating students.

34. On 4th September 2016, Department of EEE & CSE organized a lecture on "Accelerating discoveries with Big Data & Supercomputing" by Prof. Alok N. Choudhary, Henry and Isabelle Dever Professor, EECS Dept., Northwestern University, USA and Founder, Chairman and Chief Scientist, 4csights Inc.
35. On 5th September 2016, The ACM Students Chapter of BPDC conducted an event "'ACMonday' with 'Cheap Thrills' for your entertainment. Confused?". Various competition like Rapid Code: A simple coding event to prove your mettle, Photo Scavenger- Take pictures with 20 tasks to win, Cheap Thrills- Fun games that test your team's coordination skills were conducted.
36. On 15th September 2016, Oh, Crop! BPDC organized a Music Madness with live unplugged performance of Scene - the Band (desi indo- pak fusion band), DJ Chirag.
37. On 17th September 2016, Department of Humanities and Social Sciences, BPDC organized a workshop on "Effective Communication to Professional Success" for industry professionals.
38. On 20<sup>th</sup> September 2016, Placement division in association with AOEE of EEE department has been organized a training program on VERILOG Programming language which for final year students of EEE/EIE/ECE/CS who are interested in core electronics career. The training program has been scheduled on every Tuesday.
39. On 20th September 2016, Chemical Engineering Students Association (ChESA), BPDC organized an interactive session on "Recent techniques in Precipitated Calcium Carbonate (PCC)" by Mr. Hitesh Agarwal, Director, Jindal Saw Gulf/Super Cement Manufacturing, Abu Dhabi, UAE.
40. On 25<sup>th</sup> September, AOEE of EEE department, BPDC organized an interactive talk on "Innovation and Pathways in Nano electronics" by Dr Brajesh Kumar Kaushik, IIT Roorkee.
41. The Social and Environment Club of BPDC is organized the joy of giving week- Daan Utsav from the 4th to the 9th October, 2016. List of activities were cloth collection drive - the collected clothes were donated to Red Crescent, Smile- an initiative taken to give happiness and joy to the special ones at SENSES DUBAI on 4th October, Dandiya Night- a fundraiser for SPECTRUM 2017 and a night full of togetherness and fun held on 13th October 2016.
42. From 18<sup>th</sup>-19<sup>th</sup> October 2016, The SPARKS16, the annual Intra collegiate cultural festival of BITS Pilani Dubai Campus held. The event started with opening ceremony at the lobby Nukkad Natak, Eastern Singing, Mr. and Ms. Sparks, Battle of The Bands, Western Singing and Instrumental, Drape, Dancing Doubles, Impulse and Group Dance.
43. On 3rd November 2016, The Social & Environmental Club, BPDC organized Cancer Awareness Pink day and took up the initiative to spread the awareness throughout the college. Students dressed up in pink or blue to support the cause and got involved in various activities. Ms. Premi Mathew, the founder of the 'Protect your Mom Campaign' visited our campus to witness the great show. We hope to see you all there too and please wear BLUE or PINK to support the cause.
44. On 3rd November 2016, the CHIMERA, the Biotech Association of BPDC organized an Interactive session on "Biotechnology in Mental Health" by Dr. Sridhar Natesan, Sn. Researcher, Psychosis Studies Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, United Kingdom.
45. On 3rd November, SPIC MACAY Heritage Club, organized an entertaining classical dance live performance programme of Ms. Deepti Parol.

46. On 6th November 2016, the Occasion of Foundation Day, the Ethnic Day was celebrated at BPDC Auditorium with the lighting of the Diya. Faculty, Staff and Students gathered and performed the cultural programmes.
47. From 13<sup>th</sup> to 17<sup>th</sup> November 2016, the 14th BITS Sports Festival, the UAE Inter University Tournament, BSF 2016 and 1st Inter BITS Sports Meet was held. The Inauguration held at BPDC ground on 13th November 2016 with our Director BPDC lighted sports torch flame. Participants from Universities all over from UAE and from BITS campuses of Pilani, Goa and Hyderabad participated in the various sports categories of BSF 2016. The Award Ceremony held on 17th November 2016 at BPDC auditorium and the Chief Guest was Mr. Diego Maradona, FIFA Player graced the occasion and distributed the prizes to the winners. Prof. R N Saha, Director, BPDC congratulated the winners of BSF 2016.
48. On 14th November 2016, Association of Electronic Engineers presented Demonstration on "Power system Analysis and Simulation (Industry Needs and Requirements)" by Dr. Faraz Zafar Khan, Manager, R & D, ASAS Engineering and Project Management Consultancy.
49. On 17th November 2016, Social & Environment Club organized a blood donation campaign in association with Latifa Hospital.
50. On 20<sup>th</sup> November 2016, Centre for Innovation, Incubation & Entrepreneurship, BPDC, celebrated " Women Entrepreneurship Day" and organized a lecture on "Social Media Marketing" by Nicola Monteath, Founder, Chic Living Kit.
51. On 20th November 2016, Association of Electronic Engineers presented guest lecture on "Design and Debug of Embedded Systems" by Mr. Hareesh Janakiraman, Electronic Engineer, Houston, Texas.
52. On 21st November 2016, Association of Electronic Engineers presented guest lecture on "Clinical Utility of Point of Care Analyzer in Healthcare Setup" by Mr. Bharath Kamath, Product Manager, Abbott Laboratories S.A.
53. From 27<sup>th</sup> -29<sup>th</sup> November 2016, BPDC hosted ENGINuity '16, the inter-college competition. 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 variety of events such as Chem Debate, Poster Presentation, Code Blitz, Into the expanse, Big Data, Soapbox, Marvellous, ABSTIS, ASME workshop, Pass the Buck, Mindspark, Big Split, Play2Code, Graphic Design 101, CSI, Brainbashers, Speed Math Workshop, Urban Sketches, Frynapse, A game of two Halves, Techlathon were conducted. The Enginuity ended with prize distribution on 29th November, 2016.

**B4.1 SENIOR OFFICERS****DIRECTOR**

Prof. Dr. R. N. Saha

1. Dr. B. Muralidharan, Dean, Practice School
2. Dr. Priti Bajpayee, Dean, Student Welfare
3. Dr. R. Roop Kumar, Dean, Faculty Affairs
4. Dr. T. G. Thomas, Dean, Admissions
5. Dr. Anand Kumar, Associate Dean, Academic Resource Planning
6. Dr. A. Somasundaram, Associate Dean, Academic Registration & Counseling
7. Dr. K. Kumar, Associate Dean, Instructions
8. Dr. Neeru Sood, Associate Dean, Academic Research
9. Dr. D. J. Shariff, Deputy Registrar

(Details are given in Annexure B4-1)

**B4.2 ADMISSIONS**

Admissions were made twice during the year 2016, in January 2016 for the second semester 2015-2016 and in August 2016 for the first semester 2016-2017 (Details are given in Annexure B4-2). The admission summary is given below:

	<b>Integrated First Degree Programmes</b>	<b>Higher Degree Programmes</b>	<b>Doctoral Programmes (Ph.D.)</b>	<b>Total</b>
Second Semester 2015-2016	10(05)	06(02)	02 (01)	18 (08)
First Semester 2016-2017	322 (126)	27 (04)	05 (01)	354 (131)

Number of female students is given in brackets.

**B4.3 DUAL DEGREES AND TRANSFER**

## (a) Dual Degree

During the academic year 2015-2016, 2 student was permitted to work concurrently for two first degrees under Dual degree Scheme. (Details are given in Annexure B4-3).

## (b) Transfer

During the academic year 2015-2016, 6 students were permitted to transfer within First degree. (Details are given in Annexure B4-3).

**B4.4 ACADEMIC CALENDAR**

During the Calendar year 2016, the second semester 2015-2016 started on 01.02.2016 and ended on 07.06.2016. The first semester 2016-2017 started on 18.08.2016 and ended on 28.12.2016. The second semester 2015-2016 PS II started on 01.02.2016 and ended on 10.07.2016. The Summer Term 2015-16 started on 09.06.2016 and ended on 03.08.2016. Also PS I started on 09.06.2016 and ended on 03.08.2016. The first semester 2016-2017 PS II started on 01.08.2016 and ended on 04.01.2017.

	<b>Starting Date</b>	<b>Ending Date</b>	<b>Number of Instruction days</b>
Second Semester 2015-2016	01/02/2016	07/06/2016	82
Summer term 2015-2016	09/06/2016	03/08/2016	40
First Semester 2016-2017	18/08/2016	28/12/2016	78

#### B4.5 REGISTRATION OF STUDENTS

The registration for the second semester 2015-16 was held on 1st February 2016 and that of the first semester 2016-17 was held on 18<sup>th</sup> August 2016. In on-campus programmes, 1667 (567) students were registered in the first semester 2016-2017. Details of registration for the first semester 2016-2017 are given in Annexure B4-4.

	Number of students registered
Second Semester 2015-2016	1714(573)
Summer Term 2015-2016	455(141)
First Semester 2016-2017	1667(567)

#### B4.6 ACADEMIC COUNSELING BOARD (ACB)

During the year 2016, 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 2015- 2016	II Semester 2015- 2016
1. Total number of students under the purview of ACB at the beginning of the semester	106	95
2. No. of students declared out of its purview at the end of the semester	17	26
3. No. of students who left the institute during the semester	2	4
4. No. of students who came under the purview of ACB at the end of the semester	8	65
5. Total No. of students under the purview of ACB during the next semester	95	109

##### 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 2016, 422 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
78 <sup>th</sup> Award (vide Board of Governors meeting – 22 <sup>nd</sup> February 2016)	49(14)
79 <sup>th</sup> Award (vide Board of Governors meeting - 7 <sup>th</sup> July 2016)	373 (132)
<b>Total</b>	<b>422(146)</b>

**B4. 7.2 Award of Medals****(i) Institute Medals for Academic Year 2015-2016**

List of students for award of medals from amongst the students graduated at the end of first semester, second semester and summer term 2015- 2016.

S.No.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
<b>Integrated First Degree Programmes (No. of students: 422)</b>						
1.	2012A1PS036U	SHREYAS SHIRISH PATWARDHAN	M	10.00	(FIRST)	GOLD
2.	2012A4PS060U	VISHANK BHATIA	M	9.94	(SECOND)	SILVER
3.	2012A7PS064U	ROHIT RAVISHANKAR	M	9.86	(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. For the 2016 graduating batch, the Director's medals were awarded to the following students:

S. No.	ID. No.	NAME	SEX
1.	2012A4PS014U	ARJUN ARYA	M
2.	2012A7PS109U	ANKITA SRIVASTAVA	F

**(iii) DIAC Award for the Best Academic Performance**

The "DIAC Award for the Best Academic Performance" for the universities located in DIAC (Dubai International Academic City) was given to the following students for the year 2016:

S. No.	ID. No.	NAME	SEX	CGPA	DIVISION
<b>First Degree</b>					
1.	2012A1PS036U	SHREYAS SHIRISH PATWARDHAN	M	10.00	DISTINCTION
<b>Higher Degree</b>					
1.	2013K112003U	PREETHY CHAND	F	9.93	DISTINCTION

**B4.8 CAMPUS INTERVIEWS AND PLACEMENT**

Efforts were made this year to have more and more industries visit the campus for placement interviews. Despite economic slowdown in Dubai, 102 organisations conducted campus interview and made offers to students (Details are given in Annexure B4-8).

Number of companies which conducted campus interviews	102
No. of students interviewed	227
No. of offers made	109

**Employed / Higher Studies of Graduates during the Year 2016**

Programme	Number Graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
<b>On-Campus Programme</b>				
<b>B.E. (Hons.)</b>				
Biotechnology	16	10	3	3
Chemical	26	13	7	6
Computer Science	100	64	11	25
Electronics & Communication	72	42	6	24
Electrical & Electronics	48	33	8	7
Electronics & Instrumentation	6	0	3	3
Mechanical	101	59	22	20
Total	369	221	60	88

**B4.9 COURSES OFFERED**

The number of courses offered during the year 2016 is as follows:

	Number of courses offered
Second Semester 2015- 2016	202
Summer Term 2015 - 2016	14
First Semester 2016 – 2017	212

**B4.9.1 Project-oriented Courses**

During this year 2016, 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:

Sl. No.	Course No.	Course Title	No. of Students	
			II Sem. 2015-16	I Sem. 2016-17
1	BIOT F266	STUDY PROJECT	11	9
2	BIOT F366	LABORATORY PROJECT	3	6
3	BIOT F367	LABORATORY PROJECT	4	-
4	BIOT F376	DESIGN PROJECT	3	2
5	BIOT F377	DESIGN PROJECT	1	3
6	BIOT F491	SPECIAL PROJECT	2	4
7	CHE F266	STUDY PROJECT	15	4
8	CHE F366	LABORATORY PROJECT	4	6
9	CHE F367	LABORATORY PROJECT	1	-
10	CHE F376	DESIGN PROJECT	2	4
11	CHE F377	DESIGN PROJECT	2	1
12	CHEM F266	STUDY PROJECT	-	1
13	CHEM F366	LABORATORY PROJECT	-	2
14	CHEM F376	DESIGN PROJECT	-	3
15	CS F266	STUDY PROJECT	17	7

Sl. No.	Course No.	Course Title	No. of Students	
			II Sem. 2015-16	I Sem. 2016-17
16	CS F366	LABORATORY PROJECT	6	2
17	CS F367	LABORATORY PROJECT	1	3
18	CS F376	DESIGN PROJECT	24	31
19	CS F377	DESIGN PROJECT	7	7
20	CS F491	SPECIAL PROJECT	6	1
21	DE G522	DESIGN PROJECT	2	-
22	ECE F266	STUDY PROJECT	9	7
23	ECE F366	LABORATORY PROJECT	2	4
24	ECE F367	LABORATORY PROJECT	-	1
25	ECE F376	DESIGN PROJECT	13	10
26	ECE F377	DESIGN PROJECT	4	3
27	ECE F491	SPECIAL PROJECTS	4	-
28	EEE F266	STUDY PROJECT	17	7
29	EEE F366	LABORATORY PROJECT	3	5
30	EEE F367	LABORATORY PROJECT	1	1
31	EEE F376	DESIGN PROJECT	19	18
32	EEE F377	DESIGN PROJECT	7	5
33	EEE F491	SPECIAL PROJECT	6	3
34	GS F376	DESIGN PROJECT	4	-
35	HSS F266	STUDY PROJECT	3	24
36	INSTR F266	STUDY PROJECT	5	-
37	INSTR F366	LABORATORY PROJECT	-	1
38	INSTR F376	DESIGN PROJECT	3	5
39	INSTR F377	DESIGN PROJECT	2	2
40	MATH F266	STUDY PROJECT	9	19
41	MATH F376	DESIGN PROJECT	13	12
42	MATH F377	DESIGN PROJECT	3	-
43	MATH F491	SPECIAL PROJECT	2	4
44	ME F266	STUDY PROJECT	24	22
45	ME F366	LABORATORY PROJECT	9	10
46	ME F367	LABORATORY PROJECT	9	3
47	ME F376	DESIGN PROJECT	25	22
48	ME F377	DESIGN PROJECT	9	11
49	ME F491	SPECIAL PROJECT	3	1
50	PHY F366	LABORATORY PROJECT	-	1

**B4.9.2 New courses**

During the year 2016, 5 new courses were offered.

Sl.No.	Compcode	Course No.	Course Name	Enrolled
1	1569	CHEM F223	COLLOID AND SURFACE CHEM	05
2	1131	GS F212	ENVIRON DEV AND CLIMATE CH	15
3	1645	HSS F317	INTRODUCTION TO GLOBALIZATION	40
4	1628	HSS F236	SYMBOLIC LOGIC	82
5	31133	GS F221	BUSINESS COMMUNICATION	84

**B4.10 INSTITUTIONAL ACTIVITIES****B4.10.1 Convocation 2016**

Amidst great pride and honor, 421 students of the 13<sup>th</sup> batch of BITS Pilani, Dubai Campus, were awarded Engineering Degrees. The convocation ceremony was conducted in BITS Pilani, Dubai Campus located in the Dubai International Academic City. The occasion was graced by, the Chief Guest Mr. Mohammad Abdullah, Managing Director of the Dubai Knowledge Park and Dubai International Academic City at TECOM Group, Prof Souvik Bhattacharya, Vice Chancellor of BITS Pilani, Prof R. N Saha, Director BITS Pilani, Dubai Campus, Directors of other BITS Campuses, Members of the Board of Governors, Members of the Senate, Industry Partners, BITS Alumni, Faculty Members, friends and parents of the graduating students.

During this prestigious event the degrees were conferred on 368 First Degree Graduates, 51 Higher Degree Graduates and 2 scholars, who completed their Ph.D. First Degrees were awarded in the disciplines of Chemical, Electrical and Electronics, Mechanical, Computer Science, Electronics and Instrumentation, Biotechnology, and Electronics and Communication Engineering and Higher Degrees in the fields of Design Engineering, Microelectronics, Software Systems and M.B.A.

University medals of Gold, Silver and Bronze, for academic excellence, were awarded to Shreyas Shirish Patwardhan, Vishank Bhatia and Rohit Ravishankar respectively. In addition, Director's Medals for 'Best All Round Achievements – Girls and Boys' were awarded to Ankita Srivastava and Arjun Arya respectively. The DIAC Academic Excellence Award winners were Shreyas Shirish Patwardhan from First Degree and G Preethy Chand from Higher Degree.

Mr. Mohammad Abdullah, in his Convocation Address, reminisced his life and educational experiences and motivated the graduates to be innovative and spirited. He highlighted the challenges, opportunities, risks and rewards for people who think out of the box. Specifically mentioning, EXPO 2020 as the latest acknowledgement of Dubai's international community credentials and openness.

Dr. Kumar Mangalam Birla, Chancellor, BITS Pilani, in his message to students stressed how high quality education is an enabler, and not an end in itself. He also proudly mentioned how BITS Pilani graduates have gone on to serve the country in numerous ways and have distinguished themselves across the globe.

Addressing the graduating students, Vice Chancellor, Prof. Souvik Bhattacharya, congratulated their hard work and achievements. He also highlighted the achievements of BITS Pilani's four campuses together with the growing number of Graduate, Post Graduate and Ph.D students. He specifically highlighted that the international student population at the Dubai Campus has grown with 14 nationalities taking admission this year.

Dr. Bhattacharya looks forward to BITS providing an enriching global experience inside and outside the classrooms.

Prof. Dr. R.N. Saha, Director, BITS Pilani Dubai Campus, congratulated both the graduating students and their parents for their remarkable achievement. During the presentation of his report, he revealed the growth plan of expanding the program offerings, research and community outreach activities, faculty strength, student placement and campus upgradation. He highlighted the growing R&D activity in the Dubai Campus.

He emphasized on the Practice School Programme offered by BITS Pilani and how it not only gave the students work experience but also helped them get placed into the companies they interned in. He also elaborated the edge that the BITS students have due to the Campus placement facility offered to them. Prominent companies to the likes of Nestle, Reckitt Benckiser, Thomson Reuters, Paypal India, Amazon India, etc. showed interest in recruiting BITS Dubai graduates. In all, over a hundred companies visited the campus offering attractive pay packages, while Reckitt Benckiser hired at an impressive 19,000 AED per month.

The ceremony concluded solemnly, as the students bid farewell to their Alma Mater to step ahead into their glorious futures.



#### B4.10.2 Workshops and Conferences

##### Following workshops were conducted by various departments during the Academic Year 2015-2016

1. HSS Department conducted a workshop on 'Effective Communication for Professional Success' on 17<sup>th</sup> September 2016. The workshop was attended by industry professional from various organizations.
2. On 28th January 2016, BPDC Library Staff organized "EBSCO Online Database (e-journals) Orientation and Live Demo Training. The training was handled by Mr. Ghais Najjar, Information Specialist.
3. A session on "Stress Free Living conducted from Art of Living team at BPDC G07 on Monday 4th April 2016 between 3.45 to 4.45 pm. The session included "Life skills to overcome stress, Yoga and Exercise and Meditation"
4. AOEE of EEE department, BPDC organized an ARDUINO workshop on "Building Smarter Homes" on 15th and 16th April 2016. The workshop session was conducted by Mr. Talal Shaikh, Heriot-Watt University, Dubai.
5. Placement division in association with AOEE of EEE department organized a training program on VERILOG Programming language which for final year students of EEE/EIE/ECE/CS who are interested in core electronics career. The training program has been scheduled on every Tuesday. The introductory session was held on 20th September 2016.
6. The Corporate Legal Cell of the Aditya Birla Group (ABCL) conducted a workshop on "Intellectual Property Rights (IPR)" at BITS Pilani, Dubai Campus on the 13<sup>th</sup> of November 2016. ABCL is an integral part of the business group and provides timely and quality legal services on a wide range of strategic and transaction-related issues in a cost-efficient manner. The workshop helmed by Mr. Samir Singh and Mr. Dhruvajyoti Basu from ABCL saw the attendance of the faculty and research scholars of the institute in full-force.
7. CSE department of BPDC conducted a workshop on "Cryptography" from 15th to 17th March 2016. Prof C. Pandurangan, from CSE department, IIT madras was the resource person.
8. The TLC team conducted a workshop on "Effective Teaching and Learning" at BITS Pilani Dubai Campus, Dubai from 12th-14th March 2016. It was attended by all faculty members.
9. A Workshop on MATLAB introduction and basics, Robot Modeling & simulation using SIM MECHANICS was organized by Mechanical department during 22-23 March, 2016.
10. Team gear shifters conducted a Solidworks workshop in enginuity in collaboration with ASME. This was attended by 40 students and sponsored by barakat.
11. An MOU was signed with Maktoum Bin Hamdan Dental University College, Dubai & BPDC on 7.11.16 for research collaboration.

#### B4.11 FACULTY PROFILE

There are 89 Faculty/ Academic staffs in BITS Pilani, Dubai Campus at the end of the first semester 2016-2017. Out of these, 67 are Lecturer and above, and 22 are Lab Instructors and Technical Assistants. Out of these 67 teaching faculty, 65 are Ph.D. holders with several years of teaching experience and 2 have appropriate Master's Degrees with several years of teaching experience. There are 1 Senior Professor, 18 Professors, 13 Associate Professors, 30 Assistant Professors, 1 Senior Lecturer, 2 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 1:20. 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)	Percentage of teaching staff (Lecturer & above) possessing Ph. D / made good progress towards Ph.D.	<b>97</b>
(ii)	Percentage of teaching staff working for Ph.D.	<b>3</b>
(iii)	Percentage of teaching staff who participated in Practice School Programme in the year	<b>72</b>

## Faculty Development Programme

### Technical contributions from faculty and students

There were a total of 84 contributions which include 38 in various international Journals and 46 in various Conferences. The complete list of research contributions made by the faculty, staff and students is given in Annexures B4-11 and B4-12.

### Some Note-worthy Achievements

1. Dr.T.K. Datta was appointed as a member of the Advisory Committee of National Conference on "Computational Mathematics & Operations Research" organized at BK Birla Institute of Engineering & Technology, Pilani on 15-16, October 2016.
2. Dr. Mary Lourde R., served as a technical expert to evaluate an ICT FUND project proposal costing AED 1.8 million in the area of Cost effective street lighting during May June - 2016 and another Project proposal in the area Artificial Intelligence, Healthcare - diagnosis costing AED 2 million.
3. Dr R Swarnalatha had received an Outstanding Women Achiever in the field of Biomedical Instrumentation on 5<sup>th</sup> March 2016 by Venus International Foundation VIWA 2016.
4. Dr Anand Kumar reviewed ICT Fund proposal "A cloud-based IoT platform for smart and sustainable agriculture"; worth more that AED 1.6 million.
5. Dr. Anand Kumar served as a Technical Reviewer for the 2016 IEEE 59th International Midwest Symposium on Circuits and Systems held during 16-19 October 2016, Abu Dhabi, United Arab Emirates and reviewed three research manuscripts.
6. Dr. A. P. Singh reviewed a research article titled "Spatio-temporal variation and trend analysis of groundwater level in Raipur City, Chhattisgarh" for an International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal.
7. Dr R Gomathi Bhavani worked as a visiting scholar at Centre for Urban Energy at Ryerson University, Canada, under the university immersion programme of BITS Pilani during June - August 2016. She worked along with Bala Venkatesh, Director and other researchers on energy storage and renewables. She wrote a project proposal, "System Reliability Enhancement and Efficient Charging of Electric Vehicles using Battery Energy Storage System" and submitted to IC IMPACTS Innovation Demonstration Initiative under the theme safe and sustainable infrastructure.
8. Dr. Trupti Gokhale from Department of Biotechnology participated in the Industry Immersion program at National Chemical Laboratories, Pune, India from 11th July to 29th July 2016. She took up hands on training under the guidance of Dr. Asmita Prabhune, Scientist, Division of Biochemical Sciences. Research collaboration between the two departments has been initiated through the industry immersion program.
9. BITS Dubai Campus was represented by Krishna Kaushik and Tejas Kulkarni in the semi-finals of the 12th edition of the TAPMI Quiz on the Beach (QOTB™) conducted by quiz master 'Pick Brain' Giri Balasubramaniam of TATA crucible fame.
10. Team Ophiuchus comprising of Mihika Shivkumar, Tanya Mittal, Mohammed Shamroukh and Aman Sharma from BITS Pilani, Dubai Campus has bagged the "Best Case Study Analysis" award in the Business Case Study Challenge held on February23, 2016 organized by Middlesex University.
11. The BITS Pilani, Dubai Campus team - Rashi Mohnot, Apoorv Singh and Abraham Matthew became the 2015-16 CFA Institute Research Challenge winner in the UAE, hosted by CFA Society Emirates, the local UAE member society of the CFA Institute and have got the opportunity to represent UAE at the EMEA regional competition final in Chicago, Illinois, USA, the week of 11th April 2016.
12. Team Ophiuchus comprising of Mihika Shivkumar, Tanya Mittal, Mohammed Shamroukh and Aman Sharma from BITS Pilani, Dubai Campus has bagged the "Best Case Study Analysis" award in the Business Case Study Challenge held on February23, 2016 organized by Middlesex University.
13. Team Gear Shifters comprises of Aravind Prashant, Sadjyat Biswal, Vedant Bajaj has won the people's choice awards at the Innovator Show held in Abu Dhabi on 3rd and 4th march, 2016. The team secured first position with a cash prize of 10000 AED.
14. Dr. Shazi Shah Jabeen, Professor, Department of Humanities and Social Sciences BITS Pilani, Dubai Campus received the Best Professor in Humanities and Social Sciences under the category The Middle East Education Leadership Award organized and presented by Word Sustainability and World CSR Foundation at Address Hotel, Dubai Mall on 5 October 2016
15. Team Gear Shifters comprising of 20 students from BITS Pilani, Dubai, who made UAE's first Formula 1 student race car, have completed their latest car (GSRS02) and will showcase it at Formula SAE (Society of Automotive Engineers) in Germany next year. The team has also won prize at the Innovator Show 2016 in Abu Dhabi.

**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:

1. Dr. A. P. Singh delivered a keynote address titled "Impact Assessment of Road Construction on Rural Accessibility: A Case Study in India" in the National Conference on Fifteen Years of PMGSY (FYPMGSY) at Indian Institute of Technology Roorkee, India on 6 August 2016.
2. Dr. B. G. Prakash Kumar delivered a talk on "Optimization of macronutrient kinetics for biomass production in Nostoc calcicola", on 28th July 2016, Sri Venkateswara College of Engineering, Sriperumbudur, and Chennai.
3. Dr. Iype, E., of Chemical Engineering Department delivered an invited online lecture at conference Parameterization of a reactive force field using a Monte Carlo Simulation, at NSCCS ADF ReaxFF Workshop 2016, 27th - 28th September 2016, Imperial College London.
4. Dr. A. B. Chattopadhyay delivered a key note address during International conference on Green Power technology in Power Grid Issues ,challenges & control (ICGPTG-2016) at SV University ,Tirupati ,India during November 16-18,2016

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 2016)

Senior Professors, Professors	-
Associate Professors	01
Assistant Professors	04
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Dr. Nishant Pandya

**Contact details:** nishant@dubai.bits-pilani.ac.in

**Number of PhD Scholars:** NIL

**Ph.D. Thesis Submitted during the year:** NIL

**A. Sponsored Research activities:**

1. Ongoing projects: Nil
2. Projects sanctioned during the year:
 

Collaborative research project approved under the Research Initiation Grant of BITS Pilani. Topic: Development of Computer Aided Product Design Tool for Mixtures. **PI: Dr. Nishant Pandya**, BITS Pilani, Dubai Campus, Co-I: Prof. (Dr.) Vincent Gerbaud, Director – Research, Université de Toulouse, INP, CNRS, LGC, France. Duration 2 years starting from 13.10.2016. Budget approved: AED 16,000.
3. Projects completed this year: Nil

**B. Publications:**

1. V. Gerbaud, M. Teles Dos Santos, N. Pandya, J. M. Aubry, Computer aided framework for designing bio-based commodity molecules with enhanced properties., *Chemical Engineering Science*, 159, 177-193.
2. Iype, E., Esteves, A. C. C., and de With G., Mesoscopic simulation of hydrophilic cross-linked polycarbonate polyurethane networks: Structure and Morphology., *Soft Matter*, 12, 5029-5040.
3. Rajib Ghosh Chaudhuri, Santanu Paria, Au and Ag/Au double-shell hollow nanoparticles with improved near infrared surface plasmon and photoluminescence properties., *Journal of Colloid Interface Science*, 461, 15-19.
4. Kalathil, S. and Ghosh Chaudhuri, R., Hollow Palladium Nanoparticles Facilitated Biodegradation of an Azo Dye by Electrically Active Biofilms., *Materials*, 9(8), 653-663.

**C. Conferences attended/papers presented:**

1. Dr. Bharat Bhushan Gulyani and Arshia Fathima, Introducing Ensemble Methods to Predict the Performance of Waste Water Treatment Plants (WWTP) ICEPP 2016, Kyoto, Japan, December 25-27, 2016, <http://www.icepp.org/com.html>

**D. Books Published/Edited during the year:**

1. Book Chapter: S. Ramachandran, P. Sankar Ganesh, V. Sivasubramanian, and B.G. Prakash Kumar, 2016. Environmental Sustainability Using Green Technologies, Chap: Current Developments in Mass Production of Microalgae for Industrial Applications, CRC Press, Taylor and Francis Group, ISBN 9781498753050

**E. Conferences, seminars & workshops conducted: Nil****F. Invited Talks given by BITS faculty:**

1. B G Prakash Kumar delivered a talk on "Optimization of macronutrient kinetics for biomass production in *Nostoc calcicola*", on 28<sup>th</sup> July 2016, Sri Venkateswara College of Engineering, Sriperumbudur, Chennai.
2. Invited to deliver online lecture at conference: Dr. Iype, E., Parameterization of a reactive force field using a Monte Carlo Simulation NSCCS ADF ReaxFF Workshop 2016, <http://www.nscs.ac.uk/ADF2016.php>, 27<sup>th</sup> - 28<sup>th</sup> September 2016, Imperial College London.

**G. Invited talks arranged in the department:**

- 7<sup>th</sup> Feb. 2016, Introduction to Scanning Electron Microscopy, Mr. Noumaan Qureshi, TESCAN ME FZC, Sharjah, UAE.
- 3<sup>rd</sup> Mar. 2016, The current financial aspects of ethylene and propylene (commercial oil derivatives), Dr. Srikanta Dinda, Associate Professor, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus, India.
- 9<sup>th</sup> Mar. 2016, Recent advances in computational drug design and Computational Biologics design, Mr. R. Raghu, Vice president, Schrodinger Inc., USA.
- 13<sup>th</sup> Mar. 2016, From mind to the market place: Innovation through global collaboration, by Professor Suresh Bhargava, a member of groups such as the DPVC (International Research), CAMIC (Center for Advanced Materials and Industrial Chemistry) and RMIT University, Melbourne, Australia.
- 30<sup>th</sup> Mar. 2016, Polymers in the modern world, Mr. Jenö Muthiah, CEO, Alpha Coating Technology, Addison, Illinois, USA.
- 5<sup>th</sup> Apr. 2016, The simulation of light olefin selectivity from FCC unit (Lab to Pilot to Commercial), by Dr. Srikanta Dinda, Associate Professor, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus, India.
- 12<sup>th</sup> Apr. 2016, Particle based simulation for studying molecular systems, Dr. Eldhose Iype, Assistant Professor, Department of Chemical Engineering, BITS Pilani, Dubai Campus, UAE.
- 20<sup>th</sup> Sep. 2016, Recent techniques in precipitated calcium carbonate (PCC), Mr. Hitesh Agarwal, Director, Jindal Saw Gulf L.L.C/ Super Cement Manufacturing Co. L.L.C, Abu Dhabi, UAE.
- 25<sup>th</sup> Oct. 2016, Industrial Techniques in X-Ray Diffraction and Analysis, Mr. Nicolla Mottla, PANalytical- The Netherlands

**H. Awards and recognitions won by faculty and students:**

1. Dr. Bharat B. Gulyani invited as member of Conference Technical Committee of ICEPP 2016, <http://www.icepp.org/com.html>

**I. Faculty Development, International Collaboration & Industry Immersion:**

Industry Interaction carried out on wastewater treatment pilot plant with Ocean Corner for potential research & consultancy project.

**J. Significant new equipments/experimental facility added during the year:**

The following equipments were procured by the Chemical Engineering Department:

Control valve characteristics, Cascade Control Trainer and Data Acquisition System, Interacting and Non-Interacting Systems, Cooling and Heating circulation bath, Furniture for Petroleum lab with ventilation system, Conradson Carbon residue apparatus, Thin film Aniline point apparatus, Vacuum distillation system, Smoke point lamp, Pump for filter press, Soxhlet extractor set up, Distillation set up, Filters for air compressors, Ozone monitor, Weighing balance for tray drier.

**K. Departmental Association/Club activities:**

1. AIChE Students' chapter BPDC had four video conferences with BYU (Brigham Young University, Utah, USA) Sister Chapter between January and November 2016.
2. Industrial trip to Star cement industry, RAK, 27<sup>th</sup> Feb. 2016.
3. ChESA – AIChE Students' chapter BPDC organized Big Split (Engenuity '16), 17<sup>th</sup> Mar. 2016.
4. Organized Inauguration of the Petroleum Laboratory, 3<sup>rd</sup> May 2016.
5. AIChE Sustainable Energy Forum (SEF) Education Committee, Undergraduate Sub-Committee Teleconference Meeting, AIChE Students' chapter BPDC, 10<sup>th</sup> May 2016.
6. Semester Technical Activity – 2<sup>nd</sup> year and 3<sup>rd</sup> year students of the department had displayed experimental / study activities carried out during the semester as a part of an evaluation component of core courses – SP I and PDP II, 22<sup>nd</sup> May 2016.
7. Orientation program for new Batch of Chemical Engineering Students' 2016-2020 to introduce ChESA and AIChE Students' chapter BPDC. 2<sup>nd</sup> Sept. 2016.
8. Field trip to Super Cement, Abu Dhabi, 15<sup>th</sup> Oct. 2016.
9. Placement Presentation given by Monaco Engineering Solutions UAE, Mr. Gianfranco Mangiapane, Mr. Sak Chowdhury Monaco Engineering Solutions UAE, 24<sup>th</sup> Oct. 2016.
10. Interactive session on Advanced techniques of Process Simulation using ASPEN Plus, 19<sup>th</sup> Nov. 2016.
11. SEF Member Champions video Meeting with Mr. Cory, AIChE Students' chapter BPDC, 22<sup>nd</sup> Nov. 2016.
12. AIChE Students' chapter BPDC organized Inter Collegiate CHEM-E Debate Tournament (ICDT) (Engenuity 2016), 27<sup>th</sup> and 29<sup>th</sup> Nov. 2016.

**B4.14.2 Department: Civil Engineering**

Number of faculty members (as on 31<sup>st</sup> December 2016)

Senior Professors, Professors	01
Associate Professors	00
Assistant Professors	01
Lecturers	01
Visiting Faculty	-

**Head of the Department:** Dr. Ajit Pratap Singh

**Contact details:** apsingh@dubai.bits-pilani.ac.in

**Number of PhD Scholars:** 01

**Ph.D. Thesis Submitted during the year:** NIL

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: NIL

**B. Publications:**

1. S. Kanuganti, A.K. Sarkar, A.P. Singh, Evaluation of access to health care in rural areas using enhanced two-step floating catchment area (E2SFCA) method, *Transport Geography*, Volume 56, 45-52.
2. R. Dandautiya, P. Mayekar, M. Toshniwal, A.P. Singh and S. Kundu, Leaching Characteristics of fly ash generated from Suratgarh thermal power plant, *Earth Sciences and Engineering*, Volume 9(1), 167-173.

**C. Conferences/ Workshop attended/papers presented:**

1. R. Srinivas and A.P. Singh, Application of fuzzy multi-criteria approach to assess the water quality of river Ganges, *International Conference on Soft Computing: Theories and Applications (SoCTA-2016)*, Amity University Rajasthan, Jaipur, India, 28-30 December, 2016. (Paper No. 81).
2. R. Srinivas, A.P. Singh and T.A. Borthakur, Impact Assessment of Open Drains in River Ganges Using Scenario Based Water Quality Modeling, *Proceedings of Hydro 2016 International: 21st International Conference on Hydraulics, Water Resources and Coastal Engineering, CW&PRS PUNE, INDIA*, 8-10 December, 2016.
3. H. Puppala, A. Ingale, A.K. Sarkar, A. P. Singh, Three-Step Floating Catchment Area Method to Quantify the Spatial Accessibility to Health Care facilities. *12th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC)*, Indian Institute of Technology Bombay, Mumbai, India, 19-21 December 2016. (Paper No. 135-Best paper award).
4. S. Kanuganti, A.K. Sarkar, A.P. Singh, Impact Assessment of Road Construction on Rural Accessibility: A Case Study in India, *National Conference on Fifteen Years of PMGSY (FYPMGSY)*, Indian Institute of Technology Roorkee, Roorkee, India, 6-7 August, 2016. (Paper No. D-4: 1-17).
5. A.S. Mane, S.N. Gujarathi, S.S. Arkatkar, A.K. Sarkar, A. P. Singh, Methodology for Pavement Condition Assessment and Maintenance of Rural Roads, *National Conference on Fifteen Years of PMGSY (FYPMGSY)*, Indian Institute of Technology Roorkee, Roorkee, India, August 6-7, 2016. (Paper No. C-6: 1-14).
6. K. Shalini, R. Agarwala, B. Dutta, P.N. Bhanegaonkar, A.P. Singh, and A.K. Sarkar, A.K. (2016). Road safety analysis using multi criteria approach: A case study in India, presented in *14th World Conference on Transport Research*, Shanghai, China, 10-15 July, 2016. (Paper no. H2-PO6: 1-10).
7. M. Wagale, A.P. Singh, A. Singh, Neural Networks approach for evaluating quality of service in public transportation in rural areas, *India International Conference on Information processing (IICIP-2016)*, Delhi Technological University, India, 12-14 August, 2016. (Paper No. TS 4: SC&EC-IV-540).
8. K. Madan, A.P. Singh and A. Kumar, Design of Water Distribution Systems Using Genetic Algorithm, *4th United Arab Emirates Undergraduate Student Research Competition*, Abu Dhabi University, Abu Dhabi, 09 May 2016.
9. A. Shumayal and A.P. Singh, Fluid Dynamics Approach to Traffic Flow in Selected Stretches of Highways, Internal Roads and Junctions in the UAE, *4th United Arab Emirates Undergraduate Student Research Competition*, Abu Dhabi University, Abu Dhabi, 09 May 2016.
10. H. Puppala, S. Kanuganti, A.K. Sarkar, A.P. Singh, Part to Whole Methodology in Planning to Enhance the Spatial Accessibility to Health Care Facilities Using GIS; at *Geo smart India-2016*, India Expo Center, Greater Noida, India, 1-3 March, 2016. (Paper No.: Youth Forum: 57).
11. V. Swathi, K.S. Raju, A.P. Singh, Application of Storm Water Management Model to an Urban Catchment, *International Conference on Water, Environment, Energy and Society (ICWEES-2016)* organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India, 15 – 18 March, 2016.
12. K.S. Raju, G. Akshara, A.P. Singh, and A. Vasan, Application of Multiple Linear Regression as Downscaling Methodology for Lower Godavari Basin, *International Conference on Water, Environment, Energy and Society (ICWEES-2016)* organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India Bhopal, India, 15 – 18 March, 2016.
13. A.P. Singh, P. Shrivastava, and A.K. Vidyarthi, Potential Impacts of Climate Change in Water Resources Management of Chittorgarh, District, Rajasthan, India, *International Conference on Water, Environment, Energy and Society (ICWEES-2016)* organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India Bhopal, India, 15 – 18 March, 2016.
14. A.P. Singh, P. Bhakar, Ground Water Quality Assessment in Hyper-Arid Region of Western Rajasthan Using Multivariate Statistical Analysis, *Eighth International Perspective on Water Resources and the Environment conference* organized by the American Society of Civil Engineers (ASCE) and the Environmental and Water Resources Institute (EWRI) held in Colombo, Sri Lanka, 4-6 January, 2016.
15. R. Srinivas, and A.P. Singh, A fuzzy based multi-criteria decision making approach for assessing the sustainability of river Ganga, *Eighth International Perspective on Water Resources and the Environment conference* organized by the American Society of Civil Engineers (ASCE) and the Environmental and Water Resources Institute (EWRI) held in Colombo, Sri Lanka, 4-6 January, 2016.

**D. Books Published/Edited/ Reviewer/ Examiner during the year:**

1. A. P. Singh reviewed two chapters a book on Environmental Engineering to be published by Pearson India Education Services Private Limited. These chapters are (i) Quantity and Quality of Water and (ii) Solid Waste Management in August 2016.
2. A. P. Singh evaluated one Ph.D. Thesis titled "Studies on Removal of Some Toxic Anionic Dyes and Hexavalent Chromium for Industrial Wastewater Remediation" submitted at Hydro Informatics Engineering Department of Civil Engineering, National Institute of Technology, Agartala in July 2016.
3. A. P. Singh reviewed a research article titled "Automatic Water Management System for Indian Green Land Revolution" for the Journal of Water Resources Management (WARM-D-15-00774).
4. A. P. Singh reviewed a research article titled "A method of the groundwater quality assessment based on Fuzzy Network-CANFIS and geographic information system (GIS)" for Journal of Applied Water Science (AWSC-D-16-00140).
5. A. P. Singh reviewed a research article titled "Assessment of Water Quality Parameters of Bhalswa Lake In New Delhi" for an International Journal of Environmental Engineering (IJEE-105142).
6. A. P. Singh reviewed a research article titled "Spatio-temporal variation and trend analysis of groundwater level in Raipur City, Chhattisgarh" for an International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal.

**E. Conferences, seminars & workshops conducted:****F. Invited Talks given by BITS faculty:**

1. A. P. Singh delivered a keynote address titled "Impact Assessment of Road Construction on Rural Accessibility: A Case Study in India" in the National Conference on Fifteen Years of PMGSY (FYPMGSY) at Indian Institute of Technology Roorkee, India on 6 August 2016.

**G. Invited talks arranged in the department: NIL****H. Awards and recognitions won by faculty and students: NIL****I. Faculty Development, International Collaboration & Industry Immersion:**

**J. Significant new equipments/experimental facility added during the year:** Procured requisite equipments for two civil engineering Laboratories as given below:

1. Survey Laboratory was established by procuring various equipments such as Electronic Total station, Automatic Laser Level, Electronic Theodolites, Automatic Level Dumpy Level and Laser Distance Meters of worth AED 37980 in June 2016.
2. Fluid Mechanics Laboratory was established by procuring various equipments such as Fluid friction measurement apparatus, Cavitation demonstration apparatus, Free and forced vortices apparatus and Basic hydraulic bench of worth AED 116882 in December 2016.

**K. Departmental Association/Club activities: NIL**

**B4.14.3 Department: Electrical & Electronics Engineering**Number of faculty members (as on 31<sup>st</sup> December 2016)

Senior Professors, Professors	03
Associate Professors	02
Assistant Professors	08
Lecturers	00
Visiting Faculty	00
Adjunct Professor	00

**Head of the Department:** Dr. A.R.ABDUL RAJAK**Contact details:** abdulrazak@dubai.bits-pilani.ac.in**Ph.D. Thesis Submitted during the year:** 0**Number of PhD Scholars:** 11 (8 Full Time, 2 Part Time and 1 off campus)**Ph.D. Proposal Submitted during the year:** 01**A. Sponsored Research activities:****1. Ongoing projects:**

Faculty, staff and students made and delivered a prototype of a timer to industry (Au Pure). Dr Anand Kumar led this team.

**2. Projects sanctioned during the year:** Nil**3. Projects completed this year:** NIL**B. Publications:**

1. Aamir Jamal, Dr. A.R. Abdul Razak, "Design and analysis of LNA for RF Wireless Communication at 2 Ghz" International Journal of Research in Engineering and Applied Sciences, Vol. 6 Issue 11, November - 2016, pp. 185~188
2. Koyadeen, R.T., Devisree, S., Kumar, A., "A Methodology to simulate and analyze molecules as Molecular Switches", IJSSST Vol 17.
3. Shamith Louis Saldanha, Arivarasi A, Anand Kumar R, "Design of a Stepper Motor for Nano Resolution 3D Printing", World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16), San Francisco, USA, 19-21 October, 2016.
4. Ishaan Vasant, Arivarasi A, Anand Kumar R, "3D Printing File Format and Design for Creating Material compositions for Porous Structure", World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16), San Francisco, USA, 19-21 October, 2016.
5. Arivarasi A, Anand Kumar R, Jegatha Nambi Krishnan, "Design & Material Characterization of Potassium Gold Cyanide Immersed Layers for 3D Printing Nano Sensor", World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16), San Francisco, USA, 19-21 October, 2016.
6. ARIVARASI, R. ANAND KUMAR, "3D Printing of Copper Filament for Layered Sensor Fabrication", World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS '16), Dubrovnik, Croatia, September 28-30, 2016
7. KAVYA, ARIVARASI A, ANAND KUMAR R, JEGATHA NAMBI KRISHNAN, "Design & Material Characterization for 3D Printing Sensor", World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS '16), Dubrovnik, Croatia, September 28-30, 2016
8. SHIBANI NASSER, ARIVARASI A, KAPIL BANSAL, ANAND KUMAR R, "Modelling and 3D printing of Packaging for Water Quality Sensor", World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS '16), Dubrovnik, Croatia, September 28-30, 2016
9. Koyadeen, R.T., Devisree, S., Kumar, A., Raj, R., "Simulation and Analysis of BDT Molecule with Au Electrodes as a Molecular Switch." UKSim-AMSS 18th International Conference on Modelling & Simulation, Cambridge University, Cambridge, U.K., 6 - 8 April 2016.



10. Devisree, S., Kumar, A., and Raj, R., "Nanoscale FPGA with reconfigurability", 18th Mediterranean Electro technical Conference (MELECON). IEEE, 2016.
11. Swati Sinha, T V Chandrasekhar, Mary Lourde R, Estimation of Doppler Profile Using Multi-Parameter Cost Function, IEEE Trans. on Geoscience and Remote sensing, Vol. 55(2),pp. 932-942, 2016, DOI :10.1109/TGRS.2016.2616918
12. Mary Lourde R., "Challenges and Advances in FinFET Device Technology", VLSI Circuits and Systems Letter, Volume 2, Issue 1, April 2016, page No. 16 - 20. Available online TCVLSI.org
13. Swati Sinha, T V Chandrasekhar, Mary Lourde R., "An Objective Method for the Removal of RFI and Clutter in Wind Profiler Doppler Spectra" Proceedings of 2016 IEEE 59th International MWSCAS, Abu Dhabi, UAE, pp. 241 – 244, October, 2016 DOI : 978-1-5090-0916-9/16
14. Swati Sinha, T V Chandrasekhar, Mary Lourde R., "Doppler Feature based Classification of wind profiler data", 2016 International Conf. on Communication, Image and Signal Processing (CCISP 2016), Dubai. November,2016 ( JPCS, IOP Press)
15. Swati Sinha, T.V. Chandrasekhar Sarma, Mary Lourde R., "Removal of RFI and Clutter from Atmospheric Radar Spectra" International Journal of Applied Engineering Research Volume 11, Number 24 (2016) pp. 11864-11870, Research India Publications, ISSN 0973-4562 ( Scopus source record id : 21100217234)
16. Azhar Syed, Mary Lourde R "Hardware Security Threats to DSP Applications in an IoT network",Proceedings of 2016 IEEE International Symposium on Nanoelectronic and Information Systems (INIS 2016), ABV-IIITM, Gwalior, India, December 2016
17. Sreeja Rajendran, Mary Lourde R., "Ab-initio study on FinFETs and their application in IoT aided Robotics", Proceedings of IEEE 2016 International Symposium on Embedded Computing and System Design (ISED 2016), IIT Patna, India, December 2016.
18. Vilas H. Gaidhane, Y. V. Hote, V. Singh, "Emotion recognition using eigenvalues and Levenberg-Marquardt algorithm-based classifier," Sadhana: Academy Proceedings in Engineering Sciences (Springer) vol. 41, no.4, pp. 415-423, 2016. (SCI, Scopus Index)
19. Vilas H. Gaidhane, Y. V. Hote, "A New Approach for stability analysis of discrete systems," IETE Technical Review (Taylor and Francis) vol. 34, no. 1, pp. 1-6, 2016. (SCI, Scopus Index)

#### **C. Conferences attended/papers presented:**

1. Aamir Jamal (2013AAPS049), presented a research paper on " Design and performance analysis of Micro strip Patch Antenna following IEEE 802.11b/g/a specifications" 2nd IEEE International Conference on Human Computer Interactions (ICHCI'16) held at NALLI ARANGAM, SAVEETHA UNIVERSITY, CHENNAI. Tamil Nadu and obtained BEST PAPER award.
2. PhD Scholar Arivarasi presented two papers at WCECS 2016 in San Francisco, USA during 19-21 October 2016.
3. FD student Shamith also presented one paper at WCECS 2016 conference. The work was done as part of Shamith's study project.
4. Rafsa T. Koyadeen (ME student from Calicut University and who did her ME project research at BITS Pilani, Dubai Campus) presented a paper Simulation and Analysis of BDT Molecule with Au Electrodes as a Molecular Switch at UKSim 2016 at Cambridge University UK, 6-8 April 2016.
5. Dr. Mary Lourde R., Participated in a two day workshop on " 3DPAD - 3D Printing Applications to Delivery" organized by IBCI, Dubai during April 6-7, 2016.
6. Dr. Mary Lourde R., Participated in a five day Workshop on "Cadence, Synopsys and Mentor Graphics" (16-20 May, 2016) at BITS Pilani K. K. Birla Goa Campus INDIA
7. Swati Sinha, attended the symposium and presented a paper titled "An Objective Method for the Removal of RFI and Clutter in Wind Profiler Doppler Spectra" at 2016 IEEE 59th International Mid West Symposium on Circuits And Systems MWSCAS, Abu Dhabi in October 2016.
8. Swati Sinha, attended the conference and presented a paper titled "Doppler Feature based Classification of wind profiler data", at 2016 International Conf. on Communication, Image and Signal Processing (CCISP 2016), Dubai in November,2016
9. Azhar Syed , Mohammed Azeem Gafoor , Aamir Jamal Dr. Abdul Rajak "Study on Patch Antennas for various purposes A Literature Survey"3 rd International Conference on Electrical, Electronics, Engineering Trends, Communication, Optimization and Sciences (EEECOS)-2016 Sasi Institute of Technology & Engineering, Near Aerodrome, West Godavari, Tadepalligudem, Andhra Pradesh, India, 534101
10. P. K. R. Yelampalli and J. Nayak, "Local Diagonal Laplacian Pattern: A New CT and MR Feature Descriptor," in International Conference on Advanced Computing and Intelligent Engineering, Bhubaneswar, 2016.

**D. Books Published/Edited during the year:**

**Chapter in book:** Kumar, A., Vijayakumar, B., Mittal, R.K., Research Topics in Cloud Computing. Encyclopedia of Cloud Computing, Chapter in Book: Encyclopedia in Cloud Computing. Ed San Murugesan and Irena Bojanova, 676-681, Wiley-IEEE Press, July 2016.

**E. Conferences, seminars & workshops conducted**

1. AOEE had organized an **Arduino workshop** from 15<sup>th</sup> to 17<sup>th</sup> of April 2016 by Mr. Talal Sheikh, Assistant Professor Heriot - Watt University Dubai Campus. Dubai. 60 students had actively participated during weekend for the full day.

**F. Invited Talks given by faculty:****G. Invited talks / technical visits arranged by the department:**

1. AOEE had organized a Guest Lecture & Demonstration on Industrial Automation using SCADA on 10<sup>th</sup> May, 2016 by Mr. Chandradhar Prasad & Ms. Kriti Saxena, Sr.Engineers- Automation Projects, L & T Electrical and Automation FZE, Dubai.
2. AOEE had scheduled a Guest Lecture by Prof. Alek N.Choudhary, Henry and Isabelle Dever Professor, EECS Dept, Northwestern University and founder, Chairman and Chief Scientist, 4Cinsights Inc on 4<sup>th</sup> September 2016 on Accelerating Discoveries with Big Data and Supercomputing.
3. AOEE had arranged a Guest lecture by Dr. Brajesh Kumar Kaushik, Associate professor, IIT Roorkee on Innovations and Pathway in Nano Electronics on 25<sup>th</sup> September 2016.
4. AOEE had organized an Invited Talk on Power System Analysis & simulation by Dr Faraz Zafar Khan, manager R & D, ASAS Engineering and Projects Management Consultancy on 14<sup>th</sup> November 2016.
5. AOEE had organized a Site Visit to Dana Steel processing Industry LLC & Dana Lubricants Factory LLC, Ajman on 16<sup>th</sup> November 2016.
6. AOEE had organized a Guest Lecture by Mr. Hareesh Janakiram, Electronic Engineer, Houston, Texas on Design and Debug of Embedded Systems on 20<sup>th</sup> November 2106.
7. Dr R Swarnalatha had organized a Guest Lecture by Mr. Bharath Kamath, Product Manager, ABBOTT Laboratories S.A on Clinical Utility of Point of Care Analyzer in Health care Setup on 21<sup>st</sup> November 2016 for Medical Instrumentation elective course.

**H. Awards and recognitions won by faculty and students**

1. Dr. Mary Lourde is a reviewer for the journal "Integration, the VLSI Journal" published by Elsevier and reviewed a research manuscript in the area of Trusted IoT, Low power VLSI during May 2016.
2. Dr. Mary Lourde R., served as a Technical Review Committee member for International Conference on Radar Antenna Microwave Electronics and Telecommunication 2016 - ICRAMET 2016, conducted in October 2016, and has done peer blind review of a technical research papers for the conference during July - August 2016.
3. Dr. Mary Lourde R., served as a technical expert to evaluate an ICT FUND project proposal costing AED 1.8 million in the area of Cost effective street lighting during May June - 2016 and another Project proposal in the area Artificial Intelligence, Healthcare - diagnosis costing AED 2 million.
4. Dr. Mary Lourde R., served as a Technical Reviewer for the 2016 IEEE 59th International Midwest Symposium on Circuits and Systems held during 16-19 October 2016, Abu Dhabi, United Arab Emirates and reviewed six research manuscripts.
5. Dr.V.Kalaichelvi reviewed three papers on Application of AHP Method for Optimal Location of SSSC Device under Different Operating Conditions, Application of Advanced Shunt FACTs Device for Analyzing the Performance of Transmission System Using Evolutionary Algorithms and Power Flow Analysis and Comparison Using STATCOM, SSSC, UPFC in MATLAB for the SECOND IEEE INTERNATIONAL CONFERENCE ON ELECTRICAL, COMPUTER AND COMMUNICATION TECHNOLOGIES to be held at SVS College of Engineering, Coimbatore during 22 - 24, February 2017
6. Dr Anand Kumar reviewed ICT Fund proposal A cloud-based IoT platform for smart and sustainable agriculture. This proposal was worth more that AED 1.6 million.
7. Dr. Anand Kumar served as a Technical Reviewer for the 2016 IEEE 59th International Midwest Symposium on Circuits and Systems held during 16-19 October 2016, Abu Dhabi, United Arab Emirates and reviewed three research manuscripts.
8. Dr Jagadish Nayak, served as a Reviewer for Journal of Medical Systems by Springer Netherlands

9. Dr. Abdul Rajak reviewed technical paper titled "Functional Mechanism of DRX parameters for power saving and latency in LTE Network" for International Journal of Knowledge Engineering and Soft Data Paradigms in INDERSCIENCE.
10. Dr. Abdul Rajak reviewed technical paper titled "ENHANCEMENT OF NETWORK LIFETIME IN WIRELESS SENSOR NETWORKS USING RESIDUAL ENERGY" submitted for "International Journal of Image Mining" for International Journal of Knowledge Engineering and Soft Data Paradigms in INDERSCIENCE journal.
11. Dr. Abdul Rajak reviewed technical paper "Scenario-Based Stochastic Method for Optimal Operation and Management of Smart Reconfigurable Grids" in Journal of Intelligent and Fuzzy Systems
12. Dr. Abdul Rajak evaluated thesis "Title of thesis: investigations on techniques to improve the performance of phase frequency detector charge pump of phase locked LOOP" for ANNA University, India.
13. Dr. Abdul Rajak evaluated "NEURO FUZZY BASED ROUTING PROTOCOL IN MOBILE ADHOC NETWORKS" for ANNA University, India.
14. Dr R Swarnalatha had received an Outstanding Women Achiever in the field of Biomedical Instrumentation on 5<sup>th</sup> March 2016 by Venus International Foundation VIWA 2016.
15. Dr. R. Swarnalatha had served as a Judge for Electrical, Electronics & Instrumentation Engineering in the 4<sup>th</sup> United Arab Emirates Undergraduate Student Research Competition (UGSRC) on 9<sup>th</sup> May 2016, held in Abu Dhabi University, Abu Dhabi. U.A.E
16. Dr R Swarnalatha reviewed four papers titled as "A Review on Application of Artificial Neural Network(ANN) on Protein Secondary Structure Prediction", "A Rule Based Advisory System For Repair and Maintenance of UPS", "Analytics for Image, Text and Audio Analysis for Military Surveillance, Command & Control System" and "Aerial path planning using Meta- Heuristics : A survey" for the Second IEEE International Conference on Electrical, Computer and Communication Technologies to be held at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 22 - 24, February 2017.
17. Dr R Swarnalatha served as Technical Review Committee member for the second IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT-2017), to be held at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 22 - 24, February 2017.
18. Dr. Vilas H Gaidhane reviewed the research papers for the Journals 1. IEEE Transaction on Measurement & Instrumentation, 2. IETE Technical Review (Taylor & Francis) 3. International Journal of Electrical Power and Energy Systems (Elsevier) 4. Image, Video and Signal Processing (Springer) 5. Neural Computing and Applications (Springer) 6. Journal of Medical Systems (Springer)
19. Dr. Vilas H Gaidhane acts as International Committee member and reviewer for the IEEE International Conference (CCIS-2016), Mathura (UP) India

#### **I. Faculty Development, International Collaboration & Industry Immersion**

Dr R Gomathi Bhavani worked as a visiting scholar at Centre for Urban Energy at Ryerson University, Canada, under the university immersion programme of BITS Pilani during June - August 2016. She worked along with Bala Venkatesh, Director and other researchers on energy storage and renewables. She wrote a project proposal, "System Reliability Enhancement and Efficient Charging of Electric Vehicles using Battery Energy Storage System" and submitted to IC IMPACTS Innovation Demonstration Initiative under the theme safe and sustainable infrastructure.

#### **J. Significant new equipment's/experimental facility added during the year:**

1. Purchase of Four Point Probe, DiY 3D Printer, accessories and materials for MEMS Lab.
2. Three new equipments were purchased and installed in instrumentation lab such as Cascade Control Trainer, Control Valve characteristics, Interacting & Non - Interacting System and installation was done by the same company in the month of June 2016 for developing experiments for chemical Engg-process control lab & Mechatronics and automation lab.
3. Maintenance work for instrumentation lab was done by ATLAB company on 18.08.2016 and 15.01.2017
4. Three Phase Slip-ring Induction Motor mechanically coupled to D.C Compound Generators with Measuring unit and Starter, D.C Series motor coupled to D.C shunt Generator with Measuring unit and Starter, Salient pole synchronous motor, (Self-starting type) with Measuring unit, Three Phase Transformer for Electrical Machines Laboratory.
5. 25 Microprocessor Interfacing kits have been added. Which includes stepper motor control, Elevator control, traffic light controller, ADC, DAC, LED interfacing.

#### **K. Departmental Association/Club activities:**

1. IEEE Student Branch (Dubai Campus) organized two major events during 2016: Code blitz during Enginuity 2016 on 15 March 2016 and IEEEExtreme 2016 on 22 Nov 2016.

2. Team IFOR had participated in WETEX: Water, Energy, Technology and Energy Exhibition 2016; exhibiting their past innovations and current projects. This exhibition served as a mean to exhibit Team IFOR's innovation and paved way for many companies like Siemens Healthineers Global, Oilex and so on to meet the team and interact with them.
3. Presently IFOR team has been selected for funding by Team Total Grants for their latest innovation called the SorbDrone. SorbDrone an autonomous unmanned aerial vehicle, a project by Team IFOR designed to revolutionize the oil spill cleanup process. A final public voting would determine which team (out of seven) would get the grant for their project.
4. school students visited IFOR lab and Dr.V.Kalaichelvi (Faculty In-charge) along with her IFOR team members demonstrated the video as well as projects handled in IFOR lab on 6th oct 2016
5. TEAM IFOR was proud to have qualified to the semi-final stage of the UAE Drones For Good Award's National Competition which was held in the month of Feb2016. Their submission was selected out of an applicant pool of several hundred highly competitive entries. UAE Drones For Good will be publicizing Team IFOR's submission video as part of their media and PR campaign of the award and on their website
6. AOEE and Placement Division jointly organized Verilog Programming Training session for EEE/EIE/ECE/CS students from 20<sup>th</sup> September to 29<sup>th</sup> November 2016.
7. AOEE had organized a Technical Competition called Mind Spark for Enginuity from November 27<sup>th</sup> to 29<sup>th</sup> 2016 with 60 participants.
8. IEEE WIE had organized an event "Go Seek" which is a treasure hunt based on Engineering and Science concepts during Enginuity 2016.

#### B4.14.4 Department: Mechanical Engineering

Number of faculty members (as on 31<sup>st</sup> December 2016)

Senior Professors, Professors	03
Associate Professors	01
Assistant Professors	06
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Dr.M.V.N. Sankaram

**Contact details:** sankaram@dubai.bits-pilani.ac.in

**Number of PhD Scholars:** 07

**Ph.D. Thesis Submitted during the year:** NIL

#### A. Sponsored Research activities:

Total number of Sponsored Projects in the department: 01

1. Ongoing projects: NIL
2. Projects sanctioned during the year: NIL
3. Projects completed this year: NIL

#### B. Publications:

1. Kumar Shanmugam Johannes Liljenherte, Priyank Upadhyaya, Hyperelastic Strain Measurements and Constitutive Parameters Identification of 3D Printed Soft Polymers by Image Processing, Additive Manufacturing, 11, 40-48
2. F López Jiménez, Priyank Upadhyaya, J Liljenherte, Pm Reis, S Kumar, Soft optical composites for tunable transmittance, Extreme Mechanics Letters, Volume 9, Part 2, December 2016, 297–303
3. Mohammed Sabin, C.Periasamy , Y.K.Krishna, Design and Analysis of Wheel Rim Using Combinations of Number of Spokes and Materials, Journal of Advance Engineering and Research Development, 3, 130-138
4. Srihari, S., & Periasamy, C., Study of the existing solar technology and applicability of alternate third generation photovoltaic technology In Dubai, International Journal of Research in Engineering and Technology, 5, 62-64

5. M.Baalaganapathy, C.Periasamy, Computational Fluid Dynamics Simulation of Single Screw Extruders in Cable Industries, International Journal of Research in Engineering and Technology, 5, 85-99
6. V. Naranje, S. Kumar, S. Kashid, A. Ghodkeh. M. A. Hussein, Prediction of life of deep drawing die using artificial neural network, Advances in Materials and Processing Technologies, 2, 132-142
7. Shashank Khurana, Kojiro Suzuki And E. Rathakrishnan, Flow field behavior with Reynolds number variance around a spiked body, Modern Physics Letters B, In Press
8. Baalaganapathy Manohar, Miller Jothi, Udaykumar R, The effects of thermal barrier coating on thermal stress and temperature distribution in a diesel engine piston for Magnesia/Yittria partially stabilised zirconia, International Journal of Research in Mechanical Engineering Technology, IJRMET, Vol 6

**C. Conferences attended/papers presented:**

1. Maruthi Sai Dhiraj Sakhamuri, Sadjyot Biswal, Miller Jothi, Udayakumar R " Design of Formula SAE Car's Suspension Geometry using Lotus Shark Suspension Analyzer " International Journal of Arts & Sciences (IJAS) International conference (Track: Engineering and technology), Al Ain University of Science and Technology, 31 Jan to 4 Feb 2016
2. Biswal, S., Prasanth, A., Naranje V., Design and optimization for a formula SAE diffuser using CFD for increased track performance. The World Congress on Engineering, organized by the International Association of Engineers (IAENG), London, U.K., 29 June - 1 July, 2016.
3. Khurana, S., & Suzuki, K., Hemi-Blunt Forward Stagnation Surface for Vehicles in Hypersonic Flow. 2016 RAeS Applied Aerodynamics Conference, Bristol, United Kingdom, 19-21 July, 2016.

**D. Books Published/Edited during the year: NIL**

**E. Conferences, seminars & workshops conducted:**

1. Workshop on MATLAB introduction and basics, Robot Modeling & simulation using SIM MECHANICS was organized during 22-23 March, 2016

**F. Invited Talks given by BITS faculty: NIL**

**G. Invited talks arranged in the department:**

1. A Talk on Quantum Mechanics & Physics Reality by Prof Ravi Gomatham, Director, Institute of Semantic Information Science & Technology, Berkeley and Mumbai, Adjunct professor, BITS Pilani was held on 07-02-2016.
2. Workshop on Electro-Pneumatics and PLC was conducted during 8-10, May 2016.
3. Workshop on COMSOL Multi physics 5.2a on 06-11-2016.
4. Invited talk by Mr. Amit Bhingurde, COO, TAL Manufacturing and solutions Ltd, September 23, 2016

**H. Awards & Recognitions Won By Faculty & Students**

ASME students of our BPDC made won ASME District G top position in Student Design Competition (SDC) on 19-3-2016 at VIT, Vellore, India and they also participated in ASME IMECE 2016 held at Arizona, USA in November 2016.

**I. Faculty Development, International Collaboration & Industry Immersion:**

MOU with Maktoum Bin Hamdan Dental University College in October 2016

**J. Significant new equipments/experimental facility added during the year:**

EQUIPMENTS: CNC Mill, Stir Casting Furnace, Vacuum Hot Press, Robotic Manipulator

SOFTWARE: DIGIMAT, DFX, ESPIRIT

**K. Departmental association/club activities:**

**ACTIVITIES OF ASME (AMERICAN SOCIETY OF MECHANICAL ENGINEERS)**

- Mechathlon 2.0 As A Part Of Egnuity'16 (16-17, March 2016):
- 3-D Printing Workshop ()
- Trip To Nestle (04-05-2016)
- Autodesk's 3-D Software Fusion 360 (11-05-2016)

- Synergy Competitions (23-27, Oct2016):
- Techathlon(16-03-2016)

#### **ACTIVITIES OF MEA (Mechanical Engineering Association)**

- A Talk on Quantum Mechanics & Physics Reality by Prof Ravi Gomatham, Director, Institute of Semantic Information Science & Technology, Berkeley and Mumbai, Adjunct professor, BITS Pilani was held on 07-02-2017.
- Workshop on MATLAB introduction and basics, Robot Modeling & simulation using SIM MECHANICS was organized during 22-23 March,2016
- Workshop on Electro-Pneumatics and PLC was conducted during 8-10, May 2016.
- Field trip to RAK Ceramics, RAS AL KHAIMAH during 2-3 Nov, 2016.
- Workshop on COMSOL Multi physics 5.2a on 06-11-2016.
- CNC Machine training session on 24-11-16.

#### **ACTIVITIES OF SAE (Society of Automotive Engineers)**

- Team gear shifters conducted a Solidworks workshop in enginuity in collaboration with ASME. This was attended by 40 students and sponsored by barakat.
- Team Gear Shifters also participated in WETEX 2016.
- Black Hawks participated in BAJA SAE California in May,2016.

#### **B4.14.5. Department: Computer Science**

Number of faculty members (as on 31 DECEMBER 2016)

Professors	02
Associate Professors	-
Assistant Professors	03
Senior Lecturers	00
Lecturer	01

**Head of the Department:** Dr. Santhosh Kumar V.

**Contact details:** santhoshkumar@dubai.bits-pilani.ac.in

**Number of Ph.D. Scholars:** 11 (6 On-campus; 5 Part-Time)

**Ph.D. Thesis Submitted during II Semester 2015-2016:** 00

**Ph.D. Thesis Submitted during I Semester 2016-2017:** 00

**A. Sponsored Research activities:** Nil

**B. Publications:**

1. "Streaming Twitter Data Analysis Using Spark For Effective Job Search ", Lekha R. Nair, Sujala D. Shetty, Journal Of Theoretical And Applied Information Technology, Volume 80, No.2. 2016, pp. 20-23.

**C. Conferences attended/papers presented:**

1. Lekha R.Nair, Sarath Saleem, Sujala D. Shetty,, "Scalable Interactive Geo Visualization Platform for GIS Data Analysis ", 2nd IEEE International Conference on Big Data Intelligence and Computing, Newport Beach, August 8-10, 2016, New Zealand

**D. Books Published/Edited during the year: -**

1. Chapter 55, Research Topics in Cloud Computing, Anand Kumar, B. Vijayakumar, and R. K. Mittal, Birla Institute of Technology and Science, United Arab Emirates, pp.832-839, June 2016, Encyclopedia of Cloud Computing, WILEY-IEEE Press.

**E. Conferences, seminars & workshops conducted: -**

The CS department organized various talks and workshops with the help of various resource persons as given in the table below.

1. Prof Pandurangan, Professor Computer Science, IIT Chennai, spent 1 month during March 2016. He conducted Guest Lectures for courses: CS F364 Design & Analysis of Algorithms, CS G 513 Network Security for the full month.
2. Prof Pandurangan conducted a 3 day Workshop on Cryptology from 15.03.2016 to 17.03.2016. This was attended by people from industry and academia include BITS Pilani, Dubai Campus faculty and students.
3. Prof Pandurangan conducted month long "Puzzle based Learning" preparing students for aptitude tests and interviews.

**F. Invited Talks given by BITS Faculty / Students : Nil****G. Invited talks arranged in the department:**

The following invited talks have been arranged in the CS department.

1. Mr Keshav Peshwani, CEO, VPL Infotech, New Delhi, India gave a seminar on Embedded Systems Design on 18.01.2016
2. Saurabh Bodas, Research Scientist, Nexus Tec, GmbH, gave a talk on Machine Vision & Artificial Intelligence on 29.03.2016.
3. Somanath Mitra, Research Scholar, IIT Delhi, India, gave series of Guest Lectures on MIS, Database Management, Software Management, Cloud Computing from 02.05.2016 to 06.05.2016
4. Prof. Ashwin Srinivasan, Dpty Director & Prof of Computer Science, BITS Pilani, Goa Campus, India, who is an expert in Machine Learning, gave a talk on Computers are People on 26.05.2016
5. Prof. Venkatesh Srinivasan, Dept of CSE, Univ of Victoria, Canada gave a talk on Algorithms for Bigdata on 16.08.2016
6. Prof. Alok N. Choudhary, Henry & Isabelle Dever Professor of EECS, Northwestern University, Founder, Chairman and Chief Scientist, 4Cinsights Inc. who is the recipient of distinguished alumnus award of BITS Pilani, gave a talk on Accelerating Discoveries with Big Data + Supercomputing on 04.09.2016.
7. Prof. A.G. Ramakrishnan, Chairman of Electrical Engineering, India Institute of Science, Bangalore. 560 012, who is an expert in image processing, gave guest lectures on Online handwriting recognition, Text to Speech Synthesis, Optical Character Recognition and Transcription between Indian Languages from 03.10.2016 to 06.10.2016

**H. Awards and recognitions won by faculty and students**

1. The Innovative Cyber Security Ideas Competition, organized by Dubai Electronic Security Center (DESC), Government of Dubai, has been held on the 8th of December 2016 at Palazzo Versace Hotel Dubai, Creek. The BPDC team comprising of the students Praveen Kumar and Shikhar Singh under the mentorship of Prof. B. Vijayakumar, CS Faculty, presented the idea "Detecting and Preventing DDoS attacks using Artificial Neural Networks", which made it to the top 7 ideas.
2. CS team (Asteri\* ) of second year CS students (Jeevan Sandhu, Tanya Kalwani, Nishank Singhal, and Amaan Kulshreshtha) has won the first place in the ANGELHACK competition that was held from 1-2 April 2016 at the Microsoft Headquarters, Dubai Internet City. 17 teams comprising of developers, designers and entrepreneurs took part in this competition. The participants were tasked to develop a prototype of their idea within 24 hours, after which they had to present a demo of their product and pitch its business viability to a panel of judges.
3. Wrappup startup, co-founded by Rishav Jalan (current final year student) and Ayush Chordia (ex-BITISan), was invited by MIT Enterprise Forum to present the startup in TechCrunch Disrupt SF 2016 during September 2016. (<http://www.arzanvc.com/project/wrappup/>)
4. Rishav Jalan was invited by Microsoft (US) to travel to their HQ in Seattle, representing all the students of the gulf region for MVP Summit Event.

**I. Faculty Development, International Collaboration & Industry Immersion: Nil****J. Significant new equipments/experimental facility added during the year:**

1. NetSim Simulator Academic Edition, 75 user license, has been procured for the Computer Networks course and used for simulation and analysis of computer network protocols.

**K. Departmental Association/Club activities:****1. Microsoft Tech Club:**

FACULTY IN-CHARGE - Dr. S. Vadivel

PRESIDENT – Rishav Jalan

VP – Naman Kamra

TECH LEAD – Amartya Das Sharma, Ayush Dattagupta

WEB LEAD - Alok Rajiv & Kunal Malhotra

AUDIENCE EVENTS LEAD - Pradheepan Raghavan, - Hiloni Meht

CURRENT MEMBER STRENGTH = 225

The Microsoft Tech Club is run by Microsoft Student Partners, and students of the Microsoft Student Community. The Microsoft Student Partners Program is for students who realize the best tech careers come to those who chase their dreams. MSPs are involved in building apps, training others and social media. They are social, friendly students who enjoy creating global connections.

**Hackathon at Microsoft Office (Internet City):** 7 Microsoft Tech Club students participated in hackathon at Microsoft and were awarded Nokia Lumia 1520 each for their performance in the event.

**Droidcon sponsored by Microsoft:** 7 Microsoft Tech Club students attended the Droidcon conference worth 300\$ per attendee for free and along with free transportation.

**Sessions (8):**

- **Session 1:** Imagine Cup UAE 2016 roadshow.
- **Session 2:** Web development session with wordpress and Microsoft Azure
- **Session 3:** Discussion with Tech club members and understanding what they want to learn.
- **Session 4:** Introduction to Web development and competitive programming.
- **Session 5:** Diving into Competitive Programming
- **Session 6:** Introduction to Git and GitHub
- **Session 7:** Session with Microsoft, Introducing Microsoft imagine, Imagine cup and Student partner program
- **Session 8:** Understanding CSS frameworks

**Events in Enginuity (2):**

- **CodeBlitz:** In association with IEEE. Code debugging competition.
- **Frynapse:** Virtual scavenger hunt competition.

**2. Linux Users Group:**

The Linux Users group actively organized and collaborated events with other clubs and associations. The registrations were free and open to all BPDC students. Our Core members took active part in Organizing Committee for ENGINUITY 2016. The group also provided resource material on UNIX Commands and Editor for first year students. This is being mentored by Prof B. Vijaykumar.

**3. BPDC ACM Student Chapter:**

Dr.. Sujala Shetty is the the Faculty Advisor. for ACM chapter at BPDC. The ACM members took active part in organizing ENGINUITY 2016.



**B4.14.6 Department: BIOTECHNOLOGY****Number of faculty members (as on 31 December 2016)**

Senior Professors, Professors	03
Associate Professors	02
Assistant Professors	-
Lecturers	-
Visiting Faculty	1

**Head of the Department: Dr. S. Ramachandran**

**Contact details:** sramachandran@dubai.bits-pilani.ac.in

**Number of PhD Scholars: 2**

**A. Sponsored Research activities:**

- Ongoing projects: Collaborative project on** An assessment of the potential of cultivating feedstock crops for biodiesel production in the United Arab Emirates with ICBA .

- PI Dr. Rajiv Gupta, Co-PIs: Dr. Sunil Bhand, Dr. Utpal Roy, Dr. Neeru Sood, Dr. Trupti Gokhale**

Roof top rainwater harvesting for safe, potable, and healthy drinking water and ground water replenishment for BITS Pilani, Pilani campus. Sponsored by CoE: Water, Waste and Energy management, BITS Pilani for a period of 5 Years, with total amount Rs. 91 lakhs

- PI: Dr. Suresh Gupta, Co-I: Prof. S. K. Verma, Dr. Anupam Singhal, Dr. S. Ramachandran**

Zinc Recovery from Industrial Waste using Bioleaching; Sponsored by CoE: Water, Waste and Energy management, BITS Pilani for a period of 5 Years, with total amount; Rs. 48.00 Lakh.

- Projects sanctioned during the year: NIL**

- Projects completed this year: NIL**

**B. Publications:**

Kiran, M., Sood, N., & Rao, N.K., 2016. Study of morpho-agronomic diversity and oil content in desert (citrullus scolosynthesis (L.) Schard.). Australian Journal of Crop Science (in press)

**C. Conferences attended/papers presented:**

Following papers were presented in the international conferences by the department faculty/ staff/PhD scholar in the year 2016

- Ganesh, G., Srinivasan, P., Sood, N., & Gokhale, T. Synthesis of metal nanoparticles using *Stenotrophomonas maltophilia* and *Bacillus subtilis* isolated from the natural habitats of UAE. American Society of Microbiologist Microbe 2016, Boston, USA, 16-20 June, 2016. (online proceedings)
- Gokhale, T., Biswal, S., Thapa, A., & Sood N. Development Of A Biosensor Using Photobacterium Spps For The Detection Of Environmental Pollutants, American Society of Microbiologist Microbe 2016, Boston, USA, 16-20 June 2016. (online proceedings)
- Balaji, S., Vasudev, K.A., Srinivasan, P., Singh, S., Sood N., Gokhale T.S., & Subramanian, R. Prevalence of Antibiotic Resistance among Biofilm forming Bacteria Isolated from Domestic Environments in Dubai. American Society of Microbiologist Microbe 2016, Boston, USA, 16-20 June 2016. (online proceedings)
- Ganesh, G., Nandkumar, A., Srinivasan, P., Sood N., & Gokhale, T. A Study on heavy metal resistance in *Stenotrophomonas maltophilia* and *Bacillus subtilis* for applications in bioremediation. Current Trends in Biotechnology, Manipal University in association with American Society of Microbiologist, Dubai, UAE, 3-4 May 2016. (online proceedings)
- Srinivasan, P., Balaji, S., Singh, S., Sood, N., Gokhale, T., Somasundaram R., & Subramanian R. Antibiotic resistance among biofilm forming bacteria in domestic environments. Current Trends in Biotechnology, Manipal University in association with American Society of Microbiologist, Dubai, UAE, 3-4 May 2016.
- Singh S., Gokhale T., Subramanian S., & Sood N. Screening of bacterial diversity in Dubai Beaches. Current Trends in Biotechnology, Manipal University in association with American Society of Microbiologist, Dubai, UAE, 3-4 May 2016.

**D. Books Published/Edited during the year:**

Ramachandran, S., Ganesh, P.S., Sivasubramanian, V., & Kumar, B.G.P., 2016. Current Developments in Mass Production of Microalgae for Industrial Applications. In Sivasubramanian V. (ed.), Environmental Sustainability Using Green Technologies. CRC Press, ISBN 9781498753050, August 1, 2016

**E. Conferences, seminars & workshops conducted: NIL****F. Invited Talks given by BITS faculty: NIL****G. Invited talks arranged in the department:**

1. 18 February 2016, Dr. Rakesh Kumar, Professor, School of Medicine and Health Science, George Washington University, USA presented a seminar presentation on the topic, MTA1 Master Coregulator in cancer and beyond.
2. 18 February 2016, Dr. V. Sitaramam, Professor (Retired), Department of Biotechnology, University of Pune, India. Given a talk on Facts and Fiction in Modern Biology: Membrane Biology as a case in Point
3. 30 March - 4 April 2016, Dr. Suresh Arya, Professor, National Institute of Health, USA, given lectures on Synthetic Biology (Lecture Series)
4. 09<sup>th</sup> March 2016, Dr. R. Raghu, Vice president, Schrodinger Inc. USA gave an interesting lecture on "Recent advances in computational drug design and Computational Biologics design"
5. 8 May 2016, Dr. A.M. Deshmukh, Professor, Dr. Babasaheb Ambedkar Marathwada University, given a seminar presentation and discussions on Careers in Biotechnology
6. 12 May 2016, Dr. Gaurang Deshpande, Applications Scientist, Alliance Global, has presented a lecture on Introduction to Genomics
7. 3rd November 2016, Dr. Sridhar Natesan, Sn. Researcher, Institute of Psychiatry, Psychology and Neuroscience; King's College London, delivered a lecture on Biotechnology in mental health
9. October 27, 2016, Dr. Srikanth Charde, Associate Professor, Dept of Pharmacy, BITS Pilani, Hyderabad Campus, given a lecture on Novel Drug Delivery Systems

**H. Awards and recognitions won by faculty and students**

Ganesh, G., Nandkumar, A., Srinivasan, P., Sood N., & Gokhale, T. A Study on heavy metal resistance in *Stenotrophomonas maltophilia* and *Bacillus subtilis* for applications in bioremediation. Current Trends in Biotechnology, Manipal University in association with American Society of Microbiologist, Dubai, UAE, 3-4 May 2016. (Ganesh Gayathri won second prize)

**I. Faculty Development, International Collaboration & Industry Immersion:****Faculty Development:**

Dr. Neeru Sood and Dr. Trupti Gokhale visited Harvard Medical School and Massachusetts Institute of Technology, Boston, USA from 16<sup>th</sup> to 20<sup>th</sup> June 2016. (image ASM Microbe2016, Harvard Medical School, MIT Trupti, MIT Neeru)

Dr. Trupti Gokhale and Ms. Tarandeep Ahuja participated in a one day Technical Training Workshop organized by Gulf Scientific Corporation, Dubai and Malvern Instruments Ltd., UK, on 16<sup>th</sup> August 2016 at their Jabel Ali training center. The workshop was focused on the use and application of the Malvern Particle Size Analyzer and Zetasizer.

**Industry Immersion:**

Dr. Trupti Gokhale from Department of Biotechnology participated in the Industry Immersion program at National Chemical Laboratories, Pune, India from 11<sup>th</sup> July to 29<sup>th</sup> July 2016. She took up hands on training under the guidance of Dr. Asmita Prabhune, Scientist, Division of Biochemical Sciences. Research collaboration between the two departments has been initiated through the industry immersion program.

**J. Significant new equipments/experimental facility added during the year:**

The following equipments were purchased this year in the Biotechnology department:

1. Rotavapor
2. Zetasizer

**K. Departmental association/club activities:**

1. On the 1<sup>st</sup> of November, 2016, the third and fourth year students of BITS Pilani, Dubai visited the Dubai Cord Blood & Research Center (DCRC) at Latifa Hospital.
2. The Department of Biotechnology organized a study tour for the third year students to IFFCO factory at Al Ain on 15<sup>th</sup> March 2016. The students were accompanied by Dr. TruptiGokhale and Dr. NeeruSood.

**Student Achievements:****Competitions:**

1. Gayathri Ganesh and Ariya Nandakumar presented a paper on A Study on Heavy metal resistance in *Stenotrophomonas maltophilia* and *Bacillus subtilis* for Applications in Bioremediation at the Under Graduate Student Research Competition, Abu Dhabi University, held on 9 May 2016.
2. Shweta Biswal and Ashvriya Thapa presented a paper on Development Of A Biosensor Using Photobacterium Spps For The Detection Of Environmental Pollutants at the Under Graduate Student Research Competition, Abu Dhabi University, held on 9 May 2016.
3. Srishti Singh presented a paper on A Comparative Study of Bacterial Diversity in Abu Dhabi and Dubai at the Under Graduate Student Research Competition, Abu Dhabi University, held on 9 May 2016.

**B4.14.7 Department: General Sciences****Details of General Sciences (2016):**

Number of faculty members (as on 31<sup>st</sup> December 2016)

Senior Professors, Professors	06
Associate Professors	06
Assistant Professors	06
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Dr. T. K. Datta

**Contact details:** [dutta@dubai.bits-pilani.ac.in](mailto:dutta@dubai.bits-pilani.ac.in)

**Number of PhD Scholars:** 01

**Ph.D. Thesis Submitted during the year:** Nil

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: NIL

**B. Publications: 19**

1. Tapan Kumar Datta, Inventory system with defective products and investment opportunity for reducing defective proportion. *Operational Research*, 2016(online): 1-16 ( 27<sup>th</sup> Jan 2016). DOI 10.1007/s12351-016-02227-z.
2. S. Arumugam, J. Saral, A. Somasundaram, Minimizing the Number of Exceptional Edges in Cellular Manufacturing Problem, *Electronic Notes in Discrete Mathematics*, (53) 465-472, 2016.
3. S.V. Divya Rashmi, A. Somasundaram, S.Arumugam, Upper Secure Domination Number of a Graph, *Electronic Notes in Discrete Mathematics*, (53) 297-306, 2016.
4. Suhel Ahmad Khan, Yekini Shehu and J. W. Chen, Gap functions and existence of solution of simultaneous equilibrium problems, *Afrika Matematika* (2016) doi:10.1007/s13370-016-0440-1.
5. Suhel Ahmad Khan, Javid Iqbal and Yekini Shehu, Gap functions and error bounds for random generalized variational inequality problems, *Journal of Inequalities and Applications* (2016) (In Press).
6. Suhel Ahmad Khan, Generalized Vector Equilibrium Problems with Relatively Monotone Mappings, *Thai Journal of Mathematics*, vol 2016, pp 1-17.
7. J. Chen, Y.C Liou, S.A. Khan , Z. Wand and C.F. Wene, A composition projection method for feasibility problems and applications to equilibrium problems, *J. Nonlinear Sci. Appl.*, 9 (2016), 461–470.

8. Suhel Ahmad Khan. Generalized vector equilibrium problem with pseudomonotone mappings, J. Egyptian Math. Soc., Elsevier Publication, Vol. 24 (1) 2016, pp 68-72.
9. PV Rajkumar, K Ravichandran, K Karthika, B Sakthivel, B Muralidharan. Enhancement of electrical conductivity of sol-gel doped ZnO films through Zr doping and vacuum annealing. Materials Technology: Advanced Performance Materials. 31(4), 234-240, 2016.
10. K. Ravichandran, P. Sathisha, B. Muralidharan, B. Sakthivela, K. Swaminathan, A. Panneerselvam, G. Muruganandam. Influence of a novel triple doping (Ag+Mn+F) on the magnetic and antibacterial properties of ZnO nanopowders, Ceramics International, 42(2), 2349-2356, 2016.
11. A. T. Ravichandran, K. Catherine Siriya Pushpa, K. Ravichandran, T. Arun, C. Ravidhas, B. Muralidharan. Effect of size reduction on the magnetic and antibacterial properties of ZnO:Zr:Mn nanoparticles synthesized by a cost-effective chemical method. Journal of Materials Science: Materials in Electronics, 27(6), 5825-5832, 2016.
12. R. Rajan, M. Selvaraj, S. Palraj, G. Subramanian, B. Muralidharan. Studies on the anticorrosive & antifouling properties of the Gracillaria edulis extract incorporated epoxy paint in the Gulf of Mannar Coast, Mandapam, India. Progress in Organic Coatings, 90, 448-454, 2016.
13. K. Ravichandran, N. Nisha Banu, V. Senthamil Selvi, B. Muralidharan, T. Arun. Rectification of sulphur deficiency defect in CdS based films by introducing a novel modification in the SILAR cyclic process. Journal of Alloys and Compounds, 687, 402-412, 2016.
14. Snatika Sarkar and Vijaya Ilango. Advancement in Applicability of Carbon Nanotubes in Progressive Fuel Cells. Journal of Chemistry & Chemical Technology, 10(2), 227-234, 2016.
15. Aamir Jamal, Kavita S. Jerath. An Analysis of present and future of solar energy in Kingdom of Saudi Arabia along with a comparative study between Saudi Aramco Solar Car Park and other similar projects in Gulf. International Journal of Advance Engineering and Research Development, 3(3), 15-25. 2016.
16. P Arivazhagan, R Ramesh, RR Kumar, E Faulques, F Bennis, K Baskar. Structural and electrical characteristics of GaN, n-GaN and  $A_1-xGa_xN$ . Journal of Alloys and Compounds, 656, 110-118. 2016.
17. Seba Sara Varghese, Sundaram Swaminathan, Krishna Kumar Singh, Vikas Mittal. "Ab initio study on gas sensing properties of group III (B, Al and Ga) doped graphene", Computational Condensed Matter, 9 (2016) 40-55.
18. Bajpai, Priti . Layers of Commerce: Modelling the Onion Trade of Dubai .18th International conference on Applied Mathematics, ICAM 2016, London , United Kingdom , 28-29 July, 2016, published online as vol: 10 no: 7 at: <http://waset.org/archive>.
19. Karan Viraj Singh, Kavita S. Jerath. Thermo electric cooler, International Journal of Mechanical and Industrial Technology, Volume 4, June 2016 , ISSN 2348-7593, pp78-84.

#### C. Conferences/Workshop attended/papers presented: 05

1. Vijaya Ilango and Snatika Sarkar, "Improvement of Fuel Cell Performance by Application of Carbon Nanotubes", International Conference on "Engineering & Technology, Computer, Basic and Applied Sciences"- ECBA-2016 held on June 10-11, 2016, Dubai, UAE.
2. A Balasubramanian, A Somasundram, Institutional preparedness for e-governance in Indian Affiliating Universities: A study on the views of Administrative Faculty, 4th Global Conference on Business & Social Sciences 2013, held during November 14th – 15th 2016, Dubai.
3. SV. Divyarashmi, A. Somasundaram and S. Arumugam, Global Secure Domination in Graphs, International Conference on Theoretical Computer Science and Discrete Mathematics held during December 19-21, 2016 at Kalasalingam University India.
4. S .Rajeswari, M. Indhumathy, A. Somasundaram, Neeru Sood and S. Arumugam, Identification of Salinity stress tolerant, International Conference on Theoretical Computer Science and Discrete Mathematics held during December 19-21, 2016 at Kalasalingam University India.
5. All faculty members of General Sciences participated in the Workshop on "Effective Teaching and Learning" conducted by TLC, BITS Pilani Dubai Campus, Dubai during 12th-14th March 2016.

#### D. Books Published/Edited/ Reviewer/ Examiner during the year:

1. Dr. Shilpee Srivastava reviewed article for "Mathematical Reviews (MathSciNet)" of American Mathematical Society.
2. Dr. T.K. Datta reviewed articles for:

- a) Operational Research -An International Journal (Springer)
- b) Applied Mathematical Modelling (Elsevier)
- c) Int. J. of Mathematics in Operational Research (Inderscience)

**E. Conferences, seminars & workshops conducted: NIL**

**F. Invited Talks given by BITS faculty: NIL**

**G. Invited talks arranged in the department:**

Professor Suresh Bhargava, Director, Centre for Advanced Materials and Industrial Chemistry (CAMIC), RMIT University, Melbourne interacted with the chemistry and chemical engineering faculty and discussed about the collaborative research possibilities with RMIT. An interactive session on **Innovation through Global Collaboration** with students was held after the faculty meeting. Date: 13.3.2016.

**H. Awards and recognitions won by faculty and students:**

Dr.T.K. Datta was a member of the Advisory Committee of National Conference on **“Computational Mathematics & Operations Research”** to be organized at BK Birla Institute of Engineering & Technology, Pilani on 15-16, October 2016.

**I. Faculty Development, International Collaboration & Industry Immersion:**

Department of General Sciences in association with PS Division is coordinating with D-Link for Industry Immersion and setting up a Lab in BITS Dubai campus.

**J. Significant new equipments/experimental facility added during the year:**

1. UV-Spectrophotometer is added in Chemistry Laboratory.
2. Friction, Moment of Inertia Equipment added in Physics Laboratory.

**K. Departmental Association/Club activities:**

1. FLUMMOXED – BPDC QUIZ CLUB (2016 JAN – JUNE):

**NON COLLEGE EVENTS:**

**JANUARY**

TAPMI -QUIZ ON THE BEACH

On 2<sup>nd</sup> JANUARY 2016 , the 12th edition of the TAPMI Quiz on the Beach (QOTB™) was conducted by quiz master ‘Pick Brain’ Giri Balasubramaniam of TATA crucible fame. The event saw two rounds of quizzing – the semi-finals and finals. The college was represented in the semi-finals by Krishna Kaushik and Tejas Kulkarni.

The event saw eminent dignitaries from the TAPMI governing council including Pro Chancellor of Manipal University Dr. H.S. Ballal, Vice Chancellor of Manipal University Dr. K. Ramnarayan and Director Prof. Dr. R.C. Natarajan grace the event with their presence. The Superintendent of Udupi Mr. Annamalai IPS was the special guest at the event.

**MARCH**

IMT –VAUDEVILLE

As part of the annual cultural celebration at IMT Dubai-Vaudeville , a business quiz was conducted which saw 4 participating teams from our college. Omar Sultan, Ishana Rajguru and Kavya were placed second while the first prize was bagged by a team from IMT.

**APRIL**

WORLD QUIZZING CHAMPIONSHIP (WQC)

The World Quizzing Championships is a written test in the first week of the month that is sat simultaneously around the world. It consists of 240 questions across a wide variety of subjects and is available in a number of languages. It was attempted by members of the quizzing association in the campus.

**COLLEGE EVENTS**

**SPOTLIGHT**

The Spotlight quiz focused on the central theme of sports and literature and was conducted on March 16 in the campus auditorium. Both preliminary and subsequent rounds quizzed participants on various facts covering personalities, authors, sportsmen and other historically significant brain twisters. With a bustling audience

comprising of more than twenty teams, six teams consisting of two members each proceeded to the finals. Tejas Kulkarni and Gaurav Manna won the third position followed by Sowmya Gutala and Aarti Swaminathan winning second position. Sanjay Rakesh Kailat and Rajesh Suresh secured the first place.

### **BQUIZZED**

The Flummoxed group was proud to conduct its most anticipated quizzing event for Jashn 2016. Focusing on topics of the more general kind such as world affairs, history, current trends etc, the event saw a massive turnout from several contesting Universities. Among the students who participated, several belonged to campuses in the DIAC area whereas a turnout of students from campuses elsewhere was also seen. Conducted on March 16 in the campus auditorium, the preliminary rounds lasted half an hour with teams consisting of two members battling their wits to proceed to the final round which commenced at 3:00 P.M. . Students Srinivas Sarkar and Rohan Khanna bagged the third position followed by Aarti Swaminathan and Sowmya Gutala. Sai Krishna Teja and Ashwin Kumar emerged victorious winning first place.

### **QUIZZINE**

Who doesn't like food? Who isn't moved by dishes and cuisines from all over the world? Catering to all the foodies and delicacy savants, the quizzing club had an event that was sure to tickle their taste buds.

A food centered quiz held on March 16, the event attracted an unexpectedly high turnout from not just the campus students but also the neighboring institutions.

Contestants were initially quizzed on their food trivia in a preliminary round which lasted an hour followed by the finals which continued for over two hours. A rapid fire round along with a mix full of time based sections captivated the audience and educated them on never before seen facts about food

Pavith Ramesh and Adityanarayan Raghunathan scored the third prize followed by Ravish Malhotra and Shreyans Sharma who scored second place. Kiran Anand Rekha and Priyanka Venkat acquired the top position.

### **BOLLYWOOD QUIZ**

One of the quizzing events that created quite a buzz this year was the Bollywood Quiz which was revamped from last year's installment. Held in the campus auditorium on March 16, participants had to bring their best knowledge of B-town to the table. Preliminary rounds were centered on personalities, movies and big screen spectacles both from the yesteryear and the present. The competition oversaw stiff competition from students not only from the BITS campus but other universities as well. The selection round took off at 10:00 with the finals at 12:00. A total of six teams, each consisting of two members continued to the final rounds jousting on Bollywood trivia. Pallavi Manghani and Divya Menon won third place followed by Rahul Rajyaguru and Wasil Ahmad. The winners this year were S.Balasubramaniam and Aftab Kalappatt.

### **A GAME OF THRONES AND QUIZZES**

The Quizzing Club of BITS Pilani, Dubai Campus conducted its most anticipated quizzing event that had a monumental turnout from campus students as well as those in the DIAC region. Fans from the series and the books thronged to the Campus auditorium on May 5th, eager to test their trivia in the franchise.

With a total of twenty teams participating in the finals after the preliminary rounds ending after a tirade of two hours, six teams advanced to the finals. The final round commenced at 6:00 and a saw a massive turnout of questions and brain-teasers related to the show and the books of the series. Students Parth Desai and Yahaya bagged the runner's up position while Devanshi Chauhan and Ashima emerged as the winners.

The event was a complete success, finding approval from all students and is sure to be conducted for future years to come.

### **THE ONE WITH THE QUIZ**

Television as a medium has left some really memorable shows and characters whose legacy still remains etched in the very tracts and minds of people everywhere. The quizzing had one such homage to pay to one of the most watched series in television history- F.R.I.E.N.D.S

A fan favorite series that's quite popular today, trivia from the show and its characters served as the basis for the quiz on April 18. It turned out to be a crowd puller as a quiz of such a theme had never been done before. With a turnout of more than fifty people, even audience members took to participating in the questions, some of which were created from never before seen trivia. The final rounds consisted of six teams each with two students who had some special memories associated with the show.

Rahul Kumar and Nitya Harve bagged the third prize with Vikhyat Rawla and Roshita Khanna winning second position. The truest friends of the series turned out to be Akshita Angara and Ishaan Vasant who won first place.

### **THE ENTERTAINMENT QUIZ**

Organized by the senior members- Ishana Rajguru, Sagar Walia, Krishna Kaushik and Omar Sultan, the entertainment quiz was back and better to question them on the latest trends in pop culture and its subsets.

Held on April 20<sup>th</sup> in the College auditorium and was subject to a jam packed audience of more than sixty students along with an ever increasing audience that kept the flow of the event alive and ongoing.

Focused on entertainment topics, a preliminary round was setup with questions revolving around pop culture and current generation trivia, ranging everything from books to shows to movies to celebrities and the like.

A total of six teams proceeded to the finals consisting of two members each who went head to head in proving who truly had the right to call themselves hip and up with the trends. Questions became progressively tougher and harder for over two grueling hours and the winners were announced.

Students Sowmya Gutala and Aarti Swaminathan achieved the third position followed by Rahul Rajyaguru and Wasil Ahmad bagging the runner's up position. The true pop culture masters this time were Aman Mathur and Siddharth Ravishankar.

Like all years, the entertainment quiz enjoyed a massive success backed by an enormous crowd and is expectant to continue similarly for the years to come.

2. Staff Recreational Club was started on 25<sup>th</sup> March 2016 with Holi Celebration as the first activity through club.

1. Some of our departmental faculty members were associated with ARTEX, Jashan, Spectrum, Ingenuity organized by BPDC.

#### **B4.14.8. Department: Humanities & Social Sciences**

Number of faculty members (as on 31 December 2016)

Senior Professors, Professors	01
Associate Professors	01
Assistant Professors	02
Senior Lecturers	01
Lecturers	0
Visiting/ Adjunct Faculty	01

**Head of the Department:** Dr. Lajwanti Kishnani

**Contact details:** lajwanti@dubai.bits-pilani.ac.in

**Number of PhD Scholars:** 1

**Ph.D. Thesis Submitted during the year:** Nil

#### **A. Sponsored Research activities:**

1. Dr Shazi Shah Jabeen and Dr Amritesh have submitted a research project proposal to Bill and Melinda Gates Foundation on the topic recognizing the innovation potential of contraception methods in Bihar (India).

**Ph.D. Thesis Submitted during the year:** Nil

#### **B. Publications:**

1. Mubeena Iqbal and Khairunnisa Abrar. 2016. Soap Operas: A Potential Tool for Women Empowerment, GSTF Journal on Media & Communications, vol 3, 10-15
2. Rao, A.S. and Waheed A. 2015. Impact of Transformational Leadership on Team Performance - empirical study in U.A.E., Measuring Business Excellence, Vol. 19, Issue 4 pp. 30-56. Emerald Group Publishing Limited (ABDC Journal 'B' ranking & SCOPUS listed).
3. Nivetha Gunaseelan and Shazi Shah Jabeen. March 2016. Techniques of Politeness in Tamil and English: A Comparative Study, New Frontier- International Journal of Humanities and Social Sciences, Vol. 2, No.2., (ISSN No. 2394-8221), 27-38.
4. Amritesh, SC Misra, J Chatterjee. Quality Framework for Credence Based Informational Services: Applying KANO's Method, Total Quality Management & Business Excellence, Taylor & Francis, Published Online, <http://dx.doi.org/10.1080/14783363.2016.1171704>

#### **C. Conferences attended/papers presented:**

1. Vipul Parmarhi and Lajwanti Kishnani, Indianizing the English Classic Othello in Vishal Bharadwaj's Hindi Movie Omkara-A Case Study, International Conference titled-"Indian Cinema : Past , Present and Future", The Conference proceedings was published by Vidhya Prasarkar Mandal .ISBN :978-81-922741-9-7, Pg No. 47-49, VP Bedekar College Thane , 8-9 January 2016.

2. Sheetal Desai and Lajwanti Kishnani, The New Age Bollywood Heroine :Breaking Stereotypical Norms, International Conference titled-International Conference held at Manipal University Dubai , 15 May, 2016.

To be published.

3. Khushboo Agarwal, Priyanka Deshpande & Shazi Shah Jabeen. 'Factors Influencing Intention to Purchase Halal Products (Case Study: Dubai, U.A.E)', 4<sup>th</sup> United Arab Emirates Undergraduate Student Research Competition at Abu Dhabi University, Khalifa City Campus, UAE, 9 May 2016.

**D. Books Published/Edited during the year: Nil**

**E. Conferences, seminars & workshops conducted:**

1. Workshop on 'Effective Communication for Professional Success' on 17 September 2016. The workshop was attended by industry professional from various organizations.

**Convener: Dr Mubeena Iqbal**

Resource persons: Dr. Mubeena Iqbal, Dr Shazi Shah Jabeen, Dr Lajwanti Kishnani

**F. Invited Talks given by BITS faculty: NIL**

**G. Invited talks arranged in the department:**

1. On 22 February 2016, Sanjay Dhingra, Associate Director, Admissions & Financial Aid, Indian School of Business, delivered a talk on Young Leaders Programme at Indian School of Business.
2. On 25 February 2016 , Prof. Anand Kushre, Professor Incharge, Center for Entrepreneurship, IIT Bombay delivered a talk on Entrepreneurship, Startups and Incubation.
3. On 29 February 2016, Dr. Kumar Neeraj Sachdev, Associate Professor, Department of Humanities and Social Sciences delivered a lecture on Virtue based Compatibility of Business and Profession.
4. On 29 February 2016 , Mr. Jayan Ramankutty, Chairman, BITS Pilani Alumni Association had an interactive session on Developing New Ideas and Values of Startups.
5. On 19 April 2016, Mr. Melvin Mathew, Manager- Marketing talked about Domainers Meet 2016.
6. On 8 May 2016, Mr. Ally Arrossi Bakali, Senior Business Strategist & Consultant talked about the AJSM Hero-The Business Plan Competition.
7. On 11 October 2016, Mr Alan D'Souza, delivered a lecture on Importance of Branding in Building a Business: An Interesting Case Study.

**H. Awards and recognitions won by faculty and students:**

1. Dr. Shazi Shah Jabeen, Professor, Department of Humanities and Social Sciences, BITS Pilani, Dubai Campus received the Best Professor in Humanities and Social Sciences under the category The Middle East Education Leadership Award organized and presented by World Sustainability and World CSR Foundation at Address Hotel, Dubai Mall on 5 October 2016.

**I. Faculty Development, International Collaboration & Industry Immersion:**

**1. Faculty Development -**

1. Dr. Shazi Shah Jabeen reviewed five research papers for 5th Annual International Conference on Language, Literature & Linguistics (L3 2016) held on 30-31 May, 2016 in Singapore, organized by Global Science and Technology Forum, Singapore.
2. Dr. Shazi Shah Jabeen reviewed eleven articles for New Frontier, International Journal of Humanities and Social Sciences.
3. Dr. Shazi Shah Jabeen served as faculty mentor for the research paper submission of Akansha Das, Mihir Prabhudesai, Animesh Ashtunkar to 4<sup>th</sup> United Arab Emirates Undergraduate Student Research Competition at Abu Dhabi University, Khalifa City Campus, UAE, 9 May, 2016.
4. Dr. Shazi Shah Jabeen examined PhD thesis entitled "An Ecocritical Study of Kalidasa's Rtusamharam and Meghadutam", Bharathidasan University, Tiruchirappalli, India.
5. Dr. Shazi Shah Jabeen reviewed PhD thesis entitled "Relationship between Leadership Styles of School Principals and Organizational Citizenship Behaviour", Jamia Millia Islamia University, New Delhi.
6. Dr. A.S. Rao reviewed research papers for the 60th ICSB (International Conference on Small Businesses) Conference, held on 6-9 June, 2015 at Dubai, organized by U.A.E. University. He has been awarded as an Outstanding Reviewer and also Session Chair during the Conference.



7. Dr. A.S. Rao has been appointed as Member of the Editorial Board - Journal of Global Entrepreneurship Research, a Springer Open Journal.
8. Dr. Mubeena Iqbal upgraded her professional qualification by taking a certification on 'Planning and Delivering a Training Session'.
9. Dr. Mubeena Iqbal attended the Seminars on 'Developing your L&D Team for Future Agility' and 'The Future of Learning in a Changing World of Work' at the HR Talent Summit 2016 on 16 November 2016.
10. Dr. Mubeena Iqbal mentored the research paper submission of Mohammed Nawaz Mualim to the 4<sup>th</sup> United Arab Emirates Undergraduate Student Research Competition at Abu Dhabi University, Khalifa City Campus, UAE, 9 May, 2016. The paper was titled " Resource Based Learning".
11. From July- August 2016, Dr Mubeena Iqbal interacted with HR Managers of various organizations, to understand their training needs and gaps. Outcome: Training workshop on 'Effective Communication Skills' which was conducted on 17th September 2016.

## 2. Industry Immersion:

J. Significant new equipments/experimental facility added during the year: NIL

K. Departmental Association/Club activities: NIL

## B4.15 DIVISION/ UNIT/ CENTERWISE ACTIVITY HIGHLIGHTS

### B4.15.1 Academic Research Division

#### Recommended for the Award of Ph.D. Degree:

S. No.	Name	Title
1	Susila S	Design and Implementation of agent for Web service selection using QoS Metrics & performance analysis of REST and SOAP services.

#### Ph.D. Thesis Submitted and Under Process of Evaluation:

S. No.	Name	Title
1	Kiran Menon	An Assesment of Potential feedstock Crops for Bopdiesel Production in the United Arab Emirates

#### Research Contributions through Higher Degree Dissertations:

A total of 25 M.E. and M.B.A. Dissertation Projects were carried out over a period from January 2016 to December 2016 during the academic year 2015-16. The list is given in Annexure B4-13

#### Research Contributions through First Degree Theses:

A total of 28 students completed their first-degree theses during both the semesters of the calendar year 2016. Besides faculty members of the Institute, scientists from R & D labs and other professionals also supervise the thesis work. The complete list is given in Annexure B4-14.

#### Research Publications by Faculty, Staff and Students:

There were a total of 84 contributions which include 38 in various international Journals and 46 in various Conferences. 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. **The Memorandum of Understanding (MoU)** between Maktoum Bin Hamdan Dental University College (MBHDUC), Dubai and Birla Institute of Technology and Science (BITS) Pilani, Dubai campus was signed on 7 November 2016 to engage in the academic and research & development (R&D) collaboration activities.
2. Seba Sara Verghese, Research scholar from EEE, visiting researcher continued to get financial support of AED 5000 per month from Petroleum Institute, Abu Dhabi
3. As part of the WWE project, Ms. Shraddha Mishra, Ph.D student and Research scholar, Biological sciences, from Pilani Campus visited Biotechnology Department during 10 – 26<sup>th</sup> October 2016 and completed part of the project work with the help of Dr S Ramachandran and Biotechnology faculty members.

4. Dr. Theofanis Chatzistamatiou, Director of Dubai Cord Blood & Research Centre (DCRC) Latifa Hospital, Department of Pathology and Genetics - Dubai Health Authority visited the Campus and facilities in the department of biotechnology for possible research collaboration and Internship program for biotechnology students.
5. ASME students of BPDC made won ASME District G top position in Student Design Competition (SDC) on 19-3-2016 at VIT, Vellore, India and they also participated in ASME IMECE 2016 held at Arizona, USA in November 2016
6. Vinayak Dhingra, was among 10 aspiring entrepreneurs have been chosen by du, a telecom provided in UAE, as the first-ever students to partake in the Agent 055 Network Initiative. The university students underwent a multi-phase grueling application process comprising a slew of aptitude and personality assessments before being given this unique opportunity to develop their entrepreneurial skills. He secured their place on the scheme to begin earning while they learn with du.
7. The BPDC team represented by three of our final year students - Rashi Mohnot, Apoorv Singh and Abraham Matthew became the 2015-16 CFA Institute Research Challenge winner in the UAE, beating other universities in a close competition hosted by CFA Society Emirates, the local UAE member society of the CFA Institute. The winning team will represent the UAE at the EMEA regional competition final in Chicago, Illinois, USA, the week of 11th April 2016.
8. Team Ophiuchus from BITS Pilani, Dubai Campus has bagged the "Best Case Study Analysis" award in the Business Case Study Challenge held on February 23, 2016 organized by Middlesex University and took home Mont Blanc gifts sponsored by Rivoli. The team comprises of Mihika Shivkumar (Mech, Year III), Tanya Mittal (EEE, Year III), Mohammed Shamroukh (Mech, Year III) and Aman Sharma (EEE, Year III). Over 40 teams comprising of students from universities across the country competed at the Middlesex University Business Case Study Challenge.
9. TEAM IFOR was proud to have been qualified to the semi-final stage of the UAE Drones For Good Award's National Competition which was held in the month of Feb 2016. Their submission was selected out of an applicant pool of several hundred highly competitive entries. IFOR team has also been selected for funding by Team Total Grants for their latest innovation called the SorbDrone. SorbDrone an autonomous unmanned aerial vehicle, a project by Team IFOR designed to revolutionize the oil spill cleanup process. A final public voting would determine which team (out of seven) would get the grant for their project.
10. Team Gear Shifters comprises of Aravind Prashant, Sadhyat Biswal, Vedant Bajaj has won the people's choice awards at the Innovator Show held in Abu Dhabi on 3rd and 4th march, 2016. The team secured first position out of a total of 120 teams based on the combined votes of the judges, organizers and all the people who visited the show. A cash prize of 10000 AED was given to the team for their outstanding performance in the event. The innovator is an annual show organized by Abu Dhabi government's education council and Abu Dhabi Technology Development Council. It has more than 100 innovations at display and 20000 visitors per year. The team had extensive media coverage also with an article appearing on both Gulf News page 5. The team also featured extensively in the innovator video and magazine. Team Gear shifters succeeded in coming 1st among other participants from BITS Pilani, Heriot Watt, Khalifa University etc.
11. Akash Hathiramani, Tahseen Ahmad Khan, Puneet Khirwar, Srihari Srivathsan, Srihari of IV year Mechanical Engineering and Tanya Juneja of III year CSE member of ASME students branch, BPDC brought laurels by winning the first prize in Student Design Competition (SDC-2016) at ASME SPDC finals at District G. They won against a very tough competition participated by about 25 institutes in India including IITS, including our other BITS Pilani campus teams. This competition was held on 19th March 2016 at Vellore Institute of Technology, Vellore, India. It is really a great victory as they won in district G and the team will participate in Global finals ASME IMECE-2016 TO BE HELD IN Nov, 2016 USA.
12. The BPDC team represented by four of our second year CSE students - Jeevan Sandhu, Tanya Kalwani, Nishank Singhal, Amaan Kulshreshtha has won the first place in the ANGELHACK competition 2016 and IntersME Best IDea Award 2016 that was held on 1st and 2nd April 2016 at the Microsoft Headquarters, Dubai Internet City, UAE. 17 teams comprising of developers, designers and entrepreneurs took part in this competition. The participants were asked to develop a prototype of their idea within 24 hours, after which they gave a demo of their product and pitch its business viability to a panel of judges. The entitlements of the awards are AngelHack Grand Prize, an exclusive invite to AngelHack HACKcelerator Program, a 12-week Curriculum to turn your hackathon idea into a startup reality and a chance to fly to Silicon Valley for their Annual Global Demo Day and participate in a week of extensive pitch training
13. Gayathri Ganesh received BITSAA travel grant of Rs 25000 to attend International conference Microbe 2016-Organized by American Society of Microbiologist, Boston, USA, 16-20 June 2016
14. In the final round of Microsoft Office Specialist (MOS) Pilot Championship 2016, Ahmad Shumayal (2013A4PS313U) has been awarded the Runners-up trophy under Microsoft Word 2010 category. The competition was held under 3 category heads - Word, Excel and PowerPoint.
15. Team Gear Shifters comprises of 20 young innovative engineers from BITS Pilani, Dubai, who made the UAE's first Formula 1 student race car, are all geared up to showcase their latest car at Formula SAE

(Society of Automotive Engineers) in Germany next year. They designed their first Formula 1 car, GSRS01, in 2013. They showcased the car during their participation at the Michigan International Speedway in 2014. In 2015, they came up with another Formula 1 car, GSRS02. Their car was ranked 34th out of 90 cars at the Formula SAE Italy in 2015. Recently, the team also won at the Innovator Show 2016 in Abu Dhabi. The team has also participated at the Gitex 2016 and Wetex 2016. At these events, they were able to attract and inspire young minds across the UAE to delve into the motor sports industry. Notable features of the new car: Top speed of 140km/h, Advanced aerodynamics will help retain speeds at corners, Complete carbon filter variant keeps it light weight and maintains top speed, A 600-cc engine, Wireless kill switch will take care of security concerns and in cases of emergency this will help shut down the car's system from outside. It works with a wireless router and a software and break over travel switch helps shut down the car in case of brake failures. BPDC Students Anusha Karanayil from Electronics and Communication Engineering, Madhubala Vijayakumar from Computer Science Engineering and Shehab Abdul Rahim from Mechanical Engineering got selected for DU Telecom's "Agent 055 Network" a flexible part-time internship program. Agent 055 Network, is a project started by DU Telecom to help support entrepreneurship as it is one of their core CSR initiatives. Students selected for this Program will have an opportunity to Get trained under several DU teams (like marketing, sales, communication for a total of 4 weeks), will work on a part-time flexible internship model which will allow them to work 16 Hours minimum in a week and possibility to get absorbed for a full-time internship / job at a later stage.

16. BPDC students Saugaat Allabadi and Kunal Malhotra of 3rd year CSE participated in Code Jam 2016 on 21st November 2016 at MiddleSex University Dubai and won the First Prize. The students were awarded with one Acer Laptop each for their performance in the event.
17. Two teams from Microsoft Tech Club, BPDC participated in the Ministry of Finance Hackathon organised by Microsoft on 21st-22nd November 2016. The team with members of Johann Fernande, Manji Suhail, Naman Kamra, Shaurya Sood and Urvashi Sharma won 2nd prize of USD 8000 and with team members comprising Ayush Gulati, Don Joe Martin, Khushboo Agarwal, Kunal Malhotra, Pradheepan Raghavan and Saugaat Allabadi won 3rd prize of USD 6000. Faculty in-charge for the teams is Dr. Vadivel, professor, CSE.
18. Dr Neeru Sood was Invited by Science India Forum to judge NSC UAE level screening for innovation-theme sustainability -Science competition by Science Forum India on 26th November, 2016 held at MAHE Manipal, Dubai
19. Department of chemical Engineering had an Industry Interaction out on wastewater treatment pilot plant with Ocean Corner for potential research & consultancy project.
20. Dr. Neeru Sood and Dr. Trupti Gokhale visited Harvard Medical School and Massachusetts Institute of Technology, Boston, USA from 16th to 20th June 2016 during ASM Microbe 2016

To appraise themselves about BITS Pilani-Dubai campus, interact with faculty, staff & students and/or to collaborate with the Institute, the following were among the notable visitors to BITS Pilani, Dubai Campus (Please see annexure B4.10 for list of those who not only visited but also delivered invited talks at Dubai Campus)

- I. Dr. Rakesh Kumar, Professor, School of Medicine and Health Sciences, George Washington University visited & had an Interactive session with faculty, students and staff on "MTAI Master Coregulator in Cancer and Beyond".
- II. Mr. R. Raghu, Vice President, Schrodinger Inc, USA visited the Campus and had discussion on Recent advances in computational drug design and Computational Biologics design" on 9th March 2016.
- III. Prof. Suresh Bhargava, FTSE, FNA, KIA Laureate, Distinguished Professor, DPVC (International Research), College of Science, Engineering & Health, Director - Centre for Advanced Materials and Industrial Chemistry (CAMIC), RMIT University, Melbourne, VIC, had delivered an interactive session on "From Mind to the Market place: Innovation through Global Collaboration" on 13th March 2016.
- IV. Jenö Muthiah, CEO, Alpha Coating Technology, Addison, Illinois had delivered an interactive session on "Polymers in the Modern World" on 30th March 2016.
- V. Prof. Alok N. Choudhary, Henry and Isabelle Dever Professor, EECS Dept., Northwestern University, USA and Founder, Chairman and Chief Scientist, 4cinsights Inc visited the Dubai Campus and had discussion on "Accelerating discoveries with Big Data & Supercomputing" on 4th September 2016.
- VI. Prof. Bo' Liedberg, Professor in Materials Science at NTU and Director for the initiative on Biomimetic Sensing-NTU Singapore who had visited BITS Indian Campuses visited Dubai Campus to have discussion on collaborative research & updated the students on PhD opportunities at NTU's Interdisciplinary Graduate School on 26th October 2016,
- VII. Dr. Sridhar Natesan, BITS Alumuni, Sn. Researcher, Psychosis Studies Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, United Kingdom had delivered an interactive session on "Biotechnology in Mental Health" on 3rd November 2016,

- VIII. Mr. Hareesh Janakiraman, Electronic Engineer, Houston, Texas, Mr. Bharath Kamath, Product Manager, Abbott Laboratories S.A., had given a guest lecture on "Clinical Utility of Point of Care Analyzer in Healthcare Setup" on 21st November 2016.

**During the year 2015-16, 5 students underwent FD Thesis underwent Dissertation at off-campus locations:**

1. Mr Harshil Patel & Miss Niyati Joshi - Petroleum Institute, Abu Dhabi with a stipend of AED 3000
2. Mr. Aravind Desikan - Technical University at Munich, Germany
3. Shreya Jain - CS department, IIT Kanpur
4. Miss Radhika Narain - MIT, Cambridge, MA

The following faculty members have received honors

1. Dr. T.K. Datta was appointed as a member of the Advisory Committee of National Conference on "Computational Mathematics & Operations Research" organized at BK Birla Institute of Engineering & Technology, Pilani on 15-16, October 2016.
2. Dr. Mary Lourde R., served as a Technical Review Committee member for International Conference on Radar Antenna Microwave Electronics and Telecommunication 2016 - ICRAMET 2016, conducted in October 2016, and has done peer blind review of a technical research papers for the conference during July - August 2016.
3. Dr. Mary Lourde R., served as a technical expert to evaluate an ICT FUND project proposal costing AED 1.8 million in the area of Cost effective street lighting during May June - 2016 and another Project proposal in the area Artificial Intelligence, Healthcare - diagnosis costing AED 2 million.
4. Dr. Mary Lourde R., served as a Technical Reviewer for the 2016 IEEE 59th International Midwest Symposium on Circuits and Systems held during 16-19 October 2016, Abu Dhabi, United Arab Emirates and reviewed six research manuscripts.
5. Dr R Swarnalatha had received an Outstanding Women Achiever in the field of Biomedical Instrumentation on 5th March 2016 by Venus International Foundation VIWA 2016.
6. Dr. R. Swarnalatha had served as a Judge for Electrical, Electronics & Instrumentation Engineering in the 4th United Arab Emirates Undergraduate Student Research Competition (UGSRC) on 9th May 2016, held in Abu Dhabi University, Abu Dhabi, U.A.E.
7. Dr Anand Kumar reviewed ICT Fund proposal "A cloud-based IoT platform for smart and sustainable agriculture"; worth more than AED 1.6 million.
8. Dr. Anand Kumar served as a Technical Reviewer for the 2016 IEEE 59th International Midwest Symposium on Circuits and Systems held during 16-19 October 2016, Abu Dhabi, United Arab Emirates and reviewed three research manuscripts.
9. Dr Jagadish Nayak, served as a Reviewer for Journal of Medical Systems by Springer Netherlands.
10. Dr. A. P. Singh reviewed a research article titled "Spatio-temporal variation and trend analysis of groundwater level in Raipur City, Chhattisgarh" for an International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal.
11. Dr. Bharat B. Gulyani was invited as a member of Conference Technical Committee of ICEPP 2016
12. Dr Neeru Sood was Invited by Science India Forum to judge NSC UAE level screening for innovation-theme sustainability - Science competition by Science Forum India on 26th November, 2016 held at MAHE Manipal, Dubai
13. Dr. A.S. Rao reviewed research papers for the 60th ICSB (International Conference on Small Businesses) Conference, held on 6-9 June, 2015 at Dubai, organized by U.A.E. University. He has been awarded as an Outstanding Reviewer and also Session Chair during the Conference.
14. Dr. A.S. Rao has been appointed as Member of the Editorial Board - Journal of Global Entrepreneurship Research, a Springer Open Journal.

**The following students have received honors /secured the positions in the conferences/workshops:**

Research scholars/ students	Conference	Position secured / Prizes won
Ms. Gayathri Ganesh	International conference on Current Trends in Biotechnology organized by Manipal University in association with American Society of Microbiologist, Dubai	2 <sup>nd</sup> Best Paper Presentation

**Consultancy: NIL****B4.15.2 Professional Body Activities**

## ASME (American Society of Mechanical Engineers) Student Branch

- MECHATHLON 2.0 was conducted as a part of ENGINuity'16 (16-17, March 2016).
- 3-D Printing workshop was conducted.
- A trip was organized to NESTLE. (04-05-2016)
- AUTODESK'S 3-D SOFTWARE FUSION 360(11-05-2016)
- Synergy competitions were conducted on 23<sup>rd</sup> – 27<sup>th</sup> Oct 2016.
- TECHATHLON was organized on 16<sup>th</sup> March 2016.

## MEA (Mechanical Engineering Association)

- A Talk on Quantum Mechanics & Physics Reality by Prof Ravi Gomatham, Director, Institute of Semantic Information Science & Technology, Berkeley and Mumbai, Adjunct professor, BITS Pilani was held on 07-02-2017.
- Workshop on MATLAB introduction and basics, Robot Modeling & simulation using SIM MECHANICS was organized during 22-23 March,2016.
- Workshop on Electro-Pneumatics and PLC was conducted during 8-10, May 2016.
- Field trip to RAK Ceramics, RAS AL KHAIMAH during 2-3 Nov, 2016.
- Workshop on COMSOL Multi physics 5.2a on 06-11-2016.
- CNC Machine training session was conducted on 24-11-16.

## SAE (Society of Automotive Engineers)

- Team gear shifters conducted a Solidworks workshop in enginuity in collaboration with ASME sponsored by barakat.
- Team Gear Shifters also participated in WETEX 2016.
- Black Hawks participated in BAJA SAE California in May, 2016.

## IEEE Student Branch (Dubai Campus)

- Two major events were organized in 2016: Code blitz during Enginuity 2016 on 15 March 2016 and IEEEExtreme 2016 on 22 Nov 2016.
- IEEE WIE had organized an event "Go Seek" which is a treasure hunt based on Engineering and Science concepts during Enginuity 2016.

## AOEE (Association of Electronic Engineers)

- AOEE and Placement Division jointly organized Verilog Programming Training session for EEE/EIE/ECE/CS students from 20th September to 29th November 2016.
- AOEE had organized a Technical Competition called Mind Spark for Enginuity from November 27th to 29th 2016 with 60 participants.

## IFOR (Intelligent Flying Object for Reconnaissance)

- Team IFOR had participated in WETEX: Water, Energy, Technology and Energy Exhibition 2016; exhibiting their past innovations and current projects.
- IFOR team has been selected for funding by Team Total Grants for their latest innovation called the SorbDrone which is an autonomous unmanned aerial vehicle, a project by Team IFOR designed to revolutionize the oil spill cleanup process.
- School students visited IFOR lab and Dr.V.Kalaichelvi (Faculty In-charge) along with her IFOR team members demonstrated the video as well as projects handled in IFOR lab on 6th Oct 2016.
- TEAM IFOR qualified to the semi-final stage of the UAE Drones For Good Award's National Competition which was held in the month of Feb2016.

## AIChE Students' chapter

- Four video conferences were organized with BYU (Brigham Young University, Utah, USA) Sister Chapter between January and November 2016.

- Industrial trip was organized to Star cement industry, RAK, 27th Feb. 2016.
- ChESA – AIChE Students' chapter BPDC organized Big Split (Enginuity '16) on 17th Mar. 2016.
- Organized Inauguration of the Petroleum Laboratory, 3rd May 2016.
- AIChE Sustainable Energy Forum (SEF) Education Committee, Undergraduate Sub-Committee Teleconference Meeting was organized on 10th May 2016.
- Field trip was organized to Super Cement, Abu Dhabi on 15th Oct. 2016.
- Placement Presentation was given by Monaco Engineering Solutions UAE, Mr. Gianfranco Mangiapane, Mr. Sak Chowdhury Monaco Engineering Solutions UAE on 24th Oct. 2016.
- Interactive session was organized on advanced techniques of Process Simulation using ASPEN Plus on 19th Nov, 2016.
- SEF Member Champions video meeting was organized with Mr. Cory on 22nd Nov. 2016.
- Inter Collegiate CHEM-E Debate Tournament (ICDT) (Enginuity 2016) was organized on 27th and 29th Nov, 2016.

### Microsoft Tech club

The Microsoft Tech Club is run by Microsoft Student Partners, and students of the Microsoft Student Community. The Microsoft Student Partners Program is for students who realize the best tech careers come to those who chase their dreams. MSPs are involved in building apps, training others and social media. They are social, friendly students who enjoy creating global connections.

**Hackathon at Microsoft Office (Internet City):** 7 Microsoft Tech Club students participated in hackathon at Microsoft and were awarded Nokia Lumia 1520 each for their performance in the event.

**Droidcon sponsored by Microsoft:** 7 Microsoft Tech Club students attended the Droidcon conference worth 300\$ per attendee for free and along with free transportation.

### Sessions (8):

- **Session 1:** Imagine Cup UAE 2016 roadshow.
- **Session 2:** Web development session with wordpress and Microsoft Azure
- **Session 3:** Discussion with Tech club members and understanding what they want to learn.
- **Session 4:** Introduction to Web development and competitive programming.
- **Session 5:** Diving into Competitive Programming
- **Session 6:** Introduction to Git and GitHub
- **Session 7:** Session with Microsoft, Introducing Microsoft imagine, Imagine cup and Student partner program
- **Session 8:** Understanding CSS frameworks

### Events in Enginuity (2):

- **CodeBlitz:** In association with IEEE. Code debugging competition.
- **Frynapse:** Virtual scavenger hunt competition.

### Linux Users Group:

The Linux Users group actively organized and collaborated events with other clubs and associations. The registrations were free and open to all BPDC students. Our Core members took active part in Organizing Committee for ENGINUITY 2016. The group also provided resource material on UNIX Commands and Editor for first year students. This is being mentored by Prof B. Vijaykukmar.

**BPDC ACM Student Chapter:** Dr. Sujala Shetty is the the Faculty Advisor for ACM chapter at BPDC. The ACM members took active part in organizing ENGINUITY 2016.

### Chimera

1. Visited annual career fair at Dubai Science Park during 28-29 February, 2016
2. Dr Gaurang Deshpande from Alliance Global, Middle East interacted with the students about latest technologies in genomics and sequencers on May 12, 2016
3. Dr A. M. Deshmukh, Professor, Department of Microbiology, Marathwada University and President, Microbiologist Society of India, conducted an interactive session with the students on Recent Trends in Biotechnology on May 8, 2016

4. Invited talk by Dr V. Sitaraman former Professor at Department of Biotechnology (Retired), University of Pune and interacted with the students on 18<sup>th</sup> Feb, 2016
5. Dr Rakesh Kumar, Professor, Department of Biochemistry and Molecular Medicine at The George Washington University, Washington, interacted with students on 18<sup>th</sup> Feb, 2016
6. Neuron Rush was organized as part of Enginuity '16 on 16<sup>th</sup> March, 2016
7. Telepresence Lecture Series on Synthetic Biology by Dr Suresh Arya, NIH was organized during March 30<sup>th</sup> to 4<sup>th</sup> April 2016.
8. Organized a visit to Dubai Cord Blood & Research Center (DCRC) at Latifa Hospital on 1<sup>st</sup> of November, 2016.
9. Industrial visit to IFFCO factory, Al Ain was organized on 15<sup>th</sup> March 2016.

#### **B4.15.3 : Center for Innovation, Incubation and Entrepreneurship, Dubai (CIIED)**

**Report for the year 2016 is appended below**

##### **TALKS:**

<b>S.no</b>	<b>Speaker</b>	<b>Topic</b>	<b>Date</b>
1	Harsh Hirani Founder, Traders7	Stocks and Trading Market	20 <sup>th</sup> Oct 2016
2	Ahmad Abugosh Learning & Development Manager, Astrolabs	Idea to Market Place- Business Model Canvas	23 <sup>rd</sup> Oct 2016
3	Miel, Ajay Bhandoola TiE Dubai	TiE International Startup Competition	31 <sup>st</sup> Oct 2016
4	Jean Michel Gauthier, Founder & CEO, InternsMe	Idea to Market Place- Growth Hacks	3 <sup>rd</sup> Nov 2016

##### **Events & Awards:**

##### **The Wolf of Wallstreet:**

No. of Participants – 200+

1<sup>st</sup> place- HUNGRY BUNNIES [ Rewant Varma, Alina Zaidi] 2<sup>nd</sup> place- AXE CAPITAL [ Vivek Desai, Aman Gupta]

3<sup>rd</sup> place- Senseless [ Abinav Mishra] Sponsors:

##### **Mantra Awards 2016:**

Student Convenor – Swetha Sivakumar (CIIED Board Member)

1. Male Leadership - Abdul Muqueet and Swaminathan
2. Female Leadership - Koushika N
3. Entrepreneur of the Year - Rohith Saluja and Brian Robert
4. Social Leadership - Prabat Sharma
5. Innovator of the Year - Alok Rajiv and Abishek Mahajan

#### 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 54 stations with 182 students and 32 faculty during February – July 2016 and at 43 stations with 140 students and 28 faculty during August 2016 -January 2017. PS-I was conducted at 97 stations with 404 students and 33 faculty during June - August 2016.

Categorization of PS stations is given below:

S. No.	Category of Organizations	No. of Organizations	
		PS-II	PS-I
1	Banks & other Financial Institutions	00	01
2.	Design, Development, Consultancy and Software Organization.	23	33
3	Trading	11	07
4	Production, Manufacturing and Maintenance	35	48
5	Other	07	08
<b>Total</b>		<b>76</b>	<b>97</b>

With the present annual PS intake of 726 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. (Note: The data pertaining to the calendar year 2014 is given in parenthesis.)

PS-I	Summer Term 2016	404
PS-II	II Semester 2015-2016	182
PS-II	I Semester 2016-2017	140
<b>Total</b>		<b>726</b>

##### 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 2016.

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 1

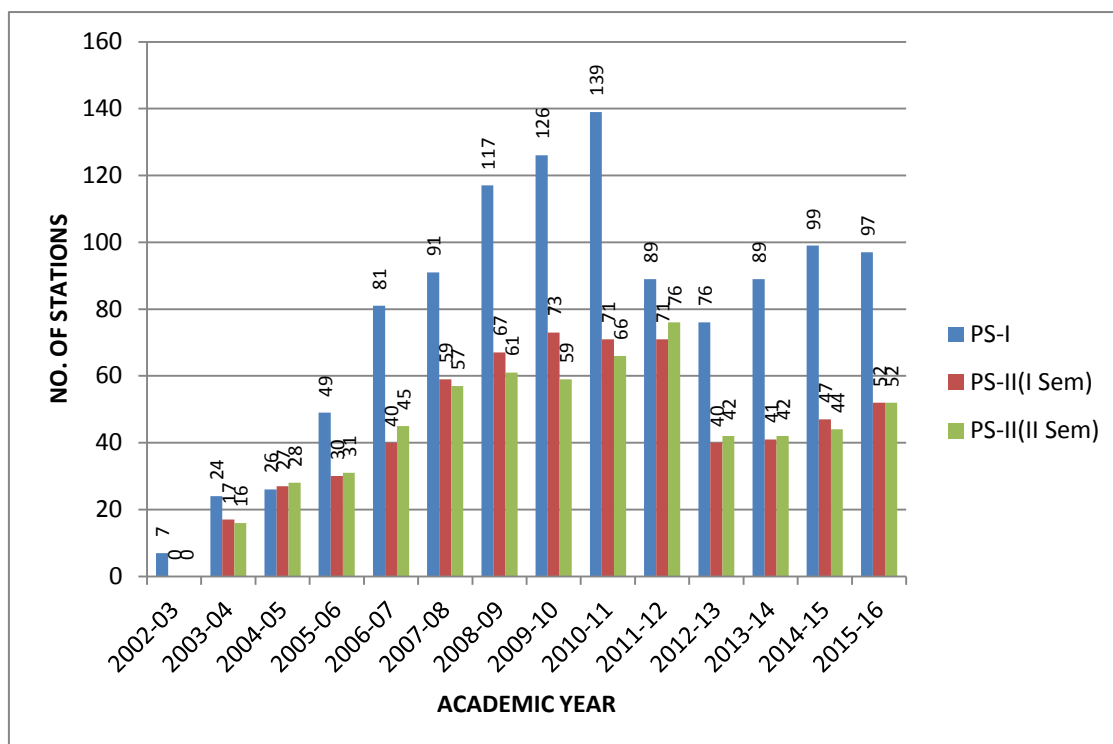


Table1 PS-II Stations Added during the year 2016

Sl. No	PS-II Stations	Monthly stipend/out of pocket allowance in AED
1.	Comin Touch Technology LLC, Dubai	1000
2.	CRODA Middle East, Dubai	2000
3.	Darvesh Group, Dubai	1000
4.	D-Link Middle East, Dubai	1500
5.	EAGLE Industries DWC-LLC, Dubai	1500
6.	ehAPI Technologies, DSO, Dubai	1500
7.	ELJI International, Sharjah	1000
8.	ESMA Group, Dubai	1000
9.	GE Power and Water, Dubai	1500
10.	Hassani Group of Companies, Dubai	1000
11.	Indogulf Middle East, Dubai	1500
12.	Merint LLC, Dubai	1000
13.	Microhit Technologies, Abu Dhabi	1000
14.	Oriental Dynamic Solutions, Dubai	1000
15.	Perfect Industries Ltd., Sharjah	1000
16.	Procal Measuring and Control Instruments, Dubai	750
17.	Rove Automation, Sharjah	1000
18.	Sprint Middle East LLC, Dubai	1000
19.	Triway World, Dubai	1500
20.	TUV NORD Middle East, Abu Dhabi	1000
21.	Unilever Gulf FZE, Dubai	2000

## **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 with two floors and area of about 14,840 sq. ft. It has a contemporary design with reading halls, reference section, stacking area, faculty lounge and digital library with 22 computers, internet browsing centre with 20 computers, 50 individual study carrels, and exclusive 8 (ground and first floors) systems for OPAC. The computers have been replaced with higher configuration for the students in the Library. It has a seating capacity of more than 300.

The Library remains open from 7.30 AM to 10.00 PM on all working days and 10.00 AM to 10.00 PM on Saturdays. The Library service is extended till Midnight during all the evaluation components including comprehensive examinations. The Library is open on Fridays for 2 hours and closed on national holidays.

The Library Automation software has been upgraded and installed in the new higher end server. All the resources secured with RFID security system and bar-coded which enables for quick and easy service to the user community. The Self Service Kiosk for issue and return of books has been installed. The Online Public Access Catalogue (OPAC) is web enabled (Web OPAC) wherein the users can access the catalogue remotely to search the resources and check their account. High speed Wi-Fi facility has been provided in the Library. Browsing computers have been replaced with higher version. New discussion room for students and new faculty reading room are launched. High end cameras have been installed. Provided one additional discussion room for students.

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, 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 around 19,760 books. The collection of the library is growing continuously on a regular basis. Around 1,500 new volumes of books were added to the existing collection during the year in major disciplines of engineering and sciences. The new titles include emerging areas like Communication Engineering, Nanotechnology, Artificial Intelligence, Biochemical Engineering, Bioinformatics, Software Engineering, Robotics, Energy Engineering, Data and Web Mining, Business and Management. New case study collection on management and engineering courses were acquired. The Library procures good number of Fictions and General Aptitude books such as TOEFL, GRE, SAT, IELTS. Books on Islam and Arabic are also added.

### **E-resources**

1. The Library caters the users' needs with the collection of 4779 e-journals from the following e-databases: IEL Online" IEEE Xplore Digital Library, American Society of Mechanical Engineers (ASME) digital collections, ACM Digital Library, EBSCO Engineering Source and EBSCO Humanities International Complete. The e-databases have full text of e-journals with back issues, conference proceedings, e-books and reports.
2. The latest question papers have been digitized and made available through the library online catalogue (<http://weblibrary/AutoLib>).
3. The Library subscribes to e-papers of "The Times of India", "The Economic Times" and "The Hindu".
4. The Library holds 4000 free e-books.

### **Reference Section**

1. The Library procured latest editions of Encyclopedias, Dictionaries and Hand books on core disciplines of Engineering, Technology, General Sciences and General Knowledge.
2. The Library subscribes to print version of 45 international journals, 60 magazines and 4 local newspapers.
3. The Library has 478 back volumes of journals.
4. Library has more than 1500 CD-ROMs on engineering courses and there are 5 computer terminals exclusively meant for the accessing these.
5. Library has 470 thesis reports, 868 project reports and 2369 practice school reports submitted by students are available for reference.
6. 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 has Wi-Fi facility within the library which enables the users to use their laptops for internet browsing / project / thesis work.
2. Library provides photocopy, printing, scanning and binding facilities to the patrons.
3. The Library provides Selective Dissemination of Information (SDI), Current Awareness Services (CAS), Conference Alert Service, Competition for students alert service and Latest arrival service to the patrons and users.
4. Useful articles, news, newspapers clippings related to education are being displayed on the library notice board for the benefit of students and faculty.

### 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 books	19,760
2	Average number of books circulated per day	140
3	Books added during the year 2015	1500
4	Number of print periodicals subscribed	110
5	Online Databases made available on library site	5
6	CD-ROM collection	1500
7	Total no of back volumes of journals	478
8	Total no. of Reports (Thesis and Project Reports)	1338

### Library Staff Achievements:

1. Mr. R. Sivakumar, Librarian attended in the Workshop on "Elements of effective Librarianship" held at BITS Pilani, Pilani Campus, India, 8th-9th April 2016.
2. Sivakumar, R., & Geetha, V. 2016. Information Literacy Programmes in UAE: Contents, User Category, Mode preferred and Skills Required. Journal of Advances in Library an Information Science (ISSN: 2277-2219), Vol. 5, No. 3, July-Sep. 2016, pp. 204-209.
3. Library Staff and Committee Members visited Sharjah International Book Fair held at Expo Centre, Sharjah, UAE during 2nd-12th November 2016 and purchased books for Library.

### B4.16.2 Infrastructure and Facilities

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 boy and girl students with single occupancy, centrally air-conditioned furnished rooms and a full-fledged mess which serves both vegetarian and non-vegetarian food.

### B4.16.3 Laboratories

The Institution's laboratories are of international standards and they have grown from 2 to 30 in the last 14 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
3.		Genetic Engineering
4.		Microbiology
5.		Industrial Microbiology
6.	Chemical Engineering	Chemical Engineering I
7.		Chemical Engineering II
8.	Chemistry	Chemistry

S.No	Discipline	Laboratory
9.	Computer Science	Computer Programming
10.		Object Oriented Programming
11.		Computer Architectures
12.		Microprocessors Programming & Interfacing
13.		Software Systems Laboratory
14.	Electrical and Electronics	Electro Mechanical Energy Conversion
15.		Digital Electronics And Computer Organization
16.		Analog Electronics
17.		Communication Systems
18.		Digital Signal Processing
19.		Power Electronics
20.		Introduction to MEMS
21.	Electronics and Instrumentation	Process Control
22.		Electronic Instruments & Instrumentation Technology
23.		Virtual Instrumentation
24.	Mechanical	Workshop Practice
25.		Prime Movers And Fluid Machines
26.		Engineering Graphics
27.		Production Techniques
28.		Computer Aided Design
29.		Heat Transfer
30.		Mechanical Engineering
31.	Physics	Physics

#### B4.16.4 Engineering Services

##### 1. Communication and allied facilities

The following facilities are available for the benefit of students and staff:

##### IT Infrastructure Facilities and Support Services

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.

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.

The data centre equipped with the following servers and Network components.

##### Servers

- HP DL 380 series new generation
- HP Storage serve (SAN)
- QNAP NAS for Backup

##### Network Components

- Cisco Core switches Nexus series
- Cisco Edge switches

Cisco Firewall  
 Cisco Prime system  
 Cisco Wireless controller  
 Cisco Network admission control and access control system  
 Cisco IP Telephony system  
 Panasonic IP camera setup

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.

We have Cisco Telepresence system (under BITS Connect 2.0 project) is implemented in our campus which is interconnected to all our campus in India. The Cisco Telepresence classroom, capacity of 160 seating will help the students to participate the online classroom sessions.

The software tools like AUTOCAD, MATLAB, CATIA, SYNOPSIS, ANSYS, SPSS and ASPEN are available to the students along with a variety of compilers and operating systems.

S.No.	Hardware Equipment	QTY	SOFTWARE
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	CISCO IDENTITY SERVICES ENGINE, SNS-3415-K9 (ISE Server)	1	Cisco IOS
7	Cisco Prime Server, PRIME-NCS-APL-K9	1	Cisco IOS
8	Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS
9	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
10	Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
11	Sonicwall NSA 5600 Series	2	Wan optimization
12	Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
13	Cisco Unified Communication System,UCS-BE-6000	1	Vcenter
14	Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS

**B4.17 PROCUREMENT AND MAINTENANCE**

Facility Management Department is in charge of Procurement, Maintenance and modification of the infrastructure and facilities in the campus. Procurement actions are initiated by the FM Department after the approval by the Purchase Committee, with respect to new equipment, spares, consumables, repairs and modifications of the existing equipments. Any modifications to the infrastructure are taken up by FM Department as per the approval of the Director, BITS Pilani, Dubai Campus.

During the year 2015, the following jobs of up-gradation / repairs of the existing facilities were done.

1. Procurement of 300 chairs for Auditorium
2. Procurement and fixing of 10000 Gallons water tank 4 Nos. for irrigation water storage
3. Replacement of all the chalk boards with marker whiteboards
4. Painting all common area for institute and hostel
5. Installation of shade in front of cafeteria
6. Installation of 10 Nos. solar street light near girls hostel
7. Procurement of 102 Desktops for various laboratories.
8. Procurement of 25 Laptops for faculty and administrative officers.
9. Procurement of 1 LED Televisions 32".

**B4.18 EQUIPMENTS AND ACCESSORIES**

A large number of equipments and accessories were purchased for BITS Pilani, Dubai Campus. The list of major equipments is included in the Annexure B4-21.

S. No	Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
1	Olympus Fluorescence Microscope BX53 with phase contrast, dark field and camera attachment (1nos)	BIOTECHNOLOGY LABS
2	Student compound microscopes (21nos)	
3	Vortex mixers (3 nos) nnn	
4	Sartorius Analytical balance (1 no)	
5	QSONICA sonicator system with micro probe (1nos).	
7	MSC ADAMS software, Pin on disc wear tester and VCR Engine were added to the existing lab facilities.	MECHANICAL LABS
8	CO2 Analyzer	CHEMICAL ENGINEERING LAB
	pH/mV/ISE/TDS/Salinity/DO meter	
	Digital Anemometer	
	Air compressor (capacity 200 lit)	
	Multi-Thermometer (digital)	
	Solar Power Meter	
	Photo bioreactor	
	Specific Gravity Hydrometers	
	Glass Viscometer	
Ozone generator		
10	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD Combo	Computer Programming Lab and Staff
11	HP Pavilion 15-N221SE, Processor Intel® Core (TM) i-7, 8GB RAM, Windows 8.1, 2GB Graphic card	Faculty and Staff
12	CISCO IP Telephone	Faculty and Staff
13	IP CCTV Camera	Academic block and hostel block

**B4.19 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS****1. Student Council**

President	Rohin Nambiar
Vice President	Pavan Ravella
General Secretary	Prarup Chapparwal
Ex Officio Member	Shreya Jain

## 2. Day Scholar Representatives

1st Year	Shilpa Sreekumar
2nd Year	Anna Joselin
3rd Year	Albin Raju
4th Year	Rohith Raveendran

## 3. Hostel Committee

Block A	Rahul Manickam
Block B	Raghav Sardana
Block C	Akash Rhambia
Block D	Chirag Jain
Block G	Manogna Reddy

## 4. Clubs

Dance (GROOVE)	Pranali Khatawkar
Art (SHADES)	Esha Backer
Astronomy (COSMOS)	Srini Sarkar
Social & Environment (MAKE A DIFFERENCE)	Arosha Pattnayak
Drama (PARIBHASHA)	Devanshi Chauhan
Public Speaking & Literary Club (EXPRESSIONS)	Akshita Angara
Photography (REFLEXIONS)	Rishab Bhaskar
Music (TREBLE)	Shane Mascarenhas
Sports	Abdul Muqet
Design (Oh,Crop!)	Sidharth Lahoti
Fashion Club (Allure)	Saheel Iqbal

## 5. Student Activities

BITS Pilani, Dubai Campus encourages student to meet each other in a friendly atmosphere to conduct professional/scientific activities such as institute-wide technical festival, Technofest and also to 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, CHERERA, Linux Users Group, Microsoft Tech. Club etc. There are 11 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 and Astronomy Club. The following were some of the important activities held during the year 2016:

### 6. The social and Environment Club-

Blood donation Camp- As our bi-annual event, Blood donation for the first semester was held on 13th of September 2015 and then on 5th May 2016 in collaboration with Al Wasl Hospital. 110 units of blood were collected in 2015 and 109 units in 2016 and all the students and teachers alike were given refreshments after their donation. Valentines day fundraiser- A fundraiser for our Bag of Love, the social and environment club put up a stall which sold cupcakes, cards, and chocolates. The profit, mainly aimed at funding our attempt to gift the MBM with goodie bags filled with necessity items. Mana Maali- a Stanford-BITS initiative, strives to eradicate mental illness and bring forward vibrant, strong and passionate youths. On 17th of April, volunteers conducted a mental health awareness campaign where they put up a play highlighting the need to eradicate stress, singing performances and various other activities. Earth Day 2016- Our green activities include celebrating Earth day, where the director and our teachers plant a tree to mark our closeness with nature and to make people aware of our environment. Spectrum 2016- Spectrum is an attempt by the club to bring a smile on innocent young faces of specially challenged kids. The event had a wide array of games and events that focused on what is most important- the entertainment and happiness of the uniquely gifted children. It was conducted on the 12th of May and saw 125 students enjoying all the competitions and activities alike. The children were from four different schools- SNF, Al Rashid center, Manzil and Senses, Dubai. Daan Utsav, the Joy of Giving week was held from 2 to 8 October 2016. A lot of events were held during the week for the same. The events included a day trip to Senses, a clothes collection drive, Dandiya Night and a stationary collection drive too. Senses, Dubai is a school for the special needs kids. The club members organized fun activities, singing and dance performances for the kids. They carried a lot of goodies too which brought a smile on their faces. The motive to spread happiness and joy was fulfilled by the end of the day. A clothes collection drive was also held during the week. Due to the joint effort of the students and the faculty members, 10 boxes were collected. All the clothes were further donated to

the Red Crescent Organization which helps the poor and people in need. The club also conducted a stationary collection drive along with the student council. The drive helped collect an enormous amount of stationary which was then donated to the Emirates Red Crescent Society. Dandiya Night was one of the most awaited events of the year. It was held on 13 October 2016 in the auditorium. The event was conducted as a fundraiser for Spectrum 2017, which is an event for the special needs kids. It attracted more than 450 students and was a huge success because of the efforts put in by the student volunteers and the support of the faculty members. Cancer Awareness Day was held on 3 November 2016. This event was conducted to raise awareness among the students and faculty members of our institute. Cancer is a disease that kills 20,000 people every day and therefore it was necessary for people to be aware of this fact. A program was held which included people sharing their experiences and views on Cancer. It acted as an eye opener for everyone who witnessed it. The blood donation camp for the first semester of 2016-17 was held on 17 November 2016. A blood donation camp is conducted twice a year in collaboration with Al Wasl Hospital. Every semester around 110 units of blood is donated. The motivation behind this camp always remains the same that is "everyone is someone's type." Another initiative that was taken up by the club was the 'Smile at a Stranger' initiative. This started in August 2016 and is still in progress. Posters were put up all around the institute to emphasize how important this is. Apart from all this, the club also encourages recycling of paper and cans. At the end of every month, student volunteers collect papers and journals from all the faculty members of the institute. Cans are also collected from the canteen after every few days. At the end of every semester, all the collected items are recycled.

#### **7. The Public Speaking and Literary Club:**

For the first time in BITS Pilani, Dubai Campus, an inter-college debate championship 'BITS Debate Championship' was held on March 12. The debate saw the participation of 7 universities/colleges from across the country. Our university did not participate in the event and only served as organisers and adjudicators for the same. SoapBox and Pass The Buck were organized as a part of Enginuity 2016 (Second Sem 2015-2016). The annual Inter-Year Debate was held on November 2. Pass The Buck and SoapBox were organized as a part of Enginuity (First Sem 2016-2017). Workshops called MasterClasses were held throughout the First Sem 2016-2017 and the main topics of discussion for the same were MUN, public speaking and debating formats.

#### **8. Dance Club:**

Dance club won many laurels at various inter university competitions. BPDC team bagged first place in Eastern and Western category at the Inter-university Dance Competition at Jashn'16 organized by BITS Pilani, Dubai Campus. The Eastern Team won the first Position in Group Dance at Vaudeville 2016 organized by Institute of Management and Technology. The members of the club performed for Diro's Tea Party 2016, Ethnic Day 2016 and Ice breakers 2016.

#### **9. Drama Club:**

The Drama club, Paribhasha, hosted 4 events in the year 2016. Two events, "Proscenium" and "Impulse" were held during Jashn 2016. In Proscenium teams staged a 20 minute play and impulse had 3 rounds, "Ring zap", "Pantomime" and "Mad Ad". During Sparks 2016 an event called "Street Play" was organized. Other events like "Impulse" were also held. A workshop was conducted by Nonidh Yadav on Cinematography, Direction, Editing, Writing and Production, was organized by the club on 15<sup>th</sup> October 2016.

#### **10. Art Club:**

The Art Club "Shades" has been active in every major event in 2016. It was responsible for the art work and decoration for Jashn and Enginuity. Props were provided for various events like impulse and street play. Also the club worked alongside the crew of the Day Dreamer's musical. Later in the semester, they were responsible for the Art work and decoration of Diro's tea party. The club also did the BSF 2016 and ethnic day decorations. It organized an annual event named Artex from 30<sup>th</sup> to 31<sup>st</sup> March 2016, this had many competitions like rangoli making, graffiti and doodling making. It also showcases the paintings and sketching done by the students for everyone to see.

#### **11. Music Club:**

The Music club organized various activities during Jashn 16, Eastern and western solo singing, duet singing, instrumental and Battle of the bands. "Music Lessons" was an initiative to encourage an understanding among students that music is not only for those with talent but also for those who enjoy it and would love to learn it. This initiative received a lot of enthusiasm from the members. Sparks Music Events happened from 17-18th October 2016, with singing events, instrumental and Battle of the Bands. The Judges for the Singing events and band events were reputed local artists. The club participated in Pink Day on 30 October 2016 an event, which was organized in association with the Social and Environment Club. On 6th November 2016, Music club gave performances for the Ethnic Day program and had set up karaoke outside the library. It also performed a musical piece in the BITSAA Alumni Arabian Nights.

#### **12. 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 the year 2015, sports club organized the following sports activities:-



**Inter Year Tournaments:**

Sports Club organized Inter Year/ Class tournaments for both boys and girls in Cricket, Football, Table-Tennis, Throw ball, Badminton, Chess, Carom, Handball, Basketball, Athletics (Field & Track) and Volleyball.

**Inter-University Tournaments:**

Gulf Medical University Sports Meet:- BITS Pilani, Dubai Campus were crowned the Overall Champions. BPDC teams won Throwball (Girls), Cricket (Girls) and Table Tennis (Girls) while-as came runner-ups in Volleyball (Boys), Lawn tennis (Girls) and Squash (Boys). American University of Sharjah Sports Fest:- BITS Pilani, Dubai Campus won Gold in Badminton (Girls), Cricket (Boys) and Table Tennis (Girls). Also, came runner-ups in Squash (Boys) and won 3<sup>rd</sup> Place in Table-Tennis (Boys) tournament. Skyline University Sports Fest:- BPDC teams won Table-Tennis (Girls) and Throwball (Girls) tournament. Scottish Highland Games:- BPDC teams won Gold in Table-Tennis (Boys) and Table- Tennis (Girls) tournaments.

**Intra- College Staff and Faculty Sports Tournament:**

Staff and Faculty sports tournament was conducted by the Sports Club and featured Badminton, Cricket, Volleyball, Table-Tennis, Carom and Chess as categories of participations.

Inter- .Year Boxing Championship: Annual sports day, Inter-Year Prize Distribution Ceremony: On 9<sup>th</sup> and 10<sup>th</sup> May 2016 organized Mega event Boxing Finals followed by sports awards ceremony for the academic year 2015 - 2016. Medals were handed out to the winners of the intra-university sports events including field and track events, cricket, throw-ball, volleyball, football, badminton, chess and table tennis. Director Dr. R.N. Saha presided the ceremony as the chief guest and gave away the prizes. Also best Sports persons from each Sports were awarded Best Player Trophies. Also, Faculty and Staff Sports Tournaments award ceremony was held the same day.

Recharge- 2016: Sports Club was responsible for conducting all the Sports Events for the Hostel Week Celebrations in Recharge- 2016. A total of 20 categories of various sports with over 400 participants were conducted in a span of 5 days.

DIAC Sports Fest:- October 30 – November 05, 2016, BITS Pilani, Dubai Campus participated in DIAC Sports Cup 2016 and won Beach Volleyball (Male), Chess (Male), Indoor Cricket (Male), Indoor Cricket (Female), also came runners- up in Volleyball (Male), Badminton (Male), Beach Volleyball (Female) and secured 3<sup>rd</sup> place in Table-tennis Male. BITS Pilani Dubai were crowned overall champions at DIAC Sports Fest 2016 with 19 points followed by Manipal University at 17 points.

Manipal Sports Fest:- November 19- 24<sup>th</sup> BITS Pilani Dubai Campus Sports teams participated in Manipal Sports fest and secured 1<sup>st</sup> place in Badminton- Boys and Girls, Throwball- Girls, Chess- Boys and Girls.

1<sup>st</sup> Inter BITS Sports Meet: The 1<sup>st</sup> Inter BITS Sports Meet was held in BITS Pilani, Dubai Campus during the 14<sup>th</sup> edition of BITS Sports Festival from 13<sup>th</sup>, 17<sup>th</sup> November 2016. The event was the first of its kind and was entirely the efforts put in by the SWD Dean Dr. Priti Bajpai, Sports Club Faculty In-charge, Rafiuddin and THE Sports Club of BITS Pilani, Dubai Campus with constant support from the Director Dr. R.N. Saha. With the initiative of involving our parent and sister campuses from India in the Sports Fest, introducing the idea of the 1st Inter Bits Sports Meet, for which the Club had to go through a rigorous process of talks and negotiations for more than six months with the student bodies, administration and the Vice Chancellor of BITS Pilani University, Dr. Souvik Bhattacharya whom the Sports Club President, Abdul Muqet met personally at BITS Pilani, Rajasthan to discuss the idea of Inter BITS Sports Meet and the concept of holding it on a rotational basis in all the four campuses of BITS Pilani University. This idea was granted acceptance by the management and administration of our University and the 1st Inter BITS Sports Meet will be held at BITS Pilani, Dubai Campus where- in representative of all the four campuses participated in different categories of sports. The next Inter BITS Sports Meet will be held at BITS Pilani, Hyderabad Campus in the year 2018. I-BSM will return to BITS Pilani, Dubai Campus after 4 years and BPDC will host the 5<sup>th</sup> edition of I-BSM in the year 2021 tentatively.

**13. Enginuity 2016:**

An inter college tech fest was held from 27<sup>th</sup> of November 2016 to 29<sup>th</sup> November 2016. Various events were conducted by the technical associations and clubs of BITS Pilani Dubai Campus. Paper presentation, model making, coding challenges, Just a Minute, Parliamentary Debate and Business challenges were held as part of Enginuity 2016. A football quiz, Game of halves for the football fans was organized. Various colleges from across the UAE participated in the tech fest. On the final day of the event an award ceremony was organized to distribute medals and certificates to the winners of the various events. Code Blitz a programming, Fast and Curious an EEE event and the big Spilt, a Chemical Engineering competition was also held..

**14. JASHN 2016:**

An Inter college cultural festival 'Jashn 2016' was held during 18<sup>th</sup>-21<sup>st</sup> April 2016. The festival started with an opening act Day Dreamer a musical. The various clubs of BITS Pilani, Dubai Campus organized different events during the cultural fest which comprised of dance, drama, music, literary and art events to name a few. Participants included students from American University of Sharjah, American University of Dubai, BITRAK, Manipal University, Middlesex University, and Canadian University of Dubai, Amity University, IMT and Herriot Watt University. Events like Dance Drama, E Quiz, Battle of DJs, Battle of Bands, Pixels, Devil's Advocate,

Singing, Short film, Fashion Show, etc were held. The prize distribution ceremony was held in the presence of the Director Prof. Dr. R. N. Saha. The event concluded with performances by the band 'Rooh' and which performed on an outside stage

#### 15. Hostel Week Celebrations 2015:

Hostel Week "Recharge" was celebrated in the Dubai Campus between the 19<sup>th</sup> February and 24<sup>th</sup> February 2016, with a lot of fanfare. A special menu was prepared for the week for hostel students. Fun activities like Beg Borrow Steal, Blind Hit, Musical Chairs, Tug of Wars, Eating Competition, Antakshri, Tambola, Kho Kho, Bathroom singing and many outdoor sports were organized. Indoor activities such as chess, carom, badminton and table tennis were organized as well. There was a huge response and participation involved by the hostel students, wardens and the staff. On the final day of the celebrations, a programme was organized in the auditorium. Prizes were distributed to the winners of the various events and various hostel students displayed their skills by dancing and singing on stage. The hostel staff was also honored during the event. A grand Buffet dinner was organized after the closing ceremony which marked the end of the celebrations.

#### 16. Farewell Party:

The 'DIROS Tea Party', a farewell party to the passing batch was organized by the Alumni Cell on 19th of May 2016. The event began with department photographs being clicked with the respective department faculty. A programme was then organized in the auditorium to bid farewell to the graduating students. The graduating batch and faculty members attended the ceremony. A dance performance by the Dance Club and music performance by Dr. Rafiuddin and the music club entertained the gathering. A lot of fun games were arranged and gift vouchers were awarded to the winners of the games. A 15 kg cake was cut by the students. The farewell ended with a dinner and on an emotional note.

#### 17. Welcome Party:

The Fresher's Welcome Party named "Ice-Breakers" was held on 28th August 2016. It was organized by the senior students of the college to welcome the new batch of students of 2016. The event began with students of the new batch breaking ice blocks with a sledge hammer. Dance and music events by the senior students entertained the gathering and students from the new batch were encouraged to display their skills on stage voluntarily. To conclude the welcome party in the auditorium a cake was cut. Refreshments were distributed to all attendees of the event.

#### 18. BITS Sports Festival 2016:

Coca-Cola presents, 14<sup>th</sup> edition of BITS Sports Festival was held from 13<sup>th</sup> – 17<sup>th</sup> November 2016. It was surely the biggest event that BITS Pilani, Dubai Campus has ever hosted or atleast hosted in a while. We had none other than **Mr. Diego Armando Maradona**, FIFA player of the century gracing the award ceremony this year. The whole organizing team of BSF did not fail to impress us even on the last day. Their hard work truly paid off and the success of BSF can be attributed to the organizing team and the core team which included Abdul Muqheet, Malvika Sridhar, Yash Patni, Navaneeth Reddy, Azaan Barodawala, Siddhath Lahoti, Mohit Gupta, Karan Viraj Singh, Tehmeem Taheen, Radhika Jaychandran, Raksha Lal, A. Sharon, T. Vudaya Sankar, Arshiya Jamadar, Shreya Naha, Saheel Iqbal and Kanwar Tushar Punj. The finals took place and the best of the best colleges competed against each other to win the trophy. There was no room for mistakes and each match was intense and engrossing. The event began with a "flag down" ceremony presided by the Chief Guest, along with the Sports Club Members. The distinguished Chief Guest were escorted to the Award Ceremony by the Director, Deans, and the Sports Club members, Dr. M Rafiuddin, Convener of BSF, Abdul Muqheet, President, Malvika Sridhar, Vice President, Yash Patni, General Secretary, and Navaneeth Reddy, Treasurer. The crowd went ballistic when he entered the auditorium and when Maradona came to the podium to speak, every single individual in the auditorium was spellbound. It was a dream come true to share the same space as this legendary footballer. Mr. Maradona, gave away the trophies to the finalists and it was a proud moment for the winners and the runners up to be awarded by Diego Maradona himself. The award ceremony began with the BSF Report by Dr. M Rafiuddin, Senior Manager, Student Services who has also been the Convener for BSF for the past 14 years, followed with a speech by the Director, Dr. Prof. RN Saha, who congratulated the organizing team for such a successful event. The Chief Guest graced the stage, and enlightened all the budding sportsman on how thankful he was to BITS Dubai, for calling him here and also enlightened everybody with the importance of sports and passion. All the teams were then given their medals and trophies, and they stood with a wide grin on their faces. Apart from all this the event packed 5 days of BSF included gaming events, competitions and an outdoor concert by "The Local Train" band.

#### 19. SPARKS 2016:

Sparks 2016, an intra-college cultural event was held during 18-19th October, 2016. The event comprised of competitions held in the auditorium and were organized by the Dance Club, the Drama Club and the Music Club. The dance competition for the fest was divided into 3 categories: Western Group Dance, Eastern Group Dance and Dancing Doubles. There were drama events like Impulse and Street Play. Music events like Eastern and Western rounds of Solo and Duet singing, Instrumental Music and Battle of Bands. There were many brilliant performances that left the audience awestruck. All the judges were amazed at the splendid performances of the students and the hard work, effort and time put in to making this event a success was both prominent and

commendable. Certificates of Merit were awarded to the top two performers / teams in each of the competitions. A food stall was also set up by the Student Council to tickle the taste buds of the students.

#### **20. Ethnic Day:**

Ethnic Day is organized every year to celebrate the Foundation Day of BITS Pilani, Dubai Campus. The celebrations were held on the 6th of November 2016 at the campus. Students dressed up in ethnic wear on the day and an event was organized in the auditorium from 2:00 PM to 4:00 PM. The programme began with the lighting of the "diya" and the Director's address. Dance and music performances by students and the staff enthralled the audience. Several On-the-Spot competitions were conducted that were open to all students and faculty members and prizes were given to the winners. Mr. Ethnic and Ms. Ethnic were announced after a few rounds of contest.

#### **21. The Astronomy Club:**

The club organized an orientation for the students, on 19<sup>th</sup> October 2015. The first bi-weekly session was held on 2<sup>nd</sup> November 2016 and a group discussion took place on astronomy on 8<sup>th</sup> November 2016. The second bi-weekly session was held on 23<sup>rd</sup> November 2015. The club hosted a discussion round on Star death on 15<sup>th</sup> December 2015. The club conducted three workshops and a seminar.

#### **22. Design Club:**

The club completed the year book for the outgoing batch. Two designing classes were conducted in the month of October in collaboration with ACM. Monochrome, an event where people were supposed to use black markers, newspaper and A3 sheets to show their creativity, was conducted during the techfest Enginuity. The club has been contributing in many other events such as: Graphic Design & Illustration done for various events organized by ACM - BITS Pilani, Dubai Campus, Team IFOR, ASME, Sports Club, Drama club, Astronomy Club, Quiz Club, Fashion club and the Editorial Board - BITS Pilani, Dubai Campus.

#### **23. Photography Club:**

The club covered events like Jashn, Sparks, Recharge, Bits Sports Festival, Enginuity, Technofest, and they covered Talk and workshops coverages for all the disciplines. A photography competition that was held during Technofest '16, The intra-college technical festival. The event was later cancelled, due to lack of submissions and bad marketing. A photography competition that was held during ENGINuity '16, and prizes were sponsored by Nikon. Was the first club held photowalk, lead by Mr. Subodh Shetty, a famous travel photographer. The location for the photowalk was The Terrace, Dubai. First cut was a short film competition organized in collaboration with Paribhasha - The Drama Club, BITS Pilani Dubai Campus. The event was judged by Mr. There were a total of 6 entries from various colleges in the UAE.

#### **24. Achievements and Commendations**

1. BITS Pilani, Dubai Campus students are selected for DU Telecom's "Agent 055 Network" a flexible part-time internship program. Anusha Karanayil, Madhubala Vijayakumar, Shehab Abdul Rahim.
2. Team IFOR and Team IORTA are proud to have qualified to the semi-final stage of the UAE Drones For Good Award's National Competition, which is to be held in the month of February 2016. Their submissions were selected out of an applicant pool of several hundred highly competitive entries. UAE Drones For Good will be publicizing the submission videos of the respective teams as part of their media and PR campaign of the award and on their website.
3. MOF Hackathon 2016 – Two teams of students of CS Department participated in the MOF Hackathon held on 22<sup>nd</sup> November 2016. Team comprising of students Johann Fernandes, Manji Suhail, Naman Kamra, Shaurya Sood and Urvashi Sharma won the second prize and whooping cash prize of 8000 USD. Another team of Ayush Gulati, Don Joe Martin, Khushboo Agarwal, Kunal Malhotra, Pradeepaan Raghavan and Saugat Allabadi bagged the third prize and 6000 USD.
4. Saugat Allabadi as well as Kunal Malhotra participated in the Middlesex Code Jam 2016 and bagged the first position along with Aser E15 Laptops.
5. A team of second year CS students has won the first place in the ANGELHACK competition that was held from 1-2 April 2016 at the Microsoft Headquarters, Dubai Internet City. The team comprised of Jeevan Sandhu, Tanya Kalwani, Nishank Singhal and Amaan Kulshreshtha.
6. Bits Sports team secured Overall Championship in Gulf Medical University Ajman Sports Fest 2016, AUS Cricket and winning all sports festivals in various Universities of UAE Heriot Watt University, Skyline University and American University of Sharjah.
7. ASME District G top position in Student Design Competition (SDC) on 19-3-2016 at VIT, Vellore, India. The student team comprised of Akash Hathiramani, Puneet Khirwar, Tahseen Ahmed Khan, Srihari Srivathsan and Tanya Juneja.
8. Eastern Dance Team won the first position at IMT's Vaudeville 2016 Dance off event on 3rd March (Thursday). The prizes included certificates and gift vouchers for all team members.

9. Gear Shifters has won the people's choice award at the Innovator Show held in Abu Dhabi on 3rd and 4th of March,2016.A cash prize of 10000 AED was given to the team for their outstanding performance in the event.

#### 10. Scholarships

Financial Assistance to Students\773 students received financial assistance of AED:5,400,464/- under different categories for the Academic Year 2015-16, the details of which are given below:

S.No	Particulars	Students Nos.	Amount in AED
1	Institute Merit Scholarship	674	3,913,250
2	Higher Degree and Doctoral Scholarship	32	573,214
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	2	30,625
4	Others (Staff, Siblings, Sports, Special Concessions)	66	883,375
<b>Total</b>		<b>773</b>	<b>5,400,464</b>

#### 25. Earn While You Learn

83 students worked as Professional Assistants in 2015-16. They participated in various academic activities like assistance in labs, software and other developmental work. This gave them an opportunity of independent thinking and developing a sense of responsibility. The programme is not linked with any academic credit but the participants were paid honorarium for their services and certificates from the Director, Dubai Campus.

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Annexure B4-1  
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Senior Prof. Dr. R. N. Saha

**DEANS**

DIVISION	NAME
1. Admissions	Dr. T. G. Thomas
2. Faculty Affairs	Dr. R. Roop Kumar
3. Practice School	Dr. B. Muralidharan
4. Student Welfare	Dr. Priti Bajpayee

**ASSOCIATE DEANS**

1. Academic Registration & Counseling	Dr. A. Somasundaram
2. Academic Research	Dr. Neeru Sood
3. Academic Resource Planning	Dr. Anand Kumar
4. Instructions	Dr. K. Kumar

**DEPUTY REGISTRAR**

Dr. D. J. Shariff

**HEAD OF THE DEPARTMENTS**

<u>DEPARTMENT</u>	<u>NAME</u>
1. Chemical pandya	Dr. Nishant harishbhai
2. Civil	Dr. Ajit Pratab Singh
3. Electrical and Electronics	Dr. A.R. Abdul Rajak
4. Mechanical	Dr. M. Shankaram
5. Computer Science	Dr. Santhosh Kumar
6. Biotechnology	Dr. S. Ramachandran
7. Mathematics and Science	Dr. T.K.Datta
8. Humanities and Management	Dr. Lajwanti Aidasani

**INCHARGES**

1. Facilities Management	Dr. K. K. Singh
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**HOSTEL WARDENS**

	<u>NAME</u>
Chief Warden	Dr. Santhosh Kumar

BLOCK

A	Mr. N. A. Venkatesh
B	Mr. Harold Franklin
C	Dr. Santhosh Kumar
D	Mr. Anuj Kumar
G	Dr. S. Karthiyayini

Annexure B4-2  
(2 pages)**DETAILS OF THE ADMISSIONS MADE DURING THE YEAR 2016****I. First Semester 2016-2017****Admission to Integrated First Degree Programmes**

## B. E. (Hons.)

Biotechnology	: 18 (16)
Chemical Engineering	: 29 (16)
Civil	: 14 (03)
Electrical and Electronics Engineering	: 19 (08)
Mechanical Engineering	: 72 (08)
Electronics and Instrumentation Engineering	: 02 (00)
Computer Science	: 138 (62)
Electronics and Communication Engineering	: 30 (13)

**Admission to Higher Degree Programmes**

## M. E.

Microelectronics	: 03 (00)
Design Engineering	: 07 (00)
Software Systems	: 05 (02)
Biotechnology	: 00 (00)
M.B.A	: 12 (02)
Ph.D	: 05 (01)

TOTAL	: 354(131)
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**II. Second Semester 2015-2016****Admission to Integrated First Degree Programmes**

## B. E. (Hons.)

Biotechnology	: 01(01)
Chemical Engineering	: 00 (00)
Electrical and Electronics Engineering	: 02 (00)
Mechanical Engineering	: 03 (00)
Electronics and Instrumentation Engineering	: 00 (00)
Computer Science	: 03 (03)
Electronics and Communication Engineering	: 01 (01)

**Admission to Higher Degree Programmes**

## M. E.

Microelectronics	: 00 (00)
Design Engineering	: 02 (00)
Software Systems	: 00 (00)
Biotechnology	: 00 (00)
M.B.A	: 04 (02)
Ph.D	: 02 (01)

TOTAL	: 18 (08)
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**SUMMARY**

	<b>II Semester 2015-2016</b>	<b>I Semester 2016-2017</b>
Integrated First Degree Programmes	10 (05)	322 (126)
Higher Degree Programmes	06 (02)	27 (04)
Ph.D	02 (01)	05 (01)
<b>Total</b>	<b>18(08)</b>	<b>354 (131)</b>



Annexure B4-3  
(1 page)

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2015-2016 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

Programmes* From ↓ To →	A4	AA	TOTAL
	A1	1	—
A7	—	1	1
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>2</b>

**\*Legend :**

A1: B.E. (Hons.) (Chemical Engineering) (With Practice School)

A4: B.E. (Hons.) (Mechanical Engineering) (With Practice School)

A7 :B.E. (Hons.) (Computer Science) (With Practice School)

AA : B.E. (Hons.) (Electronics&amp; Communication Engineering) (With Practice School)

**LIST OF CANDIDATES WHO HAVE BEEN PERMITTED TO TRANSFER WITHIN THE FIRST DEGREE IN II SEMESTER 2015 – 2016**

S.NO.	ID NO	NAME	PERMITTED TO TRANSFER	
			FROM	TO
1	2015AAPS240U	NAMRATHA RAMAKRISHNA DATH	ECE	EEE
2	2015AAPS445U	MALIHA WAJAHAT	ECE	BIOT
3	2015A7PS439U	DISHA SHAHANI	CS	BIOT
4	2015AAPS437U	THERESA PAUL	ECE	BIOT
5	2014A8PS205U	SHUBHANKAN MUKHERJEE	EIE	EEE
6	2015A7PS092U	BRYNELL PHILOMENA MORAES	CS	CHE

Annexure B4-4  
(2 Pages)**NUMBER OF STUDENTS REGISTERED IN SECOND SEMESTER 2015 - 2016**

PROGRAMME	Year of Admission					Total
	2011 and earlier	2012	2013	2014	2015	
<b>A. Integrated First Degree Programmes B.E. (Hons.)</b>						
CHE	1 (0)	26 (15)	26 (13)	45 (18)	44 (24)	142 (70)
EEE	-	46 (18)	46 (19)	41 (12)	41 (15)	174 (64)
MECH	8 (0)	100 (4)	99 (5)	134 (8)	139 (10)	480 (27)
CS	4 (1)	99 (39)	102 (35)	135 (51)	148 (68)	488 (194)
EIE	2 (0)	6 (5)	12 (2)	13 (9)	5 (2)	38 (18)
BIO	-	16 (14)	13 (11)	21 (13)	30 (24)	80 (62)
ECE	3 (1)	71 (32)	64 (29)	56 (29)	36 (21)	230 (112)
<b>Sub Total</b>	<b>18 (2)</b>	<b>364 (127)</b>	<b>362 (114)</b>	<b>445 (140)</b>	<b>443 (164)</b>	<b>1632(547)</b>
<b>B. Higher Degree Programmes</b>						
<b>M.E.</b>						
Software Systems	-	-	-	10 (4)	4(2)	14 (6)
Microelectronics	-	-	-	-	2 (0)	2 (0)
Biotechnology	-	-	-	-	-	-
Design Engineering	-	-	-	6 (0)	10 (0)	16 (0)
Master of Business Administration	-	-	-	11 (2)	11 (4)	22 (6)
<b>Ph.D.</b>	2 (1)	1 (1)	11 (6)	7 (3)	7 (3)	28 (14)
<b>Sub Total</b>	2 (1)	1 (1)	11 (6)	34 (9)	34 (9)	82 (26)
<b>Total (On Campus)</b>	<b>20 (3)</b>	<b>365 (128)</b>	<b>373 (120)</b>	<b>479 (149)</b>	<b>477 (173)</b>	<b>1714 (573)</b>

Number of female students is given in brackets.

### NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2016 - 2017

PROGRAMME	Year of Admission					Total
	2012 and earlier	2013	2014	2015	2016	
<b>A. Integrated First Degree Programmes</b>						
<b>B.E. (Hons.)</b>						
CHE	2 (0)	26 (13)	45 (18)	42 (24)	29 (16)	144 (71)
CIVIL	-	-	-	-	14 (3)	14 (3)
EEE	2 (0)	46 (19)	40 (11)	38 (16)	19 (8)	145 (54)
MECH	9 (0)	98 (5)	132 (8)	136 (10)	72 (8)	447 (31)
CS	7 (0)	102 (35)	131 (51)	142 (65)	138 (62)	520 (213)
EIE	-	12 (2)	12 (9)	5 (2)	2 (0)	31 (13)
BIO	1 (1)	12 (10)	21 (13)	32 (26)	18 (16)	84 (66)
ECE	8 (2)	63 (29)	55 (28)	33 (18)	29 (13)	188 (90)
<b>Sub Total</b>	29 (3)	359 (113)	436 (138)	428 (161)	321 (126)	1573 (541)
<b>B. Higher Degree Programmes</b>						
<b>M.E.</b>						
Software Systems	-	-	2(1)	4 (2)	5 (2)	11 (5)
Microelectronics	-	-	-	2 (0)	3 (0)	5 (0)
Biotechnology	-	-	-	-	-	-
Design Engineering	-	-	2 (0)	10 (0)	7 (0)	19 (0)
Master of Business Administration	-	-	5 (1)	11 (4)	12 (2)	28 (7)
<b>Ph.D.</b>	4 (3)	9(5)	7(3)	6 (2)	5 (1)	31 (14)
<b>Sub Total</b>	4 (3)	9(5)	16 (5)	33 (8)	32 (5)	94 (26)
<b>Total (On Campus)</b>	<b>33 (6)</b>	<b>368 (118)</b>	<b>452 (143)</b>	<b>461 (169)</b>	<b>353 (131)</b>	<b>1667 (567)</b>

Number of female students is given in brackets.

Annexure B4-5  
(1 Page)**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees	
	78 <sup>th</sup> Award (22 <sup>nd</sup> February 2016)	79 <sup>th</sup> Award (07 <sup>th</sup> July 2016)
<b>B.E. (Hons.)</b>		
Chemical	0	4(2)
Chemical (with PS)	0	19(11)
Electrical & Electronics	1(0)	5(2)
Electrical & Electronics (with PS)	2(0)	40(17)
Computer Science	1(0)	8(3)
Computer Science (with PS)	3(0)	88(37)
Electronics & Instrumentation	0	0
Electronics & Instrumentation (with PS)	0	7(5)
Mechanical	1(0)	8(0)
Mechanical (with PS)	6(0)	91(4)
Biotechnology	0	3(2)
Biotechnology (with PS)	0	14(13)
Electronics & Communication	0	1(1)
Electronics & Communication (with PS)	1(0)	66(30)
<b>Sub Total</b>	<b>15(0)</b>	<b>354(127)</b>
<b>Higher Degree</b>		
M.E. (Software Systems)	4(1)	7(3)
M.E. (Software Systems) (with PS)	4(4)	1(0)
M.E. (Microelectronics)	5(1)	
M.E. (Microelectronics) (with PS)	3(3)	
M.E. (Design Engineering)	7(0)	4(0)
Master of Business Administration	9(5)	5(1)
Master of Business Administration (with PS)	1(0)	1(0)
<b>Sub Total</b>	<b>33(14)</b>	<b>18(4)</b>
<b>Ph. D.</b>	<b>1(0)</b>	<b>1(1)</b>
<b>Total</b>	<b>49(14)</b>	<b>373(132)</b>

**SUMMARY**

	78 <sup>th</sup> Award (22 <sup>nd</sup> February 2016)	79 <sup>th</sup> Award (07 <sup>th</sup> July 2016)	Total
<b>Integrated First Degrees</b>	15(0)	354(127)	369(127)
<b>Higher Degree</b>	33(14)	18(4)	51(18)
<b>Ph. D.</b>	1(0)	1(1)	2(1)
<b>Total</b>	<b>49(14)</b>	<b>373(132)</b>	<b>422(146)</b>

AnnexureB4-6  
(2 Pages)**78<sup>th</sup> AWARD OF DEGREES APPROVED BY THE 176<sup>th</sup> MEETING OF THE BOARD OF GOVERNORS**

<b>Programme</b>	<b>Dist.</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E. (Hons.) (Chemical)		0	0	0
B.E. (Hons.) (Chemical) (with Practice School)		0	0	0
B.E. (Hons.) (Mechanical)		0	1	1
B.E. (Hons.) (Mechanical) (with Practice School)		1	5	6
B.E. (Hons.) (Computer Science)		0	1	1
B.E. (Hons.) (Computer Science) (with Practice School)		0	3	3
B.E. (Hons.) (Biotechnology)		0	0	0
B.E. (Hons.) (Biotechnology)(with Practice School)		0	0	0
B.E. (Hons.) (Electronics and Instrumentation)		0	0	0
B.E. (Hons.) (Electronics and Instrumentation) (with Practice School)		0	0	0
B.E. (Hons.) (Electrical and Electronics)		0	1	1
B.E. (Hons.) (Electrical and Electronics) (with Practice School)		0	2	2
B.E. (Hons.) (Electronics & Communication Engineering)		0	0	0
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)		0	1	1
<b>Sub Total</b>		<b>1</b>	<b>14</b>	<b>15</b>
M.E. (Software Systems)				8
M.E. (Microelectronics)				8
M.E. (Biotechnology)				0
M.E. (Design Engineering)				7
Master of Business Administration				10
<b>Sub Total</b>				<b>33</b>
<b>Ph.D. Degree</b>				<b>1</b>
<b>Total</b>				<b>49</b>

AnnexureB4-7  
(2 Pages)

**79<sup>th</sup>AWARD OF DEGREES APPROVED BY THE 178<sup>th</sup>MEETING OF THE BOARD OF GOVERNORS**

<b>Programme</b>	<b>Dist.</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E. (Hons.) (Chemical)	2	1	1	4
B.E. (Hons.) (Chemical) (with Practice School)	5	9	5	19
B.E. (Hons.) (Mechanical)	2	2	4	8
B.E. (Hons.) (Mechanical) (with Practice School)	14	41	36	91
B.E. (Hons.) (Computer Science)	2	3	3	8
B.E. (Hons.) (Computer Science) (with Practice School)	15	49	24	88
B.E. (Hons.) (Biotechnology)	1	2	0	3
B.E. (Hons.) (Biotechnology)(with Practice School)	2	10	2	14
B.E. (Hons.) (Electronics and Instrumentation)	0	0	0	0
B.E. (Hons.) (Electronics and Instrumentation) (with Practice School)	0	5	2	7
B.E. (Hons.) (Electrical and Electronics)	0	3	2	5
B.E. (Hons.) (Electrical and Electronics) (with Practice School)	8	17	15	40
B.E. (Hons.) (Electronics & Communication Engineering)	0	0	1	1
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)	4	28	34	66
<b>Sub Total</b>	<b>55</b>	<b>170</b>	<b>129</b>	<b>354</b>
M.E. (Software Systems)				7
M.E. (Software Systems) (with Practice School)				1
M.E. (Microelectronics)				0
M.E. (Biotechnology)				0
M.E. (Design Engineering)				4
Master of Business Administration				5
Master of Business Administration (with Practice School)				1
<b>Sub Total</b>				<b>18</b>
<b>Ph.D. Degree</b>				<b>1</b>
<b>Total</b>				<b>373</b>

Annexure B4-8  
(3 pages)

**LIST OF ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS AT  
BITS PILANI, DUBAI CAMPUS**

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
1.	Texas Instruments	Core	0	ECE/EEE/EIE
2.	Xiaomi Technologies	Non Core	0	CS/ME(Software Systems)
3.	BPDC	Core	2	MBA /M.E (Software Systems)
4.	Merajob	Non Core	0	CS/ME(Software Systems)
5.	Al Shirawi Group	Core	1	M.E (Design Engineering)
6.	Kuliza Technologies	Non Core	0	CS/ME(Software Systems)
7.	Ebay/PayPal	Non Core	0	All Streams
8.	Thomsun Reuters	Non Core	1	ECE/CS
9.	Zocalo	Non Core	0	CS/ME(Software Systems)
10.	Croda	Core	0	CHEM
11.	Hi-Vision	Non Core	6	All Streams
12.	Kaltenbach	Core	1	MECH
13.	Roamworks	Non Core	1	CS/ECE/ME (Software)/ ME (Microelectronics)
14.	Musigma(trainee Decision Scientist)	Non Core	0	All Streams
15.	Directi	Non Core	0	CS/ME(Software Systems)
16.	Practo(Software engineer)	Non Core	0	CS/ME(Software Systems)
17.	Bin Ghalib	Core	0	All Streams
18.	Torreid	Core	1	All Streams
19.	Headout (6 Positions)	Non Core	1	All Streams
20.	Irevna-CRISIL	Core	0	All Streams
21.	Pacific Controls	Non Core	1	MECH
22.	Edge Executive	Core	0	ME(Design) MBA
23.	Praxis	Non Core	5	CS/ME(Software Systems)
24.	Teknoware	Core	3	ECE/EEE/EIE/CS
25.	Michael Page	Non Core	1	All Streams
26.	Alliance Global	Non Core	0	Biotech
27.	PolariseMe(2 Offers)	Core	0	All Streams
28.	Comintouch (Trinity Holding)	Core	3	All Streams
29.	German Imaging Technology	Non Core	2	All Streams
30.	Affle	Non Core	3	All Streams
31.	RAS Infotech	Non Core	0	All Streams
32.	MetaData	Non Core	2	All Streams
33.	Adam Global	Non Core	6	All Streams
34.	Merint Glass (Saint Gobain)	Core	0	MECH
35.	Sprint on Web	Core	3	All Streams
36.	Triway Global	Core	3	All Streams
37.	Reckitt Benkiser	Core	1	MECH/BIO

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
38.	Connate	Non Core	1	CS
39.	Hienz	Non Core	2	CS / ME
40.	E-Square world	Core	4	All Streams
41.	ICT Health	Non Core	0	CS
42.	Systechnic	Core	1	All Streams
43.	Thyssen Krupp	Core	2	MECH
44.	Rubiqx	Non Core	1	CS
45.	Siemens	Core	0	MECH
46.	Petrofac	Core	2	MECH
47.	Porsche	Core	1	MECH / MBA
48.	Audi	Core	1	MECH
49.	Volkswagen	Core	1	MECH
50.	American Express	Non Core	1	M.E (Software Systems)
51.	Mystery Shoppers	Core	1	MBA
52.	Dnata	Core	1	MBA
53.	Trigon Gulf	Core	3	MECH
54.	Intelligent Partners	Core	1	All Streams
55.	Paramount Computers	Non Core	6	All Streams
56.	ACC middleast	Core	0	All Streams
57.	Boxit	Non Core	0	All Streams
58.	Apparel Group	Core	0	All Streams
59.	Atmosphere Realestates	Non Core	0	All Streams
60.	Callibri	Non Core	0	All Streams
61.	McDermott International	Core	1	MBA
62.	Bin Ghalib	Core	0	All Streams
63.	CtrlS	Non Core	0	CS
64.	GCC Solutions	Non Core	0	All Streams
65.	Hala Heavy	Non Core	0	All Streams
66.	Idea Imagine	Non Core	1	All Streams
67.	Wilo MiddleEast	Non Core	0	All Streams
68.	Tata Motors	Core	1	Mech
69.	Jenaan Investments	Non Core	0	All Streams
70.	Landmark Group	Non Core	0	All Streams
71.	Maersk	Core	1	All Streams
72.	Marami Metals	Core	0	All Streams
73.	Microhard Technologies	Non Core	0	All Streams
74.	MWH Global	Core	0	All Streams
75.	OTAL	Core	0	All Streams
76.	Unique Computers	Non Core	0	CS
77.	Elfit Arabia	Core	1	MECH
78.	Worley Parson	Core	0	All Streams
79.	Bell Energy	Core	0	All Streams
80.	Nestle	Core	3	EEE/MECH
81.	Bin Dasmal General Trading	Core	0	All Streams



No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
82.	Alcatel	Core	3	All Streams
83.	Tuscan Consulting	Non Core	0	All Streams
84.	Al Futtaim Carilion	Core	1	Mechanical
85.	Redington	Non Core	3	All Streams
86.	Brain Workshop	Non Core	0	All Streams
87.	Site Technologies	Core	1	ECE
88.	Ingram Micro	Core	1	All Streams
89.	ISYX Technologies	Non Core	0	CS
90.	Liberty Group	Core	0	Mechanical
91.	ESAB	Core	1	Mechanical / EEE
92.	Transworld	Non Core	2	MBA
93.	Al baddad	Core	0	All Streams
94.	Kelvion	Core	1	Mech/Chem
95.	Plus Dot Media	Non Core	1	CS
96.	ARJ Water Technology	Core	3	Mechanical
97.	7 seas computers	Core	1	All Streams
98.	Cerebra Middle East	Core	2	CS/ECE
99.	L&T	Core	2	EEE /ECE
100.	Levtech Consulting	Core	1	CS /ECE
101.	Lucy Switchgear	Core	1	MECH
102.	Schindler	Core	2	MECH/ECE/EEE/EIE

**Summary**

Total No. of Companies:	102
Total No. of students interviewed:	227
Total No. of appointments offered:	109
Total No. Of PPO Companies:	8
Total No. of PPO:	19

**\*Legend**

CHE: Chemical, CS: Computer Science, EEE: Electrical & Electronics, EIE: Electronics & Instrumentation, MECH: Mechanical, BIOT: Biotechnology, ECE: Electronics & Communication, PPO: Pre Placement Offer

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
1	Pooja Vijay Khadkikar	Designig of New Solar Power Machine	Abdul Razak Abdul Ravoof	DP
2	Nekkanti Vineet	Energy Harvesting & Generation using Piezoelectric material	Mullapudi Venkata Nagasankaram	DP
3	Tahseen Ahmad Khan	Effect of Dynamic loading and vibrations on structures	Mullapudi Venkata Nagasankaram	DP
4	Swetha Ravindar	Design & Analysis of Underwater Ocean Turbine	Mullapudi Venkata Nagasankaram	DP
5	Syed Mohammed Ataullah Jafri	Design & Analysis of Turbocharger	Mullapudi Venkata Nagasankaram	DP
6	Jay Patel	Design & Analysis of a windmill blade	Mullapudi Venkata Nagasankaram	DP
7	Shashwat Mishra	Design & Analysis of Nozzle	Mullapudi Venkata Nagasankaram	DP
8	Shreyas Nayak C	Design and Development of MARS Rover	Mullapudi Venkata Nagasankaram	DP
9	Ankit Mallapur	Design & Analysis of Fluid Power system	Mullapudi Venkata Nagasankaram	DP
10	Yash Pratap Singh	Dynamic Load Analysis and Optimization of Connecting Rod	Periasamy Chinnapalaniandi	DP
11	Sidak Bir Mutchall	Design and Analysis of a blade of Horizontal Wind turbine to achieve maximum efficiency	Periasamy Chinnapalaniandi	DP
12	Rudraraju Ganesh Varma	Model for Self Power Generation through Solar Energy in UAE	Periasamy Chinnapalaniandi	DP
13	Faiz Khan	Fatigue assessment in Cruciform Welded Joints	Periasamy Chinnapalaniandi	DP
14	Ashwin Madhusudan	Design and Analysis of Vehicle Chassis	Periasamy Chinnapalaniandi	DP
15	Jay Vijay Zarekar	Design and Analysis of a radial-flow Centrifugal Pump.	Periasamy Chinnapalaniandi	DP
16	Abdul Baari	Design and Analysis of a Wind Turbine.	Periasamy Chinnapalaniandi	DP
17	Smile Dudee	Microstructure analysis of welded joints	Ramanujam Karthikeyan	DP
18	Amogha Visveswara Subramanya	Fracture studies on welded joints	Ramanujam Karthikeyan	DP
19	Patil Neha Nitin	Layout optimization in Rotopacking	Ramanujam Karthikeyan	DP
20	Shreyansh Jain	Thermodynamic analysis of heat treatment	Ramanujam Karthikeyan	DP
21	Alton Darryil D Souza	Analysis of welded joints	Ramanujam Karthikeyan	DP
22	Shreyas Sharma	Design of Suspension hub	Vishal Gangadhar Naranje	DP
23	Shourya Jaiswal	RFID installation in prefabricated building components for tracking in the construction supply chain using CAD	Vishal Gangadhar Naranje	DP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		model		
24	Lavanya Aggarwal	Air intake system with adjustable runners in a fsae car	Vishal Gangadhar Naranje	DP
25	Sadjyot Biswal	Develpment of diffuser of a formula sae car	Vishal Gangadhar Naranje	DP
26	Syed Farhan Syed Firoz	Refrigeration Effect using Vapour Absorption Sytem	Vincent Shantha Kumar	DP
27	Ashish Kapur	Design Analysis and Simulation of susplension Geometry Using Solid Works and Lotus susplension Analysis Shark	Vincent Shantha Kumar	DP
28	Sagar Walia	Synthesis and Analysis of Composite Materials used in Automobiles	Vincent Shantha Kumar	DP
29	Abdul Muqteet	Structural and Thermal Analysis of Brake Rotor	Vincent Shantha Kumar	DP
30	Hathiramani Akash Sumeru	Kalina Cycle Simulation using ASPLEN	Udayakumar Rajamanickam	DP
31	Stuti Ashok Sharma	Design and optimization of Pressure vessels.	Udayakumar Rajamanickam	DP
32	Faisal Khan	Application of Project Management in Industry	Priti Bajpai	DP
33	A. Dheeraj	Cryptography a new approach	Priti Bajpai	DP
34	Thomas Varghese	To analyze the transportation and distribution of chemicals through ictsc	Priti Bajpai	DP
35	Apoorva Singh	Analysis of the ongoing deliberations between Britain and EU through Game Theory	Maneesha	DP
36	Mohammed Shamroukh	Orthosis Design and CAE Analysis	Maneesha	DP
37	Mohammed Shamroukh	Econometric Analysis of War on Oil States	Maneesha	DP
38	Shreya Sharad Barlingay	Design of an E-commerce search engine application to ease consumer choices	Maneesha	DP
39	Snatika Sarkar	Manufacturing process of Methanol	Vijaya Ilango	DP
40	Vinayak Dhingra	Design of novel techniques for pathogen detection	Krishna Kumar Singh	DP
41	Suveersingh	Mems based heart rate sensor	Krishna Kumar Singh	DP
42	Rohitsaluja	Mems based heart rate sensor	Krishna Kumar Singh	DP
43	Ishita Saha	Application of Simulation Technique in Real life problems	Tapan Kumar Datta	DP
44	Salman Nazeeruddin	Application of Monte Carlo Method using PHP & WTML	Tapan Kumar Datta	DP
45	Lakshay Arora	Developing arcd portal	Somasundaram Arumugam	DP
46	Alok Rajiv	Developing arcd portal	Somasundaram Arumugam	DP
47	Arbaaz Arif	Application of Laplace transformation in RLC circuit and circuit analysis	Suhel Ahmad Khan	DP
48	Nasreen Farhana Zakkir	Application of fourier analysis in digital image processing	Suhel Ahmad Khan	DP
49	Soumya Saxena	Use of RIMAVERA for Project	Baskaran Sriramulu	DP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Management and Control		
50	Ali Ahmadinajafabadi	Automated Process Control of Soap Manufacturing Process	Swarnalatha	DP
51	Snatika Sarkar	Manufacturing Processes in Chemical Process Industries	Vijaya Ilango	DP
52	Shah Mauryamukeshbhai	Production of Toluene, Design & Simulation	Nishant Pandya	DP
53	Manogna Reddy Lankapotu	Cheese Manufacture Process Design and Simulation	Nishant Pandya	DP
54	Udit Ajay Modi	Targeted marketing using Data Mining	Sujala Deepak Shetty	DP
55	Harleen	Application development for a distributed data base system	Sujala Deepak Shetty	DP
56	Aishma Raghu	Twitter sentiment analysis used for prediction	Sujala Deepak Shetty	DP
57	Barlingay Shreya Sharad	Health related app development on ios platform	Sujala Deepak Shetty	DP
58	Rahul Varma	Development of Features and Dependencies for Software System with Data Streams and user Interactivity	Vijaya kumar Balakrishnan	DP
59	Monica Chatterjee.	Generation of Visual Images for Multimedia Composition System	Vijaya kumar Balakrishnan	DP
60	Sidharth Lahoti	Design and Implementation of BPDC Admissions Portal Management System	Vijaya kumar Balakrishnan	DP
61	Amartya Das Sharma.	Design of Framework for Retrieval of Graphical Data using Metadata and Content from Web	Vijaya kumar Balakrishnan	DP
62	Khairunnisa Abdul Waheed Abdar	Business Intelligence and Data Analytics on Web and Mobile based content	Madiyajagin Muthaiyan	DP
63	Shifa Khan	Large Scale data processign using Map Reduce in Cloud computing environment	Madiyajagin Muthaiyan	DP
64	Megha Cherian	Designing of Dasboards using TABLEAU for generating different types of visualizers by extracting data using SQL queries	Madiyajagin Muthaiyan	DP
65	Abhishek Sai Ravi	Designing and Architectural Framework for Cloud Monitoring using openstack as a Service	Madiyajagin Muthaiyan	DP
66	Rebecca Thomas	Designing an architectural framework to overcome the pharming attack in a network environment	Madiyajagin Muthaiyan	DP
67	Juhi Malani	Analyze and Design a VPN to Overcome challenges associated with the Various Protocols	Madiyajagin Muthaiyan	DP
68	Shreya	Cloud Computing in Health Care	Susanna Sajoni Henry	DP
69	Harsh Hirani	Design of Expert Advisor on MQL 4	Susanna sajoni Henry	DP
70	Rohit Ravishankar	Application of Computational Intelligence for Character Recognition	Kalaichelvi Venkatesan	DP
71	Aashish Dugar	Analyzing and Processing Images for Video Streams	Kalaichelvi Venkatesan	DP
72	Shikhar Sanjaykumar Singh	Design and Implementation of back-end for a Complaint Management System	Santhosh Kumar Vasudevan	DP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
73	Rishab Dev Bhaskar	Design and Implementation of front-end for a Complaint Management System	Santhosh Kumar Vasudevan	DP
74	Parekh Vineet Vyomesh	Computer aided process planning for sheet metal parts	Nand Kumar	DP
75	Apoorv Banthia	Development of a help desk application	Nand Kumar	DP
76	Ayush Gulati	Development of a cloud based android application using NFC technique	Nand Kumar	DP
77	Likitha S .	Intelligent text analysis and classification using machine learning	Siddhaling Urolagin	DP
78	Aman Harish Jotwani	Global illumination in Crytek Model	Siddhaling Urolagin	DP
79	Kanwar Tushar Punj	Android App for visualizing tourism	Siddhaling Urolagin	DP
80	Nirupama Manjunatha Dixit	Applications and Designing of Bio-medical Devices : Pacemakers and MRI	Dawood Jalaluddin Shariff	DP
81	Koushika N.	Wearable technology- innovative smart fabrics For biological applications	Neeru Singh	DP
82	Radhikanarain	Biosorption of Chromium (VI) Using Microalga Biomass	Ramachandran Subramanian	DP
83	Shweta Biswal	Designing a optic based biosensor to Detect environmental pollution	Trupti Swarup Gokhale	DP
84	Vibha Kamath	Smart Guidance System for The Visually Impaired	Abdul Razak Abdul Ravooof	DP
85	Nehal Jain	Blood Pressure Monitoring Using Smart Phone	Abdul Razak Abdul Ravooof	DP
86	Brian Biju Jacob	Design Analysis of Smart Wheel Chair For Blind People Using Voice Command System	Abdul Razak Abdul Ravooof	DP
87	Aurthi	Designing and Implementing Various Automation Tasks With Logo! Logic Module	Abdul Razak Abdul Ravooof	DP
88	Aamir Jamal Ahsan Jamal	Design of Phased Array Antenna Using Cst Microwave Studio	Abdul Razak Abdul Ravooof	DP
89	Syeda Mudabbera Fathima	Some Aspects of Design and Analysis of Resonant Converters	Adhir Baran Chattopadhyay	DP
90	Samir Bharadwaj	Some Aspects of Flexible A.C Transmission Systems	Adhir Baran Chattopadhyay	DP
91	Shreya Rohith Salian	Some Aspects of Optimization Techniques Applied To Three Phase Induction Motor	Adhir Baran Chattopadhyay	DP
92	Usman Fayyaz	Voltage Stability Analysis for A Power System	Adhir Baran Chattopadhyay	DP
93	Sumona Das	Analysis of Closed Loop Control of a Buck-Boost Converter	Adhir Baran Chattopadhyay	DP
94	Vaneet Lobo	Automation In High Speed Rail- Road Transit	Gomathi Bhavani Rajagopalan	DP
95	Daniya Fathima	Power Flow Analysis Using Simulation	Gomathi Bhavani Rajagopalan	DP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
96	Utsav Mahidhara	Design of Adaptive Feedback Control for a Tactile Sensor Navbot	Gomathi Bhavani Rajagopalan	DP
97	Advaita Mahesh	Controlling Robotic Arm Using Micro-Controller	Jagadish Nayak	DP
98	Maziyah Asif	Design And Development of Microcontroller Based Mail Notification System	Jagadish Nayak	DP
99	Nandu Bhavani	Comparative Study of Salinity Induced Electircity on Plants	Jagadish Nayak	DP
100	Ashifa	Face Recognition	Jagadish Nayak	DP
101	Friedrich Samuel	Internet of Things Using Arm Microcontroller	Jagadish Nayak	DP
102	Anurag Beju	Design And Development of OnlineNotification Platform	Jagadish Nayak	DP
103	Shubangi Gupta	Bluetooth Communication Between Two Microcontrollers	Jagadish Nayak	DP
104	Rohit Ravishankar	Application of Computational Intelligence for Character Recognition	Kalaichelvi Venkatesan	DP
105	Aashish Dugar	Analyzing and Processing Images For Video Streams	Kalaichelvi Venkatesan	DP
106	Devyani Vichare	Risk Assessment Within a Stock Exchange Investment Using Fuzzy Logic	Kalaichelvi Venkatesan	DP
107	Syed Zeeshan Ahmed	Real Time Implementation of Vtol Aircraft	Kalaichelvi Venkatesan	DP
108	Arjun R.Menon	Automated Water Supply System And Water Theft Detection Using PLC and Scada	Mary Lourde R	DP
109	Javeria Amin	Design of an Automated Street Light Intensity Control System	Mary Lourde R	DP
110	Vivek Chandrakant Patel	Control of Offshore oil Platform Using Scada System	Mary Lourde R	DP
111	Abhishek Mahajan	Identification and Removal of Noise In Emg Signals for Upper Arm Prosthetics	Mary Lourde R	DP
112	Zahwa Noufeel	Design of a Cell Phone Detector	Mary Lourde R	DP
113	Hatim Taher Baharainwala	Design and Analysis Of Circular Table Saw	Nishant Pandya	DP
114	Rochana Rao	Study and Simulate The Mimo System With Various Channel State Information (CSI)	Raja Muthalagu	DP
115	Venkata Manikanda Teja Ramireni	Design of Mobile Jammer	Raja Muthalagu	DP
116	Ishaan Vasant	Design A New File Format for 3d Printing Process	Ramachandran Anand Kumar	DP
117	Shreya Naha	Design And Analyze 3d Printing Modeling Software	Ramachandran Anand Kumar	DP
118	Don Joe Martin	Measurement of Dielectric Changes In Blood Samples	Shazia Hasan	DP
119	Mohammed Abdul Jabbar	Steady State Analysis of Synchronous	Shazia Hasan	DP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Motor In Discrete Time Domain		
120	Umera Irfan	A Real Time QRS Detection Methods	Shazia Hasan	DP
121	Vinith Reddy	Design of an IoT Device	Shazia Hasan	DP
122	Nishant Vijay	Pspice-Based Design of DC-DC Converter Systems	Sunil Thomas	DP
123	Manik Sharma	Modelling of Synchronous Generator as a Power System Component.	Sunil Thomas	DP
124	Ramees Abdul Salam	Two Stroke Engines	Susanna Henry	DP
125	Prithvi	Four Stroke Engine	Susanna Henry	DP
126	Ramees Abdul Salam	Two Stroke Engines	Susanna Henry	DP
127	Prithvi	Four Stroke Engine	Susanna Henry	DP
128	Fayez Mohammed	Simulation of Temperature Control Using PID	Swarnalatha	DP
129	Mohd Khateeb Khan	Traffic Control System Using PLC	Swarnalatha	DP
130	Thejas Rathan	Recognition of Number Plate Numbers of Vehicles Using Matlab	Swarnalatha	DP
131	Saurabh Rohit Narvekar	Design of Humidity and Temperature Sensor	Swarnalatha	DP
132	Rohit Salya	Speech Controlled Ground Robot	Vilas Haridas Gaidhane	DP
133	Kinza Tania	Design of Discrete System and Stability Analysis	Vilas Haridas Gaidhane	DP
134	Manas Kapoor Manas	Correlation of Attendance and Student's Academic performance of BITS Pilani Dubai Campus	Geetha Kannan	DP
135	Dhawani Gaur	Correlation of Attendance and Student's Academic performance of BITS Pilani Dubai Campus	Geetha Kannan	DP
136	Parimi Sai Sindhura	Mobile controlled Home Automation	Abdul Razak Abdul Ravooof	LP
137	Saurabh Goyal	Design and study of RF analog IC for low noise amplification	Abdul Razak Abdul Ravooof	LP
138	Manik Sharma	Modelling, Designing and Simulation of Automobile Suspension System for Performance Analysis	Kalaichelvi	LP
139	Dev Jayesh Ved	Fabrication of Circular table saw	Nishant Pandya	LP
140	Salil Puri	Performance Analysis of Water turbines power generation system	Mullapudi Venkata Nagasankaram	LP
141	Syed Mohammed Qadri	Performance Analysis of Evaporative Air Cooled Condenser	Mullapudi Venkata Nagasankaram	LP
142	Vishnu Teja Tirumalasetty	Testing of Automatic Electro hydraulic Jack for four wheelers	Mullapudi Venkata Nagasankaram	LP
143	Siddharth Ajaykumar	Performance Analysis of Hydraulic Regenerative Braking system	Mullapudi Venkata Nagasankaram	LP
144	Gokul Geetha Krishnan	Mechanical Testing of hybrid composites and improvement of its stability	Periasamy Chinnapalaniandi	LP
145	Pranav Mohan Parki	Tribological behaviour of tool steel	Ramanujam Karthikeyan	LP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
146	Patel Ketul Arvindbhai	Analysis of microstructure using OOF2	Ramanujam Karthikeyan	LP
147	Swaminathan C	TIG welding of SS/ Monel metal	Ramanujam Karthikeyan	LP
148	Megha Madoo	Microforming of sheet metal	Vishal Gangadhar Naranje	LP
149	Jamil Numan Manjurul	Design and Optimization of Rack and Pinion Steering System	Vincent Shantha Kumar	LP
150	Nannapaneni Venkat Subash	Design and development of Torsional Testing Machine	Vincent Shantha Kumar	LP
151	Nelson Allen Nelson	Thermal and Stress Analysis on Turbine Fan	Vincent Shantha Kumar	LP
152	Saheel Iqbal	Effect of Current on Weld Arc Bead Radius in Arc Welding	Vincent Shantha Kumar	LP
153	Puneet Khirwar	Optimization of Kalina cycle	Udayakumar Rajamanickam	LP
154	Nidadavolu Jwalith Sai Narasimha Raju	Design of HVAC system of a commercial building.	Udayakumar Rajamanickam	LP
155	Arzan Ali	Emission Control for Diesel Engines	Udayakumar Rajamanickam	LP
156	Anjana Prasanna Iyengar	Analysis of Calcium Ions in selected food samples	Vijaya Ilango	LP
157	Nikita Krishna	Estimation of Nitrate Ions in selected food items	Vijaya Ilango	LP
158	Sana Gulam Mohamed Shaikh	Novel Techniques for Treatment of Waste Water from Chemical Plants	Nishant Pandya	LP
159	Anjanaprasannaiyengar	Qualitative & quantitative analysis: fat extraction	Vijaya Ilango	LP
160	Nikita Krishna	Study on Fat Extraction and Analysis	Vijaya Ilango	LP
161	Ali Ahmadinajafabadi	Design and Implementation of Organic Rankine Cycle System in Oil Refinery Plant	Nishant Pandya	LP
162	Aneekjaved	Biodiesel from Algae	Nishant Pandya	LP
163	Ajitesh Janaswamy	Design and Implementation of Machine Learning Algorithm Con Cloud	Santhosh Kumar Vasudevan	LP
164	Sushant Gayawal	Analysis of Private Cloud Implementation and Security Policies in Academic Environment.	Santhosh Kumar Vasudevan	LP
165	Pradheepan Raghavan	Implementation of a Game using Game Engine on Windows	Santhosh Kumar Vasudevan	LP
166	Karnati Sreekar	Techniques for Onion Routing.	Santhosh Kumar Vasudevan	LP
167	Shaik Kashif Ahmed	Machine learning application using BIG DATA	Siddhaling Urolagin	LP
168	Aimanrab	Studies on the carcinogenic effects of Nitrites in preserved fish	Dawood Jalaluddin Shariff	LP
169	Abhishek Mahajan	Design and test multi-channel EMG	Dawood	LP



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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		sensor For Neural exoskeleton	Jalaluddin Shariff	
170	Srishti Singh	Studies on bacterial isolates for industrial, Medical or environmental applications.	Neeru Singh	LP
171	Sara Awadjawdatawadsamhan	Studies on Salinity Tolerance on Growth Characteristics of Forage Crops	Ramachandran Subramanian	LP
172	Ayesha Siddeeka	Studies on Salt tolerant Forage Grasses and Legumes	Ramachandran Subramanian	LP
173	Shaikh Faisal Zaman	Screening for extrachromosomal dna in Bacterial isolates	Ramachandran Subramanian	LP
174	Ariyanandakumar	Establishing the MIC and studying the Presence of plasmids in different Bacteria	Truptiswarupgokhale	LP
175	Ashvriya	Toxicity assay for soil and water samples Using Photobacterium spp.	Truptiswarupgokhale	LP
176	Afrah Abbas Thakur	Conversation Analysis of Urdu: Persuasion and Authority	Shazi Shah Jabeen	SOP
177	Swapnil Mittal	Eco-critical discourse analysis	Shazi Shah Jabeen	SOP
178	Ajiteshjanaswamy	Management of Cloud Computing	Shazi Shah Jabeen	SOP
179	R.Ganeshvarma	Supply Chain Management through Technology	Shazi Shah Jabeen	SOP
180	Sara Awadsamhan	Contrastive Analysis of the Structure of Arabic and Urdu	Shazi Shah Jabeen	SOP
181	Mohammed Omer Khan	Perception of Consumers towards Halal Products	Shazi Shah Jabeen	SOP
182	Soumya B	Importance of Emotional Social Intelligence at Workplace : A Case Study on L&T	Lajwanti kishnani	SOP
183	Akshay Kulkarni	Psychological , Physical and Sociological effects of MMO Gaming on Adolescence :A Comprehensive Study	Lajwanti kishnani	SOP
184	Aman Sharma	Effect Of Brand Image on Buying Consumer Behaviour	Lajwanti kishnani	SOP
185	Poojakhadikar	Stress Caused by Debt. And Financial Issues on the Citizens of UAE.	Lajwanti kishnani	SOP
186	Sagarwalia	Resource Management and Sustainable Development in UAE	Lajwanti kishnani	SOP
187	Aartiswaminathan	Work Life Stress Balance in UAE and its Health Implications	Lajwanti kishnani	SOP
188	Shyam Krishnan	EI at Workplace: Important People Skills to Achieve Good Results	Lajwanti kishnani	SOP
189	Sahilmulchandani	Detailed Study of Themes and Film Styles of two Great Directors: Raj Kapoor and Guru dutt.	Lajwanti kishnani	SOP
190	Dhruvtripathi	Effective Communication and Leadership:Importance and its Implications	Lajwanti kishnani	SOP
191	Shreyas Sharma	Technology transfer	Amritesh	SOP
192	Vivek Desai	Marketing strategy	Amritesh	SOP
193	V Ravneeth	Credibility in Marketing of BINGOS	Amritesh	SOP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
194	Javeria	Brand preference in credence based services	Amritesh	SOP
195	Ankitmallapur	Student's Decision Preference in University Selection	Amritesh	SOP
196	Vaneet Lobo	Factors Influencing Brand Preference in Chosing Hypermarkets	Amritesh	SOP
197	V.D. Durga	HR in Mid Sized Organization in UAE	Srinivas Rao	SOP
198	Sushmit N	Leadershio in Mid Sized Organization in UAE	Srinivas Rao	SOP
199	Manishkumar.M	Micro Entrepreneurship in Abhu Dhabi	Srinivas Rao	SOP
200	Jaslove Singh	Entrepreneurship opportunities	Srinivas Rao	SOP
201	Tusharvatsa	Devising a Business Model Financially	Srinivas Rao	SOP
202	Samrat Sarkar	Cultural Evolution in British Education	Srinivas Rao	SOP
203	Gundasai S	HR in Recruitment	Srinivas Rao	SOP
204	K Phannendra	HR in Organization	Srinivas Rao	SOP
205	Spandana	Micro level women entrepreneurship	Srinivas Rao	SOP
206	Ahmad Shumayal	Fluid Dynamics Approach to Traffic Flow in Selected Stretches of Highways, Internal Roads and Junctions in the UAE	Ajit Pratap Singh	SOP
207	Shobhit Deva	Design and analysis of Formula SAE Chassis Using Solidworks Static Simulation	Ajit Pratap Singh	SOP
208	Yash Kapoor	Study of Magneto-Rheological (MR) Fluids and Its Applications	Ajit Pratap Singh	SOP
209	Shreyansh Jain	Transportation model for manufactured goods	Priti Bajpai	SOP
210	Bharanidharan R. S.	Applications of number theory in present times	Priti Bajpai	SOP
211	Pamidi Bavatarak Krishna	Data Analysis Techniques and applications	Maneesha	SOP
212	Khushboo Agarwal	Predictive and Statistical Analysis using R and IBM Watson	Maneesha	SOP
213	Swetha Sivakumar	Biosensors using graphene	Krishna Kumar Singh	SOP
214	Shivani Gupta	A study on natural gas dehydration	Muralidharan Baladhandapani	SOP
215	Anketha Kannan	Extraction of hydrogen from waste water	Muralidharan Baladhandapani	SOP
216	Avani K Mehta	Device for detection and harvesting of hydrogen from sewage water	Muralidharan Baladhandapani	SOP
217	Aurthi	Controlling inventory with carbon emission constraint	Tapan Kumar Datta	SOP
218	Saurabh Goyal	A brief analysis on industrial engineering and its process	Tapan Kumar Datta	SOP
219	Rahul Saxena	Small signal analysis of energy factor and pulse width modulation of power dc-dc converters	Kumar Karuppusamy	SOP
220	Rohen Bhandari	Non linear dynamical systems and their applications	Kumar Karuppusamy	SOP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
221	Rohit Vasu	Integrated photonic and electronic circuits	Ramadoss Roopkumar	SOP
222	Mohammed Sahil K R	Cryptography and its Applications	Somasundaram Arumugam	SOP
223	Abhijeet Guha Roy	Model verification of e-commerce security protocols	Somasundaram Arumugam	SOP
224	Mohammed Shabab Valiyaparambath	Scope of Internet of things in making the smart cities even smarter	Rajan Ramasamy	SOP
225	Yash Pratap Singh	Study of Wind Turbine and its Optimization	Suhel Ahmad Khan	SOP
226	Amit Vijay Ninawe	A study on the impact of gym equipment on human body.	Kavita Sunil Jerath	SOP
227	Karan Viraj Singh	Comprehensive Study on Thermo Electro Cooling	Kavita Sunil Jerath	SOP
228	Jubayedgani Chowdhury	Exergy analysis of flat plate solar collector using matlab	Baskaran Sriramulu	SOP
229	E Revanthreddy	Wireless mobile charging	Karthiyayini Sridharan	SOP
230	Vinith Reddy	Review of internet of things	Karthiyayini Sridharan	SOP
231	Mallavarapu Manishkumar	Coatings of gas turbine blades for thermal stability	Karthiyayini Sridharan	SOP
232	Sandeep Paleri	Harnessing of Solar energy in UAE	Karthiyayini Sridharan	SOP
233	Samrat Sarkar	Mechanical properties of nanocrystals	Karthiyayini Sridharan	SOP
234	Tushar Belani	Life cycle analysis of smart phones	Geetha Kannan	SOP
235	Shannon Lincoln Fernandes	Renewable energy automation, reliability & process control	Swarnalatha	SOP
236	Prakhar Nair	Valves and Actuation	Swarnalatha	SOP
237	Shivani Gupta	Natural gas dehydration in oil & gas sector	B. Muralidharan	SOP
238	Tushar Belani	Solid Waste Management and Waste Production in UAE	Geetha	SOP
239	Jithin Gopakumar	Study on biotransformation of pharmaceuticals in waste water	Nishant Pandya	SOP
240	Leesha Chaurasia	Extraction of oils from fruits	B.G. Prakash Kumar	SOP
241	Rubeena Crystal Prabakaran	Extraction of oils from flowers	B.G. Prakash Kumar	SOP
242	Taqdees Imtiaz Wadekar	Study on Air Pollution Monitoring Methods	B.G. Prakash Kumar	SOP
243	Amardeep Singh	Analysis of Distillation Techniques	B.G. Prakash Kumar	SOP
244	Zubin Sayeed Ahmed Khalfay	Improvement in Bio-Ethanol Production	B.G. Prakash Kumar	SOP
245	Anketha Kannan	Extraction of Hydrogen from Waste Water	B. Muralidharan	SOP
246	Bachchav Aditya Swapnil	Hydrogen production from biomass	D.J. Shariff	SOP
247	Akshai A	Nanotechnology involved in Manufacturing Paints for eco-efficient Buildings and Anti-fouling Paints	Nishant Pandya	SOP
248	Srinivasakannan Krishna	Investigation on carbon surfaces modifications technics	B.G. Prakash Kumar	SOP
249	Pachala Girish	Identifying the challenges to develop a green cloud computing environment	Madiyajin Muthaiyan	SOP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
250	Mohammed Sahil K R	Cryptography and its Applications	Somasundaram Arumugam	SOP
251	Abhijeet Guha Roy	Model verification of e-commerce security protocols	Somasundaram Arumugam	SOP
252	Mohammed Shabab Valiyaparambath	Scope of Internet of things in making the smart cities even smarter	Rajan Ramasamy	SOP
253	Vedant Bajaj	Image Processing for Stereo Vision using Kinect	Santhosh Kumar Vasudevan	SOP
254	Nishank Singhal	Analysis of ddos Attacks	Santhosh Kumar Vasudevan	SOP
255	E Revanthreddy	Wireless mobile charging	Karthiyayini Sridharan	SOP
256	Nehal Jain	Vehicular cloud computing security challenges	Nand Kumar	SOP
257	Aman Maheshwari	Study of Hadoop based cloud deployment	Nand Kumar	SOP
258	R Adhitya	Study of Big data security using encryption (Neural Network, fuzzy logic etc.)	Nand Kumar	SOP
259	Alina Zaidi	Prediction of protein folding rate change upon mutation	Siddhaling Urolagin	SOP
260	Saad Al Ameen Bayezeed	Big data analysis on food reviews.	Siddhaling Urolagin	SOP
261	Simran Aditani	Analysis of Big Data in Health Care	Siddhaling Urolagin	SOP
262	Kulkarni Tejas Nitin	Image processing in android	Siddhaling Urolagin	SOP
263	Sameer Bhardwaj	Optimization in Finance	Maneesha	SOP
264	Gayathri Ganesh	Cytotoxicity of Nanoparticles	Trupti Swarup Gokhale	SOP
265	Srihari Srivathsan	Study of Third Generation Photovoltaic Cells	Periasamy Chinnapalaniandi	SOP
266	Ronakf Kumar Das	Study of advancements in metal casting processes	Periasamy Chinnapalaniandi	SOP
267	Saira Khan	Application Of Superconductivity To Power Systems	Adhir Baran Chattopadhyay	SOP
268	Nishit Patel	Studies on Galvanic Corrosion and its Prevention	Bharat Bhushan Gulyani	SOP
269	Nikhata Anjum Shaik	Applications of Computational Intelligence in Bio-medical Engineering	Dawood Jalaluddin Shariff	SOP
270	Nida Amreen	Fault analysis for three phase transformers	Gomathi Bhavani Rajagopalan	SOP
271	Upasana Chakraborty	Emerging Cognitive Radio Applications	Gomathi Bhavani Rajagopalan	SOP
272	Omkar Bhandauar	Computational Modeling and Simulation of Wastewater Treatment Plant	Kalaichelvi	SOP
273	Saraiya Aaditya	Control System Aspects for Unmanned Ground Vehicles	Kalaichelvi	SOP
274	Saptadeep Debnath	Flight Data Analysis of an Unmanned Aerial Vehicle	Kalaichelvi	SOP

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275	Mohammed Shamroukh	Econometric Analysis of War on Oil States	Maneesha	SOP
276	Suveer Singh	Efficiency improvement methods for harnessing solar energy.	Mary Lourde R	SOP
277	Yashraj Dalwadi	Wireless Body area sensor Networks for Telemedicine and M-Health	Mary Lourde R	SOP
278	Sachi Thakkar	Benefits of Employee Training Programs for the Organization	Mubeena Iqbal	SOP
279	Athul Krishnan	Modeling of Machine Ethics using Bayesian Theory	Mubeena Iqbal	SOP
280	Abirami Baalaji Iyer	Modeling Machine Ethics using Recursive Learning	Mubeena Iqbal	SOP
281	Rutuja Deepraj Jadhav	Study on basics of Emulsions in the Cosmetic Industry.	Prakash Kumar Beri Gopinathan	SOP
282	Pavit Ramesh	Integrating Sustainability in an Existing Supply Chain	Pushkala Muralidharan	SOP
283	Sumeet Singh Sethi	Analysis of Sustainability Reports of companies in Energysector	Pushkala Muralidharan	SOP
284	Gutala Sai Sowmya	Discretionary portfolio management services	Pushkala Muralidharan	SOP
285	Harleen	Analysis of marketing strategy of Zomato	Pushkala Muralidharan	SOP
286	Apoorva Singh	Analysis of Tesla's business strategy	Pushkala Muralidharan	SOP
287	Sharavi Ravi Chander Poondamalli	Impact of Technological Advancements on Risk Management in Industries	Pushkala Muralidharan	SOP
288	Pallavi Bhanu Manghani	Financial risk analysis and modelling techniques	Pushkala Muralidharan	SOP
289	Akshee Deepak Thakur	Comparative analysis of benefits and challenges in adoption of green supply chain	Pushkala Muralidharan	SOP
290	Sapjot	Study on MIMO Systems and Real Life Application.	Raja Muthalagu	SOP
291	Vivek Ramdas	Study on LDACS1 system	Raja Muthalagu	SOP
292	Vishwaj S. Rao	Study and simulate the LDACS2 system	Raja Muthalagu	SOP
293	Ameya Kulkarni	Study on Machine learning	Raja Muthalagu	SOP
294	Shamith Louis Saldanha	Study of stepper motor characteristics for micro/nano dimension 3D Printing	Ramachandran Anand Kumar	SOP
295	Mohammed M M Alkhawaja	Role and Importance of Technology in Business Communication	Shazi Shah Jabeen	SOP
296	Rudraraju Ganesh Varma	Supply Chain Management through Technology	Shazi Shah Jabeen	SOP
297	Ajitesh Janaswamy	Management of Cloud Computing	Shazi Shah Jabeen	SOP
298	Swapnil Mittal	Eco-critical Discourse Analysis	Shazi Shah Jabeen	SOP
299	Afrah Abbas Thakur	Conversation Analysis of Urdu: Persuasion and Authority	Shazi Shah	SOP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
			Jabeen	
300	Sara Awad Jawdat Awad Samhan	Contrastive Analysis of the Structure of Arabic and Urdu	Shazi Shah Jabeen	SOP
301	Namitha Sathish	Contrastive Analysis of malyalam and Hindi	Shazi Shah Jabeen	SOP
302	Mohammed Omer Khan	Perception of Consumers towards Halal Products	Shazi Shah Jabeen	SOP
303	Venkata Manikantateja Ramineni	HRD practics in UAE	Srinivasa Rao	SOP
304	Nekkanti Vineet	Utility of HR in Change Management	Srinivasa Rao	SOP
305	Karnati Sreekar	Micro entrepreneurs in Fujairah	Srinivasa Rao	SOP
306	Tanya Tyagi	Energy Efficient Solar Village Lighting System with Midnight Load Shedding Using Human Sensors Devices	Sunil Thomas	SOP
307	Abhinav Jain	Study Of Permanent Magnet Synchronous Motor (PMSM) and Its Working	Sunil Thomas	SOP
308	Nikitha Kuldipsingh Shikh	Uninterruptible power supply for secured safety and security systems	Sunil Thomas	SOP
309	Mohammed Yaseen	A study on Solar Tracking System	Sunil Thomas	SOP
310	Philip Jude Solomon	Implementation and Analysis of Segue in Mobile App Development using iOS for improvement in Performance	Susanna Sajoni Henry	SOP
311	Philip Jude Solomon	Implementation and Analysis of Segue in Mobile App Development using iOS for improvement in Performance	Susanna Sajoni Henry	SOP
312	Arjun Raja	Comparision of P, PI and PID controllers for speed control of a VSI- fed induction motor.	Swarnalatha Rajaguru	SOP
313	Mahak Abdullah	Study of Implementation of PID controller and its various applications	Vilas Haridas Gaidhane	SOP
314	Rohith Raveendran	Real time monitering system using arduino processor	Vilas Haridas Gaidhane	SOP
315	Mohammed Owais	Cellphone controlled Car	Vilas Haridas Gaidhane	SOP
316	Farhan Umair Khan	Study of nonconventional energy battery Charger	Vilas Haridas Gaidhane	SOP
317	Nabeel Ahmed	Study on voice recognition controlled moving Robot	Vilas Haridas Gaidhane	SOP
318	Pamidi Bavatarak	RF ID	Abdul Razak Abdul Ravoof	SP
319	Nishant Vijay	Mathematical Framework for Cyber Resibient Control Systems	Adhir Baran Chattopadhyay	SP
320	Arbaaz Arif	Controller Selection in Building Management System	Gomathi Bhavani Rajagopalan	SP
321	Janani Ramasubbu	Interfacing LCD Display With NXP LPC1768 Mirocontroller	Jagadish Nayak	SP
322	Faisal Khan	Applications in wireless building	Raja Muthalagu	SP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Technologies		
323	Brian Biju Jacob	Applying radar signal processing to GIS	Ramachandran Anand Kumar	SP
324	Shibani Nasser	Packaging and Integration Design for 3D Printed Water Sensors	Ramachandran Anand Kumar	SP
325	Nirupama Manjunatha Dixit	Preparation and characterization of nanoparticulate systems of bioactive agents	Ranendra Narayan Saha	SP
326	Rochana Rao	System Identification using Statistical filter.	Shazia Hasan	SP
327	Syed Zeeshan Ahmed	Implementation of MPPT (Maximum Power Point Tracking) Algorithms	Sunil Thomas	SP
328	Mir Ateeb Ali	Study of seismic vibrations and their hazards	Mullapudi Venkata Nagasankaram	SP
329	Pandya Nakul Amrish	Analysis of microstructure using Digimat	Ramanujam Karthikeyan	SP
330	Shetty Aishwarya Balakrishna	The design of closed loop control system for incremental metal forming processes	Vishal Gangadhar Naranje	SP
331	Akshan Paresh Mehta	To study the effect of camless valve actuation on engine performance	Vishal Gangadhar Naranje	SP
332	Aashman Arora	Supply chain management	Vishal Gangadhar Naranje	SP
333	Fazil Ashraf Reshie	Energy analysis of turning and edm	Vishal Gangadhar Naranje	SP
334	Gaurav Handa	Computer aided process planning for sheet metal parts	Vishal Gangadhar Naranje	SP
335	Shaurya Selhi	Fundamentals of injection molding and parameters involved in Die making.	Vishal Gangadhar Naranje	SP
336	Simran Shah	Green manufacturing and product design	Vishal Gangadhar Naranje	SP
337	Arjun Arya	HVAC Design of a Green Building Meeting ASHRAE Standards	Vincent Shantha Kumar	SP
338	Ganesh Ram R K	Finite Element Analysis of Microstructures using OOF Software	Vincent Shantha Kumar	SP
339	Joseph Jeyasurya J	Enhancing the power generation in cement plant low temperature waste recovery by dual tapping concept	Vincent Shantha Kumar	SP
340	Hasan Mohammed Obaid	Study and feasibility of E85 based fuel on modern gas turbines for power generating applications	Udayakumar Rajamanickam	SP
341	Hemant Digwal	Study and Analysis of waste to energy conversion	Udayakumar Rajamanickam	SP
342	K.Venkatesh Prabu	Energy harvesting from vibrations.	Udayakumar Rajamanickam	SP
343	Shreya Jain	Nutrient analysis using mathematical tools	Priti Bajpai	SP
344	Inshiah S Patanwala	Computational number theory and its applications in modern cryptography	Kumar Karuppusamy	SP

<b>List of First Degree Projects Second Semester 2015-2016 (February 2016 to June 2016)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
345	Abhishek Ashish Hastak	Implementation of Big Data in devising marketing strategies	Sujala Deepak Shetty	SP
346	Ria Mittal	Single player game development	Sujala Deepak Shetty	SP
347	Aashish Dugar	Design of Software Defined Networks and the Future of Networking	Madiyajagin Muthaiyan	SP
348	Pavit Ramesh	Design of transparent Solar Cells to Power Hybrid Vehicles	Periasamy Chinnapalaniandi	SP
349	Soumya Saxena	Formula one power unit & KERS system	Ramanujam Karthikeyan	SP
350	Nikhatanjumshaik	Applications of Computational Intelligence in Bio-medical Engineering	Dawoodjalaluddin Shariff	SP
351	Bachchav Aditya Swapnil	Study on the production of Hydrogen from Biomass	Dawoodjalaluddin Shariff	SP
352	Alisha Annie Maben	A study on the Ergonomics involved in Biotechnology Laboratories	Neeru Singh	SP
353	Harini M	Studies on bio degradation of Polymeric compounds	Neeru Singh	SP
354	A Karthikvasudev	Studies on Protease Producing Bacteria From the United Arab Emirates	Neeru Singh	SP
355	Hamza Khaliq Khan	To study the mechanism of salinity toxicity And tolerance in plants	Neeru Singh	SP
356	Nishrin Abdul Gafoor	Studies to evaluate the response of plants to salinity stress	Neeru Singh	SP
357	Mannaal Khan	Molecular approaches to study the candidate genes involved in salinity tolerance in Cereals with emphasis on Barley & pearl Millet	Neeru Singh	SP
358	Rohan Goswami	Antibiotic Resistance in Microbial Biofilms	Ramachandran Subramanian	SP
359	Shetty Dhanyabhoja	Bioremediation of Cr(VI) using microalgal Biomass	Ramachandran Subramanian	SP
360	Madhavmukul Kothari	Genetic Treatment of Diseases: Past, Present and Future	Ramachandran Subramanian	SP
361	Majidamoossaassainar	Green synthesis of platinum nanoparticles Using plants	Trupti Swarup Gokhale	SP
362	Afarose Bagam Faazil	Isolation of anticancer molecules and their in vitro screening using different cell lines	Trupti Swarup Gokhale	SP
363	Chaithanya	Analysis of communication network using Graph Theory	Baskaran Sriramulu	SP



<b>List of First Degree Projects First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
1	Reshma Shirish Kalvade	Analysis of Waste water Treatment process using SCADA	Muralidharan B.	DP
2	Rajesh Soma Nath Suresh	Computational modelling of Fluidized bed reactor	Eldhose Iype	DP
3	Taqdees Imtiaz Wadekar	Energy from Wastepaper - Evaluation of Alternative Routes	B B Gulyani	DP
4	Anketha Kannan	Feasibility of hydrogen production from waste	Vijaya Ilango	DP
5	Jithin Gopa Kumar	Design of Portable Drinking Water Generator	Geetha	DP
6	Srinivasa Kannan Krishna	Design of Portable Drinking Water Generator	Geetha	DP
7	Khushboo Mahesh Agarwal	Cognitive Analysis of Big Data in Genomics and Bioinformatics	Sujala D. Shetty	DP
8	Tanya Juneja	Upgrading the GIS Software	Vijayakumar. B.	DP
9	Neelabh Mital	Design of feature traceability tables for user requests in software architecture and generation of specification	Vijayakumar. B.	DP
10	Afrah Abbas Thakur	Visualization of Engineering Statistics using Tableau	Siddhaling Urolagin	DP
11	Gaurav Ranjan Basu	Big Data Analytics using Hadoop	Nand Kumar	DP
12	Aayush Dinesh Kumar Agarwal	Face recognition	Sujala D. Shetty	DP
13	Aashraya Kumar Yogi	Character Recognition using Neural Networks	Santhosh Kumar	DP
14	Vansh Chopra	Web scrapping	Vadivel S.	DP
15	Aman Maheshwari	Development of android application for face recognition and tagging	Nand Kumar	DP
16	Hardik Joshi	Internet of Things and It's Applications	Santhosh Kumar	DP
17	Praveen Kumar Chandra Mohan	NFC in payment systems	Vijayakumar B.	DP
18	Pallavi Bhanu Manghani	Design and Implementation of Big Data Analytics	Vadivel S.	DP
19	Shikhar Sanjay Kumar Singh	Object detection using neural networks	Sujala D. Shetty	DP
20	Iyengar Madhav Narasimhan	Use machine learning for a recommendations based system	Santhosh Kumar	DP
21	Sumit Prabhakaran Nair	Sentiment analysis	Santhosh Kumar	DP
22	Bhadra Unnithan Sivasankaran	Design and implementation of reflection pattern for document management system	Vijayakumar.B.	DP
23	Akshee Deepak Thakur	Inventory Management and Support Systems In Green Supply Chain Administration	Santhosh Kumar	DP
24	Patel Himel Kumar	Fingerprint voting system	Nand Kumar	DP
25	Shrey Iyengar	Network virtualization	Vadivel.S	DP
26	Ayush Garg	Edge detector	Vijayakumar.B	DP
27	Rishav Jalan	Design and Development of Application	Sujala D. Shetty	DP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		using IBM Watson		
28	Ayanava Sarkar	Distributed multimedia data retrieval	Vijayakumar.B	DP
29	Akash Mundra	Using deep learning neural networks to detect cancer	Santhosh Kumar	DP
30	Pitta Samanvitha	Python script for student allocation in practice school	Eldhose lype	DP
31	Mohammed Sahil K R	Design of practice school web application	Nand Kumar	DP
32	R Adhitya	Design of practice school web application	Nand Kumar	DP
33	Bharanidharan R S	Design of practice school web application	Nand Kumar	DP
34	Tehmeem Taseen	Design and implementation of feature extraction and finger printing algorithm for distributed imagery data.	Vijayakumar.B	DP
35	Siddhant Deepak Shetty	Big data modelling in R programming	Sujala D. Shetty	DP
36	Chirag Bhagwan Tolani	Android Application on Databases	Sujala D. Shetty	DP
37	Saad Al Ameen Bayezeed	Big Data Analytics using SVM and Map Reduce on Customer Feedback	Siddhalingurolagin	DP
38	Simran Aditani	Implementation of LACE Score to Reduce Hospital Re-admissions	Siddhalingurolagin	DP
39	Harshal Mittal	Android Application on Databases	Sujala D. Shetty	DP
40	Athul Krishnan Anil Krishnan	Gesture recognition in computer Hardware Applications	Siddhalingurolagin	DP
41	Kodavala Prathyusha	Object Oriented Program for Molecular Structure Builder	Eldhoseiype	DP
42	Shaswat Anandhan	Design and implementation of feature extraction and finger printing algo for distributed video data	Vijayakumar.B	DP
43	Saugaat Allabadi	Machine Learning Application In bioinformatics	Siddhaling urolagin	DP
44	Kunal Malhotra	Twitter data analysis using machine learning and big data technology	Siddhalingurolagin	DP
45	Deepak Harinath P G	Integrating Water Management and Soil Quality control using IOT	Madijagan.M	DP
46	Shane Roldao Mascarenhas	Aspects of electrochemical analysis of corrosion	Chattopadhyaya.B.	DP
47	Jerin Jacob	Design of assistive lower limb orthotics, for "sit-to-stand" (STS) movement in elderly	Chattopadhyaya.B.	DP
48	Alan Chacko	Design of Bionic Osthesis for Parkinson's Patients to Dampen Tremors : Simulation Aspect	Chattopadhyaya.B.	DP
49	Mohammed Shamroukh	Design of Bionic Osthesis for Parkinson's Patients to Dampen Tremors: Bio-Mechanic Aspects Aspect	Chattopadhyaya.B.	DP
50	Najmus Sahar	Design and Analysis of VESA Display Stream Compression	Anand Kumar	DP
51	Suveer Singh	Simulating algorithms for radar imagery	Anand Kumar	DP
52	Sahil Mulchandani	Monte carlo simulation	Anand Kumar	DP
53	Nishank Singhal	Coding algorithm to analyze agricultural radar images	Anand Kumar	DP
54	Anudeep Sekhar Bolimera	Co-Operative Multi Robotic Systems and	Mary Lourde.R	DP

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<b>First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Computational Motion Planing		
55	Rahul Saxena	Automated Detection of Microaneurysm by screening Diabetic Retinopathy at the early stages using Image Processing Technique	Jagadish Nayak	DP
56	Patil Indraneel Rajeev	TV audiojack Bluetooth transmitter	Jagadish Nayak	DP
57	Amira Noushad	Design and simulation of wireless ad hoc network and study its performance	Abdul Rajak A.R.	DP
58	Daniya Fathima	Development of Hearing Aid Kit with Bluetooth	Abdul Rajak A.R.	DP
59	Sruthi Kannan	Home automation systems	Abdul Rajak A.R.	DP
60	Sadiya Fatima	Designing a Smart Home	Abdul Rajak A.R.	DP
61	Sahana Ganesh	Wireless security systems	Abdul Rajak A.R.	DP
62	Samrat Sarkar	Rfid student tag detection through android phones	Abdul Rajak A.R.	DP
63	Lauren Alisha Fernandes	Performance analysis of Robotic Manipulator using Intelligent Techniques	Kalaichelvi	DP
64	Ihtisham Qasim Kalimullah	Design of an Upper Limb Orthosis to dampen Resting Tremors	Kalaichelvi	DP
65	Patel Ketul Arvindbhai	Development of Multibody Mechatronics Model for a CNC Machine Tool using Solidworks and Sim Mechanics	Kalaichelvi	DP
66	Neena Johny Joseph	Experimental studies on Cascade Control system	Kalaichelvi	DP
67	Ameya Nitin Kulkarni	Control of a Gripper using Machine Learning Techniques	Kalaichelvi	DP
68	Srinath Hanumantha Rao	Designing a robokeeper using model predictive control	Gomathi Bhavani	DP
69	Sripavathi S Bhattathiri	Implementation of safety valves for domestic gas stoves	Swarnalatha. R	DP
70	Ajay Kamath	Intelligent parking system using image processing	Swarnalatha. R	DP
71	Avani Kirit Mehta	Implementation of emergency shutdown valves using simulink	Swarnalatha. R	DP
72	Swetha Sivakumar	Bio- nano sensors using graphene	Swarnalatha. R	DP
73	Rohit Raveendran	Design of robotic arm	Vilas Haridas Gaidhane	DP
74	Rohit Saluja	Robotic System to Aid Differently Abled	Vilas Haridas Gaidhane	DP
75	Abhinav Paliwal	Robotics system to aid differently abled people	Vilas Haridas Gaidhane	DP
76	Arsheen Mir	Deriving energy from far field radio frequency signals	Vilas Haridas Gaidhane	DP
77	Swapnil Mittal	Wireless charging	Shazia Hasan	DP
78	Heena Kausar	Home automation	Shazia Hasan	DP
79	Mohammed Abdul Jabbar	Sensitivity analysis and Digital control design for Synchronous motor	Shazia Hasan	DP
80	Srishtie Haripriya	CNG/LPG gas leakage detection and accident prevention	Shazia Hasan	DP
81	Ashifa Mohammed Musthafa	BER Analysis in SC-FDMA for LTE Transmission	Raja Muthalagu	DP
82	Dhawani Gaur	PAPR Reduction on OFDM Systems	Raja Muthalagu	DP

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<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
83	Pratyaksh Rohatgi	Investigation of types of machines suitable for electric vehicles	Gomathi Bhavani	DP
84	Natasha Rajshekhar	Electrocardiography design circuit	Swarnalatha. R	DP
85	Shreea D Mehra	Automatic engine locking system for drunk drivers	Vilas Haridas Gaidhane	DP
86	Mahidhara Utsav	Energy-efficient model for speed control of a train	Shazia Hasan	DP
87	Poorva Gururaj Parande	Street Lights that Glow on Detecting Vehicle Movement	Shazia Hasan	DP
88	Patel Ketul Arvindbhai	Numerical modelling of tribocorrosion of bio materials	Vincent Kumar	DP
89	Vishnu Teja Tirumalasetty	Tribological properties of cold working steel used for stamping	Ram Karthikeyan	DP
90	Zoheb Ali	Design and fabrication of multi wheel nut remover	Vishal Gangadharn aranje	DP
91	T Avinash	Mechanical properties of composites using numerical simulations	Priyank Upadhyaya	DP
92	Abhishek.N	Finite element analysis in a solid structure	Periasamy C	DP
93	R. Gowtham Raj	Designing a Industrial Robot Arm	Periasamy C	DP
94	Mrigank Mohan Haleangadi	Analysis & Optimization of Firefighting Equipment & Apparatus	Udayakumar. R	DP
95	Joseph Jeyasurya J	Performance Analysis of a solar operated Aqua Ammonia Vapor Absorption Refrigeration System (VARS)	Shashank Khurana	DP
96	Gulam Abbas	The finite element analysis of a high pressure pump	Vincent Kumar	DP
97	Uppalapati Chaitanya Kumar Varma	Design and analysis of HVAC unit: Parametric study	Priyank Upadhyaya	DP
98	Susmit Nannapaneni	Stress analysis and optimization of stresses using material/geometric parameters for SLJ and dljs	Priyank Upadhyaya	DP
99	Sainadh Unni	Dissimilar welding of stainless steel/ monel alloy - micro structural analysis	Ram Karthikeyan	DP
100	Jamanzai Iyas Ali Khan	Design on Aircraft refrigeration systems	Vincent Kumar	DP
101	Chirag Kawatra	Design and analysis of Pressure vessel	Shankaram M	DP
102	Zeki Istak Abdul Qader	Power Generation Using Speed breakers	Udayakumar. R.	DP
103	Amith Baby	Thermo-mechanical analysis of nano-composites to determine mechanical constants	Priyank Upadhyaya	DP
104	Lakhwani Vinay Parshotam	Evaluation of tribological properties of cold working steel by microstructure simulation	Ram Karthikeyan	DP
105	Tanvi Chadha	Bio-corrosion evaluation of bio-implant materials	Vincent Kumar	DP
106	Karan Viraj Singh	CFD analysis on aerodynamic design of an automobile	Udayakumar. R.	DP
107	Abishek M	Optimal design and techno-economic analysis of a Hybrid solar - wind power system	Periasamy C.	DP
108	Krishna Kaushik Yanamundra	Design and analysis of Wind turbine blades using CATIA and ANSYS	Periasamy C.	DP
109	Shobhit Deva	"Air Intake flow Analysis for 4 cylinder Internal Combustion Engine"	Shashank Khurana	DP

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110	Patel Dhruvil Kanubhai	Effects of structural defects on mechanical properties of graphene/CNT nano composites	Priyank Upadhyaya	DP
111	Tanusha Virodula	Optimized positioning of AC vents inside a car using CFD	Priyank Upadhyaya	DP
112	Aravind Prasanth	The Design & Development of front wing element and side wing integration into a FSAE racecar	Shankaram M	DP
113	Barodawala Azan Akhtar	Designing and optimization of winglets of wind turbine using ANSYS Fluent	Shashank Khurana	DP
114	Gowtham S	Automated recognition of manufacturing features using CAD and CAM	Vishal Gangadharn aranje	DP
115	Balaji Premraj Prithvi	Vibration Analysis on the pumps in pumping station and its effects	Amaranath	DP
116	Shreyas Sharma	Energy Recovery: Deriving Energy from integrating sun and sand.	Shashank Khurana	DP
117	Salil Puri	Evaluation of tribological properties of cold working steel by simulation	Ram Karthikeyan	DP
118	Syed Mohammed Qadri	Simulation of heat treatment of steel	Ram Karthikeyan	DP
119	Ashish Kapur	Hydrostatic transmission	Vishal Gangadharn aranje	DP
120	Mallavarapu Manishkumar	Design and analysis of airfoil steam turbine blade with Thermal barrier coatings	Shankaram M.	DP
121	Abdul Muqeet	Design and Analysis of a Formula SAE steering system	Vishal Gangadharn aranje	DP
122	Lavanya Aggarwal	Design and Analysis of a semi automatic electronic gear shift of a Honda CBR 600 RR Engine using pro shift PSU and flat shifter throttle blip system	Shankaram M	DP
123	K.Venkatesh Prabu	Designing of Vibrational Energy Harvester for powering street lights	Shankaram M	DP
124	Sadjyot Biswal	Design and development of a formula SAE steering system	Shankaram M	DP
125	Siddharth Ajaykumar	Crack propagation simulation for composites	Periasamy C	DP
126	Shiva Ranganath	Design of solar vapour absorption refrigeration system	Udayakumar. R	DP
127	Majidamoossaassainar	Saline soil microbiome and its role in forage crop improvement	Shariff.D.J	DP
128	Afarosebagamfaazil	Biofuel crops production under saline water irrigation and improvement methods	Shariff.D.J	DP
129	Shaikh Faisal Zaman	Characterization of biomass for biofuel applications	Ramachandran .S	DP
130	Koushika N	Fact Finding Model- From Idea to Interpretation	Neeru Sood	DP
131	Bhavani Sankar Nishanth	Smart cities and environment using IOT	Abdul Razak .A.R	DP
132	Balaji Premraj Prithvi	Vibration Analysis on the pumps in pumping station and its effects	Amaranath	DP
133	Nidadavolu Mani Sasi Rekha Chowdary	Mathematics of Holography and Physical Constraints	Baskaran. S.	DP

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134	Shyam Krishnan	Numerical Simulation of Heat And Mass Transfer of Newtonian Fluid	Baskaran. S	DP
135	Saira Khan	Creating of database on wastepaper management & statistical analysis	Datta.T.K	DP
136	Architha Bindu Gopan	Application of Metaheuristic Algorithms in Scientific and Engineering Problems	Datta.T.K	DP
137	Varun Donadi	Travelling sales man problem	Eldhose lype	DP
138	Rohan Goswami	Crop yield sensitivity to climatic variations	Geetha	DP
139	Apoorv Banthia	Designing of user interface by handling the front-end.	Kavita. S.Jerath	DP
140	Akshat Pathania	User interface web application of back-end.	Kavita. S.Jerath	DP
141	Hardik Joshi	Big Data and Data Analytics	Maneesha	DP
142	Tushar Vatsa	Valuation & stock pitch of an oil and gas company	Maneesha	DP
143	Naman Kamra	Machine Learning and Big Data	Maneesha	DP
144	Aashraya Kumar Yogi	Fractal Geometry and Applications	Priti Bajpai	DP
145	Ayush Garg	Application of Data Mining Principles for Student Placement	Priti Bajpai	DP
146	Usman Fayyaz	Cytoscape as a screening tool to identify stress tolerant variety in the cereal crops using proteomics	Somasundaram A.	DP
147	Nishrin Abdul Gafoor	To target the most influential proteins in cereal crops involved in salinity tolerance using cytoscope	Somasundaram A.	DP
148	Paras Dhawan	Numerical Solution of Lagrange multiplier method and its real life applications	Suhel Ahmad Khan.	DP
149	Rekhapalli Sri Shreya	Treatment of Pharmaceutical Waste in Water by Adsorption	Geetha	LP
150	Nithinnanda kumar	Study of Prevention of Corrosion of Oil Containers and engines by addition of TBN BOOSTER to the contained oil	B.G. Prakash Kumar	LP
151	Arunachalamabinaya	Comparative study on the phytochemical extraction and its quantification from biomass	Geetha	LP
152	Lakshay Arora Parekh Vineet Vyomesh	Security analysis of generic web applications	Santhosh Kumar. Vadivel.S.	LP
153	Parekh Vineet Vyomesh	Biometrics	Vadivel.S.	LP
154	Pradheepan Raghavan	Website deployment using azure	Sujala D. Shetty	LP
155	Ayush Gulati	Android app and widget development using IBM alchemydata	Nand Kumar	LP
156	Rishav Jalan	Development of Tradeoff Analytics	Baskaran. S	LP
157	Akshaya Kalyanaraman	Design and implementation of micro services for mobile applications	Vadivel.S.	LP
158	Abbinaya Kalyanaraman	Design and implementation of mobile based augmented reality system	Vadivel.S.	LP
159	Ishita Sujit Tavkar	Internet of things	Vadivel.S.	LP
160	Swapnil Mittal	Nozzle design for 3D printer	Anand Kumar	LP
161	Aisha Aslam	Design and experimentation of Four-point probe resistance measurement system for copper surfaces.	Anand Kumar	LP
162	Sreelakshmi Nair Jayaraju	Experimentation and Characterisation of	Anand Kumar	LP

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		Heating/Sintering Systems for Copper Nano-particle Ink		
163	Nidadavolu Mani Sasi Rekha Chowdary	Sensor less Control of a Robot	Mary Lourde.R	LP
164	Gaurav Ranjan Basu	Vehicle Number Plate Recognition using matlab	Mary Lourde.R	LP
165	Lavanya Aggarwal	Control Techniques for Single Point Incremental Forming Operations	Kalaichelvi	LP
166	Sadjyot Biswal	Modelling of incremental Sheet Forming using Intelligent Techniques	Kalaichelvi	LP
167	Sripavathi S Bhattathiri	Experimental Studies and Performance Analysis of a Level Process	Kalaichelvi	LP
168	Ameya Nitin Kulkarni	Biomedical signal classification using soft computing tools.	Shaziahasan	LP
169	Paras Dhawan	Transceiver Design for MIMO systems.	Raja Muthalagu	LP
170	Fazil Ashraf Reshie	Study of corrosion behavior of a Bio-Implant Alloy (316L Stainless-Steel)	Vincent Kumar	LP
171	Shaurya Selhi	Study and Simulation of wear behavior of materials using COMSOL	Vincent Kumar	LP
172	Nikhil Reji Thomas	Design and development of horizontal axis wind turbine.	Udayakumar. R	LP
173	Kasi Viswanathan Hariharan	Dissimilar welding of stainless steel/ monel alloy - mechanical characterization	Ram Karthikeyan	LP
174	Mohammed Shamroukh	Optimization of Facility Layout Design using Mathematical Modelling and Heuristics	Vishal Gangadharn aranje	LP
175	Ankit Mallapur	Corrosion behaviour of stainless steel/ monel alloy Dissimilar welding	Ram Karthikeyan	LP
176	Aishwarya Krishnan	Bio corrosion evaluation of bio implant materials	Vincent Kumar	LP
177	Parth Himanshu Desai	Flow Visualization – Techniques Used for Near-surface Flow Patterns over Artificial Plants	Shashank Khurana	LP
178	Mridul Mohan Mathur	Study on mechanical properties of biomaterials	Vishal Gangadharn aranje	LP
179	Jenkin Samraj	Non Destructive Testing- Magnetic particle Testing	Periasamy C	LP
180	Samarth Agarwal	An experimental study to determine the mechanical properties of 3D-printed composites	Priyank Upadhyaya	LP
181	Bachchhav Aditya Swapnil	Complete water analysis by determining the physical and chemical parameters	Shariff.D.J	LP
182	Harini M	Testing the potential of bacterial cultures in degradation of low density polyethylene films.	Neeru Sood	LP
183	Arpitashajil Das	Phytoremediation of textile dyes using mustard plants	Gokhale Trupti Swarup	LP
184	Rishikapiskalaravikanth	Effect of metal nanoparticles on growth of mustard plants	Gokhale Trupti Swarup	LP
185	Amitashajil Das	Phytoremediation of metal pollution using mustard plant	Gokhale Trupti Swarup	LP

<b>List of First Degree Projects</b>				
<b>First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
186	Mannaal Khan	Effect of salt stress on growth and biochemical parameters of barley (Hordeumvulgare) / pearl millet	Neeru Sood	LP
187	A Karthikvasudev	Effect of metal nanoparticles on the growth of barley plants	Gokhale Trupti Swarup	LP
188	Rishav Jalan	Development of Tradeoff Analytics	Baskaran. S	LP
189	Jubayed Gani Chowdhury	Removal of hydrogen sulphide (H <sub>2</sub> S) from biogas generated by anaerobic digestion.	Geetha	LP
190	Mohammed Ahmed Mahboob	removal of ammonia (NH <sub>3</sub> ) from biogas generated by anaerobic digestion	Geetha	LP
191	Dana Mohamed Ashraf	Characterization of biomass quality of napier grass for Biofuel applications	Vijaya Ilango	LP
192	Hamza Khaliq Khan	Forage quality analysis of Desmanthus	Vijaya Ilango.	LP
193	Shanellegovekar	Waste to energy conversion pathways	Vijaya lango	SOP
194	Iris Gopalakrishnan	Nanomaterials-based Adsorbents for Water and Waste Water Treatment	Karthiyayini	SOP
195	Ankitalalwani	Investigation of thermal food preservation and drying techniques	B B Gulyani	SOP
196	Adiranuranivaidyanathan	Food Preservation by Microwave Sterilisation and studying the various techniques to improve it	B B Gulyani	SOP
197	Reshma shirishkalvade	Phi the golden ratio	Priti Bajpai	SOP
198	Hamad pulikkal	Recent Advances in Nanotechnology	T. K. Datta	SOP
199	Shivani Shankar	Study on Algorithms for Sentiment Analysis	Santhosh Kumar	SOP
200	Rohin Nambiar	Fuzzy Inference System for weather Prediction	Santhosh Kumar	SOP
201	Mamta Kishnani	Big data applications on social media	Siddhalingurolagin	SOP
202	Remona Johnson	Deep Learning for Big Data	Siddhalingurolagin	SOP
203	Dasari Sai Krishna Kishore	IOT based garbage monitoring system for smart cities	Madiajagan.M.	SOP
204	Malvika Sridhar	SDR-software defined radio	Thomas.T.G.	SOP
205	Rafeena Barvien	Magnetic levitation and their applications	Chattopadhyaya.B.	SOP
206	Divya Dileep Menon	Lifi(light fidelity)	Mary Lourde.R	SOP
207	Keerthana Vijaya Kumar	Speech Processing Techniques for the Hearing Impaired	Mary Lourde.R.	SOP
208	Amrithaa Seshadri	Using FITS Image Processing to derive the Hertzsprung Russell Diagram for any Open Star Cluster	Mary Lourde.R.	SOP
209	Aniket Gupta	Threats and Vulnerabilities of Smart Grid Security System	Gomathi Bhavani	SOP
210	Varsha Venkatesh	Wheelchair Navigation System using microcontrollers	Swarnalatha. R	SOP
211	Anne Joshy	Study of biometrics in automated teller machines	Swarnalatha. R	SOP
212	Rohan Khanna	Configuring Windows Server 12 & hence implementing IPV4 protocol for running performance matrices	Raja Muthalagu	SOP
213	Shubhankan Mukherjee	High Frequency Alternating Current and its Special Use	Sunil Thomas	SOP
214	Balaji Premraj Prithvi	Water Distribution Pipeline Design and	Gudipadu	SOP



<b>List of First Degree Projects First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Construction	Venkatesh	
215	Rishabh Aji	Study of energy efficient technologies for green manufacturing processes	Ajit Pratab Singh	SOP
216	Mahidhara Utsav	Analysis of the engine control units of different automobiles	Udayakumar. R	SOP
217	Mitesh Kailash Aswani	Transparent solar panels combined with green/brown algae for power production and carbon scrubbing.	Periasamy C	SOP
218	Syed Farhan Syed Firoz	Solar cells and their efficiency: A technology review	Priyank Upadhyaya	SOP
219	Hatim Taher Baharainwala	Study on Spacecraft refrigeration system	Vincent Kumar	SOP
220	Esha Backer	Hydrogen fired Gas Turbine engine with exhaust gas recirculation	Udayakumar. R.	SOP
221	Sharankumar R	Study of fire fighting system for a residential building	Shankaram M.	SOP
222	Gulam Abbas	Carbon nanoparticles interaction with organic and inorganic pollutants	Karthiyayini. S.	SOP
223	Swaminathan C	Active and Passive flow control techniques over an Airfoil	Shashank Khurana	SOP
224	Zoheb Ali	Performance evaluation of a generator using Multi-criteria Decision Making Techniques	Ajit Pratab Singh	SOP
225	Shiva Ranganath	Benefits and risk assesment of toxicological impacts of silver nano particles	Karthiyayini. S	SOP
226	Zeki Istak Abdul Qader	Health Hazards of Nano particles	Karthiyayini. S	SOP
227	Amith Baby	Toxicological impacts of nanomaterials on the environment	Karthiyayini. S	SOP
228	Salman Nazeerudeen	Environmental impact of toxicity of nanoparticles	Karthiyayini. S	SOP
229	R Rahul Manickam	Analysis of properties of rock wool insulation	Vishal Gangadharn aranje.	SOP
230	Gurram Aravind	Study of production of electricity using foot path on public roads	Shankaram M.	SOP
231	Jiss Jose	An Investigative study on Aerodynamics of Bird Flight for possible applications.	Shashank Khurana	SOP
232	Karan Madan	Development of Environmental Status Index for Industrial Clusters	Ajit Pratab Singh	SOP
233	Vijaya Gopi S	To study effects of prpbs on Transformation of Nitrogen in soils.	Karthiyayini. S.	SOP
234	Jackson James	An investigative study on Fluid Dynamics of Bio-inspired locomotion	Shashank Khurana	SOP
235	Jasjeev Singh Chadha	Piggy back tuning for a stock ECU	Periasamy C	SOP
236	Majida Moossaassainar	Nutrient quality of forage crops under saline water irrigation	Ramachandran .S	SOP
237	Afarose Bagam Faazil	Nutritional Quality Analysis of Forage Crops	Ramachandran .S	SOP
238	Shweta Biswal	Standerdization of photobacterium cells for use in optical biosensors	Gokhale Trupti Swarup	SOP
239	Pramya Pradeep Kumar	Cytotoxic Effects of metal Nanoparticles	Gokhale Trupti	SOP

<b>List of First Degree Projects</b>				
<b>First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		on Microorganisms	Swarup	
240	Shreyas Sharma	Plastic to Fuel: Management Operations	Amritesh.	SOP
241	Vaneet Lobo	Brand Preference behavior for Hypermarkets	Amritesh.	SOP
242	Javeria Amin	Marketing strategy for educational services	Amritesh.	SOP
243	Ankit Mallapur	Student's Decision Preference in University Selection	Amritesh.	SOP
244	Vilhu Ravneet Inderjeet Singh	Marketing of NGOs in UAE	Amritesh.	SOP
245	Desai Vivek Jayesh	Comparative study of Marketing Strategies of Corporations	Amritesh.	SOP
246	Salil Puri	Finite difference simulations of seismic wave propagation	Baskaran. S	SOP
247	Shaurya Sood	Application of Game Theory in Oligopoly markets.	Baskaran. S	SOP
248	Hamad Pulikkal	Recent Advances in Nanotechnology	Datta.T.K.	SOP
249	Nikkita Singh	Analysis of Renewable energy and it's impact on rural development in India	Geetha	SOP
250	Naved Moinuddin Shaikh	System of pulleys	Kavita. S.Jerath	SOP
251	Palaparathi Divya	Generating Power From Lightning	Kavita. S.Jerath	SOP
252	Anuj Lilhori	XANES and EXAFS of superconducting materials	Kavita. S.Jerath	SOP
253	Sourav Banerjee	Motor Insurance in a Digital Ecosystem	Maneesha	SOP
254	Shourya Kheterpal	Credit Risk Management	Maneesha	SOP
255	Maurell Alex Dsouza	Techniques used in Forensic Science and its Advancement	Manoj Kannan	SOP
256	Archit Agnihotri	A Study on Epigenetic Phenomena and Diseases	Manoj Kannan	SOP
257	Mohammed Sulaiman Syed	Cyberethics and freedom of information	Mubeena Iqbal	SOP
258	Aryaman Sood	Integrated Marketing Communications	Mubeena Iqbal	SOP
259	Divyank Sood	The impact of soft skills on recruitment interviews	Mubeena Iqbal	SOP
260	Ishita Upadhyaya	Understanding Risk Communication Theory	Mubeena Iqbal	SOP
261	Mohamed Nawaz Muallim	Bridging the educational gap	Mubeena Iqbal	SOP
262	Amira Noushad	Mathematics and Cryptography	Priti Bajpai	SOP
263	Neelabh Mital	Statistical Quality Control	Priti Bajpai	SOP
264	Pradheepan Raghava	Exploring Pascal's Triangle and Its Modern Day applications	Priti Bajpai	SOP
265	Chirag Kawatra	Market Communication For Electronics Industry In UAE	Pushkala Muralidharan	SOP
266	Lakhwani Vinay Parshotam	Use of Market Survey In Consumer Research	Pushkala Muralidharan	SOP
267	Navneeth B L	Analysis And Modelling of Neurodegenerative Diseases In U.A.E	Ramachandran .S	SOP
268	Tarang Kotresh Shankar Shetty	A study on Cerium Oxide Nano-particles for Biomedical Applications	Roopkumar.R	SOP
269	Radhika Jayachandran	Applications of Quantum Dots in Bio	Roopkumar.R.	SOP

<b>List of First Degree Projects First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		Imaging		
270	Aakhib Ahmed Shakir	An empirical study of education decision making process	Shazi Shah Jabeen	SOP
271	Tanya Ann Varghese	Role of Text Readability in Engineering Student's Reading Comprehension	Shazi Shah Jabeen	SOP
272	Merlin Giji Panicker	Computer based Speech Therapeutic Intervention	Shazi Shah Jabeen	SOP
273	Alma Thankam Raju	The Study of Multilingualism in U.A.E	Shazi Shah Jabeen	SOP
274	Heena Kausar	Study Of Eco-Metaphor	Shazi Shah Jabeen	SOP
275	Rebin Anvar	Drivers of investments in small scale entrepreneurial companies in UAE	Shazi Shah Jabeen	SOP
276	Rahul Suresh Kumar	Automated light bulbs	Shilpee Srivastava Saxena	SOP
277	Usman Fayyaz	Application of differential equations in Electrical Engineering	Shilpee Srivastava Saxena	SOP
278	Nidhi Lathi	Application of Differential equation-population dynamics	Shilpee Srivastava Saxena	SOP
279	Jayesh Devji Kanzariya	The Fourier Transform and Its Applications	Shilpee Srivastava Saxena	SOP
280	Mishra Akash Bhuleshwarnath	Four-Color Theorem	Shilpee Srivastava Saxena	SOP
281	Rishu Ravi	Integer Programming	Shilpee Srivastava Saxena	SOP
282	Parvathaneni Venkata Durga Satyasai	HRM in mid sized organizations.	Srinivasa Rao	SOP
283	Jaslove Singh Badwal	Entrepreneurship Opportunities	Srinivasa Rao	SOP
284	Gundasi Saradananda	HRD in Recruitment's	Srinivasa Rao	SOP
285	Kovvali Phaneendra	HRD in Organization	Srinivasa Rao	SOP
286	Botta Leena Spandana	Micro Level Women Entrepreneurship	Srinivasa Rao	SOP
287	Apoorv Banthia	Numerical solution and application of runge kutta method by using matlab	Suhel Ahmad Khan.	SOP
288	Akshat Pathania	Analysis and real application of R.K 4th order method.	Suhel Ahmad Khan.	SOP
289	Harsh Golecha	Game Theory and its applications	Suhel Ahmad Khan.	SOP
290	Piyush Ajay Batra	Fractional calculus and its real life applications	Suhel Ahmad Khan.	SOP
291	Ayush Dattagupta	Developing web services for privacy devices	Vadivel.S	SP
292	Ihtisham Qasim Kalimullah	Design of Bionic Prosthesis for Parkinson's Patients to Dampen Tremors: Electrical Aspect	Chattopadhyaya.B.	SP
293	Barlingay Shreya Sharad	Control Strategies for Tremor Dampening System	Kalaichelvi.	SP
294	Shyam Krishnan	Heat treatment simulation of Tool steel using MATLAB	Ram Karthikeyan	SP
295	Shwetabiswal	Biomass based biofuel characteristics for domestic and industrial application	Ramachandran .S	SP
296	Pramya Pradeep Kumar	Emerging neurodegenerative diseases in U.A.E. and current developments in its management	Ramachandran .S	SP
297	Shaikh Faisal Zaman	Study on biosensors for monitoring	Shariff.D.J	SP

<b>List of First Degree Projects First Semester 2016-2017 (August 2016 to January 2017)</b>				
<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		contaminants in food and environment		
298	Aravindsatheesh	Diagnostics and prognostics of Bacteria and viral diseases /infections	Neeru Sood	SP
299	Maurell Alex Dsouza	Techniques used in Forensic Science and its Advancement	Manoj Kannan	SP
300	Asha Inbanathan	Tissue engineering and regenerative medicine- concept and clinical applications	Neeru Sood	SP
301	Fayezasamee	Studies on synthesis of metallic nanoparticles by microorganisms and plants	Neeru Sood	SP
302	Navneeth B L	Analysis and modelling of neurodegenerative diseases in u.a.e	Ramachandran .S	SP
303	Architagnihotri	A study on epigenetic phenomena and diseases	Manoj Kannan	SP
304	Ayush Gulati	Development of an android app for fitting the best multiple regression model	Datta.T.K	SP
305	Salman Nazeerudeen	Application of Forecasting Techniques Using PHP and HTML	Maneesha	SP
306	Bhavani Sankar Nishanth	Fibre optics and its's application in cyberworld	Roopkumar.R	SP
307	Lakshay Arora	ARCD Portal - Operations Integration (Frontend)	Somasundaram A.	SP
308	Alok Rajiv	ARCD PORTAL - Operations Integration (Backend)	Somasundaram A.	SP
309	Ankita Srivastava	Facial Recognition in MATLAB	Sangil Vadivel	SP

Annexure B4-10  
(2 pages)**Special Lectures by Invited Scholars – 2016**

S.No	Name	Topic	Date
1	Keshav Peshwani, CEO, VPL Infotech, New Delhi, India	Embedded Systems Design (Seminar)	January 18, 2016
2	Prof. Ravi Gomatam	Talk On Quantum Mechanics & Physical Reality	February 07, 2016
3	Mr. Noumaan Qureshi, TESCOAN ME FZC, Sharjah, UAE	Introduction to Scanning Electron Microscopy	February 07, 2016
4	Dr Rakesh Kumar, Professor, School of Medicine and Health Science, George Washington University, USA	MTA1 Master Coregulator in Cancer and beyond	February 18, 2016
5	Dr V. Sitaraman, Professor (Retired), Department of Biotechnology, University of Pune, India	Facts and Fiction in Modern Biology: Membrane Biology as a Case in Point	February 18, 2016
6	Sanjay Dhingra, Associate Director, Admissions & Financial Aid, Indian School of Business	Young Leaders Programme at Indian School of Business	February 22, 2016
7	Prof. Anand Kushre, Professor Incharge, Center for Entrepreneurship, IIT Bombay	Entrepreneurship, Startups and Incubation	February 25, 2016
8	Dr. Kumar Neeraj Sachdev, Associate Professor, Department of Humanities and Social Sciences	Virtue based Compatibility of Business and Profession	February 29, 2016
9	Mr. Jayan Ramankutty, Chairman, BITS Pilani Alumni Association	Developing New Ideas and Values of Startups	February 29, 2016
10	Dr. Srikanta Dinda, Associate Professor, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus, India.	The current financial aspects of ethylene and propylene (commercial oil derivatives)	March 03, 2016
11	Mr. R. Raghu, Vice president, Schrodinger Inc., USA.	Recent advances in computational drug design and Computational Biologics design	March 09, 2016
12	Professor Suresh Bhargava, a member of groups such as the DPVC (International Research), CAMIC (Center for Advanced Materials and Industrial Chemistry) and RMIT University, Melbourne, Australia.	From mind to the market place: Innovation through global collaboration	March 13, 2016
13	Professor Suresh Bhargava, Director -Centre for Advanced Materials and Industrial Chemistry (CAMIC), RMIT University, Melbourne	He interacted with the chemistry and chemical engineering faculty and discussed about the collaborative research possibilities with RMIT. An interactive session on Innovation through Global Collaboration with students was held after the faculty meeting.	March 13, 2016
14	Prof Pandurangan, IIT Chennai, India	Workshop on Cryptology	March 15, 2016 March 17, 2016
15	Saurabh Bodas, Research Scientist, Nexus Tec., GmbH	Machine Vision & Artificial Intelligence	March 29, 2016
16	Mr. Jenö Muthiah, CEO, Alpha Coating Technology, Addison, Illinois, USA.	Polymers in the modern world	March 30, 2016
17	Dr Suresh Arya, Professor, National Institute of Health, USA	Synthetic Biology (Lecture Series)	March 30 – April 4 2016
18	Prof Pandurangan, IIT Chennai, India	Guest Lectures for courses CS F364 Design & Analysis of Algorithms CS G Network Security	March 01, 2016 March 31, 2016
19	Prof Pandurangan, IIT Chennai, India	Puzzle based learning	March 01, 2016 March 31, 2016
20	Dr. Srikanta Dinda, Associate Professor, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus, India.	The simulation of light olefin selectivity from FCC unit (Lab to Pilot to Commercial)	April 05, 2016

S.No	Name	Topic	Date
21	Dr. Eldhose Iype, Assistant Professor, Department of Chemical Engineering, BITS Pilani, Dubai Campus, UAE.	Particle based simulation for studying molecular systems	April 12,2016
22	Mr. Melvin Mathew, Manager- Marketing	Domainers Meet 2016	April 19,2016
23	Somanath Mitra, Research Scholar, IIT Delhi	Guest Lectures on MIS, Database Management, Software Management, Cloud Computing	May 02,2016 May 06,2016
24	Mr. Ally Arrossi Bakali, Senior Business Strategist & Consultant	AJSM Hero - The Business Plan Competition	May 08,2016
25	Dr A. M. Deshmukh, Professor, Dr Babasaheb Ambedkar Marathwada University, India	Careers in Biotechnology	May 8, 2016
26	Mr. Chandradhar Prasad & Ms. Kriti Saxena, Sr. Engineers- Automation Projects, L & T Electrical and Automation FZE, Dubai	Industrial Automation using SCADA	May 10,2016
27	Dr Gaurang Deshpande, Applications Scientist, Alliance Global, Dubai, UAE	Introduction to Genomics	May 12, 2016
28	Prof. Ashwin Srinivasan, Dpty Director & Professor of Computer Science BITS Pilani, Goa Campus, India	Computers are People	May 26,2016
29	Prof. Venkatesh Srinivasan Dept of CSE,Univ of Victoria, Canada	Algorithms for Bigdata	August 16,2016
30	Prof. Alok N. Choudhary, Henry & Isabelle Dever Professor of EECS, Northwestern University Founder, Chairman and Chief Scientist, 4Cinsights Inc.	Accelerating Discoveries With Big Data + Supercomputing	September 04,2016
31	Mr. Hitesh Agarwal, Director, Jindal Saw Gulf L.L.C/ Super Cement Manufacturing Co. L.L.C, Abu Dhabi, UAE.	Recent techniques in precipitated calcium carbonate (PCC)	September 20,2016
32	Dr Brajesh Kumar Kaushik, Associate Professor, Department of Electronics and Communication Engineering, IIT -Roorkee	Innovation and Pathways in Nano electronics	September 25,2016
33	Prof . A.G. Ramakrishan Chairman of Electrical Engineering, India Institute of Science, Bangalore.	Guest lecture Online handwriting recognition, Text to Speech Synthesis, Optical Character Recognition and Transcription between Indian Languages	October 03, 2016 October 06, 2016
34	Mr Alan D'Souza	Importance of Branding in Building a Business: An Interesting Case Study	October 11,2016
35	Mr. Nicola Mottala, Area Business Manager, EMEA Export, PANalytical	Industrial Techniques in X-Ray Diffraction and Analysis.	October 25,2016
36	Dr Srikanth Charde, Associate Professor, Dept of Chemistry, BITS Pilani, Hyderabad Campus, India	Novel Drug Delivery Systems	October 27, 2016
37	Dr. Sridhar Natesan, Sn. Researcher, Institute of Psychiatry, Psychology and Neuroscience, King's College London	Biotechnology in Mental Health	November 3,2016
38	Dr Faraz Zafar Khan, manager R & D, ASAS Engineering and Projects Management Consultancy	Power System Analysis & simulation	November 4,2016
39	Prof. Dr. R. N. Saha, Sr. Professor in Pharmacy and Director, BITS Pilani, Dubai Campus	Career Development Biotechnology Students	November 17,2016
40	Mr Hareesh Janakiram , Electronic Engineer, Houston , Texas	Design and Debug of Embedded Systems	November 20,2016
41	Mr. Bharath Kamath, Product Manager, ABBOTT Laboratories S.A	Clinical Utility of Point of Care Analyzer in Health care Setup	November 21,2016

Annexure B4-11  
(5 Pages)**LIST OF FACULTY MEMBERS WHO ATTENDED VARIOUS CONFERENCES AND PRESENTED PAPERS – 2016****Conference Proceedings**

Sl. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
1	Srinivas, R. and Singh.A.P.	A fuzzy based multi-criteria decision making approach for assessing the sustainability of river Ganga	Eighth International Perspective on Water Resources and the Environment (IPWE), ASCE	Paper No: WQ:49	January 4-6, 2016 in Colombo, Sri Lanka
2	Vipul Parmarthi and Lajwanti Kishnani	"Indianizing the English Classic Othello in Vishal Bharadwaj's Hindi Movie Omkara-A Case Study "	International Conference titled- "Indian Cinema : Past , Present and Future"	The Conference proceedings published by Vidhya Prasarkar Mandal .ISBN :978-81-922741-9-7, Pg – No . 47 – 49	January 8-9, 2016 ,VP Bedekar College Thane, INDIA
3	Maruthi Sai Dhiraj sakhamura, Sadjyot biswal, Miller Jothi , Udayakumar	Design of Formula SAE Car's Suspension Geometry using Lotus Shark Suspension Analyser "	International conference(Track: Engineering and technology)	Track: Engineering and technology	January 31 to February 4 2016, Al Ain University of Science and Technology, UAE
4	Puppala, H., Kanuganti, S., Sarkar, A. K., Singh. A. P.	Part to Whole Methodology in Planning to Enhance the Spatial Accessibility to Health Care Facilities Using GIS	Geo smart India-2016	Paper No.: Youth Forum: 57	March 1-3, 2016, India Expo Center, Greater Noida, India.
5	Swathi V., Raju K.S., Singh. A. P.	Application of Storm Water Management Model to an Urban Catchment	International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India	Paper No.: TS-7 (IWRM): 197	March 15 – 18, 2016 in Bhopal, M.P., India
6	Raju, K.S., Akshara, G., Singh. A. P., and Vasan A.	Application of Multiple Linear Regression as Downscaling Methodology for Lower Godavari Basin	International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India	Paper No.: TS-16 (CC & DAM): 95	March 15 – 18, 2016 in Bhopal, M.P., India
7	Singh. A. P. Shrivastava. P. and Vidyarthi, A. K.	Potential Impacts of Climate Change in Water Resources Management of Chittorgarh, District, Rajasthan	International Conference on Water, Environment, Energy and Society (ICWEES-2016) organized jointly by the Texas A & M University, Texas, USA and AISECT University, Bhopal, India	Paper No.: TS-23 (CC & DAM): 211	March 15 – 18, 2016 in Bhopal, M.P., India
8	Aamir Jamal, Rushirajsingh parmar & Abdul Rajak	Design and Performance analysis of Microstrip Patch Antenna following IEEE 802.11b/g/a specifications,	2nd IEEE International Conference on Human Computer Interactions		March 11, 2016 ,Saveetha University, Chennai, Tamil Nadu ,India

Sl. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
9	Koyadeen R.T, Devisree S, Anand Kumar & Rusal Raj	Simulation and Analysis of BDT Molecule with Au Electrodes as a Molecular Switch	18th International Conference on Computer Modelling and Simulation-2016 UKSim-AMSS	978-1-5090-0888-9/16 \$31.00 © 2016 IEEE DOI 10.1109/UKSim.2016.10	April 6-8, 2016 Cambridge, United Kingdom
10	Devisree S, Dr.Anand Kumar, Dr.Rusal Raj	“Nanoscale FPGA with Reconfigurability”	18th Mediterranean Electrotechnical Conference, “MELECON 2016”	978-1-5090-0058- 6/16/\$31.00 ©2016 IEEE	April 18-20, 2016 Limassol, Cyprus,
11	Ganesh, G., Nandkumar, A., Srinivasan, P., Sood N., &Gokhale T	A Study on heavy metal resistance in Stenotrophomonas maltophilia and Bacillus subtilis for applications in bioremediation	Current Trends in Biotechnology,	Online proceedings	3-4 May 2016.Manipal University in association with American Society of Microbiologist
12	Srinivasan, P., Balaji, S., Singh, S., Sood, N., Gokhale, T., Somasundaram R., & Subramanian R.	Antibiotic resistance among biofilm forming bacteria in domestic environments	Current Trends in Biotechnology,	Online proceedings	3-4 May 2016.Manipal University in association with American Society of Microbiologist
13	Singh S., Gokhale T., Subramanian S., & Sood N..	Screening of bacterial diversity in Dubai Beaches	Current Trends in Biotechnology,	Online proceedings	3-4 May 2016.Manipal University in association with American Society of Microbiologist
14	Sheetal Desai And Lajwanti Kishnani	‘The New Age Bollywood Heroine :Breaking Stereotypical Norms’	2 <sup>nd</sup> International Media Research Conference		May15, 2016 International Conference held at Manipal University Dubai
15	Azhar Syed, Mohammed Azeemgafoor, Aamir Jamal & Abdul Rajak	Study on Patch Antennas for various purposes-A Literature Survey	3rd International Conference on Electrical, Electronics, Engineering Trends, Communication, Optimization and Sciences)	page 268-271	1-2 June,2016 Sasi Institute of Technology &Engineering, West Godavari, Andhra Pradesh, India
16	Vijaya Ilango and Snatika Sarkar	Improvement of Fuel Cell Performance by Application of Carbon Nanotubes”	”, International Conference on “Engineering & Technology, Computer, Basic and Applied Sciences”- ECBA-2016	DBE-266-104	June 10-11, 2016, Dubai,UAE
17	Ganesh, G., Srinivasan P., Sood N., & Gokhale. T.	Synthesis of metal nanoparticles using Stenotrophomonasmalto philia and Bacillus subtilis isolated from the natural habitats of UAE	American Society of Microbiologist - Microbe 2016	Online	June16-20, 2016 Boston, USA
18	Gokhale, T., Biswal, S., Thapa, A., & Sood, N.	Development Of A Biosensor Using Photobacterium Spss For The Detection Of Environmental Pollutants	American Society of Microbiologist - Microbe 2016	Online	June16-20, 2016 Boston, USA
19	Balaji, S,	Prevalence of Antibiotic	American Society of	Online	June16-20,



Sl. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
	Vasudev, K.A., Srinivasan, P., Singh, S., Sood N., Gokhale T.S., & Subramanian R	Resistance among Biofilm forming Bacteria Isolated from Domestic Environments in Dubai	Microbiologist-Microbe 2016		2016 Boston, USA
20	Shalini, K., Agarwala, R., Dutta, B., Bhanegaonkar, P.N., Singh, A.P., and Sarkar, A.K.	Road safety analysis using multi criteria approach: A case study in India	14th World Conference on Transport Research	H2-PO6: 1-10	July 10-15, 2016 Shanghai, China
21	Shashankkuran a and Kojiro Suzuki	Hemi-Blunt Forward Stagnation Nose for Vehicles in Hypersonic Vehicles	2016 Applied Aerodynamics Conference	Paper A.2	July 19-21, 2016, Bristol (United Kingdom)
22	A Somasundaram	Domination in Fuzzy Graphs	National Conference on Recent Trends in Applied Mathematics	Invited talk	July 22-23, 2016 St.Joseph's College of Arts & Science, Cuddalore, India
23	Bajpai, Priti, Mohammed Shibil	Layers of Commerce: Modelling the Onion Trade of Dubai	18th International conference on Applied Mathematics, ICAM 2016	published online as vol: 10 no: 7 at: <a href="http://waset.org/archive">http://waset.org/archive</a>	July 28-29, 2016, London , United Kingdom ,
24	Kanuganti, S., Sarkar, A. K., Singh, A. P.	Impact Assessment of Road Construction on Rural Accessibility: A Case Study in India	Proceedings of National Conference on Fifteen Years of PMGSY (FYPMGSY)-2016	D-4: 1-17	August 6-7, 2016, Indian Institute of Technology Roorkee, Roorkee, India
25	Mane, A. S., Gujarathi, S. N., Arkatkar, S. S., Sarkar, A. K., Singh, A. P.	Methodology for Pavement Condition Assessment and Maintenance of Rural Roads	Proceedings of National Conference on Fifteen Years of PMGSY (FYPMGSY)-2016	C-6: 1-14	August 6-7, 2016, Indian Institute of Technology Roorkee, Roorkee, India
26	Lekhar.Nair, Sarathsaleem, Sujalad. Shetty,	Scalable Interactive Geo Visualization Platform for GIS Data Analysis	2nd IEEE International Conference on Big Data Intelligence and Computing	pg.37	August 8-10, 2016 conducted at Auckland, New Zealand
27	A.S Rao	Entry & New Venture Creation	AOM Conference 2016.	--	August 8, 2016, Anaheim, California , USA
28	Wagale, M., Singh, A. P., Singh, A.	Neural Networks approach for evaluating quality of service in public transportation in rural areas	India International Conference on Information processing (IICIP-2016)	TS 4: SC&EC-IV-540	August 12-14, 2016 Delhi Technological University, India
29	Iype, E.	Parameterization of a reactive force field using a Monte Carlo Simulation	NSSCCS ADF ReaxFF Workshop 2016	Invited expert lecture (online from BPDC) <a href="http://www.nssccs.ac.uk/ADF2016.php">http://www.nssccs.ac.uk/ADF2016.php</a>	September 27-28, 2016, Imperial College London
30	A. Arivarasi, R. Anand Kumar	3D Printing of Copper Filament for Layered Sensor Fabrication	World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS '16)	--	September 28-30, 2016 Dubrovnik, Croatia,

Sl. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
31	Kavya, Arivarasi A, Anand Kumar R, Jegatha Nambi Krishnan	Design & Material Characterization for 3D Printing Sensor	World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS'16)	--	September 28-30, 2016 Dubrovnik, Croatia,
32	Shibani Nasser, Arivarasi A, Kapil Bansal, Anand Kumar R	Modelling and 3D printing of Packaging for Water Quality Sensor	World Scientific and Engineering Academic And Society (WSEAS), 9th International Conference on Circuits, Systems and Signals (CSS '16)	--	September 28-30, 2016 Dubrovnik, Croatia,
33	Swati Sinha, T V Chandrasekhar, Mary Lourde R.	"An Objective Method for the Removal of RFI and Clutter in Wind Profiler Doppler Spectra	Proceedings of 2016 IEEE 59th International MidWest Symposium on Circuits And Systems (MWSCAS)	pp. 241 – 244	October, 2016, Abu Dhabi, UAE DOI : 978-1-5090-0916-9/16
34	Hifzan Ahmad and Anuj Kumar	Impact of Advance Computing Technologies in Science and Engineering	International Conference on Advanced Computing and Software Engineering (ICACSE-2016)	--	October 14-15, 2016, KNIT, Sultanpur, INDIA
35	Lauren A Fernandes And Gomathi Bhavani Rajagopalan	Comparative Performance Evaluation and Assessment of Organic Light Emitting Diodes and Light Emitting Diodes	IEEE 59th International Midwest Symposium on Circuits and Systems	Paper No. 1570284858	October 16-19, 2016, Abu Dhabi, UAE
36	Friedrich Samuel And Gomathi Bhavani Rajagopalan	GPS Based System for Detection and Control of Maritime Boundary Intruding Boats	IEEE 59th International Midwest Symposium on Circuits and Systems	Paper No. 1570284862	October 16-19, 2016, Abu Dhabi, UAE
37	Shamith Louis Saldanha, Arivarasi A, Anand Kumar R	Design of a Stepper Motor for Nano Resolution 3D Printing	World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16),	pp280-285, Vol I	October19-21, 2016, San Francisco, USA
38	Ishaan Vasant, Arivarasi A, Anand Kumar R	3D Printing File Format and Design for Creating Material compositions for Porous Structure	World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16),	pp327-332, Vol I.	October19-21, 2016, San Francisco, USA
39	Arivarasi A, Anand Kumar R, Jegathanambi Krishnan	Design & Material Characterization of Potassium Gold Cyanide Immersed Layers for 3D Printing Nano Sensor	World Congress on Engineering & Computer Science, International Conference on Electrical Engineering and Applications (ICEEA'16),	pp355-360, Vol I.	October19-21, 2016, San Francisco, USA

Sl. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
40	Swati Sinha, T V Chandrasekhar & Mary Lourde R	"Doppler Feature based Classification of wind profiler data" Dubai.	2016 International Conf. on Communication, Image and Signal Processing (CCISP 2016)	--	November, 2016 Dubai. (JPCS, IOP Press)
41.	A. Balasubramania n A Somasundaram	Institutional preparedness for e- governance in Indian Affiliating Universities: A study on the views of Administrative Faculty	4th Global Conference on Business & Social Sciences 2016		November 14- 15,2016 Blica Radisson Blu Hotel, Dubai, UAE
41	Srinivas,R. Singh, A.P. and Borthakur, T.A.	Impact Assessment of Open Drains in River Ganges Using Scenario Based Water Quality Modeling	Proceedings of Hydro 2016 International: 21 <sup>st</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering	Paper No. TS-III-C: ECC HYD-335	December 8- 10, 2016 CW&PRS PUNE, India
42	Puppala, H., Ingale, A., Sarkar, A. K., Singh, A. P.	Three-Step Floating Catchment Area Method to Quantify the Spatial Accessibility to Health Care facilities	12th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC-2016)	Paper No. 135-Best paper award	December 19- 21, 2016 Indian Institute of Technology Bombay, Mumbai, India
43	Sv Divyarashmi, A Somasundaram, S Arumugam	Global Secure Domination in Graphs	International Conference on Theoretical Computer Science and Discrete Mathematics	-	Dec 19-21, 2016 n-ARDMATH, Kalasalingam University, India
44	Dr. Bharat Bhushan Gulyani and Arshia Fathima	Introducing Ensemble Methods to Predict the Performance of Waste Water Treatment Plants (WWTP)	ICEPP 2016,	<a href="http://www.icepp.org/comm.html">http://www.icepp.org/comm.html</a>	December 25- 27, 2016 Kyoto, Japan,
45	Azhar Syed, Mary Lourde R	Hardware Security Threats to DSP Applications in an IoT network.	2016 IEEE International Symposium on Nanoelectronic and Information Systems (INIS)	--	December 2016 ABV-IIITM, 4Gwalior, India,
46	Sreeja Rajendran, Mary Lourde R	Ab-initio study on FinFETs and their application in IoT aided Robotics	ISED 2016	--	December 2016 IIT Patna, India,

Annexure B4-12  
(4 pages)**LIST OF RESEARCH PUBLICATIONS – 2016****Journal Publications**

S. No.	Author(s)*	Title of the Publication	Journal	Vol., Issue, Year	Pages
1	R. K. Keshri and A. B. Chattopadhyay	Modeling Simulation and Harmonic Analysis of a Series Resonant Inverter Feeding R-L Load considering Transformer Parameters	Journal of Research in Engineering and Applied Sciences	Vol. 01, Issue 01, 2016	pp 1-19
2	Tapan Kumar Datta	Inventory system with Defective Products and Investment Opportunity for Reducing Defective Proportion	Operational Research	Published online on 27 January, 2016 DOI 10.1007/s12351-016-02227-z	pp 1-16
3	S Nanda, P K Dash, T Chakravorti, Shazia Hasan	A Quadratic Polynomial Signal Model and Fuzzy Adaptive Filter for Frequency and Parameter Estimation of Non Stationary Power Signals	Measurement	Vol. 87, 2016	pp 274-293
4	Nivetha Gunaseelan and Shazi Shah Jabeen	Techniques of Politeness in Tamil and English: A Comparative Study	New Frontier-International Journal of Humanities and Social Sciences	Vol. 2, Issue 2, 2016.	pp 27-38
5	mal, Kavita S. Jerath	An Analysis of Present and Future of Solar Energy in Kingdom of Saudi Arabia along with a Comparative Study between Saudi Aramco Solar Car Park And Other Similar Projects In Gulf	International Journal of Advance Engineering and Research Development	Vol. 3, Issue 3, 2016	pp 15-25
6	Mary Lourde	Challenges and Advances in Finfet Device Technology	VLSI Circuits and Systems Letter	Vol. 2, Issue 1, 2016	pp 16 - 20
7	Karan Viraj Singh, Kavitas.Jerath	Thermo Electric Cooler	International Journal of Mechanical and Industrial Technology	Vol. 4, Issue 1, 2016	pp.78-84
8	SA Khan, Y Shehu, J W Chen	Gap Functions and Existence of Solution Of Simultaneous Equilibrium Problems	Afrika Matematika	Published online on 27 July, 2016 DOI-10.1007/s13370-016-0440-1	pp 1-13
9	Adhir Baran Chattopadhyay, Upala Banarjee and Sunil Thomas	Analysis of Finite Width Effects of Single-sided Linear Induction Motor using Hankel Functions	Research Journal of Applied Sciences, Engineering and Technology	Vol. 12, Issue 12, 2016, DOI: 10.19026/rjas et.12.2873	pp 1163-1175
10	Menon, Kiran; Sood Neeru & Rao, Nanduri Kameswara	Study of morpho-agronomic diversity and oil content in desert gourd ( <i>Citrullus colocynthis</i> (L.) Schrad.)	Australian Journal of Crop Science	Vol. 10, issue 7, 2016	pp 1000-1006
11	Vilas H. Gaidhane, Y. V. Hote, V. Singh	Emotion Recognition using Eigenvalues and Levenberg-Marquardt Algorithm-based Classifier	Sadhana: Academy Proceedings in Engineering Sciences	vol. 41, issue 4, 2016	415-423
12	Vilas H. Gaidhane, Y. V. Hote	A New Approach for Stability Analysis of Discrete Systems	IETE Technical Review	vol. 33, issue 5, 2016	pp 466-471

S. No.	Author(s)*	Title of the Publication	Journal	Vol., Issue, Year	Pages
13	Suhel Ahmad Khan , Javid Iqbal, Yekinishehu	Gap Functions and Error Bounds for Random Generalized Variational Inequality Problems	Journal of Inequalities and Applications	Open Access February,2016 DOI: 10.1186/s13660-016-0984-5	pp 1-17
14	J. Chen, Y.C Liou, Suhel Ahmad Khan, Z. Wand And C.F. Wene	A Composition Projection Method for Feasibility Problems and Applications to Equilibrium Problems	Journal of Nonlinear Science and Applications	Vol. 9,issue2, 2016	pp 461-470
15	Suhel Ahmad Khan	Generalized Vector Equilibrium Problem with Pseudomonotone Mappings	Journal of the Egyptian Mathematical Society	Vol. 24, Issue 1, 2016	pp 68-72
16	Snatika Sarkar And Vijaya Ilango	Advancement in Applicability of Carbon Nanotubes in Progressive Fuel Cells	Journal of Chemistry & Chemical Technology,	Vol. 10, issue 2, 2016	pp 227-234
17	R. Rajan, M. Selvaraj, S. Palraj, G. Muralidharan,B. Muralidharan	Studies on the Anticorrosive and Antifouling Properties of the <i>Gracillaria edulis</i> Extract Incorporated Epoxy Paint in the Gulf Of Mannar Coast, Mandapam, India	Progress in Organic Coatings	Vol. 90, 2016	pp 448 - 454
18	P. Arivazhagan , R. Ramesh , Ramadoss Roop Kumar , Eric Faulques ,Fouad Bennis , K. Baskar	Structural and Electrical Characteristics of gan, n-gan and a1xga1_xn,	Journal of Alloys and Compounds	Vol. 656, 2016	pp 110-118
19	Mubeena Iqbal And Khairunnisa Abrar	Soap Operas: A Potential Tool for Women Empowerment	GSTF Journal on Media & Communications	Vol. 3, issue 1, 2016	pp 10-15
20	Amritesh, Sc Misra, J Chatterjee	Quality Framework for Credence Based Informational Services: Applying KANO's Method	Total Quality Management & Business Excellence	Published Online April 2016 DOI.org/10.1080/14783363.2016.1171704	pp 1-32
21	Kumar Shanmugam Johannes Liljenhjerte, Priyank Upadhyaya	Hyperelastic Strain Measurements and Constitutive Parameters Identification of 3D Printed Soft Polymers by Image Processing	Additive Manufacturing	Vol. 11, 2016	pp 40-48
22	F López Jiménez, Priyank Upadhyaya, J Liljenhjerte, Pm Reis, S Kumar	Soft Optical Composites for Tunable Transmittance	Extreme Mechanics Letters	Vol. 9, Part 2, 2016	pp 297-303
23	Mohammed Subin, C.Periasamy , Y.K.Krishna	Design and Analysis of Wheel Rim Using Combinations of Number of Spokes and Materials	Journal of Advance Engineering and Research Development	Vol. 3,issue 3,2016	pp.130-138
24	Srihari, S., & Periasamy, C.	Study of the existing solar technology and applicability of alternate third generation photovoltaic technology In Dubai	International Journal of Research in Engineering and Technology	Vol.5,issue6,2016	pp 62-64

S. No.	Author(s)*	Title of the Publication	Journal	Vol., Issue, Year	Pages
25	M.Baalaganapathy, C.Periasamy	Computational Fluid Dynamics Simulation of Single Screw Extruders in Cable Industries	International Journal of Research in Engineering and Technology	Vol 5, Issue3,2016	pp.85-59
26	V. Naranje, S. Kumar, S. Kashid, A. Ghodkeh. M. A. Hussein	Prediction of life of deep drawing die using artificial neural network	Advances in Materials and Processing Technologies	Vol. 2, Issue1, 2016	Pp.132-142
27	Shashank Khurana, Kojiro Suzuki And E. Rathakrishnan	Flow field behavior with Reynolds number variance around a spiked body	Modern Physics Letters B	Vol. 30 DOI: <a href="http://dx.doi.org/10.1142/S0217984916503620">http://dx.doi.org/10.1142/S0217984916503620</a>	pp.1-13
28	Baalaganapathy Manohar, Miller Jothi, Udaykumar R	The effects of thermal barrier coating on thermal stress and temperature distribution in a diesel engine piston for Magnesia/Yittria partially stabililized zirconia	International Journal of Research in Mechanical Engineering Technology	Vol 6, issue1, 2016	pp.9-15
29	lype, E., Esteves, A. C. C., & De With G.	Mesoscopic simulation of hydrophilic cross-linked polycarbonate polyurethane networks: Structure and Morphology.	Soft Matter, 12,	Vol.12, Issue26,2016	pp.5029-5040
30	Kalathil, S. & Ghosh Chaudhuri, R.	Hollow Palladium Nanoparticles Facilitated Biodegradation of an Azo Dye by Electrically Active Biofilms.	Materials	Vol. 9, issue ,2916	pp.653-663
31	Kanuganti, S., Sarkar, A.K., Singh, A.P.	Evaluation of access to health care in rural areas using enhanced two-step floating catchment area (E2SFCA) method	Transport Geography	Vol. 56, 2016	pp. 45-52
32	Dandautiya, R., Mayekar, P., Toshniwal, M., Singh, A. P. And Kundu S.	Leaching Characteristics of fly ash generated from Suratgarh thermal power plant	Earth Sciences and Engineering	Volume 9(1), 2016	pp. 167-173
33	V. Gerbaud, M. Teles Dos Santos, N. Pandya, J. M. Aubry	Computer aided framework for designing bio-based commodity molecules with enhanced properties	Chemical Engineering Science	Article in Press <a href="http://dx.doi.org/10.1016/j.ces.2016.04.044">Http://dx.doi.org/10.1016/j.ces.2016.04.044</a>	--
34	Rajib Ghosh Chaudhuri, Santanu Paria	Au and Ag/Au double-shell hollow nanoparticles with improved near infrared surface plasmon and photoluminescence properties	Journal of Colloid Interface Science	Vol.,461 2016	pp.15-19

S. No.	Author(s)*	Title of the Publication	Journal	Vol., Issue, Year	Pages
35	Lekha R. Nair, Dr. Sujala D. Shetty	Streaming twitter data analysis using spark for effective job search	Journal of theoretical and applied information technology	Vol. 80, No.2, 2016	pg. 349-353
36	Swati Sinha , T.V.Chandrasekhar Sarma And Mary Lourde R	" Removal of RFI and Clutter in Atmospheric Radar Power Spectra"	International Journal of Applied Engineering Research	Vol. 11, issue 24 2016	pp. 11864-11870
37	Swati Sinha, T V Chandrasekhar Sarma, Mary Lourde R	Estimation of Doppler Profile Using Multi-Parameter Cost Function	IEEE Trans. On Geoscience and Remote sensing	Vol. 55, issue 2, 2017, DOI : 10.1109 /TGRS.2016.2616918	pp. 932-942,
38	Aamir Jamal, A.R. Abdul Razak	Design and analysis of LNA for RF Wireless Communication at 2 Ghz	International Journal of Research in Engineering and Applied Sciences	Vol. 6 Issue 11, November - 2016	pp. 185-188

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(2 pages)

## List of Higher Degree Dissertations

### Second Semester 2015-2016 (February 2016 to June 2016)

During the **Second Semester 2015-2016**, 16 Higher Degree dissertation projects have been completed. The list of completed Higher Degree dissertations during Second Semester 2015-2016 is given in below

SI No	Name	Topic	Supervisor
1	Ram Krishn Mishra	Design of an efficient Content based information Retrieval System for Distributed Multimedia Data on image and video	Dr. B. Vijayakumar
2	Sushil Rukhaiyar	Secure Cloud Architecture	Mr. Nand Kumar
3	Menon Vidya Manoharan	Analyzing the Features of Internet of Things (IOT) and Designing a Suitable Prototype for Healthcare Management	Dr. M Madijagan
4	Abhiroop Santra	Design, Analysis and Implementation of University Management System using 3-tire Model Hosted in Cloud	Mr. Nand Kumar
5	Priya Sajesh	Design and Implementation of a Eucalyptus Cloud Based Interactive Mobils Live Video Learning System	Dr. M Madijagan
6	Anubha Punj	Big Data Analytics: Survey in Health Care	Dr. Siddhaling Urolagin
7	Karthik Natarajan	Design and Implementation of Reflection Architectural Pattern for Pipes & Filters and MVC Combination systems	Dr. B. Vijayakumar
8	D Purushothaman	Investigation of mechanical and Tribological properties of Hybrid Aluminum Composite by Optimizing the Parameters using Genetic Algorithm	Dr.C. Periasamy
9	Anshul Singhal	To Study the Effect of Camless Valve Actuation on Engine Performance	Dr. Ram Karthikeyan
10	Vipin Venugopal	Investigation of Tribological Behaviour of Deep Drawing Die Steel	Dr. Vishal Naranje
11	Aswin Thambi Tharakan	Design of Gate Valve with Fluid Arrestor to Improve HVAC and plumbing system Performance	Dr. M V N Sankaram
12	Vignesh S	Issues & Challenges Faced by Micro Level Entrepreneurs in U.A.E	Dr. A. Srinivasa Rao
13	Antony Jerish	Managers role in implementation of different ways of securing the network	Dr. Sujala D Shetty
14	Fernandes Richard Flaviano	Time – Driven Activity Based Coasting (TABC) - an Application Based Case Study	Ms. Pushkala Muralidharan



15	Karthik Thiagarajan	Analysis of Sales Communication – A Managerial Perspective	Dr. Mubeena Iqbal
16	Pooja Rajeevan Nair	Benefits and Challenges of SAP Warehouse Management System	Ms. Pushkala Muralidharan

During the **First Semester 2015-2016**, 9 Higher Degree Dissertation projects were completed. The list of completed Higher Degree dissertations during First Semester 2016-2017 is given in below

### **First Semester 2016-2017(September 2016 to January 2017)**

<b>Sl. No.</b>	<b>Name</b>	<b>Topic</b>	<b>Supervisor</b>
1	Amol Bidrolkar	Usability – Based Quality Factor for User-Centered Design in Software Development Process	Mr. Nand Kumar
2	Deepasankari R	Design and Implementation of Vertical Transportation Space Planner Using 3-Tier Architecture in C#.NET and SQL	Dr. S Vadivel
3	Tanmay Bohra	Experimental Investigations of Bio Diesel on a Variable Compression ration Engine	Dr. R. Udayakumar
4	Sarath Menon	Design of System for recycling of Rock Wool Insulation	Dr. Vishal Naranje
5	Sharma Aditi Malay Bindu	Assessing the role of Service Quality on Customer Satisfaction – A Study of Thyssenkrupp Elevators UAE LLC	Ms. Pushkala Muralidharan
6	Syed Zain Ahmad	Modes of Financing a Startup in UAE	Ms. Pushkala Muralidharan
7	Ebenraj Rathish Bright D	HR Practices – Recruitment Process in UAE	Dr. A. Srinivasa Rao
8	Nair Anish Rajan	Issues and Challenges Faced by Micro Level Entrepreneurs in UAE	Dr. A. Srinivasa Rao
9	Alan John M	Analysis of Project Management Practices in UAE	Dr. Anand Kumar

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(2 pages)

**List of First Degree Theses  
Second Semester 2015-2016 (February 2016 to June 2016)**

Sl. No	Name	Topic	Supervisor
1	Shreshth Sipani	Study of Tribology and Corrosion on 316L Stainless Steel	Dr. Vincent Shantha Kumar
2	Jaikaran Walia	Design and Analysis of Formula I car Suspension	Dr. M V N Sankaram
3	Sneha Jayan	Optimisation & Control Of Rotary Klin In A Cement Plant	Dr. R Swarnalatha
4	Niyati Joshi	Simulation Of Environmental Gas Dispersion	Dr. B. B. Gulyani
5	Ishana Avinash Rajguru	Analysis Of Selected Grass Biomass Treated With Saline And Recycled Wastewater For Biomass Characterization	Dr. B. G. Prakash Kumar
6	Omar Sultan Qureshi	Optimizing The Carbon Dioxide Sequestered For Nostoc Caldicola In A Pilot Photo Bioreactor	Dr. Nishant Pandya
7	Akshay Sharma	Speed Control Of An Electric Vehicle Considering Other Performance Figures Into Account	Dr. A.B.Chattopadhyay
8	Arvind Desikan	Construction Of Fpga Based Control System For Three -Level Neutral Point Clamped Converter	Dr. A.B.Chattopadhyay
9	Inderveer Singh Atwal	Design and Implementation of Battery Management System in Electric Vehicle	Dr. Sunil Thomas
10	Kavya Jayan	Analysis and Characterization of Materials for 3D Printing	Dr. Anand Kumar
11	Harshil Kaushik Patel	Development of Image Based Visual Servoing Scheme for Inspection Maintenance and Repairing Operations on Petroleum Pipelines	Dr. R. Karthikeyan
12	Rahul Dahiya	Analyzing the Effect and Efficiency of Wind Tower on Fresh Air Handling Unit (FAHU) for Medical Buildings.	Dr. C.Periasamy
13	Afshine Anwer Ali	Design & Fabrication of Hydraulic Dough Divider – Design and Simulation	Dr. R. Karthikeyan
14	Mohammed Zoheb Hynus	Game Engine Design AD Implementation Using GPUS	Dr. V. Santhosh Kumar
15	Dhruv Pant	Design And Implementation Of Collision Detection Technique For 3D Graphic Objects	Dr. V. Santhosh Kumar
16	Prashanth Srinivasan	Cytotoxicity and Analysis of Biologically Produced Heavy Metal Nanoparticles	Dr. Trupti Gokhale
17	Manisha Kakwani	Modeling And Simulation Of MIMO-OFDM System For 5G Wireless Communication	Dr. M. Raja

**First Semester 2016-2017 (September 2016 to January 2017)**

Sl. No.	Name	Topic	Supervisor
1	Radhika Narain	Developing Enzymatic and Antibody-Based Tools for Decoding Complex Drugs and Diseases	Dr. D. Jalaluddin Shariff
2	Aman Harish Jotwani	Voxelization for Indirect ILLUMINATION	Dr. Siddhaling Urolagin

<b>Sl. No.</b>	<b>Name</b>	<b>Topic</b>	<b>Supervisor</b>
3	Saheel Iqbal	Optimization of Turning Parameters of Aluminium Alloy (A-366 Grade) By Using Taguchi Method	Dr. Sankaram M V N
4	Sidharth Lahoti	User Interface Design	Mr. Nand Kumar
5	Khoja Zaidali Haiderali	Hybrid Recommender System for College Courses	Dr. Sujala D.Shetty
6	Shreya Jain	Image Captioning Using Deep Learning	Dr. Sujala D.Shetty
7	Arun S	Implementing Deep Learning Models on New Datasets	Dr. V Santhosh Kumar
8	Amartya Das Sharma	Heterogeneous Query Formulation and Plan Generation for Distributed Multimedia Objects	Dr. B. Vijaykumar
9	Mohit Gupta	Efficient Keyword Search Over Encrypted Cloud Data	Dr. V Santhosh Kumar
10	Juhi Malani	Fingerprint Classification Using Neural Networks	Dr. S Vadivel
11	Karra Mounica	Design of a Recommender System for a Cloud based Healthcare Application, Involving Contextual Data	Dr. B. Vijaykumar

Annexure B4-15  
(3 pages)

**DETAILS OF DISTRIBUTION OF PS I STUDENTS AND FACULTY OVER PRACTICE SCHOOL- I  
STATIONS DURING THE SUMMER TERM 2015-2016**

(09.06.2016 – 03.08.2016)

S. No.	Station	No. of Students	No. of Faculty
<b>I. Stations in United Arab Emirates (UAE)</b>			
<b>Ia. Stations at Abu Dhabi</b>			
1.	ALSA Engg & Construction LLC	4	1
2.	Fohmics	2	1
3.	Gulf and Safa Dairies Co LLC.*	2	1
4.	Huawei Middle East	2	1
5.	Standard Global Quality Certification*	4	1
6.	The Petroleum Institute	3	1
7.	TUV Nord*	4	1
<b>Ib. Stations at Ajman</b>			
8.	Elfit Arabia*	4	1
9.	Lavish Livings International FZE*	6	1
10.	Moalajah FZC	4	1
<b>Ic. Stations at Dubai</b>			
11.	Abhath Weights Measuring Lab	3	1
12.	Adapt ME	2	1
13.	Al Abbas Group	4	1
14.	Atlas Copco Services Middle East	7	1
15.	Automation and Power Solution Tgd.FZE	3	1
16.	Aver Solutions*	2	1
17.	Comba Telecom	3	1
18.	Contec Technologies	2	1
19.	EAGLE Industries DWC-LLC*	4	1
20.	EhAPI Tech*	14	1
21.	Elements WJD	3	1
22.	Emerson (Rosemount) FZE*	2	1
23.	Emerson (Fischer) FZE*	1	1
24.	Emirates Transformer and Switchgear Ltd	4	1
25.	ESMA Group*	5	1
26.	ETA Engineering	9	1
27.	Fedex	3	1
28.	Gargash Motors & General Trading LLC	2	1
29.	Globelink West Star Shipping	3	1
30.	Granteq*	4	1
31.	Hasani Group of Companies*	3	1
32.	HIMA ME	3	1
33.	Intercoil International LLC*	6	1

34.	Kingsmen ME LLC*	3	1
35.	KPTAC Technologies*	4	1
36.	L & T Electrical & Automation*	5	1
37.	Levtech Consulting*	2	1
38.	MSD-Dubai Healthcare City*	2	1
39.	MSD, Dubai Internet City*	3	1
40.	Oasis Investment Company	3	1
41.	Paramount Computer Systems FZ LLC	4	1
42.	Prime Global Technology	4	1
43.	Procal Measuring & Control Equipment*	2	1
44.	RAS Infotech Ltd	4	1
45.	Roto Packing Materials Industry Co LLC*	2	1
46.	Sanbook Quality Consultancy*	11	1
47.	Scan Technology LLC*	5	1
48.	Screen Check	4	1
49.	Spira Power Gasket Mfg. LLC	6	1
50.	StarB2B Consulting Services*	3	1
51.	Steinweg-Sharaf	4	1
52.	Tech Robotix	3	1
53.	Topnet Distribution FZCO*	3	1
54.	TUV Nord*	3	1
55.	TWINVEY Electric Consultancy	2	1
56.	URS Testing Laboratories LLC*	6	1
57.	XTL Marine LLC	3	1
58.	Young and Mubeen Controls FZ LLC*	6	1
59.	Zahara Security Systems & Electricals LLC*	3	1
60.	Zio Technologies LLC*	3	1
<b>Id. Stations at Ras Al-Khaimah</b>			
61.	Gateway Trading LLC	4	1
62.	RAK Ceramics	2	1
63.	RAK Paints	3	1
<b>le. Stations at Sharjah</b>			
64.	Al Nawras Steel Co.LLC	5	1
65.	Central Motors & Equipment (Bosch)*	2	1
66.	Burj Eiffel International Lubricant Industry, LLC	7	1
67.	Computer Networks Middle East	3	1
68.	Consilium Middle East FZ LLC	4	1
69.	Diplomat Engineering LLC	4	1
70.	L&T Power Transmission and Dist.	5	1
71.	Verger et Delporte Ltd	3	1

<b>II. Stations in India</b>			
<b>Ila. Stations at Chennai</b>			
72.	Alstom Ltd	4	1
73.	Kothari Petrochemicals Ltd.	6	1
74.	Motherson Automation Engineering and Technologies	3	1
75.	Ramco Systems	3	1
76.	Siemens	5	1
77.	Vinzas Solutions India Pvt. Ltd.	3	1
<b>Ilb. Stations at Delhi</b>			
78.	ARESS Auto	4	1
79.	Asahi India Glass Ltd	7	1
80.	BHEL Power	3	1
<b>Ilc. Stations at Faridabad</b>			
81.	Indian Oil Corporation R & D Centre	5	1
<b>Ild Stations at Gurgaon</b>			
82.	Archaic Solutions OPC Pvt. Ltd.	5	1
83.	Carrier Midea India Pvt. Ltd.	4	1
84.	Jindal Buildsys Ltd.	4	1
<b>Ile. Stations at Hyderabad</b>			
85.	Cyient Ltd.	6	1
86.	Euroflex Transmissions India Pvt. Ltd.	9	1
87.	Naina Power Pvt. Ltd.	8	1
88.	Sujana Metal Products Ltd.	8	1
<b>Ilf. Stations at Mumbai</b>			
89.	FlyJac Logistics Pvt. Ltd.	5	1
90.	Hindalco Industries	3	1
91.	L&T Heavy Engineering Ltd.	4	1
92.	L & T Infotech	5	1
93.	Mahindra & Mahindra Automotive Sector	4	1
94.	Mahindra & Mahindra	5	1
95.	Paladion Networks	3	1
96.	Tata Consultancy Services	5	1
<b>Ilg. Stations at Noida</b>			
97.	Resistoflex Pvt. Ltd.	4	1

**Summary:**

Total number of students	404
Total number of Stations	97
Total number of Faculty	33**

**Note:**

\* - also PS II station

\*\* - Each PS I Faculty was allotted more than one station to monitor.

Annexure B4-16  
(3 pages)**SOME PRACTICE SCHOOL- II STATISTICS**

Statistical Details of the Distribution of Students &amp; Faculty over Practice School-II during the year 2016:

S. No.	Name of the PS Station	Second Semester 2015-16 01.02.2016 – 10.07.2016		First Semester 2016-17 01.08.2016 – 04.01.2017		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>A. Stations at Abu Dhabi</b>						
1	ATECO	3	1	-	-	3
2	Central Motors & Equipment (BOSCH)	3	1	-	-	3
3	Corodex Industries LLC	-	-	2	1	2
4	Gulf & Safa Dairies Co. LLC*	3	1	-	-	3
5	Litwin PEL	2	1	-	-	2
6	Microhit Technologies	4	1	-	-	4
7	Protiviti	1	1	-	-	1
8	Standard Global Quality Certificates*	-	-	1	1	1
9	TUV NORD Middle East*	5	1	4	1	9
10	Yokogawa Middle East	2	1	-	-	2
<b>B. Stations at Ajman</b>						
11	Elfit Arabia*	1	1	2	1	3
12	Lavish Livings International FZE*	3	1	3	1	6
<b>C. Stations at Dubai</b>						
13	ATECO	2	1	-	-	2
14	Aver Solutions*	-	-	3	1	3
15	Azbil Corporation	2	1	-	-	2
16	BICC Components Ltd.	2	1	-	-	2
17	Central Motors & Equipment (BOSCH)	1	1	-	-	1
18	CNS Technologies	-	-	2	1	2
19	Comin Touch Technology LLC	-	-	2	1	2
20	Croda Middle East	1	1	-	-	1
21	D-Link Middle East & Africa	2	1	-	-	2
22	Darvesh Group	4	1	-	-	4
23	Eagle Industries DWC-LLC*	6	1	5	1	11
24	Eastern Biotech & Life Sciences FZ LLC	4	1	3	1	7
25	ECS Middle East LLC	3	1	-	-	3
26	ehAPI Technologies, DSO, Dubai*	-	-	9	1	9
27	Emerson Process Mgt. FZE*	14	1	14	1	28
28	ESMA Group*	-	-	4	1	4
29	ETA M&E	4	1	-	-	4
30	ETA Power Projects Division	3	1	-	-	3
31	Gargash Lighting Systems LLC	2	1	-	-	2
32	GE Power and Water	3	1	-	-	3

S. No.	Name of the PS Station	Second Semester 2015-16 01.02.2016 – 10.07.2016		First Semester 2016-17 01.08.2016 – 04.01.2017		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
33	Granteq LLC*	-	-	3	1	3
34	Hassani Group of Companies*	3	1	2	1	5
35	International Center for Biosaline Agriculture	4	1	2	1	6
36	ICT Health LLC	2	1	-	-	2
37	IndoGulf ME	-	-	5	1	5
38	Intercoil International LLC*	7	1	8	1	15
39	Johnson Controls	2	1	2	1	4
40	Kingsmen Middle East LLC*	-	-	3	1	3
41	KPTAC Technologies*	4	1	3	1	7
42	L&T Electrical & Automation*	6	1	5	1	11
43	Levtech Consulting*	3	1	-	-	3
44	Lucy Switchgear FZE	4	1	2	1	6
45	Medcare Hospital	2	1	-	-	2
46	Merint LLC	1	1	-	-	1
47	MSD, Dubai Internet City*	6	1	3	1	9
48	MSD, Dubai Healthcare City*	-	-	5	1	5
49	Mercentile Information & Technocommunication Technology Co. LLC (MITTCO)	-	-	3	1	3
50	Oriental Dynamic Solutions	-	-	2	1	2
51	Procal Measuring & Control Instruments*	-	-	3	1	3
52	Protiviti	4	1	-	-	4
53	Roto Packing Materials Ind. Co. LLC*	3	1	-	-	3
54	Sanbook Quality Consultancy*	-	-	3	1	3
55	Scan Technology LLC*	4	1	2	1	6
56	Sciencetech	-	-	2	1	2
57	Siemens	5	1	1	1	6
58	Sprint Middle East LLC	4	1	-	-	4
59	StarB2B Consulting Service*	-	-	2	1	2
60	Telematics Networking & Communication LLC	4	1	-	-	4
61	Thyssenkrupp Elevator UAE LLC.	2	1	3	1	5
62	Topnet Distribution FZCO*	4	1	3	1	7
63	Triway World	9	1	-	-	9
64	Unilever Gulf FZE	-	-	3	1	3
65	URS Testing Laboratory LLC*	-	-	3	1	3
66	YallaSpree	2	1	2	1	4
67	Young and Mubeen Controls FZ LLC*	4	1	3	1	7
68	Zahra Security Systems & Electricals LLC*	-	-	3	1	3
69	Zio Technologies LLC*	3	1	-	-	3



S. No.	Name of the PS Station	Second Semester 2015-16 01.02.2016 – 10.07.2016		First Semester 2016-17 01.08.2016 – 04.01.2017		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>D. Sharjah</b>						
70	Central Motors & Equipment (BOSCH)*	1	1	2	1	3
71	Cluttons, Sharjah	-	-	2	1	2
72	Elji International FZE	3	1	-	-	3
73	ESRI	2	1	2	1	4
74	Perfect Industries FZC	-	-	2	1	2
75	Petrofac International Ltd	4	1	-	-	4
76	Rove Automation & Installation Works Ltd.	2	1	-	-	2

**Summary:**

Total No. of PS II stations in Semester II – 54

Total No. of PS II stations in Semester I – 43

Total No. of students in Semester II – 182

Total No. of students in Semester I – 142

Common Stations in Both Semesters – 21

\* Also PS I stations

Annexure B4-17  
(2 pages)

## 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	04	07
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

### 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-	I	August 2009 – January 2010	73	155	60

10		(02.08.2009 to 14.01.2010)			
	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
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)	38	140	28

Annexure B4-18  
(3 pages)

**FACILITIES AVAILABLE AT PSI STATIONS DURING THE YEAR 2015-2016**

S. No.	STATION	Out of Pocket allowance in AED & other facilities
<b>I. Stations in United Arab Emirates (UAE)</b>		
<b>Ia. Stations at Abu Dhabi</b>		
1	ALSA Engg & Construction LLC	1000
2	Fohmics	1000
3	Gulf and Safa Dairies Co LLC.	1000
4	Huawei Middle East	1000
5	Standard Global Quality Certification	500
6	TUV Nord	1000
<b>Ib. Stations at Ajman</b>		
1	Elfit Arabia	750
2	Lavish Livings International FZE	1500
<b>Ic. Stations at Dubai</b>		
1	Al Abbas Group	1000
2	Atlas Copco Services Middle East	1000
3	Automation and Power Solution Tgd.FZE	1000
4	Aver Solutions	1000
5	Comba Telecom	1000
6	EAGLE Industries DWC-LLC	1000
7	EhAPI Tech	1500
8	Emerson (Rosemount) FZE	1000
9	Emerson (Fischer) FZE	1000
10	Gargash Motors & General Trading LLC	1000
11	Globelink West Star Shipping LLC	1000
12	Granteq	500
13	Intercoil International LLC	1500
14	Kingsmen Middle East LLC	1000
15	Levtech Consulting	750
16	MSD-Dubai Healthcare City	2000
17	Paramount Computer Systems FZ LLC	1500
18	Procal Measuring & Control Equipment	750
19	RAS Infotech Ltd.	1000
20	Roto Packing Materials Ind. Co. LLC.	750
21	Sanbook Quality Consultancy	500
22	Screencheck ME FZ LLC	750
23	Steinweg-Sharaf	1000
24	Topnet Distribution	1000

S. No.	STATION	Out of Pocket allowance in AED & other facilities
25	Young & Mubeen Controls	500
26	Zahara Security Systems & Electricals LLC	1500
27	Zio Technologies LLC	1000
<b>Id. Stations at Ras Al-Khaimah</b>		
1	RAK Ceramics	1000
2	RAK Paints	1000
<b>Id. Stations at Sharjah</b>		
1	Cluttons	1500
2	Petrofac International Ltd.	4500

**FACILITIES AVAILABLE AT PS II Sem I STATIONS DURING THE YEAR 2015-2016**

S. No.	STATION	Out of Pocket allowance in AED & other facilities
<b>I. Stations in United Arab Emirates (UAE)</b>		
<b>Ia. Stations at Abu Dhabi</b>		
1.	Central Motors & Equipment (BOSCH)	1500
2.	Corodex Industries LLC	1000
3.	Litwin PEL	1000
4.	Protiviti	1500
5.	Standard Global Quality Certificates	500
6.	TUV NORD Middle East	1000
7.	Yokogawa Middle East	1000
<b>Ib. Stations at Ajman</b>		
1.	Elfit Arabia	1000
2.	Lavish Livings International FZE	1500
<b>Ic. Stations at Dubai</b>		
1.	Aver Solutions	1000
2.	Adapt ME	1000
3.	Azbil Corporation	800
4.	BICC Components Ltd.	1000
5.	Central Motors & Equipment (BOSCH)	1500
6.	CNS Technologies	1000
7.	Comin Touch Technology LLC	1000
8.	Croda Middle East	1500
9.	D Link ME,JAFZA	1500
10.	Darvesh Group	1000
11.	Eagle Industries DWC-LLC	1500
12.	Eastern Biotech & Life Sciences FZ LLC	1000
13.	ECS Middle East LLC	1000
14.	ehAPI Technologies, DSO, Dubai	1500
15.	Emerson Process Mgt. FZE,JAFZA	1500
16.	GE Power and Water	1500

17.	Granteq LLC	1000
18.	International Center for Biosaline Agriculture	1500
19.	ICT Health LLC	2000
20.	Intercoil International LLC	2000
21.	Johnson Controls	1500
22.	Kingsmen Middle East LLC	1500
23.	Johnson Controls	1000
24.	L & T Electrical & Automation,JAFZA	1500
25.	Levtech Consulting	1000
26.	Lucy Switchgear FZE,JAFZA	1500
27.	Medcare Hospitals	1000
28.	Merint LLC	1000
29.	Mercentile Information & Technocommunication Technology Co. LLC (MITTCO)	1000
30.	MSD,Health Care City	2000
31.	Oriental Dynamic Solutions	1000
32.	Procal Measuring & Control Instruments	750
33.	Protiviti	1500
34.	Roto Packing Materials Ind. Co. LLC	1500
35.	Sanbook Quality Consultancy	500
36.	Scientech	1000
37.	Siemens	3000
38.	Sprint Middle East LLC	1000
39.	Topnet Distribution	1500
40.	Triway World	1500
41.	Yalla Spree	750
42.	Young and Mubeen Controls FZ LLC	500
43.	Zahra Security Systems & Electricals LLC	1000
44.	Zio Technologies	1000
<b>Id. Stations at Sharjah</b>		
1.	Central Motors & Equipment (BOSCH)	2000
2.	Cluttons,	1500
3.	ESRI	3700
4.	Perfect Industries FZC	1000
5.	Petrofac International Ltd	3700

Annexure B4-19

(6 pages)

**LIST OF PROJECT ASSIGNMENTS FOR PS II - SECOND SEMESTER 2015-16**

1	ATECO, Abu Dhabi	
	1	Access Control Security Systems
	2	Supply, Installation, Testing & Commissioning for electrical work
	3	CCTV Monitoring and Surveillance System
2	ATECO, Dubai	
	4	RFID Security
	5	Integrated Intelligent Building Management System
3	Azbil Corporation, Dubai	
	6	Building Energy Management System
	7	Optimization and Energy Strategies for BMS
4	BICC, Dubai	
	8	Preparation of Company Handbook and Marketing Research
	9	Preparation of Marketing Documents and Research
5	Central Motors & Equipment (BOSCH), Abu Dhabi	
	10	Indirect Electric Welding on Bosch Diesel Pumps
6	Central Motors & Equipment (BOSCH), Dubai	
	11	Database and Diagnostics Systems for Workshop Testing Equipment at Central Motors
7	Central Motors & Equipment (BOSCH), Sharjah	
	12	Market Analysis and Strategy for Power Tools Distribution
8	Croda Middle East, Dubai	
	13	Croda Crop Care Activites
9	Darvesh Group, Dubai	
	14	Techniques of Orders in Oracle
	15	Integration of HR management and Communication
	16	Human Resource Database Management
	17	Performance Review System
10	D-Link Middle East & Africa, Dubai	
	18	Networking Solutions in D-Link
	19	D-Link WLAN Solutions
11	Eagle Industries DWC-LLC, Dubai	
	20	Design and Analysis of Eagle Automotive Suspension System
	21	Selection and Tuning of Engine for Sand Rail
	22	Design and Development of Braking, Transmission System and Reverse Engineering of Front Axle
	23	Implementation of Quality Management System ISO 9001;2015 for Genesis Aviation (subsidiary of Eagle Industries DWC-LLC)
	24	Optimization of Production & Setting of Drive Train for Sand Rail
	25	Electric Harness Design for Sand Rail Application & Optimization between Speed and Load of an Electric Vehicle
12	Eastern Biotech & Life Sciences FZ LLC, Dubai	
	26	Rare Genetic Disorders

	27	Food Intolerance and Food Allergy
	28	Prenatal Screening and Genetic Counseling In GCC countries
	29	Autoimmune Diseases and Their Genetic Causes
13	ECS Middle East LLC, Dubai	
	30	E-Commerce & Mobile Application Development
	31	Disaster Recovery Strategies for ORACLE Database
	32	CRM & Internet Marketing Strategies for E-Commerce Websites
14	Elfit Arabia, Ajman	
	33	Hydraulic System In a Cable Pulling Winch Machine
15	Elji International FZE, Sharjah	
	34	Study of Solar Power Systems
	35	Study of EPDM Rubber, Cooling Tower, Steam Boiler and Signages Boiler and Estimation of Signages
	36	QC Case Study in ALINTISHAR Water Proofing
16	Emerson FZE (Fisher), Dubai	
	37	Computer-Aided Design and Analysis of Safety Measures for Testing Equipment
	38	Study of Manufacturing Process and Implementation of Lean Management for Lead-time Reduction
	39	CAD/CAM Implementation for Small Scale Operations
	40	Maintenance and Analysis of CRM Database for Lifecycle Service and Education Department
	41	Implementing Various Methods to Optimize the Functioning of the Operations Department
	42	Process Workflow Automation for Emerson Final Control using Web Technologies
17	Emerson FZE (Rosemount), Dubai	
	43	Quality Management System
	44	Close Monitoring of Projects
	45	PMO Date Management
	46	Service Level Project- A Root-Cause Analysis to meet the Requested/Promised Shipment Date using Late Reason Codes (LRC)
	47	Role of Proactive Project Management in Successful Project Implementation
	48	Manufacturing Projects
	49	Role of Buyer & Planner in a Supply Chain
	50	Warehouse Management
18	ESRI, Sharjah	
	51	GIS Raster Enhancements Using Python Functions
	52	Design and development of raster types, Raster functions for GIS and their Quality their assurance
19	ETA M&E, Dubai	
	53	MEP Construction Activities
	54	HVAC System used in DAMAC Towers
	55	Mechanical and Plumbing Works
	56	Process of District Cooling Plant #3-Business Bay
	57	Organizational Structure of Various Departments at ETA-PPD
	58	Role of Various Departments of ETA-PPD
	59	Electric Substation turnkey project by ETA-PPD
20	Gargash Lighting Systems LLC, Dubai	



	60	Lighting Through Ages
	61	Introduction to Lighting Concepts and Lighting Design using DIALux
21	GE Power and Water, Dubai	
	62	Refinery Water Treatment in Sour Water Stripper and Cooling Tower
	63	Sour Water Analyses at GE Water & Process Technologies
	64	Chemical Treatment Analysis at GE Water & Process Technologies
22	Gulf & Safa Dairies Co. LLC, Abu Dhabi	
	65	Production and Marketing Strategies of Dairy Products in UAE
	66	Process Safety and Operations at Dairy Industry
	67	Organization Behaviour
23	Hassani Group of Companies, Dubai	
	68	Yoghurt Production and Quality Assessment
	69	Production and Quality Analysis of Cream
	70	Production and Qualitative Analysis of Evaporated Milk
24	ICBA, Dubai	
	71	Development of MAWRED Knowledge Hub Using Drupal
	72	Development of Knowledge Hubs using Drupal Platform
	73	Cross-platform apps for ICBA - Android and iOS
	74	Development of SNP Markers in HKT1; 5 Gene from Barley
25	ICT Health, Dubai	
	75	Implementation of CareSeva and HINAI EClaims
	76	Development of CareSeva and HINAI Modules
26	Intercoil International LLC, Dubai	
	77	Production time - Motion analysis and ERP
	78	Scope for Automation
	79	Automated Truck loading system
	80	Ergonomics in Mattress Manufacturing
	81	Implementing 5S on Shop Floor
	82	Process flow Optimization for Mattress Production
	83	Shop Floor Design in Mattress Manufacturing
27	Johnson Controls, Dubai	
	84	Consolidation of WEB Application
	85	Client computing for Johnson Controls International
28	KPTAC Technologies, Dubai	
	86	PHP Language and Google Apps
	87	Google Apps for Works
	88	Laravel - A PHP Framework for Web Artisans
	89	Application Testing and Bug Reports
29	L&T Electricals & Automation, Dubai	
	90	Execution of Factory Acceptance Test
	91	Re-engineering of PAGA Design
	92	Integration of Automation Systems
	93	Project Engineering of Telecommunication Systems

	94	Data Backup System
	95	Setup, Configuration and Documentation of Security Systems
30	Lavish Livings International FZE, Ajman	
	96	Data Warehousing and Web Hosters in E-Commerce Industry
	97	Drop-shipping and Their Applications.
	98	Emerging Trends in eCommerce
31	Levtech Consulting Dubai	
	99	Microsoft Dynamics ERP with Chef Middle East Case Study
	100	ERP Implementation with SIKA Case Study
	101	Enterprise Resource Planning Systems
32	Litwin PEL, Abu Dhabi	
	102	PS Activities Carried Out for PWRI Project
	103	Design basis for PWRI project (Pipeline/Piping)
33	Lucy Switchgear FZE Dubai	
	104	User Design Interface and RCT Trade Wastewater Transfer System
	105	Time and Motion Study of HV and LV Tests Performed on Units
	106	Layout of a Manufacturing Plant
	107	Kaizen Projects for Optimization of Production
34	Medcare Hospital Dubai	
	108	Medcare Hospital-An Overview of the Biomedical Department
	109	Accounting and Financial Management
35	Merint LLC, Dubai	
	110	Technical Design Dspects of Glass
36	Microhit Technologies, Abu Dhabi	
	111	System Integration Solution Provider Products and Distribution
	112	System Integration and Internet of things
	113	Polycom Microhit and IOT
	114	Security of Infrastructure and Role of IOT
37	MSD- BO, Dubai	
	115	Sales Report Automation and Development of a GUI for the EDGE Program
	116	Generation of Sales Reports and Data Visualization Using Tableau
	117	Database Management for EDGE Program
38	MSD PS, Dubai	
	118	Principles and Tools for Professional Graphic Design
39	MSD, Dubai	
	119	The Strategic Finance Function: An Automated Framework
	120	The Philosophy of Logo Design
40	Petrofac International Ltd. Sharjah	
	121	Study on Centrifugal Compressor
	122	Analysis and Equipment Procurement Process of Rotating Machines for Sru- Fadhili Gas Plant
	123	Distributed Control System in the Sulphur Recovery Unit- Fadhili Gas Project
	124	Manifold and Group Trunkline System for the GCS 29,30,31 in North Kuwait
41	Protiviti, Abu Dhabi	

	125	Analysis of Cyber Security Technology, Web Application Risk Management and Penetration Testing at Protiviti
42	Protiviti, Dubai	
	126	Business Continuity Management
	127	Impact of Digital Transformation Across Industries
	128	Smart Cities & Analysis of the Future Implications
	129	Cyber Laws and Cyber Crime in the UAE
43	Roto Packing Materials Ind. Co. LLC, Dubai	
	130	Maintainance Optimisation in a Manufacturing Industry
	131	Analytical Study of Quality Control Methods at Rotopacking and Standardisation of Values for Raw Material Testing
	132	Line Maintenance in Manufacturing Industry
44	Rove Automation, Sharjah	
	133	Structured Cabling and Its Pre-qualifications
	134	Building Automation and Guest Room Management
45	Scan Technology, Dubai	
	135	Business Intelligence and Data Visualization
	136	Detailed Analysis & Visualization on Universities in the US and Course Offerings
	137	A Study on Data Visualization & Data Mart
	138	A Report on Data Analysis With Tableau
46	Siemens LLC, Dubai	
	139	Analysis and Estimation of a Job-In-Hand Project at Siemens Dubai
	140	Tendering and Datapoint Schedules in the Siemens Service Department
	141	Design of PLC logic and Network Architecture
	142	Demand Flow ® : Chilled Water System Optimization
	143	Business Process Re-engineering and Digitalization
47	Sprint Middle East LLC, Dubai	
	144	Market for Customer Relationship Management Solution in Dubai
	145	Marketing & Analyzing of Online Feedback Solution
	146	Web Based Restaurant Evaluation and Feedback Solution
	147	Analysis and Marketing of Online Services in UAE
48	Telematics, Dubai	
	148	Networking Principles and Applications
	149	Structured Cabling Systems and Guest Room Management Systems
	150	Implementation of Project Management
	151	ELV and ICT Systems
49	Thyssenkrupp Elevator Dubai	
	152	Project Management at Thyssenkrupp
	153	Traffic Analysis of Elevators in High Rise Buildings
50	Topnet Distribution FZCO, Dubai	
	154	Structured Cabling
	155	A Study on Networking Cables, Optical Fiber and Dark Fiber
	156	Power Over Ethernet
	157	Data Center and Different Networking Solutions

51	Triway World, Dubai	
	158	Market Penetration Strategies for Mart Jack/Capillary
	159	Business enhancement using Beacon Technology
	160	Benefits of a Search Engine Optimization (SEO) in a Corporate Organization
	161	Home Automation and IOT Extension, Advantages and Challenges Faced
	162	Study and Analysis of face Detection System and Algorithm
	163	Business Enhancement using Loyalty and Customer Engagement Analysis
	164	Big Data analysis in Different Business Sectors
	165	Intranet Portal
	166	Detailed Study of CRM System in an Organization
52	TUV NORD Middle East, Abu Dhabi	
	167	Health Safety and Environment
	168	Industrial Third Party Inspection
	169	HSE ad Vendor Inspections
	170	Third Party Inspections and Oil Rigs
	171	Introduction to Auditing and Certification
53	YallaSpree, Dubai	
	172	Game Development Using Corona SDK
	173	P2P Cloud Computing and Virtualization
54	Yokogawa Middle East, Abu Dhabi	
	174	Yokogawa Factory Acceptance Test
	175	Integrated Gas Development Expansion Project (IGD-E)
55	Young and Mubeen Controls Dubai	
	176	A Study on Structured Cabling Systems
	177	A Study on Access Control Systems
	178	A Study on Lighting Control Systems
	179	A Study on CCTV Systems
56	Zio Technologies LLC Dubai	
	180	Security Surveillance and Access Control Systems
	181	Biometric Access Control Systems
	182	Audio/Visual Systems

Annexure B4-20  
(4 Pages)**COMPUTING FACILITIES ACROSS THE CAMPUS**

S. No.	Location	Hardware	QTY	Software
		Equipment		
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 BndI/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

S. No.	Location	Hardware	QTY	Software
		Equipment		
		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	2	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 Programming Lab (332 & 333)	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows Xp
		Dell OptiPlex Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB GB SATA HDD (Total = 127) Intel Core I5 4590 (Quad Core 3.30 Ghz) 4 GB RAM DDR500TB 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	Windows 8.1 and Windows 10
3	Microprocessor Lab (108)	Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB 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	5	Windows XP, MS Office 2003
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
		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	Instrumentation Lab (329)	ACER 5600, 3.0Ghz/Intel, 1GB RAM, 80 GB HDD	5	Windows XP, MS Office 2007, RS Logic
		ACER 7600, 3.0Ghz/Intel, 1GB RAM, 40 GB HDD	1	PLC software and Lab view software
		Dell OptiPlex 9020 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	10	Windows 8.1
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)	ACER: Intel® Pentium 4 - 3.0 GHz ACPI uniprocessor PC, 1GB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	14	Windows XP, MS Office 2003
		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 64 bit
		Compaq D510, 2.40Ghz\Intel	1	
8	Communication Lab (330)	ACER: Intel Core 2 CPU 2.0GHz, 1 GB RAM, 150GB Hard Disk, DVD Writer	2	Windows 7, MS Office 2007 and Matlab 7
		Inter Core i5 CPU 650 @3.20 Ghz 2 Gb RAM 500 HDD	1	SIMULINK-R2010a

S. No.	Location	Hardware	QTY	Software
		Equipment		
9	Power Electronics Lab (302)	Lenovo: Intel® Core i3 - 2.8 GHz uniprocessor PC, 1GB RAM, 80GB Hard Disk, 3COM Ether Link 10/100	5	Windows XP, MS Office 2007
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	CNC LAB (MF3)	Assembled System Intel Core i3 3.20GHz, 2 GB RAM, 500GB HDD	1	Windows 7, MS office 2007
		Lenovo think center intel Core 2 Duo, 2 GB RAM, 160 GB HDD	2	Windows 7, MS office 2007
12	Heat Transformation lab (MG3)	Assembled-3.0GHz Intel, 512 Mb RAM	1	Windows XP, MS Office 2003
13	PMFM Lab (MG2)	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows XP, MS Office 2003
		Compaq D510	1	
14	Chemistry Lab (306)	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows XP, MS Office 2007
15	Class Rooms	IBM -LENOVO-Think Centre: Intel® Core 2 CPU 4400@2.00 GHz, 1.99GHz, 1GB RAM, 150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	30	Windows XP, Windows 7, MS Office 2007
		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: Intel® Core 2 CPU 4400@2.00 GHz, 1.99GHz, 1GB RAM, 150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	8	Windows XP, MS Office 2007
		Dell Optiplex 9020, Core i5, 4590, 3.30GHz, 4GB RAM, 500GB HDD	1	Windows 8.1 MS office 2007
		Dell Optiplex 9020, Core i7, 4770, 3.30GHz, 8GB RAM, 1TB HDD	5	Windows 8.1 MS office 2007
		ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 1GB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	2	Windows XP, MS Office 2007
17	Library (BPDC)	LENOVO-ThinkCentre Edge : Intel® 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 GB 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 GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	37	Windows 8.1, MS Office 2013
		HP Notebook Laptop	38	
19	Administration (Academic)	IBM -LENOVO-Think Centre: Intel® Core 2 CPU 4400@2.00 GHz, 1.99GHz, 1GB RAM, 150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	16	Windows 7, MS Office 2007
		Dell OptiPlex 9020 MT Intel Core i7-4770 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	13	Windows 8.1, MS office 2013
		HP Pavilion laptop	15	Windows 8.1, MS office 2013

S. No.	Location	Hardware	QTY	Software
		Equipment		
		Acer Veriton M265 / Intel Core 2 Duo E7400 2.8 GHz / 2 GB RAM / DVD R / Mouse / Key Board	6	Windows 7, MS Office 2007
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/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,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	31	Windows 7, MS Office 2007 ADAMS 2015 Aspen Automation Studio
23	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	10	Windows 8.1
24	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
25	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
26	CCTV Control room	HP elite Desk+ HP Compaq8100+Dell Optiplex 9020(2+3+2)	7	Windows 7 and Windows 8.1
27	Creative Lab (MS7)	Dell Optiplex 9020, Intel Core I7, 3.60 GHz, 8GB RAM, 1TB HDD	2	Windows 8.1
		HP Think station, Intel Xeon E5 1620, 3.50GHz, 8GB RAM, 1TB HDD.	2	Windows 8.1



Annexure B4-21  
(3 Pages)**LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2016**

<b>S.No</b>	<b>Name of Equipment</b>	<b>Used for Courses/Thesis/Dissertation Computational/Administrative Work</b>
1.	1. 3 Phase slip ring induction motor with DC Compound generators 2. D.C Series motor with DC Generator 3. Salient pole synchronous motor (Self starting type) 4. Three Phase Transformer 5. Rheostats 6. Three phase variable inductor 7. Three phase capacitor bank 8. single phase capacitor bank 9. DC Regulated Power supply(RPS) 10. Digital 3 Phase Multifunction meter 11. Digital single Phase Multifunction meter 12. Digital Tachometer Non-Contact Photo type 13. Phase Sequence Indicator 14. 3 Phase Loading Rheostat 15. Single Phase transformer 16. Digital Watt meter 17. Digital Volt mete 18. Digital Ammeter 19. Digital Multi meter 20. Terminals.	Electrical Machines Lab
2.	1. Digital Multimeters -- 5 Nos. 2.. Analog and Digital Trainer kits --5 Nos.	Analog & Digital Electronics Lab
3.	1. Control Value Characteristics 2. Cascade Control Trainer 3. Interacting and Non Interacting Systems	Instrumentation Lab
4.	1) Do-it-Yourself 3D printer kit 2) Four Point Probe	MEMS Lab
5.	1. ESA PCI DIOT (48 lines I/O Card with 3 16 Bit Programmable Timers with 4 ft FRC cable and Power supply) 2. ESA IF-STEP (Stepper Motor Interface with Stepper Motor (3Kgcm) & Power Adapter) 3. ESA IF-16ADC8 (16 Channel 8-bit ADC Interface) 4. ESA IF-DADC (DAC for ADC & Temp. Sensor Interface) 5. ESA IF-DDAC (Dual DAC Interface) 6. ESA IF-ELV (Elevator Interface) 7. ESA IF-KBD-DISP (6-digit, 7-Segment Display with Calculator KBD Interface) 8. ESA IF-LC (Logic Controller Interface) 9. ESA IF-TRL (Traffic Lights Interface) 10. ESA IF-LCD (LCD (16x2) Interface)	Microprocessor & Interface Lab
6	Stir Casting	FD Courses
7	3D printer	FD/HD Courses

8	Vacuum Hot Press	HD Courses
9	Robotic Arm	FD/HD Courses
10	Pneumatic	FD/HD Courses
11	Potentiostat	Thesis / Research Practice
12	Ball Mill	FD Courses
13	Vacuum Pump (1)	Chemistry Lab
14	Heating Mantle (5)	Chemistry Lab
15	Melting Point Apparatus (1)	Chemistry Lab
16	Colorimeter (2)	Chemistry Lab
17	Digital Water bath (1)	Chemistry Lab
18	UV-Vis Spectrophotometer (1)	Chemistry Lab
19	Ex9935 Conservation Of Energy Interface (550)	Physics Lab
20	Ex9952 Mechanical Waves	Physics Lab
21	Ex5545a Interference And Diffraction Interface (550)	Physics Lab
22	Ex5501 Atwood Machine Interface (550)	Physics Lab
23	Ex5516a Moment Of Inertia Interface (550)	Physics Lab
24	Pasco	Physics Lab
25	Capstone Software	Physics Lab
26	Desktop Computers With Hp 18.5led Monitor	Physics Lab
27	Lcd Projector Hitachi	Physics Lab
28	Fixed And Loose Pulley & Block	Physics Lab
29	Ballistic Pendulum P2131200	Physics Lab
30	Mechanical Conservation Of Energy/Maxwell's Wheel	Physics Lab
31	Coupled Pendula With Measure Dynamics P2132580	Physics Lab
32	Control valve characteristics	Process Control Lab
33	Cascade Control Trainer and Data Acquisition System	Process Control Lab
34	Interacting and Non-Interacting Systems	Process Control Lab
35	Cooling and Heating circulation bath	Petroleum Lab
36	Furniture for Petroleum lab with ventilation system	Petroleum Lab
37	Conradson Carbon residue apparatus	Petroleum Lab
38	Thin film Aniline point apparatus	Petroleum Lab
39	Vacuum distillation system	Petroleum Lab
40	Smoke point lamp	Petroleum Lab
41	Pump for filter press	Chemical Engineering Lab
42	Soxhlet extractor set up	Chemical Engineering Lab
43	Distillation set up	Chemical Engineering Lab
44	Filters for air compressors	Chemical Engineering Lab
45	Ozone monitor	Chemical Engineering Lab
46	Weighing balance for tray drier	Chemical Engineering Lab
47	Zetasizer	IMA Lab
48	Rotavapor	Bioprocess Engineering Lab

49	<ol style="list-style-type: none"><li>1. Lenovo ThinkStation P500</li><li>2. Monitor (Included in along with thinkstation)</li><li>3. PCB Printers</li><li>4. Plastic 3D Printer</li><li>5. CNC milling vertical Machining Centre</li><li>6. Computers</li><li>7. Electronic Components</li></ol>	Creative Lab
50	<ol style="list-style-type: none"><li>1. Electronic Total station,</li><li>2. Automatic Laser Level,</li><li>3. Electronic Theodolites,</li><li>4. Automatic Level Dumpy Level</li><li>5. Laser Distance Meters</li></ol>	Survey Laboratory
51	<ol style="list-style-type: none"><li>1. Fluid friction measurement apparatus</li><li>2. Cavitation demonstration apparatus</li><li>3. Free and forced vortices apparatus</li><li>4. Basic hydraulic bench.</li></ol>	Fluid Mechanics Laboratory

BITS Pilani

# **annual report** 2016

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## **Part B5: Work-Integrated Learning Programme**

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## WORK-INTEGRATED LEARNING PROGRAMMES

### B5.1 SENIOR OFFICERS OF THE WORK-INTEGRATED LEARNING PROGRAMMES

1. Prof. G Sundar, Director (Off-Campus Programmes & Industry Engagement)
2. Prof. S Gurunayanan, Dean
3. Mr. K Venkatasubramanian, Associate Dean
4. Prof. G Venkiteswaran, Associate Dean
5. Prof. Raghunath Ratabole, Associate Dean
6. Prof. Srinivasa Prakash Regalla, Associate Dean
7. Prof. Anil Kumar, Associate Dean
8. Mr. Rajiv Tandon, Chief Operations Officer
9. Mr. Pradeep Singh Dev, DGM

### B5.2 HISTORY

Since 1979, the Institute has been participating in the human resource development needs of the industries. The Institute has evolved several degree programmes by integrating the working environment of the employees with the learning environment required by the Institute. These programmes were first started as M.E. (Collaborative) programmes in 1979. Later, from 1988, the Institute ventured into Off-campus Work-Integrated Learning Programmes in Science and Technology areas. These programmes:

- (a) are targeted to meet the needs of continuing education of employed professionals;
- (b) are based on Science & Technology approach and operate disciplines that are non-conventional and Science & Technology oriented;
- (c) are designed for the purposeful acquisition of scientific methods, modern skills and involvement in open-ended experiments;
- (d) judiciously combine the flexibility and ingenuity of the off-campus system with all the regular features of the on-campus system; and
- (e) allow the employed professionals to pursue a meaningful and relevant university degree with minimum dislocation from their work environment.

### B5.3 SALIENT FEATURES

All programmes offered under the Work-Integrated Learning Programmes are characterized by a person - centered approach where the rigour and standard are maintained as in the institute's on-campus programmes. While a number of on-campus programmes are also available under off-campus, the Institute interacts with various organizations like industries, hospitals and national laboratories with a view to design and offer specialized programmes. Many organizations sponsor their employees for various programmes, in order to prepare their human resources to meet the challenges posed by the growth of industries and rapid advancement of technology in India and abroad.

### B5.4 PROGRAMMES OFFERED

**Table 1: Currently Operative Off-Campus Work-Integrated-Learning Programmes at a Glance**

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
<b>Post Graduate Diploma in Finance</b>	- <b>Designed for the HRD needs of Business organizations</b>
<b>B.Tech. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&T, Vadodara, Cluster, Pune
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
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
5. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
6. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; DRL, Hyderabad; Vedanta, Jharsuguda
<b>M.Sc. Programme</b>	
1. Business Analytics	- Genpact, Gurgaon, 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
<b>M.B.A. Programmes</b>	
1. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of consulting firms
2. Finance	- Designed for the HRD needs of Business organizations
3. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
4. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b>M.Tech. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Tata Motors, Pune
2. Design Engineering	- John Deere, Pune; Cluster Programme, Pune
3. Embedded Systems	- UTC, Bangalore, Hyderabad; L&T, Vadodara; Cluster programme, Pune, Bangalore
4. Environmental Engineering	- Goa State Pollution Control Board, Goa
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, Sesa Sterlite, Jharsuguda
6. Microelectronics	- Cypress, Qualcomm, Texas Instruments, Cluster, Bangalore
7. Pharmaceutical Operations and Management	- Lupin, Mumbai; Cipla, Mumbai
8. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
9. Science Communication	- National Council of Science Museums, Kolkata
10. Software Engineering	- EMC, Bangalore; Tech Mahindra, Pune; iGate, Mumbai; Qualcomm, Hyderabad; SAP Labs, Sabre, Bangalore; Persistent, Pune; Cybage, Pune; CTS, Chennai; TCS, Hyderabad; Virtusa, Chennai; Wipro Technologies, Bangalore; Hexaware, Mumbai; Verizon, Chennai
11. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad, Verizone, Chennai
12. Structural Engineering	- PWD, Goa
13. Systems Engineering	- Wipro Infotech, Bangalore
14. Telecommunications and Software Engineering	- Avaya, Pune, Tech Mahindra, Pune
15. Transportation Engineering	- PWD, Goa
<b>M.Phil.</b>	
1. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
2. Hospital and Health Systems Management	- CMC, Vellore; Bombay Hospital, Mumbai

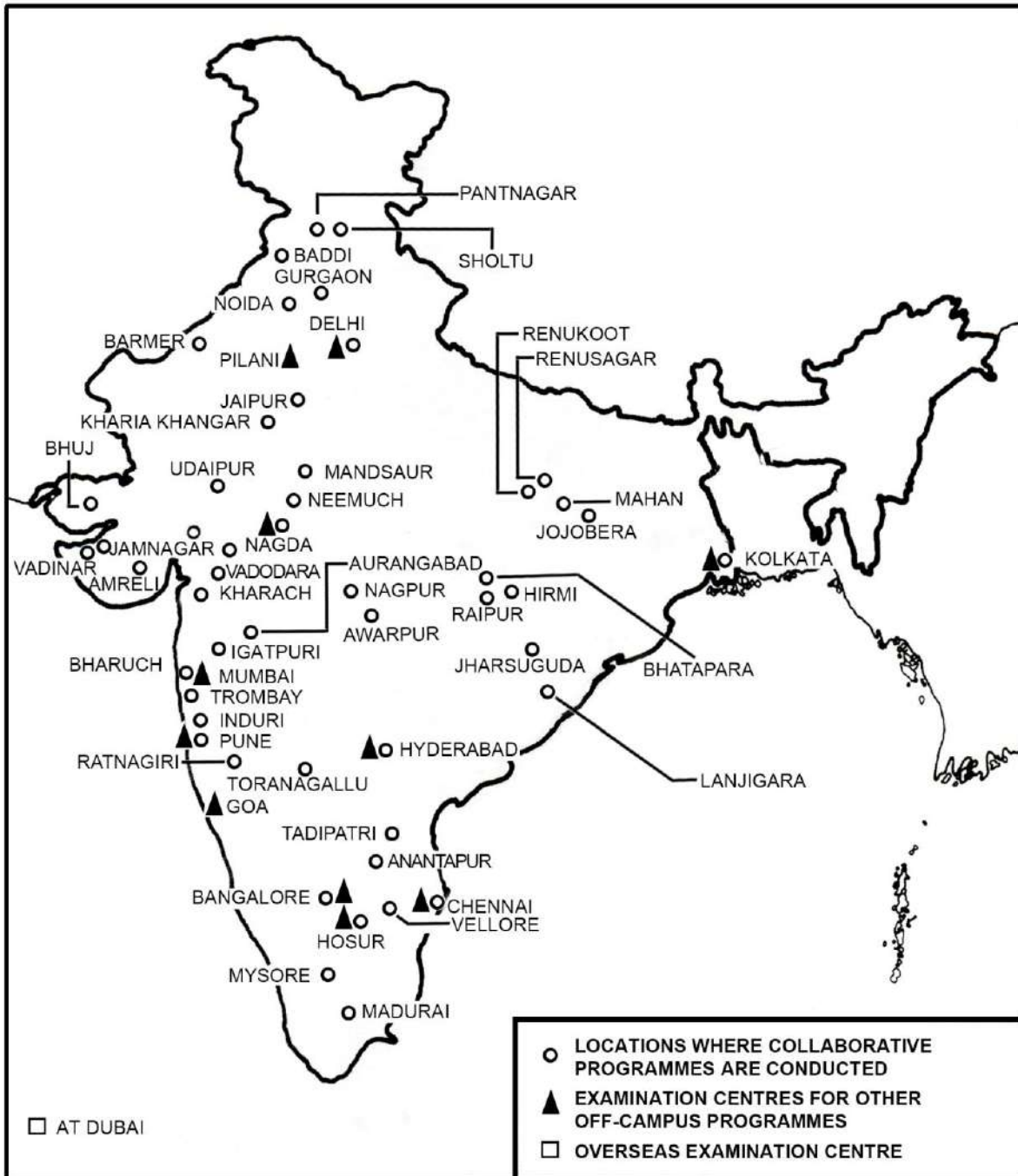
**Table 2: The following Off-Campus Work-Integrated-Learning Programmes are also operated for old registered students**

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
<b>B.S. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&Ties, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Infotech, Mumbai
4. Manufacturing Engineering	- Bharath Forge, TACO, Kirloskar Oil Engines, Pune
5. Physician Assistant	- Madras Medical Mission, Chennai
6. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
7. Process Engineering	- Aditya Birla Group; Hindalco Industries, Dahej; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b>B.Tech.</b>	
1. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
2. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
<b>B.Optom. Programme</b>	
1. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
<b>M.S. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Consultancy Management	- Consultancy Development Centre, New Delhi
3. Design Engineering	- Eaton Technologies, Pune, L&T, Vadodara; SKF, Pune
4. Embedded Systems	- John Deere, iGate, Pune; L&T, Vadodara
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
6. Microelectronics	- Wipro Technologies, Cypress, Qualcomm, IBM, Bangalore
7. Pharmaceutical Operations & Management	- Lupin, Mumbai
8. Software Engineering	- Wipro Technologies, EMC, SAP Labs - Bangalore; CTS, Virtusa, Chennai; Tech Mahindra, Pune ; Cybage, Persistent, iGATE, Mumbai, TCS, Hyderabad, Qualcomm, Hyderabad
9. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries
10. Systems Engineering	- Wipro Infotech - Bangalore
11. Telecommunications & Software Engineering	- Tech Mahindra, Avaya - Pune



B5.5 MAP OF BITS WORK-INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2016-2017

## MAP OF BITS WORK-INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2016-2017



**B5.6 ADMISSIONS**

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

	<b>Integrated First Degree Programmes</b>	<b>Higher Degree Programmes</b>	<b>Total</b>
Second Semester 2015-2016	468(89)	3766(1627)	4234(1716)
First Semester 2016-2017	502(12)	2545(0522)	3047(0534)

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.

<b>Semester</b>	<b>Number of students registered</b>
Second Semester 2015-2016	19177
First Semester 2016-2017	19020

Details of Registration of students for the First Semester 2016-2017 are given in **Annexure 2 (Part B5)**.

**B5.8 GEOGRAPHICAL DISTRIBUTION OF STUDENTS REGISTERED IN FIRST SEMESTER 2016-2017****(A) INDIA**

<b>State</b>	<b>No. of students</b>		
	<b>Specific</b>	<b>Non Specific</b>	<b>Total</b>
Andhra Pradesh	507	298	805
Assam		28	28
Bihar		19	19
Chandigarh		10	10
Chattisgarh		17	17
Dadra & Nagar Haveli		1	1
Delhi	209	224	433
Goa	52	27	79
Gujarat	36	130	166
Haryana	40	237	277
Himachal Pradesh		11	11
Jammu & Kashmir		15	15
Jharkand	46	24	70
Karnataka	7609	1067	8676
Kerala	28	274	302
Madhya Pradesh		68	68
Maharashtra	2237	930	3167
Meghalaya		2	2
Mizoram		2	2
Nagaland		3	3
Orissa	41	39	80
Pondicherry		16	16
Punjab		66	66

State	No. of students		
	Specific	Non Specific	Total
Rajasthan		148	148
Tamil Nadu	1963	1251	3214
Telangana	75	248	323
Uttar Pradesh	22	227	249
Uttarakhand		26	26
West Bengal	45	119	164
<b>Total</b>	<b>12910</b>	<b>5527</b>	<b>18437</b>

**(B) Foreign**

Country	No. of students		
	Specific	Non Specific	Total
China		8	8
Georgia		1	1
KSA		31	31
Kuwait		57	57
Malaysia	96	5	101
Oman		28	28
Qatar		39	39
Singapore		17	17
UAE		278	278
UK		9	9
USA		13	13
VIRGINIA		1	1
<b>Total</b>	<b>96</b>	<b>487</b>	<b>583</b>
<b>Grand Total</b>	<b>13006</b>	<b>6014</b>	<b>19020</b>

**B5.9 SPONSORING ORGANIZATIONS**

During the year, 4160 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 2016, Second Semester 2015-2016 started on 09-01-2016 and ended on 05-05-2016, while First Semester 2016-2017 started on 16-07-2016 and ended on 16-12-2016 for all programmes except the following:

**Second Semester 2015-2016**

Degree	Programme	Organization	Location	Start Date	End Date
B.S.	Engineering Design	L&Ties	Vadodara	25-01-2016	30-06-2016
B.S.	Manufacturing Engineering	Bharat Forge Ltd.	Pune	31-01-2016	25-06-2016
B.S.	Manufacturing Engineering	Kirloskar	Pune	14-02-2016	26-06-2016
B.S.	Manufacturing Engineering	TACO	Pune	30-01-2016	02-07-2016
B.S.	Power Engineering	ABG	Mumbai	25-01-2016	30-06-2016
B.S.	Power Engineering	Essar Power	Hazira	25-01-2016	30-06-2016
B.S.	Power Engineering	JSW Energy	Barmer	25-01-2016	30-06-2016

Degree	Programme	Organization	Location	Start Date	End Date
B.S.	Power Engineering	TATA Power	Mumbai	25-01-2016	30-06-2016
B.S.	Process Engineering	ABG	Mumbai	25-01-2016	30-06-2016
B.S.	Process Engineering	DRL	Hyderabad	25-03-2016	30-07-2016
B.S.	Process Engineering	Indogulf	Jagdishpur	25-01-2016	30-06-2016
B.S.	Process Engineering	JSW Steel Ltd.	Toranagallu	27-03-2016	14-08-2016
B.S.	Process Engineering	Vedanta	Jharsuguda	25-01-2016	30-06-2016
B.Tech.	Information Systems	Wipro Infotech	Bangalore	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Hyderabad	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Mumbai	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Mysore	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Pune	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Delhi	19-03-2016	17-08-2016
B.Tech.	Information Systems	Wipro Infotech	Mumbai	19-03-2016	17-08-2016
B.Tech.	Manufacturing Technology	Bharat Forge Ltd.	Pune	31-01-2016	25-06-2016
B.Tech.	Manufacturing Technology	Kirloskar	Pune	14-02-2016	26-06-2016
B.Tech.	Manufacturing Technology	Tata Motors	Jamshedpur	10-04-2016	30-08-2016
B.Tech.	Power Engineering	JSW Energy	Mumbai	25-01-2016	30-06-2016
B.Tech.	Process Engineering	JSW Steel Ltd.	Toranagallu	27-03-2016	14-08-2016
M.S.	Design Engineering	Eaton	Pune	31-01-2016	06-26-2016
M.S.	Design Engineering	L&Ties	Vadodara	25-01-2016	30-06-2016
M.S.	Embedded Systems	L&Ties	Vadodara	25-01-2016	30-06-2016
M.S.	Engineering Management	Mahindra & Mahindra	Nagpur	25-01-2016	30-06-2016
M.S.	Integrated Software Systems	ATOS	Pune	18-12-2015	16-05-2016
M.S.	Integrated Software Systems	Tech Mahindra	Pune	18-12-2015	16-05-2016
M.S.	Pharmaceutical Operation and Management	Lupin	Mumbai	01-02-2016	15-06-2016
M.S.	Science Communication	NCSM	Kolkata	01-02-2016	07-06-2016
M.S.	Software Engineering	Cybage	Pune	23-01-2016	28-05-2016
M.S.	Software Engineering	IGATE	Pune	06-02-2016	30-06-2016
M.S.	Software Engineering	Qualcomm	Hyderabad	12-03-2016	13-08-2016
M.S.	Software Engineering	SAP Labs	Bangalore	06-02-2016	23-07-2016
M.S.	Software Engineering	SAP Labs	Bangalore	06-02-2016	23-07-2016
M.S.	Software Engineering	Tech Mahindra	Pune	23-01-2016	29-05-2016
M.S.	Software Engineering	Tech Mahindra	Hyderabad	23-01-2016	29-05-2016
M.S.	Software Engineering	Tech Mahindra	Hyderabad	23-01-2016	29-05-2016
M.S.	Software Engineering	Virtusa	Chennai	24-01-2016	11-05-2016
M.S.	Software Engineering	Virtusa	Hyderabad	24-01-2016	11-05-2016
M.S.	Software Engineering	Wipro Technologies	Bangalore	27-02-2016	16-07-2016
M.S.	Software Engineering	Wipro Technologies	Chennai	27-02-2016	16-07-2016

Degree	Programme	Organization	Location	Start Date	End Date
M.S.	Software Engineering	Wipro Technologies	Delhi	27-02-2016	16-07-2016
M.S.	Software Engineering	Wipro Technologies	Hyderabad	27-02-2016	16-07-2016
M.S.	Software Engineering	Wipro Technologies	Kochi	27-02-2016	16-07-2016
M.S.	Software Engineering	Wipro Technologies	Kolkata	27-02-2016	16-07-2016
M.S.	Software Engineering	Wipro Technologies	Pune	27-02-2016	16-07-2016
M.S.	Systems Engineering	Wipro Infotech	Bangalore	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Chennai	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Delhi	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Mumbai	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Mysore	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Bangalore	19-03-2016	17-08-2016
M.S.	Systems Engineering	Wipro Infotech	Delhi	19-03-2016	17-08-2016
M.S.	Tele & Software Engineering	Avaya	Pune	16-01-2016	16-05-2016
M.S.	Telecommunications and Software Engineering	Tech Mahindra	Pune	23-01-2016	29-05-2016
M.Tech.	Automotive Engineering	Tata Motors	Pune	10-04-2016	30-08-2016
M.Tech.	Automotive Engineering	TATA Technologies	Pune	25-01-2016	30-06-2016
M.Tech.	Design Engineering	Cluster	Pune	31-01-2016	26-06-2016
M.Tech.	Design Engineering	John Deere	Pune	31-01-2016	26-06-2016
M.Tech.	Embedded Systems	Cluster	Bangalore	05-03-2016	27-08-2016
M.Tech.	Embedded Systems	Cluster	Pune	06-02-2016	25-06-2016
M.Tech.	Embedded Systems	UTC	Bangalore	05-03-2016	27-08-2016
M.Tech.	Embedded Systems	UTC Fire	Hyderabad	05-03-2016	27-08-2016
M.Tech.	Environmental Engineering	GSPC Board	Goa	19-12-2015	30-05-2016
M.Tech.	Manufacturing Management	Vedanta	Jharsuguda	25-01-2016	30-06-2016
M.Tech.	Microelectronics	Cluster	Bangalore	05-03-2016	06-08-2016
M.Tech.	Microelectronics	Cypress Semiconductor	Bangalore	30-01-2016	02-07-2016
M.Tech.	Microelectronics	PDC	Bangalore	05-03-2016	13-08-2016
M.Tech.	Pharmaceutical Operations & Management	Cipla	Mumbai	25-01-2016	30-06-2016
M.Tech.	Software Engineering	CTS	Chennai	13-02-2016	26-06-2016
M.Tech.	Software Engineering	EMC	Bangalore	01-02-2016	30-05-2016
M.Tech.	Software Engineering	EMC	Bangalore	15-04-2016	30-08-2016
M.Tech.	Software Engineering	EMC	Bangalore	15-04-2016	30-08-2016
M.Tech.	Software Engineering	Hexaware Technologies	Mumbai	20-02-2016	13-07-2016
M.Tech.	Software Engineering	Sabre	Bangalore	05-03-2016	06-08-2016
M.Tech.	Software Engineering	Verizon	Chennai	13-02-2016	30-06-2016
M.Tech.	Software Engineering	Verizon	Hyderabad	13-02-2016	30-06-2016
M.Tech.	Software Engineering	Wipro Technologies	Kolkata	27-02-2016	16-07-2016

Degree	Programme	Organization	Location	Start Date	End Date
M.Tech.	Software Systems	TCS	Hyderabad /Delhi/Mumbai	23-04-2016	24-09-2016
M.Tech.	Software Systems	WIPRO	Bangalore	23-01-2016	30-06-2016
M.Tech.	Software Systems	WIPRO	Chennai	23-01-2016	30-06-2016
M.Tech.	Software Systems	WIPRO	Hyderabad	23-01-2016	30-06-2016
M.Tech.	Software Systems (non-spec)	Tech Mahindra	Pune	18-12-2015	16-05-2016
M.Tech.	Systems Engineering	Wipro Infotech	Bangalore	19-03-2016	17-08-2016
M.Tech.	Systems Engineering	Wipro Infotech	Delhi	19-03-2016	17-08-2016
M.Tech.	Systems Engineering	Wipro Infotech	Hyderabad	19-03-2016	17-08-2016
M.Tech.	Systems Engineering	Wipro Infotech	Mumbai	19-03-2016	17-08-2016
M.Tech.	Systems Engineering	Wipro Infotech	Mysore	19-03-2016	17-08-2016
M.Tech.	Systems Engineering	Wipro Infotech	Pune	19-03-2016	17-08-2016

**First Semester 2016-2017**

Degree	Programme	Orgn.	Location	Start Date	End Date
B.S.	Engineering Design	L&Ties	Vadodara	01-08-2016	27-01-2017
B.S.	Manufacturing Engineering	Bharat Forge	Pune	24-07-2016	14-01-2017
B.S.	Manufacturing Engineering	TACO	Pune	06-08-2016	27-01-2017
B.S.	Manufacturing Engineering	Kirloskar	Pune	06-08-2016	29-01-2017
B.S.	Power Engineering	ABG	Mumbai	01-08-2016	27-01-2017
B.S.	Power Engineering	Essar Power	Hazira	01-08-2016	27-01-2017
B.S.	Power Engineering	JSW Energy	Mumbai	01-08-2016	27-01-2017
B.S.	Power Engineering	TATA Power	Mumbai	01-08-2016	27-01-2017
B.S.	Process Engineering	ABG	Mumbai	01-08-2016	27-01-2017
B.S.	Process Engineering	DRL	Hyderabad	20-08-2016	24-12-2016
B.S.	Process Engineering	JSW Steel Ltd.	Torangallu	27-03-2016	29-08-2016
B.S.	Process Engineering	Vedanta	Jharsuguda	01-08-2016	27-01-2017
B.Tech.	Information Systems	Wipro Infotech	Bangalore	28-08-2016	15-03-2017
B.Tech.	Information Systems	Wipro Infotech	Bangalore	28-08-2016	15-03-2017
B.Tech.	Manufacturing Technology	Bharat Forge	Pune	24-07-2016	14-01-2017
B.Tech.	Manufacturing Technology	Mahindra Vehicle	Pune	31-07-2016	18-01-2017
B.Tech.	Manufacturing Technology	MARUTI	Gurgaon	25-09-2016	09-04-2017
B.Tech.	Manufacturing Technology	TACO	Pune/Panthnagar	25-09-2016	21-04-2017
B.Tech.	Manufacturing Technology	Tata Motors	Jamshedpur/ Panthnagar	11-09-2016	18-03-2017
B.Tech.	Manufacturing Technology	Kirloskar	Pune	06-08-2016	29-01-2017
B.Tech.	Power Engineering	JSW Energy	Mumbai	01-08-2016	27-01-2017
B.Tech.	Process Engineering	BPCL	Mumbai	15-10-2016	01-06-2017
B.Tech.	Process Engineering	JSW Steel Ltd.	Torangallu	11-09-2016	06-03-2017
M.S.	Design Engineering	SKF	Pune	20-08-2016	14-01-2017

M.S.	Integrated Software Systems (Non-Spec)	Tech Mahindra	Non Specific	16-07-2016	11-12-2016
M.S.	Microelectronics	Qualcomm	Bangalore	30-07-2016	01-01-2017
M.S.	Pharmaceutical Operations & Management	Lupin	Mumbai	09-05-2016	25-09-2016
M.S.	Science Communication	NCSM	Kolkata	11-07-2016	10-12-2016
M.S.	SOFTWARE ENGINEERING	CTS	Chennai	20-08-2016	14-01-2017
M.S.	Software Engineering	IGATE	Pune	06-08-2016	13-01-2017
M.S.	Software Engineering	Qualcomm	Hyderabad	03-09-2016	07-01-2017
M.S.	Software Engineering	SAP Labs	Bangalore	13-08-2016	05-02-2017
M.S.	Software Engineering	Tech Mahindra	Pune	30-07-2016	31-12-2016
M.S.	Software Engineering	Tech Mahindra	Hyderabad	20-08-2016	11-12-2016
M.S.	SOFTWARE ENGINEERING	VIRTUSA	Hyderabad	05-06-2016	09-10-2016
M.S.	Telecommunications and Software Engineering	Tech Mahindra	Pune	30-07-2016	04-12-2016
M.Tech.	Automotive Engineering	Tata Motors	Pune	21-08-2016	18-02-2017
M.Tech.	Automotive Engineering	TATA Technologies	Pune	01-08-2016	18-12-2016
M.Tech.	Design Engineering	CLUSTER	Bangalore	28-08-2016	26-02-2017
M.Tech.	Design Engineering	CLUSTER	Delhi	28-08-2016	19-02-2017
M.Tech.	Design Engineering	Cluster	Pune	07-08-2016	05-02-2017
M.Tech.	Design Engineering	John Deere	Pune	06-08-2016	08-01-2017
M.Tech.	Embedded System	CLUSTER	Bangalore	27-08-2016	18-02-2017
M.Tech.	Embedded System	CLUSTER	Delhi	28-08-2016	19-02-2017
M.Tech.	Embedded System	CLUSTER	Pune	20-08-2016	08-02-2017
M.Tech.	Embedded Systems	CISCO	Bangalore	24-09-2016	15-04-2017
M.Tech.	Embedded Systems	Cluster	Pune	23-07-2016	29-12-2016
M.Tech.	Embedded Systems	PDC	Bangalore	27-08-2016	16-02-2017
M.Tech.	Embedded Systems	UTC	Bangalore	01-10-2016	01-04-2017
M.Tech.	Embedded Systems	UTC Fire	Hyderabad	01-10-2016	09-04-2017
M.Tech.	Environmental Engineering	GSPC Board	Goa	16-07-2016	25-12-2016
M.Tech.	Integrated Software Systems	Atos	Non Specific	16-07-2016	11-12-2016
M.Tech.	Manufacturing Management	Vedanta	Jhasrsuguda	16-07-2016	27-11-2016
M.Tech.	Microelectronics	CLUSTER	Bangalore	27-08-2016	18-02-2017
M.Tech.	Microelectronics	Cluster	Bangalore	27-08-2016	23-02-2017
M.Tech.	Microelectronics	Cluster	Bangalore	27-08-2016	23-02-2017
M.Tech.	Microelectronics	Cypress Semiconductor	Bangalore	30-07-2016	31-12-2016
M.Tech.	Microelectronics	IBM Analog	Bangalore	30-07-2016	31-12-2016
M.Tech.	Microelectronics	WIPRO	Pune	17-09-2016	22-03-2017
M.Tech.	Pharmaceutical Operations & Management	Cipla	Mumbai	16-07-2016	27-11-2016
M.Tech.	Software Engineering	Aricent	Gurgaon	16-07-2016	11-12-2016

M.Tech.	Software Engineering	AVAYA	Pune	07-08-2016	20-12-2016
M.Tech.	Software Engineering	CTS	Chennai	20-08-2016	01-01-2017
M.Tech.	Software Engineering	Cybage	Pune	16-07-2016	24-12-2016
M.Tech.	Software Engineering	EMC	Bangalore	20-08-2016	14-01-2017
M.Tech.	Software Engineering	EMC	Bangalore	30-09-2016	15-04-2017
M.Tech.	Software Engineering	Hexaware	Mumbai	06-08-2016	05-01-2017
M.Tech.	Software Engineering	ORACLE	Bangalore	08-10-2016	12-04-2017
M.Tech.	Software Engineering	Sabre	Bangalore	20-08-2016	15-02-2017
M.Tech.	Software Engineering	SAP Labs	Bangalore	13-08-2016	04-02-2017
M.Tech.	Software Engineering	Wipro	Bangalore	28-08-2016	15-03-2017
M.Tech.	Software Engineering	Wipro	Chennai	28-08-2016	15-03-2017
M.Tech.	Software Engineering	Wipro	Gurgaon	28-08-2016	15-03-2017
M.Tech.	Software Engineering	Wipro	Hyderabad	28-08-2016	15-03-2017
M.Tech.	Software Engineering	Wipro	Kolkata	28-08-2016	15-03-2017
M.Tech.	Software Engineering	Wipro	Pune	28-08-2016	15-03-2017
M.Tech.	Software Systems	CISCO	Bangalore	24-09-2016	15-04-2017
M.Tech.	Software Systems	CISCO	Bangalore	01-10-2016	15-04-2017
M.Tech.	Software Systems	TCS	Hyd/ Mum/ Delhi	15-10-2016	14-05-2017
M.Tech.	Software Systems	WIPRO	Bangalore / Chennai/ Hyd	09-07-2016	04-01-2017
M.Tech.	Software Engineering	Verizon	Chennai/ Hyderabad	16-07-2016	29-12-2016
M.Tech.	Systems Engineering	Wipro Infotech	Bangalore	28-08-2016	15-03-2017
M.Tech.	Telecommunications and Software Engineering	AVAYA	Pune	07-08-2016	11-12-2016
M.Tech.	Transportation Engineering	PWD	Panjim	26-11-2016	30-04-2017

### B5.11 COURSES OFFERED

The number of courses, offered during the year 2016 is as follows:

	Number of Courses offered
Second Semester 2015-2016	711
First Semester 2016-2017	702

### B5.12 NEW COURSE INTRODUCED

The new course introduced during the year 2016 is as follows

S.No.	Course No.	Course Title
1.	AE* ZG615	Advanced Engine Technology



**B5.13 LIVE INTERACTIVE LECTURE SESSIONS**

For the WILP courses offered during II Semester 2015-2016 and I Semester 2016-2017 for the B.Tech. Engineering Technology, B.Tech. Information Systems, B.Tech. Process Engineering, B.Tech. Power Engineering, 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 2015-2016**

S.NO.	COURSE NO.	COURSE TITLE
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AAOC ZC222	OPTIMIZATION
3.	AETT ZG523	PROJECT MANAGEMENT
4.	AETT ZG524	VEHICLE DYNAMICS
5.	AETT ZG532	COMPUTER AIDED ENGINEERING
6.	AETT ZG611	COMPUTATIONAL FLUID DYNAMICS AND HEAT TRANSFER
7.	BITS ZC461	SOFTWARE ENGINEERING
8.	BITS ZC471/CM ZC471 / HHSM ZC471	MANAGEMENT INFORMATION SYSTEMS
9.	BITS ZC481	COMPUTER NETWORKS
10.	BITS ZG553	REAL TIME SYSTEMS
11.	CS ZG524	REAL TIME OPERATING SYSTEMS
12.	CS ZG525	ADVANCED COMPUTER NETWORKS
13.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
14.	EA ZC473	MULTIMEDIA COMPUTING
15.	EDLT ZC322	KINEMATICS & DYNAMICS OF MACHINES
16.	EDLT ZC342	THERMAL ENGINEERING –II
17.	EDLT ZC431	MECHANICAL ENGINEERING DESIGN – II
18.	EDLT ZC453	PRODUCT DESIGN AND DEVELOPMENT
19.	EEE ZG512	EMBEDDED SYSTEM DESIGN
20.	EEGPC ZG613	ENVIRONMENTAL SYSTEM MODELLING
21.	EEGPC ZG614	AIR POLLUTION CONTROL TECHNOLOGIES
22.	EEGPC ZG621	SOLID WASTE MANAGEMENT
23.	EEGPC ZG622	ENVIRONMENTAL PROCESS ENGINEERING
24.	ENGG ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
25.	ENGG ZC232	ENGINEERING MATERIALS
26.	ENGG ZC242	MAINTENANCE AND SAFETY
27.	ENGG ZC243	MECHANICAL TECHNOLOGY
28.	ES ZC263	DIGITAL ELECTRONICS & MICROPROCESSORS
29.	ES ZC343	MICROPROCESSORS & MICROCONTROLLERS
30.	ET ZC234	MANUFACTURING PROCESSES
31.	ET ZC342	MATERIALS MANAGEMENT
32.	ET ZC344	INSTRUMENTATION & CONTROL
33.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
34.	ET ZC412	PRODUCTION PLANNING & CONTROL

<b>S.NO.</b>	<b>COURSE NO.</b>	<b>COURSE TITLE</b>
35.	ET ZC413	ENGINEERING DESIGN
36.	ET ZC415	MANUFACTURING EXCELLENCE
37.	ET ZC423	ESSENTIALS OF PROJECT MANAGEMENT
38.	ET ZC432	QUALITY CONTROL ASSURANCE & RELIABILITY
39.	HHSM ZC417	MANAGERIAL COMMUNICATION
40.	HHSM ZG515	QUANTITATIVE METHODS
41.	HHSM ZG517	HEALTH CARE MANAGEMENT
42.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
43.	IS ZC323	SYSTEMS PROGRAMMING
44.	IS ZC332	DATABASE SYSTEMS & APPLICATIONS
45.	IS ZC353	COMPUTER ORGANIZATION & ARCHITECTURE
46.	IS ZC362	OPERATING SYSTEMS
47.	IS ZC363	DATA STRUCTURES & ALGORITHMS
48.	IS ZC372	COMPILER DESIGN
49.	IS ZC415	DATA MINING
50.	IS ZC423	SOFTWARE DEVELOPMENT FOR PORTABLE DEVICES
51.	IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
52.	IS ZC444	ARTIFICIAL INTELLIGENCE
53.	IS ZC446	DATA STORAGE TECHNOLOGIES & NETWORKS
54.	IS ZC462	NETWORK PROGRAMMING
55.	IS ZC464	MACHINE LEARNING
56.	IS ZC472	COMPUTER GRAPHICS
57.	MATH ZC161	ENGINEERING MATHEMATICS-I
58.	MATH ZC222	DISCRETE STRUCTURES FOR COMP SCIENCE
59.	MATH ZC232	ENGINEERING MATHEMATICS-II
60.	MATH ZC233	CALCULUS
61.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
62.	MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNTING
63.	MBA ZC416	MANAGERIAL ECONOMICS
64.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
65.	MBA ZC411/ QMJ ZC411	MARKETING
66.	MBA ZC417	QUANTITATIVE METHODS
67.	MBA ZG515	CONSULTING & PEOPLE SKILLS
68.	MBA ZG521/ CM ZG513	FINANCIAL MANAGEMENT
69.	MBA ZG523	PROJECT MANAGEMENT
70.	MBA ZG524/QM ZG524	QUALITY MANAGEMENT SYSTEMS
71.	MBA ZG525	BUSINESS PROCESS ANALYSIS
72.	MBA ZG526/QM ZG526	OPERATIONS MANAGEMENT
73.	MBA ZG531/QM ZG531	STATISTICAL QUALITY CONTROL
74.	MBA ZG541	CONSULTANCY PRACTICES

S.NO.	COURSE NO.	COURSE TITLE
75.	MBA ZG621	SUPPLY CHAIN MANAGEMENT
76.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
77.	MGTS ZC211	PRINCIPLES OF MANAGEMENT
78.	MM ZG533	MANUFACTURING PLANNING & CONTROL
79.	MM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
80.	MM ZG512/ MMVA ZG512	MANUFACTURING STRATEGY
81.	MM ZG513	MAINTENANCE ENGINEERING
82.	MM ZG515 / QM ZG515 / CM ZG515	QUANTITATIVE METHODS
83.	MM ZG522 / QM ZG532 / CM ZG532 / HHSM ZG518/MBA ZG522	TOTAL QUALITY MANAGEMENT
84.	MM ZG523 / QM ZG523 / CM ZG523 / HHSM ZG519	PROJECT MANAGEMENT
85.	MM ZG534/ MMVA ZG534	SUSTAINABLE MANUFACTURING
86.	MM ZG535 / QM ZG535	DECISION ANALYSIS
87.	MM ZG537 / MBA ZG537	LEAN MANUFACTURING
88.	MM ZG541	PRODUCT DESIGN
89.	MM ZG611 / QM ZG611 / CM ZG611 /MBA ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
90.	MM ZG621 / QMJ ZG621	SUPPLY CHAIN MANAGEMENT
91.	MM ZG627/MMVA ZG627	MANAGERIAL CORPORATE FINANCE
92.	MMVA ZG514 / MM ZG514 / QM ZG514/MBA ZG514	LEADERSHIP & MANAGING CHANGE
93.	PEAB ZC411 / PEVA ZC411	PRODUCTION PLANNING & CONTROL
94.	PEAB ZC412 / PEVA ZC412	PROCESS EQUIPMENT DESIGN
95.	PEAB ZC453	PROCESS CONTROL AND INSTRUMENTATION
96.	PERL ZC211	PRINCIPLES OF MANAGEMENT (DRL, HYD)
97.	PERL ZC313	TECHNICAL REPORT WRITING (DRL, HYD)
98.	PEVA ZC211	PRINCIPLES OF MANAGEMENT
99.	PEVA ZC313	TECHNICAL REPORT WRITING
100.	PEVA ZC317 / PEAB ZC317	TRANSPORT PHENOMENA –II
101.	POWAB ZC312 / POWES ZC312 / PEVA ZC331	QUALITY CONTROL ASSURANCE & RELIABILITY
102.	POWAB ZC332 / POWES ZC332	ENERGY MANAGEMENT
103.	POWAB ZC411/ POWJS ZC411/ POWTP ZC411	ENVIRONMENTAL POLLUTION CONTROL
104.	POWAB ZC412/ POWJS ZC412 / POWTP ZC412	POWER SYSTEM OPERATION AND CONTROL
105.	POWAB ZC421/ POWES ZC421	ESSENTIALS OF PROJECT MANAGEMENT
106.	POWAB ZC441/ POWES ZC441	POWER SYSTEM ENGINEERING – II
107.	POWAB ZC452/POWJS ZC452 / POWTP ZC452	RENEWABLE ENERGY
108.	POWAB ZC481/POWJS ZC481 / POWTP ZC481	PLANT LAYOUT & DESIGN
109.	POWJS ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY

S.NO.	COURSE NO.	COURSE TITLE
110.	POWJS ZC164	COMPUTER PROGRAMMING
111.	POWJS ZC231	THERMODYNAMICS
112.	POWJS ZC233	CALCULUS
113.	QM ZG528	RELIABILITY ENGINEERING
114.	QM ZG536	DESIGN OF EXPERIMENTS
115.	QM ZG663	CONCURRENT ENGINEERING
116.	SS ZG513	NETWORK SECURITY
117.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
118.	SS ZG515	DATA WAREHOUSING
119.	SS ZG518	DATABASE DESIGN & APPLICATIONS
120.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN
121.	SS ZG520	WIRELESS & MOBILE COMMUNICATION
122.	SS ZG526	DISTRIBUTED COMPUTING
123.	SS ZG527	CLOUD COMPUTING
124.	SS ZG531	PERVASIVE COMPUTING
125.	SS ZG537	INFORMATION RETRIEVAL
126.	SS ZG547	USABILITY ENGINEERING
127.	SS ZG548	ADVANCED DATA MINING
128.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
129.	SS ZG554	DISTRIBUTED DATA SYSTEMS
130.	SS ZG582	TELECOM NETWORK MANAGEMENT
131.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
132.	SS ZG626	HARDWARE SOFTWARE CO-DESIGN
133.	SS ZG653	SOFTWARE ARCHITECTURES
134.	SS ZG656	NETWORKED EMBEDDED APPLICATIONS
135.	SS ZG661/QM ZG662/ MBA ZG661	SOFTWARE QUALITY MANAGEMENT
136.	TA ZC163	COMPUTER PROGRAMMING (C)
137.	TA ZC164	COMPUTER PROGRAMMING (MATLAB)
138.	TA ZC232	ENGINEERING MEASUREMENTS
139.	TA ZC312	TECHNICAL REPORT WRITING
140.	TEPWG ZG534	PAVEMENT MATERIAL CHARACTERIZATION
141.	TEPWG ZG535	HIGHWAY GEOMETRIC DESIGN
142.	TEPWG ZG616	BRIDGE ENGINEERING
143.	TEPWG ZG623	GROUND IMPROVEMENT TECHNIQUES

**First Semester 2016-2017**

S.No.	COURSE NO.	COURSE TITLE
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AETT ZG612	ADVANCE IN MATERIALS COMPOSITE AND PLASTICITY
3.	AETT ZG621	DURABILITY CRASH AND SAFETY ENGINEERING

S.No.	COURSE NO.	COURSE TITLE
4.	AETT ZG622	ADVANCED MANUFACTURING PROCESS
5.	AETT ZG633	ADVANCES IN VEHICLE BODY STRUCTURE
6.	BA ZC471	MANAGEMENT INFORMATION SYSTEMS
7.	BA* ZC412	MODELS AND APPLICATIONS IN OPERATIONAL RESEARCH
8.	BA* ZC413	INTRODUCTION TO STATISTICAL METHODS
9.	BITS ZC471 / HHSM ZC471	MANAGEMENT INFORMATION SYSTEMS
10.	BITS ZG553	REAL TIME SYSTEMS
11.	CS ZG524	REAL TIME OPERATING SYSTEMS
12.	CS ZG525	ADVANCED COMPUTER NETWORKS
13.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
14.	EA ZC451	INTERNETWORKING TECHNOLOGIES
15.	EA ZC473	MULTIMEDIA COMPUTING
16.	EDLT ZC324	MECHATRONICS & AUTOMATION
17.	EDLT ZC422	FLUID POWER ENGINEERING
18.	EDLT ZC441	AUTOMOTIVE VEHICLE
19.	EDLT ZC452	COMPOSITE MATERIALS AND DESIGN
20.	EEE ZG512	EMBEDDED SYSTEM DESIGN
21.	ENGG ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
22.	ENGG ZC232	ENGINEERING MATERIALS
23.	ENGG ZC242	MAINTENANCE AND SAFETY
24.	ENGG ZC243	MECHANICAL TECHNOLOGY
25.	ES ZC263	DIGITAL ELECTRONICS & MICROPROCESSORS
26.	ES ZC343	MICROPROCESSORS & MICROCONTROLLERS
27.	ET ZC235	MANUFACTURING PROCESSES
28.	ET ZC323	MECHATRONICS & AUTOMATION
29.	ET ZC343	MATERIALS MANAGEMENT
30.	ET ZC344	INSTRUMENTATION & CONTROL
31.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
32.	ET ZC413	ENGINEERING DESIGN
33.	ET ZC416	PRODUCTION PLANNING & CONTROL
34.	ET ZC417	MANUFACTURING EXCELLENCE
35.	ET ZC423	ESSENTIALS OF PROJECT MANAGEMENT
36.	ET ZC424	PLANT LAYOUT AND DESIGN
37.	ET ZC434	QUALITY CONTROL ASSURANCE & RELIABILITY
38.	HHSM ZC417	MANAGERIAL COMMUNICATION
39.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
40.	IS ZC327	SYSTEMS PROGRAMMING
41.	IS ZC337	DATABASE SYSTEMS & APPLICATIONS
42.	IS ZC343	SOFTWARE ENGINEERING
43.	IS ZC353	COMPUTER ORGANIZATION & ARCHITECTURE

<b>S.No.</b>	<b>COURSE NO.</b>	<b>COURSE TITLE</b>
44.	IS ZC363	DATA STRUCTURES & ALGORITHMS
45.	IS ZC364	OPERATING SYSTEMS
46.	IS ZC373	COMPILER DESIGN
47.	IS ZC415	DATA MINING
48.	IS ZC423	SOFTWARE DEVELOPMENT FOR PORTABLE DEVICES
49.	IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
50.	IS ZC444	ARTIFICIAL INTELLIGENCE
51.	IS ZC446	DATA STORAGE TECHNOLOGIES & NETWORKS
52.	IS ZC462	NETWORK PROGRAMMING
53.	IS ZC464	MACHINE LEARNING
54.	IS ZC467	COMPUTER NETWORKS
55.	IS ZC472	COMPUTER GRAPHICS
56.	MATH ZC222	DISCRETE STRUCTURES FOR COMP SCIENCE
57.	MATH ZC233	CALCULUS
58.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
59.	MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNTING
60.	MBA ZC416	MANAGERIAL ECONOMICS
61.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
62.	MBA ZC411 /BA ZC411	MARKETING
63.	MBA ZC417	QUANTITATIVE METHODS
64.	MBA ZG515	CONSULTING & PEOPLE SKILLS
65.	MBA ZG521	FINANCIAL MANAGEMENT
66.	MBA ZG523	PROJECT MANAGEMENT
67.	MBA ZG524/QM ZG524	QUALITY MANAGEMENT SYSTEMS
68.	MBA ZG525	BUSINESS PROCESS ANALYSIS
69.	MBA ZG526/QM ZG526	OPERATIONS MANAGEMENT
70.	MBA ZG531/QM ZG531	STATISTICAL QUALITY CONTROL
71.	MBA ZG541	CONSULTANCY PRACTICE
72.	MBA ZG621	SUPPLY CHAIN MANAGEMENT
73.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
74.	MGTS ZC211	PRINCIPLES OF MANAGEMENT
75.	MM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
76.	MM ZG512	MANUFACTURING STRATEGY
77.	MM ZG513	MAINTENANCE ENGINEERING
78.	MM ZG514 / QM ZG514/MBA ZG514	LEADERSHIP & MANAGING CHANGE
79.	MM ZG515 / QM ZG515	QUANTITATIVE METHODS
80.	MM ZG522 / QM ZG532 /HHSM ZG518/MBA ZG522	TOTAL QUALITY MANAGEMENT
81.	MM ZG523 / QM ZG523 /HHSM ZG519	PROJECT MANAGEMENT
82.	MM ZG533	MANUFACTURING PLANNING & CONTROL

S.No.	COURSE NO.	COURSE TITLE
83.	MM ZG534	SUSTAINABLE MANUFACTURING
84.	MM ZG535 / QM ZG535	DECISION ANALYSIS
85.	MM ZG537 / MBA ZG537	LEAN MANUFACTURING
86.	MM ZG541	PRODUCT DESIGN
87.	MM ZG611 / QM ZG611 / MBA ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
88.	MM ZG621	SUPPLY CHAIN MANAGEMENT
89.	MM ZG627	MANAGERIAL CORPORATE FINANCE
90.	PEAB ZC314	POWER PLANT ENGINEERING
91.	PEAB ZC331	QUALITY CONTROL ASSURANCE & RELIABILITY
92.	PEAB ZC382	CEMENT TECHNOLOGY
93.	PEAB ZC452/PEVA ZC452	PROCESS PLANT SAFETY AND ENVIRONMENT
94.	PERL ZC342 (DRL)	MATERIALS MANAGEMENT
95.	PERL ZC424 (DRL)	ESSENTIALS OF PROJECT MANAGEMENT
96.	PEVA ZC352	ENERGY MANAGEMENT
97.	PEVA ZC383	EXTRACTIVE METALLURGY
98.	PEVA ZC453	PROCESS CONTROL AND INSTRUMENTATION
99.	POMSS ZC441	HUMAN RESOURCE MANAGEMENT
100.	POMSS ZG515	PHARMACEUTICAL ADMINISTRATION AND MANAGEMENT (PAM)
101.	POMSS ZG522	QUALITY ASSURANCE AND REGULATORY AFFAIRS
102.	POMSS ZG542	PRODUCTION & OPERATIONS MANAGEMENT
103.	POWAB ZC232/POWJS ZC232/POWTP ZC232	PRINCIPLES OF MANAGEMENT
104.	POWAB ZC321/ POWJS ZC321/ POWTP ZC321	TECHNICAL REPORT WRITING
105.	POWAB ZC411/POWES ZC411	ENVIRONMENTAL POLLUTION CONTROL
106.	POWAB ZC412/ POWES ZC412	POWER SYSTEM OPERATION AND CONTROL
107.	POWAB ZC452/POWES ZC452	RENEWABLE ENERGY
108.	POWAB ZC481/ POWES ZC481	PLANT LAYOUT AND DESIGN
109.	POWJS ZC234	LINEAR ALGEBRA & OPTIMIZATION
110.	POWJS ZC243	ENGINEERING MEASUREMENTS
111.	POWJS ZC315	TRANSPORT PHENOMENA
112.	POWJS ZC343	MICROPROCESSORS & MICROCONTROLLERS
113.	QM ZG528	RELIABILITY ENGINEERING
114.	QM ZG536	DESIGN OF EXPERIMENTS
115.	QM ZG663	CONCURRENT ENGINEERING
116.	SS ZG513	NETWORK SECURITY
117.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
118.	SS ZG515	DATA WAREHOUSING
119.	SS ZG518	DATABASE DESIGN & APPLICATIONS
120.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN

S.No.	COURSE NO.	COURSE TITLE
121.	SS ZG520	WIRELESS & MOBILE COMMUNICATION
122.	SS ZG526	DISTRIBUTED COMPUTING
123.	SS ZG527	CLOUD COMPUTING
124.	SS ZG531	PERVASIVE COMPUTING
125.	SS ZG537	INFORMATION RETRIEVAL
126.	SS ZG547	USABILITY ENGINEERING
127.	SS ZG548	ADVANCED DATA MINING
128.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
129.	SS ZG554	DISTRIBUTED DATA SYSTEMS
130.	SS ZG582	TELECOM NETWORK MANAGEMENT
131.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
132.	SS ZG626	HARDWARE SOFTWARE CO-DESIGN
133.	SS ZG653	SOFTWARE ARCHITECTURES
134.	SS ZG656	NETWORKED EMBEDDED APPLICATIONS
135.	SS ZG661/QM ZG662/ MBA ZG661	SOFTWARE QUALITY MANAGEMENT
136.	TA ZC163	COMPUTER PROGRAMMING (C)
137.	TA ZC164	COMPUTER PROGRAMMING (MATLAB)
138.	TA ZC233	ENGINEERING MEASUREMENTS
139.	TA ZC312	TECHNICAL REPORT WRITING
140.	TEPWG ZC513	REINFORCED SOIL STRUCTURES FOR TRANSPORTATION ENGINEERING
141.	TEPWG ZG518	PAVEMENT ANALYSIS AND DESIGN
142.	TEPWG ZG536	TRAFFIC ENGINEERING AND SAFETY
143.	TEPWG ZG546	HIGHWAY CONSTRUCTION PRACTICES

#### B5.14 PROJECT WORK AND DISSERTATION

Students of B.S., B.Tech. programmes do a full-semester Project Work in their final semester, while students of higher degree programmes like M.S., M.Tech. and M.Phil. submit a Dissertation 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 2016.

#### B5.15 ACADEMIC AND PROFESSIONAL COUNSELLING

During the year, the Academic Monitoring Board (AMB), 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 students under its purview during the year is given below:

		II Semester 2015-2016	I Semester 2016-2017
1.	Registered and under the under the purview of AMB at the beginning of the semester	1271	785
2.	Declared outside the purview of AMB at the end of the semester	968	402
3.	Discontinued during the semester	30	27
4.	Continue to be under the purview of AMB	273	356
5.	New cases referred to AMB at the end of the Semester	736	628



6.	Under the purview of AMB at the beginning of the next semester	1009	984
7.	Registered and under the purview of AMB at the beginning of the next semester	785	719

### B5.16 AWARD OF DEGREES

During the year, a total of 7961 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
78 <sup>th</sup> Award (vide Board of Governors meeting held on 19.03.2016)	5574(2206)
79 <sup>th</sup> Award (vide Board of Governors meeting held on 15.07.2016)	2387(0458)
<b>Total:</b>	<b>7961(2664)</b>

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

### B5.17 NEW COLLABORATIVE PROGRAMMES INTRODUCED

The following new corporate partnership programmes were introduced during the year 2016

1. M.Tech. Software Engineering (Verizon Data Services India, Chennai)
2. M.Tech. Software Engineering (Hexaware Technologies, Mumbai)
3. M.Tech. Software Engineering (Oracle India, Bangalore)
4. M.Tech. Software Systems (Cisco, Bangalore)
5. B.Tech. Manufacturing Technology (Tata Motors, Jamshedpur)
6. M.Tech. Embedded Systems (UTC Fire & Security India, Hyderabad)
7. M.Tech. Embedded Systems (Cisco, Bangalore)
8. M.Tech. Transportation Engineering (Public Works Department, Goa)
9. M.Tech. Automotive Engineering (Tata Motors, Pune)
10. B.Tech. Manufacturing Technology (Maruti Suzuki, Gurgaon)
11. B.Tech. Manufacturing Technology (Mahindra Motor Vehicles, Pune)
12. B.Tech. Process Engineering (Bharat Petroleum Corporation Ltd., Mumbai)

### B5.18 COLLABORATIVE PROGRAMMES UNDER DISCUSSION

The new collaborative programmes under discussion are indicated below:

1. Post Graduate Diploma in General Management for employed professionals
2. M.Sc. Pharmaceutical Chemistry for employed professionals

**B5.19 New Initiatives in WILP**

Over the past couple of years, WILP has started focusing on enhancing the emphasis on outcome-based education, as part of the courses offered therein. Towards this objective, we have begun moving our pedagogical approach from a teaching-centric, lecture-based approach, to a learner-centred, discussion-oriented, practical-based, hands-on approach to instruction, built around essential content in digital form, with a significant focus on work integration.

During this year, several experiential learning initiatives including virtual laboratories, remote laboratories, games-based learning, electronic simulations, case studies, and work-integrated learning exercises have been incorporated in many courses. Students get trained in using a variety computational tools for applying the concepts and techniques learnt in the courses, to solve technical problems in their work environment. These initiatives have been found to be quite effective in engaging the students actively in the teaching-learning process.

In consonance with the emphasis on skills-based training, we have also begun offering short-term and certificate programmes. As part of this endeavor, we have offered several short-term certificate programmes, including two certificate programmes in 'Quality Control Microbiology' and 'Applied Industrial Microbiology' in collaboration with Biocon Academy at Bangalore, two certificate programmes in 'Biostatistics' and 'Design of Experiments' for employees of Sun Pharma at Vadodara, and a certificate programme on 'Basics of Cloud Computing' for employees of Arris at Bangalore.

In addition to the efforts required on programme design, digital content development, laboratory development, and pedagogy, we have also devoted significant time and thought to matters such as faculty recruitment, training and development. In this direction, we have designed and implemented a structured approach to faculty development, which ensures that our faculty members operate in a conducive environment that promotes continuous learning, and are enabled, enhanced and enriched with contemporary tools and techniques spanning the entire teaching-learning lifecycle.

These efforts are focused on defining and articulating the enhanced value proposition that we offer to students and the organizations that partner with us in these programmes.

## LIST OF ANNEXURES

<b>Annexure No.</b>	<b>Description</b>	<b>Page No.</b>
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B5-3	LIST OF ORGANIZATIONS WHO HAVE SPONSORED THEIR EMPLOYEES FOR WORK INTEGRATED LEARNING PROGRAMMES OF BITS	B5: A-5-76
B5-4	LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2015	B5: A-77-86
B5-5	LIST OF DISSERTATION SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2015	B5: A-87-123
B5-6	STATEMENT OF DEGREES AWARDED	B5: A-124-125
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**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2016**

**(A) Second Semester 2015-2016**

<b>PROGRAMMES</b>	<b>No. of students joined</b>
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech</b>	
Engineering Technology	165(005)
Information Systems	223(083)
Power Engineering	30(000)
Process Engineering	50(001)
<b>Sub Total</b>	<b>468(089)</b>
<b>2. Higher Degree Programme:</b>	
<b>M.Tech</b>	
Design Engineering	27(0003)
Manufacturing Management	156(0008)
Integrated Software Systems	22(0003)
Microelectronics	56(0010)
Quality Management	86(0014)
Science Communication	13(0002)
Software Engineering	2547(1358)
Software Systems	549(0143)
System Engineering	158(0060)
Transportation Engineering	36(0003)
<b>MBA</b>	
Consultancy Management	48(0009)
Manufacturing Management	40(0003)
Quality Management	28(0011)
<b>Sub total</b>	<b>3766 (1627)</b>
<b>Total</b>	<b>4234(1716)</b>

**(B) First Semester 2016-2017**

<b>PROGRAMMES</b>	<b>No. of students joined</b>	
<b>1. Integrated First Degree Programmes:</b>		
<b>B.Tech</b>		
Engineering Technology		264(009)
Manufacturing Technology		208(003)
Process Engineering		30(000)
	<b>Sub total</b>	<b>502(012)</b>
<b>2. Higher Degree Programmes:</b>		
<b>M.Tech</b>		
Design Engineering		204(011)
Embedded Systems		146(024)
Integrated Software Systems		47(021)
Manufacturing Management		228(014)
Microelectronics		60(009)
Pharmaceutical Operations & Management		76(007)
Quality Management		140(025)
Software Engineering		172(067)
Software Systems		1123(262)
<b>M.B.A.</b>		
Consultancy Management		66(019)
Finance		24(004)
Manufacturing Management		82(004)
Quality Management		68(023)
<b>M.Phil.</b>		
Hospital and Health Systems Management		36(013)
<b>M.Sc.</b>		
Business Analytics		63(019)
	<b>Sub total</b>	<b>2545(522)</b>
	<b>Total</b>	<b>3047(534)</b>

**SUMMARY**

	<b>II Semester 2015-16</b>	<b>I Semester 2016-17</b>	<b>Total</b>
Integrated First Degree Programmes	468(0089)	502(0012)	970(0101)
Higher Degree Programmes	3766(1627)	2545(0522)	6311(2149)
<b>Total</b>	<b>4234(1716)</b>	<b>3047(534)</b>	<b>7281(2250)</b>

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2016-2017**

Programme	Year of Admission						Total
	2011 and earlier	2012	2013	2014	2015	2016	
<b>A. Integrated First Degree Programmes</b>							
<b>B.Optom.</b>				2(01)	59(43)		61(44)
<b>B.S.</b>							
Engineering Design				23(03)			23(03)
Engineering Technology	56(00)	30(00)	188(06)	217(09)			491(15)
Information Systems	16(00)		25(00)				41(00)
Manufacturing Engineering			29(01)	74(01)			103(02)
Marine Engineering	13(00)	30(00)	241(01)	248(03)			532(04)
Nautical Technology	8(00)	10(00)	69(00)	78(02)			165(02)
Optometry	2(00)	2(02)	98(84)	90(68)	29(23)		221(177)
Physician Assistant			23(20)	33(33)			56(53)
Power Engineering			63(00)	51(00)			114(00)
Process Engineering			49(02)	28(01)			77(03)
<b>B.Tech.</b>							
Engineering Technology					469(15)	264(09)	733(24)
Information Systems				69(17)	239(84)		308(101)
Manufacturing Technology				23(00)	88(00)	208(03)	319(03)
Marine Engineering	1(00)				228(02)		229(02)
Nautical Technology					79(01)		79(01)
Power Engineering			24(00)		30(00)		54(00)
Process Engineering			43(00)	49(00)	50(01)	30(00)	172(01)
<b>Sub. Total</b>	<b>96(00)</b>	<b>72(02)</b>	<b>852(114)</b>	<b>985(138)</b>	<b>1271(169)</b>	<b>502(12)</b>	<b>3778(455)</b>
<b>B. Higher Degree Programmes</b>							
<b>MBA</b>							
Consultancy Management				44(11)	113(16)	66(19)	223(46)
Finance						24(04)	24(04)
Manufacturing Management		1(00)	2(00)	46(02)	87(03)	82(04)	218(09)
Quality Management			1(00)	16(06)	64(24)	68(23)	149(53)
<b>M.S.</b>							
Consultancy Management	3(00)	1(00)	1(00)				5(00)
Integrated Software Systems			124(55)	39(19)	29(21)		192(95)
Manufacturing Management	5(00)	1(00)	3(00)				9(00)
Microelectronics			1(00)				1(00)
Quality Management		2(00)	1(00)				3(00)

Programme	Year of Admission						Total
	2011 and earlier	2012	2013	2014	2015	2016	
Software Engineering	18(00)	1198(77)	298(169)	1(00)			1515(946)
Software Systems	21(00)	7(01)	7(02)	18(06)			53(09)
Telecommunications & Software Engineering			1(00)	5(00)			6(00)
<b>M.Sc.</b>							
Business Analytics						63(19)	63(19)
<b>M.Phil.</b>							
Hospital & Health Systems Management	2(00)	2(02)	2(02)	8(03)	28(09)	36(13)	78(29)
Optometry					6(04)		6(04)
<b>M.Tech.</b>							
Automotive Engineering				1(00)	69(05)		70(05)
Design Engineering				64(06)	54(09)	204(11)	322(26)
Embedded Systems				59(14)	45(07)	161(25)	265(46)
Environmental Engineering				23(08)			23(08)
Integrated Software Systems			7(01)	22(04)	20(05)	47(21)	96(31)
Manufacturing Management	3(00)	1(00)	10(01)	191(14)	363(21)	228(14)	796(50)
Microelectronics			1(00)	22(04)	98(14)	60(09)	181(27)
Pharmaceutical Operations and Management				8(00)		76(07)	84(07)
Quality Management		1(00)	2(00)	113(14)	202(30)	140(25)	458(69)
Science Communication					13(02)		13(02)
Software Engineering	18(00)	2398(1287)	518(277)	1222(587)	2646(1399)	172(67)	6974(3617)
Software Systems	28(00)	15(00)	55(13)	657(170)	1313(368)	1123(262)	3191(813)
Systems Engineering				71(25)	124(45)		195(70)
Telecommunications and Software Engineering				1(00)			1(00)
Transportation Engineering					28(03)		28(03)
<b>Sub. Total</b>	<b>98(00)</b>	<b>3627(2067)</b>	<b>1034(520)</b>	<b>2631(893)</b>	<b>5302(1985)</b>	<b>2550(523)</b>	<b>15242(5988)</b>
<b>Total Off-campus</b>							<b>19020(6443)</b>

**Note:** The numbers in brackets indicate number of female students.

**LIST OF ORGANIZATIONS WHO HAVE SPONSORED THEIR EMPLOYEES  
FOR WORK INTEGRATED LEARNING PROGRAMMES OF BITS**

S.NO	NAME	LOCATION
1.	[24]7 CUSTOMER SERVICE LTD.	BANGALORE
2.	[24]7 INNOVATION LABS	BANGALORE
3.	24]7 CUSTOMER PVT. LTD.	BANGALORE
4.	3DPLM SOFTWARE SOLUTIONS LTD.	NANDED
5.	3DPLM SOFTWARE SOLUTIONS LTD.	PUNE
6.	3M SINGAPORE PVT. LTD.	VELACHERRY
7.	3PILLAR GLOBAL	BHIWANI
8.	4I APPS SOLUTIONS	CHENNAI
9.	7N CONSULTING PVT. LTD.	GURGAON
10.	A INNOVATIVE INTERNATIONAL LTD.	AHMEDABAD
11.	A T DIGISGN TECHNOLOGIES (I) PVT. LTD.	GREATER NOIDA
12.	AASHNA CLOUDTECH PVT. LTD.	PUNE
13.	ABACUS CORPORATION SERVICES	HYDERABAD
14.	ABB (I) LTD.	ABU DHABI
15.	ABB (I) LTD.	BANGALORE
16.	ABB (I) LTD.	BARODA
17.	ABB (I) LTD.	BHILWARA
18.	ABB (I) LTD.	CHENNAI
19.	ABB (I) LTD.	DOHA
20.	ABB (I) LTD.	ERODE
21.	ABB (I) LTD.	KANNUR
22.	ABB (I) LTD.	NASHIK
23.	ABB (I) LTD.	SUBANG JAYA
24.	ABB (I) LTD.	TIRUVANNAMALAI
25.	ABB (I) LTD.	VADODARA
26.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	ADILABAD
27.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	BANGALORE
28.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	CHENNAI
29.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	KOLKATA
30.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	MADURAI
31.	ABB GLOBAL INDUSTRIES & SERVICES LTD.	MAYILADUTHURAI
32.	ABDULLAH H AL SHUWAYER SONS CO.	DAMMAM
33.	ABELLON CLEAN ENERGY LTD.	AHMEDABAD
34.	ABG CEMENT BUSINESS	MUMBAI
35.	ABIRAMI ENTERPRISES	CHENNAI
36.	ABJ ENGINEERING & CONTRACTING CO.	KOTTAYAM
37.	ABS GROUP INC	TRICHIRAPALLI
38.	ABU DHABI CO. FOR ONSHORE PETROLIUM	THRISSUR
39.	ABU DHABI GAS DEVELOPMENT CO. LTD.	ABU DHABI
40.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	ANGAMALY
41.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	CHENNAI
42.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	ERNAKULAM
43.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	KOCHI
44.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	NORTH PARAVOOR
45.	ABU DHABI GAS INDUSTRIES LTD. ( GASCO )	RUWAI
46.	ABU DHABI NATIONAL OIL CO. (ADNOC)	ABU DHABI
47.	ABU DHABI OIL REFINERY CO.	ARIYALUR
48.	ABU DHABI OIL REFINERY CO.	KUMBAKONAM
49.	ABU DHABI OIL REFINING CO.	ABU DHABI
50.	ABU DHABI OIL REFINING CO.	TAKREER
51.	ABU DHABI POLYMERS LTD.	ABU DHABI



52.	ABU DHABI POWER & CONTROL SYSTEMS WORKS	ABU DHABI
53.	ACC LTD.	COIMBATORE
54.	ACC LTD.	KYMORE
55.	ACC LTD.	MAINPURI
56.	ACC LTD.	TIRUPUR
57.	ACCEL FRONTLINE LTD.	TRIVANDRUM
58.	ACCELERE INFOSOFT PVT. LTD.	AHMEDABAD
59.	ACCELYST SOLUTIONS PVT. LTD.	BANGALORE
60.	ACCENTURE	BANGALORE
61.	ACCENTURE	CHENNAI
62.	ACCENTURE	COCHIN
63.	ACCENTURE	COIMBATORE
64.	ACCENTURE	CUDDALORE
65.	ACCENTURE	DELHI
66.	ACCENTURE	DOMBIVLI
67.	ACCENTURE	ERNAKULAM
68.	ACCENTURE	HYDERABAD
69.	ACCENTURE	JABALPUR
70.	ACCENTURE	KANNUR
71.	ACCENTURE	KANYAKUMARI
72.	ACCENTURE	KOCHI
73.	ACCENTURE	KOLKATA
74.	ACCENTURE	LUCKNOW
75.	ACCENTURE	LUDHIANA
76.	ACCENTURE	MADURAI
77.	ACCENTURE	MUMBAI
78.	ACCENTURE	NAGPUR
79.	ACCENTURE	NAGROTA
80.	ACCENTURE	NAVI MUMBAI
81.	ACCENTURE	NEW DELHI
82.	ACCENTURE	PATIALA
83.	ACCENTURE	PUNE
84.	ACCENTURE	SECUNDERABAD
85.	ACCENTURE	THRISSUR
86.	ACCENTURE	VADODARA
87.	ACCOLITE SOFTWARE	HYDERABAD
88.	ACCORD SOFTWARE AND SYSTEMS PVT. LTD.	BANGALORE
89.	ACCURATE LOGISTICS	CHENNAI
90.	ACG INSPECTION SYSTEM PVT. LTD.	THANE
91.	ACG PAMPAC MACHINES PVT. LTD.	KOLHAPUR
92.	ACG PAMPAC MACHINES PVT. LTD.	PUNE
93.	ACHERON SOFTWARE CONSULTANCY PVT. LTD.	HYDERABAD
94.	ACI WORLDWIDE INC	BANGALORE
95.	ACI WORLDWIDE INC	VISAKHA PATNAM
96.	ACIDAES SOLUTIONS PVT. LTD.	BHILWARA
97.	ACME INDUSTRIAL HARDWARE TRADING CO. LLC	CHOOISSERRY
98.	ACTIFIO TECHNOLOGIES (I) PVT. LTD.	TENALI
99.	ACTSINFO	BANGALORE
100.	ACTUANT (I) PVT. LTD.	BANGALORE
101.	ADANI PORTS & SEZ LTD.	MUNDRA
102.	ADANI POWER LTD.	AHMEDABAD
103.	ADANI POWER LTD.	KUTCH
104.	ADANI POWER MAHARASHTRA LTD.	ASANSOL
105.	ADANI POWER MAHARASHTRA LTD.	BANKURA
106.	ADANI POWER MAHARASHTRA LTD.	BURNPUR
107.	ADANI POWER MAHARASHTRA LTD.	DURGAPUR
108.	ADANI POWER MAHARASHTRA LTD.	HALDIA
109.	ADANI POWER MAHARASHTRA LTD.	LAKHIMPUR KHERI

110.	ADANI POWER MAHARASHTRA LTD.	SINGRAULI
111.	ADAPTIVE PROCESSES CONSULTING PVT. LTD.	BANGALORE
112.	ADCO- UAE	ABU DHABI
113.	ADCO- UAE	ALWAR
114.	ADCO- UAE	JAIPUR
115.	ADCO- UAE	THANE
116.	ADE TECHNOLOGIES PTE LTD.	SINGAPORE
117.	ADITECH IT & CONSULTANCY SERVICES PVT. LTD.	PUNE
118.	ADITYA BIRLA STAR CEMENTCO.LLC	CHENNAI
119.	ADITYA CARE HOSPITAL	BHUBANESWAR
120.	ADITYA INDUSTRY	BARODA
121.	ADNOC DISTRIBUTION	AL AIN
122.	ADNOC LINDE INDUSTRIAL GASES	ABU DHABI
123.	ADOBE SYSTEMS	AGRA
124.	ADOBE SYSTEMS	AHMEDABAD
125.	ADOBE SYSTEMS	BANGALORE
126.	ADOBE SYSTEMS	GHAZIABAD
127.	ADOBE SYSTEMS	GURGAON
128.	ADOBE SYSTEMS	JHUNJHUNU
129.	ADOBE SYSTEMS	KAITHAL
130.	ADOBE SYSTEMS	NOIDA
131.	ADOR FONTECH LTD.	NAGPUR
132.	ADP SOLUTIONS PVT. LTD.	CHENNAI
133.	ADSORBENT CARBONS PVT. LTD.	TIRUNELVELI
134.	ADVANCE VALVES PVT. LTD.	DELHI
135.	ADVENT TOOLTECH PVT. LTD.	PUNE
136.	ADVINUS THERAPEUTICS LTD.	BANGALORE
137.	ADYARD ABU DHABI LLC	TRICHY
138.	ADYARD INTERSERVE ABU DHABI L.L.C	ABU DHABI
139.	AEDIFICO TECH PVT. LTD.	GHAZIABAD
140.	AEQUS PVT. LTD.	BELAGAVI
141.	AEROEURO ENGINEERING (I) PVT. LTD.	BANGALORE
142.	AERONAUTICAL DEVELOPMENT AGENCY	BANGALORE
143.	AEROTECHNICS	TRIVANDRUM
144.	AERZEN MACHINES (I) PVT. LTD.	VADODARA
145.	AESSEAL (I) PVT. LTD. PUNE	PUNE
146.	AESSEAL MIDDLE EAST FZE	PALAKKAD
147.	AFOUR TECHNOLOGIES PVT. LTD.	PUNE
148.	AGAMYA SOLUTIONS PVT. LTD.	MUMBAI
149.	AGFA HEALTHCARE SOLUTIONS	DUBAI
150.	AGGREKO ENERGY RENTAL (I) PVT. LTD.	FARIDABAD
151.	AGILIAD TECHNOLOGIES PVT. LTD.	KOLHAPUR
152.	AGS TRANSACT TECHNOLOGIES LTD.	MUMBAI
153.	AHALIA HOSPITAL	COCHIN
154.	AIB VINCOTTE INTERNATIONAL PARTNERS LLC	VADODARA
155.	AIBEL PTE LTD.	SINGAPORE
156.	AIR (I) LTD.	CHENNAI
157.	AIR FORCE	AMRITSAR
158.	AIR INTERNATIONAL - TTR THERMAL SYSTEM P	PUNE
159.	AIRPORTS AUTHORITY OF INDIA	KOLKATA
160.	AIRWATCH BY VMWARE	KOLLAM
161.	AISHVI ENGINEERING AND PROJECTS	MUMBAI
162.	AJAX FIORI ENGINEERING (I) PVT. LTD.	INDORE
163.	AKAMAI TECHNOLOGIES (I) PVT.LTD.	BANGALORE
164.	AKS SOFTWARE LTD.	NOIDA
165.	AKSHAYA PVT. LTD.	CHENNAI
166.	AKZO NOBEL (I) LTD.	BANGALORE
167.	AL ABBAS GROUP	DUBAI

168.	AL AHLEIA SWITCHGEARCO.	TRICHUR
169.	AL AMEEN FATHIMA COLLEGE OF NURSING	BIJAPUR
170.	AL AMIN MEDICAL INSTRUMENTS CO.LTD.	KANNUR
171.	AL ANWAR CERAMIC TILESCO.SAOG.	NAGORE
172.	AL ARABIA SAFETY & SECURITY L.L.C	TIRUCHIRAPPALLI
173.	AL FARAA GROUP	CUDDALORE
174.	AL GHURAIR IRON & STEEL LLC	ABU DHABI
175.	AL GHURAIR IRON & STEEL LLC	MUSSAFFAH
176.	AL HAMRAH CONSTRUCTION.CO.LLC	AL JAZEERA
177.	AL HAMRAH CONSTRUCTION.CO.LLC	RAS AL KHAIMAH
178.	AL HASSAN ENGINEERINGCO.SAOG	RUWI
179.	AL JAZEERA MEDIA NETWORK	DOHA
180.	AL JAZIRA METAL INDUSTRIES CO. LLC	ABU DHABI
181.	AL MAHASIN ELECTRO MECH CONT COMP	PERAMBALUR
182.	AL NABOODAH MEP LLC	DUBAI
183.	AL NASR ENGINEERING	COIMBATORE
184.	AL QABAS EMPLOYMENT	ABU DHABI
185.	AL REYAMI STEEL - ABU DHABI	TRICHY
186.	AL SABAH ELECTROMECHANICAL INTERNATIONAL	AJMAN
187.	AL SABBAH ELECTROMECHANICAL	ABU DHABI
188.	AL SALEM JOHNSON CONTROLS	TIRUPUR
189.	AL SHIRAWI ELECTRICAL & MECHANICAL ENGIN	DUBAI
190.	AL SHIRAWI ELECTRICAL & MECHANICAL ENGIN	RAS AL KHOR
191.	AL TAJIR GLASS INDUSTRIES	DUBAI
192.	AL TAMIMI ENGINEERING SERVICES LLC	DUBAI
193.	AL YAMAMA CO. FOR TRADING & CONTRACTING	CHALLAKERE
194.	ALCATEL LUCENT (I) PVT. LTD.	BANGALORE
195.	ALCATEL LUCENT (I) PVT. LTD.	CHENNAI
196.	ALCATEL LUCENT (I) PVT. LTD.	NEW DELHI
197.	ALCATEL LUCENT (I) PVT. LTD.	THIRUVANANTHAPURAM
198.	ALCHEM INTERNATIONAL PVT. LTD.	FARIDABAD
199.	ALE (I) PVT. LTD.	CHENNAI
200.	ALEMBIC PHARMACEUTICALS LTD.	VADODARA
201.	ALETHE LABS (I) PVT. LTD.	NEW DELHI
202.	ALFANAR ELECTRICAL SYSTEMS	RIYADH
203.	AL-FUTTAIM ENGINEERING	CHICKMAGLUR
204.	ALGOSCALE TECHNOLOGIES PVT. LTD.	NEW DELHI
205.	AL-JEHAT CO. ( JATCO)	KALYAN
206.	ALKHORAYEF WATER &POWER TECHNOLOGIES COM	CHENNAI
207.	ALLEGIS SERVICES (I) PVT. LTD.	HOSUR
208.	ALLGO EMBEDDED SYSTEMS PVT. LTD.	BANGALORE
209.	ALLGREEN ECOTECH SOLUTIONS PVT. LTD.	NOIDA
210.	ALLIANCE GLOBAL SERVICES	HYDERABAD
211.	ALLIANCE TIRE CO.	MUMBAI
212.	ALLIANCE TIRE CO.	TIRUNELVELI
213.	ALLIANZ MANAGED OPERATIONS & SERVICES SE	KANCHIPURAM
214.	ALLSCRIPTS (I) PVT. LTD.	BANGALORE
215.	ALLSCRIPTS (I) PVT. LTD.	GREATER NOIDA
216.	ALLSCRIPTS (I) PVT. LTD.	KODAGU
217.	ALLSCRIPTS (I) PVT. LTD.	PUNE
218.	ALLSTATE SOLUTIONS PVT. LTD.	BANGALORE
219.	ALLYZONE SOFTTECH PVT. LTD.	DELHI
220.	ALP CONSULTING LTD.	CHENNAI
221.	ALPHA PALLETS FZC	NANDED
222.	ALSTOM (I) PVT. LTD.	BANGALORE
223.	ALSTOM (I) PVT. LTD.	VADODARA
224.	ALSTOM MIDDLE EAST	ABU DHABI
225.	ALSTOM SYSTEMS (I) PVT. LTD.	BANGALORE

226.	ALSTOM SYSTEMS (I) PVT. LTD.	DELHI
227.	ALSTOM SYSTEMS (I) PVT. LTD.	FARIDABAD
228.	ALSTOM SYSTEMS (I) PVT. LTD.	HOSUR
229.	ALSTOM SYSTEMS (I) PVT. LTD.	VADODARA
230.	ALTAIR ENGINEERING (I) PVT. LTD.	BANGALORE
231.	ALTAJIR GLASS INDUSTRIES LTD.	DUBAI
232.	ALTIMETRIK (I) PVT. LTD.	CHENNAI
233.	ALTIMETRIK (I) PVT. LTD.	HYDERABAD
234.	ALTIOSTAR NETWORKS	BANGALORE
235.	ALTISOURCE BUSINESS SOLUTIONS PVT. LTD.	BANGALORE
236.	ALTRAN (I) PVT. LTD.	BANGALORE
237.	ALTRAN TECHNOLOGIES	CHENNAI
238.	ALTRAN TECHNOLOGIES	TIRUPATI
239.	ALTURKI ENT.LLC	VIRUDHUNAGAR
240.	AMADA SOFT (I) PVT. LTD.	DHANBAD
241.	AMADASOFT (I) PVT. LTD.	CHENNAI
242.	AMADEUS SOFTWARE LABS PVT. LTD.	BANGALORE
243.	AMADEUS SOFTWARE LABS PVT. LTD.	HOSUR
244.	AMANA INDUSTRIES	TRICHY
245.	AMAZON (I) DEVELOPMENT CENTER	HYDERABAD
246.	AMAZON (I) PVT. LTD.	BANGALORE
247.	AMBE ENGINEERS PVT. LTD.	FARIDABAD
248.	AMBOSELI PROFESSIONAL PVT.LTD.	BANGALORE
249.	AMBUJA CEMENTS LTD.	SURAT
250.	AMD (I) PVT. LTD.	BANGALORE
251.	AMD (I) PVT. LTD.	HYDERABAD
252.	AMDOCS (I) PVT. LTD.	DELHI
253.	AMDOCS (I) PVT. LTD.	FARIDABAD
254.	AMDOCS (I) PVT. LTD.	LIMASSOL
255.	AMDOCS (I) PVT. LTD.	NAVI MUMBAI
256.	AMDOCS (I) PVT. LTD.	NORCROSS
257.	AMDOCS (I) PVT. LTD.	PUNE
258.	AMEC FOSTER WHEELER	ABU DHABI
259.	AMEC FOSTER WHEELER ASIA PACIFIC PTE. LTD.	CHENNAI
260.	AMEC INTERNATIONAL	ABU DHABI
261.	AMEC INTERNATIONAL LTD.	CHENNAI
262.	AMERICAN EXPRESS (I) PVT. LTD.	BANGALORE
263.	AMERICAN EXPRESS (I) PVT. LTD.	DELHI
264.	AMERICAN EXPRESS (I) PVT. LTD.	GURGAON
265.	AMERICAN UNIVERSITY IN THE EMIRATES	KOLLAM
266.	AMETEK INSTRUMENTS (I) PVT. LTD.	BANGALORE
267.	AMI CHAND MAKHAN LAL FEEDS PVT. LTD.	GURGAON
268.	AMITECH (I) PVT. LTD.	SURAT
269.	AMITY UNIVERSITY UTTAR PRADESH	GURGAON
270.	AMNEAL PHARMA	HYDERABAD
271.	AMNEAL PHARMACEUTICALS PVT. LTD.	AHMEDABAD
272.	AMPHENOL FCI	PUNE
273.	AMPHENOL INTERCONNECT (I) PVT. LTD.	CHENNAI
274.	AMPLEX EMIRATES LLC	ABU DHABI
275.	AMRITA CENTRE FOR CYBER SECURITY	KOLLAM
276.	AMTEX SYSTEMS	CHENNAI
277.	AMW AUTO COMPONENTS LTD.	GURGAON
278.	ANALOG DEVICES (I) PVT. LTD.	BANGALORE
279.	ANALYTICS QUOTIENT	KANPUR
280.	ANAND AUTOMOTIVE PVT. LTD.	GURGAON
281.	ANCHALA SKIN INST AND RESEARCH CENTRE	HYDERABAD
282.	ANCHOR ELECTRICALS PVT. LTD.	DAMAN
283.	ANDHRA PRADESH POWER GENERATION COMPRPOR	PRODDATUR

284.	ANDREW TELECOMMUNICATIONS (I) PVT. LTD.	PONDA
285.	ANNAI APPLIANCES MANUFACTURING PVT. LTD.	BANGALORE
286.	ANSALDO STS (A) A HITACHI GROUP CO.	TIRUCHIRAPPALLI
287.	ANTARA ARTS COLLECTIVE TRUST	BANGALORE
288.	ANURADHA PROPERTIES AND TOWNSHIPS PVT. LTD.	BANGALORE
289.	ANZ OPERATIONS AND TECHNOLOGY	BANGALORE
290.	AON HEWITT	NEW DELHI
291.	AON HEWITT	NOIDA
292.	AON HEWITT	THANE
293.	APAR TECHNOLOGIES PTE LTD.	KANPUR
294.	APARNA CONSTRUCTIONS & ESTATES PVT. LTD.	HYDERABAD
295.	APERTA LTD.	COIMBATORE
296.	APEX BANK	AIZAWL
297.	APIGEE TECHNOLOGIES LTD.	BANGALORE
298.	APJ TOURS & TRAVELS PVT. LTD.	MUMBAI
299.	APOLLO HOSPITALS ENTERPRISES LTD.	CHITTORGARH
300.	APOLLO INTERNATIONAL LTD.	GURGAON
301.	APOLLO SPECIALITYHOSPITALS	CHENNAI
302.	APOLLO TYRES LTD.	BANGALORE
303.	APOLLO TYRES LTD.	CHENNAI
304.	APOLLO TYRES LTD.	KOCHI
305.	APOLLO TYRES LTD.	NAVI MUMBAI
306.	APOLLO TYRES LTD.	VADODARA
307.	APOTEX PHARMACHEM (I) PVT. LTD.	BANGALORE
308.	APPIRIO (I) CLOUD SOLUTIONS PVT. LTD.	JAIPUR
309.	APPIRIO (I) CLOUD SOLUTIONS PVT. LTD.	NEW DELHI
310.	APPLE INC	BANGALORE
311.	APPLIED MATERIALS (I) PVT. LTD.	BANGALORE
312.	APPLIED MATERIALS (I) PVT. LTD.	CHENNAI
313.	APPLIED MATERIALS (I) PVT. LTD.	DHARWAD
314.	APPLIED MICRO CIRCUITS (I) PVT. LTD.	PUNE
315.	APPLUS VELOSI	TIRUNELVELI
316.	APPLUS VELOSI	TRICHY
317.	APPLUSVELOSI LLC	MANGALORE
318.	APPSMYTH TECHNOLOGIES (I) PVT. LTD.	MUMBAI
319.	APTEAN (I) PVT. LTD.	BANGALORE
320.	APTECH LTD.	PUNE
321.	AQUA MACHINERIES PVT. LTD.	AHMEDABAD
322.	ARABI- ENERTECH KUWAIT	FAHEHEEL
323.	ARABIAN AUTOMOBILESCO.LLCC	MADURAI
324.	ARABIAN BUSINESS CENTRE FOR RECRUITMENT	ABU DHABI
325.	ARABIAN PIPELINE PROJECTSCO.	MANAPARAI
326.	ARABTEC CONSTRUCTION LLC	TRICHIRAPALLI
327.	ARC ELECTRICALS	KANCHIPURAM
328.	ARCADIS DESIGN & CONSULTANCY INC	DUBAI
329.	ARCHGROUP CONSULTANTS	PUDUKKOTTAI
330.	ARCUM ENGINEERING P LTD.	KOLKATA
331.	ARIBA SAP	MALAPPURAM
332.	ARIBA TECHNOLOGIES (I) PVT. LTD.	BANGALORE
333.	ARICENT TECHNOLOGIES	BANGALORE
334.	ARICENT TECHNOLOGIES	CHENNAI
335.	ARICENT TECHNOLOGIES	DAVANGERE
336.	ARICENT TECHNOLOGIES	DELHI
337.	ARICENT TECHNOLOGIES	ERNAKULAM
338.	ARICENT TECHNOLOGIES	GHAZIABAD
339.	ARICENT TECHNOLOGIES	GURGAON
340.	ARICENT TECHNOLOGIES	HOSUR
341.	ARICENT TECHNOLOGIES	KOLLEGAL

342.	ARICENT TECHNOLOGIES	MADURAI
343.	ARICENT TECHNOLOGIES	NAMAKKAL
344.	ARICENT TECHNOLOGIES	NEW DELHI
345.	ARICENT TECHNOLOGIES	NOIDA
346.	ARICENT TECHNOLOGIES	TIRUPUR
347.	ARICENT TECHNOLOGIES	VIRUDHUNAGAR
348.	ARIES MARINE ENGG. SERVICES	SHARJAH
349.	ARISGLOBAL SOFTWARE PVT. LTD.	BANGALORE
350.	ARISHINA LIFE SCIENCES (P) LTD.	ERNAKULAM
351.	ARISTOCRAT TECHNOLOGIES (I) PVT. LTD.	FARIDABAD
352.	ARISTOCRAT TECHNOLOGIES (I) PVT. LTD.	NEW DELHI
353.	ARJUN PULP& PAPER (I) PVT.LTD.	CHENNAI
354.	ARM EMBEDDED TECHNOLOGIES PVT. LTD.	BANGALORE
355.	ARM WELDERS PVT. LTD.	PUNE
356.	ARMAB INSURANCE WORK	ALAPPUZHA
357.	ARMACELL (I) PVT. LTD.	PUNE
358.	ARMOR (I) CODING AND IMAGING SUPPLIES	BANGALORE
359.	ARMSTRONG INTERNATIONAL PVT. LTD.	CHENNAI
360.	ARMY	GHAZIABAD
361.	ARMY	JAIPUR
362.	ARMY	MHOW
363.	ARMY	NAGROTA
364.	ARMY	NEW DELHI
365.	ARMY	PATIALA
366.	ARMY	PUNE
367.	ARPAN INFRASOLUTION PVT. LTD.	NAWADA
368.	ARRIS (I) PVT. LTD.	BANGALORE
369.	ARROW ELECTRONICS INC	BANGALORE
370.	ARTEMIS HOSPITAL	GURGAON
371.	ARTERIA TECHNOLOGIES PVT. LTD.	MUMBAI
372.	ARUBA NETWORKS (I) PVT. LTD.	BANGALORE
373.	ARUBA NETWORKS A HP ENTERPRISE CO.	ANANTAPUR
374.	ARUNA ALLOY STEELS PVT. LTD.	MADURAI
375.	ARVIND ENVISOL PVT. LTD.	AHMEDABAD
376.	ARVIND LIFESTYLE BRANDS LTD.	BANGALORE
377.	ARYAKA NETWORKS (I) PVT. LTD.	BANGALORE
378.	ASAHI (I) GLASS LTD.	CHENNAI
379.	ASAHI (I) GLASS LTD.	DELHI
380.	ASAHI (I) GLASS LTD.	KOLHAPUR
381.	ASAN CONSULTING	COIMBATORE
382.	ASAP INFO SYSTEMS PVT. LTD.	AHMEDABAD
383.	ASCENDAS SERVICES (I) PVT. LTD.	BANGALORE
384.	ASHOK LEYLAND LTD.	BANGALORE
385.	ASHOK LEYLAND LTD.	CHENNAI
386.	ASHOK LEYLAND LTD.	COIMBATORE
387.	ASHOK LEYLAND LTD.	HOSUR
388.	ASHOK LEYLAND LTD.	JAIPUR
389.	ASHOK LEYLAND LTD.	MADURAI
390.	ASHOK LEYLAND LTD.	MALDA
391.	ASHOK LEYLAND LTD.	PALWAL
392.	ASHOK LEYLAND LTD.	RAJAPALAYAM
393.	ASHOK LEYLAND LTD.	SALEM
394.	ASHOK LEYLAND LTD.	SILIGURI
395.	ASHOK LEYLAND LTD.	TIRUNELVELI
396.	ASHOK LEYLAND LTD.	TRICHY
397.	ASHOK LEYLAND LTD.	VELLORE
398.	ASHWIN INDUSTRIES	CHENNAI
399.	ASIA MOTOR WORKS AUTO COMPONENTS LTD.	BHUJ

400.	ASIA MOTOR WORKS LTD.	BHUJ
401.	ASIAN PAINTS LTD.	PONDICHERRY
402.	ASIAN PAINTS LTD.	TRICHY
403.	ASIAN PAINTS LTD.	VELLORE
404.	ASM TECHNOLOGIES LTD.	BANGALORE
405.	ASPECT TECHNOLOGY CENTER (I) PVT. LTD.	BANGALORE
406.	ASPENTECH	PUNE
407.	ASSAM RIFLES	SILCHAR
408.	ASSOCIATED LIGHTING CO.	DHANOURA
409.	ASSYST INTERNATIONAL PVT. LTD.	KOCHI
410.	ASTECHNOSOFT PVT. LTD.	AGRA
411.	ASTER AADHAR HOSPITAL	KOLHAPUR
412.	ASTERIA AEROSPACE PVT. LTD.	BANGALORE
413.	ASTRA SYSTEMS PVT. LTD.	BANGALORE
414.	ASTRAZENECA	DINDIGUL
415.	ASTRON CERTIFICATION	TIRUNELVELI
416.	AT&S (I) PVT. LTD.	MYSORE
417.	AT&T COMMUNICATIONS SERVICES PVT. LTD.	NEW DELHI
418.	ATC TIRES PVT. LTD.	CUDDALORE
419.	ATC TIRES PVT. LTD.	TIRUNELVELI
420.	ATHENA CHHATTISGARH POWER LTD.	HYDERABAD
421.	ATHENAHEALTH	BHUBANESWAR
422.	ATHENAHEALTH TECHNOLOGY PVT. LTD.	CHENNAI
423.	ATKINS	BANGALORE
424.	ATKINS	GURGAON
425.	ATLAS COPCO (I) LTD.	BANGALORE
426.	ATLAS COPCO (I) LTD.	HOSUR
427.	ATLAS COPCO (I) LTD.	PUNE
428.	ATOS (I) PVT. LTD.	BANGALORE
429.	ATOS (I) PVT. LTD.	DOMBIVLI
430.	ATOS (I) PVT. LTD.	INDORE
431.	ATOS (I) PVT. LTD.	JIND
432.	ATOS (I) PVT. LTD.	KALAMBOLI
433.	ATOS (I) PVT. LTD.	KOLKATA
434.	ATOS (I) PVT. LTD.	LUDHIANA
435.	ATOS (I) PVT. LTD.	MUMBAI
436.	ATOS (I) PVT. LTD.	PUNE
437.	ATRIA CONVERGENCE TECHNOLOGIES	BANGALORE
438.	ATRIA CONVERGENCE TECHNOLOGIES	PEDDAPURAM
439.	ATRIA POWER CORPORATION LTD.	BANGALORE
440.	ATTIVO NETWORK SECURITY (I) PVT.LTD.	BANGALORE
441.	AU FINANCIERS (I) LTD.	JAIPUR
442.	AU FINANCIERS (I) LTD.	JODHPUR
443.	AUDIENCE SCIENCE (I) PVT. LTD.	PUNE
444.	AURIBISES TECHNOLOGIES PVT. LTD.	LUDHIANA
445.	AUROBINDO PHARMA LTD.	HYDERABAD
446.	AUTOGRADE INTERNATIONAL PVT. LTD.	BANGALORE
447.	AUTOLIV (I) PVT. LTD.	BANGALORE
448.	AUTOMATION ANYWHERE	TIRUPATHI
449.	AUTOMETERS ALLIANCE LTD.	GHAZIABAD
450.	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	CHENNAI
451.	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	HYDERABAD
452.	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	MIRYALGUDA
453.	AUTOMOTIVE STAMPINGS & ASSEMBLIES LTD.	PUNE
454.	AVACO INTERNATIONAL	SHARJAH
455.	AVANTEL LTD.	HYDERABAD
456.	AVAYA (I) PVT. LTD.	CHENNAI
457.	AVAYA (I) PVT. LTD.	ERNAKULAM

458.	AVAYA (I) PVT. LTD.	PUNE
459.	AVERY DENNISON (I) PVT. LTD.	PUNE
460.	AVIN SYSTEMS PVT. LTD.	BANGALORE
461.	AVL (I) PVT. LTD.	GURGAON
462.	AVT MCCORMICK INGREDIENTS PVT. LTD.	COCHIN
463.	AVTEC LTD.	HOSUR
464.	AVTEC LTD.	SALEM
465.	AVVAS INFOTECH (CLIENT AMDOCS)	PUNE
466.	AWAL GULF MANUFACTURING CO	BANGALORE
467.	AXIOM CONSULTING PVT. LTD.	BANGALORE
468.	AXIS BANK	DELHI
469.	AXIS IT&T LTD. (CADES DIGITECH PVT. LTD.	MYSORE
470.	AXON CONSTRUCTIONS PVT. LTD.	TRICHY
471.	AXSYS HEALTHTECH LTD.	HYDERABAD
472.	AXXONET SYSTEMS	BANGALORE
473.	AYT INTERNATIONAL L.L.C	SHARJAH
474.	B M C SOFTWARE LTD.	PUNE
475.	B2B INFOTECH MEDIA	NEW DELHI
476.	BA CONTINUUM (I) PVT. LTD.	CHENNAI
477.	BA CONTINUUM (I) PVT. LTD.	COIMBATORE
478.	BA CONTINUUM (I) PVT. LTD.	DELHI
479.	BA CONTINUUM (I) PVT. LTD.	HYDERABAD
480.	BA CONTINUUM (I) PVT. LTD.	THANE
481.	BAHWAN CYBERTEK PVT. LTD.	CHENNAI
482.	BAHWAN ENGINEERING CO. LLC	DUBAI
483.	BAHWAN TECHNICAL CONTRACTINGCO.LLC	AL QUOZ
484.	BAJAJ AUTO LTD.	AURANGABAD
485.	BAJAJ AUTO LTD.	NASHIK
486.	BAJAJ AUTO LTD.	PUNE
487.	BAJAJ AUTO LTD.	RUDRAPUR
488.	BAJAJ ELECTRICALS LTD.	MUMBAI
489.	BAKER HUGHES GHANA LTD.	MUMBAI
490.	BAKER HUGHES INC	DUBAI
491.	BAKER HUGHES SINGAPORE PTE.	RAMANATHAPURAM
492.	BALAJI SOFTWARE	THANE
493.	BALL AEROCAN (I) PVT. LTD.	AHMEDABAD
494.	BAM HIGGS & HILL LLC	DUBAI
495.	BANK OF AMERICA	GUNTUR
496.	BANK OF AMERICA	HYDERABAD
497.	BANK OF AMERICA	THANE
498.	BARALA HOSPITAL	JHUNJHUNU
499.	BARCLAYS TECHNOLOGY CENTRE (I) PVT. LTD.	AGRA
500.	BARCLAYS TECHNOLOGY CENTRE (I) PVT. LTD.	PUNE
501.	BARCLAYS TECHNOLOGY CENTRE (I) PVT. LTD.	VISAKHA PATNAM
502.	BARCO ELECTRONICS SYSTEMS PVT. LTD.	GHAZIABAD
503.	BARCO ELECTRONICS SYSTEMS PVT. LTD.	MORENA
504.	BARTEC MIDDLE EAST LLC	KANCHEEPURAM
505.	BASE CONTROL TECH FZC	SHARJAH
506.	BASF (I) LTD.	MANGALORE
507.	BDS STEEL DETAILERS (AUSTRALIA) PTY LTD.	CHENNAI
508.	BE ENGINEERING SERVICE (I) PVT. LTD.	HYDERABAD
509.	BECHTEL (I) PVT. LTD.	KURNOOL
510.	BECHTEL (I) PVT. LTD.	NOIDA
511.	BEEINFOTECH	COIMBATORE
512.	BELIEVERS CHURCH MEDICAL COLLEGE HOSPITAL	CALICUT
513.	BELIEVERS CHURCH MEDICAL COLLEGE HOSPITAL	THIRUVALLA
514.	BELLS SOFT TECH	BANGALORE
515.	BELLSONICA AUTO COMPONENT (I) PVT. LTD.	GURGAON



516.	BEML LTD.	MYSORE
517.	BEML LTD.	NOIDA
518.	BENCHMARK IT SOLUTIONS	PUNE
519.	BENCHMARK IT SOLUTIONS (I) PVT. LTD.	SATARA
520.	BENCHMARK TECHNOLOGY	RIYADH
521.	BENNETT COLEMAN ANDCO.LTD.	PUNE
522.	BENTLEY SYSTEMS (I)	PUNE
523.	BENU INC	CHENNAI
524.	BERCO UNDERCARRIAGES (I) PVT. LTD.	HYDERABAD
525.	BERI UDYOG PVT. LTD.	SHAMLI
526.	BEST BUSINESS BUREAU	DUBAI
527.	BETHANY HOSPITAL	THANE
528.	BEUMER (I) LTD.	KHAJALI
529.	BG EXPLORATION & PRODUCTION (I) LTD.	DAHANU
530.	BG EXPLORATION & PRODUCTION (I) LTD.	MALAPPURAM
531.	BG EXPLORATION & PRODUCTION (I) LTD.	VISAKHAPATNAM
532.	BGR ENERGY SYSTEMS LTD.	CHENNAI
533.	BHAKTIVEDANTA INSTITUTE	MUMBAI
534.	BHARAT DYNAMICS LTD.	HYDERABAD
535.	BHARAT ELECTRONICS LTD.	BANGALORE
536.	BHARAT ELECTRONICS LTD.	CHENNAI
537.	BHARAT ELECTRONICS LTD.	GURGAON
538.	BHARAT ELECTRONICS LTD.	HYDERABAD
539.	BHARAT FORGE LTD.	BELONIA
540.	BHARAT FORGE LTD.	MUNDHAWA
541.	BHARAT FORGE LTD.	PUNE
542.	BHARAT FRITZ WERNER	BANGALORE
543.	BHARAT HEAVY ELECTRICALS LTD.	BANGALORE
544.	BHARAT HEAVY ELECTRICALS LTD.	CHENNAI
545.	BHARAT HEAVY ELECTRICALS LTD.	DELHI
546.	BHARAT HEAVY ELECTRICALS LTD.	THIRUCHIRAPALLI
547.	BHARAT HEAVY ELECTRICALS LTD.	TRICHY
548.	BHARAT PETROLEUM CORPORATION LTD.	ERNAKULAM
549.	BHARAT PETROLEUM CORPORATION LTD.	MADURAI
550.	BHARAT PETROLEUM CORPORATION LTD.	MANGALORE
551.	BHARAT PETROLEUM CORPORATION LTD.	MUMBAI
552.	BHARAT SANCHAR NIGAM LTD.	BHARUCH
553.	BHARAT SANCHAR NIGAM LTD.	GHAZIABAD
554.	BHARAT SANCHAR NIGAM LTD.	HYDERABAD
555.	BHARAT SANCHAR NIGAM LTD.	PUNE
556.	BHARTI AIRTEL LTD.	DELHI
557.	BHARTI INFRA TEL LTD.	BHUBANESWAR
558.	BHAVANI INDUSTRIES	BANGALORE
559.	BHAVNA SOFTWARE (I) PVT. LTD.	DELHI
560.	BHAWAN ENGINEERINGCO.LLC	PUNE
561.	BHORUKA CHARITABLE TRSUT	JAIPUR
562.	BHTC (I) PVT. LTD.	PUNE
563.	BHUSHAN POWER AND STEEL LTD.	SAMBALP
564.	BIESSE MANUFACTURINGCO.PVT. LTD.	CUMBUM
565.	BIGTECH SOFTWARE PVT. LTD.	COIMBATORE
566.	BILAD OMAN LLC (SUHAIL BAHWAN GROUP)	SOHAR
567.	BILT GRAPHIC PAPER PRODUCTS LTD.	CHANDRAPUR
568.	BINLADIN CONTRACTING GROUP	PATHANAMTHITTA
569.	BIOCON LTD.	AGRA
570.	BIOCON LTD.	BANGALORE
571.	BIOCON LTD.	DEORIA
572.	BIOCON LTD.	HYDERABAD
573.	BIOLOGICAL E LTD.	HYDERABAD

574.	BIOLOGICAL E LTD.	SECUNDERABAD
575.	BIRLA CELLULOSIC	BHARUCH
576.	BIRLA COPPER	DAHEJ
577.	BIRLASOFT (I) LTD.	HYDERABAD
578.	BIRLASOFT (I) LTD.	NOIDA
579.	BIRLASOFT (I) LTD.	SECUNDERABAD
580.	BIRLASOFT INC	MADURAI
581.	BIRMINGHAM STEEL FABRICATION	ROLLA
582.	BISS PVT. LTD.	BANGALORE
583.	BITS-PILANI DUBAI CAMPUS	DUBAI
584.	BITS-PILANI HYDERABAD CAMPUS	HYDERABAD
585.	BITS-PILANI KK BIRLA GOA CAMPUS	GOA
586.	BITS-PILANI PILANI CAMPUS	ZUARINAGAR
587.	BIW SOFT PVT. LTD.	PILANI
588.	BIZIMPACT KNOWLEDGE SERVICES LLP	PILANI
589.	BK GULF LLC	ARUPPUKOTTAI
590.	BLACK KNIGHT (I) SOLUTIONS PVT. LTD.	HYDERABAD
591.	BLACK KNIGHT (I) SOLUTIONS PVT. LTD.	SECUNDERABAD
592.	BLACKCAT ENGINEERING AND CONSTRUCTION	KARAIKUDI VIA
593.	BLASTLINE (I) PVT. LTD.	ERNAKULAM
594.	BLEND COLOURS PVT. LTD.	CHENNAI
595.	BLOGIC INFOTECH PVT.LTD.	HYDERABAD
596.	BLOOM ENERGY CORPORATION	BANGALORE
597.	BLUE STAR LTD.	CHENNAI
598.	BLUE STAR LTD.	RAJAPALAYAM
599.	BLUE STAR LTD.	SRI GANGANAGAR
600.	BLUE STAR LTD.	UDUMALPET
601.	BLUE STAR LTD.	UDUPI
602.	BLUE STAR LTD.	ULHASNAGAR
603.	BMC SOFTWARE (I) PVT. LTD.	BANGALORE
604.	BMC SOFTWARE (I) PVT. LTD.	PUNE
605.	BOBST (I) PVT. LTD.	BHOPAL
606.	BOBST (I) PVT. LTD.	PUNE
607.	BOMBARDIER TRANSPORTATION (I) PVT. LTD.	VADOADARA
608.	BONATRANS (I) PVT. LTD.	AURANGABAD
609.	BORDER ROAD ORGANIZATION	BAHADURGARH
610.	BOROUGE(ABU DHABI POLYMERS CO.)	ABU DHABI
611.	BOS SHELF LLC	KOLLAM
612.	BOSCH LTD.	AHMEDABAD
613.	BOSCH LTD.	BANGALORE
614.	BOSCH LTD.	BIDADI
615.	BOSCH LTD.	CHENNAI
616.	BOSCH LTD.	COIMBATORE
617.	BOSCH LTD.	GOA
618.	BOSCH LTD.	JAIPUR
619.	BOSCH LTD.	JHUNJHUNU
620.	BOSCH LTD.	KOTTAYAM
621.	BOSCH LTD.	NASHIK
622.	BOSCH LTD.	NEW DELHI
623.	BOSCH LTD.	PUNE
624.	BOSCH LTD.	TIRUVANNAMALAI
625.	BOSTON ANALYTICS	NEW DELHI
626.	BOSTON SCIENTIFIC TECHNOLOGY & ENGINEERI	GURGAON
627.	BPCL	MUMBAI
628.	BRAKES (I) PVT. LTD.	CHENNAI
629.	BRAKES (I) PVT. LTD.	SHOLINGHUR
630.	BREACH CANDY HOSPITAL TRUST	MUMBAI
631.	BRIDGESTONE (I) PVT. LTD.	BARWAHA

632.	BRIDGESTONE (I) PVT. LTD.	MUMBAI
633.	BRIDGESTONE (I) PVT. LTD.	PUNE
634.	BRIJ LAL HOSPITAL	BAREILLY
635.	BRILLIANT BIO PHARMA PVT. LTD.	HYDERABAD
636.	BRILLIO TECHNOLOGIES PVT. LTD.	TRIVANDRUM
637.	BRITANNIA INDUSTRIES LTD.	RAJGARH
638.	BRITISH TELECOM	BANGALORE
639.	BRITISH TELECOM	DELHI
640.	BRITISH TELECOM	LUDHIANA
641.	BROADCOM (I) PVT. LTD.	HYDERABAD
642.	BROADCOM COMMUNICATIONS PVT. LTD.	BANGALORE
643.	BROADCOM COMMUNICATIONS PVT. LTD.	ROORKEE
644.	BROADCOM COMMUNICATIONS TECHNOLOGIES PVT. LTD.	BANGALORE
645.	BROADCOM COMMUNICATIONS TECHNOLOGIES PVT. LTD.	KAKINADA
646.	BROADCOM COMMUNICATIONS TECHNOLOGIES PVT. LTD.	TIRUVANNAMALAI
647.	BROADCOM LTD.	BANGALORE
648.	BROADCOM LTD.	HYDERABAD
649.	BROADCOM SEMICONDUCTORS PVT. LTD.	BANGALORE
650.	BROADGATE TECHNICAL SERVICES	CHENNAI
651.	BROADRIDGE FINANCIAL SOLUTIONS	SHANKARPALLY
652.	BROADRIDGE JAPAN LTD.	CHENNAI
653.	BROCADE COMMUNICATIONS SYSTEMS PVT. LTD.	BANGALORE
654.	BROCADE COMMUNICATIONS SYSTEMS PVT. LTD.	ERODE
655.	BROOKFIELD MULTIPLEX MEDGULF JV W.L.L	DOHA
656.	BROOKFIELD MULTIPLEX MEDGULF JV WLL.	THRISSUR
657.	BT E-SERV (I) PVT. LTD.	BANGALORE
658.	BTL (I) PVT. LTD.	BANGALORE
659.	BTL (I) PVT. LTD.	KOTTAYAM
660.	BTL (I) PVT. LTD.	PALAKKAD
661.	BUHLER (I) PVT. LTD.	BANGALORE
662.	BURCKHARDT COMPRESSION (I) PVT. LTD.	PUNE
663.	BUREAU OF INDIAN STANDARDS	NEW DELHI
664.	BUREAU VERITAS	DEIRA
665.	BUREAU VERITAS (I) PVT. LTD.	SURAT
666.	BUREAU VERITAS CERTIFICATION (I) PVT. LTD.	BANGALORE
667.	BUREAU VERITAS CERTIFICATION (I) PVT. LTD.	HOWRAH
668.	BUREAU VERITAS SPA ABU DHABI	KOTTAYAM
669.	BURKAN MUNITIONS SYSTEMS	THRISSUR
670.	BUSH ELECTRICALS AND ENGINEERS	THANE
671.	BVRAUTOMATION	BANGALORE
672.	C IENA (I) PVT. LTD.	GURGAON
673.	CA (I) TECHNOLOGIES PVT. LTD.	BANGALORE
674.	CA (I) TECHNOLOGIES PVT. LTD.	CHENNAI
675.	CA TECHNOLOGIES	HYDERABAD
676.	CA TECHNOLOGIES	KADAPA
677.	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	BANGALORE
678.	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	GHAZIABAD
679.	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	NOIDA
680.	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	PUNE
681.	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	RANCHI
682.	CADILA PHARMACEUTICALS LTD.	VIKASPURI
683.	CADMAXX SOLUTIONS PVT. LTD.	BANGALORE
684.	CADSYS (I) LTD.	HYDERABAD
685.	CADVISION ENGINEERS PVT. LTD.	SECUNDERABAD
686.	CAIRN (I) LTD.	GURGAON
687.	CAIRN ENERGY (I) PTY LTD.	NEW DELHI
688.	CALCON INSTRUMENTATION & SALES LLC	ALUVA
689.	CALDERYS REFRACTORY (I) LTD.	SURAT

690.	CALITRON CALIBRATION LABORATORY	PUNE
691.	CALLHEALTH SERVICES PVT. LTD.	HYDERABAD
692.	CALSOFT INC.	PUNE
693.	CALSOFT LABS (I) PVT. LTD.	BANGALORE
694.	CALSOFT PVT. LTD.	SAHARSA
695.	CAMERON MANUFACTURING (I) PVT. LTD.	CHENNAI
696.	CAMERON MANUFACTURING (I) PVT. LTD.	COIMBATORE
697.	CAMERON MANUFACTURING (I) PVT. LTD.	TIRUPPUR
698.	CAMP SYSTEMS PVT. LTD.	HYDERABAD
699.	CANARA HSBC OBC LIFE INSURANCE	NEW DELHI
700.	CANARA HYDRAULICS PVT. LTD.	COIMBATORE
701.	CANNY INFRA	HYDERABAD
702.	CANON (I) PVT. LTD.	BANGALORE
703.	CANON (I) PVT. LTD.	DELHI
704.	CANVERA DIGITAL TECHNOLOGIES	BANGALORE
705.	CAP GEMINI CONSULTING LTD.	BANGALORE
706.	CAP GEMINI (I) PVT. LTD.	HYDERABAD
707.	CAPARO ENGINEERING (I) LTD.	CHENNAI
708.	CAPARO POWER LTD.	DELHI
709.	CAPGEMINI (I) PVT. LTD.	AHMED NAGAR
710.	CAPGEMINI (I) PVT. LTD.	BANGALORE
711.	CAPGEMINI (I) PVT. LTD.	CHENNAI
712.	CAPGEMINI (I) PVT. LTD.	COIMBATORE
713.	CAPGEMINI (I) PVT. LTD.	DELHI
714.	CAPGEMINI (I) PVT. LTD.	DHARMAPURI
715.	CAPGEMINI (I) PVT. LTD.	DOMBIVLI
716.	CAPGEMINI (I) PVT. LTD.	FARIDKOT
717.	CAPGEMINI (I) PVT. LTD.	GHAZIABAD
718.	CAPGEMINI (I) PVT. LTD.	GUWAHATI
719.	CAPGEMINI (I) PVT. LTD.	HYDERABAD
720.	CAPGEMINI (I) PVT. LTD.	JABALPUR
721.	CAPGEMINI (I) PVT. LTD.	KOLHAPUR
722.	CAPGEMINI (I) PVT. LTD.	KURNOOL
723.	CAPGEMINI (I) PVT. LTD.	MORADABAD
724.	CAPGEMINI (I) PVT. LTD.	MUMBAI
725.	CAPGEMINI (I) PVT. LTD.	MYSORE
726.	CAPGEMINI (I) PVT. LTD.	NAVI MUMBAI
727.	CAPGEMINI (I) PVT. LTD.	NELLORE
728.	CAPGEMINI (I) PVT. LTD.	PUNE
729.	CAPGEMINI (I) PVT. LTD.	THANE
730.	CAPGEMINI (I) PVT. LTD.	TRIVANDRUM
731.	CAPGEMINI (I) PVT. LTD.	VILLUPURAM
732.	CAPIOT SOFTWARE PVT. LTD.	MUMBAI
733.	CAPITA	PATHANAMTHITTA
734.	CAPITAL HYUNDAI	NEW DELHI
735.	CAPRICORN GROUP	PUNE
736.	CAPRICOT TECHNOLOGIES PVT. LTD.	HANSI
737.	CAPTRONIC SYSTEMS PVT. LTD.	BANGALORE
738.	CARBONYX ENGINEERING (I) PVT. LTD.	PANAJI
739.	CARBORUNDUM UNIVERSAL LTD.	BANGALORE
740.	CARBORUNDUM UNIVERSAL LTD.	CHENNAI
741.	CARBORUNDUM UNIVERSAL LTD.	HOSUR
742.	CARBORUNDUM UNIVERSAL LTD.	KANCHEEPURAM
743.	CARBORUNDUM UNIVERSAL LTD.	KOCHI
744.	CARBORUNDUM UNIVERSAL LTD.	KOLKATA
745.	CARBORUNDUM UNIVERSAL LTD.	KOLLAM
746.	CARBORUNDUM UNIVERSAL LTD.	MADURANTHAKAM
747.	CARBORUNDUM UNIVERSAL LTD.	ROORKEE

748.	CARBORUNDUM UNIVERSAL LTD.	THRISSUR
749.	CARBORUNDUM UNIVERSAL LTD.	VILLUPURAM
750.	CARESOFTE GLOBAL PVT. LTD.	COIMBATORE
751.	CARGILL (I) PVT. LTD.	GURGAON
752.	CARPE HEAT TRANSFER PVT. LTD.	MUMBAI
753.	CARRIER AIRCONDITIONING & REFRIGERATION	CHANDIGARH
754.	CARRIER AIRCONDITIONING & REFRIGERATION	KOLKATA
755.	CARTINI (I) LTD.	PONDA
756.	CATERPILLAR (I) PVT. LTD.	ARAKKONAM
757.	CATERPILLAR (I) PVT. LTD.	CHENNAI
758.	CATERPILLAR (I) PVT. LTD.	HYDERABAD
759.	CATERPILLAR (I) PVT. LTD.	SALEM
760.	CATERPILLAR (I) PVT. LTD.	VELLORE
761.	CATERPILLAR (I) PVT. LTD.	WARANGAL
762.	CAVIUM NETWORKS (I) PVT. LTD.	BANGALORE
763.	CAVIUM NETWORKS (I) PVT. LTD.	MUMBAI
764.	CDK GLOBAL (I) PVT. LTD.	JAMMU
765.	CDK GLOBAL (I) PVT. LTD.	PUNE
766.	CELSTREAM TECHNOLOGIES PVT. LTD.	BANGALORE
767.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	BANGALORE
768.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	HYDERABAD
769.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	KOOTHATTUKULAM
770.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	NOIDA
771.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	PUNE
772.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	TRIVANDRUM
773.	CENTER FOR DEVELOPMENT OF ADVANCED COMPUTING	VELLORE
774.	CENTRE FOR DEVELOPMENT OF TELEMATICS	BANGALORE
775.	CENTRE OF EXCELLENCE IN WIRELESS TECHNOL	CHENNAI
776.	CENTUM ELECTRONICS LTD.	BANGALORE
777.	CENTUM RAKON (I) PVT. LTD.	BANGALORE
778.	CENTURY HOSPITAL	CHENGANNUR
779.	CENTURYLINK (I) PVT. LTD.	BANGALORE
780.	CENTURYLINK TECHNOLOGIES (I) PVT. LTD.	BANGALORE
781.	CERNER CORPORATION	BANGALORE
782.	CERNER HEALTHCARE SOLUTIONS PVT. LTD.	BANGALORE
783.	CGI INFORMATION SYSTEMS AND MANAGEMENT	PATHANAMTHITTA
784.	CGI INFORMATION SYSTEMS	HYDERABAD
785.	CGI PVT. LTD.	BANGALORE
786.	CGI TECHNOLOGIES AND SOLUTIONS INC	HYDERABAD
787.	CH2M HILL (I) PVT. LTD.	NOIDA
788.	CH2M HILL INTERNATIONAL	BANGALORE
789.	CHANNELPLAY LTD.	GURGAON
790.	CHARTER GLOBAL	PUNE
791.	CHECKTRONIX (I) PVT. LTD.	CHENNAI
792.	CHECKTRONIX (I) PVT. LTD.	DHARMAPURI
793.	CHECKTRONIX (I) PVT. LTD.	TIRUPUR
794.	CHER MEDICAL TECHNOLOGIES	MUMBAI
795.	CHETTINAD CEMENT CORPORATION LTD.	DINDUGUL
796.	CHETTINAD CEMENT CORPORATION LTD.	KARUR
797.	CHEVROLET SALES (I) PVT. LTD.	FARIDABAD
798.	CHEVRON ORONITE PTE LTD.	CHENNAI
799.	CHEVRON ORONITE PTE LTD.	JURONG WEST
800.	CHEVRON ORONITE PTE LTD.	SINGAPORE
801.	CHEVRON ORONITE PVT. LTD.	COCHIN
802.	CHIRAL BIOSCIENCES LTD.	HYDERABAD
803.	CHIYODA ALMANA	MADURAI
804.	CHOICE SOLUTIONS PVT. LTD.	KAMAREDDY
805.	CHRISTIAN MEDICAL COLLEGE	VELLORE

806.	CHRONOS RICHARDSON (I) PVT. LTD.	MATHURA
807.	CHRYSLER (I) AUTOMOTIVE PVT. LTD.	BHADRAK
808.	CIARPRO TECHNOLOGIES	CHENNAI
809.	CISCO VIDEO TECHNOLOGY	BANGALORE
810.	CIENA (I) PVT. LTD.	DELHI
811.	CIENA (I) PVT. LTD.	GURGAON
812.	CIENA (I) PVT. LTD.	MATHURA
813.	CIENA (I) PVT. LTD.	NEW DELHI
814.	CIENA CORP	GURGAON
815.	CIGNETIX SYSTEMS	COCHIN
816.	CIPLA LTD.	MUMBAI
817.	CISCO SYSTEMS (I) PVT. LTD.	BANGALORE
818.	CISCO SYSTEMS (I) PVT. LTD.	CHENNAI
819.	CISCO SYSTEMS (I) PVT. LTD.	CHINCHWAD
820.	CISCO SYSTEMS (I) PVT. LTD.	GHAZIABAD
821.	CISCO SYSTEMS (I) PVT. LTD.	GURGAON
822.	CISCO SYSTEMS (I) PVT. LTD.	KOLKATA
823.	CISCO SYSTEMS (I) PVT. LTD.	MADURAI
824.	CISCO SYSTEMS (I) PVT. LTD.	NEW DELHI
825.	CISCO SYSTEMS (I) PVT. LTD.	PUNE
826.	CISCO VIDEO TECHNOLOGIES (I) PVT. LTD.	BANGALORE
827.	CITICORP SERVICES (I) PVT. LTD.	BHOPAL
828.	CITICORP SERVICES (I) PVT. LTD.	JAIPUR
829.	CITICORP SERVICES (I) PVT. LTD.	PUNE
830.	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	BANGALORE
831.	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	DEHRADUN
832.	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	NEW DELHI
833.	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	TONK
834.	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	VIRUDHUNAGAR
835.	CKR CONSULTING ENGINEERS	DUBAI
836.	CLAIRVOYANT MOBILE SOLUTIONS	DELHI
837.	CLARICE TECHNOLOGIES PVT. LTD.	PUNE
838.	CLARION TECHNOLOGIES	BANGALORE
839.	CLCD LLC	HYDERABAD
840.	CLEAR-TRAIL	INDORE
841.	CLEVELAND BRIDGE & ENGINEERING MIDDLE EAST	DUBAI
842.	CLOUD VISION SYSTEMS PVT. LTD.	PUNE
843.	CMA SYSTEMS FZ LLC	DUBAI
844.	CMC LTD.	HYDERABAD
845.	CMC LTD.	THANE
846.	CMC LTD.	TIRUMALAGIRI
847.	CMI FPE LTD.	PANVEL
848.	CMI INDUSTRY METALS LTD.	NEW MUMBAI
849.	CMS INFOSYSTEM	NOIDA
850.	COASTAL GUJARAT POWER LTD.	KUTCH
851.	COASTAL GUJARAT POWER LTD.	MUNDRA
852.	COCHIN SHIPYARD LTD.	ERNAKULAM
853.	CODA GLOBAL	CHENNAI
854.	CODENOMICON SOFTWARE (I) PVT. LTD.	NEW DELHI
855.	COGNIZANT TECHNOLOGY SOLUTIONS	ACHALPUR
856.	COGNIZANT TECHNOLOGY SOLUTIONS	AGRA
857.	COGNIZANT TECHNOLOGY SOLUTIONS	AMALAPURAM
858.	COGNIZANT TECHNOLOGY SOLUTIONS	AMRAVATI
859.	COGNIZANT TECHNOLOGY SOLUTIONS	ARAKKONAM
860.	COGNIZANT TECHNOLOGY SOLUTIONS	BANGALORE
861.	COGNIZANT TECHNOLOGY SOLUTIONS	BENTONVILLE
862.	COGNIZANT TECHNOLOGY SOLUTIONS	BHIWANDI
863.	COGNIZANT TECHNOLOGY SOLUTIONS	BUNDI

864.	COGNIZANT TECHNOLOGY SOLUTIONS	BURDWAN
865.	COGNIZANT TECHNOLOGY SOLUTIONS	CANTON
866.	COGNIZANT TECHNOLOGY SOLUTIONS	CHENGAM
867.	COGNIZANT TECHNOLOGY SOLUTIONS	CHENNAI
868.	COGNIZANT TECHNOLOGY SOLUTIONS	CHEYAR
869.	COGNIZANT TECHNOLOGY SOLUTIONS	CHINCHWAD
870.	COGNIZANT TECHNOLOGY SOLUTIONS	CHITTORGARH
871.	COGNIZANT TECHNOLOGY SOLUTIONS	COIMBATORE
872.	COGNIZANT TECHNOLOGY SOLUTIONS	DHANBAD
873.	COGNIZANT TECHNOLOGY SOLUTIONS	DHARMAPURI
874.	COGNIZANT TECHNOLOGY SOLUTIONS	DINDIGUL
875.	COGNIZANT TECHNOLOGY SOLUTIONS	DUBLIN
876.	COGNIZANT TECHNOLOGY SOLUTIONS	DUNWOODY
877.	COGNIZANT TECHNOLOGY SOLUTIONS	ERNAKULAM
878.	COGNIZANT TECHNOLOGY SOLUTIONS	ERODE
879.	COGNIZANT TECHNOLOGY SOLUTIONS	GHAZIABAD
880.	COGNIZANT TECHNOLOGY SOLUTIONS	GUDUVANCHERY
881.	COGNIZANT TECHNOLOGY SOLUTIONS	GULBARGA
882.	COGNIZANT TECHNOLOGY SOLUTIONS	GURDASPUR
883.	COGNIZANT TECHNOLOGY SOLUTIONS	GURGAON
884.	COGNIZANT TECHNOLOGY SOLUTIONS	HARIPAD
885.	COGNIZANT TECHNOLOGY SOLUTIONS	HOSUR
886.	COGNIZANT TECHNOLOGY SOLUTIONS	HOWRAH
887.	COGNIZANT TECHNOLOGY SOLUTIONS	HYDERABAD
888.	COGNIZANT TECHNOLOGY SOLUTIONS	KALYAN
889.	COGNIZANT TECHNOLOGY SOLUTIONS	KANCHIPURAM
890.	COGNIZANT TECHNOLOGY SOLUTIONS	KANNUR
891.	COGNIZANT TECHNOLOGY SOLUTIONS	KARAIKAL
892.	COGNIZANT TECHNOLOGY SOLUTIONS	KARIMNAGAR
893.	COGNIZANT TECHNOLOGY SOLUTIONS	KATTANKULATHUR
894.	COGNIZANT TECHNOLOGY SOLUTIONS	KOCHI
895.	COGNIZANT TECHNOLOGY SOLUTIONS	KOCHIN
896.	COGNIZANT TECHNOLOGY SOLUTIONS	KOLKATA
897.	COGNIZANT TECHNOLOGY SOLUTIONS	KOLLAM
898.	COGNIZANT TECHNOLOGY SOLUTIONS	KRISHNAGIRI
899.	COGNIZANT TECHNOLOGY SOLUTIONS	KURNOOL
900.	COGNIZANT TECHNOLOGY SOLUTIONS	MACHALIPATNAM
901.	COGNIZANT TECHNOLOGY SOLUTIONS	MADURAI
902.	COGNIZANT TECHNOLOGY SOLUTIONS	MALAPPURAM
903.	COGNIZANT TECHNOLOGY SOLUTIONS	MALVERN
904.	COGNIZANT TECHNOLOGY SOLUTIONS	MANCHESTER
905.	COGNIZANT TECHNOLOGY SOLUTIONS	MAPLE SHADE
906.	COGNIZANT TECHNOLOGY SOLUTIONS	MEERUT
907.	COGNIZANT TECHNOLOGY SOLUTIONS	MYSORE
908.	COGNIZANT TECHNOLOGY SOLUTIONS	NAGPUR
909.	COGNIZANT TECHNOLOGY SOLUTIONS	NASHIK
910.	COGNIZANT TECHNOLOGY SOLUTIONS	NAVI MUMBAI
911.	COGNIZANT TECHNOLOGY SOLUTIONS	NAVSARI
912.	COGNIZANT TECHNOLOGY SOLUTIONS	NELLORE
913.	COGNIZANT TECHNOLOGY SOLUTIONS	NEW DELHI
914.	COGNIZANT TECHNOLOGY SOLUTIONS	NORTHVILLE
915.	COGNIZANT TECHNOLOGY SOLUTIONS	OSMANABAD
916.	COGNIZANT TECHNOLOGY SOLUTIONS	PALAKKAD
917.	COGNIZANT TECHNOLOGY SOLUTIONS	PERAMBALUR
918.	COGNIZANT TECHNOLOGY SOLUTIONS	PUDUCHERRY
919.	COGNIZANT TECHNOLOGY SOLUTIONS	PUDUKKOTTAI
920.	COGNIZANT TECHNOLOGY SOLUTIONS	PUNE
921.	COGNIZANT TECHNOLOGY SOLUTIONS	QUINCY

922.	COGNIZANT TECHNOLOGY SOLUTIONS	RAJAMUNDRY
923.	COGNIZANT TECHNOLOGY SOLUTIONS	SALEM
924.	COGNIZANT TECHNOLOGY SOLUTIONS	SAN JOSE
925.	COGNIZANT TECHNOLOGY SOLUTIONS	SARAVANAMPATTI
926.	COGNIZANT TECHNOLOGY SOLUTIONS	SCRANTON
927.	COGNIZANT TECHNOLOGY SOLUTIONS	SECUNDERABAD
928.	COGNIZANT TECHNOLOGY SOLUTIONS	SERAMPORE
929.	COGNIZANT TECHNOLOGY SOLUTIONS	SHRIRAMPUR
930.	COGNIZANT TECHNOLOGY SOLUTIONS	SINGAPORE
931.	COGNIZANT TECHNOLOGY SOLUTIONS	STAMFORD
932.	COGNIZANT TECHNOLOGY SOLUTIONS	STEVENAGE
933.	COGNIZANT TECHNOLOGY SOLUTIONS	THODUPUZHA
934.	COGNIZANT TECHNOLOGY SOLUTIONS	THORAIPAKKAM
935.	COGNIZANT TECHNOLOGY SOLUTIONS	THRISSUR
936.	COGNIZANT TECHNOLOGY SOLUTIONS	TIRUPATI
937.	COGNIZANT TECHNOLOGY SOLUTIONS	TIRUVALLUR
938.	COGNIZANT TECHNOLOGY SOLUTIONS	TIRUVANNAMALAI
939.	COGNIZANT TECHNOLOGY SOLUTIONS	TRICHY
940.	COGNIZANT TECHNOLOGY SOLUTIONS	TRIVANDRUM
941.	COGNIZANT TECHNOLOGY SOLUTIONS	UDUMALPET
942.	COGNIZANT TECHNOLOGY SOLUTIONS	VELLORE
943.	COGNIZANT TECHNOLOGY SOLUTIONS	VENGAPAKKAM
944.	COGNIZANT TECHNOLOGY SOLUTIONS	VERNON
945.	COGNIZANT TECHNOLOGY SOLUTIONS	VILLUPURAM
946.	COGNIZANT TECHNOLOGY SOLUTIONS	VIRUDHUNAGAR
947.	COLAN INFO TECH	DINDIGUL
948.	COLLABERA INC	BAREILLY
949.	COLLABERA TECHNOLOGIES PVT. LTD.	HYDERABAD
950.	COLLABNET SOFTWARE PVT. LTD.	CHENNAI
951.	COLORCON ASIA PVT. LTD.	VERNA
952.	COLRUYT GROUP	VISAKHA PATNAM
953.	COLUMN SOFTWARE TECHNOLOGIES PVT. LTD.	JAIPUR
954.	COMAU (I) PVT. LTD.	PUNE
955.	COMMSCOPE (I) PVT. LTD.	BICHOLIM
956.	COMMSCOPE (I) PVT. LTD.	MARGAO
957.	COMMVault SYSTEMS (I) PVT. LTD.	BANGALORE
958.	COMMVault SYSTEMS (I) PVT. LTD.	MADURAI
959.	COMMVault SYSTEMS (I) PVT. LTD.	SATTUR
960.	COMPASS ENGINEERING SERVICES LLC	THRISSUR
961.	COMPASS SYSTEM PVT. LTD.	GHAZIABAD
962.	COMPASSITES SOFTWARE SOLUTIONS PVT. LTD.	BANGALORE
963.	COMPUMATRICE	PUNE
964.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	BANGALORE
965.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	CALICUT
966.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	CHENNAI
967.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	DELHI
968.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	HYDERABAD
969.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	NOIDA
970.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	TIRUPATHI
971.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	TRICHY
972.	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	VELLORE
973.	COMVERSE NETWORK SYSTEMS (I) PVT. LTD.	BANGALORE
974.	COMVERSE NETWORK SYSTEMS (I) PVT. LTD.	BHUBANESWAR
975.	COMVERSE NETWORK SYSTEMS (I) PVT. LTD.	GURGAON
976.	CONARES METAL SUPPLY LLC	AL DHAID
977.	CONARES STEEL	DUBAI
978.	CONAX ACCESS SYSTEMS PVT. LTD.	GHAZIABAD
979.	CONGNIZANT TECHNOLOGY SOLUTIONS	BANGALORE



980.	CONSTRUCTION DEVELOPMENT CO.	CHENNAI
981.	CONTANER CORPORATION OF (I) LTD.	JAIPUR
982.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT. LTD.	BANGALORE
983.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT. LTD.	COIMBATORE
984.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT. LTD.	DURG
985.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT. LTD.	GREATER NOIDA
986.	CONTINENTAL AUTOMOTIVE COMPONENTS (I) PVT. LTD.	PUNE
987.	CONTINENTAL HOSPITALS LTD.	HYDERABAD
988.	CONTROL COMPONENT (I) PVT. LTD.	CHENNAI
989.	CONTROL COMPUTER SYSTEMS (SYSCOM)	DUBAI
990.	CONVERGYS (I) SERVICES PVT. LTD.	HYDERABAD
991.	CONVERGYS INFORMATION MANAGEMENT (I) PVT. LTD.	HYDERABAD
992.	CORAZA TECHNOLOGIES ONEDIRECT	BANGALORE
993.	CORE TIME SOLUTION	NANGAL
994.	CORECOMPETE PVT. LTD.	HYDERABAD
995.	COREEL TECHNOLOGIES (I) PVT. LTD.	BANGALORE
996.	CORNING TECHNOLOGIES (I) PVT. LTD.	MUMBAI
997.	CORNING TECHNOLOGIES (I) PVT. LTD.	NAGPUR
998.	CORNING TECHNOLOGIES (I) PVT. LTD.	PUNE
999.	COROMANDEL INTERNATIONAL LTD.	HYDERABAD
1000.	COROMANDEL INTERNATIONAL LTD.	VISAKHAPATNAM
1001.	CORP RESEARCH COUNSLTING	BANGALORE
1002.	CORPUS SOFTWARE PVT. LTD.	SOMPETA
1003.	COSMA INTERNAIONAL (I) PVT. LTD.	CHENNAI
1004.	COSTRA GROUP LLC	KOCHI
1005.	COVIDIEN ENGINEERING SERVICES PVT. LTD.	HYDERABAD
1006.	COVIDIEN ENGINEERING SERVICES PVT. LTD.	SECUNDERABAD
1007.	CQAE(N)	HYDERABAD
1008.	CRAFTSMAN AUTOMATION PVT. LTD.	JAMSHEDPUR
1009.	CRAFTSMAN AUTOMATION PVT. LTD.	PUNE
1010.	CRANE PROCESS FLOW TECHNOLOGIES (I) PVT. LTD.	MUMBAI
1011.	CRANE PROCESS FLOW TECHNOLOGIES (I) PVT. LTD.	PUNE
1012.	CREATIVE BUSINESS LABS PVT. LTD.	NEW DELHI
1013.	CREATIVE SYNERGIES CONSULTING (I) PVT. LTD.	BANGALORE
1014.	CREATIVE VIRTUAL	MUMBAI
1015.	CREDIT SUISSE	BANGALORE
1016.	CREDIT SUISSE SERVICES PVT. LTD.	PUNE
1017.	CREST PREMEDIA PVT. LTD.	PUNE
1018.	CRESTECH SOFTWARE SYSTEM PVT. LTD.	NEW DELHI
1019.	CRIPUMPS PVT. LTD.	KOLKATA
1020.	CROMPTON GREAVES LTD.	BHOPAL
1021.	CROMPTON GREAVES LTD.	THANE
1022.	CRYOLOR ASIA PACIFIC	CHENNAI
1023.	CRYSTAL CROP PROTECTION PVT. LTD.	DELHI
1024.	CSC (I) PVT. LTD.	CHENNAI
1025.	CSC (I) PVT. LTD.	NEW DELHI
1026.	CSC (I) PVT. LTD.	NOIDA
1027.	CSC (I) PVT. LTD.	SALEM
1028.	CSC (I) PVT. LTD.	SECUNDERABAD
1029.	CSIR-CEERI	JHUNJHUNU
1030.	CSIR-CEERI	PILANI
1031.	CSIR-NATIONAL AEROSPACE LABORATORIES	BANGALORE
1032.	CSS CORP PVT. LTD.	CHENNAI
1033.	CSS CORP PVT. LTD.	KURNOOL
1034.	CSS CORP PVT. LTD.	PALAKKAD
1035.	CTK SOFTWARE	BANGALORE
1036.	CUMMINS (I) LTD.	GUWAHATI
1037.	CUMMINS (I) LTD.	JAIPUR

1038.	CUMMINS (I) LTD.	NEW DELHI
1039.	CUMMINS (I) LTD.	PUNE
1040.	CUMMINS (I) LTD.	SATARA
1041.	CUMMINS MIDDLE EAST	SHARJAH
1042.	CUMMINS MIDDLE EAST FZE	DUBAI
1043.	CUMMINS TECHNOLOGIES (I) PVT. LTD.	BHOPAL
1044.	CUMMINS TECHNOLOGIES (I) PVT. LTD.	INDORE
1045.	CUMMINS TECHNOLOGIES (I) PVT. LTD.	PUNE
1046.	CUPOLA TECHNOLOGY	BANGALORE
1047.	CWE DELHI CANTT	NEW DELHI
1048.	CYBAGE SOFTWARE PVT. LTD.	PILANI
1049.	CYBAGE SOFTWARE PVT. LTD.	PUNE
1050.	CYBERTECH SYSTEMS & SOFTWARE LTD.	THANE
1051.	CYBRILLA TECHNOLOGIES PVT. LTD.	BANGALORE
1052.	CYBRILLA TECHNOLOGIES PVT. LTD.	JAUNPUR
1053.	CYIENT LTD.	BANGALORE
1054.	CYIENT LTD.	HYDERABAD
1055.	CYIENT LTD.	KARIMANAGAR
1056.	CYIENT LTD.	MADURAI
1057.	CYIENT LTD.	MEDAK
1058.	CYIENT LTD.	VISAKHAPATNAM
1059.	CYIENT LTD.	VIZIANAGARAM
1060.	CYLINGAS CO. LLC	KANNUR
1061.	CYPRESS SEMICONDUCTORS PVT. LTD.	BANGALORE
1062.	CYPRESS SEMICONDUCTORS PVT. LTD.	ERNAKULAM
1063.	CYPRESS SEMICONDUCTORS PVT. LTD.	NAGERCOIL
1064.	CYPRESS SEMICONDUCTORS PVT. LTD.	TIRUPATI
1065.	D H SOLUTIONS (I) PVT. LTD.	TRIVANDRUM
1066.	D. E. SHAW (I) SOFTWARE PVT. LTD.	HYDERABAD
1067.	DAELIM INDUSTRIALCO.LTD.	KOLKATA
1068.	DAIKIN AIRCONDITIONING (I) PVT. LTD.	JHUNJHUNU
1069.	DAIMLER (I) COMMERCIAL VEHICLE PVT. LTD.	CHENNAI
1070.	DALMIA BHARAT CEMENT LTD.	CHENNAI
1071.	DALMIA BHARAT CEMENT LTD.	GUWAHATI
1072.	DALMIA BHARAT CEMENT LTD.	SATNA
1073.	DANA (I) TECHNICAL CENTER	BULANDSHAHR
1074.	DANFOSS INDUSTRIES	CHENNAI
1075.	DANFOSS INDUSTRIES (P) LTD.	CHENNAI
1076.	DANSKE IT	BANGALORE
1077.	DANWAY EME LLC	DUBAI
1078.	DASSAULT SYSTEMES (I) PVT. LTD.	BANGALORE
1079.	DATAFOSTER SOLUTIONS	SOLAPUR
1080.	DATAGROUP GEOSPATIAL TECHNOLOGIES PVT. LTD.	HYDERABAD
1081.	DATAMATE INFO SOLUTION PVT. LTD.	CHERTHALA
1082.	DATAMATICS VISTA INFO SYSTEMS LTD.	TRICHY
1083.	DATAMETICA PVT. LTD.	PUNE
1084.	DATAMETICA SOLUTIONS PVT. LTD.	PUNE
1085.	DATAMI	BANGALORE
1086.	DATT MEDIPRODUCTS PVT. LTD.	DELHI
1087.	DATTA MEGHE INSTITUTE OF MEDICAL SCIENCE	NAGPUR
1088.	DAYALBAGH UNIVERSITY	AGRA
1089.	DBA AND SONS	ABU DHABI
1090.	DBXENTO SYSTEMS	NASHIK
1091.	DCM SHRIRAM LTD.	TIRUCHIRAPPALLI
1092.	DECISION MINDS (I) PVT. LTD.	BANGALORE
1093.	DECURTIS CORPORATION	JAIPUR
1094.	DECURTIS CORPORATION	PILANI
1095.	DEE DEVELOPMENT ENGINEERS LTD.	FARIDABAD

1096.	DEEPAK HOSPITAL	JALNA
1097.	DEFENCE FORCES	AMBALA
1098.	DEFENCE RESEARCH & DEVELOPMENT ORGANIZATION	HYDERABAD
1099.	DEFENCE RESEARCH & DEVELOPMENT ORGANIZATION	NOIDA
1100.	DEFIANCE TECHNOLOGIES	CHENNAI
1101.	DELL (I) PVT. LTD.	BANGALORE
1102.	DELL INTERNATIONAL SERVICES PVT. LTD.	BANGALORE
1103.	DELL INTERNATIONAL SERVICES PVT. LTD.	CHENNAI
1104.	DELL INTERNATIONAL SERVICES PVT. LTD.	ELURU
1105.	DELL INTERNATIONAL SERVICES PVT. LTD.	HYDERABAD
1106.	DELL INTERNATIONAL SERVICES PVT. LTD.	NASIRABAD
1107.	DELOITTE CONSULTING (I) PVT. LTD.	BANGALORE
1108.	DELOITTE CONSULTING (I) PVT. LTD.	GWALIOR
1109.	DELOITTE CONSULTING (I) PVT. LTD.	HYDERABAD
1110.	DELOPT	BANGALORE
1111.	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	ALAPPUZHA
1112.	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BANGALORE
1113.	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BELGAUM
1114.	DELPHI CONNECTION SYSTEMS (I) PVT. LTD.	CHENNAI
1115.	DELPHI-TVS DIESEL SYSTEMS LTD.	CHENNAI
1116.	DELPHI-TVS DIESEL SYSTEMS LTD.	COIMBATORE
1117.	DELPHI-TVS DIESEL SYSTEMS LTD.	TIRUPPUR
1118.	DELTA POWER SOLUTIONS (I) PVT. LTD.	BANGALORE
1119.	DENSO (I) LTD.	NANGLOI
1120.	DEODITA TECHNOLOGIES	MUMBAI
1121.	DESCON ENGINEERING LTD.	THIRUVANANTHAPURAM
1122.	DESIGN SENSE SOFTWARE TECHNOLOGIES	BANGALORE
1123.	DESIGN TECH SYSTEMS LTD.	FARIDABAD
1124.	DESMET BALLESTRA (I) PVT.LTD.	MUMBAI
1125.	DESMI (I) LLP	KOTTAYAM
1126.	DEUTSCHE BANK	PUNE
1127.	DEXCEL ELECTRONICS DESIGNS PVT.LTD.	RAMANATHAPURAM
1128.	DFMSIM SOFTWARE (I) PVT. LTD.	CHENNAI
1129.	DGCA MINISTRY OF CIVIL AVIATION	CHENNAI
1130.	DIAGNOSEARCH LIFE SCIENCES PVT. LTD.	SERAMPORE
1131.	DIAGNOSYS ELECTRONICS (I) PVT. LTD.	BANGALORE
1132.	DIAGNOSYS ELECTRONICS (I) PVT. LTD.	HYDERABAD
1133.	DIAMOND POWER INFRASTRUCTURE LTD.	VADODARA
1134.	DIFACTO ROBOTICS AND AUTOMATION PVT. LTD.	VELLORE
1135.	DIGIDARTS MARKETING PVT. LTD.	NEW DELHI
1136.	DIGITAL HARBOR PVT. LTD.	KADAPA
1137.	DIMA E-SOLUTIONS PVT. LTD.	PUNE
1138.	DIMENSION DATA (I) PVT. LTD.	BANGALORE
1139.	DIMENSION DATA (I) PVT. LTD.	GURGAON
1140.	DIRECTI INTERNET SOLUTIONS PVT. LTD.	BANGALORE
1141.	DISA (I) LTD.	TUMKUR
1142.	DISTRICT HEALTH SOCIETY	PATNA
1143.	DN HOMES PVT. LTD.	CUTTACK
1144.	DNATA   EMIRATES GROUP	DUBAI
1145.	DODSAL ENGINEERING & CONSTRUCTION PTE LTD.	COCHIN
1146.	DOOSAN INFRACORE	CHENNAI
1147.	DOOSAN POWER SYSTEMS (I) PVT. LTD.	CHENNAI
1148.	DORNIER CONSULTING GMBH	AL KARAAMA
1149.	DOTSQUARES	JAIPUR
1150.	DOVER (I) PVT. LTD.	CHENNAI
1151.	DOVER (I) PVT. LTD.	HYDERABAD
1152.	DOVER (I) PVT.LTD.	BANGALORE
1153.	DOW CHEMICAL INTERNATIONAL PVT. LTD.	CHENNAI

1154.	DP GARG EXPORT PVT.LTD.	GURGAON
1155.	DP GARG EXPORT PVT.LTD.	NOIDA
1156.	DR. REDDY'S LABORATORIES LTD.	BANGALORE
1157.	DR. REDDY'S LABORATORIES LTD.	DATIA
1158.	DR. REDDY'S LABORATORIES LTD.	HYDERABAD
1159.	DR. REDDY'S LABORATORIES LTD.	KOLKATA
1160.	DR. REDDY'S LABORATORIES LTD.	MALAPPURAM
1161.	DR. REDDY'S LABORATORIES LTD.	MEDAK
1162.	DR. REDDY'S LABORATORIES LTD.	ROHTAK
1163.	DR. REDDY'S LABORATORIES LTD.	TUTICORIN
1164.	DR. REDDY'S LABORATORIES LTD.	VADODARA
1165.	DR. REDDY'S LABORATORIES LTD.	VIJAYAWADA
1166.	DR. REDDY'S LABORATORIES LTD.	VISAKHA PATNAM
1167.	DR.K.M.CHERIAN'S FRONTIER LIFELINE HOSPITAL	CHENNAI
1168.	DRDO	DELHI
1169.	DRDO	HYDERABAD
1170.	DRDO	NOIDA
1171.	DRESSER VALVE (I) PVT. LTD.	COIMBATORE
1172.	DRILL JIG BUSHING CO. (MADRAS) PVT. LTD.	CHENNAI
1173.	DRUVA DATA SOLUTIONS PVT. LTD.	PUNE
1174.	DSA ANALYTICS AND RESEARCH PVT. LTD.	BANGALORE
1175.	DTE GEN OF QUALITY ASSURANCE	JABALPUR
1176.	DUBAI AIR NAVIGATION SERVICES	DUBAI
1177.	DUBAI ALLUMINIUM CO. LTD.	DUBAI
1178.	DUBAI CABLE CO.	JABEL ALI
1179.	DUBAI CABLE CO.	MUSSAFFAH
1180.	DUBAI ELECTRICITY AND WATER AUTHORITY	DUBAI
1181.	DUBAI ELECTRICITY AND WATER AUTHORITY	JEBEL ALI
1182.	DUBAI ELECTRICITY AND WATER AUTHORITY	MALAPPURAM
1183.	DURA AUTOMOTIVE SERVICES (I) PVT. LTD.	HYDERABAD
1184.	DURR (I) PVT. LTD.	CHENNAI
1185.	DURR (I) PVT. LTD.	HOSUR
1186.	DVS TECHNOSOFT PVT. LTD.	PUNE
1187.	DYANSYS (I) PVT. LTD.	CHENNAI
1188.	DYNACAST SINGAPORE PTE LTD.	JURONG WEST
1189.	DYNAMIC BIZ SOLUTIONS	MIDDLETOWN
1190.	DYNAMIC TECHNO MEDICALS PVT. LTD.	THRISSUR
1191.	E.I.DUPONT INDIA PVT. LTD.	HYDERABAD
1192.	E.I.DUPONT INDIA PVT. LTD.	SECUNDERABAD
1193.	E2INFOSYSTEMS PVT. LTD.	CHENNAI
1194.	EAGLEBURGMANN (MALAYSIA) SDN BHD	MADURAI
1195.	EASI, AN ALLEGIS GROUP OF COMPANY	BENGALURU
1196.	EASI, AN ALLEGIS GROUP OF COMPANY	TRICHY
1197.	EASUN REYROLLE LTD.	NEYVELI
1198.	EATON CORP MTL INSTRUMENTS PVT. LTD.	CHENNAI
1199.	EATON CORPORATION	PUNE
1200.	EATON FLUID POWER LTD.	NOIDA
1201.	EATON INDIA ENGINEERING CENTER PUNE	PUNE
1202.	EATON INDIA ENGINEERING CENTER PVT. LTD.	PUNE
1203.	EATON INDUSTRIAL SYSTEMS PVT. LTD.	PUNE
1204.	EATON INDUSTRIAL SYSTEMS PVT. LTD.	PUNE
1205.	EATON POWER QUALITY PVT. LTD.	MUMBAI
1206.	EATON TECHNOLOGIES PVT. LTD.	KOLHAPUR
1207.	EATON TECHNOLOGIES PVT. LTD.	KOPPAL
1208.	EATON TECHNOLOGIES PVT. LTD.	PUNE
1209.	EATON TECHNOLOGIES PVT. LTD.	SATARA
1210.	EATON TECHNOLOGIES PVT. LTD.	TASGAON
1211.	EC SOFTWARE	DHARMAPURI

1212.	ECHO ARCHITECTURE	RIYADH
1213.	ECIL	HYDERABAD
1214.	ECON METALLIC INDIA PVT. LTD.	MOHALI
1215.	E-CONNECT SOLUTIONS PVT. LTD.	UDAIPUR
1216.	EDGEVERVE SYSTEMS LTD.	PUNE
1217.	EDIFECS TECHNOLOGIES PVT. LTD.	NOIDA
1218.	EGA-DUBAI ALUMINIUM COMPANY	DUBAI
1219.	EGAIN COMMUNICATIONS	PUNE
1220.	EGI - ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	COOCH BEHAR
1221.	EINFOCHIPS LTD.	AHMEDABAD
1222.	EINFOCHIPS LTD.	SOLAPUR
1223.	EISYSTEMS SERVICES	MATHURA
1224.	ELECTRO MECHANICAL SERVICES LLC	RUWI
1225.	ELECTRONICA HITECH MACHINE TOOLS PVT. LTD.	PUNE
1226.	ELECTRONICS CORPORATION OF INDIA LTD.	HYDERABAD
1227.	ELECTRONICS FOR IMAGING PVT. LTD.	BENGALURU
1228.	ELECTROPNEUMATICS & HYDRAULICS IND PVT. LTD.	PUNE
1229.	ELEVATOR COMPANY (INDIA) LTD.	BENGALURU
1230.	ELITE SCHOOL OF OPTIMETRY	CHENNAI
1231.	ELITECORE TECHNOLOGY PVT. LTD.	CHHATARPUR
1232.	ELSEWEDY CABLES	DOHA
1233.	ELSYTEC POWER PROJECTS PVT. LTD.	CHENNAI
1234.	ELVERS TECH	BENGALURU
1235.	EMBEDDED SYSTEMS SOLUTIONS	BENGALURU
1236.	EMC CORPORATION	BENGALURU
1237.	EMC DATA STORAGE SYSTEMS INDIA PVT. LTD.	BENGALURU
1238.	EMC SOFTWARE AND SERVICES INDIA PVT. LTD.	BENGALURU
1239.	EMC SOFTWARE AND SERVICES INDIA PVT. LTD.	ERODE
1240.	EME ENGINEERING CONSULTANTS	BUSINESS BAY
1241.	EMERIO INFOTECH PTE LTD.	SINGAPORE
1242.	EMERSON ELECTRIC CO. INDIA PVT. LTD.	NAVI MUMBAI
1243.	EMERSON FZE	JEBEL ALI
1244.	EMERSON FZN	JEBEL ALI
1245.	EMERSON INDUSTRIAL AUTOMATION	BENGALURU
1246.	EMERSON INNOVATION CENTER	PUNE
1247.	EMERSON NETWORK POWER (I) PVT. LTD.	BENGALURU
1248.	EMERSON NETWORK POWER (I) PVT. LTD.	DOMBIVLI
1249.	EMERSON NETWORK POWER (I) PVT. LTD.	KHARAR
1250.	EMERSON NETWORK POWER (I) PVT. LTD.	MULUND
1251.	EMERSON NETWORK POWER (I) PVT. LTD.	NAVI MUMBAI
1252.	EMERSON NETWORK POWER (I) PVT. LTD.	THANE
1253.	EMERSON PROCESS MANAGEMENT	JEBEL ALI
1254.	EMERSON PROCESS MANAGEMENT ASIA PACIFIC	SINGAPORE
1255.	EMIDS TECHNOLOGIES PVT. LTD.	BENGALURU
1256.	EMIRATES ALUMINIUM COMPANY	ABU DHABI
1257.	EMIRATES ALUMINIUM COMPANY	DUBAI
1258.	EMIRATES ALUMINIUM COMPANY	ERNAKULAM
1259.	EMIRATES ALUMINIUM COMPANY	JAMNAGAR
1260.	EMIRATES BLOCK FACTORY	ABU DHABI
1261.	EMIRATES GENERAL PETROLEUM CORPORATION	DUBAI
1262.	EMIRATES GLOBAL ALUMINIUM	AHMEDABAD
1263.	EMIRATES GROUP	DUBAI
1264.	EMIRATES STEEL INDUSTRIES	MUSSAFAH
1265.	EMIRATES STEEL INDUSTRIES	RAJAMPET
1266.	EMIRATES TRADING AGENCY (ETA)	DUBAI
1267.	EMISSION CONTROLS MANUFACTURERS ASSOCIATES	NEW DELHI
1268.	EMITAC ENTERPRISE SOLUTIONS	ABUDHABI
1269.	EMMANUEL HOSPITAL ASSOCIATION	LALITPUR

1270.	E-MUG TECHNOLOGIES PVT. LTD.	HYDERABAD
1271.	ENARKA INSTRUMENTS PVT. LTD.	BENGALURU
1272.	ENDEAVOUR SOFTWARE TECHNOLOGIES	BENGALURU
1273.	ENDURANCE TECHNOLOGIES PVT. LTD.	AURANGABAD
1274.	ENDURANCE TECHNOLOGIES PVT. LTD.	RUDRAPUR
1275.	ENERGO PROJEKT ENTEL CO.LTD.	DUBAI
1276.	ENERGO PROJEKT ENTEL CO.LTD.	ODUMETHA
1277.	ENERGY ENGINEERING	AJMAN
1278.	ENGINEERS INDIA LTD.	BHARUCH
1279.	ENGTECH ASSOCIATES	ALLAHABAD
1280.	ENLIGHTEN SOFTWARE SERVICES PVT. LTD.	BENGALURU
1281.	ENVESTNET ASSET MANAGEMENT (INDIA) PVT. LTD.	TRIVANDRUM
1282.	EPCOS INDIA PVT. LTD.	REWARI
1283.	EQ-TECHNOLOGIC	PUNE
1284.	EQUADRIGA SOFTWARE PVT. LTD.	TIRUCHIRAPPALLI
1285.	EQUATE PETRO CHEMICALS COMAPNY	KUWAIT
1286.	EQUATE PETRO CHEMICALS COMAPNY	MUMBAI
1287.	EQUATE PETRO CHEMICALS COMAPNY	ORATHANADU
1288.	EREVMAX TECHNOLOGIES PVT. LTD.	KOLKATA
1289.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	BENGALURU
1290.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	CHENNAI
1291.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	COIMBATORE
1292.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	TUMKUR
1293.	ERICSSON UK LTD.	DELHI
1294.	ERNST & YOUNG	TRIVANDRUM
1295.	ERNST & YOUNG GLOBAL (ASIA PACIFIC) PTE	SINGAPORE
1296.	ERNST YOUNG LLP	HYDERABAD
1297.	EROS INTERNATIONAL MEDIA PVT. LTD.	BENGALURU
1298.	ESAB MIDDLE EAST LLC	DUBAI
1299.	ESCORTS AGRI MACHINERY LTD.	FARIDABAD
1300.	ESCORTS LTD.	FARIDABAD
1301.	ESCORTS LTD.	PANIPAT
1302.	ESNAAD	NEW DELHI
1303.	ESOFT	HYDERABAD
1304.	E-SOURCE SOLUTIONS LTD.	BENGALURU
1305.	ESQUARE INFO SOLUTIONS	TIRUVALLUR
1306.	ESSAR ENERGY SERVICES LTD.	JAMNAGAR
1307.	ESSAR OIL LTD.	JAMNAGAR
1308.	ESSAR POWER LTD.	SURAT
1309.	ESSAR PROJECS (I) LTD.	NAVI MUMBAI
1310.	ESSAR PROJECTS SINGAPORE PTE LTD.	HOSUR
1311.	ESSAR STEEL INDIA LTD.	CHENNAI
1312.	ESSAR STEEL INDIA LTD.	SURAT
1313.	ESSENTRA LTD.	BENGALURU
1314.	ESSILOR INDIA PVT. LTD.	BENGALURU
1315.	ESSILOR MANUFACTURING INDIA PVT. LTD.	CHIKMAGLUR
1316.	ESTUATE SOFTWARE PVT. LTD.	BENGALURU
1317.	ETA ASCON (M&E DIVISION)	MUMBAI
1318.	ETA ASCON GROUP OF COMPANIES	KADAYANALLUR
1319.	ETA PCS SWITCHGEAR LLC	AJMAN
1320.	ETERNIS FINE CHEMICALS	KOLHAPUR
1321.	ETIHAD AIRWAYS ENGINEERING	ABU DHABI
1322.	EUROFINS IT SOLUTIONS INDIA PVT. LTD.	BENGALURU
1323.	EURONET INDIA PVT. LTD.	PUNE
1324.	EUROTAS INFRASTRUCTURE LTD.	NASHIK
1325.	EUTHENICS IT SERVICES PVT. LTD.	VISAKHAPATNAM
1326.	EVALUESERVE.COM	NEW DELHI
1327.	EVERSENDAI ENGINEERING FZE	SHARJAH

1328.	EVERSENDI ENGINEERING LLC	SHARJAH
1329.	EVERSENDI OFFSHORE RMC FZE	DUBAI
1330.	EVOLUTION DEVELOPERS LTD.	DELHI
1331.	EVOQUA WATER TECHNOLOGIES PTE LTD.	SINGAPORE
1332.	EXCEL POWER SWITCHGEAR PVT. LTD.	CHENNAI
1333.	EXCELERON SOFTWARE PVT. LTD.	BENGALURU
1334.	EXCELLENCE INFOCOM	PUNE
1335.	EXCELLENCE INFONET	JUNAGADH
1336.	EXCELLENT SHIPBUILDERS	GURUVAYUR
1337.	EXETER SOFTWARE INDIA	BENGALURU
1338.	EXFO INC.	PUNE
1339.	EXIDE LIFE INSURANCE COMPANY LTD.	BENGALURU
1340.	EXILANT TECHNOLOGIES PVT. LTD.	BENGALURU
1341.	EXPEDIA ONLINE TRAVEL SERVICES INDIA PVT. LTD.	DWARKA
1342.	EXPEDIA ONLINE TRAVEL SERVICES INDIA PVT. LTD.	GURGAON
1343.	EXPERT GLOBAL SOLUTION PVT. LTD.	PUNE
1344.	EXTERRAN BELLELI ENERGY FZE	SHARJAH
1345.	EXTERRO R & D	TIRUCHIRAPPALLI
1346.	EXXON MOBIL	SINGAPORE
1347.	EXZA INFOSYSTEMS PVT. LTD.	VIMANNAGAR
1348.	EY (ERNST & YOUNG)	THIRUVANNAMALAI
1349.	EYE Q VISION PVT. LTD.	ALIGARH
1350.	FACC OPERATIONS GMBH	TUMKUR
1351.	FAG ROLLER BEARING PVT.LTD.	VADODARA
1352.	FAIR HAVENS FOUNDATION	HYDERABAD
1353.	FAIR ISAAC INDIA SOFTWARE PVT. LTD.	HYDERABAD
1354.	FAIVELEY TRANSPORT RAIL TECHNOLOGIES IND	VELLORE
1355.	FANUC INDIA PVT. LTD.	KANNUR
1356.	FARAH LEISURE PARK MANAGEMENT LLC	AHMEDABAD
1357.	FAURECIA EMISSIONS CONTROL TECHNOLOGIES	TIRUNELVELI
1358.	FAURECIA INTERIOR SYSTEMS INDIA PVT.LTD.	PUNE
1359.	FCI TECHNOLOGY SERVICES	PALAKKAD
1360.	FEDERAL MOGUL GOETZE (INDIA) LTD.	MADURAI
1361.	FELICITAS GLOBAL PTE LTD.	SINGAPORE
1362.	FERROFAB FZE	PONNERI
1363.	FEV INDIA PVT. LTD.	PUNE
1364.	FIAT CHRYSLER AUTOMOTIVES	CHENNAI
1365.	FIAT INDIA AUTOMOBILES LTD.	PUNE
1366.	FICO	KANCHIPURAM
1367.	FIDELITY BUSINESS SERVICES INDIA PVT. LTD.	BENGALURU
1368.	FIDELITY BUSINESS SERVICES INDIA PVT. LTD.	GIDDALUR
1369.	FIDELITY INVESTMENTS	BENGALURU
1370.	FIDELITY NATIONAL INFORMATION SERVICES	BENGALURU
1371.	FINANCIAL SOFTWARE AND SYSTEMS	CHENNAI
1372.	FINETECH CONTROLS PVT. LTD.	NOIDA
1373.	FIREEYE CYBERSECURITY PVT. LTD.	BENGALURU
1374.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	BENGALURU
1375.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	CHENNAI
1376.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	TIRUNELVELI
1377.	FISERV INDIA PVT. LTD.	GHAZIABAD
1378.	FISERV INDIA PVT. LTD.	GHAZIABAD
1379.	FISERV INDIA PVT. LTD.	PUNE
1380.	FLEXTRONICS INDIA LTD.	CHENNAI
1381.	FLEXTRONICS INDIA LTD.	COIMBATORE
1382.	FLEXTRONICS INDIA PVT. LTD.	PUNE
1383.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1384.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	KANCHIPURAM
1385.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	MUMBAI

1386.	FLIPKART INDIA PVT. LTD.	BENGALURU
1387.	FLIPKART INTERNET PVT. LTD.	BENGALURU
1388.	FLIPKART LTD.	MEERUT
1389.	FLOWSERVE INDIA CONTROLS PVT. LTD.	BENGALURU
1390.	FLOWSERVE INDIA CONTROLS PVT. LTD.	COIMBATORE
1391.	FLSMIDTH INDIA PVT. LTD.	CHENNAI
1392.	FLSMIDTH INDIA PVT. LTD.	CUDDALORE
1393.	FLSMIDTH INDIA PVT. LTD.	ELURU
1394.	FLUOR DANIEL INDIA PVT. LTD.	GURGAON
1395.	FLUOR KUWAIT COMPANY	AHMADI
1396.	FMC TECHNOLOGIES INDIA PVT. LTD.	HYDERABAD
1397.	FOLEYDESIGNS PVT. LTD.	BENGALURU
1398.	FORBES MARSHALL PVT. LTD.	PIMPRI
1399.	FORBES MARSHALL PVT. LTD.	PUNE
1400.	FORCE MOTORS LTD.	PUNE
1401.	FORD INDIA PVT. LTD.	AHMEDABAD
1402.	FORD INDIA PVT. LTD.	BOISAR
1403.	FORD INDIA PVT. LTD.	CHENNAI
1404.	FORD INDIA PVT. LTD.	THIRUKKOILUR
1405.	FORD IT	CHENNAI
1406.	FORD MOTOR COMPANY	AHMEDABAD
1407.	FORD MOTOR PVT. LTD.	CHENNAI
1408.	FORD TECHNOLOGY SERVICES INDIA LTD.	CHENNAI
1409.	FORD TECHNOLOGY SERVICES INDIA LTD.	SIRSI
1410.	FORMATIVE SOFTWARE SOLUTIONS PVT. LTD.	CHENNAI
1411.	FORTIS	KALYAN
1412.	FOSTER WHEELER	CHENNAI
1413.	FOX SOLUTIONS	NASHIK
1414.	FRANCONNECT SOFTWARE INDIA PVT. LTD.	DELHI
1415.	FRAUSCHER SENSOR TECHNOLOGY	BENGALURU
1416.	FREESCALE SEMICONDUCTOR INDIA PVT. LTD.	BENGALURU
1417.	FREESCALE SEMICONDUCTOR INDIA PVT. LTD.	HYDERABAD
1418.	FRESHDESK TECHNOLOGIES PVT. LTD.	CHENNAI
1419.	FTD INDIA PVT. LTD.	HYDERABAD
1420.	FTD INFOCOM PVT. LTD.	BENGALURU
1421.	FUJITEC INDIA PVT. LTD.	CHENNAI
1422.	FUJITSU CONSULTING INDIA LTD.	HYDERABAD
1423.	FUJSENG CONSTRUCTION LLC	FUJAIRAH
1424.	FUJSENG CONSTRUCTION LLC	THANJAVUR
1425.	FUNDTECH INDIA LTD.	PUNE
1426.	FUNIZEN SOLUTIONS PVT. LTD.	CHENNAI
1427.	FUTURESOFT INDIA PVT. LTD.	BHIWANI
1428.	GABOM	GABON
1429.	GABRIEL INDIA LTD.	ERODE
1430.	GABRIEL INDIA LTD.	PUNE
1431.	GABRIEL INDIA LTD.	SALEM
1432.	GALFAR AL MISNAD ENGINEERING AND CONTRACT	DOHA
1433.	GALFAR ENGINEERING AND CONTRACTING SAOG	MUSCAT
1434.	GALIPOGLU HIDROMAS INDIA MANFAC	CHENNAI
1435.	GANGES INTERNATIONALE PVT. LTD.	CHENNAI
1436.	GARS INFOTECH PVT. LTD.	PILANI
1437.	GASCO (ABUDHABI GAS INDUSTRIES)	CHENNAI
1438.	GATES UNITTA INDIA CO PVT. LTD.	MADURAI
1439.	GAVS TECHNOLOGY	CHENNAI
1440.	GE APPLIANCES	BENGALURU
1441.	GE ENERGY	HYDERABAD
1442.	GE F&PT - DRESSER VALVE INDIA PVT. LTD.	COIMBATORE
1443.	GE HEALTHCARE	BENGALURU



1444.	GE INDIA EXPORTS PVT. LTD.	HYDERABAD
1445.	GE INDIA INDUSTRIAL PVT. LTD.	BENGALURU
1446.	GE INDIA INDUSTRIAL PVT. LTD.	GURGAON
1447.	GE INDIA TECHNOLOGY LTD.	BENGALURU
1448.	GE INTELLIGENT PLATFORMS PVT. LTD.	BENGALURU
1449.	GE INTELLIGENT PLATFORMS PVT. LTD.	PUNE
1450.	GE OIL & GAS	TRICHUR
1451.	GE POWER CONVERSION LTD.	CHENNAI
1452.	GE WATER & PROCESS TECHNOLOGIES	MUSCAT
1453.	GE-BEL (GE-HEALTH CARE )	BENGALURU
1454.	GEBR PFEIFFER (INDIA) PVT. LTD.	NEW DELHI
1455.	GEBR PFEIFFER (INDIA) PVT. LTD.	NOIDA
1456.	GENERAL ELECTRIC	BENGALURU
1457.	GENERAL ELECTRIC HEALTHCARE	BENGALURU
1458.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	BENGALURU
1459.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	PUNE
1460.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	TUTICORIN
1461.	GENOMATRIX INDIA PVT. LTD.	DEWAS
1462.	GENPACT HEADSTRONG CAPITAL MARKETS	BENGALURU
1463.	GENPACT INDIA PVT. LTD.	GHAZIABAD
1464.	GENPACT INDIA PVT. LTD.	HYDERABAD
1465.	GENUINE CONSULTANCY SERVICE	CHENNAI
1466.	GEOMETRIC LTD.	BENGALURU
1467.	GEOMETRIC LTD.	PUNE
1468.	GERMANISCHER LLOYD INDUSTRIAL SERVICES	TRICHY
1469.	GESTAMP AUTOMOTIVE CHENNAI LTD.	CHENNAI
1470.	GHANTOOT GENERAL MECHANICAL ENGINEERING	PARAMAKUDI
1471.	GHCL LTD.	VERAVAL
1472.	GI AUTO PVT. LTD.	BENGALURU
1473.	GIESECKE & DEVRIENT INDIA PVT. LTD.	PUNE
1474.	GIOSTAR - SAVIOUR HOSPITAL	MUMBAI
1475.	GIVAUDAN INDIA PVT. LTD.	THANE
1476.	GKN SINTER METALS PVT. LTD.	PUNE
1477.	GLAXO SMITHKLINE CONSUMER HEALTHCARE	MANGALDOI
1478.	GLEEDS HOOLOOMANN CONSULTING INDIA PVT. LTD.	MALAPPURAM
1479.	GLOBAL ANALYTICS INDIA PVT.LTD.	KARUR
1480.	GLOBAL ANALYTICS INDIA PVT.LTD.	SHENGOTTAH
1481.	GLOBAL EDGE SOFTWARE LTD.	BENGALURU
1482.	GLOBAL FOUNDRIES SINGAPORE PTE LTD.	VILLUPURAM
1483.	GLOBAL INFOTECH & ENGINEERING ASSOCIATE	SERAMPORE
1484.	GLOBAL LOGIC INDIA LTD.	BENGALURU
1485.	GLOBAL LOGIC INDIA LTD.	NOIDA
1486.	GLOBAL PETROLEUM BUSINESS TRADING ESTABL	DOHA
1487.	GLOBAL PROCESS SYSTEM	DUBAI
1488.	GLOBAL REMOTE INTEGRATED ACCESS SOLUTION	CHENNAI
1489.	GLOBALLOGIC INDIA PVT. LTD.	BHATINDA
1490.	GLOBALLOGIC INDIA PVT. LTD.	CHENNAI
1491.	GLOBALLOGIC INDIA PVT. LTD.	MANDYA
1492.	GLOCAL HEALTH CARE-BEGUSARAI	PATNA
1493.	GMAX AUTO LTD.	NARNAUL
1494.	GMERS MEDICAL COLLEGE GANDHINAGAR	GANDHINAGAR
1495.	GOA STATE POLLUTION CONTROL BOARD	GOA
1496.	GODREJ & BOYCE MFG CO. LTD.	BHUBANESWAR
1497.	GODREJ & BOYCE MFG CO. LTD.	CALICUT
1498.	GODREJ & BOYCE MFG CO. LTD.	DELHI
1499.	GODREJ & BOYCE MFG CO. LTD.	ERODE
1500.	GODREJ & BOYCE MFG CO. LTD.	KARJAT
1501.	GODREJ & BOYCE MFG CO. LTD.	MUMBAI

1502.	GODREJ & BOYCE MFG CO. LTD.	NAVI MUMBAI
1503.	GODREJ & BOYCE MFG CO. LTD.	NEW DELHI
1504.	GODREJ & BOYCE MFG CO. LTD.	PATIALA
1505.	GODREJ & BOYCE MFG CO. LTD.	PUNE
1506.	GODREJ & BOYCE MFG CO. LTD.	VIKROLI
1507.	GOLDMAN SACHS SERVICES PVT. LTD.	BENGALURU
1508.	GOLDSTONE INFRATECH LTD.	SECUNDERABAD
1509.	GOODRICH AEROSPACE SERVICES PVT. LTD.	BENGALURU
1510.	GOODYEAR INDIA LTD.	CHENNAI
1511.	GOPA INTEC	KALPETTA
1512.	GOPA INTERNATIONAL ENERGY CONSULTANTS	MUSSAFAH
1513.	GOVERNMENT POLYTECHNIC FOR WOMEN	SRINAGAR
1514.	GOVT POLYTECHNIC COLLEGE	PULWAMA
1515.	GOYAL HOSPITAL & RESEARCH CENTRE PVT. LTD.	JODHPUR
1516.	GRASIM INDUSTRIES LTD.	NAGDA
1517.	GREAT SOFTWARE LABORATORY	PUNE
1518.	GREAVES COTTON LTD.	AURANGABAD
1519.	GREEN LINE SOLAR PVT. LTD.	PONDICHERRY
1520.	GREENHECK FAN INDIA PVT. LTD.	KOLKATA
1521.	GREENMILE CONSULTANCY SERVICES PVT. LTD.	THIRUNELVELI
1522.	GREENSCAPES	DUBAI
1523.	GRINDWELL NORTON LTD.	NAGPUR
1524.	GROWELL HR SOLUTION PVT. LTD.	BENGALURU
1525.	GROZ ENGG TOOLS PVT. LTD.	NEW DELHI
1526.	GROZ ENGINEERING TOOLS PVT. LTD.	MORADABAD
1527.	GRUNER INDIA PVT.LTD.	CHORGALIA
1528.	GS ENGINEERING & CONSTRUCTION DELHI PVT. LTD.	GURGAON
1529.	GS ENGINEERING & CONSTRUCTION PVT. LTD.	THANE
1530.	GSH (INDIA) PVT. LTD.	BHAGALPUR
1531.	GSH (INDIA) PVT. LTD.	NAVI MUMBAI
1532.	GSPANN TECHNOLOGIES	HYDERABAD
1533.	GSPC GAS CO LTD.	GONDAL
1534.	GTRE, DRDO, MIN OF DEFENCE	BENGALURU
1535.	GUINEE	GUINEA
1536.	GUJARAT STATE ELECTRICITY CORPORATION	NAVSARI
1537.	GULF OIL LUBRICANTS INDIA LTD.	SILVASSA
1538.	GULF PETROCHEMICAL & TRADING SERVICES LLC	THRISSUR
1539.	GULF PIPING COMPANY	ABUDHABI
1540.	GULF PIPING COMPANY	MUSSAFAH
1541.	GULF VALVE - PENTAIR	CHENNAI
1542.	GULF VALVE FZE	SHARJAH
1543.	GVK BIOSCIENCES PVT. LTD.	HYDERABAD
1544.	GW TECH PVT. LTD.	SAS NAGAR
1545.	GXS INDIA TECHNOLOGY CENTRE PVT. LTD.	BENGALURU
1546.	H K AL SADIQ SONS CO.LTD.	KALPETTA
1547.	HADEED, SABIC	JUBAIL
1548.	HALCROW INTERNATIONAL PARTNERSHIP(CH2M H	DUBAI
1549.	HALLA VISTEON CLIMATE SYSTEMS INDIA PVT. LTD.	BHIWADI
1550.	HALLA VISTEON CLIMATE SYSTEMS INDIA PVT. LTD.	FARIDABAD
1551.	HANYANG AUTOMOTIVE INDIA P LTD.	CHENNAI
1552.	HAPPIEST MINDS TECHNOLOGIES PVT. LTD.	BENGALURU
1553.	HAPPIEST MINDS TECHNOLOGIES PVT. LTD.	GHAZIABAD
1554.	HARBINGER SYSTEMS PVT. LTD.	PUNE
1555.	HARITA FEHRER LTD.	HOSUR
1556.	HARITA SEATING SYSTEMS LTD.	HOSUR
1557.	HARITA TECHSERV LTD.	PUNE
1558.	HARITA TECHSERV LTD.	VELLORE
1559.	HARMAN INTERNATIONAL (INDIA) PVT. LTD.	BENGALURU

1560.	HARTFORD STEAM BOILER INTERNATIONAL GMBH	MUMBAI
1561.	HAYA WATER SAOC	MUSCAT
1562.	HBL POWER SYSTEMS LTD.	HYDERABAD
1563.	HCENTIVE TECHNOLOGY INDIA PVT. LTD.	DELHI
1564.	HCL TECHNOLOGIES LTD.	BENGALURU
1565.	HCL TECHNOLOGIES LTD.	CHENNAI
1566.	HCL TECHNOLOGIES LTD.	COIMBATORE
1567.	HCL TECHNOLOGIES LTD.	GHAZIABAD
1568.	HCL TECHNOLOGIES LTD.	HOSUR
1569.	HCL TECHNOLOGIES LTD.	KOTTAYAM
1570.	HCL TECHNOLOGIES LTD.	MADURAI
1571.	HCL TECHNOLOGIES LTD.	NEW DELHI
1572.	HCL TECHNOLOGIES LTD.	NOIDA
1573.	HCL TECHNOLOGIES LTD.	SINGAPORE
1574.	HEAT EXCHANGES SPECIALISTS (S) PTE LTD.	MAMALLAPURAM
1575.	HEAVY ENGINEERING INDUSTRIES AND SHIPBUI	SAFAT
1576.	HED EXPERTS PVT. LTD.	BENGALURU
1577.	HEDRICH VACUUM SYSTEMS (I) PVT. LTD.	KOLKATA
1578.	HEIDELBERG CEMENT INDIA LTD.	NARSINGARH
1579.	HEIDELBERG CEMENT INDIA LTD.	NEW DELHI
1580.	HELLA INDIA AUTOMOTIVE PVT. LTD.	CHENNAI
1581.	HELLA INDIA AUTOMOTIVE PVT. LTD.	GURGAON
1582.	HELLA INDIA PVT. LTD.	NEW DELHI
1583.	HEMARUS THERAPEUTICS LTD.	SECUNDERABAD
1584.	HENDERSON INTERNATIONAL. LLC.	PERUMALPATTU
1585.	HENKEL TEROSON INDIA LTD.	LUCKNOW
1586.	HENKEL TEROSON INDIA LTD.	CHENNAI
1587.	HERO MOTOCORP LTD.	GURGAON
1588.	HEW PRECISION WORKS PVT. LTD.	PARATWADA
1589.	HEWIIT ASSOCIATES INDIA PVT. LTD.	NOIDA
1590.	HEWLETT PACKARD GLOBALSOFT LTD.	BENGALURU
1591.	HEWLETT PACKARD GLOBALSOFT LTD.	CHENNAI
1592.	HEWLETT PACKARD ISO PVT. LTD.	BENGALURU
1593.	HEXAGON CAPABILITY CENTER INDIA PVT. LTD.	HYDERABAD
1594.	HEXAGON CAPABILITY CENTER INDIA PVT. LTD.	SECUNDERABAD
1595.	HEXAWARE TECHNOLOGIES LTD.	CHENNAI
1596.	HEXAWARE TECHNOLOGIES LTD.	COIMBATORE
1597.	HEXAWARE TECHNOLOGIES LTD.	NAVI MUMBAI
1598.	HGST	ERNAKULAM
1599.	HI JOULE	ABU DHABI
1600.	HIDI RAE CONSULTING ENGINEERS INC	DUBAI
1601.	HIKAL LTD.	BENGALURU
1602.	HINDALCO INDUSTRIES LTD.	BELGAUM
1603.	HINDALCO INDUSTRIES LTD.	KOLLAM
1604.	HINDALCO INDUSTRIES LTD.	UJJAIN
1605.	HINDUJA FOUNDRIES LTD.	CHENNAI
1606.	HINDUSTAN AERONAUTICS LTD.	BENGALURU
1607.	HINDUSTAN PETROLEUM CORPORATION LTD.	MUMBAI
1608.	HINDWARE(HSIL)	ROORKEE
1609.	HIRMI CEMENT WORKS, ULTRATECH CEMENT LTD.	BALODA BAZAR
1610.	HITACHI AUTOMOTIVE SYSTEMS	CHENNAI
1611.	HITACHI CONSULTING SOFTWARE SERVICES PVT. LTD.	BENGALURU
1612.	HI-TECH GEARS LTD.	FARIDABAD
1613.	HLL LIFECARE LTD.	COCHIN
1614.	HN BUSINESS CONSULTANTS	NEW DELHI
1615.	HNG FLOAT GLASS LTD.	VADODARA
1616.	HODEK VIBRATION TECHNOLOGIES PVT. LTD.	PUNE
1617.	HOLY FAMILY HOSPITAL	MUMBAI

1618.	HONDA CARS INDIA LTD.	BHARATPUR
1619.	HONDA CARS INDIA LTD.	GREATER NOIDA
1620.	HONDA LOGISTICS INDIA PVT. LTD.	NOORPUR
1621.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	BENGALURU
1622.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	HOSUR
1623.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	KOLAR
1624.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	LUDHIANA
1625.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	NEW DELHI
1626.	HONEYWELL AUTOMATION INDIA LTD.	PUNE
1627.	HONEYWELL ECC	PUNE
1628.	HONEYWELL ELECTRICAL DEVICES & SYSTEMS	DEHRADUN
1629.	HONEYWELL INTERNATIONAL (INDIA) PVT. LTD.	BENGALURU
1630.	HONEYWELL INTERNATIONAL (INDIA) PVT. LTD.	PUNE
1631.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	BENGALURU
1632.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	GAJWEL
1633.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	MADURAI
1634.	HOSPIHEALTH CONSULTANTS INDIA PVT. LI	BENGALURU
1635.	HOSPIRA HEALTHCARE INDIA PVT. LTD.	CHENNAI
1636.	HOSPIRA HEALTHCARE INDIA PVT. LTD.	COIMBATORE
1637.	HOWARD FINLEY AL KHALEEJ	ABU DHABI
1638.	HP GLOBALSOFT PVT. LTD.	BENGALURU
1639.	HP INDIA SALES PVT. LTD.	FARIDABAD
1640.	HP LTD.	CHENNAI
1641.	HSBC EDPI PVT. LTD.	BENGALURU
1642.	HSBC GLT3.0	HYDERABAD
1643.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	HYDERABAD
1644.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	NAVI MUMBAI
1645.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	PUNE
1646.	HT MEDIA LTD.	GURGAON
1647.	HUAWAI TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1648.	HUBNER INTERFACE SYSTEMS INDIA PVT. LTD.	BENGALURU
1649.	HUDCO	NEW DELHI
1650.	HUGHES SYSTIQUE INDIA PVT. LTD.	NEW DELHI
1651.	HUMBOLDT WEDAG INDIA PVT. LTD.	DELHI
1652.	HUSKY INJECTION MOLDING SYSTEMS	CHENNAI
1653.	HUTCHINSON BELT DRIVE SYSTEMS INDIA	CHENNAI
1654.	HYDAC INDIA PVT. LTD.	NEW DELHI
1655.	HYDER CONSULTING INDIA PVT. LTD.	BENGALURU
1656.	HYDER CONSULTING INDIA PVT. LTD.	HYDERABAD
1657.	HYDRAULIC SYSYEMS CENTRE LLC	MUSCAT
1658.	HYDRO MIDDLE EAST INCORPORATED	CHIDAMBARAM
1659.	HYDROTECH ENGINEERING LLC	TRIVANDRUM
1660.	HYPERLOCAL PVT. LTD.	BENGALURU
1661.	HYUNDAI CONSTRUCTION EQUIPMENTS INDIA PVT LTD.	PUNE
1662.	HYUNDAI MOBIS	GANDHIDHAM
1663.	HYUNDAI MOTOR INDIA LTD.	CHENNAI
1664.	HYUNDAI MOTOR INDIA LTD.	MANAPAKKAM
1665.	HYUNDAI MOTOR INDIA LTD.	NEW DELHI
1666.	I.S.R.O	BENGALURU
1667.	I NAUTIX TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
1668.	IAF	BENGALURU
1669.	IANEW IT SERVICE PVT. LTD.	BELLARY
1670.	IAP COMPANY PVT. LTD.	JAIPUR
1671.	IBM GLOBAL SERVICES PVT. LTD.	NEW DELHI
1672.	IBM INDIA PVT. LTD.	BENGALURU
1673.	IBM INDIA PVT. LTD.	CHENNAI
1674.	IBM INDIA PVT. LTD.	GHAZIABAD
1675.	IBM INDIA PVT. LTD.	GUNTUR

1676.	IBM INDIA PVT. LTD.	PUNE
1677.	IBM INDIA PVT. LTD.	SRIKALAHASTI
1678.	IBM INDIA PVT. LTD.	THIRUVANANTHAPURAM
1679.	IBM INDIA PVT. LTD.	TIRUCHIRAPPALLI
1680.	IBOBO GROUP PVT. LTD.	GURGAON
1681.	IBS SOFTWARE SERVICES PVT. LTD.	CHENGANNUR
1682.	IBS SOFTWARE SERVICES PVT. LTD.	TRIVANDRUM
1683.	ICEM	KOLLAM
1684.	ICICI BANK	NEW DELHI
1685.	ICREON COMMUNICATIONS PVT. LTD.	DELHI
1686.	IDBI BANK LTD.	KONNAGAR
1687.	IDBI BANK LTD.	MUMBAI
1688.	IDBI INTECH LTD.	PILANI
1689.	IDEA CELLULAR LTD.	BENGALURU
1690.	IDEA CELLULAR LTD.	KOCHI
1691.	IDEAS - A SAS COMPANY	PUNE
1692.	IDMC LTD.	SECUNDERABAD
1693.	IFB INDUSTRIES LTD.	BENGALURU
1694.	IFFCO KISAN SANCHAR LTD.	NEW DELHI
1695.	IFGL REFRACTORIES LTD.	KOLKATA
1696.	IFOCUS SYSTEC PVT. LTD.	BENGALURU
1697.	IGATE COMPUTER SYSTEMS LTD.	MUMBAI
1698.	IGATE GLOBAL SOLUTIONS LTD.	BENGALURU
1699.	IGATE GLOBAL SOLUTIONS LTD.	NOIDA
1700.	IGIDR	MUMBAI
1701.	IGNITE WORLD	SIRSA
1702.	IGUS (INDIA) PVT. LTD.	NEW DELHI
1703.	IHQ MOD NAVY	MUMBAI
1704.	IHS GLOBAL PVT. LTD.	NEW DELHI
1705.	IIT MADRAS	SIVAKASI
1706.	IKA INDIA PVT. LTD.	BENGALURU
1707.	ILENSYS TECHNOLOGIES PVT. LTD.	HYDERABAD
1708.	IM GEARS PVT. LTD.	THIRUVANNAMALAI
1709.	IMAGEGRAFIX SOFTWARE FZCO	DUBAI
1710.	IMAGEX TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1711.	IMPEC FILTERS PVT. LTD.	CHENNAI
1712.	IMPIGER TECHNOLOGIES (PVT.) LTD.	SALEM
1713.	IMPLANTAIRE TECHNOLOGIES INDIA PVT.LTD.	BENGALURU
1714.	IMPLANTAIRE TECHNOLOGIES INDIA PVT.LTD.	MYSORE
1715.	IMTAC LLC	TIRUVARUR
1716.	INA BEARING INDIA PVT. LTD.	PUNE
1717.	INAPP INFORMATION TECHNOLOGIES	ALAPPUZHA
1718.	INAPP INFORMATION TECHNOLOGIES (INDIA) PVT LTD.	THIRUVANANTHAPURAM
1719.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
1720.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	MADURAI
1721.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	PUNE
1722.	INDECOMM GLOBAL SERVICES (INDIA) PVT. LTD.	BENGALURU
1723.	INDECOMM GLOBAL SERVICES (INDIA) PVT. LTD.	TIRUVALLUR
1724.	INDEGENE LIFE SYSTEMS	KANNUR
1725.	INDEXNINE TECHNOLOGIES	PUNE
1726.	INDIA COMNET	CHENNAI
1727.	INDIA NIPPON ELECTRICALS LTD.	HOSUR
1728.	INDIA PISTONS LTD.	CHENNAI
1729.	INDIAN AIR FORCE	NEW DELHI
1730.	INDIAN AIR FORCE	SURATGARH
1731.	INDIAN ARMED FORCES	NEW DELHI
1732.	INDIAN ARMY	AMBALA CANTT
1733.	INDIAN ARMY	BATHINDA

1734.	INDIAN ARMY	BELGAUM
1735.	INDIAN ARMY	BENGALURU
1736.	INDIAN ARMY	HYDERABAD
1737.	INDIAN ARMY	NEW DELHI
1738.	INDIAN ARMY	UDHAMPUR
1739.	INDIAN HOTELS COMPANY LTD.	MUMBAI
1740.	INDIAN INSTITUTE OF ASTROPHYSICS	BENGALURU
1741.	INDIAN INSTITUTE OF PACKAGING	NEW DELHI
1742.	INDIAN INSTITUTE OF TECHNOLOGY PATNA	PATNA
1743.	INDIAN INSTITUTE OF TECHNOLOGY ROPAR	RUPNAGAR
1744.	INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION	HYDERABAD
1745.	INDIAN NAVY	NEW DELHI
1746.	INDIAN RAILWAY	LUCKNOW
1747.	INDIAN RARE EARTHS LTD.	KOLLAM
1748.	INDIAN SPACE RESEARCH ORGANISATION	BENGALURU
1749.	INDIAN SPACE RESEARCH ORGANISATION	SULLURUPETA
1750.	INDIAN SPACE RESEARCH ORGANIZATION	THIRUVANANTHAPURAM
1751.	INDO - MIM	BENGALURU
1752.	INDO AUTOTECH LTD.	BENGALURU
1753.	INDO GULF FERTILISERS	SULTANPUR
1754.	INDO-US MIM TEC PVT. LTD.	BENGALURU
1755.	INDRA HYDRO TECH PUMPS PVT.LTD.	BENGALURU
1756.	INDUSTRIAL FANS INDIA PVT.LTD.	CHENNAI
1757.	INDUSTRYARC	PILANI
1758.	INEDA SYSTEMS	HYDERABAD
1759.	INEDA SYSTEMS PVT. LTD.	HYDERABAD
1760.	INEL POWER ELECTROMECHANICAL LLC	VADALUR
1761.	INFINEON TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1762.	INFINERA IND PVT. LTD.	COIMBATORE
1763.	INFOEDGE INDIA LTD.	DELHI
1764.	INFOEDGE INDIA LTD.	NOIDA
1765.	INFOGAIN INDIA PVT. LTD.	KANPUR
1766.	INFOR (INDIA) PVT. LTD.	HYDERABAD
1767.	INFOR GLOBAL SOLUTIONS	SECUNDERABAD
1768.	INFORMATICA BUSINESS SOLUTIONS PVT. LTD.	BENGALURU
1769.	INFORMATION MOSAIC	GURGAON
1770.	INFOSUVIDHA AND SERVICES PVT. LTD.	MAHE
1771.	INFOSYS LTD.	BENGALURU
1772.	INFOSYS LTD.	HYDERABAD
1773.	INFOSYS LTD.	PUNE
1774.	INFOSYS LTD.	SERAMPORE
1775.	INFOSYS TECHNOLOGIES LTD.	BENGALURU
1776.	INFOSYS TECHNOLOGIES LTD.	CHENNAI
1777.	INFOSYS TECHNOLOGIES LTD.	HYDERABAD
1778.	INFOSYS TECHNOLOGIES LTD.	MANGALORE
1779.	INFOSYS TECHNOLOGIES LTD.	PUNE
1780.	INFOTECH ENTERPRISES LTD.	BENGALURU
1781.	INFOTECH ENTERPRISES LTD.	HYDERABAD
1782.	INFOTECH ENTERPRISES LTD.	VISAKHAPATNAM
1783.	INFOTECH GLOBAL	KANDUKUR
1784.	INFOZECH SOFTWARE LTD.	DELHI
1785.	INFOZECH SOFTWARE LTD.	NEW DELHI
1786.	INGENIOUS NETWORK FZC	SHARJAH
1787.	INGERSOLL RAND INTERNATIONAL LTD.	BENGALURU
1788.	INGERSOLL RAND INTERNATIONAL LTD.	CHENNAI
1789.	INMOBI SOFTWARE PVT. LTD.	BENGALURU
1790.	INMOBI TECHNOLOGY SERVICES PVT. LTD.	BENGALURU
1791.	INNOMINDS SOFTWARE PVT. LTD.	HYDERABAD

1792.	INSTITUTE OF MINERALS & MATERIALS TECHNO	BHUBANESWAR
1793.	INTACCT SOFTWARE PVT. LTD.	BENGALURU
1794.	INTAS PHARMACEUTICALS LTD.	AHMEDABAD
1795.	INTEGRAL RAPIDTRANZ SYSTEMS PVT. LTD.	TRICHY
1796.	INTEGRATED SPECIALIZED GENERAL CONTRACTION	ABU DHABI
1797.	INTEGRITYHOST LLC	PUNE
1798.	INTEL INDIA PVT. LTD.	BENGALURU
1799.	INTEL MOBILE COMMUNICATIONS INDIA PVT. LTD.	BENGALURU
1800.	INTEL TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1801.	INTELIZIGN ENGG SERVICES PVT. LTD.	CHENNAI
1802.	INTELIZIGN ENGINEERING SERVICES PVT.LTD.	CHENNAI
1803.	INTELLECT DESIGN ARENA LTD.	VELLORE
1804.	INTELLIGENT CONTROL AND AUTOMATION SYSTE	DUBAI
1805.	INTELLIGRAPHICS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1806.	INTERGLOBE TECHNOLOGIES SOLUTIONS PVT. LTD.	FARIDABAD
1807.	INTERGRAPH CONSULTING PVT. LTD.	SECUNDERABAD
1808.	INTERNATIONAL CENTER FOR AUTOMOTIVE TECH	NEW DELHI
1809.	INTERRAIT	GHAZIABAD
1810.	INTERTEK MOODY	TIRUNELVELI
1811.	INTERTEK(ABUDHABI)	CHENNAI
1812.	INTREPID ONLINE RETAIL PVT. LTD. (STYLETAG	TRICHY
1813.	INTUIT INDIA PRODUCT DEVELOPMENT CENTRE PVT LTD.	BENGALURU
1814.	INTUIT TECHNOLOGY SERVICES PVT. LTD.	BENGALURU
1815.	INVENGER TECHNOLOGIES PVT. LTD.	MANGALORE
1816.	INVENSYS INDIA PVT. LTD.	CHENNAI
1817.	INVOLUTE TECHNOLOGIES PVT. LTD.	PUNE
1818.	ION EXCHANGE PROJECTS & ENGINEERING LTD.	MUMBAI
1819.	ION TRADING PVT. LTD.	NEW DELHI
1820.	IPETRONIK INC	BENGALURU
1821.	IPUNITY COMMUNICATIONS (P) LTD.	TRICHY
1822.	IQUID PROPULSION SYSTEM-ISRO	TRIVANDRUM
1823.	IRRIGATION DEPARTMENT	MALAPPURAM
1824.	ISGEC HEAVY ENGINEERING LTD.	FARIDABAD
1825.	ISIGHTPARTNERS	PUNE
1826.	ISOLUX CORSAN INDIA ENGINEERING & CONSTRUCTION	GREATER NOIDA
1827.	ISRO	TRIVANDRUM
1828.	ISRO PROPULSION COMPLEX	NAGERCOIL
1829.	ISRO SATELLITE CENTRE	BENGALURU
1830.	ISRO,SDSC SHAR,SRIHARIKOTA	SULLURUPETA
1831.	ISRO-SRIHARIKOTA	NELLORE
1832.	ISSA, DRDO, MINISTRY OF DEFENCE	NEW DELHI
1833.	ISTRAC,INDIAN SPACE RESEARCH ORGANIZATIO	BENGALURU
1834.	IT PEOPLE FZ LLC	BENGALURU
1835.	IT SERVICES AND SOLUTIONS	PUNE
1836.	ITAL BEAUTY NIPPERS PVT. LTD.	PUDUCHERRY
1837.	ITC INFOTECH INDIA LTD.	BENGALURU
1838.	ITC INFOTECH INDIA LTD.	GURGAON
1839.	ITC INFOTECH INDIA LTD.	HOSUR
1840.	ITC INFOTECH INDIA LTD.	TRIVANDRUM
1841.	ITE&C DEPARTMENT, GOVT OF ANDHRAPRADESH	HYDERABAD
1842.	ITER - INDIA, INSTITUTE FOR PLASMA RESEARCH	BHAVNAGAR
1843.	ITER-INDIA / IPR	AHMEDABAD
1844.	ITPC. INDIA PVT. LTD.	PUNE
1845.	ITS DIGITECH PVT. LTD.	PUNE
1846.	ITW INDIA LTD.	GHAZI
1847.	J S W ENERGY LTD.	MUMBAI
1848.	J S W STEEL LTD.	BELLARY
1849.	J&S RESEARCH AND INNOVATIONS	NEW DELHI

1850.	JABIL CIRCUIT SDN. BHD.	BAYAN LEPAS
1851.	JAITECH POWER PROJECT PVT. LTD.	VELLORE
1852.	JAMMU DEVELOPMENT AUTHORITY	JAMMU
1853.	JAMNA AUTO INDUSTRIES LTD.	GWALIOR
1854.	JANANI MOULDINGS PVT. LTD.	CHENNAI
1855.	JANATICS INDIA PVT. LTD.	GANDHINAGAR
1856.	JANUS TECHNOLOGIES	CHENNAI
1857.	JAYPEE CEMENT CORPORATION LTD.	GUNTUR
1858.	JBK TECHNOLOGY LTD.	DELHI
1859.	JBK CONTROLS	DOHA
1860.	JCB INDIA DESIGN CENTER	PUNE
1861.	JCB INDIA LTD.	CHENNAI
1862.	JCB INDIA LTD.	FARIDABAD
1863.	JCB INDIA LTD.	PUNE
1864.	JCB MANUFACTURING LTD.	PUNE
1865.	JEHANGIR HOSPITAL	PUNE
1866.	JENESYS TECHNOLOGIES	BENGALURU
1867.	JGC GULF INTERNATIONAL COMPANY LTD.	MUMBAI
1868.	JHAJJAR POWER LTD.	JHAJJAR
1869.	JINDAL SAW LTD.	MUNDRA
1870.	JINDAL STAINLESS LTD.	JAJPUR
1871.	JINDAL STEEL & POWER LTD.	PARALAKHEMUNDI
1872.	JK ORGANISATION	AGRA
1873.	JK TYRE & INDUSTRIES LTD.	CHENNAI
1874.	JK TYRE & INDUSTRIES LTD.	RAJSAMAND
1875.	JMC PROJECTS (I) LTD.	DHARWAD
1876.	JOHN DEERE INDIA PVT. LTD.	HYDERABAD
1877.	JOHN DEERE INDIA PVT. LTD.	PUNE
1878.	JOHNCRANE SEALING SYSTEM INDIA PVT. LTD.	BENGALURU
1879.	JOHNSON CONTROLS (I) PVT. LTD.	GURGAON
1880.	JOHNSON CONTROLS (I) PVT. LTD.	PUNE
1881.	JOHNSON CONTROLS AUTOMOTIVE LTD.	PUNE
1882.	JOHNSON ELECTRIC PVT. LTD.	TRICHY
1883.	JOTUN SAUDIA CO. LTD.	JEDDAH
1884.	JOTUN U.A.E LTD. (L.L.C)	DUBAI
1885.	JP MORGAN INDIA PVT. LTD.	BENGALURU
1886.	JP MORGAN INDIA PVT. LTD.	DEWAS
1887.	JP MORGAN INDIA PVT. LTD.	MUMBAI
1888.	JRD INTERNATIONAL	JABEL ALI
1889.	JRL MINING P LTD.	DHANBAD
1890.	JSOFT SOLUTIONS LTD.	MUMBAI
1891.	JSW STEEL LTD.	BELLARY
1892.	JSW STEEL LTD.	SALEM
1893.	JTEKT SONA AUTOMOTIVE INDIA LTD.	NEW DELHI
1894.	JUNIPER NETWORKS INDIA PVT. LTD.	BENGALURU
1895.	JUPITER LIFELINE HOSPITAL, THANE	THANE
1896.	JURONG SHIPYARD PTE LTD.	SINGAPORE
1897.	JVMR INDUSTRIES	BENGALURU
1898.	K2 INC.	SOLAPUR
1899.	KAAR TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
1900.	KABELSCHLEPP INDIA PVT. LTD.	TIRUPPUR
1901.	KADIMI SPECIAL STEELS PVT. LTD.	THOOTHUKUDI
1902.	KAILASH VAHAN UDYOG LTD.	PUNE
1903.	KALPENA INDUSTRIES LTD.	AHMEDABAD
1904.	KAR MOBILES LTD.	HOSUR
1905.	KAYS HARBOR TECHNOLOGIES	ZIRAKPUR
1906.	KEC INTERNATIONAL LTD.	JAIPUR
1907.	KEC INTERNATIONAL LTD.	TIRUCHIRAPPALLI



1908.	KELE CONTRACTING LLC	VELLORE
1909.	KEMS FORGINGS LTD.	BENGALURU
1910.	KENDRION PUNE PVT. LTD.	PUNE
1911.	KENNAMETAL INDIA LTD.	BENGALURU
1912.	KENNAMETAL SHARED SERVICES PVT. LTD.	BENGALURU
1913.	KENTZ OVER SEAS LTD.	MANGAF
1914.	KEO INTERNATIONAL CONSULTANTS	RAJAHMUNDRY
1915.	KERAL STATE ELECTRONIC DEVELOPMENT CORP	KOLLAM
1916.	KERAL STATE ELECTRONIC DEVELOPMENT CORP	THIRUVANANTHAPURAM
1917.	KERRY INGREDIENTS INDIA PVT. LTD.	CHENNAI
1918.	KEY INFORMATION TECHNOLOGY	DUBAI
1919.	KEYSIGHT TECHNOLOGIES	FARIDABAD
1920.	KEYSIGHT TECHNOLOGIES	MANESAR
1921.	KEYSIGHT TECHNOLOGIES INTERNATIONAL	NEW DELHI
1922.	KG DESIGN SERVICES PVT. LTD.	COIMBATORE
1923.	KHALIFA UNIVERSITY	ABU DHABI
1924.	KHANSAHEB CIVIL ENGINEERING LLC	AL RASHIDIYA
1925.	KHODAY INDIA LTD.	CHITRADURGA
1926.	KIIT UNIVERSITY	KOLKATA
1927.	KIMMCO	SHUAIBA
1928.	KINPO INTERNATIONAL LTD.	BENGALURU
1929.	KIRAN INSTITUTE OF CAREER EXCELLENCE PVT. LTD.	DELHI
1930.	KIRLOSKAR BROTHERS LTD.	PUNE
1931.	KIRLOSKAR ELECTRIC	BENGALURU
1932.	KIRLOSKAR FERROUS INDUSTRIES LTD.	HOSPET
1933.	KIRLOSKAR OIL ENGINES LTD.	CHENNAI
1934.	KIRLOSKAR OIL ENGINES LTD.	KOLHAPUR
1935.	KIRLOSKAR OIL ENGINES LTD.	PUNE
1936.	KIRLOSKAR PNEUMATIC CO LTD.	PUNE
1937.	KIRLOSKAR TOYOTA TEXTILE MACHINERY	BENGALURU
1938.	KIRODIMAL INSTITUTE OF TECHNOLOGY	RAIGARH
1939.	KITCO LTD.	KOTTAYAM
1940.	KJS INDIA PVT.LTD.	ZAHEERABAD
1941.	KLN ENGINEERING PRODUCTS PVT. LTD.	COIMBATORE
1942.	KNETCO, JOINT OPERATION	THANJAVUR
1943.	KNEXIR CONSULTANTS PVT. LTD.	KALYAN
1944.	KNOWLEDGE PARTNET TECHNOLOGIES PVT. LTD.	CHENNAI
1945.	KODIAK NETWORKS INDIA PVT. LTD.	BENGALURU
1946.	KOMATSU INDIA PVT. LTD.	MADURAI
1947.	KONE ASSARAIN LLC	MUSCAT
1948.	KONE ELEVATORS INDIA PVT. LTD.	CHENNAI
1949.	KONE ELEVATORS INDIA PVT. LTD.	SALEM
1950.	KONE MIDDLE EAST LLC	DUBAI
1951.	KONECRANES SHARED SERVICES INDIA	JUBAIL
1952.	KONECRANES SHARED SERVICES INDIA	PUNE
1953.	KOPERA SOFTWARE PVT. LTD.	PUNE
1954.	KORES INDIA LTD.	PUNE
1955.	KOTHARI MEDICAL CENTRE	KOLKATA
1956.	KPIT CUMMINS INFOSYSTEMS LTD.	BENGALURU
1957.	KPIT TECHNOLOGIES LTD.	BENGALURU
1958.	KPIT TECHNOLOGIES LTD.	CHIDAMBARAM
1959.	KPIT TECHNOLOGIES LTD.	PUNE
1960.	KPMG INDIA	CHENNAI
1961.	KPMG INDIA	HYDERABAD
1962.	KPMG INDIA	NOIDA
1963.	KRISHNA HOSPITAL	BHILWARA
1964.	KRISHNA MARUTI LTD.	GURGAON
1965.	KRONOS SOLUTIONS INDIA PVT. LTD.	NEW DELHI

1966.	KSB PUMPS LTD.	NASHIK
1967.	KSB PUMPS LTD.	PUNE
1968.	KSEB LTD.	TRICHUR
1969.	KSEB LTD.	TRIVANDRUM
1970.	KSK MAHANADI POWER COMPANY LTD.	BILASPUR
1971.	KUWAIT NATIONAL PETROLEUM COMPANY	MAVELIKARA
1972.	KUWAIT OIL COMPANY SECONDED THROUGH OIL	FAHAHEEL
1973.	L M WINDPOWER TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1974.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	BEAWAR
1975.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	BENGALURU
1976.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	CHENNAI
1977.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	COIMBATORE
1978.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	MANGALORE
1979.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	PALAKKAD
1980.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	TIRUNELVELI
1981.	L&T GEOSTRUCTURE	CHENNAI
1982.	L&T HYDROCARBON ENGINEERING LTD.	SHARJAH
1983.	L&T INFOTECH	ALLAHABAD
1984.	L&T INFOTECH	BENGALURU
1985.	L&T INFOTECH	KALYAN
1986.	L&T INTEGRATED ENGINEERING SERVICES	BENGALURU
1987.	L&T LTD.	JALNA
1988.	L&T MHI	CHENNAI
1989.	L&T MHI BOILERS PVT.LTD.	CHENNAI
1990.	L&T MHPS BOILERS PVT. LTD.	CHENNAI
1991.	L&T MODULAR FABRICATION YARD LLC	SOHAR
1992.	L&T OMAN LLC	MUSCAT
1993.	L&T POWER	CHIDAMBARAM
1994.	L&T POWER	INDORE
1995.	L&T TECHNOLOGY SERVICES LTD.	BENGALURU
1996.	L&T TECHNOLOGY SERVICES LTD.	NAVI MUMBAI
1997.	L&T VALVES LTD.	COIMBATORE
1998.	L&T WATER & RENEWABLE ENERGY IC	BENGALURU
1999.	L.V. PRASAD EYE INSTITUTE	HYDERABAD
2000.	LABVANTAGE SOLUTIONS	UTTARPARA
2001.	LAFARGE INDIA PVT. LTD.	CHITTORGARH
2002.	LAHMEYER INTERNATIONAL GMBH	VADALUR
2003.	LAKSHMI MACHINE WORKS LTD.	COIMBATORE
2004.	LALITHA SUPERSPECIALITY HOSPITAL	GUNTUR
2005.	LAM RESEARCH INDIA PVT. LTD.	BENGALURU
2006.	LANCE CADD SOLUTIONS	HYDERABAD
2007.	LANCO POWER ANPARA LTD.	ANPARA
2008.	LANDIS & GYR	GHAZIABAD
2009.	LANPL, ANPARA	SONEBHADRA
2010.	LARSEN & TOUBRO (OMAN) LLC	RUWI
2011.	LARSEN & TOUBRO (OMAN)LLC	THRISSUR
2012.	LARSEN & TOUBRO B&F IC	MUMBAI
2013.	LARSEN & TOUBRO CONSTRUCTION LTD.	CHENNAI
2014.	LARSEN & TOUBRO CONSTRUCTION LTD.	NAVI MUMBAI
2015.	LARSEN & TOUBRO CONSTRUCTION LTD.	THRISSUR
2016.	LARSEN & TOUBRO ECC DIV.	PUNE
2017.	LARSEN & TOUBRO HYDROCARBON ENGINEERING	BHARUCH
2018.	LARSEN & TOUBRO INFOTECH LTD.	BENGALURU
2019.	LARSEN & TOUBRO INFOTECH LTD.	SALEM
2020.	LARSEN & TOUBRO LTD.	ABU DHABI
2021.	LARSEN & TOUBRO LTD.	AKOLA
2022.	LARSEN & TOUBRO LTD.	ANGUL
2023.	LARSEN & TOUBRO LTD.	ARIYALUR

2024.	LARSEN & TOUBRO LTD.	BENGALURU
2025.	LARSEN & TOUBRO LTD.	BHILAI
2026.	LARSEN & TOUBRO LTD.	COIMBATORE
2027.	LARSEN & TOUBRO LTD.	CUDDALORE
2028.	LARSEN & TOUBRO LTD.	ERNAKULAM
2029.	LARSEN & TOUBRO LTD.	FARIDABAD
2030.	LARSEN & TOUBRO LTD.	KOLKATA
2031.	LARSEN & TOUBRO LTD.	MANAMADURAI
2032.	LARSEN & TOUBRO LTD.	MUMBAI
2033.	LARSEN & TOUBRO LTD.	MYSORE
2034.	LARSEN & TOUBRO LTD.	NAGPUR
2035.	LARSEN & TOUBRO LTD.	NAIHATI
2036.	LARSEN & TOUBRO LTD.	NASHIK
2037.	LARSEN & TOUBRO LTD.	NAVI MUMBAI
2038.	LARSEN & TOUBRO LTD.	NEW DELHI
2039.	LARSEN & TOUBRO LTD.	RAMNAD
2040.	LARSEN & TOUBRO LTD.	REWA
2041.	LARSEN & TOUBRO LTD.	ROORKEE
2042.	LARSEN & TOUBRO LTD.	RUDRAPRAYAG
2043.	LARSEN & TOUBRO LTD.	SHARJAH
2044.	LARSEN & TOUBRO LTD.	SIVAGANGAI
2045.	LARSEN & TOUBRO LTD.	SURAT
2046.	LARSEN & TOUBRO LTD.	THIRUVARUR
2047.	LARSEN & TOUBRO LTD.	THOLUR
2048.	LARSEN & TOUBRO LTD.	TRICHY
2049.	LARSEN & TOUBRO LTD.	UDUPI
2050.	LARSEN & TOUBRO LTD.	VELLORE
2051.	LARSEN & TOUBRO LTD.	VYARA
2052.	LATIFA SCHOOL FOR GIRLS	DUBAI
2053.	LAW FIRM OF NAREN THAPPETA	BENGALURU
2054.	LEADERS FOR TOMORROW FOUNDATION	NEW DELHI
2055.	LEAR AUTOMOTIVE INDIA PVT. LTD.	CHENNAI
2056.	LEAR AUTOMOTIVE INDIA PVT. LTD.	NAGPUR
2057.	LEAR AUTOMOTIVE INDIA PVT. LTD.	PUNE
2058.	LEGRAND SNC FZE	DUBAI
2059.	LEIGHTON OFFSHORE SDN BHD	KATPADI
2060.	LEITWIND SHRIRAM MFG. LTD.	CHENNAI
2061.	LENNOX INDIA TECHNOLOGY CENTRE	CHENNAI
2062.	LENOVO INDIA PVT. LTD.	BENGALURU
2063.	LEPRO HERBALS (P) LTD.	AGRA
2064.	LETRIKA ROOTS PVT. LTD.	NAMAKKAL
2065.	LG ELECTRONICS INDIA PVT. LTD.	CHENNAI
2066.	LG ELECTRONICS INDIA PVT. LTD.	GURGAON
2067.	LG SOFT INDIA	BENGALURU
2068.	LG SOFT INDIA PVT. LTD.	BENGALURU
2069.	LIEBHERR INDIA PVT. LTD.	NAVI MUMBAI
2070.	LIFESENSE MEDICAL SYSTEMS PVT. LTD.	BENGALURU
2071.	LIFTOFF SOFTWARE INDIA PVT. LTD.	BENGALURU
2072.	LINKEDIN TECHNOLOGY INFORMATION PVT. LTD.	BENGALURU
2073.	LINKS MIDDLEEAST TECHNICAL SERVICES LLC	MUSSAFAH
2074.	LINKWELL TELESYSTEMS PVT. LTD.	HYDERABAD
2075.	LIQUID PROPULSION SYSTEMS CENTRE	TRIVANDRUM
2076.	LIQUID PROPULSION SYSTEM CENTER	THIRUVANANTHAPURAM
2077.	LISLE TECHNOLOGY PARTNERS	BENGALURU
2078.	LISTER TECHNOLOGIES	CHENNAI
2079.	LIVACO INDUSTRIES/OMNISCIENT PROCESS EQU	MUMBAI
2080.	LIVECAREER INDIA PVT. LTD.	DELHI
2081.	LIVECAREER INDIA PVT. LTD.	NOIDA

2082.	LM WIND POWER TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2083.	LNV TECHNOLOGY PVT. LTD.	HYDERABAD
2084.	LOBO STAFFING SOLUTIONS PVT. LTD.	BENGALURU
2085.	LOCUZ ENTERPRISE SOLUTIONS	CHENNAI
2086.	LODHA DEVELOPERS PVT. LTD.	NAVI MUMBAI
2087.	LOGICA PVT. LTD.	CHENNAI
2088.	LONZA BIOLOGICS TUAS PTE LTD.	BUKIT BATOK
2089.	LRDE ,DRDO,MIN.OF DEFENCE	BENGALURU
2090.	LRN CONTENT SOLUTIONS PVT. LTD.	GURGAON
2091.	LSI INDIA RESEARCH AND DEVELOPMENT PVT. LTD.	BENGALURU
2092.	LUBRIZOL INDIA PVT. LTD.	MUMBAI
2093.	LUCAS TVS LTD.	NEYVELI
2094.	LUCAS TVS LTD.	REWARI
2095.	LUCAS-TVS LTD.	CHENNAI
2096.	LUK INDIA	DHARMAPURI
2097.	LUPIN LTD.	MUMBAI
2098.	M A QADEER QURAISHI	HYDERABAD
2099.	M. V. G. R. COLLEGE OF ENGINEERING	VISAKHAPATNAM
2100.	MAADEN ALUMINIUM COMPANY	RASLAFFAN
2101.	MAADEN ALUMINIUM COMPANY	SANGLI
2102.	MAARS AUTOCORP PVT. LTD.	GURGAON
2103.	MADRAS ENGINEERING INDUSTRIES PVT. LTD.	CHENNAI
2104.	MADRAS MEDICAL MISSION	CHENNAI
2105.	MADURA FASHION AND LIFESTYLE	BENGALURU
2106.	MAERSK GLOBAL SERVICE CENTRE	MUMBAI
2107.	MAERSK GLOBAL SERVICE CENTRES (I) PVT. LTD.	PUNE
2108.	MAGNA COSMA INTERNATIONAL (I) PVT. LTD.	MALAPPURAM
2109.	MAGNA INFOTECH PVT. LTD.	BENGALURU
2110.	MAGNA INFOTECH PVT. LTD.	FARIDABAD
2111.	MAGNA INFOTECH PVT. LTD.	NEW DELHI
2112.	MAGNA QUEST TECHNOLOGIES LTD.	HYDERABAD
2113.	MAGNA QUEST TECHNOLOGIES LTD.	PRODDATUR
2114.	MAGNETI MARELLI UM ELECTRONIC SYSTEMS PVT LTD.	GURGAON
2115.	MAHIANDRAREVA ELECTRICALS VEHICLES PVT LTD.	WARANGAL
2116.	MAHINDRA & MAHINDRA LTD.	LUCKNOW
2117.	MAHINDRA & MAHINDRA LTD.	NASHIK
2118.	MAHINDRA & MAHINDRA LTD.	PUNE
2119.	MAHINDRA & MAHINDRA LTD.	RUDRAPUR
2120.	MAHINDRA & MAHINDRA LTD.	THANE
2121.	MAHINDRA & MAHINDRA LTD.	ZAHEERABAD
2122.	MAHINDRA AEROSPACE PVT. LTD.	BENGALURU
2123.	MAHINDRA ENGINEERING SERVICES LTD.	PUNE
2124.	MAHINDRA HEAVY ENGINES PVT. LTD.	PUNE
2125.	MAHINDRA REVA ELECTRIC VEHICLE PVT. LTD.	BENGALURU
2126.	MAHINDRA SATYAM	HYDERABAD
2127.	MAHINDRA VEHICLE MANUFACTURERS LTD.	NASHIK
2128.	MAHLE BEHR ENGINEERING SERVICES	CHINCHWAD
2129.	MAHLE BEHR INDIA LTD.	PUNE
2130.	MAHLE FILTER SYSTEM INDIA (P) LTD.	GURGAON
2131.	MAIHAR CEMENT	MAIHAR
2132.	MAKEMYTRIP (I) PVT. LTD.	NEW DELHI
2133.	MAKEMYTRIP.COM	MATHURA
2134.	MAKINO AUTO INDUSTRIES PVT. LTD.	GHAZIABAD
2135.	MAMIGO TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
2136.	MANAPPURAM FINANCE LTD.	THRISSUR
2137.	MANATEC ELECTRONICS PVT. LTD.	KANCHIPURAM
2138.	MANDO AUTOMOTIVE INDIA PVT. LTD.	CHENNAI
2139.	MANDO SOFTTECH INDIA PVT. LTD.	GURGAON

2140.	MANHATTAN ASSOCIATES PVT. LTD.	BENGALURU
2141.	MANITOWOC CRANES, POTAIN INDIA PVT.LTD.	PUNE
2142.	MANLIFT POWER L.L.C	DUBAI
2143.	MANPOWER SERVICES INDIA PVT. LTD.	VILLAPURAM
2144.	MANTHAN SYSTEMS	BENGALURU
2145.	MAPR TECHNOLOGIES RESEARCH & DEVELOPMENT	HYDERABAD
2146.	MARICO LTD.	ERODE
2147.	MARQUIS TECHNOLOGIES	GURGAON
2148.	MARS GCC	AL MAJAZ
2149.	MARS INTERNATIONAL INDIA PVT. LTD.	SECUNDERABAD
2150.	MARUTI PLASTIC	SURAT
2151.	MARUTI SUZUKI INDIA LTD.	HUDA
2152.	MARVELL INDIA PVT. LTD.	HYDERABAD
2153.	MARVELL INDIA PVT. LTD.	PUNE
2154.	MARVELL SEMICONDUCTORS	PUNE
2155.	MATEX NET PVT. LTD.	DELHI
2156.	MAVUNO TECHNOLOGIES PVT. LTD.	DELHI
2157.	MAXIM INTEGRATED INDIA PVT. LTD.	BENGALURU
2158.	MAXIM INTEGRATED PRODUCTS INC	BENGALURU
2159.	MAXIM SMT TECHNOLOGIES PVT. LTD.	NOIDA
2160.	MAXLINEAR TECHNOLOGIES PVT. LTD.	BENGALURU
2161.	MBTECH GROUP GMBH & CO. KGAA	BENGALURU
2162.	MCAFEE INDIA PVT. LTD.	BENGALURU
2163.	MCAFEE SOFTWARE (INDIA) PVT. LTD.	BENGALURU
2164.	MCAFEE SOFTWARE (INDIA) PVT. LTD.	JAIPUR
2165.	MCC PTA INDIA CORP. PVT. LTD.	HALDIA
2166.	MCDERMOTT MIDDLE EAST INC	DUBAI
2167.	MCF, ISRO	HASSAN
2168.	MCKINSEY KNOWLEDGE CENTRE	GURGAON
2169.	MCNALLY BHARAT ENGINEERING COMPANY LTD.	BAIDYABATI
2170.	MECH AUTOMOBILES	THANJAVUR
2171.	MECH HONDA	THANJAVUR
2172.	MECHATRONICS SYSTEMS PVT. LTD.	PUNE
2173.	MECON LTD.	BENGALURU
2174.	MEDIA LAB ASIA	DELHI
2175.	MEDIATEK INDIA TECHNOLOGY PVT. LTD.	NOIDA
2176.	MEDTRONIC (COVIDIEN)	HYDERABAD
2177.	MEETHAQ EMPLOYMENT AGENCY	JAIPUR
2178.	MEGATECH CONTROL LLC	KUNDAPURA
2179.	MEHRO CONSULTANTS	NEW DELHI
2180.	MELSTAR INFORMATION TECHNOLOGY LTD.	NEW DELHI
2181.	MEMF-ETA SWITCHGEAR MFG. CO.	SANGLI
2182.	MENTOR GRAPHICS	BENGALURU
2183.	MERCEDES BENZ R&D INDIA PVT. LTD.	BENGALURU
2184.	MERCEDES BENZ R&D INDIA PVT. LTD.	PUNE
2185.	MERCER CONSULTING INDIA PVT. LTD.	NEW DELHI
2186.	MERIDIANSOFT INFO SYSTEMS PVT. LTD.	HYDERABAD
2187.	MERITOR CVS INDIA PVT. LTD.	BENGALURU
2188.	MERU NETWORKS INDIA PVT. LTD.	BENGALURU
2189.	METACUBE SOFTWARE PVT. LTD.	JAIPUR
2190.	METALSA INDIA PVT. LTD.	SARAIKELA
2191.	METAS OF SDA, GIFALFARD MEMORIAL HOSPITAL	CHENNAI
2192.	METEXIM SOURCING PVT.LTD.	KANYAKUMARI
2193.	METHODEXSYSTEMS LTD.	DEWAS
2194.	METITO OVERSEAS LTD.	DUBAI
2195.	METITO OVERSEAS LTD.	TRICHY
2196.	METITO WATER TREATMENT	SHARJAH
2197.	METRICSTREAM INFOTECH INDIA PVT. LTD.	BENGALURU

2198.	MHB FILTER INDIA PVT. LTD.	AKKALKOT
2199.	MICHELIN INDIA TAMILNADU TYRES PVT. LTD.	CHENNAI
2200.	MICRO LABS LTD.	BENGALURU
2201.	MICROCHIP TECHNOLOGY	CHENNAI
2202.	MICROLAND	BENGALURU
2203.	MICRON SEMICONDUCTOR ASIA PTE LTD.	SINGAPORE
2204.	MICROSOFT CORPORATION	BENGALURU
2205.	MICROSOFT CORPORATION	HYDERABAD
2206.	MICROSOFT GLOBAL SERVICES CENTER	BENGALURU
2207.	MICROSOFT GLOBAL SERVICES CENTER	HYDERABAD
2208.	MICROSOFT INDIA (R&D) PVT. LTD.	BENGALURU
2209.	MICROSOFT INDIA (R&D) PVT. LTD.	HYDERABAD
2210.	MICROSOFT INDIA (R&D) PVT. LTD.	JAIPUR
2211.	MICROSOFT INDIA DEVELOPMENT CENTER	MYSORE
2212.	MICROSOFT INDIA GTSC	BENGALURU
2213.	MICROSOFT INDIA PVT. LTD.	HYDERABAD
2214.	MICROSOFT SERVICES GLOBAL DELIVERY	HYDERABAD
2215.	MIDAS POLYMER COMPOUNDS PVT. LTD.	KOTTAYAM
2216.	MIDAS SAFETY PRODUCTS PVT. LTD.	ALAPPUZHA
2217.	MIDDLEEAST PRESTRESSING LLC	TIRUNELVELI
2218.	MILESTONE CORPORATE SERVICES PVT. LTD.	HYDERABAD
2219.	MILLENNIUM TECHNOSOFT LTD.	HYDERABAD
2220.	MINACS PVT. LTD.	BENGALURU
2221.	MIND CURV	ERNAKULAM
2222.	MINDA FURUKAWA ELECTRIC PVT. LTD.	NARNAUL
2223.	MINDA FURUKAWA ELECTRIC PVT. LTD.	REWARI
2224.	MINDA KYORAKU LTD.	REWARI
2225.	MINDA STONERIDGE INSTRUMENTS LTD.	PUNE
2226.	MINDARIKA PVT. LTD.	CHENNAI
2227.	MINDQ SYSTEMS PVT. LTD.	HYDERABAD
2228.	MINDTECK INDIA LTD.	BENGALURU
2229.	MINDTREE LTD.	BENGALURU
2230.	MINDTREE LTD.	COCHIN
2231.	MINDTREE LTD.	VRIDHACHALAM
2232.	MINERALS TECHNOLOGIES	BENGALURU
2233.	MISHRA DHATU NIGAM LTD.	HYDERABAD
2234.	MISTRAL SOLUTIONS PVT. LTD.	BENGALURU
2235.	MISYS FINANCIAL SOFTWARE	BENGALURU
2236.	MISYS SOFTWARE SOLUTIONS	BENGALURU
2237.	MITSUBISHI ELECTRIC INDIA PVT.LTD.	PUNE
2238.	MITSUMI ELASTOMERS SINGAPORE PVT. LTD.	PARAMAKUDI
2239.	MITTAL PUBLICATIONS	NEW DELHI
2240.	ML OUTSOURCING SERVICES PVT. LTD.	CHENNAI
2241.	MOBIGRAPH	TIRUNELVELI
2242.	MOBILE INTERFACE DESIGNS	PUNE
2243.	MOBILEUM INDIA PVT. LTD.	GURGAON
2244.	MOCA HEALTHCARE CERTIFICATIONS PVT. LTD.	NEW DELHI
2245.	MO-DATA INC	FREMONT
2246.	MODEC OFFSHORE PRODUCTION SYSTEMS	SINGAPORE
2247.	MOHAMED ABDUL RAHMAN AL BAHAR	SHARJAH
2248.	MOHINI CONSTRUCTION EQUIPMENTS	JAIPUR
2249.	MOLBIO DIAGNOSTICS PVT. LTD.	PERNEM
2250.	MOLD MASTERS TECHNOLOGIES PVT. LTD.	COIMBATORE
2251.	MOLEX INDIA PVT. LTD.	BENGALURU
2252.	MONDELEZ INDIA FOODS PVT. LTD.	SAHARANPUR
2253.	MOOG INDIA TECHNOLOGY CENTER PVT. LTD.	BENGALURU
2254.	MORGAN CERAMICS MIDDLE EAST	RA AL KHAIMAH
2255.	MORGAN STANLEY	AMBALA CITY

2256.	MORGAN STANLEY ADVANTAGE SERVICES	BENGALURU
2257.	MOSER BAER INDIA LTD.	GREATER NOIDA
2258.	MOTHERSON AUTOMOTIVE TECHNOLOGIES & ENGG	CHENNAI
2259.	MOTHERSON SUMI INFOTECH & DESIGNS LTD.	KURNOOL
2260.	MOTHERSON SUMI SYSTEMS LTD.	NEW DELHI
2261.	MOTIVITY LABS	HYDERABAD
2262.	MOTT MACDONALD	ABU DHABI
2263.	MOTT MACDONALD & CO. LLC	MUSCAT
2264.	MOZZAT ENTERPRISE SDN BHD	SERIA
2265.	MPHASIS AN HP COMPANY	BENGALURU
2266.	MPHASIS LTD.	SALEM
2267.	MRF LTD.	CHENNAI
2268.	MRF TYRES	ERODE
2269.	MRV INFOTECH INDIA PVT. LTD.	VELACHERY
2270.	MSCRIPTS SYSTEMS INDIA PVT. LTD.	CHINTAMANI
2271.	MSD INTERNATIONAL GMBH	SINGAPORE
2272.	MSYS TECHNOLOGIES	BENGALURU
2273.	MUBEA AUTOMOTIVE INDIA	PUNE
2274.	MUBLE SOLUTIONS PVT. LTD.	COCHIN
2275.	MURUGAPPA MORGAN THERMAL CERAMICS LTD.	AHMEDABAD
2276.	MUSASHI AUTO PARTS INDIA PVT. LTD.	BENGALURU
2277.	MUTHOOT MEDICAL CENTRE	KOLLAM
2278.	MVIT,VSSC,DOS,ISRO	THIRUVANANTHAPURAM
2279.	MYCITYWAY INDIA RESEARCH LABS PVT. LTD.	MORADABAD
2280.	MYLAN LABORATORIES LTD.	HYDERABAD
2281.	MYNTRA DESIGNS PVT. LTD.	BENGALURU
2282.	MYSORE MEDICAL COLLEGE AND RESEARCH INST	MYSORE
2283.	MYUNG SUNG INDIA PRECISION PVT. LIMIT	CHENNAI
2284.	NACHI KG TECHNOLOGY (I) PVT. LTD.	NEEMRANA
2285.	NAFFCO ELECTROMECHANICAL LLC	JAFZA
2286.	NAFFCO ELECTROMECHANICALCO.LLC	JEBEL ALI
2287.	NAFFCO FZCO	DUBAI
2288.	NAGA ARCHITECTS	DUBAI
2289.	NAGARRO SOFTWARE PVT. LTD.	GHAZIABAD
2290.	NAGARRO SOFTWARE PVT. LTD.	GURGAON
2291.	NAGARRO SOFTWARE PVT. LTD.	NEW DELHI
2292.	NAGRA VISION (I) PVT. LTD.	BANGALORE
2293.	NAGRAVISION (I) PVT. LTD.	HOSUR
2294.	NAILBITER RESEARCH PVT. LTD.	AHMEDABAD
2295.	NAKILAT KEPPEL OFFSHORE AND MARINE LTD.	NEYVELI
2296.	NAKILAT KEPPEL OFFSHORE AND MARINE LTD.	TIRUCHIRAPPALLI
2297.	NAMO NARAYAN INDUSTRIES	VALANCHERY
2298.	NAPINO AUTO & ELECTRONICS LTD.	FARIDABAD
2299.	NAPINO AUTO & ELECTRONICS LTD.	GHAZIABAD
2300.	NARAYANA HRUDAYALAYA LTD.	BANGALORE
2301.	NATCO PHARMA LTD.	HYDERABAD
2302.	NATIOAL ENGINEERING INDUSTRIES	TRICHIRAPALLI
2303.	NATIONAL AEROSPACE LABORATORIES	BANGALORE
2304.	NATIONAL CENTRE FOR BIOLOGICAL SCIENCES	BANGALORE
2305.	NATIONAL CONSTRUCTION CO.	ABU DHABI
2306.	NATIONAL CONSTRUCTION CO.	CHENNAI
2307.	NATIONAL CONSTRUCTION CO.	MUSAFFA
2308.	NATIONAL COUNCIL OF SCIENCE MUSEUM	KOLKATA
2309.	NATIONAL DEFENCE ACADEMY	PUNE
2310.	NATIONAL ENGINEERING INDUSTRIES LTD.	GURGAON
2311.	NATIONAL ENGINEERING INDUSTRIES LTD.	JAIPUR
2312.	NATIONAL INFORMATICS CENTRE	AGARTALA
2313.	NATIONAL INFORMATICS CENTRE	CHENNAI

2314.	NATIONAL INFORMATICS CENTRE	JAIPUR
2315.	NATIONAL INFORMATICS CENTRE	PUNE
2316.	NATIONAL INFORMATICS CENTRE	RATANGARH
2317.	NATIONAL INFORMATICS CENTRE	ROING
2318.	NATIONAL INFORMATICS CENTRE	THIRUVANANTHAPURAM
2319.	NATIONAL INSTITUTE OF FASHION TECHNOLOGY	BANGALORE
2320.	NATIONAL INSTITUTE OF ADVANCED STUDIES	BANGALORE
2321.	NATIONAL INSTITUTE OF WIND ENERGY TECHNOLOGY	CHENNAI
2322.	NATIONAL INSTU. OF OPHTHALMIC SCIENCES	SELANGOR
2323.	NATIONAL PETROLEUM CONSTRUCTION CO.	ABU DHABI
2324.	NATIONAL PETROLEUM CONSTRUCTION CO.	MUSSAFAH
2325.	NATIONAL PROJECTS CONSTRUCTION CORPORATI	FARIDABAD
2326.	NATIONAL REMOTE SENSING CENTRE	SAMBALPUR
2327.	NATIONAL REMOTE SENSING CENTRE	SECUNDERABAD
2328.	NAVA ENERGY ZAMBIA LTD.	CUDDALORE
2329.	NAVARATAN TECHNOLOGIES	NIZAMBAD
2330.	NAVIKARAN INFOTECH PVT. LTD.	NEW DELHI
2331.	NAVITAS IT BUSINESS CONSULTING PVT. LTD.	VIJAYAWADA
2332.	NBC BEARINGS	JAIPUR
2333.	NCC LTD.	CHENNAI
2334.	NCC LTD.	HYDERABAD
2335.	NCR CORPORATION (I) PVT. LTD.	ALIGARH
2336.	NCR CORPORATION (I) PVT. LTD.	BANGALORE
2337.	NCR CORPORATION (I) PVT. LTD.	DUBAI
2338.	NCR CORPORATION (I) PVT. LTD.	HYDERABAD
2339.	NCR CORPORATION (I) PVT. LTD.	MOYNA
2340.	NCR CORPORATION (I) PVT. LTD.	MUMBAI
2341.	NCR CORPORATION (I) PVT. LTD.	SECUNDERABAD
2342.	NDDDB DAIRY SERVICES	SONIPAT
2343.	NDS SERVICES PAY-TV TECHNOLOGY PVT. LTD.	BANGALORE
2344.	NEC TECHNOLOGIES (I) PVT. LTD.	COCHIN
2345.	NEC TECHNOLOGIES (I) PVT. LTD.	HOWRAH
2346.	NEC TECHNOLOGIES (I) PVT. LTD.	NEW DELHI
2347.	NEC TECHNOLOGIES (I) PVT. LTD.	NOIDA
2348.	NEC TECHNOLOGIES (I) PVT. LTD.	SHAHJAHANPUR
2349.	NEETA DAIRY	MUMBAI
2350.	NEI LTD.	JAIPUR
2351.	NEOAIRTECH (I) PVT. LTD.	BANGALORE
2352.	NEOSOFT TECHNOLOGIES	AURANGABAD
2353.	NEOSOFT TECHNOLOGIES	THANE
2354.	NEPRA RESOURCE MANAGEMENT PVT. LTD.	AHMEDABAD
2355.	NESS TECHNOLOGIES (I) PVT. LTD.	BANGALORE
2356.	NESS TECHNOLOGIES (I) PVT. LTD.	BELAGAVI
2357.	NESS TECHNOLOGIES (I) PVT. LTD.	BOOTHAPANDY
2358.	NESS TECHNOLOGIES (I) PVT. LTD.	CHITTORGARH
2359.	NESS TECHNOLOGIES (I) PVT. LTD.	YELURUPADU
2360.	NESTLE MIDDLE EAST MANUFACTURING LLC	DUBAI
2361.	NESTLE R&D (I) PVT. LTD.	NEW DELHI
2362.	NETAJI SUBHAS INSTITUTE OF TECHNOLOGY	PATNA
2363.	NETAPP (I) PVT. LTD.	BANGALORE
2364.	NETAPP (I) PVT. LTD.	LUDHIANA
2365.	NETCORP DIGITAL SOLUTIONS	LUCKNOW
2366.	NETCRACKER TECHNOLOGY SOLUTIONS (I) PVT. LTD.	BANGALORE
2367.	NETCRACKER TECHNOLOGY SOLUTIONS (I) PVT. LTD.	HYDERABAD
2368.	NETCRACKER TECHNOLOGY SOLUTIONS (I) PVT. LTD.	PUNE
2369.	NETCRACKER TECHNOLOGY SOLUTIONS (I) PVT. LTD.	UDAIPUR
2370.	NETENRICH TECHNOLOGIES PVT. LTD.	HYDERABAD
2371.	NETENRICH TECHNOLOGIES PVT. LTD.	SECUNDERABAD



2372.	NETHRAM LLC	THALLIPARAMBA
2373.	NETSKOPE (I) PVT. LTD.	BANGALORE
2374.	NETTUR TECHNICAL TRAINING FOUNDATION	VELLORE
2375.	NETWORK SYSTEMS AND TECHNOLOGIES PVT. LTD.	KANNUR
2376.	NEWGEN SOFTWARE TECHNOLOGIES LTD.	PILIBHIT
2377.	NEXTEER AUTOMOTIVE (I) PVT. LTD.	HOSUR
2378.	NHPL	SURAT
2379.	NIBHA ENTERPRISE PVT. LTD.	GURGAON
2380.	NIC MIT GOI	GHAZIABAD
2381.	NICE INTERACTIVE SOLUTIONS PVT. LTD.	MUMBAI
2382.	NICE SOFTWARE SOLUTIONS	NAGPUR
2383.	NICE SYSTEMS	PUNE
2384.	NIELIT	AIZAWL
2385.	NIELIT	DELHI
2386.	NIELIT	GHAZIABAD
2387.	NIELIT	KOLKATA
2388.	NIELSEN (I) PVT. LTD.	AMROHA
2389.	NIHILENT TECHNOLOGIES PVT. LTD.	PUNE
2390.	NIIT TECHNOLOGIES LTD.	CHENNAI
2391.	NIIT TECHNOLOGIES LTD.	DELHI
2392.	NIIT TECHNOLOGIES LTD.	GURGAON
2393.	NIIT TECHNOLOGIES LTD.	NEW DELHI
2394.	NIIT TECHNOLOGIES LTD.	PILANI
2395.	NILKAMAL LTD.	THANE
2396.	NIMR AUTOMOTIVE LLC	KANCHIPURAM
2397.	NINELEAPS TECHNOLOGY SOLUTIONS PVT. LTD.	BANGALORE
2398.	NIPPON DATA	ROHTAK
2399.	NIPPON DATA SYSTEMS	GURGAON
2400.	NIRMA CHEMICALS LTD.	BHAVNAGAR
2401.	NISSAN MOTOR (I) PVT. LTD.	BANGALORE
2402.	NIZWA COLLEGE OF TECHNOLOGY	KOZHIKODE
2403.	NJS ENGINEERS (I) PVT. LTD.	KOLKATA
2404.	NMGH (I) ENGINEERING & SUPPORT SERVICE	PUNE
2405.	NOKIA (I) PVT. LTD.	BANGALORE
2406.	NOKIA (I) PVT. LTD.	BELGAUM
2407.	NOKIA (I) PVT. LTD.	CHENNAI
2408.	NOKIA (I) PVT. LTD.	DEHRADUN
2409.	NOKIA (I) PVT. LTD.	ROURKELA
2410.	NOKIA (I) PVT. LTD.	THALASSERY
2411.	NOKIA SIEMENS NETWORKS (I) PVT. LTD.	TIRUPUR
2412.	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	BANGALORE
2413.	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	KALYAN
2414.	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	KOLKATA
2415.	NORTH ANDHRA COASTAL EVANGELISING ASSOCI	MACHALIPATNAM
2416.	NOVARTIS (I) LTD.	THANE
2417.	NOVARTIS SINGAPORE PHARMACEUTICAL MANUFA	SINGAPORE
2418.	NOVELL SOFTWARE DEVELOPMENT (I) PVT.LTD.	BANGALORE
2419.	NOVELL SOFTWARE DEVELOPMENT (I) PVT.LTD.	GADAG
2420.	NOVELVOX SOFTWARES	FARIDABAD
2421.	NRSC (ISRO)	HYDERABAD
2422.	NRSC (ISRO)	SECUNDERABAD
2423.	NSK (I) SALES CO. PVT. LTD.	KOLKATA
2424.	NTI PVT. LTD.	NOIDA
2425.	NTPC ALSTOM POWER SERVICES PVT. LTD.	UDHAMPUR
2426.	NTPC LTD.	SONEBHADRA
2427.	NTRANGA IT SERVICES	HYDERABAD
2428.	NTT DATA GDS PVT. LTD.	BANGALORE
2429.	NTT DATA GDS PVT. LTD.	CHENNAI

2430.	NTT DATA GDS PVT. LTD.	HYDERABAD
2431.	NTT DATA GDS PVT. LTD.	NOIDA
2432.	NTT DATA GDS PVT. LTD.	TIRUNELVELI
2433.	NUCLEUS SOFTWARE EXPORTS	NOIDA
2434.	NUCLEUS SOFTWARE EXPORTS LTD.	LUCKNOW
2435.	NUCLEUS SOFTWARE EXPORTS LTD.	NEW DELHI
2436.	NUSECOND TECHNOLOGIES PVT. LTD.	BANGALORE
2437.	NUVISO NETWORKS PVT. LTD.	BANGALORE
2438.	NVIDIA GRAPHICS PVT. LTD.	BANGALORE
2439.	NVIDIA GRAPHICS PVT. LTD.	BULDANA
2440.	NVIDIA GRAPHICS PVT. LTD.	NAGPUR
2441.	NVIDIA GRAPHICS PVT. LTD.	PUNE
2442.	NVIDIA GRAPHICS PVT. LTD.	VIKARBAD
2443.	NXP SEMICONDUCTORS (I) PVT. LTD.	BANGALORE
2444.	NYK AUTO LOGISTICS (I) LTD.	CHENNAI
2445.	O P JINDAL INSTITUTE OF TECHNOLOGY	RAIGARH
2446.	OJE N (I) LTD.	KOCHI
2447.	OBSIDIAN SOFTWARE PVT. LTD.	BANGALORE
2448.	ODESSA TECHNOLOGIES	COIMBATORE
2449.	OEN (I) LTD.	TIRUVALLA
2450.	OERLIKON BALZERS	PUNE
2451.	OIL & NATURAL GAS CORPORATION LTD.	BHIMAVARAM
2452.	OIL (I) LTD.	DULIAJAN
2453.	OILFIELD SERVICES & SUPPLIES (I) PVT. LTD.	CHENNAI
2454.	OLLOSOFT TECHNOLOGIES PVT. LTD.	JAIPUR
2455.	OMAN AIR	MUSCAT
2456.	OMNEX (I) PVT. LTD.	CALICUT
2457.	OMNIX INTERNATIONAL	DUBAI
2458.	OMT SOFTWARE PVT. LTD.	NEW DELHI
2459.	ON SEMICONDUCTOR TECHNOLOGY (I) PVT. LTD.	BANGALORE
2460.	ONDOT SYSTEMS (I) PVT. LTD.	BANGALORE
2461.	ONE97 COMMUNICATIONS PVT. LTD.	KANPUR
2462.	ONE97 COMMUNICATIONS PVT. LTD.	NOIDA
2463.	ONMOBILE GLOBAL LTD. (LIVEWIRE MOBILE)	BANGALORE
2464.	ONWARD ESERVICES	CHENNAI
2465.	ONWARD TECHNOLOGIES LTD.	PUNE
2466.	OPEN SKY LABS PVT. LTD.	BANGALORE
2467.	OPEN-SILICON RESEARCH PVT. LTD.	BANGALORE
2468.	OPENTEXT TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
2469.	OPERATIONAL ENERGY GROUP (I) PVT.LTD.	CHENNAI
2470.	OPG POWER GENERATION PVT. LTD.	CHENNAI
2471.	OPTIVAL HEALTH SOLUTIONS PVT. LTD.	HYDERABAD
2472.	OPTYM (I) PVT. LTD.	BANGALORE
2473.	ORACLE (I) PVT. LTD.	ANCHAL
2474.	ORACLE (I) PVT. LTD.	BALASORE
2475.	ORACLE (I) PVT. LTD.	BANGALORE
2476.	ORACLE (I) PVT. LTD.	DELHI
2477.	ORACLE (I) PVT. LTD.	ERNAKULAM
2478.	ORACLE (I) PVT. LTD.	GHAZIABAD
2479.	ORACLE (I) PVT. LTD.	HYDERABAD
2480.	ORACLE (I) PVT. LTD.	KOLAR
2481.	ORACLE (I) PVT. LTD.	KOTTAYAM
2482.	ORACLE (I) PVT. LTD.	MUZAFFARPUR
2483.	ORACLE (I) PVT. LTD.	MYSORE
2484.	ORACLE (I) PVT. LTD.	NIZAMABAD
2485.	ORACLE (I) PVT. LTD.	PUNE
2486.	ORACLE (I) PVT. LTD.	RANNI
2487.	ORACLE (I) PVT. LTD.	SILIGURI

2488.	ORACLE (I) PVT. LTD.	TRIVANDRUM
2489.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	BANGALORE
2490.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	MUMBAI
2491.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	PUNE
2492.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	PUTTUR
2493.	ORANGE BUSINESS SERVICES	GURGAON
2494.	ORBICULAR PHARMACEUTICAL TECHNOLOGY PVT.	SECUNDERABAD
2495.	ORBIT TECHNICAL SOLUTIONSPVT. LTD.	KANCHIPURAM
2496.	ORBITZ (I) SERVICES PVT. LTD.	BANGALORE
2497.	ORGA SYSTEMS (I) PVT. LTD.	KOLKATA
2498.	ORIENT CEMENT	VISAKHAPATNAM
2499.	ORION TEST SYSTEMS (I) PVT. LTD.	PUNE
2500.	OSSCUBE SOLUTIONS LTD.	BIKANER
2501.	OSTRO ENERGY PVT. LTD.	RATLAM
2502.	OTIS ELEVATOR CO. (I) LTD.	BANGALORE
2503.	OTIS ELEVATOR CO. (I) LTD.	PUNE
2504.	OTIS-ISRC PVT. LTD.	PUNE
2505.	OWLER (I) PVT. LTD.	ERODE
2506.	OZONE HOSPITAL & RESEARCH CENTRE PVT. LTD.	AKOLA
2507.	OZONE OVERSEAS PVT. LTD.	KANGRA
2508.	P M NAGARATHNA AITHAL	BANGALORE
2509.	P SERVE PTE LTD.	SINGAPORE
2510.	PACE MICRO TECHNOLOGY	MADURAI
2511.	PACE MICRO TECHNOLOGY (I) PVT. LTD.	BANGALORE
2512.	PACKETVIDEO (I) PVT. LTD.	JIND
2513.	PACO ALLEN AUTO PVT.LTD.	LUCKNOW
2514.	PADMINI VNA MECHATRONIC PVT. LTD.	GURGAON
2515.	PANASONIC APPLIANCES INDIACO.LTD.	CHENNAI
2516.	PANASONIC AVIONICS CORPORATION	DUBAI
2517.	PANORAMA CONTRACTING AND ENGINEERING CO.	ERNAKULAM
2518.	PANTECH SLOUTIONS	HYDERABAD
2519.	PARABLU SYSTEMS PVT. LTD.	BANGALORE
2520.	PARAMETRIC TECHNOLOGY CORPORATION	DELHI
2521.	PARAMETRIC TECHNOLOGY CORPORATION	DHARAMSHALA
2522.	PAREXEL INTERNATIONAL (I) PVT. LTD.	LUCKNOW
2523.	PARINATI SOLUTIONS PVT. LTD.	VASCO
2524.	PARKER HANNIFIN (I) PVT. LTD.	COIMBATORE
2525.	PARSONS INTERNATIONAL	ABU DHABI
2526.	PARVEEN INDUSTRIES PVT. LTD.	DELHI
2527.	PATHPARTNER TECHNOLOGY CONSULTING PVT. LTD.	BANGALORE
2528.	PATSPIN (I) LTD.	ALUVA
2529.	PAYPAL (I) PVT. LTD.	BANGALORE
2530.	PAYPAL (I) PVT. LTD.	CHENNAI
2531.	PEARSON ENGLISH	CHENNAI
2532.	PEGASYSTEMS WORLDWIDE (I) PVT. LTD.	CHODAVARAM
2533.	PEGASYSTEMS WORLDWIDE (I) PVT. LTD.	HYDERABAD
2534.	PEGASYSTEMS WORLDWIDE (I) PVT. LTD.	NIZAMABAD
2535.	PEINER SMAG MACHINERY (INDAI) PVT. LTD.	KALPAKKAM
2536.	PELMAR SUDRISHTI ENGINEERING (I) PVT. LTD.	HYDERABAD
2537.	PEMAC PTE LTD.	CHENNAI
2538.	PENTA TRADING AND CONTRACTING WLL	MARTHANDAM
2539.	PENTAIR VALVES & CONTROLS PVT. LTD.	BANGALORE
2540.	PENTAIR WATER (I) PVT. LTD.	NEW DELHI
2541.	PENTAIR WATER (I) PVT. LTD.	SANKHALIM
2542.	PENTAIR WATER (I) PVT. LTD.	VERNA
2543.	PEOPLE CLOUD TECHNOLOGIES PVT. LTD.	BANGALORE
2544.	PEOPLE STRONG HR SERVICES PVT. LTD.	DELHI
2545.	PEPSICO (I) HOLDINGS PVT.D LTD.	PALAKKAD

2546.	PERFETTI VAN MELLE (I) PVT. LTD.	GURGAON
2547.	PERFINT HEALTHCARE PVT. LTD.	KANYAKUMARI
2548.	PERNOD RICARD (I) PVT. LTD.	DERABASSI
2549.	PERSISTENT SYSTEMS LTD.	BANGALORE
2550.	PERSISTENT SYSTEMS LTD.	NAGPUR
2551.	PERSISTENT SYSTEMS LTD.	PONDA
2552.	PERSISTENT SYSTEMS LTD.	PUNE
2553.	PETROFAC INTERNATIONAL	ABU DHABI
2554.	PETROFAC INTERNATIONAL	AL QASIMIYA
2555.	PETROFAC INTERNATIONAL	BHUBANESWAR
2556.	PETROFAC INTERNATIONAL	CHENNAI
2557.	PETROFAC INTERNATIONAL	HYDERABAD
2558.	PETROFAC INTERNATIONAL	KAYAMKULAM
2559.	PETROFAC INTERNATIONAL	MALAPPURAM
2560.	PETROFAC INTERNATIONAL	NAVI MUMBAI
2561.	PETROFAC INTERNATIONAL	SHARJAH
2562.	PETROLEUM DEVELOPMENT OMAN	CHENNAI
2563.	PETROLEUM DEVELOPMENT OMAN	GHAZIABAD
2564.	PETROLEUM DEVELOPMENT OMAN	NAVI MUMBAI
2565.	PETRON EMIRATES CONTG & MFGCO.L.L.C	DUBAI
2566.	PETRON EMIRATES CONTG & MFGCO.L.L.C	NAVI MUMBAI
2567.	PETRONAS GAS BERHAD	PUNE
2568.	PETRONASH FZE	DUBAI
2569.	PETROSTAR CORPORATION LLC	TIRUNELVELI
2570.	PHA (I) PVT. LTD.	CHENNAI
2571.	PHA (I) PVT. LTD.	KANCHIPURAM
2572.	PHARMAZELL VIZAG PVT. LTD.	VISAKHAPATNAM
2573.	PHILIPS (I) LTD.	BANGALORE
2574.	PHILIPS (I) LTD.	CHENNAI
2575.	PHILIPS (I) LTD.	NOIDA
2576.	PHILIPS (I) LTD.	PUNE
2577.	PHILIPS ELECTONICS (I) LTD.	PUNE
2578.	PHILIPS ELECTRONICS (I) LTD.	BANGALORE
2579.	PHILIPS HEALTHCARE (I) LTD.	BANGALORE
2580.	PHILIPS INNOVATION CAMPUS	BANGALORE
2581.	PHOENIX LAMPS LTD.	NEW DELHI
2582.	PHOENIX MECANO I. PVT. LTD.	PUNE
2583.	PHYSICAL RESEARCH LABORATORY	UDAIPUR
2584.	PIAGGIO VEHICLES PVT.LTD.	TRIPUNITHURA
2585.	PILKINGTON AUTOMOTIVE (I) LTD.	HYDERABAD
2586.	PINNACLE SOURCING AND CONSULTANCY PVT. LTD	GREATER NOIDA
2587.	PIT SOLUTIONS PVT. LTD.	NAGERCOIL
2588.	PITNEY BOWES SOFTWARE (I) PVT. LTD.	DELHI
2589.	PITNEY BOWES SOFTWARE (I) PVT. LTD.	FARIDABAD
2590.	PITNEY BOWES SOFTWARE (I) PVT. LTD.	GHAZIABAD
2591.	PITNEY BOWES SOFTWARE (I) PVT. LTD.	JAIPUR
2592.	PITNEY BOWES SOFTWARE (I) PVT. LTD.	NEW DELHI
2593.	PLINTRON GLOBAL TECHNOLOGY SOLUTIONS PVT. LTD.	CHENNAI
2594.	P-MECH CONSULATANT PVT. LTD.	CHENNAI
2595.	PMI ENGG EXPORTS PVT. LTD.	HOSUR
2596.	POLARIS (I) PVT. LTD.	BANGALORE
2597.	POLARIS (I) PVT. LTD.	CHENNAI
2598.	POLARIS (I) PVT. LTD.	HYDERABAD
2599.	POLARIS (I) PVT. LTD.	NEW DELHI
2600.	POLARIS (I) PVT. LTD.	PILANI
2601.	POLARIS (I) PVT. LTD.	SIRSA
2602.	POLE TO WIN INTERNATIONAL	BANGALORE
2603.	POLICYBAZAAR INSURANCE WEB AGGREGATOR PVT. LTD.	NEW DELHI

2604.	POLIXEL SECURITY SYSTEMS PVT. LTD.	KANPUR
2605.	POLYPLASTICS INDUSTRIES (I) PVT. LTD.	YAMUNA NAGAR
2606.	PORTESCAP (I) PVT.LTD.	MUMBAI
2607.	PORTESCAP (I) PVT.LTD.	PUNE
2608.	POSCO MAHARASHTRA STEEL PVT.LTD.	GOREGAON
2609.	POSCO MAHARASHTRA STEEL PVT.LTD.	KOLHAPUR
2610.	POSCO MAHARASHTRA STEEL PVT.LTD.	MAHAD
2611.	POSCO MAHARASHTRA STEEL PVT.LTD.	MANGAON
2612.	POSCO MAHARASHTRA STEEL PVT.LTD.	MUMBAI
2613.	POSCO MAHARASHTRA STEEL PVT.LTD.	POLADPUR
2614.	POSCO MAHARASHTRA STEEL PVT.LTD.	PUNE
2615.	POSCO MAHARASHTRA STEEL PVT.LTD.	RAIGAD
2616.	POSCO MAHARASHTRA STEEL PVT.LTD.	RATNAGIRI
2617.	POSCO MAHARASHTRA STEEL PVT.LTD.	ROHA
2618.	POSCO MAHARASHTRA STEEL PVT.LTD.	SANGLI
2619.	POSCO MAHARASHTRA STEEL PVT.LTD.	SUDHAGAD
2620.	POSCO MAHARASHTRA STEEL PVT.LTD.	TAL-SHAHAPUR
2621.	POSITIVE TRADING AND CONTRACTING	KECHERY
2622.	POSITRONIC INTERCONNECTS PVT. LTD.	PUNE
2623.	POTAIN (I) PVT. LTD.	PUNE
2624.	POWER ENGINEERING (I) PVT. LTD.	PANAJI
2625.	POWERSPACK INDUSTRIES PVT. LTD.	REWARI
2626.	PRABANJAM HEALTHCARE PVT. LTD.	CHENNAI
2627.	PRAJ INDUSTRIES LTD.	PUNE
2628.	PRAMATI TECHNOLOGIES PVT. LTD.	CHENNAI
2629.	PRAMATI TECHNOLOGIES PVT. LTD.	HYDERABAD
2630.	PRANAVA EET	HYDERABAD
2631.	PRASHANTH HOSPITAL	VIJAYAWADA
2632.	PRATHAM SOFTWARE	JAIPUR
2633.	PRAXAIR (I) PVT. LTD.	JOLARPETTAI
2634.	PRECITEC PRECISION MACHINERIES PVT. LTD.	BANGALORE
2635.	PREMIER EVOLVICS PVT. LTD.	COIMBATORE
2636.	PREMIER PRODUCTION FABRICATORS LLC	RUWI
2637.	PRESIDENCY UNIVERSITY	PILANI
2638.	PREUSSE (I) PVT. LTD.	SALEM
2639.	PRICEWATERHOUSECOOPERS PVT. LTD.	CHENNAI
2640.	PRICEWATERHOUSECOOPERS PVT. LTD.	RAMANATHAPURAM
2641.	PRICEWATERHOUSECOOPERS PVT. LTD.	SECUNDERABAD
2642.	PRICOL TECHNOLOGIES LTD.	PALEMAD
2643.	PRICOL TECHNOLOGIES LTD.	PUNE
2644.	PRIMA MACHINES SERVICES (I) PVT. LTD.	ALIBAG
2645.	PRIMETALS TECHNOLOGIES (I) PVT. LTD.	KOLKATA
2646.	PRIMUS TECHSYSTEMS PVT. LTD.	PIMPRI
2647.	PROCESSMONK LTD.	KANNUR
2648.	PRODIGY TECHNOVATIONS PVT. LTD.	BANGALORE
2649.	PROJECT OBJECTS (I)	KANPUR
2650.	PROKARMA SOFTECH PVT. LTD.	CHENNAI
2651.	PROLIFE MULTISPECIALITY HOSPITAL	BANGALORE
2652.	PROSERV MIDDLE EAST	ALAPPAUZHA
2653.	PROTEGRITY LAKESIDE INFOTECH	BANGALORE
2654.	PROWARENESS	BANGALORE
2655.	PSIOG DATA SCIENCE	CHENNAI
2656.	PTC SOFTWARE (I) PVT. LTD.	DELHI
2657.	PTC SOFTWARE (I) PVT. LTD.	KOTA
2658.	PTC SOFTWARE (I) PVT. LTD.	PUNE
2659.	PUBLIC HEALTH FOUNDATION OF INDIA	GURGAON
2660.	PUBMATIC (I) PVT. LTD.	DOMBIVLI
2661.	PUNJ LLOYD PTE LTD.	SOMPETA

2662.	PURESFTWARE PVT. LTD.	DELHI
2663.	PURESFTWARE PVT. LTD.	NEW DELHI
2664.	PURPLETALK (I) PVT. LTD.	HYDERABAD
2665.	PWD GOA	PANJIM
2666.	PYRAMID ENGINEERING	MUMBAI
2667.	PYRODYNAMICS	BANGALORE
2668.	Q3 TECHNOLOGIES	DELHI
2669.	QATAR ALUMINIUM LTD.	DOHA
2670.	QATAR ALUMINIUM LTD.	MESAIEED
2671.	QATAR ALUMINIUM LTD.	PATHANAMTHITTA
2672.	QATAR CHEMICALS CO. LTD.	DOHA
2673.	QATAR CHEMICALS CO. LTD.	MESAIEED
2674.	QATAR ENGINEERING & CONSTRUCTIONCO.WLL	MAYILADUTHURAI
2675.	QATAR FERTILISER CO.	MESAIEED
2676.	QATAR GENERAL ELECTRICITY & WATER CORPOR	MANJERI
2677.	QATAR PETROLEUM	TRICHY
2678.	QATAR POWER CO.	DOHA
2679.	QATAR SHELL GTL LTD.	DOHA
2680.	QATARGAS	RASLAFAN
2681.	QATARGAS OPERATING CO. LTD.	MADURAI
2682.	QBURST TECHNOLOGIES PVT. LTD.	PALAKKAD
2683.	QD-SBG CONSTRUCTION	NAGAPATTINAM
2684.	QD-SBG CONSTRUCTION	VIJAYAWADA
2685.	QLOGIC (I) PVT. LTD.	PUNE
2686.	QRUIZE TECHNOLOGIES PVT. LTD.	CHENNAI
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2688.	QUALCOMM (I) PVT. LTD.	CHENNAI
2689.	QUALCOMM (I) PVT. LTD.	HYDERABAD
2690.	QUALCOMM (I) PVT. LTD.	WAYANAD
2691.	QUALCOMM GLOBAL TRADING PTE. LTD.	SINGAPORE
2692.	QUALITYKIOSK TECHNOLOGIES	MUMBAI
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2694.	QUESS CORP. LTD.	BANGALORE
2695.	QUEST GLOBAL ENGINEERING PVT. LTD.	BANGALORE
2696.	QUEST GLOBAL ENGINEERING PVT. LTD.	BELGAUM
2697.	QUEST GLOBAL ENGINEERING PVT. LTD.	KANNUR
2698.	QUEST GLOBAL ENGINEERING PVT. LTD.	THIRUVALLA
2699.	QUEST GLOBAL ENGINEERING PVT. LTD.	TRIVANDRUM
2700.	QUEST GLOBAL MANUFACTURING PVT. LTD.	GADAG
2701.	QUEST GLOBAL PVT. LTD.	BANGALORE
2702.	QUEST GLOBAL PVT. LTD.	CHALLAPALLI
2703.	QUICK RAYS PVT. LTD.	DELHI
2704.	QUIKR (I) PVT. LTD.	BANGALORE
2705.	QUINNOX CONSULTANCY SERVICES	SHAHJAHANPUR
2706.	QUINNOX CONSULTANCY SERVICES	TIPTUR
2707.	QUINSTREET PVT. LTD.	PUNE
2708.	QUINTILES IMS	BANGALORE
2709.	QUINTILES RESEARCH (I) PVT. LTD.	BANGALORE
2710.	QWIKCILVER SOLUTIONS PVT. LTD.	BANGALORE
2711.	QWIKCILVER SOLUTIONS PVT. LTD.	HOSUR
2712.	R L INSTITUTE OF NAUTICAL SCIENCES	MADURAI
2713.	R SYSTEMS INTERNATIONAL LTD.	FARIDABAD
2714.	R SYSTEMS INTERNATIONAL LTD.	GHAZIABAD
2715.	R. L. INSTITUTE OF NAUTICAL SCIENCES	MADURAI
2716.	R2A AUTOMATION PVT. LTD.	AURANGABAD
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2718.	RAD365 SOLUTIONS PVT. LTD.	BALASORE
2719.	RADHARANI RAIL ENGINEERING SYSTEM PVT. LTD.	JHANSI

2720.	RADIAL OMNICHANNEL TECHNOLOGIES	OOTY
2721.	RADISYS	ALAPPUZHA
2722.	RADISYS (I) PVT. LTD.	BANGALORE
2723.	RADIX LEARNING PVT. LTD.	BANGALORE
2724.	RADIX MICROSYSTEMS	HYDERABAD
2725.	RAGE FRAMEWORKS PVT. LTD.	PUNE
2726.	RAHUL ELECTRONICS	AHMEDABAD
2727.	RAILTEL CORPORATION OF (I) LTD.	CUTTACK
2728.	RAJASHREE CEMENT WORKS	GULBARGA
2729.	RAJCOMP INFO SERVICES LTD.	BIKANER
2730.	RAK MEDICAL HEALTH SCIENCES UNIVERSITY	SHIVAMOGGA
2731.	RAKUTEN (I) DEVELOPMENT AND OPERATION	BANGALORE
2732.	RAMBOLL (I) PVT. LTD.	CHENNAI
2733.	RAMBOLL MIDDLE EAST	DUBAI
2734.	RAMCO SYSTEMS LTD.	CHENNAI
2735.	RAMKRISHNA FORGINGS LTD.	JAMSHEDPUR
2736.	RANAL ENGINEERING SERVICES PVT. LTD.	BANGALORE
2737.	RANAL GLOBAL SERVICES PVT. LTD.	CHENNAI
2738.	RANDACK FASTENERS (I) PVT. LTD.	PUNE
2739.	RANE BRAKE LINING LTD.	CHENNAI
2740.	RANE ENGINE VALVE LTD.	CHENNAI
2741.	RANE ENGINE VALVE LTD.	PALVONCHA
2742.	RANE NSK STEERING SYSTEMS PVT. LTD.	BHIWANI
2743.	RANE NSK STEERING SYSTEMS PVT. LTD.	CHENNAI
2744.	RANE NSK STEERING SYSTEMS PVT. LTD.	PUNE
2745.	RANE NSK STEERING SYSTEMS PVT. LTD.	ROORKEE
2746.	RANE(MADRAS)LTD.	TRICHY
2747.	RARE MILE TECHNOLOGIES	BANGALORE
2748.	RARE SOLUTIONS PVT. LTD.	HYDERABAD
2749.	RASGAS CO. LTD.	CHENNAI
2750.	RASGAS CO. LTD.	RASLAFAN
2751.	RASHID AL JABRI GROUP	TRIVANDRUM
2752.	RASHMI METALIKS LTD.	KOLKATA
2753.	RASHTRIYA CHEMICALS & FERTILIZERS LIMITE	MUMBAI
2754.	RAVE TECHNOLOGIES	NAVI MUMBAI
2755.	RAVIKIRAN MAMIDI	HYDERABAD
2756.	RAYCHEM RPG PRV. LTD.	PUNE
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2761.	RCV INNOVATIONS PVT.LTD.	CUTTACK
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2766.	RED HAT SOFTWARE SERVICES PVT. LTD.	AHMEDABAD
2767.	REDGRAPE BUSINESS SERVICES	CHENNAI
2768.	REDGRAPE BUSINESS SERVICES	KALLAKURICHI
2769.	REDMART (I) PVT. LTD.	BHUBANESWAR
2770.	REDPINE SIGNALS INC	HYDERABAD
2771.	REF TECHNOLOGIES	HYDERABAD
2772.	REGAL BELOIT CORPORATION	HYDERABAD
2773.	REGAL SOLUTIONS PVT. LTD.	MUMBAI
2774.	REGEN POWERTECH PVT. LTD.	CHENNAI
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2777.	RELIANCE CORPORATE IT PARK LTD.	JAMNAGAR

2778.	RELIANCE CORPORATE IT PARK LTD.	KANCHRAPARA
2779.	RELIANCE CORPORATE IT PARK LTD.	NAVI MUMBAI
2780.	RELIANCE CORPORATE IT PARK LTD.	THANE
2781.	RELIANCE INDUSTRIES LTD.	AHMEDABAD
2782.	RELIANCE INDUSTRIES LTD.	JAMNAGAR
2783.	RELIANCE INDUSTRIES LTD.	SURAT
2784.	RELIANCE INDUSTRIES LTD.	VADODARA
2785.	RELIANCE INFRASTRUCTURE LTD.	MIRA ROAD
2786.	RELIANCE JIO INFOCOMM LTD.	BANGALORE
2787.	RELIANCE JIO INFOCOMM LTD.	MAHENDERGARH
2788.	RELIANCE JIO INFOCOMM LTD.	MUMBAI
2789.	RELIANCE JIO INFOCOMM LTD.	NEW DELHI
2790.	RELIANCE JIO INFOCOMM LTD.	THANE
2791.	RELIANCE RETAIL	NAVI MUMBAI
2792.	RELIANCE TECH SERVICES	HYDERABAD
2793.	RELYON SOLAR PVT. LTD.	PUNE
2794.	RENATA PRECISION COMPONENTS PVT. LTD.	PUNE
2795.	RENAULT NISSAN AUTOMOTIVE (I) PVT. LTD.	CHENNAI
2796.	RENAULT NISSAN AUTOMOTIVE (I) PVT. LTD.	HYDERABAD
2797.	RENAULT NISSAN AUTOMOTIVE (I) PVT. LTD.	KANCHIPURAM
2798.	RENAULT NISSAN TECH & BUSINESS CENTRE INDIA	CHENNAI
2799.	RENAULT NISSAN TECH & BUSINESS CENTRE INDIA	KANCHEEPURAM
2800.	RENAULT NISSAN TECH & BUSINESS CENTRE INDIA	KUMBAKONAM
2801.	RENAULT NISSAN TECH & BUSINESS CENTRE INDIA	SALEM
2802.	RENAULT NISSAN TECH & BUSINESS CENTRE INDIA	VELLORE
2803.	REPLICON SOFTWARE (I) PVT. LTD.	BANGALORE
2804.	REVITAS TECHNOLOGIES PVT. LTD.	AHMEDABAD
2805.	REYNOLD (I) PVT.LTD.	NOIDA
2806.	RHINO MACHINES PVT. LTD.	ANAND
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2808.	RICOH (I) LTD.	AHMEDABAD
2809.	RICOH INNOVATIONS PVT. LTD.	BANGALORE
2810.	RIKA FORGE	CHENNAI
2811.	RING PLUS AQUA LTD.	NASHIK
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2813.	RJP INFOTEK PVT. LTD.	CHENNAI
2814.	RMC READYMIX (I) - A DIVISON OF PRIS	NEW PANVEL
2815.	ROBERT BOSCH (I) LTD.	BANGALORE
2816.	ROBERT BOSCH (I) LTD.	PUNE
2817.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ALAPPUZHA
2818.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BANGALORE
2819.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BELGAUM
2820.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	CHENNAI
2821.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	COIMBATORE
2822.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	DHARWAD
2823.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ERNAKULAM
2824.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ERODE
2825.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	GUWAHATI
2826.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	HYDERABAD
2827.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	JAIPUR
2828.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	KARUR
2829.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MADURAI
2830.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MALAPPURAM
2831.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MANGALAGIRI
2832.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MYSORE
2833.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	PANIPAT
2834.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	PATHANAMTHITTA
2835.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	PUNE



2836.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SALEM
2837.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SANQUELIM
2838.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SHIMOGA
2839.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SIRSI
2840.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TRICHUR
2841.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TRICHY
2842.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TRIVANDRUM
2843.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TUTICORIN
2844.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	VISAKHAPATNAM
2845.	ROCA BATHROOM PRODUCTS PVT. LTD.	TUPUKERA
2846.	ROCKWELL AUTOMATION (I) PVT. LTD.	GHAZIABAD
2847.	ROCKWELL COLLINS (I) PVT. LTD.	HARAPANAHALLI
2848.	ROCKWELL COLLINS (I) PVT. LTD.	HYDERABAD
2849.	ROHDE & SCHWARZ EMIRATES LLC	ERODE
2850.	ROHM & HAAS (I) PVT. LTD.	CHENNAI
2851.	ROLLS ROYCE (I) PVT. LTD.	BANGALORE
2852.	ROLLS ROYCE (I) PVT. LTD.	CHENNAI
2853.	ROLTA (I) LTD.	GHAZIABAD
2854.	ROLTA (I) LTD.	HYDERABAD
2855.	ROOP AUTOMOTIVE LTD.	GURGAON
2856.	ROOP AUTOMOTIVE LTD.	SOHNA
2857.	ROOTS INDUSTRIES (I) LTD.	COIMBATORE
2858.	ROSSELL TECHSYS	BANGALORE
2859.	ROTORK CONTROL (I) PVT. LTD.	CHENNAI
2860.	ROYAL BANK OF SCOTLAND	GURGAON
2861.	ROYAL BANK OF SCOTLAND	MALOUT
2862.	ROYAL DUTCH SHELL	CHENNAI
2863.	ROYAL ENFIELD	CHENNAI
2864.	ROYAL ENFIELD	JAIPUR
2865.	ROYAL ENFIELD	RANIPET
2866.	RR DONNELLEY	CHIRAKKADAVU
2867.	RR DONNELLEY	TRIVANDRUM
2868.	RS CONSULTANCY	HOWRAH
2869.	RSAM TECHNOLOGIES (I) LTD.	MYSURU
2870.	RSG MEDIA SYSTEMS PVT. LTD.	GURGAON
2871.	RT VISION TECHNOLOGIES PVT. LTD.	GREATER NOIDA
2872.	RTP CONTROLS (I) PVT. LTD.	BANGALORE
2873.	RTS SYSTEMS PVT. LTD.	MOHALI
2874.	RUD (I) CHAIN PVT. LTD.	THANE
2875.	RUDRACE TECHNOLOGIES	DELHI
2876.	RUWAI FERTILIZER INDUSTRIES LTD.	RUWAI
2877.	S.A TECHNOLOGIES	CHENNAI
2878.	S.N. BHOBE & ASSOCIATES PVT. LTD.	PANJIM
2879.	S.O.S INTERNATIONAL EQUIPMENTS L.L.C	THIRUNELVELI
2880.	S.S.D.CLINICAL LAB & BLOOD BANK	RAIPUR
2881.	S.VE.J ASSOCIATES	NILGIRIS
2882.	SAANKHYA LABS PVT. LTD.	BANGALORE
2883.	SAANKHYA LABS PVT. LTD.	BELGAUM
2884.	SAARTHI AIRWAYS (P) LTD.	THRISSUR
2885.	SABIC RESEARCH & TECHNOLOGY PVT. LTD.	KUMTA
2886.	SABMILLER (I) LTD.	KANPUR
2887.	SABRE TRAVEL TECHNOLOGIES PVT. LTD.	BANGALORE
2888.	SADAR HOSPITAL	SIWAN
2889.	SAFAS INTERNETWORKING TECHNOLOGIES PVT. LTD.	BANGALORE
2890.	SAFENET INC	HATHRAS
2891.	SAFRAN ENGINEERING SERVICES	BANGALORE
2892.	SAFRAN ENGINEERING SERVICES	HAVERI
2893.	SAGAR KNITS (I) PVT. LTD.	TIRUPUR

2894.	SAGE PUBLICATION	GURGAON
2895.	SAHARA AND MA'ADEN PETROCHEMICAL CO.	KOLLAM
2896.	SAHARA ENGINEERING	COIMBATORE
2897.	SAHARA PETROCHEMICALS CO.	HASSAN
2898.	SAINATH ENVIROTECH	TUTICORIN
2899.	SAINT GOBAIN	SULTHAN BATHERY
2900.	SAINT-GOBAIN GYPROC EMIRATES INDUSTRIES	ABU DHABI
2901.	SAIPEM (I) PVT. LTD.	CHENNAI
2902.	SAIPEM CONTRACTING NETHERLANDS BV SHARJAH	SHARJAH
2903.	SAKAE RIKEN POLYPLASTICS (I) PVT.LTD.	REWARI
2904.	SALCOMP MANUFACTURING (I) PVT. LTD.	CHENNAI
2905.	SALESFORCE (I) PVT. LTD.	HYDERABAD
2906.	SAMALKOT POWER LTD.	EAST GODAVARI
2907.	SAME DEUTZ FAHR	VELLORE
2908.	SAME DEUTZ-FAHR	KALPAKKAM
2909.	SAMSUNG (I) ELECTRONICS PVT. LTD.	BAREILLY
2910.	SAMSUNG (I) ELECTRONICS PVT. LTD.	CHANDIGARH
2911.	SAMSUNG (I) ELECTRONICS PVT. LTD.	CHENNAI
2912.	SAMSUNG (I) ELECTRONICS PVT. LTD.	CHHINDWARA
2913.	SAMSUNG (I) ELECTRONICS PVT. LTD.	FARIDABAD
2914.	SAMSUNG (I) ELECTRONICS PVT. LTD.	GHAZIABAD
2915.	SAMSUNG (I) ELECTRONICS PVT. LTD.	GREATER NOIDA
2916.	SAMSUNG (I) ELECTRONICS PVT. LTD.	HANSI
2917.	SAMSUNG (I) ELECTRONICS PVT. LTD.	HYDERABAD
2918.	SAMSUNG (I) ELECTRONICS PVT. LTD.	JAIPUR
2919.	SAMSUNG (I) ELECTRONICS PVT. LTD.	JHANSI
2920.	SAMSUNG (I) ELECTRONICS PVT. LTD.	JODHPUR
2921.	SAMSUNG (I) ELECTRONICS PVT. LTD.	KANCHEEPURAM
2922.	SAMSUNG (I) ELECTRONICS PVT. LTD.	KUWAIT
2923.	SAMSUNG (I) ELECTRONICS PVT. LTD.	MAINPURI
2924.	SAMSUNG (I) ELECTRONICS PVT. LTD.	MEERUT
2925.	SAMSUNG (I) ELECTRONICS PVT. LTD.	NEW DELHI
2926.	SAMSUNG (I) ELECTRONICS PVT. LTD.	NOIDA
2927.	SAMSUNG (I) SOFTWARE OPERATIONS PVT. LTD.	MYSORE
2928.	SAMSUNG (I) SOFTWARE OPERATIONS PVT. LTD.	ROHTAK
2929.	SAMSUNG R&D INSTITUTE	ALIGARH
2930.	SAMSUNG R&D INSTITUTE	BANGALORE
2931.	SAMSUNG R&D INSTITUTE	BHOPAL
2932.	SAMSUNG R&D INSTITUTE	DELHI
2933.	SAMSUNG R&D INSTITUTE	FARIDABAD
2934.	SAMSUNG R&D INSTITUTE	GHAZIABAD
2935.	SAMSUNG R&D INSTITUTE	HAMIRPUR
2936.	SAMSUNG R&D INSTITUTE	HIREKERUR
2937.	SAMSUNG R&D INSTITUTE	HYDERABAD
2938.	SAMSUNG R&D INSTITUTE	KALKA
2939.	SAMSUNG R&D INSTITUTE	MADURAI
2940.	SAMSUNG R&D INSTITUTE	NAGINA
2941.	SAMSUNG R&D INSTITUTE	NOIDA
2942.	SAMSUNG R&D INSTITUTE	RANEBENNUR
2943.	SAMSUNG R&D INSTITUTE	TIRUNELVELI
2944.	SANCHAY TECH	NEW DELHI
2945.	SANDHAR AUTOMACH (SANDHAR TECHNOLOGIES L	BANGALORE
2946.	SANDHU ENTERPRISES	RUDRAPUR
2947.	SANDISK (I) DEVICE DESIGN CENTRE PVT. LTD.	BANGALORE
2948.	SANDVIK ASIA PVT. LTD.	BANGALORE
2949.	SANDVIK ASIA PVT. LTD.	CHANDIGARH
2950.	SANDVIK ASIA PVT. LTD.	KOLHAPUR
2951.	SANDVIK ASIA PVT. LTD.	SATARA

2952.	SANDVIK ASIA PVT. LTD.	UDAIPUR
2953.	SANDVINE TECHNOLOGIES (I) PVT. LTD.	BANGALORE
2954.	SANDVINE TECHNOLOGIES (I) PVT. LTD.	TUMKUR
2955.	SANGHI INDUSTRIES LTD.	CHANDRAPUR
2956.	SANKALP HOSPITAL	SURAT
2957.	SANKALP KPIT SEMICONDUCTOR PVT. LTD.	BANGALORE
2958.	SANKALP SEMICONDUCTORS PVT. LTD.	SHIVAMOGGA
2959.	SANMINA-SCI TECHNOLOGY (I) PVT. LTD.	CHENNAI
2960.	SANOFI PASTEUR (I) PVT. LTD.	MUMBAI
2961.	SANOFI SYNTHELABO (I) PVT. LTD.	PANVEL
2962.	SANTRES ENGINEERING PVT. LTD.	CHENNAI
2963.	SAP LABS (I) PVT. LTD.	ALLAHABAD
2964.	SAP LABS (I) PVT. LTD.	BANGALORE
2965.	SAP LABS (I) PVT. LTD.	BELLARY
2966.	SAP LABS (I) PVT. LTD.	BHOPAL
2967.	SAP LABS (I) PVT. LTD.	DELHI
2968.	SAP LABS (I) PVT. LTD.	GURGAON
2969.	SAP LABS (I) PVT. LTD.	KOLKATA
2970.	SAP LABS (I) PVT. LTD.	KOZHIKODE
2971.	SAP LABS (I) PVT. LTD.	NEW DELHI
2972.	SAP LABS (I) PVT. LTD.	PALANI
2973.	SAP LABS (I) PVT. LTD.	PUNE
2974.	SAP LABS (I) PVT. LTD.	SAHIBABAD
2975.	SAP LABS (I) PVT. LTD.	THRISSUR
2976.	SAP LABS (I) PVT. LTD.	TRIVANDRUM
2977.	SAPIENT CONSULTING PVT. LTD.	BANGALORE
2978.	SAPIENT CONSULTING PVT. LTD.	DELHI
2979.	SAPIENT CONSULTING PVT. LTD.	GHAZIABAD
2980.	SAPIENT CONSULTING PVT. LTD.	GURGAON
2981.	SAPIENT CONSULTING PVT. LTD.	JALANDHAR
2982.	SAPIENT CONSULTING PVT. LTD.	NEW DELHI
2983.	SAPIENT NITRO	BANGALORE
2984.	SAPPIO CONSULTANCY SERVICES PVT. LTD.	KOCHI
2985.	SARASWATHI HOSPITAL	COIMBATORE
2986.	SAS POWER INDUSTRIES FZE	CHENNAI
2987.	SAS R&D (I) PVT. LTD.	PUNE
2988.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	BANGALORE
2989.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	CHENNAI
2990.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	MAYILADUTHURAI
2991.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	PUNE
2992.	SATYAM COMPUTERS SERVICE LTD.	BANGALORE
2993.	SATYAM VENTURE	CHENNAI
2994.	SATYAM VENTURE ENGINEERING SERVICES	PUNE
2995.	SAUDI ARABIAN BECHTEL CO.	MALAPPURAM
2996.	SAUDI TABREED DISTRICT COOLING CO.	AL KHOBAR
2997.	SAURASHTRA CHEMICALS DIVISION OF NIRMA LTD.	DWARKA
2998.	SCHAEFFLER (FAG BEARINGS (I) LTD.	CHENNAI
2999.	SCHINDLER (I) PVT. LTD.	PUNE
3000.	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT. LTD.	CHENNAI
3001.	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT. LTD.	PUNE
3002.	SCHNEIDER ELECTRIC (I) PVT. LTD.	BANGALORE
3003.	SCHNEIDER ELECTRIC (I) PVT. LTD.	BELGAUM
3004.	SCHNEIDER ELECTRIC (I) PVT. LTD.	CHENNAI
3005.	SCHNEIDER ELECTRIC (I) PVT. LTD.	COIMBATORE
3006.	SCHNEIDER ELECTRIC (I) PVT. LTD.	DUBAI
3007.	SCHNEIDER ELECTRIC (I) PVT. LTD.	HOSUR
3008.	SCHNEIDER ELECTRIC (I) PVT. LTD.	SECUNDERABAD
3009.	SCHNEIDER PROTOTYPING (I) PVT. LTD.	VELLORE

3010.	SCHNELLECKE JEENA LOGISTICS (I) PVT. LTD.	PUNE
3011.	SCHWING STETTER (I) PVT. LTD.	MUMBAI
3012.	SCHWING STETTER (I) PVT. LTD.	PUNE
3013.	SCIENTECHNIC LLC	CHENNAI
3014.	SCIENTECHNIC LLC	DUBAI
3015.	SCIENTECHNIC LLC	TINDIVANAM
3016.	SCIENTIFIC GAMES CORP.	BANGALORE
3017.	SCIENTIFIC PUBLISHING SERVICES (P) LTD.	CHENNAI
3018.	SCIENTIFIC PUBLISHING SERVICES (P) LTD.	TRICHY
3019.	SCIT LTD.	INDORE
3020.	SCOPE INTERNATIONAL PVT. LTD.	ARIYALUR
3021.	SCOPE INTERNATIONAL PVT. LTD.	CHENNAI
3022.	SCOTTISH LEGAL AID BOARD	EDINBURGH
3023.	SCRY ANALYTICS	NEW DELHI
3024.	SD MIDDLE EAST LLC	HYDERABAD
3025.	SDG SOFTWARE (I) PVT. LTD.	NOIDA
3026.	SE BLADES LTD.	AHMEDABAD
3027.	SE BLADES LTD.	TEZPUR
3028.	SEA & LAND DRILLING CONTRACTORS INC.	THANE
3029.	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	BANGALORE
3030.	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	PARAMAKUDI
3031.	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	PUNE
3032.	SEARS IT & MANAGEMENT SERVICES (I) PVT. LTD.	PUNE
3033.	SEASIA INFOTECH PVT. LTD. MOHALI	BATHINDA
3034.	SECO TOOLS	PUNE
3035.	SECUDE SOLUTIONS	CHENNAI
3036.	SECURE METERS LTD.	RAJSAMAND
3037.	SECURE METERS LTD.	UDAIPUR
3038.	SECURITY TECH ENTERPRISES	NALASOPARA
3039.	SEDEMAC MECHATRONICS PVT. LTD.	PUNE
3040.	SEMBCORP MARINE LTD.	SINGAPORE
3041.	SEMIFI INTEGRATED TECHNOLOGIES	BANGALORE
3042.	SEMILON TECHNOLOGIES PVT. LTD.	THIRUVANANTHAPURAM
3043.	SENIOR (I) PVT. LTD.	JAMSHEDPUR
3044.	SENTOR ELECTRICAL TRADING LLC	DUBAI
3045.	SENVION (I) PVT. LTD.	BANGALORE
3046.	SERVEU (L.L.C)	AL-QUOZ
3047.	SESA STERLITE LTD.	VEDANTA
3048.	SESHASAYEE PAPER AND BOARDS LTD.	ERODE
3049.	SEVEN N CONSULTING PVT. LTD.	GHAZIABAD
3050.	SEW EURODRIVE (I) PVT. LTD.	TRICHY
3051.	SFO TECHNOLOGIES PVT. LTD.	BANGALORE
3052.	SFO TECHNOLOGIES PVT. LTD.	COCHIN
3053.	SFO TECHNOLOGIES PVT. LTD.	KOCHI
3054.	SGK TECHNO VENTURES	HYDERABAD
3055.	SHAHI EXPORTS PVT. LTD.	CHICKABALLAPUR
3056.	SHAHI EXPORTS PVT. LTD.	SHIMOGA
3057.	SHAKTI CONCRETE INDUSTRIES	HYDERABAD
3058.	SHAPOORJI PALLONJI & CO. PVT. LTD.	JAGDALPUR
3059.	SHAPOORJI PALLONJI MID EAST LLC	SHIMOGA
3060.	SHAPOORJI PALLONJI MIDEAST LLC	SIVAGANGAI
3061.	SHARJAH ELECTRICITY AND WATER AUTHORITY	SHARJAH
3062.	SHARQ; A SABIC AFFILIATE	KOLLAM
3063.	SHDM J SYS TECHNOLOGIES PVT. LTD.	JODHPUR
3064.	SHELL (I) MARKETS PVT. LTD.	CHENNAI
3065.	SHELL MARKETS (I) PVT. LTD.	BANGALORE
3066.	SHEOREY DIGITAL SYSTEMS LTD.	BANGALORE
3067.	SHILPI CABLE TECHNOLOGIES LTD.	NEW DELHI

3068.	SHIVPAD ENGINEERS PVT. LTD.	SALEM
3069.	SHORETEL COMMUNICATIONS PVT. LTD.	MYSORE
3070.	SHOWA (I) PVT. LTD.	AHMEDABAD
3071.	SHREE CEMENT LTD.	AJMER
3072.	SHREE CEMENT LTD.	BEAWAR
3073.	SHREE KRISHNA HOSPITAL	ANAND
3074.	SHREETECH ENGINEERING	YAMUNA NAGAR
3075.	SHRIKRISHNA HRUDAYALAYA	NAGPUR
3076.	SHRIRAM PISTONS & RINGS LTD.	AJMER
3077.	SHRIRAM PISTONS & RINGS LTD.	ALWAR
3078.	SHRIRAM PISTONS & RINGS LTD.	BARABANKI
3079.	SHRIRAM PISTONS & RINGS LTD.	BHIWADI
3080.	SHRIRAM PISTONS & RINGS LTD.	DHARUHERA
3081.	SHRIRAM PISTONS & RINGS LTD.	FARIDABAD
3082.	SHRIRAM PISTONS & RINGS LTD.	GHAZIABAD
3083.	SHRIRAM PISTONS & RINGS LTD.	KHETRI
3084.	SHRIRAM PISTONS & RINGS LTD.	RAMPUR
3085.	SHRISHTI BIZ CONSULTANTS	CHENNAI
3086.	SICGIL INDUSTRIAL GASES LTD.	VADODARA
3087.	SIDDHA DEVELOPMENT RESEARCH AND CONSULTANTS	BHUBANESWAR
3088.	SIECHEM TECHNOLOGIES PVT. LTD.	CHENNAI
3089.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	AURANGABAD
3090.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	BANGALORE
3091.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	BHAGALPUR
3092.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	BHARATPUR
3093.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	CARANZALEM
3094.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	CHENNAI
3095.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	CUDDALORE
3096.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	DELHI
3097.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	DHUBRI
3098.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	DUBAI
3099.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	GURGAON
3100.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	KOLKATA
3101.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	MARGAO
3102.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	MASDAR
3103.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	MUMBAI
3104.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	NASHIK
3105.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	PANJIM
3106.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	PUNE
3107.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	SHIMOGA
3108.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	VASCO
3109.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	VERNA
3110.	SIEMON CABLING SOLUTIONS PVT. LTD.	HYDERABAD
3111.	SIERRA ATLANTIC SOFTWARE SERVICES LTD.	CHENNAI
3112.	SIFY TECHNOLOGIES LTD.	CHENNAI
3113.	SIFY TECHNOLOGIES LTD.	CUDDALORE
3114.	SIFY TECHNOLOGIES LTD.	NEW DELHI
3115.	SIGACHI INDUSTRIES PVT. LTD.	SECUNDERABAD
3116.	SIGED EMIRATES L.L.C	THRISSUR
3117.	SIGMA ELECTRIC MANUFACTURING CORPORATION	LONAVLA
3118.	SIGMA ELECTRIC MANUFACTURING CORPORATION	PUNE
3119.	SIGMA ENGINEERING WORKS LLC	CHENNAI
3120.	SIGNION SYSTEMS PVT. LTD.	HYDERABAD
3121.	SIGNODE (I) LTD.	BILASPUR
3122.	SIGNODE (I) LTD.	DHARWAD
3123.	SILICON IMAGE (I) RESEARCH AND DEVELOP	HYDERABAD
3124.	SILICUS	PUNE
3125.	SILMAX TOOLS (I) PVT. LTD.	BANGALORE

3126.	SILTRONIC SINGAPORE PTE LTD.	HOUGANG
3127.	SILVERTECH MIDDLE EAST	JEBEL ALI
3128.	SILVERTECH MIDDLE EAST FZCO	CHENNAI
3129.	SILVERTECH MIDDLE EAST FZCO	COIMBATORE
3130.	SIMPLEX INFRASTRUCTURES LTD.	MIDNAPORE
3131.	SIMPSON &CO.LTD.	CHENNAI
3132.	SINGAPORE OXYGEN AIRLIQUIDE PTE LTD.	CHENNAI
3133.	SIS (I) PVT. LTD.	HYDERABAD
3134.	SIVASAKTHI PRECISION TOOLS	COIMBATORE
3135.	SIXDEE TELECOM SOLUTION PVT. LTD.	BHAGALPUR
3136.	SKARDIN INDUSTRIAL CORP	PONDICHERY
3137.	SKAVA SYSTEMS	TIRUPPUR
3138.	SKF (I) LTD.	BANGALORE
3139.	SKF (I) LTD.	CHENNAI
3140.	SKF (I) LTD.	HARIDWAR
3141.	SKF (I) LTD.	KOLKATA
3142.	SKF (I) LTD.	MEDAK
3143.	SKF (I) LTD.	PUNE
3144.	SKF (I) LTD.	PUNE
3145.	SKF (I) LTD.	SOLAPUR
3146.	SKIDATA BANGALORE PVT. LTD.	BANGALORE
3147.	SKILLNET SOLUTIONS (I) PVT. LTD.	INDORE
3148.	SKYHIGH NETWORKS	BANGALORE
3149.	SL LUMAX	BURDWAN
3150.	SLING MEDIA PVT. LTD.	BANGALORE
3151.	SLK SOFTWARE SERVICES PVT. LTD.	BANGALORE
3152.	SMART SMILES DENTAL CLINIC	MUMBAI
3153.	SMARTPLAY AN ARICENT CO.	BANGALORE
3154.	SMARTPLAY TECHNOLOGIES	MADHAPUR
3155.	SMARTPLAY TECHNOLOGIES (I) PVT. LTD.	PEDANA
3156.	SMARTRON (I) PVT. LTD.	HYDERABAD
3157.	SMARTSTREAM TECHNOLOGIES	VELLORE
3158.	SMC PNEUMATICS (I) PVT. LTD.	DELHI
3159.	SMILE DENTAL CLINIC	VIZIANAGARAM
3160.	SML ENTERPRISES	CHENNAI
3161.	SML ISUZU LTD.	GURDASPUR
3162.	SMOE PTE LTD.	SINGAPORE
3163.	SMR AUTOMOTIVE SYSTEMS (I) LTD.	KADAYANALLUR
3164.	SMR HR TECHNOLOGIES	CHENNAI
3165.	SMS (I) PVT. LTD.	COIMBATORE
3166.	SMS (I) PVT. LTD.	JAIPUR
3167.	SMT. K. NAVALE COLLEGE OF PHYSIOTHERAPY	VADODARA
3168.	SN INDUSTRIAL CONSULTANTS	BANGALORE
3169.	SNAMPROGETTI S.A LTD.	SRINGERI
3170.	SNAPDEAL	BANGALORE
3171.	SNAPDEAL	GURGAON
3172.	SNAPDEAL	SONIPAT
3173.	SNC LAVALIN ARABIA	RAJAPALAYAM
3174.	SO INFOTECH	DERABASSI
3175.	SOBHA LLC	DUBAI
3176.	SOCIETE GENERALE GLOBAL SOLUTION CENTRE	BANGALORE
3177.	SOCTRONICS TECHNOLOGIES PVT. LTD.	HYDERABAD
3178.	SODEXO	BANGALORE
3179.	SOFT DESIGNERS	BANGALORE
3180.	SOFTWARE AG BANGALORE TECHNOLOGIES PVT. LTD.	BANGALORE
3181.	SOFTWARE AG BANGALORE TECHNOLOGIES PVT. LTD.	CHENNAI
3182.	SOFTWARE AG BANGALORE TECHNOLOGIES PVT. LTD.	KURNOOL
3183.	SOFTWARE AG BANGALORE TECHNOLOGIES PVT. LTD.	NAGPUR

3184.	SOFTWARE DEVELOPMENT INSTITUTE	BANGALORE
3185.	SOFTWARE PARADIGMS INFOTECH PVT. LTD.	MYSORE
3186.	SOFTWARE TECHNOLOGY PARKS OF INDIA	GHAZIABAD
3187.	SOFTWARE TECHNOLOGY PARKS OF INDIA	MOHALI
3188.	SOFTWARE TECHNOLOGY PARKS OF INDIA	NOIDA
3189.	SOHAR ALUMINIUM	AHMEDABAD
3190.	SOHAR ALUMINIUM	SOHAR
3191.	SOLARTIS TECHNOLOGIES PVT. LTD.	CHENNAI
3192.	SOLARWINDS	CHENNAI
3193.	SOMA ISOLUX SURAT HAZIRA TOLLWAY PVT. LTD.	VYARA
3194.	SOMI CONVEYOR BELTING LTD.	JODHPUR
3195.	SONATA SOFTWARE LTD.	BANGALORE
3196.	SONATA SOFTWARE LTD.	HYDERABAD
3197.	SONICWALL INFOSECURITY PVT. LTD.	BANGALORE
3198.	SONITEK INTERNATIONAL	NEW DELHI
3199.	SONUS NETWORKS PVT. LTD.	BANGALORE
3200.	SONY (I) SOFTWARE CENTRE PVT. LTD.	BANGALORE
3201.	SONY (I) SOFTWARE CO.	CHENNAI
3202.	SONY MIDDLE EAST AND AFRICA	MUMBAI
3203.	SOPRA (I) PVT. LTD.	NEW DELHI
3204.	SOPRA (I) PVT. LTD.	NOIDA
3205.	SOTI (I) PVT. LTD.	FARIDABAD
3206.	SOURCESOL INTERACTIVE TECHNOLOGIES PRIVA	TIRUCHIRAPPALLI
3207.	SOUTH INDIAN BANK IT DIVISION	THRISSUR
3208.	SOUTH WEST CERTIFICATION SERVICES	CHENNAI
3209.	SPAN INFOTECH (I) PVT. LTD.	BANGALORE
3210.	SPAN INFOTECH (I) PVT. LTD.	MOHALI
3211.	SPECIAL TECHNICAL SERVICES LLC	KARUR
3212.	SPECIAL TECHNICAL SERVICES LLC	MUSCAT
3213.	SPECIALIST SERVICES LLC	AL QOUZE
3214.	SPECTRANET NIGERIA LTD.	MUMBAI
3215.	SPECTRIS TECHNOLOGIES PVT. LTD.	NAVI MUMBAI
3216.	SPECTRON ENGINEERS PVT. LTD.	ERNAKULAM
3217.	SPECTRUM DYES & CHEMICALS PVT. LTD.	SURAT
3218.	SPICER (I) PVT. LTD.	PANTNAGAR
3219.	SPICER (I) PVT.LTD.	DHARWAD
3220.	SPIE OIL AND GAS SERVICES MIDDLE EAST LTD.	NAGERCOIL
3221.	SPIGOT SOFTWARE	BANGALORE
3222.	SPIME (I) TECHNOLOGIES	CHENNAI
3223.	SPIRAX SARCO (I) PVT. LTD.	CHENNAI
3224.	SPIRENT COMMUNICATIONS PVT. LTD.	MYSORE
3225.	SPOYL TECH SOLUTIONS PVT.LTD.	BANGALORE
3226.	SPRINKLR (I) PVT. LTD.	SHIMOGA
3227.	SPUN MICRO PROCESSING PVT. LTD.	GURGAON
3228.	SQS (I) BFSI LTD.	CHENNAI
3229.	SREE HARI ENTERPRISES	BANGALORE
3230.	SRF LTD.	CHENNAI
3231.	SRI BALAMURUGAN ENGG. WORKS PVT. LTD.	PUDUKKOTTAI
3232.	SRIJA EDUCATION AND RESEARCH FOUNDATION	HYDERABAD
3233.	SRISHTI ENGG. SERVICES	HOSUR
3234.	SRISHTI TECHNET PVT. LTD.	KOTA
3235.	SRM TECHNOLOGIES PVT.LTD.	CHENNAI
3236.	SRS ENTERPRISES	PUNE
3237.	SSA INFOSYSTEM PVT. LTD.	NOIDA
3238.	ST. MARTHA'S HOSPITAL	BANGALORE
3239.	STANDOUT IT SOLUTIONS	KOTHAMANGALAM
3240.	STAR CEMENT ADITYA BIRLA GROUP ULTRATECH	BHILAI
3241.	STAR CEMENT CO.	UDUPI

3242.	STAR GULF BOS-SHELF LLC	KANNUR
3243.	STARLITE LIGHTING LTD.	NASHIK
3244.	STATE BANK OF (I) LTD.	SATHYAMANGALAM
3245.	STATE BANK OF HYDERABAD	HYDERABAD
3246.	STATE BANK OF PATIALA	KARNAL
3247.	STATE BANK OF TRAVANCORE	NAVI MUMBAI
3248.	STATE INSTITUTE OF RURAL DEVELOPMENT	AIZAWL
3249.	STAYTOP IT SOLUTIONS PVT. LTD.	HYDERABAD
3250.	STAYZILLA	CHENNAI
3251.	STEAG O&M CO. PVT. LTD.	VISAKHAPATNAM
3252.	STEEL AUTHORITY OF (I) LTD.	BOKARO
3253.	STEEL AUTHORITY OF (I) LTD.	KOLKATA
3254.	STEEL EXCHANGE (I) LTD.	VISAKHAPATNAM
3255.	STEEL EXCHANGE (I) LTD.	VIZIANAGARAM
3256.	STEELCASE ASIA PACIFIC HOLDING (I) PVT. LTD.	PUNE
3257.	STELIS BIOPHARMA PVT. LTD.	BANGALORE
3258.	STEP ELECTRONICS PVT. LTD.	BANGALORE
3259.	STERIA (I) LTD.	CHENNAI
3260.	STERIA (I) LTD.	NOIDA
3261.	STERLING & WILSON PVT. LTD.	KOLKATA
3262.	STERLING HOLIDAYS	VILLUPURAM
3263.	STERLITE COPPER	TUTICORIN
3264.	STERLITE TECHNOLOGIES LTD.	PUNE
3265.	STESALIT SYSTEMS LTD.	BANGALORE
3266.	STIGASOFT PVT. LTD.	PADRAUNA
3267.	STMICROELECTRONICS	GREATER NOIDA
3268.	STMICROELECTRONICS PVT. LTD.	BADARPUR
3269.	STOCK REDLER (I) PVT. LTD.	BANGALORE
3270.	STONE (I) LTD.	KOLKATA
3271.	STORK RUBBER PRODUCTS PVT. LTD.	DELHI
3272.	STORK RUBBER PRODUCTS PVT. LTD.	GURGAON
3273.	STOVEKRAFT PVT. LTD.	BANGALORE
3274.	STRAITS ORTHOPAEDICS	TRICHY
3275.	STREAM INDUSTRIAL & ENGINEERING	AL SADD
3276.	STRONGMOMENTS TECHNOLOGIES PVT. LTD.	DELHI
3277.	STRUCTURAL SOLUTIONS PVT. LTD.	HYDERABAD
3278.	STRUCTURAL SOLUTIONS PVT. LTD.	MUSSOORIE
3279.	STRYKER GLOBAL TECHNOLOGY CENTER PVT. LTD.	BAHADURGARH
3280.	STRYKER GLOBAL TECHNOLOGY CENTER PVT. LTD.	GURGAON
3281.	SUBEX LTD.	BANGALORE
3282.	SUBEX LTD.	SAMBHAR LAKE
3283.	SUBROS LTD.	NOIDA
3284.	SUEX TRACTBEL OPERATION & MAINTENANCE CO	KUMBAKONAM
3285.	SULEKHA.COM NEW MEDIA PVT. LTD.	CHENNAI
3286.	SULZER TECH (I) PVT. LTD.	PUNE
3287.	SUMERU VERDE TECHNOLOGIES PVT. LTD.	PATIALA
3288.	SUNBEAM AUTO PVT. LTD.	GURGAON
3289.	SUNDARAM AUTO COMPONENTS LTD.	CHENNAI
3290.	SUNDARAM AUTO COMPONENTS LTD.	HOSUR
3291.	SUNDARAM AUTO COMPONENTS LTD.	KODAIKANAL
3292.	SUNDARAM AUTO COMPONENTS LTD.	VELLORE
3293.	SUNDARAM CLAYTON LTD.	CHENGALPET
3294.	SUNDARAM CLAYTON LTD.	CHENNAI
3295.	SUNDARAM CLAYTON LTD.	HOSUR
3296.	SUNDARAM CLAYTON LTD.	SIVAKASI
3297.	SUNDARAM INDUSTRIES PVT. LTD.	CHENNAI
3298.	SUNDRAM FASTENERS LTD.	CHENNAI
3299.	SUNDRAM FASTENERS LTD.	COIMBATORE



3300.	SUNDRAM FASTENERS LTD.	GOBICHETTIPALAYAM
3301.	SUNDRAM FASTENERS LTD.	HOSUR
3302.	SUNDRAM FASTENERS LTD.	PILER
3303.	SUNDRAM FASTENERS LTD.	SALEM
3304.	SUNDRAM FASTENERS LTD.	TIRUVANNAMALAI
3305.	SUNGARD GLOBAL SOLUTIONS PUNE	PUNE
3306.	SUNMACHX ENGINEERING INDUSTRIES	THANJAVUR
3307.	SUNTEC BUSINESS SOLUTIONS	PALAKKAD
3308.	SUNTEC BUSINESS SOLUTIONS	TECHNOPARK
3309.	SUNTEC BUSINESS SOLUTIONS PVT. LTD.	THAKURLI
3310.	SUPREME INDUSTRIAL WORKS	TIRUNELVELI
3311.	SUPREME TELECOMMUNICATIONS LTD.	BANGALORE
3312.	SURELOCK PLASTICS PVT. LTD.	KHARAGPUR
3313.	SUREWAVES MEDIATECH PVT. LTD.	BANGALORE
3314.	SUTURES (I) PVT. LTD.	BANGALORE
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3316.	SUZLON ENERGY LTD.	NAGERCOIL
3317.	SUZLON ENERGY LTD.	PUNE
3318.	SUZUKI MOTOR GUJARAT	KAITHAL
3319.	SWAIDAN TRADING CO. LLC	DUBAI
3320.	SWIFT PLM SERVICES	PUNE
3321.	SWIFTANT IT SOLUTIONS (I) PVT. LTD.	HOSUR
3322.	SYMANTEC SOFTWARE (I) PVT. LTD.	BANGALORE
3323.	SYMANTEC SOFTWARE (I) PVT. LTD.	CHENNAI
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3326.	SYMANTEC SOFTWARE (I) PVT. LTD.	LUCKNOW
3327.	SYMANTEC SOFTWARE (I) PVT. LTD.	PUNE
3328.	SYMANTEC SOFTWARE (I) PVT. LTD.	THRISSUR
3329.	SYMBIOSIS TECHNOLOGY	ABU DHABI
3330.	SYMBOL TECHNOLOGIES (I) PVT. LTD.	BANGALORE
3331.	SYMBOL TECHNOLOGIES (I) PVT. LTD.	DHARWAD
3332.	SYMPHONY TELECA CORPORATION	BANGALORE
3333.	SYMPHONY TELECA CORPORATION	NEW DELHI
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3335.	SYNAPSE TECHNO DESIGN INNOVATIONS PVT. LTD.	BANGALORE
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3340.	SYNERGIES CASTINGS LTD.	CHENNAI
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3342.	SYNERGY MARINE PTE LTD.	CHENNAI
3343.	SYNERGY MARITIME PVT. LTD.	PUDUKOTTAI
3344.	SYNERZIP INFOTECH	PUNE
3345.	SYNGENE INTERNATIONAL LTD. (A BIOCON	BANGALORE
3346.	SYNIVERSE TECHNOLOGIES	BANGALORE
3347.	SYNOPSISYS (I) PVT. LTD.	BANGALORE
3348.	SYNOPSISYS (I) PVT. LTD.	DELHI
3349.	SYNOPSISYS (I) PVT. LTD.	FARIDABAD
3350.	SYNOPSISYS (I) PVT. LTD.	GREATER NOIDA
3351.	SYNOPSISYS (I) PVT. LTD.	NEW DELHI
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3353.	SYNTEL ARVIND LTD.	PUNE
3354.	SYNTEL INTERNATIONAL PVT. LTD.	CHENNAI
3355.	SYNTEL INTERNATIONAL PVT. LTD.	TIRUNELVELI
3356.	SYNTEL LTD.	CHENNAI
3357.	SYNTEL LTD.	COIMBATORE

3358.	SYNTEL PVT. LTD.	HYDERABAD
3359.	SYNTEL TELECOM  ARVIND LTD.	PUNE
3360.	SYNTHESIS WINDING TECHNOLOGIES PVT. LTD.	BANGALORE
3361.	SYSCO INFOTECH	CHENNAI
3362.	SYSCOM CORP. LTD.	GHAZIABAD
3363.	SYSTEM LEVEL SOLUTIONS PVT. LTD.	ANAND
3364.	SYSTEMS PLUS TRANSFORMATION LLP	PUNE
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3370.	TAKREER	ADNOC
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3373.	TAKREER	KOTTAYAM
3374.	TAKYEEF ELECTROMECHANICAL W.L.L	DOHA
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3376.	TALLY SOLUTIONS PVT. LTD.	GHAZIABAD
3377.	TARENTO TECHNOLOGIES	BANGALORE
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3385.	TATA ADVANCED SYSTEMS LTD.	JAMSHEDPUR
3386.	TATA ADVANCED SYSTEMS LTD.	KARAIKUDI
3387.	TATA ADVANCED SYSTEMS LTD.	WARANGAL
3388.	TATA AUTOCOM SYSTEMS LTD.	BASIRHAT
3389.	TATA AUTOCOMP HENDRICKSON SUSPENSIONS PVT. LTD.	PUNE
3390.	TATA AUTOCOMP SYSTEMS LTD.	PUNE
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3418.	TATA CONSULTANCY SERVICES LTD.	GUNTUR
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3435.	TATA CONSULTANCY SERVICES LTD.	KUMBAKONAM
3436.	TATA CONSULTANCY SERVICES LTD.	LUCKNOW
3437.	TATA CONSULTANCY SERVICES LTD.	LUDHIANA
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3442.	TATA CONSULTANCY SERVICES LTD.	MUMBAI
3443.	TATA CONSULTANCY SERVICES LTD.	MYDUKUR
3444.	TATA CONSULTANCY SERVICES LTD.	NAGERCOIL
3445.	TATA CONSULTANCY SERVICES LTD.	NAGPUR
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3447.	TATA CONSULTANCY SERVICES LTD.	NAVI MUMBAI
3448.	TATA CONSULTANCY SERVICES LTD.	NEW DELHI
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3457.	TATA CONSULTANCY SERVICES LTD.	SIDDIPET
3458.	TATA CONSULTANCY SERVICES LTD.	THANE
3459.	TATA CONSULTANCY SERVICES LTD.	THRISSUR
3460.	TATA CONSULTANCY SERVICES LTD.	TIRUNELVELI
3461.	TATA CONSULTANCY SERVICES LTD.	TRIVANDRUM
3462.	TATA CONSULTANCY SERVICES LTD.	TUMKUR
3463.	TATA CONSULTANCY SERVICES LTD.	UDAIPUR
3464.	TATA CONSULTANCY SERVICES LTD.	UDHAMPUR
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3470.	TATA ELXSI LTD.	ERODE
3471.	TATA ELXSI LTD.	KAKINADA
3472.	TATA ELXSI LTD.	KARKALA
3473.	TATA ELXSI LTD.	MADURAI

3474.	TATA ELXSI LTD.	NAGERCOIL
3475.	TATA ELXSI LTD.	NAMAKKAL
3476.	TATA ELXSI LTD.	PUNE
3477.	TATA ELXSI LTD.	THIRUVANANTHAPURAM
3478.	TATA ELXSI LTD.	THRISSUR
3479.	TATA ELXSI LTD.	TIRUR
3480.	TATA ELXSI LTD.	TRIVANDRUM
3481.	TATA ELXSI LTD.	TUMKUR
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3504.	TATA TECHNOLOGIES LTD.	LUCKNOW
3505.	TATA TECHNOLOGIES LTD.	NAGPUR
3506.	TATA TECHNOLOGIES LTD.	PUNE
3507.	TATA TELESERVICES LTD.	CHENNAI
3508.	TAVANT TECHNOLOGIES (I) PVT. LTD.	BANGALORE
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3510.	TAVISCA SOLUTIONS PVT. LTD.	AKOLA
3511.	TAVISCA SOLUTIONS PVT. LTD.	MUMBAI
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3520.	TCS LTD.	GURGAON
3521.	TCS LTD.	HYDERABAD
3522.	TCS LTD.	KALYAN
3523.	TCS LTD.	LUCKNOW
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3528.	TCS LTD.	PUNE
3529.	TCS LTD.	THANE
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3531.	TCS(TATA CONSULTANCY SERVICES)	YAMUNA NAGAR

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3536.	TECH BIZ SOLUTIONS	JODHPUR
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3539.	TECH MAHINDRA LTD.	AJMER
3540.	TECH MAHINDRA LTD.	ALAPPUZHA
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3547.	TECH MAHINDRA LTD.	BALASORE
3548.	TECH MAHINDRA LTD.	BANGALORE
3549.	TECH MAHINDRA LTD.	BANTWAL
3550.	TECH MAHINDRA LTD.	BEAWAR
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3565.	TECH MAHINDRA LTD.	DELHI
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3568.	TECH MAHINDRA LTD.	DWARKA
3569.	TECH MAHINDRA LTD.	ERODE
3570.	TECH MAHINDRA LTD.	FARIDABAD
3571.	TECH MAHINDRA LTD.	GUNTUR
3572.	TECH MAHINDRA LTD.	HARIHARA
3573.	TECH MAHINDRA LTD.	HINJEWADI
3574.	TECH MAHINDRA LTD.	HOSUR
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3576.	TECH MAHINDRA LTD.	INDORE
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3578.	TECH MAHINDRA LTD.	KADAPA
3579.	TECH MAHINDRA LTD.	KADIRI
3580.	TECH MAHINDRA LTD.	KAKINADA
3581.	TECH MAHINDRA LTD.	KALYAN
3582.	TECH MAHINDRA LTD.	KANNUR
3583.	TECH MAHINDRA LTD.	KARNAL
3584.	TECH MAHINDRA LTD.	KOLKATA
3585.	TECH MAHINDRA LTD.	KOLLAM
3586.	TECH MAHINDRA LTD.	KOMPALLY
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3590.	TECH MAHINDRA LTD.	KUMBAKONAM
3591.	TECH MAHINDRA LTD.	KUMTA
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3604.	TECH MAHINDRA LTD.	MUMBAI
3605.	TECH MAHINDRA LTD.	MYSORE
3606.	TECH MAHINDRA LTD.	NAGPUR
3607.	TECH MAHINDRA LTD.	NANDED
3608.	TECH MAHINDRA LTD.	NASHIK
3609.	TECH MAHINDRA LTD.	NEW DELHI
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3611.	TECH MAHINDRA LTD.	NOIDA
3612.	TECH MAHINDRA LTD.	ONGOLE
3613.	TECH MAHINDRA LTD.	PALAKKAD
3614.	TECH MAHINDRA LTD.	PALAMANER
3615.	TECH MAHINDRA LTD.	PALAMPUR
3616.	TECH MAHINDRA LTD.	PANCHKULA
3617.	TECH MAHINDRA LTD.	PANIPAT
3618.	TECH MAHINDRA LTD.	PANVEL
3619.	TECH MAHINDRA LTD.	PARVATHIPUARM
3620.	TECH MAHINDRA LTD.	PATHANAMTHITTA
3621.	TECH MAHINDRA LTD.	PATHANKOT
3622.	TECH MAHINDRA LTD.	PATIALA
3623.	TECH MAHINDRA LTD.	PENNADAM
3624.	TECH MAHINDRA LTD.	PUNE
3625.	TECH MAHINDRA LTD.	RAJASTHAN
3626.	TECH MAHINDRA LTD.	RAJGANGPUR
3627.	TECH MAHINDRA LTD.	RAMABHADRAPURAM
3628.	TECH MAHINDRA LTD.	ROURKELA
3629.	TECH MAHINDRA LTD.	RUDRAPUR
3630.	TECH MAHINDRA LTD.	SAHARANPUR
3631.	TECH MAHINDRA LTD.	SALEM
3632.	TECH MAHINDRA LTD.	SANGLI
3633.	TECH MAHINDRA LTD.	SECUNDERABAD
3634.	TECH MAHINDRA LTD.	SERAMPORE
3635.	TECH MAHINDRA LTD.	SHIMLA
3636.	TECH MAHINDRA LTD.	SHIRPUR
3637.	TECH MAHINDRA LTD.	SIKAR
3638.	TECH MAHINDRA LTD.	SILCHAR
3639.	TECH MAHINDRA LTD.	SOLAPUR
3640.	TECH MAHINDRA LTD.	SURAT
3641.	TECH MAHINDRA LTD.	TELANGNA
3642.	TECH MAHINDRA LTD.	THANE
3643.	TECH MAHINDRA LTD.	THIRUVARUR
3644.	TECH MAHINDRA LTD.	THODUPUZHA
3645.	TECH MAHINDRA LTD.	TIRUPATI
3646.	TECH MAHINDRA LTD.	TIRUPUR
3647.	TECH MAHINDRA LTD.	TRICHY

3648.	TECH MAHINDRA LTD.	UDUPI
3649.	TECH MAHINDRA LTD.	VADODARA
3650.	TECH MAHINDRA LTD.	VELLORE
3651.	TECH MAHINDRA LTD.	VIJAYAWADA
3652.	TECH MAHINDRA LTD.	VIRUDHUNAGAR
3653.	TECH MAHINDRA LTD.	VISAKHAPATNAM
3654.	TECH MAHINDRA LTD.	VIZIANAGARAM
3655.	TECH MAHINDRA LTD.	WARANGAL
3656.	TECH MAHINDRA LTD.	ZIRAKPUR
3657.	TECHNICAL EDUCATION DEPARTMENT J&K	ANANTNAG
3658.	TECHNICAL SOLUTIONS TO INDUSTRY	DUBAI
3659.	TECHNICAL SUPPLIES INTERNATIONAL CO.LLC	TIRUCHIRAPPALLI
3660.	TECHNICO INDUSTRIES LTD.	FARIDABAD
3661.	TECHNICO INDUSTRIES LTD.	NEW DELHI
3662.	TECHNIP (I) LTD.	KALYAN
3663.	TECHNIP (I) LTD.	MUMBAI
3664.	TECHNOLOGY ONE GEN.TRADING L L C	DUBAI
3665.	TECHNOLOGY VENTURES MARINE EQPT LLC	THRISSUR
3666.	TECHNOSOFT ENGINEERING PROJECTS LTD.	NAIGAON
3667.	TECHPROCESS PAYMENTS SERVICES LTD.	MUMBAI
3668.	TECTON ENGINEERING AND CONSTRUCTION CO.	CHENNAI
3669.	TECTON ENGINEERING AND CONSTRUCTION CO.	DINDIGUL
3670.	TECTON ENGINEERING AND CONSTRUCTION CO.	TUTICORIN
3671.	TEGA INDUSTRIES LTD.	KOLKATA
3672.	TEJAS NETWORKS LTD.	BANGALORE
3673.	TEJAS NETWORKS LTD.	MUMBAI
3674.	TEJOSMA TECHNOLOGY PVT. LTD.	RAICHUR
3675.	TEK CARE (I) PVT. LTD.	CHENNAI
3676.	TEK SYSTEMS	BANGALORE
3677.	TEKIP KNOWLEDGE CONSULTING PVT. LTD.	BANGALORE
3678.	TEKNORIX SYSTEMS PVT. LTD.	VERNA
3679.	TEKTRONIX (I) PVT. LTD.	BANGALORE
3680.	TEKTRONIX COMMUNICATION	MUMBAI
3681.	TELEXCELL	NEW DELHI
3682.	TEMA BUSINESS SYSTEMS	HYDERABAD
3683.	TEMENOS (I) PVT. LTD.	BANGALORE
3684.	TEMENOS (I) PVT. LTD.	CHENNAI
3685.	TENOVA (I) PVT. LTD.	BANGALORE
3686.	TERADATA (I)	DEHRADUN
3687.	TERADATA (I) PVT. LTD.	HYDERABAD
3688.	TERADATA (I) PVT. LTD.	VIJAYAWADA
3689.	TEREX (I) PVT. LTD.	PUNE
3690.	TERRAZZO LTD.	SHARJAH
3691.	TESCO BANGALORE PVT. LTD.	BANGALORE
3692.	TESCO BANGALORE PVT. LTD.	MYSORE
3693.	TESCO HSC	NAMAKKAL
3694.	TESSOLVE SEMICONDUCTORS PVT. LTD.	BANGALORE
3695.	TESTANDVERFICATION SOLUTIONS PVT. LTD.	BANGALORE
3696.	TESTTEX (I) LABORATORIES PVT. LTD.	MUMBAI
3697.	TETRAPAK (I) PVT. LTD.	BANGALORE
3698.	TEVATRON TECHNOLOGIES PVT. LTD.	ALLAHABAD
3699.	TEXAS INSTRUMENTS (I) PVT. LTD.	BANGALORE
3700.	TEXAS INSTRUMENTS (I) PVT. LTD.	GHAZIABAD
3701.	TEXTRON (I) PVT. LTD.	BANGALORE
3702.	TEXTRON (I) PVT. LTD.	CHENNAI
3703.	THAI ACRYLIC FIBER CO. LTD.	KHANDWA
3704.	THALES (I) PVT. LTD.	BANGALORE
3705.	THANGAM CORPORATE SERVICES	PONDICHERRY

3706.	THE DEPOSITORY TRUST AND CLEARING CORPOR	CHENNAI
3707.	THE DHANLAXMI BANK LTD.	THRISSUR
3708.	THE HI-TECH ROBOTIC SYSTEMZ LTD.	NEW DELHI
3709.	THE ILLUSTRATORS	BANGALORE
3710.	THE INDIAN HUME PIPE CO. LRD.	DHULE
3711.	THE KANOO GROUP	ABU DHABI
3712.	THE KANOO GROUP COMMERCIAL LLC	COIMBATORE
3713.	THE MATHWORKS (I) PVT. LTD.	BANGALORE
3714.	THE PETROLEUM INSTITUTE	ABU DHABI
3715.	THE RAMCO CEMENTS LTD.	CHENNAI
3716.	THE ROYAL BANK OF SCOTLAND	GHAZIABAD
3717.	THE ROYAL BANK OF SCOTLAND	GURGAON
3718.	THE SMART TECHIES PVT.LTD.	JAIPUR
3719.	THE TATA POWER CO. LTD.	MUMBAI
3720.	THE WORLD BANK GROUP	CHENNAI
3721.	THERMAX LTD.	PUNE
3722.	THERMAX LTD.	VADODARA
3723.	THERMO FISHER SCIENTIFIC (I) PVT. LTD.	CHENNAI
3724.	THINK FUTURE TECHNOLOGIES PVT. LTD.	NAGPUR
3725.	THIRUPATHY BRIGHT INDUSTRIES	TRICHY
3726.	THOMSON REUTERS	BANGALORE
3727.	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	CHENNAI
3728.	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	COIMBATORE
3729.	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	GURGAON
3730.	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	KANNUR
3731.	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	MADURAI
3732.	THRYMR SOFTWARE PVT. LTD.	SECUNDERABAD
3733.	THYROCARE TECHNOLOGIES LTD.	THANE
3734.	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	HYDERABAD
3735.	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	KOLHAPUR
3736.	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	PUNE
3737.	TIBCO SOFTWARE (I) PVT. LTD.	HYDERABAD
3738.	TIBCO SOFTWARE (I) PVT. LTD.	MUMBAI
3739.	TIBCO SOFTWARE (I) PVT. LTD.	PUNE
3740.	TIBCO SOFTWARE (I) PVT. LTD.	SATARA
3741.	TIETO	PUNE
3742.	TIETO SOFTWARE TECHNOLOGIES LTD.	CHENNAI
3743.	TIL LTD.	GARHWA
3744.	TIME ANALYTIC AND SHARED SERVICES	KANPUR
3745.	TIME INC (I)	BANGALORE
3746.	TIME TECHNOPLAST LTD.	THANE
3747.	TIMKEN ENGINEERING & RESEARCH (I) PVT. LTD.	KANNUR
3748.	TITAN CO. LTD.	BANGALORE
3749.	TITAN CO. LTD.	CHENNAI
3750.	TITAN CO. LTD.	CHIDAMBARAM
3751.	TITAN CO. LTD.	COIMBATORE
3752.	TITAN CO. LTD.	HOSUR
3753.	TITAN CO. LTD.	KOZHICODE
3754.	TITAN CO. LTD.	KRISHNAGIRI
3755.	TITAN CO. LTD.	NEW DELHI
3756.	TITAN CO. LTD.	THIRUNELVELI
3757.	TITAN CO. LTD.	TUTICORIN
3758.	TITAN CO. LTD.	VELLORE
3759.	TITAN CO. LTD.	VIRUDHUNAGAR
3760.	TMEIC INDUSTRIAL SYSTEMS (I) PVT. LTD.	BANGALORE
3761.	TML DRIVELINES LTD.	JAMSHEDPUR
3762.	TOKAI RIKI MINDA (I) PVT. LTD.	BANGALORE
3763.	TOKAI RIKI MINDA PVT. LTD.	SALEM



3764.	TOLANI MARITIME INSTITUTE	PUNE
3765.	TOLEDO ARABIA	CALICUT
3766.	TOOL ROOM ENGINEERING	CHENNAI
3767.	TORRY HARRIS BUSINESS SOLUTION PVT.LTD.	BANGALORE
3768.	TOSHIBA JSW POWER SYSTEM PVT. LTD.	GURGAON
3769.	TOSHIBA MACHINE (CHENNAI) PVT.LTD.	CHENNAI
3770.	TOSHIBA SOFTWARE (I) PVT. LTD.	BANGALORE
3771.	TOSHIBA SOFTWARE (I) PVT. LTD.	PUNE
3772.	TOSHIBA SOFTWARE (I) PVT. LTD.	SECUNDERABAD
3773.	TOSHIBA SOFTWARE (I) PVT. LTD.	SHIVAMOGGA
3774.	TOTAL OIL (I) PVT. LTD.	ERNAKULAM
3775.	TOYODA GOSEI MINDA (I) PVT. LTD.	NARNAUL
3776.	TOYODA GOSEI SOUTH (I) PVT. LTD.	BANGALORE
3777.	TOYOTA INDUSTRIES ENGINE (I) PVT. LTD.	BANGALORE
3778.	TOYOTA KIRLOSKAR AUTO PARTS PVT. LTD.	BANGALORE
3779.	TOYOTA KIRLOSKAR MOTOR PVT. LTD.	BANGALORE
3780.	TOYOTA KIRLOSKAR MOTOR PVT. LTD.	BIDADI
3781.	TPF SOFTWARE (I) PVT. LTD.	CHENNAI
3782.	TPVISION (I) PVT. LTD.	BANGALORE
3783.	TRACTORS AND FARM EQUIPMENT LTD.	BANGALORE
3784.	TRACTORS AND FARM EQUIPMENT LTD.	CHENNAI
3785.	TRACTORS AND FARM EQUIPMENT LTD.	VISAKHAPATNAM
3786.	TRANQUILIT SOFTWARE PVT. LTD.	COIMBATORE
3787.	TRANS GULF ELECTRO-MECHANICAL LLC	DUBAI
3788.	TRAVELREPUBLIC	TIRUPPUR
3789.	TRAWEX TECHNOLOGIES	BANGALORE
3790.	TREENI SOFTWARE SOLUTION PVT. LTD.	PUNE
3791.	TREO TECHNOLOGIES	AMBALA CANTT
3792.	TRISPECTRUM	CHENNAI
3793.	TRIDENT INFOSOL PVT. LTD.	BANGALORE
3794.	TRIMBLE INFORMATION TECHNOLOGIES	CHENNAI
3795.	TRIPTA INNOVATIONS PVT. LTD.	SURAT
3796.	TRIQUESTA PTE LTD.	BANGALORE
3797.	TRIVENI ENGINEERING & INDUSTRIES LTD.	MEERUT
3798.	TRIVENI TURBINE LTD.	BANGALORE
3799.	TRUSTED AEROSPACE ENGINEERING PVT. LTD.	COIMBATORE
3800.	TS TECH SUN (I) PVT. LTD.	DELHI
3801.	TSI FZE	DUBAI
3802.	TŠV RHEINLAND (I) PVT. LTD.	BANGALORE
3803.	TUBE INVESTMENTS OF (I) LTD.	PUNE
3804.	TURBOTECH PRECISION ENGINEERING PVT. LTD.	BANGALORE
3805.	TURNTRO MECHANICAL WORKS	DELHI
3806.	TUSCANO EQUIPMENTS PVT. LTD.	KARUR
3807.	TUSHACO PUMPS PVT.LTD.	DAMAN
3808.	TUV RHEINLAND (I) PVT. LTD.	AHMEDABAD
3809.	TUV SUD SOUTH ASIA PVT. LTD.	FARIDABAD
3810.	TUV SUD SOUTH ASIA PVT. LTD.	NOIDA
3811.	TVM SIGNALLING & TRANSPORTATION SYSTEMS	BANGALORE
3812.	TVS ELECTRONICS LTD.	CHENNAI
3813.	TVS MOTOR CO. LTD.	BANGALORE
3814.	TVS MOTOR CO. LTD.	CHENNAI
3815.	TVS MOTOR CO. LTD.	HOSUR
3816.	TVS MOTOR CO. LTD.	MYSORE
3817.	TVS MOTOR CO. LTD.	VISAKHAPATNAM
3818.	TVS SUNDRAM FASTENERS LTD.	CHENNAI
3819.	TVS SUNDRAM FASTENERS LTD.	COIMBATORE
3820.	TVS SUNDRAM FASTENERS LTD.	ERODE
3821.	TVS SUNDRAM FASTENERS LTD.	HOSUR

3822.	TVS SUNDRAM FASTENERS LTD.	KRISHNAGIRI
3823.	TVS SUNDRAM FASTENERS LTD.	TIRUNELVELI
3824.	TVS UPASANA LTD.	KRISHNAGIRI
3825.	TYCO FIRE & SECURITY PVT. LTD.	BANGALORE
3826.	TYCO FIRE & SECURITY UAE LLC	ABU DHABI
3827.	TYCO FIRE AND SECURITY (I) PVT. LTD.	JAMSHEDPUR
3828.	TYFONE CDI PVT. LTD.	BANGALORE
3829.	U T C FIRE & SECURITY (I) LTD.	NAVI MUMBAI
3830.	UBIQUE SYSTEMS PVT. LTD.	KOLKATA
3831.	UBITECH PVT. LTD.	CHENNAI
3832.	UEI ELECTRONICS PVT. LTD.	BANGALORE
3833.	UEM (I) PVT. LTD.	MANGALORE
3834.	UFI FILTERS (I) PVT. LTD.	REWARI
3835.	UGAM SOLUTIONS	BANGALORE
3836.	ULTRATECH CEMENT LTD.	ANANTAPUR
3837.	ULTRATECH CEMENT LTD.	BALODABAZAR
3838.	ULTRATECH CEMENT LTD.	CHENNAI
3839.	ULTRATECH CEMENT LTD.	CHITTORGARH
3840.	ULTRATECH CEMENT LTD.	KATNI
3841.	ULTRATECH CEMENT LTD.	MUMBAI
3842.	UMAS PVT.LTD.	PUNE
3843.	UNBOX TECHNOLOGIES PVT. LTD.	BANGALORE
3844.	UNIBIZ SOFTWARE SOLUTIONS	BANGALORE
3845.	UNICHARM (I) PVT. LTD.	AMBALA CANTT
3846.	UNICHARM (I) PVT. LTD.	ROPAR
3847.	UNIFY TECHNOLOGY	HYDERABAD
3848.	UNIGEN (I) PVT. LTD.	HYDERABAD
3849.	UNIKEN (I) PVT. LTD.	PUNE
3850.	UNIPRES (I) PVT. LTD.	CHEYAR
3851.	UNISYS GLOBAL SERVICES (I) LTD.	BANGALORE
3852.	UNITECH MACHINES LTD.	NEW DELHI
3853.	UNITED BREWERIES LTD.	BANGALORE
3854.	UNITED BREWERIES LTD.	MANGALORE
3855.	UNITED DEVELOPMENT CO.	KOTTAYAM
3856.	UNITED HEALTH GROUP PVT. LTD.	BANGALORE
3857.	UNITED HEALTH GROUP PVT. LTD.	GHAZIABAD
3858.	UNITED HEALTH GROUP PVT. LTD.	HYDERABAD
3859.	UNITED HEALTH GROUP PVT. LTD.	NEW DELHI
3860.	UNITED HEALTH GROUP PVT. LTD.	NOIDA
3861.	UNITED HEALTH GROUP PVT. LTD.	PALAKONDA
3862.	UNITED METAL COATING L.L.C.	PUNE
3863.	UNITED PRECISION ENGINEERING CO.	YAMUNA NAGAR
3864.	UNITED TECHNO INFO SYSTEMS	CHENNAI
3865.	UNITED TECHNOLOGIES	BANGALORE
3866.	UNITEDHEALTH GROUP	GURGAON
3867.	UNITEDHEALTH GROUP	HYDERABAD
3868.	UNITY INFOTECH SOLUTIONS L.L.C	DUBAI
3869.	UNIVERSITY YADUNDE 1	CAMEROON
3870.	UNIVERSITY YADUNDE 1	KIGALI
3871.	UNIVERSITY YADUNDE 1	LIBREVILLE
3872.	UNIVERSITY YADUNDE 1	MAPUTO
3873.	UNIVERSITY YADUNDE 1	YAOUNDE
3874.	UPGRAD LTD.	MUMBAI
3875.	UPL LTD.	MUMBAI
3876.	US TECHNOLOGY INTERNATIONAL PVT. LTD.	BANGALORE
3877.	US TECHNOLOGY INTERNATIONAL PVT. LTD.	CHENNAI
3878.	US TECHNOLOGY INTERNATIONAL PVT. LTD.	VELLORE
3879.	USHA INTERNATIONAL LTD.	FARIDABAD

3880.	USHODAYA ENTERPRISES PVT. LTD.	VIJAYAWADA
3881.	UST GLOBAL	BAIDYABATI
3882.	UST GLOBAL	BANGALORE
3883.	UST GLOBAL	COIMBATORE
3884.	UST GLOBAL	PALAKKAD
3885.	UST GLOBAL	PUDUCHERRY
3886.	UST GLOBAL	TRIVANDRUM
3887.	UTC AEROSPACE SYSTEMS PVT. LTD.	BANGALORE
3888.	UTC AEROSPACE SYSTEMS PVT. LTD.	CHICKMANGALORE
3889.	UTC AEROSPACE SYSTEMS PVT. LTD.	COIMBATORE
3890.	UTC AEROSPACE SYSTEMS PVT. LTD.	HYDERABAD
3891.	UTC AEROSPACE SYSTEMS PVT. LTD.	PONDA
3892.	UTC AEROSPACE SYSTEMS PVT. LTD.	SHIMOGA
3893.	UTC FIRE & SECURITY (I) PVT. LTD.	HYDERABAD
3894.	UTKAL ALUMINA INTERNATIONAL LTD.	ROURKELA
3895.	UTTAM BIOTECH PVT. LTD.	MUMBAI
3896.	UTTAM VALUE STEELS LTD.	WARDHA
3897.	V J TECHNOLOGIES PVT. LTD.	PUNE
3898.	VA TECH VENTURES PVT. LTD.	BANGALORE
3899.	VAG VALVES (I) PVT. LTD.	HYDERABAD
3900.	VAKRANGEE LTD.	MUMBAI
3901.	VALDEL ENGINEERS & CONSTRUCTORS PVT. LTD.	NEW DELHI
3902.	VALEO (I) PVT. LTD.	BANGALORE
3903.	VALEO (I) PVT. LTD.	PUNE
3904.	VALEO LIGHTING (I) PVT. LTD.	CHENNAI
3905.	VALEO LIGHTING (I) PVT. LTD.	ONNUPURAM
3906.	VALLOUREC DRILLING MIDDLE EAST FZE	JEBEL ALI
3907.	VALLOUREC DRILLING PRODUCT MIDDLE EAST	DUBAI
3908.	VALUE ADDITION FZC	SHARJAH
3909.	VALUELABS	ADOOR
3910.	VALUELABS LLP	HYDERABAD
3911.	VALUEMOMENTUM SOFTWARE SERVICES PVT. LTD.	HYDERABAD
3912.	VALVO-EICHER COMMERCIAL VEHICLE LTD.	INDORE
3913.	VARDHMAN INDUSTRIES	JAIPUR
3914.	VARIAN MEDICAL SYSTEM SOFTWARE (I) PVT. LTD.	PARBHANI
3915.	VARROC ENGINEERING PVT. LTD.	CHIPLUN
3916.	VARROC ENGINEERING PVT. LTD.	JAIPUR
3917.	VARROC ENGINEERING PVT. LTD.	PATAN
3918.	VARROC ENGINEERING PVT. LTD.	PUNE
3919.	VARROC POLYMERS PVT. LTD.	PUNE
3920.	VASUDHA PHARMA CHEM LTD.	HYDERABAD
3921.	VE COMMERCIAL VEHICLES LTD.	BAGHAPURANA
3922.	VE COMMERCIAL VEHICLES LTD.	INDORE
3923.	VEC OIL & GAS CONSULTANTS	AL-KHUWAIR
3924.	VEDAMS SOFTWARE SOLUTIONS (I) PVT. LTD.	HYDERABAD
3925.	VEDANTA LTD.	SANQUELIM
3926.	VEDANTA RESOURCES	BATHINDA
3927.	VEDNAG RADIO TECHNOLOGY PVT. LTD.	HYDERABAD
3928.	VELAN IT SOLUTION PVT. LTD.	CHENNAI
3929.	VELAN VALVES (I) PVT. LTD.	COIMBATORE
3930.	VELANKANI ELECTRONICS PVT. LTD.	HOSUR
3931.	VELOCITY TECH-SOL (I) PVT. LTD.	PUNE
3932.	VELOSI LLC	KANCHEEPURAM
3933.	VELOSI LLC	OMAN
3934.	VENGALA ENGINEERING DESIGN SERVICES	BANGALORE
3935.	VENTURE GULF ENGINEERING	ERNAKULAM
3936.	VENTURE GULF ENGINEERING W.L.L	COCHIN
3937.	VERGA ATTACHMENTS PVT. LTD.	BANGALORE

3938.	VERIFONE (I) TECHNOLOGY PVT. LTD.	BANGALORE
3939.	VERITAS SOFTWARE (I) PVT. LTD.	PUNE
3940.	VERIZON DATA SERVICES (I) PVT. LTD.	BANGALORE
3941.	VERIZON DATA SERVICES (I) PVT. LTD.	CHENNAI
3942.	VERIZON DATA SERVICES (I) PVT. LTD.	COIMBATORE
3943.	VERIZON DATA SERVICES (I) PVT. LTD.	DINDIGUL
3944.	VERIZON DATA SERVICES (I) PVT. LTD.	HYDERABAD
3945.	VERIZON DATA SERVICES (I) PVT. LTD.	NEW DELHI
3946.	VERIZON DATA SERVICES (I) PVT. LTD.	THANJAVUR
3947.	VERSA NETWORKS	SAHARSA
3948.	VERYX TECHNOLOGIES PVT. LTD.	CHENNAI
3949.	VESTAS TECHNOLOGY R&D CHENNAI PVT. LTD.	CHENNAI
3950.	VESTAS TECHNOLOGY R&D CHENNAI PVT. LTD.	KADAPA
3951.	VIABLE IT SOLUTIONS	SUNAM
3952.	VIDGYOR MEDIA TECHNOLOGIES PVT. LTD.	ANAKAPALLE
3953.	VIDYOTTAMA CONSULTANCY SERVICES PVT. LTD.	MUNGER
3954.	VIJAY TECHNICAL SERVICES & CONSTRUCTION	GURGAON
3955.	VIMSRICONSULTING PVT. LTD.	SECUNDERABAD
3956.	VINAR SYSTEMS PVT. LTD.	DELHI
3957.	VIOS MEDICALS (I) PVT. LTD.	BANGALORE
3958.	VIRTUOSOS SOLUTIONS PVT. LTD.	FARIDABAD
3959.	VIRTUSA (I) PVT. LTD.	HYDERABAD
3960.	VIRTUSA (I) PVT. LTD.	VAYALPAD
3961.	VIRTUSA CONSULTING SERVICES PVT. LTD.	HYDERABAD
3962.	VIRTUSA POLARIS	CHENNAI
3963.	VIRTUSA SOFTWARE SERVICES PVT. LTD.	CHENNAI
3964.	VIRTUSA SOFTWARE SERVICES PVT. LTD.	MANAPAKKAM
3965.	VIS NETWORKS PVT. LTD.	PUNE
3966.	VISA CONSOLIDATED SUPPORT SERVICES INDIA	BANGALORE
3967.	VISA CONSOLIDATED SUPPORT SERVICES INDIA	MADURAI
3968.	VISA INC	VIRUDHUNAGAR
3969.	VISA WORLD WIDE PTE LTD.	GUNTUR
3970.	VISMI TECHNOLOGIES PVT. LTD.	CHENNAI
3971.	VISTA AUTOMATION	DUBAI
3972.	VISTA INFOSYSTEMS	CHENNAI
3973.	VISTEON AUTOMOTIVE SYSTEMS (I) PVT. LTD.	CHENNAI
3974.	VISTEON CORPORATION	PUNE
3975.	VISTEON ELECTRONICS (I) PVT. LTD.	CHENNAI
3976.	VISTEON TECHNICAL AND SERVICE CENTRE	CHENNAI
3977.	VISTEON TECHNICAL AND SERVICE CENTRE	COIMBATORE
3978.	VISTEON TECHNICAL AND SERVICE CENTRE	HYDERABAD
3979.	VISTEON TECHNICAL AND SERVICE CENTRE	PUNE
3980.	VISUAL IQ TECHNO SERVICES (I) PVT. LTD.	COCHIN
3981.	VISUAL IQ TECHNO SERVICES (I) PVT. LTD.	ERNAKULAM
3982.	VISWAMBARA SOFTWARE SYSTEMS	VILLUPURAM
3983.	VIZUAL BUSINESS TOOL PVT. LTD.	CHENNAI
3984.	VMC SYSTEMS LTD.	SECUNDERABAD
3985.	VMWARE SOFTWARE (I) PVT. LTD.	BANGALORE
3986.	VMWARE SOFTWARE (I) PVT. LTD.	CHANDANNAGAR
3987.	VMWARE SOFTWARE (I) PVT. LTD.	COIMBATORE
3988.	VMWARE SOFTWARE (I) PVT. LTD.	KUMTA
3989.	VMWARE SOFTWARE (I) PVT. LTD.	NAVI MUMBAI
3990.	VMWARE SOFTWARE (I) PVT. LTD.	PUNE
3991.	VMWARE SOFTWARE (I) PVT. LTD.	SIVAKASI
3992.	VMWARE SOFTWARE (I) PVT. LTD.	THIRUVANANTHAPURAM
3993.	VODAFONE (I) SERVICES PVT. LTD.	PUNE
3994.	VODAFONE SHARED SERVICES (I) PVT. LTD.	PUNE
3995.	VODAFONE SHARED SERVICES (I) PVT. LTD.	THIRUVALLUR

3996.	VOITH HYDRO PVT. LTD.	NOIDA
3997.	VOITH PAPER FABRICS (I) LTD.	FARIDABAD
3998.	VOITH PAPER TECHNOLOGY (I) PVT. LTD.	KONNAGAR
3999.	VOLANSYS TECHNOLOGIES PVT. LTD.	AHMEDABAD
4000.	VOLKSWAGEN (I) PVT. LTD.	NASHIK
4001.	VOLKSWAGEN (I) PVT. LTD.	PUNE
4002.	VOLTAS LTD.	ALAPPUZHA
4003.	VOLTAS QATAR WLL	THRISSUR
4004.	VOLVO (I) PVT. LTD.	BANGALORE
4005.	VOLVO (I) PVT. LTD.	MYSORE
4006.	VOLVO EICHER COMMERCIAL VEHICLE LTD.	BANGALORE
4007.	VOLVO EICHER COMMERCIAL VEHICLE LTD.	INDORE
4008.	VOLVO EICHER COMMERCIAL VEHICLE LTD.	PUNE
4009.	VOLVO EICHER COMMERCIAL VEHICLE LTD.	YAMUNANAGAR
4010.	VORTEX ENGINEERING PVT. LTD.	CHENNAI
4011.	VORTEX ENGINEERING PVT. LTD.	HYDERABAD
4012.	VOTARY TECH PVT. LTD.	HYDERABAD
4013.	VOTORANTIM CIMENTOS	JAMNAGAR
4014.	VSERV BUSINESS SOLUTIONS PVT. LTD.	KARNAL
4015.	VST TILLERS TRACTORS LTD.	HOSUR
4016.	VTL ELECTRONICS LTD.	KOLKATA
4017.	VVDN TECHNOLOGIES PVT. LTD.	ROHTAK
4018.	VYOMINI TECH PVT. LTD.	NOIDA
4019.	W S ATKINS & PARTNER OVERSEAS	BANGALORE
4020.	WABCO (I) LTD.	CHENNAI
4021.	WABCO (I) LTD.	CUDDALORE
4022.	WABCO (I) LTD.	NAGAPATTINAM
4023.	WABCO (I) LTD.	PUDUVAYAL
4024.	WABCO (I) LTD.	VADALUR
4025.	WALMART LABS	BANGALORE
4026.	WARTSILA (I) LTD.	VIRUDHUNAGAR
4027.	WARTSILA GULF LLC	DUBAI
4028.	WATSON PHARMA PVT. LTD.	GOA
4029.	WDI DRILLING	DUBAI
4030.	WEBRAINS SOLUTIONS PVT. LTD.	BHUBANESWAR
4031.	WEG INDUSTRIES (I) PVT. LTD.	BANGALORE
4032.	WEG INDUSTRIES (I) PVT. LTD.	HOSUR
4033.	WEIR ENSCI	BANGALORE
4034.	WEIR MINERALS (I) PVT. LTD.	BANGALORE
4035.	WEIR OIL & GAS	THANJAVUR
4036.	WELLS FARGO (I) SOLUTIONS PVT. LTD.	BANGALORE
4037.	WELLS FARGO (I) SOLUTIONS PVT. LTD.	HYDERABAD
4038.	WELLS FARGO (I) SOLUTIONS PVT. LTD.	SECUNDERABAD
4039.	WENDT (I) LTD.	HOSUR
4040.	WEP SOLUTIONS LTD.	BANGALORE
4041.	WEST PHARMA	CHENNAI
4042.	WESTERN DIGITAL MALAYSIA	SALEM
4043.	WHEELS (I) LTD.	CHENNAI
4044.	WHEELS (I) LTD.	MADURAI
4045.	WHEELS (I) LTD.	SRIPERUMBUDUR
4046.	WHIRLPOOL OF (I) LTD.	PUNE
4047.	WHITECROSS HEALTH INITIATIVES PVT. LTD.	BANGALORE
4048.	WIDAS CONCEPTS (I) PVT. LTD.	BANGALORE
4049.	WIELAND METALS SINGAPORE PTE LTD.	SINGAPORE
4050.	WILLIAM HARE (I) PVT. LTD.	BANGALORE
4051.	WILLIAMS CONTROLS IND. LTD.	PUNE
4052.	WINCOR NIXDORF PTE. LTD.	CHOA CHU KANG
4053.	WINGIFY SOFTWARE PVT. LTD.	NEW DELHI

4054.	WINGS2I IT SOLUTIONS PVT. LTD.	BANGALORE
4055.	WIPRO GE HEALTHCARE PVT. LTD.	BANGALORE
4056.	WIPRO GE HEALTHCARE PVT. LTD.	PUNE
4057.	WIPRO GE HEALTHCARE PVT. LTD.	THANJAVUR
4058.	WIPRO INFOTECH	BANGALORE
4059.	WIPRO INFOTECH	COCHIN
4060.	WIPRO INFOTECH	DELHI
4061.	WIPRO INFOTECH	GURGAON
4062.	WIPRO INFOTECH	HYDERABAD
4063.	WIPRO INFOTECH	MUMBAI
4064.	WIPRO INFOTECH	MYSORE
4065.	WIPRO INFOTECH	PUNE
4066.	WIPRO INFOTECH	WARANGAL
4067.	WIPRO TECHNOLOGIES	BANGALORE
4068.	WIPRO TECHNOLOGIES	CHENNAI
4069.	WIPRO TECHNOLOGIES	CUDDALORE
4070.	WIPRO TECHNOLOGIES	DELHI
4071.	WIPRO TECHNOLOGIES	ERNAKULAM
4072.	WIPRO TECHNOLOGIES	HOSUR
4073.	WIPRO TECHNOLOGIES	HYDERABAD
4074.	WIPRO TECHNOLOGIES	KADAPA
4075.	WIPRO TECHNOLOGIES	KANCHIPURAM
4076.	WIPRO TECHNOLOGIES	KARAIKUDI
4077.	WIPRO TECHNOLOGIES	KOCHI
4078.	WIPRO TECHNOLOGIES	KOLKATA
4079.	WIPRO TECHNOLOGIES	KOLLAM
4080.	WIPRO TECHNOLOGIES	MADURAI
4081.	WIPRO TECHNOLOGIES	MUMBAI
4082.	WIPRO TECHNOLOGIES	MYSORE
4083.	WIPRO TECHNOLOGIES	NEW DELHI
4084.	WIPRO TECHNOLOGIES	PUNE
4085.	WIPRO TECHNOLOGIES	TIRUPPUR
4086.	WITTUR ELEVATOR COMPONENTS (I) PVT. LTD.	THIRUVALLUR
4087.	WITTYBEE TECHNOLOGIES LTD.	AHMEDABAD
4088.	WME CONSULTANTS	DUBAI
4089.	WMI KONECRANES (I) PVT. LTD.	PUNE
4090.	WNS GLOBAL SERVICES PVT. LTD.	THANE
4091.	WOCKHARDT HOSPITALS LTD.	HYDERABAD
4092.	WOCKHARDT HOSPITALS LTD.	MUMBAI
4093.	WOCKHARDT HOSPITALS LTD.	SANQUELIM
4094.	WOCKHARDT LTD.	AURANGABAD
4095.	WORLD BANK (IBRD)	CHENNAI
4096.	WORLEY PARSONS ENGINEERING CONSULTING CO	RATNAGIRI
4097.	WORLEY PARSONS OMAN ENG. LLC.	VISAKHA PATNAM
4098.	WORLEYPARSON ENGINEERING PVT. LTD.	ABU DHABI
4099.	WORLEYPARSONS OMAN ENGINEERING LLC	MUSCAT
4100.	WRIGLEY (I) PVT. LTD.	BANGALORE
4101.	WS ATKINS & PARTNERS OVERSEAS	ABU DHABI
4102.	WS ATKINS & PARTNERS OVERSEAS	KOLKATA
4103.	WS ATKINS(IND) PVT. LTD.	BANGALORE
4104.	WSP PARSONS BRINCKERHOFF	DUBAI
4105.	WSP PARSONS BRINCKERHOFF	HULIYAR
4106.	WSP PARSONS BRINCKERHOFF	MUSCAT
4107.	WWW.75F.IO	BANGALORE
4108.	WYSKI ENGINEERING & TECHNOLOGY PVT. LTD.	DARBHANGA
4109.	XCHANGING SOLUTIONS LTD.	BANGALORE
4110.	XENTO SYSTEMS	PUNE
4111.	XEROX BUSINESS SERVICES (I) PVT. LTD.	CHENNAI

4112.	XEROX BUSINESS SERVICES (I) PVT. LTD.	COIMBATORE
4113.	XEROX BUSINESS SERVICES (I) PVT. LTD.	NEW DELHI
4114.	XEROX BUSINESS SERVICES (I) PVT. LTD.	NOIDA
4115.	XEROX BUSINESS SERVICES (I) PVT. LTD.	TRIVANDRUM
4116.	XILINX (I) TECHNOLOGY SERVICES LTD.	HYDERABAD
4117.	XYLEM WATER SOLUTIONS (I) PVT. LIM	AHMEDABAD
4118.	YAHOO ! SOFTWARE DEVELOPMENT IND. P LTD.	BANGALORE
4119.	YAMAZAKI MAZAK (I) PVT. LTD.	BANGALORE
4120.	YAMAZAKI MAZAK (I) PVT. LTD.	DELHI
4121.	YAMAZAKI MAZAK (I) PVT. LTD.	PUNE
4122.	YARDI SOFTWARE (I) PVT. LTD.	VADODARA
4123.	YASH TECHNOLOGIES PVT. LTD.	HYDERABAD
4124.	YASHODA SUPER SPECIALITY HOSPITALS	GHAZIABAD
4125.	YASHODA SUPER SPECIALITY HOSPITALS	HYDERABAD
4126.	YASHODA SUPER SPECIALITY HOSPITALS	NEW DELHI
4127.	YAZAKI WIRING TECHNOLOGIES (I) PVT.LTD.	CHENNAI
4128.	YAZAKI WIRING TECHNOLOGIES (I) PVT.LTD.	KOTTAYAM
4129.	YAZAKI WIRING TECHNOLOGIES (I) PVT.LTD.	PUNE
4130.	YODLEE INFOTECH PVT. LTD.	NILESHWAR
4131.	YOKOGAWA IA TECHNOLOGIES (I) PVT. LTD.	BANGALORE
4132.	YUME (I) PVT. LTD.	PUNE
4133.	Z S ASSOCIATES	NEW DELHI
4134.	ZALONI TECHNOLOGIES (I) PVT. LTD.	GUWAHATI
4135.	ZALONI TECHNOLOGIES (I) PVT. LTD.	TEZPUR
4136.	ZAMIL COOLCARE- ZAMIL FIRE PROTECTION	CHENNAI
4137.	ZEAL ENCORE TECHNOLOGIES	BANGALORE
4138.	ZEBRA TECHNOLOGIES	BANGALORE
4139.	ZEN TECHNOLOGIES LTD.	HYDERABAD
4140.	ZENITH BIRLA (I) LTD.	REWA
4141.	ZENSAR TECHNOLOGIES	PUNE
4142.	ZENTECH (I) OFFSHORE & MARINE ENGG. PVT. LTD.	PUNE
4143.	ZEOMEGA INFOTECH PVT. LTD.	BANGALORE
4144.	ZF (I) PVT. LTD.	PUNE
4145.	ZF HERO CHASSIS SYSTEMS PVT. LTD.	CHENNAI
4146.	ZF LENKSYSTEME (I) PVT. LTD.	SATARA
4147.	ZF WIND POWER COIMBATORE PVT. LTD.	COIMBATORE
4148.	ZILLION INFO TECH SOLUTION PVT. LTD.	ABU DHABI
4149.	ZOHO CORPORATION PVT. LTD.	CALICUT
4150.	ZOHO CORPORATION PVT. LTD.	CHENNAI
4151.	ZOHO CORPORATION PVT. LTD.	KANCHIPURAM
4152.	ZOHO CORPORATION PVT. LTD.	NAMAKKAL
4153.	ZOHO CORPORATION PVT. LTD.	TRICHY
4154.	ZTT (I) PVT. LTD.	CHENNAI
4155.	ZUARI CEMENT LTD.	KADAPA
4156.	ZULAIQA HOSPITAL	DUBAI
4157.	ZUTI ENGINEERING SOLUTIONS	PUNE
4158.	ZYDUS HOSPITALS & RESEARCH PVT. LTD.	AHMEDABAD
4159.	ZYME SOLUTIONS PVT. LTD.	BANGALORE
4160.	ZYME SOLUTIONS PVT. LTD.	KANNUR

**LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED  
LEARNING PROGRAMMES IN THE YEAR 2016**

**B.S. (Engineering Technology)**

1. 3D MODELING SIMPLIFICATION IN MACHINING FEATURE CREATION
2. 99 (MW) SINGOLI BHATWARI HYDRO ELECTRIC PROJECT (PROJECT MANAGEMENT)
3. 99 (MW) SINGOLI BHATWARI HYDRO POWER PROJECT (PROJECT MANAGEMENT)
4. A METHODOLOGY FOR PROBABILISTIC SAFETY ASSESSMENT OF CONTROL AND PROTECTION SYSTEM FAILURES
5. A STUDY ON ANALYSIS OF MARKET POTENTIAL FOR THE POWER DISTRIBUTION PRODUCTS
6. A TECHNOMARKETING ANALYSIS FOR "MODULAR TYPE UPS SYSTEM"
7. ACHIEVE ZERO BREAKDOWN IN ENGINE OIL FILLING MACHINE
8. ADVANCED PROCESS CONTROL
9. ALTERNATE APPROACH FOR FUEL QUANTITY MEASUREMENT TECHNIQUES USED IN AIRCRAFTS OTHER THAN CAPACITANCE LEVEL PROBES
10. AN APPROACH FOR DEVELOPING SMARTCITIES IN INDIA - BROAD ARCHITECTURE AND TECHNOLOGY EVALUATION
11. AN INTRODUCTION TO THE HEAT DISSIPATION METHODS OF LED LIGHT SYSTEMS USED IN HEADLAMPS AND POSSIBILITIES OF USING HEAT PIPES AS AN ALTERNATIVE
12. ANALYSIS & REDUCTION OF IN-HOUSE REJECTION IN REVERSE IDLER GEAR G40 BY APPLYING DMAIC TECHNIQUE OF SIX SIGMA METHODOLOGY
13. APPLYING PROJECT MANAGEMENT PROCESS, TOOLS & TECHNIQUES IN A SAMPLE PROJECT
14. ASSEMBLY DISASSEMBLY FIXTURE FOR FRICTION PADS
15. ASSESSMENT OF PROJECT MANAGEMENT COMPETENCY
16. AUTO SPC MONITORING SYSTEM FOR PEEL FORCE TEST
17. AUTOMATED SCREW FEEDING DEVICE FOR SOLD STATE DRIVE
18. AUTOMATED TOOL FOR CALCULATING HEAT GENERATION AND HEAT SOAK
19. AUTOMATIC OVERFILL PREVENTION SYSTEM FOR PETROLEUM STORAGE TANKS
20. AUTOMATIC PALLET INDUCTING SYSTEM FOR LSP CONVEYORS
21. AUTOMATION AND ENERGY MANAGEMENT SYSTEMS
22. AUTOMATION OF FREE RUNNING TESTING KIT IN WIND TURBINE HUB TESTING AT PLANT AND PROCESS CONTROL
23. AUTOMATION OF GENERATION AND MODIFICATION OF GRID LINES/CAR LINES AT DRAFTING.
24. AUTOMIZATION IN GAS CUTTING PROCESS
25. AV INTEGRATION PROJECT
26. BENCHMARKING USING GRAPH FOR PRODUCT COST CONTROL
27. BILL OF MATERIAL ENRICHMENT & SPARE PARTS ANALYSIS FOR CRITICAL EQUIPMENT
28. BIOMETRIC SCANNER
29. CAPACITY IMPROVEMENT IN P15 ENGINE ASSEMBLY FROM 38000 TO 55000 ENGINES PER ANNUM THROUGH PROCESS IMPROVEMENT, AUTOMATION & LINE BALANCING
30. CARBOMATE CONDENSOR GRID BAFFLE MANUFACTURING
31. CENTRALIZED MAINTENANCE MANAGEMENT
32. CHANGE MANAGEMENT IMPLEMENTATION
33. CMP EBARA TOPRING AIRBAG PRESSURE LEAK DETECTION SYSTEM
34. COLD EYE REVEIEW PROJECT" ON UREA PLANT PROJECT OF MATIX FERTILISER"



35. COMMISSIONING OF EARTHING TRANSFORMER
36. CONDITION MONITORING USING VIBRATION ANALYSIS
37. CONSTRUCTION MANAGEMENT ON ERECTION AND COMMISSIONING OF BLAST FURNACE
38. CONSTRUCTION OF NEW LANDING CRAFT VESSEL
39. CONTACT INSERTION MACHINE
40. CONTROLLED LOW STRENGTH CEMENTITIOUS FILLER MATERIAL
41. CO-ORDINATED VARIABLE SPEED AC DRIVE CONTROL SYSTEM FOR WIRE DRAWING APPLICATION
42. COST EFFECTIVE AND ECONOMIC METHOD TO WELD RACK AND CHORD PLATES BY USING DUAL MOTORIZED GANTRY WITH DUAL SAW HEAD
43. COST EFFECTIVENESS OF USING A WASTEWATER TREATMENT SYSTEM
44. COST OPTIMIZATION FOR HEAVY EQUIPMENT USAGE DURING PLANNED TURNAROUNDS & SHUTDOWNS
45. CREATE MARKET STRATEGY FOR GLOBAL SENSOR G-SERIES & LAUNCH WITH POWERFUL PROMOTION OF IT USPS.
46. CRITICAL OUT OF SEQUENCE INSTALLATION OF KINETIC HYDRATE INHIBITOR PACKAGE ON HIGHER ELEVATION OF DECK PLATFORM
47. CUSTOMER DELIGHT - KEY TO GROWTH
48. CYCLE TIME & COST REDUCTION IN BASE LEVELING LOCK NUT WITH PROCESS IMPROVEMENTS
49. DATA CENTER VIRTUALIZATION
50. DEBOTTLENECKING FSM PRODUCTION CONSTRAINTS
51. DEFINE & SET WORKING MODEL FOR EXECUTION OF GLOBAL SEATING PROGRAMS FROM JCI PUNE
52. DESIGN & DEVELOPMENT OF MODERN ELECTRICAL / ELECTRONIC ARCHITECTURE FOR CARS
53. DESIGN & MANUFACTURE OF PIPE LIFT UNIT
54. DESIGN A MOVING BLADE FOR DUAL SWITCHING
55. DESIGN AND ANALYZE ENCLOSURE SYSTEM FOR COMMERCIAL TURF EQUIPMENT USING SIX SIGMA DFSS METHODOLOGY
56. DESIGN AND DEVELOPMENT OF SOLAR ZIG BEE BASED PESTICIDE ROBOT TO USE IN AGRICULTURE
57. DESIGN AND DEVELOPMENT OR TURNABLE SHELF FOR REFRIGERATORS
58. DESIGN AND ENGINEERING OF ALUMINIUM FLOURIDE FEEDER
59. DESIGN AND MANUFACTURING OF RUNNING TEST EQUIPMENT FOR GEAR BOX
60. DESIGN AND PROCESS IMPROVEMENT WITH HINGES
61. DESIGN DEVELOPMENT AND EXECUTION OF ROBOTIC ARC WELDING SYSTEM
62. DESIGN OF A DIAGNOSTIC TOOL FOR PROCESS OPTIMIZATION OF INDUSTRIAL GRINDING MACHINE
63. DESIGN OF CMOS LOW-DROPOUT (LDO) VOLTAGE REGULATOR
64. DESIGN OF DIESEL STORAGE AND PUMPING FACILITIES FOR ONSHORE PLANTS
65. DESIGN OF HYDRAULIC OPERATED BOLLARD SYSTEM BY USING BLADDER TYPE ACCUMULATOR
66. DESIGN OF INSTRUMENT AIR SYSTEM FOR ONSHORE PLANT
67. DESIGN OF ROGOWSKI COIL FOR LIGHTNING CURRENT MEASUREMENT SYSTEM
68. DESIGN OF ROTOR AND STATOR TO PROVIDE EFFECTIVE DUAL OUTPUT SWITCHING
69. DESIGN OF SHEAVE GUARD FOR WIRELINE LOWER SHEAVE WHEEL
70. DESIGN OF THERMAL PRINTER
71. DESIGN, ENGINEERING, PROCUREMENT, CONSTRUCTION OF FIRE SPRINKLER SYSTEM FOR SOUQWAQIF UNDER-GROUND CAR PARK AT DOHA, QATAR.
72. DESIGN, IMPLEMENTATION & VALIDATION OF ENGINE FEAD(FRONT ENDACCESSORIES DRIVE SYSTEM) WITH AUTOTENSIONER
73. DESIGNING OF DISCHARGE CHUTE LINING TO MINIMIZE THE MAINTENANCE COST OF CRUSHING PLANT.

74. DETECTION AND CONTROL OF NON-MOVING INVENTORIES IN 2WHEELER MANUFACTURING
75. DEVELOPMENT FORMATION RATIO FROM 60% TO 90% OF TWIN TUBE & MONO SHOX.
76. DEVELOPMENT OF 167HP HEAVY DUTY DIESEL ENGINE FOR EURO V NORMS WITH SCR TECHNOLOGY
77. DEVELOPMENT OF 400HZ SOLID STATE FREQUENCY CONVERTER
78. DEVELOPMENT OF CONSTRUCTION PROCESS IN 400 KV DOUBLE CIRCUIT QUADRAUPLE TRANSMISSION LINE
79. DEVELOPMENT OF FLUSH TANK LEVER
80. DEVELOPMENT OF PLASTIC 2" FAUCET WITH NPT MOUNTING THREAD
81. DEVELOPMENT OF STEEL BELTED RADIAL TIRE FOR PASSENGER CAR
82. DIGITAL OILFIELDS ELECTRONIC MONITORING OF WELLS
83. DOOR MODULE - LATCH CABLE AND COVER PRESSING MACHINE
84. DRY CYCLE TIME REDUCTION IN TBR CURING PRESS
85. DUAL FAN PROCESS SPEED CONTROL SYSTEM
86. DUBAI REPAIR CENTER TEMPERATURE REPAIR CAPABILITY EXPANSION PROJECT
87. DYNAMIC PLANNING FOR EXTENSION OF TIME IN CONSTRUCTION PROJECTS
88. EFFECTIVE MAINTENANCE OF HYDROCARBON DETECTOR
89. EFFECTIVE MONITORING, CONTROL & REDUCTION OF COST BY STRATEGIC PROCUREMENT & LOGISTICS MANAGEMENT IN CONSTRUCTION INDUSTRY
90. EFFECTIVE TECHNIQS - POWER PLANT CONSTRUCTION
91. EFFICIENCY IMPROVEMENT FOR PICKING MATERIAL TO MAKE MACHINES AT BIESSE
92. ELECTRICAL COMPONENTS MANUFACTURER RATIONALIZATION AND MAINTENANCE
93. ELIMINATING ENDPOINT FAILURES ON LAM MCX TOOLS PROCESS LEVELS DURING LATE RF HOURS
94. ELIMINATION OF MATERIAL DEPOSIT ON COLLAR DEFECT IN HEX COLLAR BOLT
95. ELIMINATION OF UNDESIRABLE TRIPPING OF VRM CIRCUIT
96. ELIMINATIONS OF THE DEFECT IN ZINC DIE CASTING
97. EMERGENCY GAS SUPPLY TO EMAL
98. ENERGY AND EMISSION REDUCTION STUDY AT ZAKUM OIL FIELD.
99. ENERGY AUDIT AND PERFORMANCE OPTIMIZATION OF COMBINED CYCLE POWER PLANT
100. ENERGY AUDITING OF MANUFACTURING UNIT INCLUDING ALL UTILITIES AT CERENAUTL NISSAN AUTOMOTIVE INDIA PVT LTD.
101. ENERGY CONSERVATION IN ROLLING MILL BY BILLET HOT CHARGING
102. ENERGY EFFICIENT UV DISINFECTION SYSTEM
103. ENERGY MANAGEMENT AND SOLAR NET METERING SYSTEM A CASE STUDY FOR IMPLEMENTATION
104. ENERGY MANAGEMENT IN CONSTRUCTION SITE
105. ENERGY OPTIMIZATION IN HVAC PLANT ROOMS
106. ENGINEERING STUDY FOR THE REPLACEMENT OF OIL SKIMMER IN DISPOSAL TANKS (FOR PRODUCED WATER)
107. ENHANCE LPG RECOVERY FROM DEBUTANIZER COLUMN OVERHEAD OFF-GAS STREAM, IN DEBUTANIZER VENT CONDENSER IN PLATFORMING UNIT.
108. ENHANCE PRODUCTIVITY OF STEEL MELT SHOP THROUGH LIVE INTEGRATED MAINTENANCE
109. ENHANCED HEAT RECOVERY IN HRSG BY MEANS OF CONDENSATE PREHEAT SYSTEM
110. ENHANCEMENT OF 3D MODELING TECHNIQUES, DRAFTING AND DELIVERY PROCESS USING TEKLA V20.1
111. ENHANCEMENT OF FLEXIBILITY IN SUPPLY OF CUTTING TOOLS FOR ENGINE HEAD MACHINING
112. EQUIPMENT RELIABILITY IMPROVEMENT IN REDUCTION PLANT
113. ETHANE RECOVERY MAXIMIZATION OF NGL RECOVERY UNIT.

114. EVM PRODUCTION TEST BENCH FOR POWER MANAGEMENT CHIPS USING NI VIRTUAL BENCH
115. EXPERIMENTAL STUDY ON IMPACT ANALYSIS AND TECHNICAL WRITING OF MAINTENANCE MANUALS USED FOR COMMERCIAL AIRCRAFT
116. FABRICATION OF ICE CRUSHING WITH CONVEYOR FEEDING SYSTEM
117. FACILITY DEVELOPMENT FOR PRESSURE TESTING OF ROCKET MOTOR CASING ASSEMBLY.
118. FAILURE ANALYSIS OF ELECTRICAL HEATER IN ETHYLENE RECOVERY UNIT
119. FAILURE ANALYSIS OF HIGH PRESSURE CONDENSER OF GAS CONCENTRATION SECTION IN FLUIDIZED CATALYTIC CRACKER UNIT
120. FAILURE ANALYSIS OF INTERPASS TOWER SPARGER IN SPENT ACID REGENERATION UNIT
121. FAILURE ANALYSIS OF ISO BUTENE PUMP MECHANICAL SEALS IN C4 PREPARATION UNIT
122. FAILURE ANALYSIS OF PROTECTION RELAYS IN ELECTRICAL PROTECTION SYSTEM
123. FEASIBILITY STUDY & ADAPTATION OF INSITE ASSET MANAGEMENT SYSTEM ON VERMEER EQUIPMENT FOR MIDDLE EAST CONDITIONS
124. FEASIBILITY STUDY & UP GRADATION DESIGN OF PROTECTION RELAYS IN 11KV DISTRIBUTION SUBSTATION
125. FEASIBILITY STUDY ON ENERGY RECOVERY IN FRESH AIR HANDLING UNITS
126. FIFO IN EXPIRY PARTS
127. FIRE ALARM & PAVA SYSTEM UPGRADE FOR DEIRA CITY CENTRE SHOPPING MALL
128. FIRE PROTECTION AND LIFE SAFETY SYSTEM FOR WAREHOUSES
129. FIXTURE DESIGN, MACHINING PROCESS & CNC PART PROGRAM FOR BRUSHLESS HOUSING
130. FLARE MINIMIZATION PROJECT
131. FLOW MEASUREMENT SYSTEM UPGRADE IN CUSTODY TRANSFER/ROYALTY.
132. FLUE GAS DESULPHURIZATION
133. FLUX CORED ARC WELDING PROCESS
134. FUELING CONTROL SYSTEM (PLC & HMI)
135. FUNCTION MODE EFFECTIVE CONSEQUENCE CRITICALITY ANALYSIS ON THE JACK UP RIG SAIPEM PERRO NEGRO 8 (CLIENT TOTAL)
136. GAS INSULATED SUBSTATION- EFFECTIVE PROJECT MANAGEMENT
137. GREEN AND COST SAVING HOTEL LOAD TECHNOLOGY FOR INDIAN RAILWAYS
138. GREEN TECHNOLOGY IN THE FIELD OF WASTE WATER TREATMENT
139. HEAT RECOVERY IN FEED-BOTTOM EXCHANGER FOR HP STEAM OPTIMIZATION IN CLAY TREATER FEED HEATER
140. HIGH ACCURACY SOLAR TRACKING SYSTEMS WITH LINEAR ACTUATORS
141. HIGH EFFICIENCY HVAC SYSTEM FOR MARINE VESSELS
142. HOSPITAL DESIGN - ELECTRICAL INTERFACE FOR MEDICAL EQUIPMENT
143. IDENTIFY PROCESS IMPROVEMENT AREAS TO MINIMIZE REJECTION OF JOB NOT READY FOR INSPECTION (RFI) REQUESTS
144. IMPACT OF CLOUD ON APPLICATION ARCHITECTURE VIEW FROM SOFTWARE VENDORS TO ASSESS DEVELOPMENT CHALLENGES
145. IMPROVE PRODUCTIVITY IN HYUNDAI TRANSMISSION MACHINING CELL
146. IMPROVE THE PRODUCTIVITY IN TRANSMISSION LINE PROJECTS WITH MICRO PLANNING
147. IMPROVEMENT IN GRINDING EFFICIENCY BY USE OF GRINDING AID
148. IMPROVEMENT OF QUALITY AND RELIABILITY OF SENTRONIC VALVE USED IN RUBBER PROCESSING
149. IMPROVEMENT OF STATION HEAT RATE FOR COASTAL GUJARAT POWER LIMITED (CGPL)-MUNDRA
150. IMPROVING (MEP) MECHANICAL, ELECTRICAL AND PLUMPING DESIGN BY APPLYING VALUE ENGINEERING USING (CAD) COMPUTER AIDED DESIGN.
151. IMPROVING EFFICIENCY OF SUPPLYCHAIN THROUGH LOGISTICS
152. IMPROVING OEE(OVERALL EQUIPMENT EFFICIENCY) IN PACKING MACHINES AND REDRESSAL OF

- EMPLOYEES GRIEVANCES THROUGH OEE
153. IMPROVING OVERALL TWO WHEELER VOLUME AND MARKET SHARE
  154. IMPROVING THE SERVICE LIFE OF THE TANDEM GEAR PUMP IN A TRACTOR
  155. IMPROVING WELDING PRODUCTIVITY AND AVOIDING DEFECTS IN WELDING
  156. INCREASE SALE OF HIGHER SIZE SKUS (14.9X28 AND 16.8X29 SIZE TIRES)
  157. INCREASING THE LIFE SPAN OF HIGH VOLTAGE ELECTRICAL SUBMERSIBLE PUMPS (HV ESP)
  158. INDUSTRIAL SAFETY SYSTEMS FOR WORKING AT HEIGHT
  159. INNOVATION IN TRANSMISSION ASSY LINE TO IMPROVE QUALITY AND PRODUCTIVITY
  160. INNOVATIVE TECHNIQUES OF PROGRAMMING AND HMI DEVELOPMENT IN INDUSTRIAL AIR COMPRESSORS.
  161. INSTALLATION OF 66/11KV SUBSTATION
  162. INSTALLATION OF PIG RECEIVER AND LAUNCHER AT RUMAITHA OIL FACILITIES
  163. INSTALLING SOLAR POWER AND LED LIGHTINGS
  164. INTEGRATION OF ELECTRICAL SYSTEM FOR FUJAIRAH WATER SUPPLY NETWORK IN TRANSCO
  165. INVENTORY MANAGEMENT AND OPTIMUM MODE OF PARTS SUPPLY FOR A LEAN MANUFACTURING ASSEMBLY CELL
  166. INVENTORY REDUCTION
  167. ISOLATED HYBRID POWER SYSTEM
  168. JIT IMPLEMENTATION - LEAD TIME REDUCTION THROUGH VSM & TOC
  169. JUST IN TIME MANUFACTURING- A CASE STUDY FOR IMPLEMENTATION
  170. KANBAN IMPLEMENTATION
  171. LABOUR PRODUCTIVITY ANALYSIS AND IMPROVEMENT FOR FORMWORK IN SUBSTATION CONSTRUCTION
  172. LCV SHOWER TEST STRAIGHT PASS IMPROVEMENT
  173. LEAD TIME IMPROVEMENT IN NEW PRODUCT REQUEST FOR QUOTE (RFQ) TECHNICAL RESPONSE IN HOUSING COMPRESSOR
  174. LEAD TIME REDUCTION
  175. LEVELLED PRODUCTION IMPLEMENTATION IN CTC CELL
  176. LINE CURRENT DIFFERENTIAL PROTECTION USING TEH ALSTOM
  177. LINK BRIDGE-DUBAI METRO TO BLVD
  178. LOCALISATION OF AXLE SHAFT FOR OFF HIGHWAY TRUCKS
  179. LOGISTICS, STUDY OF MATERIAL HANDLING AND PRESERVATION FOR NASR FULL FIELD DEVELOPMENT PROJECT
  180. MACHINABILITY AND SURFACE PROPERTIES OPTIMIZATION OF GFRP COMPOSITE MATERIAL BY USING CNC TURNING PROCESS
  181. MAINTENANCE & SAFETY: IMPLEMENTATION OF SAFE MAINTENANCE MANAGEMENT POSITIVE ISOLATION (LOTOV)
  182. MAINTENANCE AND SAFETY IN UPSTREAM OIL AND GAS INDUSTRIES.
  183. MAINTENANCE SPARE PART MANAGEMENT
  184. MANAGING HEALTH AND SAFETY IN CONSTRUCTION
  185. MARKETING AGENCY PRODUCTS & SERVICES
  186. MATERIALS MANAGEMENT
  187. MAXIMIZE PROFITS BY OPTIMIZING NAPHTHA SPLITTER OPERATION.
  188. MECHANICAL ENGINEER
  189. MINIMISATION OF PROCUREMENT CYCLE TIME
  190. MODERNIZATION OF BOF SECONDARY DEDUSTING SYSTEM
  191. MODIFICATION OF CONTROL LOGIC TO AVOID MACHINE TRIP

192. MODIFICATION OF SEALING AIR SYSTEM CONTROL IN HEAT RECOVERY STEAM GENERATOR
193. MPPT WITH SINGLE DC-DC CONVERTER AND INVERTER FOR GRID CONNECTED HYBRID WIND DRIVEN PMSG-PV SYSTEM
194. NATURAL GAS PROCESSING SURVEY AND REPORT PREPARATION
195. NEW DEVELOPMENT OF TWO WHEELER SEAT FOAM INSTEAD OF EXISTING SYSTEM POLYOL
196. NEW LOW SPEED WIND TURBINE DESIGN AND PRODUCT DEVELOPMENT PROCESS TO SUIT INDIAN MARKET
197. NEW PRODUCT DEVELOPMENT
198. NEW PRODUCT INTRODUCTION OF API MANUAL SLAB GATE VALVE
199. CLEAN EXPERIMENTAL INVESTIGATION AND BEAD GEOMETRY ANALYSIS OF SAE 387 GRADE 12 - FCAW PROCESS
200. OFFLINE DIE SETTING TIME REDUCTION
201. OILY WATER TREATMENT PACKAGE
202. ONLINE CHANGEOVER OF CONTROL SYSTEMS FROM EXISTING LCR TO NEW LCR
203. ONLINE PORTAL FOR PROCUREMENT OF MISC ITEMS
204. OPTIMAL SYNTHESIS AND OPERATION OF ENERGY NETWORKS
205. OPTIMIZATION OF CLAMPING PRESSURE FOR HYDROTESTER USING PROPORTIONAL PRESSURE CONTROL VALVE
206. OPTIMIZATION OF COMPRESS AIR USES FOR SAVING ENERGY
207. OPTIMIZATION OF PLATE FIN HEAT EXCHANGER FOR BETTER PERFORMANCE USING ANSYS
208. OPTIMIZATION OF PROGRAM LOGIC & HMI DEVELOPMENT TECHNIQUES USING DISTRIBUTED CONTROL SYSTEM
209. OPTIMIZED APPLICATION ENGINEERING FOR INDUSTRIAL CONTROL SYSTEM
210. OPTIMUM UTILIZATION OF WASHING MACHINES
211. ORIFACE FLOW CALCULATION
212. OUTLET FLANGE PRESS TOOL DESIGN FOR SILENCER
213. OVERALL BREAKDOWN REDUCTION IN PRESSURE DIE CASTING MACHINES
214. PACKING IMPROVEMENTS IN AL LHD (EXPORT) & CUSHION DRIVER SEAT
215. PANELS DEVELOPMENT FOR SAUDI ELECTRICITY COMPANY, RIYADH, SAUDI ARABIA
216. PARTIAL STROKE TESTING
217. PAS FOR API BATCH PROCESS
218. PASSENGER CAR SEAT COMFORT
219. PERFORMANCE ENHANCEMENT STUDY OF AL-ZOUD
220. PERFORMANCE IMPROVEMENT IN ASH HANDLING SYSTEM
221. PLANNING REMOVAL REPLACEMENT AND TESTING OF GAS TURBINE ENGINES
222. PLC & MCC CONTROL PANEL
223. POWER GENERATORS REMOTE MONITORING
224. POWER MEASUREMENT SYSTEM USING MICRO CONTROLLER
225. PREDICTION AND VALIDATION OF THE POWER CONSUMPTION FOR CENTRIFUGAL PUMP
226. PRESSURE DROP ANALYSIS IN PLATE HEAT EXCHANGERS
227. PROCESS FLOW OPTIMIZATION & COST SAVING PROJECT AT BACK END ASSEMBLY OF EMS INDUSTRY
228. PROCESS OPTIMIZATION FOR HEADLAMP AIMING TEST RIGS
229. PROCESS OPTIMIZATION FOR MACHINING OPERATION OF CALIPER PISTON TO ACHIEVE COST REDUCTION BY PRODUCTIVITY IMPROVEMENT
230. PRODUCTION LINE FEEDING THROUGH JUST IN TIME SEQUENCE FOR COCKPITS- INVENTORY REDUCTION.
231. PRODUCTION OF VERTICAL CASTING REINFORCED CONCRETE PIPES

232. PRODUCTIVITY IMPROVEMENT IN FORD TRANSMISSION CELL
233. PRODUCTIVITY IMPROVEMENT IN VISTEON BA CYLINDER FRONT MACHINING CELL
234. PRODUCTIVITY IMPROVEMENT OF METALIZER SECTION
235. PROJECT DELAY ANALYSIS BY WINDOW ANALYSIS METHOD
236. PROJECT EXECUTION- CONCEPT TO COMMISSIONING
237. PROJECT MANAGEMENT- 5X270MW THERMAL POWER PLANT AT AMRAVATI
238. PROJECT MANAGEMENT AT 220 KV & 132 KV TRANSMISSION LINE PROJECT (PKG - J) , KHARAGPUR TL IN WEST BENGAL
239. PROJECT MANAGEMENT FOR COAL HANDLING PLANT WITH SILO LOADING ARRANGEMENT AT LINGARAJ OCP
240. PROJECT MANAGEMENT FOR CONSTRUCTION OF TWO NUMBERS OF 40 METER DIAMETER POSTTENSIONED SILO FOR ORPIC AT SOHAR, OMAN
241. PROJECT MANAGEMENT FOR MECHANICAL WORKS AT DELHI METRO UNDERGROUND STATIONS
242. PROJECT MANAGEMENT IN CONSTRUCTION OF COAL HANDLING PLANT PACKAGE A
243. PROJECT MANAGEMENT IN ENGINEERING, PROCUREMENT, CONSTRUCTION, TESTING, COMMISSIONING & PG TEST OF BULK MATERIAL HANDLING SYSTEM (COAL HANDLING PLANT) OF 2X500 MW THERMAL POWER PLANT.
244. PROJECT MANAGEMENT IN ENGINEERING, PROCUREMENT, CONSTRUCTION, TESTING, COMMISSIONING & PERFORMANCE GUARANTEE TEST OF BULK MATERIAL HANDLING SYSTEM (COAL HANDLING PLANT) OF A 2X500 MW THERMAL POWER PLANT
245. PROJECT MANAGEMENT IN EOR PROJECTS
246. PROJECT MANAGEMENT IN MPT MODIFICATION PROJECT (EOR) AT RAJASTHAN
247. PROJECT MANAGEMENT IN PROVIDING, LAYING, JOINTING, TESTING & COMMISSIONING OF RAW WATER PIPELINE
248. PROJECT MANAGEMENT OF AUTOMOTIVE BENCHMARKING
249. PROJECT MANAGEMENT OF ELECTRICAL & INSTRUMENTATION WORKS FOR 3.3 MTPA BLAST FURNACE PLANT, TATA STEEL LTD, AT KALINGANAGAR, ODISHA
250. PROJECT MANAGEMENT OF ERECTION AND COMMISSIONING OF SINTER PLANT
251. PROJECT MANAGEMENT ON 33/11KV NETWORK UP GRADATION THROUGH UG CABLING & OH LINE
252. PROJECT MANAGEMENT ON COKE OVEN CONSTRUCTION
253. PROJECT MANAGEMENT ON ELECTRICAL POWER DISTRIBUTION
254. PROJECT QUALITY ASSURANCE PLAN
255. PROVIDE SOLUTION FOR ATTACHMENT FAILURE IN AUTOMOTIVE SEAT SIDE SHIELD USING LEAN PRACTICES AND STANDARDIZE THE RESULTS
256. PUMPING STATION AND RESERVOIR AUTOMATION
257. QUALITY IMPROVEMENT OF PARTS DEVELOPED BY GLOBAL HONEYWELL CORPORATE LIBRARY
258. QUALITY MANAGEMENT ON RURAL ELECTRIFICATION PROJECTS
259. QUICK CHANGE FIXTURE
260. QUOTE MANAGEMENT: QUOTE LEAD TIME REDUCTION THROUGH PROCESS ALIGNMENT
261. RATIONALIZATION OF INCORRECT PART TYPE CATEGORIES AND ITS MAINTENANCE
262. REACTIVE POWER COMPENSATION
263. REAL TIME PRODUCTION DATA AQUISITION
264. REDESIGN OF FIRE PROTECTION SYSTEM FOR ADDRESS HOTEL DUBAI
265. REDUCE ENERGY CONSUMPTION IN AROMATIC COMPLEX
266. REDUCE LINE STOPPER IN TUBE BACKREST ASSY - ROYAL ENFIELD
267. REDUCE REJECTION IN GRAVITY DIE CASTING PROCESS - SANG YANG CASTING
268. REDUCE REJECTION IN POWDER COATING PROCESS
269. REDUCE THE IMPACT OF AIR POLLUTION FROM GENSETS BY INTRODUCTION OF AFTER-TREATMENT

## TECHNOLOGIES

270. REDUCTION IN CYCLE TIME OF PROVIDING DOMESTIC PNG CONNECTION TO CUSTOMERS
271. REDUCTION IN PERCENTAGE OF ERRORS AND IMPROVING THE HMI GRAPHICS DELIVERY QUALITY USING SIX SIGMA TOOLS
272. REDUCTION IN TREATMENT COST OF EMS
273. REDUCTION OF CYCLE TIME FOR LIFT AXLE MODEL PRODUCTION AT PANTNAGAR
274. REDUCTION OF FAN HUB FAILURES IN OFF HIGHWAY TRUCKS
275. REDUCTION OF OIL CONTENT IN PRODUCED WATER
276. REDUCTION OF ROOF DUCT IN BODY SHOP
277. REENGINEERING SCHIESS SHELL ROLLING MACHINE FROM CONVENTIONAL TO AUTOMATED MACHINE
278. REJECTION REDUCTION IN CALIPER CARRIER ASSEMBLY LINE
279. RELIABILITY IMPROVEMENT OF REMOTE PLASMA CLEAN ISOLATION VALVE SENSOR
280. RELIABILITY IMPROVEMENT OF STABILIZER BOTTOM PUMP MECHANICAL SEAL
281. REPORT ON TECNO-ECONOMIC ANALYSIS (REPLACEMENT OF CRITICAL PIPING SYSTEM) DAS ISLAND
282. RETROFITTING OF PLC & HMI FROM SIEMENS MAKE S5 PLC TO S7 & BOSCH MAKE HMI TO SIEMENS MAKE HMI
283. RETROFITTING/UPGRADATION OF OLD LOW VOLTAGE AIR CIRCUIT BREAKERS WITH NEW ELECTRICALLY OPERATED LOW VOLTAGE AIR CIRCUIT BREAKERS AT DHDS (UPGRADATION PROJECT)
284. RF SWITCH MATRIX FOR MODULAR ATEs
285. ROLE OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT IN BOILER CONSTRUCTION
286. ROOT CAUSE ANALYSIS OF WIFI COMMUNICATION LOSS IN ANODE BAKING FURNACE
287. ROOT CAUSE ANALYSIS TO RESOLVE OIL THICKENING ISSUE IN 6-CYLINDER HEAVY DUTY DIESEL ENGINE BY OPTIMIZING ENGINE COMBUSTION
288. RUGGEDIZATION OF THE COMMERCIAL AIR CONDITIONER TO MILITARY COMMUNICATION SHELTER APPLICATION
289. SAFE DESIGN FOR OPERATION & MAINTENANCE OF MINERAL PROCESSING AND BULK MATERIAL HANDLING EQUIPMENTS AN ANALYSIS OF STANDARDS & REQUIREMENTS VS ACTUAL DESIGN.
290. SAFETY SYSTEMS FOR OFFSHORE PLATFORMS (PROCESS CONTROL SYSTEMS, EMERGENCY SHUTDOWN SYSTEMS,& FIRE AND GAS SYSTEM)
291. SAVING OF WASTAGE OF URETHANE DURING GLASS GLAZING OPERATION
292. SCMS (SUBSTATION CONTROL AND MONITORING SYSTEM)
293. SCRAP REDUCTION IN RUBBER PROCESSING THROUGH GEOMETRICAL ALIGNMENT
294. SELECTING AN APPROPRIATE ELEVATOR SUITABLE FOR A NEW PROJECT BASED ON ITS CIVIL STRUCTURE, POPULATION AND TRAFFIC
295. SELECTION & DESIGN OF VAPORIZER IN LIQUEFIED NATURAL GAS (LNG) REGASIFICATION FACILITY
296. SELECTION OF SUITABLE SWITCHGEAR FOR DIESEL GENERATOR SET WITH STARTER FOR MOTORS WITH SUITABLE ELECTRICAL PROTECTION
297. SIMULATION OF ELECTRICAL POWER SYSTEM FAULTS: USING MATLAB AND NUMERICAL RELAY
298. SOLAR PUMP CONTROLLER
299. SPRING SUPPORT CAST BRACKET STRUCTURAL DESIGN & PACKAGING
300. STANDARDIZATION AND VALIDATION OF CAD MODELS OF PASSIVE ELECTRONIC COMPONENTS (RESISTORS AND CAPACITORS) IN CADENCE GLOBAL LIBRARY
301. STATION AUXILIARY POWER REDUCTION
302. STEAM CONDENSATE RECOVERY SYSTEM
303. STOCKPILE MODELLING AND QUALITY CALCULATION TO REDUCE STANDARD DEVIATION FROM 0.458 TO 0.400 IN DISPATCHED IRON ORE FINES ALUMINA%.
304. STRUCTURAL DESIGN FOR OFFSHORE PLATFORM - MECHANICAL TECHNOLOGY
305. STUDY AND IMPLEMENTATION OF QMS TO FABRICATION INDUSTRIES

306. STUDY OF MATERIAL HANDLING SAFETY IN EMIRATES SKY CARGO OPERATIONS
307. STUDY ON LOGISTICS OF HEAVY MACHINERIES BETWEEN GULF COUNTRIES
308. STUDY ON MULTI STAGE DESALINATION AND ANALYSIS OF ITS PERFORMANCE
309. SUB STATION INSTALLATION, TESTING ,COMMISSIONING
310. SUBSTATION AUTOMATION SYSTEM
311. SUPPLY CHAIN MANAGEMENT
312. SUPPLY CHAIN MANAGEMENT CARRIED AT NCL JOBS
313. SUPPLY CHAIN PERFORMANCE IMPROVEMENT IN EPC PROJECTS
314. SUPPLY OF WIRELESS TRANSCEIVER SYSTEM FOR BERTH SIGNALS
315. SUSTAINABILITY IMPROVEMENT OF CASTER HYDRAULIC PUMP OPERATION
316. TANK LEVEL CONTROLLING AND TEMPERATURE MONITORING SYSTEM WITH PROGRAMMABLE LOGIC CONTROL (PLC)
317. TAXONOMY OF ELECTRICAL AND ELECTRONIC COMPONENTS IN GLOBAL COMPONENT DATABASE
318. TECHNICAL EVALUATION OF STP TECHNOLOGIES
319. TECHNIQUES OF ACCIDENT INVESTIGATION TO UNDERSTAND ACCIDENT CAUSES (CONSTRUCTION)
320. TEST SETUP FOR ENGINE OIL SUMP IMPACT TESTING
321. TESTING OF PIPELINES BY JOINT TEST METHOD FOR LARGER DIAMETER PIPES
322. THEORETICAL STUDY ON ALTERNATIVE REFRIGERANTS
323. THERMAL POWER PLANT CONSTRUCTION
324. THERMOELECTRIC WATER COOLING SYSTEM FOR MVAC VFD PANEL
325. TIME REDUCTION FOR FITTINGS DESIGN
326. TO IMPROVE THROUGHPUT TIME FOR HELICAL BAFFLES IN MACHINE SHOP IN PLANT 15 , PROCESS EQUIPMENT DIVISION
327. TO REDUCE BRAZING FIXTURE CHANGE OVER TIME IN BRAZING OPERATION
328. TO REDUCE DEFECTS PER VEHICLE IN TRACTOR
329. TO REDUCE THE INSPECTION TIME OF FABRICATED STEEL COMPONENTS AND TESTING OF STEEL FOR PHYSICAL PROPERTIES IN MANUFACTURING OF TRANSMISSION LINE TOWER
330. TO REINSTATE THE CAPACITY OF 2V CYLINDER HEAD MACHINING IN OLD LINE FROM CURRENT REDUCED LEVEL OF 40HEAD/SHIFT TO 70 HEAD/SHIFT WHILE MAINTAINING QUALITY AND SAFETY.
331. TO RUN DIESEL ENGINE WITH ALTERNATE FUEL (CNG)
332. TO STUDY THE EFFECTIVE SNAP JOINT DESIGN OF ABS CLIP-ON PLATE WITH PA6-G30 BASE PLATE FOR NPD IN WIRING & ACCESSORIES
333. TORQUE TEST FIXTURE FOR ADAPTER HEAD
334. TQM IN SERVICE SECTOR - IMPLEMENTATION @ JCB INDIA DEALER NETWORK
335. TRUCK SEAT BENCH MARKING AND VAVE
336. TURN KEY PROJECT IN SABIC FOR METAL DETECTOR & CHECKWEIGHER
337. TWO WHEELER HELMET BUILD IN SEATING
338. USE OF INFORMATION TECHNOLOGY IN SUPPLY CHAIN MANAGEMENT AND LOGISTICS
339. VIRTUALIZATION & INDUSTRIAL DATA CENTRE
340. VSD INSTALLATION FOR 3.3KV MOTOR
341. WEB BREAK ELIMINATION OF WEB OFFSET PRINTING MACHINES
342. WELDING PROCEDURE SPECIFICATION (WPS) FOR CORROSION RESISTANCE WELDING (INCONEL 625)
343. WIRELESS TECHNOLOGY FOR INSTRUMENTATION AND CONTROL

### **B.S. (Information Systems)**

344. BUILDING A IAAS PRIVATE CLOUD
345. BUILDING A PRIVATE CLOUD INFRASTRUCTURE WITH MANAGMENT AND ORCHESTRATION TOOLS



346. CENTRALIZED INTERFACE FOR END POINTS
347. DATA VISIBILITY, CONTROL AND DATA LOSS PREVENTION
348. DEVELOPING A COMMON MODEL THAT CAN BE USED FOR THE HMI DEVELOPERS AND BUSINESS LOGIC DEVELOPERS IN IN-VEHICLE INFOTAINMENT SYSTEM
349. DEVELOPMENT OF PCB PLANNER
350. DICOM CONNECTIVITY STACK
351. ERP IMPLEMENTATION & OPERATIONAL SUPPORT AT SITE
352. FILE SHARE REPORT GENERATION AND SECURITY GROUP MEMBERSHIP'S EXTRACTION
353. GENERIC GAMIFICATION FRAMEWORK FOR BUSINESS PROCESS MANAGEMENT PLATFORMS
354. IMPLEMENTATION OF DEVOPS METHODOLOGY THROUGH PUPPET
355. IMPLEMENTATION OF SECURED WIRELESS ACCESS WITH PROVISION OF SAME IP ADDRESS IN DIFFERENT VLAN'S
356. IMPROVEMENT OF REQUIREMENTS MANAGEMENT IN BOARD LAYOUT DESIGN
357. MOTION OBJECT TRACKING USING IMPROVED FUZZY C MEANS SEGMENTATION AND CROWD ACTIVITY DETECTION USING MULTI MODEL SYSTEM
358. MTL AND CSL LIBRARY
359. NETWORK DEVICES LOGS ANALYZER AND AUDIT TOOL
360. NETWORK MONITORING AND PERFORMANCE TROUBLESHOOTING SOLUTION
361. OPENSTACK PRIVATE CLOUD COMPUTING
362. PERFORMANCE BASED ROUTING FOR WAN NETWORK USING SDN
363. PUBLIC CLOUD ENVIRONMENT - INFRASTRUCTURE AND NETWORK SECURITY IMPLEMENTATION
364. REPLICATION MONITORING TOOL
365. RIP ATLAS BASED REAL-TIME INTERNET PERFORMANCE MONITORING
366. SECURED ONE OFFICE VOICE SOLUTION
367. SENIOR SYSTEMS ENGINEER
368. SIMPLIFIED APPROACH FOR HARDWARE REFRESH
369. SOFTWARE DEFINED DATA CENTER
370. SOFTWARE MANAGER
371. SOLIDEDGE CONNECTOR FOR ARAS
372. STUDY AMAZON WEB SERVICES CLOUD OFFERINGS
373. SYSTEM PERFORMANCE ANALYZER TOOL
374. THE VENDING MACHINE TOUCH SCREEN UI INTERFACE
375. TO ENABLE SAP BUSINESS TRANSACTION THROUGH MOBILE DEVICES
376. VIRTUALIZED ENVIRONMENT
377. VMWARE IMPLEMENTATION
378. VOIP INTEGRATION WITH E-SERVICES IMPLEMENTATIONS
379. WAKEUP MANAGEMENT IN A TRACKING SYSTEM ON CHIP FROM HARDWARE TO SOFTWARE
380. WIRELESS LAN CONTROLLER (LINK & ROUTING)
381. WIRELESS LAN IMPLEMENTATION IN FACTORY SITE

**LIST OF DISSERTATION SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED  
LEARNING PROGRAMMES IN THE YEAR 2016**

**M.S. (CONSULTANCY MANAGEMENT)**

1. DESIGN & TECHNOLOGY UPGRADATION IN CLUTCHES
2. SCALING-UP A CONSULTANCY PRACTICE

**M.S. (MANUFACTURING MANAGEMENT)**

3. COMPUTERIZATION OF THE RADIOLOGY IN AL ZABEEL HOSPITAL DUBAI
4. ELIMINATION OF CAPACITY CONSTRAINTS IN CRANKSHAFT LINE THROUGH PROCESS IMPROVEMENTS
5. IMPROVE MANUFACTURING FIRST PASS YIELD ON MACHINED COMPONENTS OF FLOW CONTROL VALVES
6. IMPROVEMENT ON TECHNICAL AVAILABILITY OF SMT (PCBA) MANUFACTURING LINES
7. IMPROVING PRODUCTIVITY BY REDUCING MANUFACTURING DOWN TIME USING TPM
8. LEAN IMPLEMENTATION IN LOADCELL ELEMENT MANUFACTURING
9. OPTIMISED DESIGN OF REVERSIBLE WIPER MOTOR & LINKAGE MECHANISM
10. PURCHASING TECHNIQUES - ERP APPROACH
11. REDUCTION OF TIME TAKEN TO REVIEW CERTIFICATE PACKAGE OF DOWN HOLE TESTING (DHT) AND SUB-SEA LANDING STRING (SLS) PARTS.
12. SOURCING DEVELOPMENT FOR PRESSURE PUMPING AND CHEMISTRY PUMP PARTS
13. VALUE STUDY ON AXIAL PISTON HYDRAULIC MOTOR

**M.S. (QUALITY MANAGEMENT)**

14. ACHIEVE ZERO PPM WITH HIGH REJECTION SUPPLIER BY Q1-2016
15. CONCERN ANALYSIS AND RESOLUTION IN VALIDATION TESTING PROJECT
16. EVALUATION OF VARIOUS PROJECT MANAGEMENT METHODOLOGIES
17. QUANTITATIVE ANALYSIS ON CRITICAL SUCCESS FACTORS IN AGILE SOFTWARE DEVELOPMENT PROJECTS

**M.S. (SOFTWARE SYSTEMS)**

18. A SECURE AUTHENTICATION MECHANISM OF SSO IN DISTRIBUTED SYSTEMS AND NETWORKS
19. AD-HOC LOW POWER BLE MESH NETWORK FOR IOT
20. AIRLINE BAGGAGE MANAGEMENT
21. AN ADOPTED SECURITY FRAMEWORK FOR AUTHORISATION IN MOBILE CLOUD ENVIRONMENT
22. ANALYSIS OF INTERNET TRAFFIC
23. ANALYSIS OF PERFORMANCE PARAMETERS IN DIFFERENT RTOS AND MAPPING THEM WITH VARYING COMPLEXITY PROJECTS OF INSTRUMENT CLUSTER APPLICATIONS.
24. ANALYSIS OF SOFTWARE ARCHITECTURES
25. ANALYTICAL APPROACH FOR CONSUMER PACKAGED GOODS
26. ASSISTED LIVING
27. AUDIT-FREE CLOUD STORAGE VIA DENIABLE ATTRIBUTE-BASED ENCRYPTION
28. AUTOMATED CUSTOMER RESPONSE SYSTEM USING BOT FRAMEWORK
29. AUTOMATION FRAMEWORK TO TEST NEW AUTHORIZATION MANAGER USING FITNESS
30. AUTOMATION TESTING USING SELENIUM HYBRID FRAMEWORK
31. BUILDING MINIMUM COST NETWORK SECURITY INFRASTRUCTURE
32. CASE MANAGEMENT SYSTEM
33. CHANGE MANAGEMENT CUSTOMIZATION IN WINDCHILL 10.2 APPLICATION
34. COMMON INTEGRATION LAYER FOR WEB SERVICES INTEGRATION
35. COMMUNICATION NETWORK TOPOLOGIES IN AUTOMATION SYSTEMS - THEIR VISUALIZATION ARCHITECTURE
36. COMPUTERIZED OFFICE FUNCTIONING
37. CONTROL CLOUD DATA ACCESS PRIVILEGE AND ANONYMITY WITH FULLY ANONYMOUS ATTRIBUTE-BASED ENCRYPTION
38. CUSTOMER PROBLEM AREA IDENTIFICATION (CPAI)
39. CUSTOMER SERVICE SYSTEM
40. DATA ANALYSIS FOR BANKING SECTOR.
41. DATA ANALYSIS FOR RETAIL INDUSTRY.

42. DATA COPY AUTOMATION WITH USER INTERFACE
43. DATA DISTRIBUTION SERVICE MIDDLEWARE PERFORMANCE ANALYSIS FOR DATA COMMUNICATIONS IN AUTOMOTIVE, AVIONICS AND DEFENSE AREAS
44. DATA LOAD VALIDATION
45. DATA MINING ON OPEN GOVERNMENT DATA (OGD) INDIA PLATFORM
46. DATA REPLICATION BETWEEN MULTIPLE OHI APPLICATIONS
47. DEFINE, ESTABLISH AND IMPLEMENT ORGANIZATION STANDARD SOFTWARE ENGINEERING AND MANAGEMENT SYSTEM
48. DELVING INTO THE CLOUD-A DEEP DIVE INTO IAAS, PAAS AND SAAS
49. DESIGN & DEVELOPMENT OF MACHINE PERFORMANCE MONITORING AND DATA CAPTURING MODULE WITH INTERFACE SOFTWARE
50. DESIGNING AND OPTIMIZATION OF ETL ARCHITECTURE IN DATAWAREHOUSE
51. DEVELOPING CONTRACT SERVICE LAYER FOR GENERATING CONTRACTS IN REAL ESTATE TRANSACTIONS
52. DISCUSSING THE SECURITY RISK AND ATTACK ANALYSIS AND ITS MITIGATION FOR DEVELOPING A SECURE NETWORK
53. DMZ NETWORK DESIGN WITH CISCO ROUTERS AND VLAN.
54. DYNAMIC USAGE & STATISTICAL ANALYSIS OF LAB DEVICES AND TESTS SCRIPTS
55. E-BUSINESS FOR HUMAN RESOURCE MANAGEMENT
56. E-LEARNING MANAGEMENT SYSTEM WITH ONLINE VIRTUAL CLASSROOM
57. E-LEARNING SYSTEMS
58. ELECTRONIC FLIGHT FOLDER MANAGEMENT
59. EMPOWER- PROJECT MANAGEMENT SYSTEM
60. ENABLE IP STB SOFTWARE TO SEAMLESSLY HANDLE AND PROCESS BOTH MPEG-2 TS-AS-IS AND MPEG-2 TS ENCAPSULATED WITHIN RTP CONTENT
61. ENABLING WEBRTC BASED VIDEO CALLS IN HYBRID MOBILE ENTERPRISE COMMUNICATION APPLICATION
62. ENTERPRISE INCIDENT HUDDLE WEBSITE
63. ENTERPRISE NETWORK SECURITY MANAGEMENT
64. E-PRICING
65. FILE TRANSFER FROM ONE HOST TO ANOTHER INCORPORATION IN POWERCOMMS
66. HANDLING UNEVEN LENGTH TEXT DOCUMENTS AND MODELING FEATURE EXTRACTION TECHNIQUE IN EXISTING CLASSIFICATION ALGORITHM (DATA MINING)
67. HEALTH MANAGEMENT PORTAL
68. HYBRID FRAMEWORK FOR SOFTWARE TESTING
69. IMPLEMENT INTERNET OF THINGS (IOT) IN INDUSTRIAL AUTOMATION USING MQTT PROTOCOL
70. IMPLEMENTATION OF DWH PARTNER GATEWAY FOR EXTRACTION AND TRANSFER OF FILES
71. IMPLEMENTING AND OPTIMIZING SEARCH PROCESS IN A WEB APPLICATION
72. IMPROVED USABILITY OF PAYMENT SYSTEMS USING QR CODE
73. INFERRING PRIVACY PREFERENCE OF USER-UPLOADED IMAGES ON CONTENT SHARING SITES USING ADAPTIVE PRIVACY POLICY PREDICTION (A3P)
74. INTEGRATE ETL BASED DATAWAREHOUSING & JD EDWARDS E1 SALES DATA WITH BI PUBLISHER REPORTING
75. INTEGRATED TEST AUTOMATION FRAMEWORK
76. INTEGRATING THE UI SCREENS OF VARIOUS E BUSINESS MODULES AT A SINGLE WORKBENCH SCREEN FOR EASE OF ACCESS
77. INTRUSION DETECTION WITH SNORT
78. IT ASSET MANAGEMENT
79. LEARNING & DEVELOPMENT IN PERFORMANCE MANAGEMENT SYSTEM
80. LEVERAGING BIG DATA TO ANALYZE CUSTOMER ACCOUNTS RECEIVABLE WITH RESPECT TO AUTOMOBILE INDUSTRY
81. LOW POWER WLAN DESIGN FOR INTEGRATED MOBILE COMPUTERS
82. METADATA DRIVEN ETL
83. METALYTICS
84. MOTION SENSOR BASED HOME SECURITY SYSTEM USING INTERNET OF THINGS (IOT)
85. MOVIES GENRE CLASSIFICATION BY SYNOPSIS USING K-NEAREST NEIGHBOR
86. MULTI CONNECTIVITY FRAMEWORK HOME SOLUTION
87. MULTICAST IMPLEMENTATION IN ACCESS NETWORKS
88. MULTI-TENANT PLATFORM FOR PROCESSING PAYPAL PAYMENTS
89. NAVAL SHIPBUILDING PROJECT MANAGEMENT
90. NEO : A WEB BASED APPLICATION

91. ONLINE EMPLOYEE REGISTRATION AND ONBOARDING
92. ONLINE MARKETING & STRATEGY
93. OPENFLOW AND ITS USE CASE IN NETWORK FUNCTION VIRTUALIZATION (NFV)
94. OPTIMIZATION TECHNIQUES FOR DATABASE MIGRATIONS IN SAP ENVIRONMENTS
95. OVER THE AIR VEHICLE MONITORING AND CONTROL SYSTEM
96. PASSIVE IP TRACEBACK: DISCLOSING THE LOCATIONS OF IP SPOOFERS FROM PATH BACKSCATTER
97. PASSWORD POLICY AND MANAGEMENT FRAMEWORKS
98. PEER TO PEER FILE SYNCHRONIZATION SYSTEM.
99. PERFORMANCE DISCUSSION PORTAL
100. PREDICTIVE ANALYSIS ON MICROSOFT REWARDS DATA
101. PROFITABILITY BASED MANAGEMENT SOLUTIONS USING BUSINESS INTELLIGENCE
102. RESUME MANAGEMENT SYSTEM
103. RUMOR RIDING ANONYMZING UNSTRUCTURED PEER TO PEER SYSTEMS
104. SALESFORCE CLOUD BASED HR MANAGEMENT TOOL
105. SCALING IMAGE METADATA FOR MOBILE
106. SDL CAMPAIGN MANAGER AND ANALYTICS
107. SEAMLESS INVENTORY VISIBILITY TOOL FOR SUPPLY CHAIN MANAGEMENT (IN E-COMMERCE)
108. SEAMLESS IOT DEVICE INTEGRATION FOR SMART HOME
109. SERVICE INTEGRATION AND MANAGEMENT IN THE BOX
110. SERVICE ORDER MANAGEMENT, DNA, FINLAND
111. SINGLE IDENTITY FOR ENTERPRISE APPLICATION
112. SLOT GAMES DEVELOPMENT WITH BONUS FEATURE ON UNITY3D ENGINE
113. SMART FRAUD DETECTION SYSTEM
114. SMARTSAN: SOFTWARE DEFINED NETWORKS, INTELLIGENT ISCSI TARGET MANAGEMENT.
115. SOCIAL ACTIVITY FEED TRIGGERED REAL TIME PRODUCT RECOMMENDATION ENGINE
116. SOFTWARE LIFECYCLE PROCESS FOR DESIGN AND VALIDATION OF AN ELECTRICAL SYSTEM IN A TYPICAL FIGHTER AIRCRAFT.
117. SOFTWARE TESTING AND QUALITY ASSURANCE
118. STORING DATA IN HDFS INSTEAD OF DATA WAREHOUSE APPLIANCE (ORACLE EXADATA)
119. TRACKER APP FOR NGO WORK AND DONATIONS
120. TRANSFER DATA USING WIRELESS SENSOR NETWORKS IN AN EFFICIENT AND SECURE PATTERN
121. UNINTERRUPTED STORAGE EXPANSION WITH OSS ASSURANCE SYSTEM
122. UPLOADING HOSPITAL DETAILS BY HOSPITAL ADMIN AND ANALYZING PERFORMANCE OF THE HOSPITALS BY MEDICAL ASSOCIATION ADMIN
123. VIRTUALIZATION SECURITY
124. WDA TOOL TO SIMULATE DEVICES
125. WEB API AND MICRO SERVICE ARCHITECTURE
126. WEB BASED GRAPHICS EDITOR FOR HVAC SYSTEMS
127. WORK TRACKER FOR AN ADVERTISING FIRM

### **MBA (CONSULTANCY MANAGEMENT)**

128. A REVIEW OF RECENT DEVELOPMENTS IN ENGINEERING SERVICES & EVALUATION OF ITS KEY PERFORMANCE MEASURES WITH OPERATIONAL EXCELLENCE
129. A STUDY ON EMPLOYEE SATISFACTION AT CANARA HSBC OBC LIFE INSURANCE
130. A STUDY ON MUTUAL FUNDS AND INVESTMENT DECISION EVALUATION
131. ADOPTING AGILE AND DEVOPS IN A LARGE ORGANIZATION
132. AGILE PROJECT MANAGEMENT CONSULTING AT A TELECOM MAJOR
133. AGILE RISK MANAGEMENT - ENHANCING STAKEHOLDER ENGAGEMENT THROUGH EFFECTIVE COMMUNICATION
134. AMW- LET'S MAKE A MONEY
135. ANALYSIS OF PROCESS-BASED MANAGEMENT SYSTEM DURING THE PLANNING AND EXECUTION STAGE FOR IT ORGANIZATION
136. ANALYZING EFFECTIVENESS OF MARKETING THROUGH SOCIAL MEDIA
137. BRUSH HOLDER MANUFACTURING AUTOMATION
138. BUSINESS PARTNERSHIP - STRATEGIC MANAGEMENT
139. BUSINESS PLANNING FOR A SMALL SCALE START UP
140. BUSINESS UNIT OPERATIONS WITHIN IT SERVICE
141. CASE STUDY: GLOBALIZING CONSULTING IN A SOFTWARE PRODUCT FIRM FROM DECENTRALIZED TO CENTRALIZED OPERATING MODEL.
142. CHANGE MANAGEMENT IN ERP IMPLEMENTATIONS

143. COMPARATIVE ANALYSIS OF SUPPLY CHAIN SOFTWARE SOLUTIONS
144. CONSULTANCY PRACTICES IN SERVICE INDUSTRY PROJECT MANAGEMENT
145. CONSULTANCY SERVICES- ENERGY MANAGEMENT
146. CONSULTANT ROLE IN CONSTRUCTION MANAGEMENT
147. CONTINUOUS DELIVERY - STRATEGIC TOOL ADOPTION
148. CONTRIBUTION OF ORGANIZATIONAL FACTORS IN WORKERS JOB SATISFACTION IN IT INDUSTRY
149. CURRENT BUSINESS SCENARIO, CHALLENGES AND OPPORTUNITIES FOR NICHE TECHNOLOGIES STARTUP IN INDIA
150. DATA & KNOWLEDGE MANAGEMENT A KEY TO SUCCESSFUL PROJECT MANAGEMENT
151. DESIGN AND IMPLEMENT SCRUM FRAMEWORK IN WFR USING AGILE/SCRUM METHODOLOGY.
152. DEVELOPMENT OF FORGED CRUSHER HAMMER
153. DYNAMIC BUFFER MANAGEMENT FOR INVENTORY AND SUPPLY CHAIN IN "LOADER CRANE CYLINDERS" PRODUCT GROUP
154. EY PERFORMANCE MANAGEMENT SYSTEM - A STUDY
155. FEASIBILITY REPORT FOR 10 MW SOLAR PV PLANT
156. FUTURE OF PROJECT MANAGEMENT PROFESSION BASED ON PAST TRENDS
157. HEALTH CARE ANALYTICS PILOT FOR IBM CLIENT
158. IDENTITY AND ACCESS MANAGEMENT SOLUTION
159. IMPACT OF FINTECH STARTUPS TO BANKING INDUSTRY AND HOW TRADITIONAL BANKS RESPONDING TO THE CHALLENGE
160. IMPACTS OF OUTSOURCING THE MAINTENANCE BUSINESS OF LARGE ENTERPRISE SOFTWARE APPLICATIONS, FOR A SOFTWARE VENDOR.
161. IMPORTANCE AND CHALLENGES OF VIRTUAL PROJECT MANAGEMENT IN THE CONTEXT OF MULTICULTURAL PROJECTS OPERATING FROM MULTIPLE LOCATIONS WITH OUT AFFECTING THE OVERALL PROJECT PERFORMANCE
162. IMPROVED SUPPLY CHAIN PERFORMANCE THROUGH RFID
163. IT IN THE DIGITAL AGE USING AGILE , DEVOP'S AND AUTOMATION
164. ITIL BUSINESS PROCESS RE-ENGINEERING PROJECT
165. MANAGEMENT OF STRESSED ASSETS IN INDIAN BANKS
166. MITIGATING TIME OVERRUN OF CONSTRUCTION PROJECTS BY INCREASING OPERATIONAL EFFICIENCY
167. ONLINE RETAIL INDUSTRY IN RURAL INDIA
168. PROCESS CYCLE OPTIMIZATION IN SUPPLY CHAIN / PROJECT MANAGEMENT
169. PROCESS MANAGEMENT FOR CHANGE OF OWNERSHIP AND OPERATIONAL MANAGEMENT OF MERCHANT SHIPS
170. PROCESS MANAGEMENT IN MANUFACTURING ORGANIZATION
171. PROCESS STANDARDIZATION OF EMBEDDED DATA MANAGEMENT AND ENABLING ONLINE FLASHING OF VEHICLES FOR TATA TECHNOLOGIES DOMESTIC AND COMMERCIAL AUTOMOTIVE CUSTOMER
172. PROGRESS MEASUREMENT SYSTEM IN ENGINEERING & CONSULTANCY FIRM
173. PROJECT MANAGEMENT IN EPC PROJECT
174. PYSCHOCENTRIC APPROACH - PROJECT MANAGEMENT
175. REDUCE THE FACTORY COST OF DANFOSS BALL VALVE
176. REGULATORY RISK AND MANAGEMENT
177. RETAINING EMPLOYEES AT IT SERVICE SECTOR
178. REVITALIZING BITS WILP MBA PROGRAM
179. SAP CLOUD FOR CUSTOMER (C4C)
180. SERVANT LEADERSHIP MODEL: ESSENTIAL TRAITS OF A SERVANT LEADER IN SMOOTHER CHANGE MANAGEMENT.
181. SERVICE DEVELOPMENT FRAMEWORK ESTABLISHMENT
182. SERVICENOW TOOL
183. SOFTWARE DEFINED NETWORK AS STRATEGIC CHANGE AGENT
184. SPARES INVENTORY MANAGEMENT AND SERVICE DELIVERY IN AIRCONDITIONING INDUSTRY
185. STRESS MANAGEMENT IN TODAYS CORPORATE WORLD
186. STUDY OF SUPPLY CHAIN MANAGEMENT IN OIL & GAS SECTOR
187. SUPPLY CHAIN MGMT - PVR CINEMAS
188. SUPPLY CHAIN MGMT IN PHARMACEUTICALS
189. THE ROLE OF COMPETANCY MAPPING IN ORGANIZATIONAL EFFECTIVENESS
190. TO IMPROVE DATABASE MANAGEMENT SYSTEM TO HAVE AN EFFICIENT, REAL TIME AND SINGLE SOURCE DATA
191. TRANSFORMATION OF THE IT SUPPLY CHAIN IN THE ERA OF CLOUD AND AS-A-SERVICE ECONOMY
192. USAGE OF DIGITAL MARKETING CHANNELS FOR NON-PRESCRIPTION PHARMACEUTICAL PRODUCTS

**MBA (MANUFACTURING MANAGEMENT)**

193. A STUDY ON EFFECTIVENESS OF SIX SIGMA OPERATIONS
194. A STUDY ON EMPLOYEE JOB SATISFACTION AT LARSEN & TOUBRO TECHNOLOGY SERVICES
195. ANALYZING AND MANAGING COMPLEXITY IN ORGANIZATIONS & PROJECTS
196. APPLICATION OF LEAN PRINCIPLES ON MAKE TO ORDER, LOW VOLUMES WITH HIGH COMPLEXITY STEEL CUTTER BODIES
197. APPLICATION OF LEAN TECHNIQUES IN AEROSPACE COMPOSITES MANUFACTURING
198. AUTOMATED ORDER HOLD PLACING SOLUTION IN ORACLE ERP USING AGILE PROJECT METHODOLOGY
199. CHARACTERIZATION OF UNIFORMITY OF MECHANICAL PROPERTIES & MICRO STRUCTURE OF HIGH CARBON(HC)81/85
200. COOLING TOWER PROJECTS DEVELOPING A PROJECT PLAN FOR ACHIEVING THE PROJECT SUCCESS WITH RESPECT TO COST & TIME
201. DEPLOYMENT OF MANUFACTURING EXECUTION SYSTEM (MES) FOR PROCESS PLANNING IN AN ENGINE ASSEMBLY
202. DESIGN & DEVELOPMENT OF EFFECTIVE MAINTENANCE SYSTEM
203. DESIGN AND DEVELOPMENT OF VEHICLE TRACKING SYSTEM USING GPS/GSM TECHNOLOGY
204. DEVELOPING A STREAMLINE WORKFLOW FOR RECOMMENDED SPARE PARTS LIST PROJECT USING LEAN APPROACH.
205. DEVELOPMENT OF INFORMATION SHARING & DECISION SUPPORT SYSTEM FOR SALES ORDERS
206. DEVELOPMENT OF NEW VARIANTS TO EXPAND THE PRODUCT PORTFOLIO OF INDUSTRIAL YARN AND ESTABLISHING MANUFACTURING FACILITIES FOR THE VARIANTS
207. DEVELOPMENT OF PORTABLE FOOD AND BEVERAGE PRESERVATION COOLER
208. DEVELOPMENT OF RESPONSIBILITY ASSIGNMENT MATRIX (RAM) FOR IMPROVEMENT IN BUSINESS OPERATIONS
209. EFFECTIVE INVENTORY MANAGEMENT IN CEMENT PLANT
210. ELIMINATION OF SIR DEVIATIONS AND FUNCTIONAL PROBLEMS OF NEW LCM TOOLS
211. ENHANCING THE CAPABILITY TOWARDS ZERO DEFECT
212. EVOLVING AN OPTIMUM APPROACH TO REDUCE THE FLIGHT-TEST DURATION OF PROTOTYPE AIRCRAFTS BY 50%
213. FORMULATION OF FUNCTIONAL STRATEGIES TO SUPPORT CORPORATE BUSINESS GOALS THROUGH POLICY MANAGEMENT USING THE DISTINCTIVE COMPETENCIES OF THE FUNCTIONAL AREA
214. FUTURE SCOPE OF OPERATION MANAGEMENT IN MAINTENANCE OF MACHINE USED IN CONSTRUCTION INDUSTRY
215. GREEN FIELD
216. IMPACT OF 5S ON TOTAL QUALITY BEHAVIOUR OF THE WORKFORCE IN PUBLIC SECTOR ENTERPRISE
217. IMPLEMENTATION OF LEAN TOOLS IN MATERIAL FLOW FOR JCB CYLINDER PRODUCTION
218. IMPLEMENTING LEAN METHODS IN CONSTRUCTION
219. IMPROVE PRODUCTIVITY BY 20% IN AN ASSEMBLY PROCESS BY THE USE OF VALUE STREAM MAPPING TOOL
220. IMPROVING PRODUCTIVITY IN PRODUCTION DEPARTMENT USING LEAN MANUFACTURING CONCEPTS
221. INCREASING CRANE SERVICE SALES VOLUMES AND OVER ALL MARKET SHARE BY EXPANDING TO NEW REGION (YANBU / SAUDI ARABIA)
222. INDIGENOUS CAPACITY ENHANCEMENT OF HOLLOW-GRINDING OPERATION.
223. INSTILLING LEAN CULTURE IN THE ORGANIZATION NEXT LEVEL
224. KAIZEN (NEED OF THE HOUR)
225. LAUNCHING NEW RANGE OF CIRCUIT BREAKERS
226. LEAN LOGISTIC
227. LEAN MANUFACTURING IN SERVICE INDUSTRY
228. MANAGE BY MIND AND LEAD BY HEART
229. MANUFACTURING AND PROCESS OF MELTING ZINC AND ALUMINIUM WITH INDUCTION
230. MIXED MODEL ASSEMBLY LINE FOR SEASONAL AND LOW VOLUME PRODUCTS
231. MORE HEAT RECOVERY BY REPLACING EXISTING AIR HEATER SYSTEM
232. NATURAL GAS COST REDUCTION THROUGH CONSUMPTION OPTIMIZATION & CONTRACT MANAGEMENT
233. NEW AUTOMATION TECHNOLOGY INTRODUCTION IN THE BODY SHOP MANUFACTURING
234. NEW PRODUCT DEVELOPMENT OF BUILT-IN-REFRIGERATORS USING TQM METHODOLOGIES
235. OFF SPEC REDUCTION
236. ON TIME EXECUTION OF APAAR PADLOCK PROJECT TO CONTRIBUTE TO DESIRED REVENUE GENERATION THROUGH NPD

237. OPERATION MANAGEMENT IN CONSTRUCTION INDUSTRY
238. OPTIMIZATION OF ELECTRIC ACTUATOR TESTING USING LEAN SIX SIGMA APPROACH
239. OPTIMIZATION OF GAS TURBINE COMPRESSOR ONLINE WATER WASH
240. OPTIMIZATION OF PROCESS FOR FLAMMABILITY READ ACROSS PROJECT USING LEAN APPROACH
241. OPTIMIZATION OF PRODUCTION LINE & BUSINESS PROFITABILITY IMPROVEMENT
242. OPTIMIZATION OF PROJECT MANAGEMENT STRATEGIES IN AUTOMOTIVE R&D
243. OPTIMIZATION OF TEST FACILITY THROUGH LEAN APPROACH A STUDY
244. OPTIMIZING COST EFFECTIVE SUPPLY CHAIN AT AMBERNATH WORKS
245. OPTIMIZING ONLINE MARKETING STRATEGY FOR SECO INDIA
246. PROCESS IMPROVEMENT IN TURRET PROCESSING UNIT
247. PRODUCTIVITY IMPROVEMENT AT ELECTRONIC CONTROL UNIT (ECU) FINAL ASSEMBLY MANUFACTURING LINE
248. PRODUCTIVITY IMPROVEMENT BY IMPLEMENTING STANDARDIZED WORK USING MTM METHODOLOGY
249. PRODUCTIVITY IMPROVEMENT IN HYDRAULIC POWER STEERING PUMP HOUSING WASHING LINE
250. PRODUCTIVITY IMPROVEMENT IN WAREHOUSE OPERATIONS
251. PRODUCTIVITY IMPROVEMENT OF CRITICAL COMPONENT (BUMPER) USING TQM/LEAN TOOLS
252. PRODUCTIVITY IMPROVEMENT, CAPACITY ENHANCEMENT & OPTIMIZING THE SUPPLY CHAIN FOR A RISK FREE BUSINESS
253. PROJECT MANAGEMENT FOR TRANSFER OF PRODUCT LINE FROM US LOCATION TO INDIA
254. PROJECT MANAGEMENT OF DEVELOPMENT OF CONNECTING ROD
255. PULL IMPLEMENTATION IN HYDRAULIC HEAD FLANGE LINE
256. PULL IMPLEMENTATION IN ROLLER RING□
257. REDUCING CUSTOMER COMPLAINTS BY TQM METHODOLOGY
258. REDUCTION IN OPERATING EXPENSES OF NEW PRODUCT RIM DEADBOLT
259. REDUCTION IN RAW MATERIAL WASTAGE - A LEAN MANUFACTURING APPROACH
260. ROTOR MAGNET
261. SALARY DISBURSEMENT SYSTEM
262. SHORT SERVICE COMMISSION FOR OFFICERS IN ARMED FORCES: IS IT REALLY ATTRACTIVE?
263. SPACE OPTIMIZATION IN CENTRAL MANUFACTURING AREA
264. STEPPED BORE MASTER CYLINDER
265. STRATEGIC MANAGEMENT USING COMPETITIVE BENCH-MARKING FOR REFRIGERATION PRODUCTS
266. STRATEGIC SOURCING AND SUPPLIER RELATIONSHIP MANAGEMENT
267. STRIP BRIGHTNESS IMPROVEMENT & REDUCTION IN CHEMICAL CONSUMPTION FROM PRE-CLEANING SECTION
268. STUDY & DEVELOPMENT OF AN EXCELLENCE MODEL FOR LENS MANUFACTURING LABS OF ESSILOR INDIA
269. SUPPLIER RELATIONSHIP MANAGEMENT FOR TATA ADVANCED SYSTEMS LIMITED IN AEROSPACE INDUSTRY
270. TECHNO-COMMERCIAL VIABILITY OF CAPTIVE AIR SEPARATION PLANT FOR FUTURE OPERATIONS AT LIQUID PROPELLANT STORAGE AND SERVICING FACILITY SDSC SHAR.
271. THE AGILE PROJECT MANAGEMENT AND EXECUTION SYSTEM FOR EPIC/EPC PROJECTS
272. THE ROAD AHEAD FOR CONNECTED CARS.
273. TO DEVELOP WORLD CLASS MANUFACTURING SYSTEM IN VISCOSE PRODUCTION
274. TO REDUCE REJECTION OF CRITICAL COMPONENT WEAR RING IN RAILWAY BEARING.
275. TO REDUCE THE CUP BORE REJECTION ON T-4 LINE FROM 18810PPM TO 5000PPM.
276. TURNAROUND MANAGEMENT IN REFINERIES
277. VALUE STREAM MAPPING OF MECHANICAL ASSEMBLY OF LOW VOLTAGE SWITCHBOARD
278. WATER SYSTEM OPERATION WORK DESIGN

## **MBA (QUALITY MANAGEMENT)**

279. ATOMIZING THE TRAVEL INDUSTRY PRODUCT SOFTWARE INTO INDEPENDENT COMPONENTS AND OPTIMIZATION OF THE DEVELOPMENT PROCESS, TOOLING AND INFRASTRUCTURE
280. BENCHMARKING EFSS(ENTERPRISE FILE SHARE AND SYNC) PRODUCTS FOR QUALITY OF SERVICE
281. CUSTOMER-USAGE DRIVEN TESTS
282. DEFECT INJECTION AND COST OF QUALITY REDUCTION IN DEVELOPMENT AND MAINTENANCE PROJECTS THROUGH EARLY LIFE CYCLE STAGE DEFECT CONTAINMENT
283. DEFINE & SET UP THE END-TO-END WORKFLOW FOR THE EBOOK CONVERSION PROCESS
284. DEVELOPMENT OF SILICA BASED TREAD COMPOUND FOR VERY LOW ROLLING RESISTANCE COEFFICIENT IN PASSENGER CAR RADIAL TYRES.
285. IMPACT OF CUSTOMER SATISFACTION AND SUPPORT COST IN CALL CENTER
286. IMPLEMENTATION OF TQM PRINCIPLES IN CONSTRUCTION OF OIL & GAS PIPELINES AND PIPING OF

- FORCADOS YOKRI INTEGRATED PROJECT (FYIP)
287. IMPLEMENTING TOTAL QUALITY MANAGEMENT AT NAVAL DOCKYARD MUMBAI
  288. IMPLEMENTATION OF TQM FOR THE IMPROVMENT OF QUALITY PROCESS IN THE TEAM
  289. IMPROVEMENTS IN SECURITY DEVELOPMENT LIFECYCLE
  290. INTEGRITY OF PIPE WORKS AT EMAL PHASE 1
  291. INVENTORY MANAGEMENT
  292. LEADERSHIP STYLES OF THE TEAM
  293. LEAN IT SUSTENANCE IN IT INFRASTRUCTURE SERVICES
  294. LEAN PROJECT MANAGEMENT & PROJECT QUALITY
  295. MANAGING AND CHANGING LEADERSHIP PROCESSES WITH MIND TOOLS
  296. METRICS BASELINING & BENCHMARKING FOR IT
  297. NORTH AMERICA MEDICAL DEVICES-FINANCIAL PLANNING & ANALYSIS QUALITY
  298. OPTIMIZATION OF TIME, COST AND QUALITY FOR INSTALLATION OF HEATING VENTILATION AND AIR-CONDITIONING (HVAC) SYSTEMS AND FIRE PROTECTION SYSTEMS IN CONSTRUCTION PROJECTS
  299. PREPARING A QUALITY MANUAL FOR TATA POWER COMPANY
  300. PROCESS CAPABILITY ANALYSIS FOR CASTING/ HEAT TREATMENT
  301. QUALITY ASSESSMENT OF STORED VALUE PLATFORM
  302. QUALITY ASSURANCE FRAMEWORK IN VOCATIONAL SKILL DEVELOPMENT
  303. QUALITY IMPROVEMENT AT AUTOLIV IND.
  304. QUALITY IN AGILE SOFTWARE DEVELOPMENT LIFE CYCLE
  305. QUALITY MANAGEMENT IN HEALTH CARE DOMAIN
  306. REDUCING ERRORS, CYCLE TIME AND INCREASING THE VALUE OF REVENUE PROCUREMENT PROCESS THROUGH THE APPLICATION OF SIX SIGMA IN A FIELD UNIT OF INDIAN ARMY
  307. SAFE IN SOFTWARE PRODUCT MANAGEMENT FOR CONTINUOUS DELIVERY OF PRODUCTS WITH GREAT QUALITY.
  308. TO IMPROVE FIRST SHOT OK OF TRANSAXLE SHOP BY REDUCING DEFECT OF 5TH GEAR NOT ENGAGE
  309. TO OPTIMIZE PROJECT IMPLEMENTATION LIFE CYCLE, BY APPLYING LEAN CONCEPTS FOR ON-LINE BANKING PRODUCT
  310. TOTAL QUALITY MANAGEMENT IN OIL & GAS CONSTRUCTION PROJECTS
  311. TRANSITION PHASE STUDY OF ISO 9001:2015 AND ISO 13485:2016 QUALITY MANAGEMENT SYSTEM STANDARDS FOR MEDICAL DEVICE MANUFACTURER -HLL LIFECARE LIMITED
  312. YIELD IMPROVEMENT(REJECTION CONTROL) AT SUPPLIER M/S RADIANT POLYMER USING QUALITY TOOLS AND METHODOLOGY

### **M.Tech. (MANUFACTURING MANAGEMENT)**

313. A COMPARATIVE ANALYSIS BETWEEN COST OPTIMIZED AND WEIGHT OPTIMIZED AEROSPACE STRUCTURAL COMPONENT.
314. A COMPARATIVE AND PERSPECTIVE ANALYSIS OF ROBOTICS DEVELOPMENT & FUTURE ASPECTS IN THEIR RESPECTIVE FIELDS
315. A METHOD STUDY AND MANUFACTURING PROCESS OF CAM SHAFT ASSEMBLY
316. A MULTI-CRITERIA OUTSOURCING NETWORK DESIGN USING STATISTICAL MODELLING TECHNIQUES
317. A STUDY OF AUTOMOTIVE SUPPLY CHAIN BY UNDERSTANDING AND ANALYZING THE NEW PRODUCT DEVELOPMENT PROCESS
318. A STUDY ON LATEST TRENDS IN WIND POWER GENERATION
319. A VARIANT DESIGN OF PNEUMATIC VALVE IN AEROSPACE CONTROL SYSTEMS
320. ADDITIVE MANUFACTURING - A TRANSFORMATIONAL ADVANCED MANUFACTURING TECHNOLOGY: APPLICATIONS IN FIELD OF AEROSPACE
321. AN APPLICATION OF VALUE STREAM MAPPING IN AUTOMOTIVE INDUSTRY
322. ANALYSE AND IMPROVE THE PROCESS CAPABILITY IN AXLE CARRIER MACHINING PROCESS.
323. ANALYSIS OF PRODUCTION METHODOLOGY OF H-COMPACT MOTORS AND COMPARISON BETWEEN JOB AND BATCH PRODUCTION IN VIEW OF COST AND PROCESS FOR OPTIMIZATION AND STANDARDIZATION
324. ANALYSIS OF SINGLE POINT INCREMENTAL FORMING PROCESS USING FINITE ELEMENT METHOD
325. ANALYSIS OF VARIOUS GRINDING TECHNIQUES WITH RESPECT TO EFFICIENCIES & IT'S EFFECT ON PROPERTIES OF CEMENT
326. APPLICATION & EVALUATION OF LEAN PRINCIPLES FOR A MEDIUM SCALE STEEL FABRICATION COMPANY
327. APPLICATION OF DIAMOND FRAMEWORK FOR GRAVURE PRINTING MACHINE'S PROJECTS
328. APPLICATION OF PROCESS CERTIFICATION IN ELEVATOR CONTROL TRANSFORMER
329. APPLICATION OF RELIABILITY CENTERED MAINTENANCE TO OPTIMIZE OPERATION AND MAINTENANCE IN FWPP#1 COMBINED CYCLE POWER PLANT
330. AUTOMATED COMPONENT REMOVAL SYSTEM IN 800 TON FINE BLANKING PRESS



331. AUTOMATION OF GENERAL ASSEMBLY DRAWING (GAD) PREPARATION TO REDUCE THE LEAD TIME
332. AUTOMATION OF RUBBER COATING THICKNESS MEASUREMENT SYSTEM
333. AUTOMOTIVE BIW ASSEMBLY LINE ROBOTIC SIMULATION
334. AVIATION MAINTENANCE SAFETY
335. BIESSE MANUFACTURING CO.PVT LTD
336. BOMBARDIER GLOBAL 7000/8000 POCKET DOOR MECHANISM REDESIGN
337. BUILDING POWER MANAGEMENT USING WITH AUTOMATION SYSTEMS
338. BUSINESS MODELLING FOR USED MACHINE CHANNEL SALES-A STRATEGIC APPROACH
339. BUSINESS PROCESS RE-ENGINEERING FOR FABRICATED PRODUCTS FOR IMAGEX TECHNOLOGIES
340. CALCULATION & ESTABLISHMENT OF MANHOUR NORMS FOR PIPING/STEEL FABRICATION
341. CASH FLOW IMPROVEMENT BY INVENTORY REDUCTION IN VOLUME FLUCTUATING BUSINESS ENVIRONMENT.
342. CHECK STRAP HOLE OFFSET ISSUE
343. CHROME CHIP REDUCTION IN MOLY CHROME CERAMIC RINGS
344. COMPARATIVE EVALUATION OF MAXIMUM POWER POINT TRACKING METHODOLOGIES IN PHOTOVOLTAIC SYSTEM
345. COMPARATIVE PRE-TREATMENT OF RAW WATER FOR GENERATION OF PURIFIED WATER
346. COMPARISON AND EXPERIMENTAL INVESTIGATION OF GLASS FIBRES AND NATURAL FIBRE REINFORCED COMPOSITE.MECHANICAL PROPERTIES OF BANAN FIBRE REINFORCE COMPOSITE
347. COMPLAINT RESOLUTION: THROUGH PROBLEM SOLVING TECHNIQUES
348. COMPLEXITY MANAGEMENT OF FRONT JACK HARNESS FOR ROTARY DRILL MACHINE
349. COMPREHENSIVE STUDY FOR DESIGN & DEVELOPMENT OF SPECIAL TYPE OF VALVE FOR NUCLEAR PROCESS SYSTEMS
350. COMPUTER AIDED DESIGN, ANALYSIS AND MANUFACTURING OF A FLEXURE PROOF MASS ASSEMBLY FOR A TACTICAL GRADE SERVO ACCELEROMETER
351. COMPUTER AIDED DESIGN, ANALYSIS AND MANUFACTURING OF A FUSED QUARTZ RESONATOR SHELL FOR DEVELOPMENT OF HEMISPHERICAL RESONATING GYROSCOPE.
352. COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM FOR MEDICAL EQUIPMENTS
353. CONNECTOR SELECTOR APP- A WAY OF COMPLEXITY MANAGEMENT
354. CONVERSION OF WET BOTTOM ASH CONVEYING SYSTEM OF BOILER TO DRY SYSTEM (CASE STUDY AT HINDUSTAN NEWSPRINT LTD.)
355. COST REDUCTION IN KNUCKLE BY ELIMINATION OF SPLASH GUARD MACHINING PROCESS
356. COST REDUCTION OF AUTOMOBILE COMPONENTS BY COLD FORGING
357. COST REDUCTION OF CLUTCH RELEASE BEARING PRODUCT THROUGH VALUE ANALYSIS AND VALUE ENGINEERING
358. COST REDUCTION ON REFRIGERATOR THERMOSTAT
359. CRACK OCCURRENCE REDUCTION IN STEEL PARTS
360. CREATION OF A WORKFLOW PROCESS TO IMPROVE TACTICAL PLANNING OF INDIVIDUAL PARTS IN NEW SUPPLY CHAIN PROJECTS AT MANUFACTURING SECTOR
361. CYCLE TIME REDUCTION AND PROCESS IMPROVEMENT THROUGH SIX SIGMA
362. CYCLE TIME REDUCTION OF TUBESHEET AND SHELL CIRCULAR SEAM JOINT WELDING
363. DEFECT ELIMINATION AND PROCESS OPTIMIZATION IN SUSPENSION MANUFACTURING TO MINIMIZE LOSSES DUE TO REJECTION
364. DESIGN & DEVELOP A LAB-SCALE JET COOKER TO STUDY THE SLURRY MAKING PROCESS FOR FURTHER IMPROVEMENT
365. DESIGN & DEVELOPMENT OF AUTOMATIC TORQUE TIGHTNESS CHECK AT ENGINE ASSEMBLY LINE
366. DESIGN & DEVELOPMENT OF FUEL LEVEL SENSOR (FLS) FOR 2-WHEELERS
367. DESIGN & DEVELOPMENT OF STEERING RACK & PINION
368. DESIGN & OPTIMIZATION OF DEMIST AIR DUCT FOR CAR
369. DESIGN & USE OF MES (MANUFACTURING EXECUTION SYSTEM) FOR IMPROVING PROCESS RELIABILITY
370. DESIGN & VALIDATION OF COLD PLATE FOR WIND CONVERTER POWER MODULES.
371. DESIGN AND ANALYSIS OF MULTIPLE SADDLE SUPPORT FOR HORIZONTAL VESSEL
372. DESIGN AND ASSEMBLY OF COMPONENTS OF AN ELECTRIC OVERHEAD TRAVELLING (EOT) CRANE
373. DESIGN AND DEVELOPMENT OF ANTI- INTRUSION BAR FOR BRAKE AND CLUTCH PEDAL CRASH REQUIREMENTS
374. DESIGN AND DEVELOPMENT OF COMMONISED MARKING FIXTURE FOR BODY CALIPER HOUSING CASTINGS BY PARAMETRIC CODING
375. DESIGN AND DEVELOPMENT OF COST EFFECTIVE,OPTIMIZED MULTI-TURN BEVEL GEARBOX FOR VALVE AUTOMATION/OPERTAION
376. DESIGN AND DEVELOPMENT OF ELECTRICAL CIRCUIT TRAINING SIMULATOR FOR HERO MOTOCORP MOTORCYCLE

377. DESIGN AND DEVELOPMENT OF TURBOCHARGER - HEAT SHIELD FOR MINING TIPPERS TO MEET DGMS REGULATION
378. DESIGN AND INSTALLATION OF ADDITIONAL CIRCULATION SYSTEM IN A PROCESS VESSEL
379. DESIGN AND SIMULATION OF AUTOMOTIVE HEADLAMP LENS
380. DESIGN OF NOISE REDUCED MUFFLER FOR OFF-ROAD VEHICLE
381. DESIGN OF NOZZLE ORIFICE WITH ROBUSTNESS AGAINST COKING PHENOMENA IN FUEL INJECTOR OF DIESEL ENGINE
382. DESIGN OF RAW MATERIAL & FINISHED GOODS WAREHOUSE FOR PHARMACEUTICAL PRODUCT MANUFACTURING SITE
383. DESIGN OPTIMIZATION OF DRIVE AXLE HOUSING
384. DESIGN OPTIMIZATION OF WHEEL HUB
385. DESIGN VERIFICATION OF ELECTRICAL POWER, LIGHTING AND CONTROLS FOR BUILDINGS
386. DESIGN, FABRICATION & IMPLEMENTATION OF MECHANIZED FIN FEEDING UNIT FOR MOVEMENT OF FLAT FINS IN 20 TORCH MEMBRANE PANEL WELDING MACHINE (MPM), AT TUBULAR PRODUCTS, HPBP, BHEL, TRICHY.
387. DESIGNING TEST BENCH FOR XY-ACTUATOR (AUTOMATED MANUAL TRANSMISSION)
388. DETERMINE THE CAUSE & SOLUTION OF STEERING WHEEL VIBRATION AT ENGINE IDLE
389. DEVELOP A ROAD MAP FOR EFFECTIVE EXECUTION OF PROJECT ENGINEERING AND MANUFACTURING
390. DEVELOP A TEST FIXTURE FOR CLEAN ROOM ROBOT TO ENHANCE RELIABILITY
391. DEVELOP STRATEGY AND MANUFACTURING MODEL FOR AWS PRODUCTS EASING THE IMPEDIMENTS OF PRODUCTIVITY AND THE TIME TO MARKET TO ESTABLISH THE RIGHT COMPETITIVE STRATEGY
392. DEVELOPEMENET OF PRODUCT RELIABILITY SCORECARD FOR INDIA ENGINE BUSINESS UNIT
393. DEVELOPING UTILITY/PROCESS TO SAVE LEAD TIME IN BIW ROBOTIC SIMULATION
394. DEVELOPMENT & IMPLEMENTATION OF MATERIALS PORTAL IN LV SWITCHBOARD MANUFACTURING
395. DEVELOPMENT AND APPLICATION OF A FORECASTING TOOL FOR CENTRIFUGAL PUMP SUPPLIERS IN POWER SECTOR FOR PROVIDING AFTER SALES SPARES AND SERVICE TO THE CUSTOMERS FOR IMPROVED PLANT OPERATION WITH REDUCED COSTS
396. DEVELOPMENT OF CALIBRATION MEASUREMENT SYSTEM FOR I R THERMOMETERS IN CLINICAL TEMPERATURE RANGE
397. DEVELOPMENT OF EXISTING ENGINE CRANKSHAFT THROUGH FORGED TECHNOLOGY AS AGAINST EXISTING CAST TECHNOLOGY
398. DEVELOPMENT OF HOT STAMPING ASSEMBLIES AS AN ANSWER FOR GNCAP RESULTS OF INDIA CARS
399. DEVELOPMENT OF IMPROVED DESIGN & MATERIALS FOR BEATER HAMMERS
400. DEVELOPMENT OF IN HOUSE CAPABILITIES FOR REPAIR OF PNEUMATIC & HYDRAULIC CYLINDERS
401. DEVELOPMENT OF NEW CAR BODY IN WHITE STRUCTURE DESIGN BASED ON NEW PRODUCT DEVELOPMENT METHODOLOGIES
402. DEVELOPMENT OF NEW DASH INSULATOR WITH IMPROVED NVH FOR AUTOMOTIVE PASSENGER CAR
403. DEVELOPMENT OF OPTIMIZED STEERING MOUNTING BRACKET FOR ICV PASSENGER VEHICLES WITH SIGNIFICANT COST REDUCTION
404. DEVELOPMENT OF PIPING MATERIAL SELECTION AND MANAGEMENT IN FPSO ENGINEERING DESIGN PHASE
405. DEVELOPMENT OF PROJECT MANAGEMENT FRAMEWORK FOR REPAIR JOBS
406. DEVELOPMENT OF TEMPLATE POSTPROCESSOR FOR 4 AXIS CNC MILLING MACHINES FOR FANUC SERIES CONTROLS USING UNIGRAPHICS NX6 AND POST BUILDER
407. DIAGNOSTICS FRAMWORK FOR PLANT ASSEMBLY AND SERVICING OF VEHICLES.
408. DIGITAL MODELING OF CURVIC FACE OF CURVIC COUPLING AND DIGITAL MANUFACTURING AND MODEL BASED ENTERPRISE
409. DIGITAL PROCESS-PLANNING OPTIMIZATION OF THE ENGINE SERIES-PRODUCTION LINE AT DAIMLER AG, MANNHEIM, GERMANY
410. DISCRETE EVENT SIMULATION FOR THROUGHPUT RAMP-UP & TO VALIDATE TEST SEQUENCE FOR VANS USING NEW STRATEGIES
411. DOOR WINDOW GLASS SLOW MOVEMENT ISSUE IN PASSENGER CAR
412. DOWNTIME REDUCTION IN CNC PIPE BENDING MACHINE
413. ECONOMY MANAGEMENT & OPTIMIZATION METHODOLOGY
414. EFFECT OF WELDING PARAMETERS ON FRICTION STIR WELDING ON ALUMINIUM ALLOY AA 1100 H-14
415. EFFECTIVE INVENTORY MANAGEMENT OF HIGH MIX LOW VOLUME PROJECT INVENTORY CONTROL
416. EFFECTIVE MANUFACTURING PLANNING FROM ENGINEERING DESIGN FOR COMPLEX PRODUCT ASSEMBLIES
417. EFFECTIVENESS OF RISK ASSESSMENT FOR EXPORT PROJECT
418. EFFICIENCY IMPROVEMENT IN COMPRESSORS
419. ELECTRICAL DESIGN AND PLC PROGRAMMING FOR ROBOTIC ROLLER HEMMING APPLICATION
420. ELECTRICAL ENERGY MANAGEMENT IN THE CEMENT INDUSTRY

421. ELIMINATE CUSTOMER COMPLAINT IN COVER RH COMPONENT DUE TO DIA 7 MOUNTING HOLE OPERATION MISSING FOR ROYAL ENFIELD CUSTOMER.
422. ELIMINATE THE CUSTOMER COMPLAINT IN TIE-ROD TUBE MACHINING (THREAD CUT)
423. ELIMINATING REJECTION DUE TO CRACK IN OUTPUT SHAFT
424. ELIMINATION OF DEFECT GENERATION IN CONTINUOUS MOVING MANUAL ENGINE ASSEMBLY LINE
425. ELIMINATION OF FIN LINE REJECTION IN CYLINDER BORE CELL
426. ELIMINATION OF FLANGE WIDTH VARIATION SCRAP AND REWORK REJECTION IN LP 1337 WHEEL CODE BY IMPLEMENTING FTR (FIRST TIME RIGHT)
427. ELIMINATION OF OIL SEEPAGE THROUGH DRAIN HOLE IN VACUUM PUMP ALTERNATOR
428. ELIMINATION OF REJECTION IN INJECTOR MANUFACTURING PROCESS
429. ELIMINATION OF RIM SCRAP DUE TO INCOMPLETE EXPANSION PROCESS
430. EMPIRICAL ANALYSIS OF SUPPLY CHAIN RISK MANAGEMENT IN INDIAN AUTOMOTIVE INDUSTRY
431. ENERGY CONSERVATION TO IMPROVE EFFICIENCY OF HIGH ENERGY CONSUMERS
432. ENERGY CONSUMPTION REDUCTION IN MAIN POWER DISTRIBUTION
433. ENERGY MANAGEMENT AND INNOVATIONS IN POWER DISTRIBUTION
434. ENERGY MANAGEMENT IN MANUFACTURING AND TESTING OF POWER CONDITIONING SYSTEMS
435. ENERGY MANAGEMENT TECHNIQUES FOR SOLAR PHOTOVOLTAIC POWER SYSTEMS
436. ENERGY OPTIMIZATION IN PAINT SHOP
437. ENERGY SAVING IN TRAY DRYER FOR ACTIVE PHARMACEUTICAL INGREDIENT INDUSTRIES.
438. ENGINE SPECIFIC FUEL CONSUMPTION IMPROVEMENT THROUGH OPTIMIZATION OF FUEL SYSTEM AND COMBUSTION SYSTEM.
439. ENHANCING CUSTOMER SATISFACTION BY REDUCING LED DISPLAY FAILURES IN THE CONTROL PANEL AT CUSTOMERS PLACE IN ENERGY METERS
440. ESTABLISH AN IN-HOUSE OIL ANALYSIS PROGRAM TO REDUCE THE MAINTENANCE COST
441. ESTABLISHING WASTE MAPPING
442. ESTABLISHMENT OF HARD TURNING PROCESS INSTEAD OF CONVENTIONAL GRINDING PRECESS
443. EVALUATION OF DIFFERENT TOLERANCE STACKUP ANALYSIS MODELS AND IDENTIFICATION OF OPTIMAL MODEL FOR FLEXIBLE ASSEMBLIES.
444. EXCAVATORS QUALITY IMPROVEMENTS
445. EXPLORING COST SAVING POTENTIAL THROUGH EFFECTIVE ENERGY MANAGEMENT AND STATISTICAL PROCESS CONTROL
446. FA1,FA2 & FA3 CASTING LINES - CASTING CHAINS UPGRADE
447. FAST TRACKING OF INFRASTRUCTURE PROJECTS
448. FEASIBILITY STUDY FOR ON-LINE SALES OF TECHNOLOGICAL PRODUCTS LIKE CARBIDE CUTTING TOOLS
449. FEASIBILITY STUDY FOR PROVIDING SHORE POWER TO SHIP.
450. FIRED HEATER INSTRUMENTATION AND CONTROLS RELIABILITY IMPROVEMENT PROJECT
451. FLOW MANAGEMENT IN MULTI-PRODUCT, MULTI-PROJECT ENVIRONMENT
452. FUEL ECONOMY IMPROVEMENT OF HEAVY COMMERCIAL BUSES THROUGH ELECTRONIC FEATURES & PARAMETERS OPTIMIZATIONS
453. FUEL EFFICIENCY IMPROVEMENT IN UPCR BY USING "DOE" TECHNIQUE
454. IDENTIFY A FEASIBLE SOLUTION FOR LEAK TESTING LOW DUTY TURBOCHARGERS AT CTT DEWAS BY USING SIX SIGMA METHODOLOGY
455. IMPLEMENTATION OF BUILT-TO-PRINT MANUFACTURING PROCESS FOR QUAD TRANSMIT/RECEIVE MODULES OF ACTIVE ELECTRONICALLY SCANNED ARRAY RADAR
456. IMPLEMENTATION OF DISPATCH BARCODE SYSTEM TO IMPROVE TRACEABILITY AND DELIVERY PERFORMANCE
457. IMPLEMENTATION OF GOVERNANCE, RISK AND COMPLIANCE
458. IMPLEMENTATION OF LEAN MANUFACTURING PRACTICE
459. IMPLEMENTATION OF LEAN TRANSFORMATION METHODOLOGY IN ASSEMBLY LINE
460. IMPLEMENTATION OF SUPPLIER DEVELOPMENT PROGRAM
461. IMPORTANCE OF PREVENTIVE MAINTENANCE IN MAINTENANCE ENGINEERING
462. IMPROVE BILLS OF MATERIAL ACCURACY TO 98%
463. IMPROVE CASH FLOW AND PROFIT & LOSS (P&L) BY IMPROVING INVENTORY TURNS
464. IMPROVE RELIABILITY PERFORMANCE OF POWER CONDITIONING SYSTEM MODULES
465. IMPROVEMENT IN ENGINEERING REQUEST PROCESS BETWEEN ENGINEERING AND COMMERCIAL DATA MANAGEMENT.
466. IMPROVEMENT IN LOSS OF ONLINE DIAPER PACKAGING MACHINE AND STANDARDISATION OF ALL PARAMETERS
467. IMPROVEMENT IN OLE OF PTED LINE BY ELIMINATING WAITING LOSS DUE TO SKID SELECTION TO PROCESS MULTIPLE BIW MODELS IN PAINT SHOP
468. IMPROVEMENT IN PRODUCTION PRACTICES THROUGH CONTINUOUS PROCESS IMPROVEMENT

469. IMPROVEMENT OF SUPPLY CHAIN MANAGEMENT FOR PLANT & MACHINERY DEPARTMENT IN HCI IC OF L&T CONSTRUCTION
470. IMPROVING CHEMICAL RESISTANCE OF FRP MOLDED GRATING AND REDUCE COST
471. IMPROVING EFFICIENCY AND RELIABILITY OF EXTRUSION INGOT MACHINE WITH AUTOMATION SYSTEM
472. IMPROVING PROCESS CAPABILITY OF INDUCTION HARDENING PROCESS IN TURBINE SHAFT
473. IMPROVING PRODUCTIVITY, PERFORMANCE & PROFITABILITY BY REDUCING COST OF NON-QUALITY - ONFINITI UPS
474. IMPROVING PUNCTUALITY OF CURRENT ORDER & PROJECT MANAGEMENT PROCESSES TO MINIMIZE DELAY IN DELIVERY SCHEDULES BY INTEGRATION OF EFFECTIVE PROJECT MANAGEMENT METHODS
475. IMPROVING THE PRODUCTIVITY OF THE W75 - HORN VARIANT
476. IMPROVISATION IN PROJECT EXECUTION
477. IMPROVING THE GROSS MARGIN & MARKET SHARE OF PRODUCT 13A SWITCH SOCKET
478. IMPROVING PROCESS CAPABILITY OF TENSILE STRENGTH OF 12.9 GRADE FASTENERS IN HEAT TREATMENT PROCESS
479. IMPROVING THE EFFICIENCY OF COATING BY REDUCING THE MATERIAL WASTAGE
480. IN HOUSE DEVELOPMENT OF MECHANIZED CHOP SAW MACHINE FOR RED JOINT CUTTING IN REAL TIME RADIOGRAPHY (RTR), AT TUBULAR PRODUCTS, HPBP, BHEL, TRICHY.
481. INCREASE THE PRESS UTILISATION IN MECHANICAL LINE BY 10%
482. INCREASING THE PRODUCTIVITY AND QUALITY IN ABRASIVE JET MACHINE
483. INDUSTRIAL PRODUCT AND PROCESS DEVELOPMENT
484. INDUSTRIAL VALVES - ENGINEERING & DEVELOPMENT FOR HIGH PRESSURE & LOW TEMPERATURE APPLICATIONS
485. INDUSTRY BENCHMARKING OF PRODUCT COSTING TECHNIQUE TO IMPROVE NEW PRODUCT GROSS MARGIN
486. INSTALLATION AND OPERATION & MAINTENANCE OF AUTOMATIC JUMPFORM SYSTEM IN NATURAL DRAFT COOLING TOWER
487. INTEGRATION OF CAM PROGRAMMING AND SIMULATION IN ONE SYSTEM
488. INTEROFFICE PROJECT MANAGER & PROJECT MANAGEMENT CHALLENGES IN MIDDLE EAST
489. INVENTORY CONTROL SYSTEM IN RATNAGIRI GAS AND POWER PVT LTD
490. INVENTORY MANAGEMENT
491. INVENTORY MANAGEMENT ACROSS 11 CIRCLES OF INFRATEL
492. LEAN MANUFACTURING APPLICATIONS IN LAUNCH VEHICLE ASSEMBLY AND INTEGRATION
493. LEAN MANUFACTURING THROUGH MRP AND PULL APPROACH
494. LEAN MANUFACTURING □ - CREATING MORE VALUE FOR CUSTOMERS WITH FEWER RESOURCES.
495. LINE BALANCING IN MANUFACTURING ASSEMBLY LINE
496. LOCALIZATION OF SERVO CONTROLLED ELECTRICAL NUT RUNNER
497. LOW NOISE MAGNETIC TUBE UNLOADING SYSTEM FOR ANNEALING FURNACE
498. MACHINE CAPABILITY IMPROVEMENT AND REDUCTION OF SCRAPS
499. MAINTENANCE AND SAFETY IN CEMENT PLANT
500. MAINTENANCE MANAGEMENT AND REPLACEMENT CRITERIA OF SUB SYSTEMS FOR CNC VERTICAL TRIMMING MILL AT SDSC SHAR (A STUDY UNDERTAKEN FOR INDIAN SPACE RESEARCH ORGANIZATION)
501. MAINTENANCE MANAGEMENT IN CEMENT INDUSTRY
502. MANAR MALL EXPANSION PROJECT MEP SERVICES
503. MANUFACTURING COST REDUCTION OF SPACE SOLAR PANEL BY USING LARGE AREA SOLAR CELLS.
504. MANUFACTURING OF FORGED MEDIUM PRESSURE CHECK VALVES WITH TAPERED SEAT RING AND DISC ASSEMBLY FOR STEAM GENERATORS
505. MANUFACTURING OF POWER CONDITIONING SYSTEMS THROUGH ERGONOMIC APPROACH AND ECO FRIENDLY MATERIALS
506. MANUFACTURING ORGANIZATION AND MANAGEMENT
507. MANUFACTURING ORGANIZATION AND MANAGEMENT-PRODUCT INNOVATION TO IMPROVE EFFICIENCY AND QUALITY IMPROVEMENT OF 3W SEAT
508. MAXIMIZATION OF INJECTOR LIFE TO SUIT INDIA USAGE REQUIREMENTS
509. MEASUREMENT OF OVERALL PLANT EFFECTIVENESS (OPE) AND ALSO TO SUGGEST MEASURES TO IMPROVE THE SAME FOR THE OXIDATION PLANT (U-300) OF THE KERALA MINERALS AND METALS LTD (KMML), KOLLAM, KERALA.
510. MOBILE APPLICATION BASED DIGITAL PLATFORM FOR CAR AND BIKE POOLING
511. MODAL ANALYSIS OF TURBINE BLADE
512. MODIFICATION OF THE EXISTING CLUTCH MOTOR SEWING MACHINES FOR INCREASING EMPLOYABILITY OF LEG IMPAIRED PERSONS IN GARMENT FACTORIES
513. MTTR OPTIMISATION THROUGH SUB CONTROL SYSTEM REDUCTION IN LINE1 & 2 CEMENT PLANT.
514. NEW MATERIAL DEVELOPMENT

515. NEW PRODUCT DEVELOPMENT : A NEED OF COMPETITIVE SCENARIO
516. NEW PRODUCT DEVELOPMENT METHODOLOGY FOR INDIAN MANUFACTURING SECTOR
517. NEW PRODUCT DEVELOPMENT OF ELECTRO MECHANICAL ACTUATOR -A MARKET DRIVEN APPROACH
518. NEW PRODUCT DEVELOPMENT,SOURCING-PROCESS MANUAL CREATION AND IMPLEMENTATION OF DMIS FOR NEW PROJECT MANAGEMENT
519. NOVEL MIRROR CONCEPT: ENGINEERING TO SERIES PRODUCTION MANUFACTURING USING CONCURRENT PROJECT MANAGEMENT
520. OEE IMPROVEMENT BY TPM IMPLEMENTATION
521. OFFLINE DIE SETTING TIME REDUCTION
522. OPTIMISATION /REDUCTION IN OPERATING INVENTORY
523. OPTIMISATION IN PACKING COST
524. OPTIMISATION OF PLANT EFFICIENCY USING RELATIVE ALLOCATION OF FACILITIES
525. OPTIMIZATION OF VALIDATION (PHYSICAL PHASE)- AN APPROACH TO OPTIMIZE PART DESIGN IN DIGITAL PHASE
526. OPTIMIZATION OF ASSEMBLY AND SERVICE OPERATIONS
527. OPTIMIZATION OF BULK MATERIAL HANDLING THROUGH ENGINEERED TRANSFER CHUTE
528. OPTIMIZATION OF ENERGY & BUSINESS DELIVERY
529. OPTIMIZATION OF LAYOUT AND IMPLEMENTATION OF TRACKING SYSTEM FOR TRADE WAREHOUSE
530. OPTIMIZATION OF MECHANICAL PROPERTIES OF PINECONE POWDER REINFORCED BIO-COMPOSITE USING TAGUCHI METHOD
531. OPTIMIZATION OF ORGANISATIONAL ENERGY USING LINEAR PROGRAMMING
532. OPTIMIZATION OF PROCESS TIME AND INVENTORY BY IMPLEMENTING LEAN TECHNIQUES
533. OPTIMIZATION OF PRODUCTION PLANNING SYSTEM FOR TAILOR MADE PRODUCTS
534. OPTIMIZATION OF PRODUCTION PROCESS BY INTEGRATING LEAN-SIX SIGMA
535. OPTIMIZATION OF REPAIRABLE PROCESS
536. OPTIMUM DRIVER SELECTION FOR CENTRIFUGAL COMPRESSOR
537. OVERALL EQUIPMENT EFFICIENCY IMPROVEMENT
538. PARADIGM SHIFT IN REFINERY MAINTENANCE PROCEDURE AND ITS EFFECTIVENESS
539. PLANNING AND EXECUTION OF BIOPHARMACEUTICALS MANUFACTURING
540. PROBLEM SOLVING SKILLS (PSS)
541. PROCESS DEVELOPMENT OF RANOLAZINE EXTENDED RELEASE TABLETS 500 /1000 MG
542. PROCESS DEVELOPMENT FOR NEW MODEL GEARS
543. PRODUCT DESIGN IMPROVEMENT TO REDUCE COST OF POOR QUALITY AND INCREASE PRODUCTIVITY
544. PRODUCT DESIGN USING BENCHMARKING
545. PRODUCT DESIGN-RE ENGINEERING OF FIBRE OPTIC JOINT CLOSURE
546. PRODUCT DEVELOPMENT OF TIER III SLOW SPEED SPLIT CASE FIRE PUMPS
547. PRODUCT LOCALIZATION FOR INDIAN MARKET
548. PRODUCTION PROCESS IMPROVEMENT USING QUALITY TOOLS AND TECHNIQUES
549. PRODUCTION SYSTEM LAYOUT ( LINEAR TO U SHAPE) MODIFICATION FOR SLURRY PRODUCT ASSEMBLY- LEAN INITIATIVE
550. PRODUCTION SYSTEM, PLANNING, CONTROL AND INVENTORY MANAGEMENT
551. PRODUCTION SYSTEMS - PLANNING & CONTROL
552. PRODUCTIVITY ENHANCEMENT THROUGH NEW AUTOMATED PAINTING BOOTH IN CRANE MANUFACTURING
553. PRODUCTIVITY IMPROVEMENT THROUGH LINE BALANCING
554. PROJECT LIFECYCLE MANAGEMENT THROUGH AN AUTOMATED SOFTWARE APPLICATION
555. PROJECT MANAGEMENT
556. PROJECT MANAGEMENT - EMERGENCY EQUIPMENT INSTALLATION DESIGN FOR COMMERCIAL AIRCRAFT
557. PROJECT TIMELINE REDUCTION A METHODOLOGY TO ACHIEVE ON-TIME PRODUCT LAUNCH
558. PROTECTIVE PACKAGING DESIGN & EXPERIMENTAL EVALUATION OF INDUSTRIAL ELECTRO-MECHANICAL PRODUCTS
559. QUALITY ASSURANCE FOR PHARMA INSTRUMENTS
560. QUALITY IMPROVEMENT IN INVESTMENT CASTING PART
561. RADIO FREQUENCY IDENTIFICATION (RFID)
562. REDESIGN & DEVELOPMENT OF WELDING FIXTURE TO INCORPORATE MULTIPLE FRAME VARIANTS
563. REDUCE ENVIRONMENTAL FOOTPRINT BY REUSE OF WASTES
564. REDUCE THE CYCLE TIME IN DICV SEAT ASSEMBLY
565. REDUCE THE PRODUCT COST TO IMPROVE THE MARKET SHARE
566. REDUCING AND OPTIMIZATION OF SQUEAK AND RATTLE ISSUES IN AUTOMOTIVE DOOR SYSTEMS USING 6 SIGMA METHODOLOGIES

567. REDUCING REJECTION IN CAGE - CV JOINT
568. REDUCING THE TOTAL MANUFACTURING HOURS AND INVENTORY THROUGH FACTORY PROCESS & LAYOUT IMPROVEMENT
569. REDUCTION IN CUSTOMER LINE REJECTION BY 30% IN ENGINE ASSEMBLY
570. REDUCTION IN TOTAL CYCLE TIME FOR TECHNICAL INSTRUCTIONS
571. REDUCTION OF DIMENSION CHANGEOVER TIME IN TYRE BUILDING MACHINE
572. REDUCTION OF DIMENSION CHANGEOVER TIME USING SMED IN ASSEMBLY SHOP
573. REDUCTION OF PROCESS REJECTION DUE TO LEAK TEST BY SIX SIGMA ANALYSIS
574. REDUCTION OF TAKT TIME IN POWERTRAIN COOLING PRODUCT LINE USING VALUE STREAM MAPPING TECHNIQUE
575. REDUCTION OF TOGGLE PRINTING REJECTION BY SIX SIGMA METHODOLOGY
576. REDUCTION OF VIBRATION LEVELS IN RE ENGINE
577. REDUCTION OF WARRANTY CLAIMS THROUGH IMPROVEMENT OF HORN
578. RELIABILITY EVALUATION BASED MAINTENANCE STRATEGY SELECTION FOR A CRITICAL PROCESS EQUIPMENT AT IREL CHAVARA.
579. RELIABILITY IMPROVEMENT OF TRANSMISSION CONTROL MODULE IN REAR ENGINE BUSES
580. RELIABILITY IMPROVEMENT ON EXTRUDER GEARBOX
581. RELIABILITY IMPROVEMENT ON HIGH PRESSURE PLUNGER PUMP
582. REMOTE TANK LEVEL MONITORING SYSTEMS
583. REPLACEMENT OF CO2 WITH INERGEN (INERT GAS) FIRE EXTINGUISHING SYSTEM
584. REQUIREMENTS MANAGEMENT FOR WHIPLASH INJURY PROTECTION FOR AUTOMOTIVE SEAT
585. RESIDUAL USEFUL LIFE ESTIMATION OF ROLLING ELEMENT BEARING WITH MULTIPLE DEFECTS ON RACEWAYS
586. RHEOLOGICAL STUDIES OF POLYMERS FOR OPTIMIZING PLASTIC PRODUCT DESIGN AND PROCESS PARAMETERS
587. RISK MANAGEMENT STRATEGIES AND TACTICS IN PHARMACEUTICAL SUPPLY CHAIN
588. ROOT CAUSE ANALYSIS FOR SEA WATER LIFT PUMP FAILURE
589. SCAFFOLDING PRODUCTIVITY, COST AND EFFICIENCY IMPROVEMENT
590. SELECTIVE CONTROL OF CHEMICAL REACTIONS WITH PLASMAS
591. SERVICE LOAD ANALYSIS FOR DURABILITY IN PASSENGER CAR
592. SHELF LIFE OF PERFUMERY RAW MATERIAL-AN INDUSTRIAL CHALLENGE
593. SIMULATION OF SHAFT USED IN TEXTILE MACHINERY
594. SIX SIGMA USING DMAIC APPROACH
595. SIX SIGMA-FIXTURE DESIGN FOR WARPED/NON STANDARD WAFERS MANUFACTURING
596. SOME STUDIES ON IMPROVEMENT OF QUALITY ASSURANCE AND RELIABILITY OF DISTRIBUTION BOX OF FEEDER PROTECTION AND CONTROL REF615 IEC IN M/S. STERA ENGINEERING INDIA (P) LTD, CHENNAI.
597. STATISTICAL PROCESS MODELLING - ENHANCED MACHINE RELIABILITY
598. STEEL PRODUCT DEVELOPMENT BY IMPROVING MECHANICAL PROPERTY OF CONTINUOUS ANNEALING LINE MATERIAL OVER THE BATCH ANNEALING
599. STRATEGIC SOURCING
600. STRATEGIES FOR OPTIMIZING NWC AND INVENTORY MANAGEMENT
601. STRATEGY FOR SUPPLIER MANAGEMENT AND SUPPLIER PERFORMANCE INDEX
602. STREAMLINE THE OUTSOURCED PROCUREMENT PROCESS FOR FIP TEST BENCH PRODUCT SEGMENT
603. STUDY AND IMPROVE DESIGN OF REAR COOLING UNIT FOR VALUE ENGINEERING AND CUSTOMER SATISFACTION IN PASSENGER CARS.
604. STUDY OF CONCESSION PROCESS IN AIRCRAFT INDUSTRY & PROPOSAL FOR THE QUALITY IMPROVEMENTS
605. STUDY OF WEB DEVELOPMENT AND ONLINE SALES OF MECHANICAL FACE SEALS AND DUO CONE SEALS
606. STUDY OF WIND POWER PROJECT DEVELOPMENT SCOPE IN ANDHRA PRADESH AND KARNATAKA: DOCUMENTATION AND FINANCIAL MODELING
607. STUDY ON EVOLUTION OF CREW RESOURCE MANAGEMENT IN MILITARY AVIATION AND FUTURE IMPLICATIONS
608. SYSTEMATIC MANUFACTURING UNIT PLANNING AND OPERATIONS CONTROL
609. SYSTEMATIC APPROACH TO EFFECTIVE PROJECT COST MANAGEMENT
610. TEAR DOWN STUDY FOR THE CAR SEAT
611. TECHNOLOGY APPROACHES AND COMPETITIVE LANDSCAPE FOR ATOMIC LAYER DEPOSITION (ALD)
612. TELEMATER 320/420 FRONT AND REAR CHASSIS DEVELOPMENT AND PRODUCTIONIZATION
613. TEST BED OUTPUT OPTIMIZATION THROUGH ENGINE QUALITY IMPROVEMENT BY RESOLVING QUALITY PROBLEMS USING DESIGN OF EXPERIMENT
614. TESTING LEAD TIME OPTIMIZATION - HIGH PRESSURE VALVES

- 615. THROUGHPUT ENHANCEMENT OF PCI (PULVERISED COAL INJECTION) SYSTEM TO MINIMIZE THE HOT METAL COST
- 616. TO DEVELOP RL (SECTIONALIZER) LEVEL- 3 TEST SET UP IN INDIA FOR INDIAN MARKET
- 617. TO ELIMINATE DEFECT OF HEAD LIGHT AIMING WRONG ON BOLERO FAMILYVEHICLES
- 618. TO ELIMINATE THE QUALITY CONCERN OF GEAR LEVER KNOB WRONG FITMENT ON SCORPIO ASSEMBLY LINE.
- 619. TO IMPROVE PROCESS CAPABILITY OF LEAD ERROR IN FUEL PUMP GEAR
- 620. TO IMPROVE THE SAFETY IN MECHANICAL PRESS
- 621. TO MAXIMIZE PROFIT BY OPTIMIZING PLATFORMING REACTOR OPERATION
- 622. TO REDUCE REJECTION, REWORK PERCENTAGE IN BEARING HOUSING MACHINING)
- 623. TOOL DESIGN OPTIMIZATION USING ADVANCED MANUFACTURING RELEASE PROCESS
- 624. TOTAL QUALITY MANAGEMENT
- 625. TRANSITION BUSINESS FROM INDIA LOGISTICS CENTER TO LSC FACILITY
- 626. TRANSPORT CART FOR MATERIAL HANDLER UNDER AND UPPER CARRIAGE
- 627. URBAN E-MOBILITY CONCEPT
- 628. VALUE ADDITION IN COMPACTORS
- 629. VALUE ENGINEERING
- 630. VALUE ENGINEERING OF AUTOMOTIVE DISC TYPE ELECTRIC HORN
- 631. VALUE STREAM MAPPING
- 632. VALUE STREAM MAPPING IN PRODUCTION PROCESS
- 633. VALUE TRANSMISSION FOR INDIA MARKET
- 634. VERIFICATION OF PLANT LAYOUT, MATERIAL FLOW & PRODUCTION CAPACITY USING DISCRETE EVENT SIMULATION TOOL
- 635. WHITE BODY STORAGE SYSTEM
- 636. XUV 500 AXLE LINE MATERIAL STORAGE & FEEDING OPTIMIZATION USING VALUE STREAM MAPPING

#### **M.Tech. (QUALITY MANAGEMENT)**

- 637. A DESIGN OF EXPERIMENT APPROACH TO MAINTENANCE OPERATIONS
- 638. A HYBRID MODEL FOR ANALYSIS OF VIDEO SIGNAL QUALITY UNDER CONCURRENT LOAD CONDITIONS
- 639. A PRODUCT COMPLIANCE MANAGEMENT FRAMEWORK FOR STATUTORY REGULATION
- 640. A STUDY ON PRODUCTION & OPERATIONS MANAGEMENT WITH REFERENCE TO RETAIL SECTOR
- 641. A STUDY ON QUALITY OF WORK LIFE AND ITS IMPACT ON THE WELL-BEING OF EMPLOYEES WORKING IN IT COMPANIES
- 642. A STUDY ON STATISTICAL QUALITY CONTROL THROUGH INSTRUMENTAL TEST METHODS FOR MATERIAL TESTING.
- 643. A STUDY ON THE PERCEPTION ON RECENT CHANGE TOWARDS E-GOVERNANCE IMPLEMENTATION OF THE PRICE SOFTWARE AMONG ENGINEERS IN IRRIGATION DEPARTMENT, GOVERNMENT OF KERALA.
- 644. ACHIEVE PROJECT OBJECTIVES BY CONTROLLING RISKS IN CONSTRUCTION PROJECT
- 645. ACHIEVING OPERATION EXCELLENCE THROUGH LEAN IMPLEMENTATION: A CASE STUDY OF REALIZING CUSTOMER VALUE IN A MULTI-LOCATION SOFTWARE PRODUCT DEVELOPMENT ENVIRONMENT
- 646. AN ANALYSIS INTO IMPROVING SERVICE QUALITY BY KNOWLEDGE AREAS OF MANAGEMENT
- 647. ANALYSING WORLD CLASS INNOVATIVE HR PRACTICES FOR IMPLEMENTATION IN THE INDIAN ARMY
- 648. ANALYSIS OF AUTOMATED ID OVERLAY QUALITY ISSUES AND ENHANCING PRODUCTIVITY
- 649. ANALYSIS OF FREQUENT LEAKAGE IN STEAM CONDENSATE SYSTEM
- 650. ANALYSIS OF PROJECT PERFORMANCE OF DELAYED CROCKER UNIT AT IOCL PARADIP, ORISSA
- 651. ANALYSIS OF QUALITY SYSTEM PERFORMANCE OF THIRD PARTY GAS INTERCONNECTING FACILITIES PROJECTS EPC-WORKS
- 652. ANALYTICAL METHOD VALIDATION OF CD45-FITC/CD4-RD1/CD8-ECD/CD3-PC5 TESTING USING A FLOW CYTOMETER.
- 653. APPLICATION OF LINEAR PROGRAMMING TO ORGANIZATIONAL RESOURCE PLANNING AND OPTIMIZATION
- 654. APPLICATION OF PORTER'S FIVE FORCES TO IPR FIRMS IN INDIA
- 655. APPLICATION OF TOTAL QUALITY MANAGEMENT CONCEPTS IN MANUFACTURING INDUSTRIES
- 656. APPLICATION OF TQM TOOLS FOR BUSINESS EXCELLENCE MODEL IN INDIAN AUTOMOTIVE MANUFACTURING SECTOR
- 657. APPLY DISCRETE EVENT SIMULATION IN SUPPORT PROJECTS FOR RESOURCE MANAGEMENT
- 658. ASCERTAIN THE EFFICACY OF MOD 495-7 ON A GAS TURBINE AEROENGINE(M53-P2)
- 659. ASSESSMENT OF CURRENT TOWER RADIATION LEVELS OF KERALA CIRCLE AND INTRODUCTION OF NEP
- 660. BEHAVIOR DRIVEN DEVELOPMENT FOR AGILE
- 661. BEHAVIOURAL PSYCHOLOGY OF A PERSON AT WORK PLACE

662. CHANGE MANAGEMENT IN ENTERPRISE RESOURCE PLANNING (ERP) IMPLEMENTATIONS: AN ANALYTIC APPROACH
663. CONTINUAL PRODUCT QUALITY IMPROVEMENT THROUGH TQM, TPM & SPC TECHNIQUES
664. CPM / PERT MODEL IN CONSTRUCTION PROJECTS
665. CUSTOMER SATISFACTION THROUGH HOLISTIC QUALITY MANAGEMENT APPROACH
666. D258 STARTER MOTOR (D3) WARRANTY IMPROVEMENT- TAURAS & EXPLORER MODEL (FORD NORTH AMERICA)
667. DATA COLLECTION AND USING STATISTICAL METHODS TO EXTEND CALIBRATION DUE DATES OF LABORATORY EQUIPMENT
668. DESIGN AND BUILT SERVICE OPERATION MODEL BASED ON ETOM FRAMEWORK FOR MIDDLE EAST BASED TELCO
669. DESIGN FOR RELIABILITY APPLICATION TO PATIENT MONITORING CENTRAL STATION
670. DESIGN OF EXPERIMENT TO OPTIMIZE PARAMETERS FOR ELECTRIC DISCHARGE MACHINE
671. DESIGNING AN AGILE METHODOLOGY FOR MOBILE SOFTWARE DEVELOPMENT USING A HYBRID METHOD ENGINEERING APPROACH
672. DETAILED SWOT ANALYSIS FOR AN R & D INSTITUTE INCLUDING CREATING A TEMPLATE COVERING CRITICAL ASPECTS FOR FUTURE PERIODICAL SWOT ANALYSIS.
673. DEVELOP AN ESTIMATION METHODOLOGY FOR DIFFERENT TYPES OF PROJECTS BY USING PARAMETRIC ESTIMATION TECHNIQUES.
674. DEVELOP EVALUATION MATRICES FOR HELICOPTER MISSION RELIABILITY
675. DEVELOPMENT AND IMPLEMENTATION OF SYSTEM ASSURANCE PROCESS AT GEC
676. DEVELOPMENT OF ORGANIZATIONS QUALITY MANAGEMENT SYSTEM HEALTH - CHECK TOOL
677. DIGITAL IAF : FROM THE SPEED OF SOUND TO THE SPEED OF LIGHT
678. DIGITAL TV FIELD TESTÂ€™S DEFECT MANAGEMENT SYSTEM
679. DOE DRIVEN TEST PLAN FOR HEXAVALENT CHROMIUM FREE PASSIVATION PROCESS EVALUATION
680. EFFECTIVE MANAGEMENT OF TIME, COST OVER RUN IN DEFENCE HOUSING PROJECTS
681. EFFORT REDUCTION AND PROCESS IMPROVEMENT USING LEAN AND SIX SIGMA METHODOLOGY
682. ELIMINATION OF FUEL GAUGE CALIBRATION AND RESPONSE TIME RELATED PROBLEMS IN TATA SUMO INSTRUMENT CLUSTER
683. ELIMINATION OF RING OFFSET PROBLEM THROUGH TQM
684. EMPHASIS ON EARLY DETECTION & PREVENTION OF PROBLEMS IN CONCRETE MODULAR CONSTRUCTION
685. ENERGY EFFICIENCY AND POWER QUALITY MANAGEMENT USING INTERNET OF THINGS DEVICES
686. ENERGY MANAGEMENT AND AUDIT IN COMMERCIAL BUILDINGS
687. ENGINE FIELD CLAIM REDUCTION THROUGH TOTAL QUALITY MANAGEMENT
688. ENHANCING UMTS KPIS USING SIX SIGMA TOOLS.
689. EVALUATE&RE-DESIGN THE CRITICAL WELD JOINTS TO MEET THE QUALITY REQUIREMENTS OF THE WELD
690. EVOLUTION OF BIOSIMILAR GUIDELINES IN EUROPEAN UNION: MEASUREMENT OF PARADIGM SHIFT IN THE GUIDELINES IN LAST DECADE AND ASSESSMENT OF APPROACH TAKEN BY THE BIOPHARMACEUTICAL MANUFACTURERS FOR SECURING A MARKETING AUTHORIZATION.
691. FAILURE REPORTING AND CORRECTIVE ACTION SYSTEM (FRACAS)
692. FIELD PROBLEM ANALYSIS AND SOLUTION OF FEAD BELT FOR PASSENGER CAR
693. FORMULATION OF ORGANIZATIONAL STRATEGIES TO DEAL WITH CURRENT CRISIS OF LOW OIL PRICE
694. FORMULATION OF QUALITY ASSURANCE PLAN OF MISSILE SYSTEM
695. FTS CREDIT CARD PREFUNDING LEAKAGE REDUCTION BY 75%
696. HUMAN FACTORS IN AIRCRAFT MAINTENANCE AND INSPECTION
697. IMPLEMENTATION OF ADVANCED NON-DESTRUCTIVE TESTING TECHNIQUES IN OIL & GAS PROJECTS
698. IMPLEMENTATION OF AGILE METHODOLOGY IN MOBILE AUTOMATION TESTING
699. IMPLEMENTATION OF ASSET MANAGEMENT IN QF
700. IMPLEMENTATION OF BUILT-IN QUALITY (AN INTEGRATED QUALITY SYSTEM)
701. IMPLEMENTATION OF LEAN ENGINEERING AT INDIAN AIRFORCE REPAIR UNITS
702. IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEMS
703. IMPLEMENTING LEANER SUPPLY CHAIN MANAGEMENT IN MILITARY : RISK PERSPECTIVES
704. IMPROVEMENT IN RELIABILITY & BUILT IN QUALITY OF AUTOMOTIVE HORNS WITH SPECIAL FOCUS ON CAUSE ANALYSIS OF VARIATION IN RELIABILITY OF HORNS FROM ITS DEVELOPMENT STAGE TO REGULAR PERIODIC VALIDATIONS.
705. IMPROVEMENT OF POST TREATMENT QUALITY IN CONTINUOUS GALVANIZED LINE BY CONDUCTING QUICK SIX SIGMA PROJECT.(DMAIC)
706. IMPROVEMENTS IN THE QUALITY MANAGEMENT OF MECHANICAL INTEGRATION TASKS FOR MULTIPLE SATELLITE ASSEMBLIES IN OPERATIONAL LAUNCH VEHICLE.
707. IMPROVING COQ & DDR FOR AN IT AGILE DEVELOPMENT PROJECT



- 708. IMPROVING PRODUCTIVITY OF BRAHMOS INTEGRATION FACILITY BY IMPLEMENTING PRINCIPLES OF OPERATIONS MANAGEMENT
- 709. IMPROVING THE SECURITY OF CLASSIFIED DATA AND ASSOCIATED RESOURCES
- 710. INCREASED AVAILABILITY OF ROTABLES AT USER END THROUGH PROCESS IMPROVEMENT
- 711. INLINE PASS RATIO IMPROVEMENT
- 712. INSTALLATION AND INTEGRATION OF FLIGHT DATA RECORDER SYSTEM IN JET TRAINER AIRCRAFT OF IAF
- 713. INTEGRATED MANAGEMENT SYSTEM FOR IMPROVING QUALITY
- 714. INTEGRATION AND PRACTICING OF PROJECT MANAGEMENT TECHNIQUES
- 715. INTRODUCING RISK MANAGEMENT PROCESS TO THE MANUFACTURING INDUSTRY
- 716. INVESTIGATE MAINTENANCE POLICY SELECTION USING THE ANALYTIC HIERARCHY PROCESS: AN APPLICATION FOR MILITARY AIRCRAFT
- 717. LAUNCH OF A NEW NPI
- 718. MAINTENANCE AND SAFETY
- 719. MATERIAL INTEGRATION TESTING AND ANALYSIS OF MISSILE TANKS CARRYING LIQUID PROPELLANT THROUGH ULTRA SONIC GUAGING
- 720. MOBILE APPLICATION FOR INDUSTRIAL APPLICATION
- 721. NEED FOR IMPROVED QUALITY ENVIRONMENTAL AUDITS FOR VARIED ELECTRONIC EQUIPMENT ASSETS AT DISPERSED LOCATION
- 722. NON CONFORMANCE AND ROOT CAUSE ANALYSIS TOWARDS QUALITY IMPROVEMENT ON ROCKET ENGINES
- 723. OPTIMIZATION OF BEST BRAZE JOINT FIT FOR ARMATURE AND SPINDLE OF SOLENOID VALVE
- 724. OPTIMIZATION OF OIL AND GAS PRODUCTION TESTING
- 725. OPTIMIZATION OF SPECIFICATION AND FEATURES BY BENCHMARKING OF DIFFERENT CAR MANUFACTURER VEHICLES
- 726. ORGANIZATION CHANGE MANAGEMENT FOR EFFECTIVE AND SUCCESSFUL CMMI LEVEL 5 IMPLEMENTATION
- 727. PASSIVE INFRASTRUCTURE ASSESSMENT OF CORE NODES AT MOBILE SWITCHING CENTRE
- 728. PERFORMANCE AND RELIABILITY IMPROVEMENT OF CIRCUIT BREAKER
- 729. PERFORMANCE MEASUREMENT SYSTEM FOR ENGINEERING DEPARTMENT
- 730. PHARMACEUTICAL QUALITY MANAGEMENT
- 731. PROACTIVE APPROACH TO REDUCE SUPPLIER'S PPM LEVEL
- 732. PROACTIVE RISK MANAGEMENT THROUGH AN EFFICIENT PROJECT LAUNCH PROCESSES FRAMEWORK
- 733. PROCESS CAPABILITY ANALYSIS OF MANUFACTURING PROCESS OF ANTIMIGRAINE TABLETS 100MG
- 734. PROCESS CYCLE TIME REDUCTION BY NEW MATERIAL INTRODUCTION
- 735. PROCESS IMPROVEMENT FOR CYLINDER HEAD LEAK
- 736. PROCESS IMPROVEMENT OF TANK MAUNFACTURING AT SUPPLIER EMPL
- 737. PROCESS OPTIMISATION& ENERGY CONSERVATION IN MASTER CYLIDER ALUMINIUM CASTING HEAT TREATMENT PROCESS
- 738. PRODUCT DEVELOPMENT BY CONCURRENT ENGINEERING APPROACH
- 739. PRODUCT QUALITY IMPROVEMENT IN BRAKE FLUID RESERVOIR
- 740. PRODUCTIVITY AND PROCESS IMPROVEMENT THROUGH LEAN AND SIX SIGMA
- 741. PRODUCTIVITY AND QUALITY IMPROVEMENT USING EFFECTIVE PLUMBING SYSTEM
- 742. PROJECT MANAGEMENT FOR CONSTRUCTION PROJECTS : IMPROVING PROJECT PERFORMANCE
- 743. PROJECT MANAGEMENT METHODOLOGY IN INDIAN AUTOMOTIVE MANUFACTURING SECTOR
- 744. PROJECT ON PRODUCTIVITY IMPROVEMENTS & STEEL QUALITY ENHANCEMENT IN CONTINUOUS CASTING BILLET CASTERS THROUGH QUALITY OPTIMIZATION OF TUNDISH REFRACTORIES.
- 745. PROJECT ON REMOTE CONTAINER MANAGEMENT
- 746. PROJECT PRODUCTIVITY ENHANCEMENT BY CHANGING WELD JOINT DETAILS AND WELDING CONSUMABLE FOR DUBAI I SPOKES WELDING
- 747. PROJECT PRODUCTIVITY ENHANCEMENT FOR RACK AND CORD LEG WELDING WITH TWIN WIRE SAW
- 748. QMS MANUAL
- 749. QUALITY AND PROCESS IMPROVEMENT OF DIFFERENTIAL CASE LINE (AXLE ASSEMBLY PART) BY REDUCING 50% SCRAP WRT YEAR 2015.
- 750. QUALITY ASSESSMENT AND BRINGING CHANGE THROUGH TQM
- 751. QUALITY ASSURANCE AND QUALITY CONTROL PREVENTIVE MEASURES FOR CLADDED (EXPLOSION BONDED CLAD PLATES) PRESSURE VESSELS TO MINIMIZE THE RISK OF CORROSION AND SERVICE FAILURES
- 752. QUALITY ASSURANCE/ QUALITY CONTROL IN BUILDING CONSTRUCTION THROUGH QUALITY MANAGEMENT SYSTEM IN ORDER TO ACHIEVE MORE PREDICTABLE & CONSISTENT END PRODUCT FOR MEETING AND EXCEEDING CLIENTS NEED
- 753. QUALITY CONTROL FOR LEAD SHIELDED RADIOACTIVE MATERIAL TRANSPORTATION PACKAGE

- FABRICATION, CONSIDERING OPERATIONAL AND REGULATORY REQUIREMENT
754. QUALITY CONTROL OF ADVANCE CHROME-MOLY VANADIUM MATERIAL HRC REACTOR
  755. QUALITY ENHANCEMENT OF REPARABLE OF INDIAN MILITARY AIRCRAFT
  756. QUALITY IMPROVEMENT
  757. QUALITY IMPROVEMENT AT SUPPLIER M/S KAY BEE ACCORDING TO AUTOMOTIVE REQUIREMENTS(ISO/TS :16949)
  758. QUALITY IMPROVEMENT IN DIAPHRAGM WALL CONSTRUCTION IN L&T GEOSTRUCTURE
  759. QUALITY IMPROVEMENT IN PAVEMENT QUALITY CONCRETE USING STATISTICAL QUALITY CONTROL TOOLS
  760. QUALITY IMPROVEMENT PROJECT
  761. QUALITY MANAGEMENT IN PROCUREMENT OF STATIC EQUIPMENT FOR DOWNSTREAM OIL AND GAS INDUSTRIES
  762. QUALITY MANAGEMENT OF OFFSHORE OIL AND GAS EPC PROJECTS DURING PROCUREMENT PHASE
  763. QUALITY MANAGEMENT OF SYSTEMS DESIGNED AND DEVELOPED BY DRDO
  764. QUALITY MANAGEMENT SYSTEM - PROCESS APPROACH TO DEVELOP PROJECT SITE
  765. QUALITY MANAGEMENT SYSTEM IMPLEMENTATION CHALLENGES IN EPC (ENGINEERING, PROCUREMENT AND CONSTRUCTION) PROJECT
  766. QUALITY RISK MITIGATION TECHNIQUES DURING NEW SUPPLIER DEVELOPMENT
  767. QUALITY SYSTEM CONCEPTS FOR IMPROVING AND MONITORING PERFORMANCE OF SUPPLIERS
  768. REDUCE PERCENTAGE OF RTV ITEMS AGEING AT SEZ PHALTAN PLANT
  769. REDUCING HEAT TINT DURING WELDING OF 6MOLY SUPER AUSTENITIC STAINLESS STEEL
  770. REDUCTION IN POST DELIVERY DEFECT DENSITY IN SOFTWARE DEVELOPMENT FOR ONE OF OUR CLIENTS
  771. REDUCTION OF CUT MARK DEFECT IN FLAT PRODUCTS
  772. REDUCTION OF LAMINATE DELAMINATION DEFECT BY SIX SIGMA APPROACH AND APPLYING LESSONS LEARNT ACROSS DIFFERENT BLADE TYPES AND PLANTS.
  773. REDUCTION OF SHOCK ABSORBER WARRANTY RETURN IN XUV 500 DUE TO NOISE
  774. REDUCTION OF UNPLANNED MAINTENANCE RATE IN MULTIFUNCTION DEVICES
  775. REFURBISHING OF ABB MAKE TURBOCHARGER ROTOR BLADES & DYNAMIC BALANCING
  776. REINFORCE FOR ROBUST PART PROCESS PROCEDURE INSPECTION AND MEASUREMENT SYSTEM TO ENHANCE CUSTOMER SATISFACTION
  777. RELIABILITY ANALYSIS OF SINGLE SECTION DIGITAL AXLE COUNTER BASED ON FIELD PERFORMANCE REPORT
  778. RELIABILITY ANALYSIS OF VENTILATOR ASSEMBLY
  779. RELIABILITY ANALYSIS OF REPAIRABLE SYSTEMS
  780. RELIABILITY CENTERED MAINTENANCE(RCM) ANALYSIS FOR CRUDE REFINERY
  781. RELIABILITY IMPROVEMENT OF WHEEL LOADER
  782. RELIABILITY VALIDATION FOR NEW PRODUCT DEVELOPMENT IN ORGANIZATION
  783. RESOURCE OUTSOURCING IN OIL AND GAS INDUSTRIES
  784. REVIEW & OPTIMIZATION OF PREVENTIVE MAINTENANCE TASKS FOR QP REFINERY ASSETS
  785. RISK BASED PROCUREMENT INSPECTION
  786. ROBUST DESIGN OF INTERSECTING PRESSURE VESSELS FOR INDUSTRIAL APPLICATIONS
  787. ROLE OF HR AMONG EMPLOYEE MANAGEMENT DURING CHANGE IN ORGANISATIONAL BEHAVIOUR
  788. ROLE OF INTERNAL COST AND EXTERNAL COST ON ORGANIZATIONAL PERFORMANCE
  789. ROOT CAUSE ANALYSIS TO REDUCE THE PERCENTAGE DEVIATION IN BATCH COMPLETION FOR THE PRODUCT HAVING HIGHEST VARIANCE DURING PROCESSING USING QC TOOLS AND TO ARRIVE AT SOLUTION TO MINIMIZE THIS SCENARIO.
  790. ROOT CAUSE ANALYSIS USING A3 METHODS: A CASE STUDY ON WHITE SPOTS IN ROCKET PROPELLANT
  791. SATELLITES AND COTS PHILOSOPHY : AN R & QA ASSESSMENT
  792. SCHEDULING MAINTENANCE ACTIVITIES OF A PREMIER TRAINER AIRCRAFT TO REDUCE THE DOWNTIME AND OPTIMIZE TOTAL ELAPSED TIME FOR AN SCHEDULED AND UNSCHEDULED MAINTENANCE TASK
  793. SERVICE QUALITY ASSESSMENT OF MSME FINANCING OF UNION BANK OF INDIA IN THE STATE OF JHARKHAND
  794. SIX SIGMA APPROACH FOR PROCESS OPTIMIZATION IN HYDRAULIC HOSE END FITTING SLEEVE STAKING PROCESS
  795. SIX SIGMA APPROACH TO REDUCTION OF TICKET BACKLOG % TO < 12% IN SE PROJECT
  796. SOFTWARE DEVELOPMENT FOR PRODUCT QUALITY ASSESSMENT AND ANALYSIS IN BUILDING CONSTRUCTION PROJECTS
  797. SOFTWARE QUALITY ASSESSMENT OF A WEB BASED APPLICATION USING AUTOMATION TOOL
  798. STRATEGIC PARTNERSHIP WITH SUPPLY CHAIN AND ITS DECISION MAKING ANALYSIS

- 799. STUDY AND EXPERIMENT THE APPLICABILITY OF END OF LIFE USAGE OF SALVAGED EQUIPMENTS FOR ITS EFFECTIVE UTILIZATION AND BETTERMENT OF ORGANIZATION.
- 800. STUDY OF NON-CONFORMANCE IN PIPING SYSTEM FOR OPTIMIZING THE COST OF QUALITY
- 801. STUDY ON AMETEK SERVICE QUALITY ANALYSIS AND STRATEGY FOR IMPROVEMENT.
- 802. STUDY ON EMS IMPLEMENTATION FOR OIL FIELD DEVELOPMENT PROJECT
- 803. STUDY ON ENVIRONMENTAL MANAGEMENT SYSTEM IMPLEMENTATION
- 804. STUDY THE LEVEL OF PEOPLE INVOLVEMENT IN TQM AND ITS IMPACT ON ORGANIZATIONAL PERFORMANCE AT SCHNEIDER ELECTRIC
- 805. SUPPLIER PROCESS IMPROVEMENT THROUGH QUALITY MANAGEMENT SYSTEM APPROACH
- 806. SUPPLY CHAIN MANAGEMENT IN AVIATION
- 807. SUPPLY CHAIN MANAGEMENT IN DEFENCE PROCUREMENT/MAINTENANCE
- 808. TO AVOID SCRATCH LEVEL ON PLUNGERS USED IN SAFETY CRITICAL PART (BRAKE ASSY)
- 809. TO IMPROVE THE SERVICE FACILITIES OF ALL HOSTELS OF INDIAN STATISTICAL INSTITUTE, KOLKATA.
- 810. TO INCREASE CUSTOMER ENGAGEMENT FROM 7 $\pm$ 2 MINUTES TO 25 $\pm$ 2 MINUTES IN TISVA LIGHTING BRAND STORES THROUGH CUSTOMER BUYING EXPERIENCE.
- 811. TO REDUCE COPQ % FROM 1.6 TO 0.5 THROUGH DMAIC APPROACH
- 812. TO REDUCE LEAD TIME IN DEFECT INVESTIGATION PROCESS USING TQM AND FINDING ROOT CAUSE AT CQA(V) AHMEDNAGAR
- 813. TO STUDY THE IMPACT OF TURBOCHARGER ROTATING PARTS CRITICAL QUALITY CHARACTERISTICS ON HIGH SPEED CORE TESTING
- 814. TOOL COST REDUCTION IN SPINNING PROCESS ON ELIMINATION OF HEAT CHECK MARK
- 815. TOTAL QUALITY MANAGEMENT- A GUIDE TO CUSTOMER SATISFACTION
- 816. TRANSITION TO DEVOPS
- 817. UTILIZATION OF QUALITY CONTROL TOOLS IN PROJECT
- 818. UTILIZATION OF QUALITY TOOLS FOR MANAGING CONSTRUCTION PROJECTS
- 819. VARIABILITY REDUCTION IN PULLOUT TEST
- 820. WARRANTY CLAIMS REDUCTION IN ELEVATOR INSTALLATION COMPONENTS.

#### **M.Tech. (SOFTWARE SYSTEMS)**

- 821. 1830 PSS24X MANAGEMENT IN 1350 OMS
- 822. 3D MEDICAL IMAGE VIEWER
- 823. 6 INCH AND 8 INCH WAFER SUPPORT IN PARALLEL MODE FOR APPLIED MATERIALS 200MM SYSTEM
- 824. A CASE TOOLKIT TO GENERATE BEHAVIORAL CODE FROM UML MODELS USING PROGRAMMING LANGUAGE INDEPENDENT CONSTRUCTS
- 825. A CLOSED DOMAIN QUESTION ANSWERING SYSTEM FOR AUTOMATION DEVICES IN ENGINEERING SYSTEM.
- 826. A COMPARATIVE STUDY OF D-FLOW CONGESTION CONTROL AND TRADITIONAL CONGESTION CONTROL ALGORITHMS FOR TCP
- 827. A COMPARATIVE STUDY ON AGILE AND TRADITIONAL SOFTWARE DEVELOPMENT METHODOLOGIES
- 828. A COMPUTER VISION APPROACH FOR INDOOR OCCUPANCY DETECTION IN SMART CAMERA APPLICATIONS
- 829. A DATA MINING DRIVEN APPROACH FOR SMARTER URBAN TRANSPORTATION
- 830. A DETAILED STUDY OF THE U.S. FOOD INDUSTRY WITH THE HELP OF DATA SCIENCE TECHNIQUES
- 831. A DETAILED VIEW ON MONGO DB AND ITS INTEGRATION WITH REAL TIME MESSAGING QUEUE SYSTEM LIKE KAFKA
- 832. A DISTRIBUTED MICROSERVICES ARCHITECTURE FOR LARGE SECURE TRANSACTION SYSTEMS
- 833. A METHOD OF ON-DEMAND RETRIEVAL, PRESENTATION OF METADATA OF BROADCASTED TV EVENTS ENDED IN THE PAST AND PLAYBACK OF THEIR CONTENT, USING THE EXISTING MECHANISM OF PROGRESSIVE DOWNLOAD
- 834. A PLUGGABLE ARCHITECTURE FOR HIGH-PERFORMANCE SINGLE PAGE APPLICATION
- 835. A SCALABLE APPROACH FOR IOT CLOUD BASED SENSOR NETWORK APPLICATION
- 836. A SCALABLE E-COMMERCE CHECKOUT PLATFORM
- 837. A SECURE METHOD FOR HIDING SECRET DATA ON CUBISM IMAGE USING HYBRID FEATURE DETECTION METHOD
- 838. A SECURE PIN AUTHENTICATION METHOD AGAINST SHOULDER SURFING ATTACKS
- 839. A SECURED RESOURCE ACCESS MANAGEMENT IN CLOUD COMPUTING ENVIRONMENT
- 840. A SHOT DETECTION VIDEO WATERMARKING SCHEME IN THE DWT DOMAIN
- 841. A STUDY ON LOADING OF CAD DATA USING PARALLEL COMPUTATION
- 842. A STUDY ON SINGLE SIGN ON SOLUTIONS AND RELEVANCE IN TODAY'S WORLD
- 843. A SYSTEM TO MAKE PERSONALIZED VIDEO SUMMARIES FROM ADAPTIVE STREAMING (DASH).
- 844. A VISUAL REPRESENTATION TOOL FOR MACHINE LEARNING ALGORITHMS
- 845. AADHAR CARD

- 846. ACCESS CONTROL LAYER AS A WEB SERVICE AND FRAMEWORK
- 847. ACCOUNT SOLD FACT MANAGEMENT SOLUTION
- 848. ADAPTIVE UNIVERSAL DEVICE SUPPORT MODULE FOR IBM QRADAR SIEM
- 849. ADD INTELLIGENCE TO DYNAMIC MULTI PATHING (DMP) SO AS TO INCREASE IO THROUGHPUT ON METRO/GEO SYNCHRONOUS STORAGE ARRAY CONFIGURATIONS
- 850. ADDING SELF-SERVICE SUPPORT TO EXISTING KIOSK SYSTEM
- 851. ADDRESSING FAILURES TO INCREASE PRODUCTIVITY
- 852. ADDRESSING INTEROPERABILITY AND USABILITY ISSUES WITH WEBRTC
- 853. ADDRESSING SECURITY & PRIVACY IN CLOUD COMPUTING
- 854. ADOBE ANALYTICS LIVESTREAM DASHBOARD
- 855. ADOPTION OF CLOUD NETWORK BY TELECOMMUNICATION SERVICES
- 856. ADOPTION OF NEURAL NETWORKS IN PROPORTIONAL-INTEGRAL CONTROLLERS FOR IMPROVED PERFORMANCE
- 857. ADVANCE PROMOTION ENGINE
- 858. ADVANCED SMS BASED ASSET TRACKING SYSTEM USING ANDROID
- 859. ADVANCING HIGH AVAILABILITY SOLUTIONS FOR DISTRIBUTED NETWORK OPERATING SYSTEMS
- 860. ADVERTISEMENT DATA ANALYSIS
- 861. AGILITY IN TESTING
- 862. AI IN MOBILE COMPUTING
- 863. AIRCRAFT MISSION UPLOAD MODULE
- 864. AIRCRAFT PERFORMANCE COMPUTATIONS USING LEARNED DATA
- 865. AIRLINE CREW EXECUTIVE SYSTEM
- 866. ALARM CORRELATION ON SERVICES PROVISIONED ON TELECOM NETWORK ELEMENTS
- 867. ALARM CORRELATOR
- 868. ALTERNATE CONTENT REPLACEMENT DURING SOLAR OUTAGE AND REGIONAL BLACKOUT
- 869. AMALGAMATION OF KNOWLEDGE FROM VARIOUS FIELDS TO FUEL MORE GROWTH (SCOPE EDUCATION INSTITUTIONS)
- 870. AMENITIES GUIDED NAVIGATION
- 871. AN ALGORITHM TO IMPROVE QUALITY OF SERVICE IN ZONAL ROUTING PROTOCOL FOR AD-HOC NETWORKS
- 872. AN APPROACH TOWARDS RECOMMENDING INDUSTRY SPECIFIC CLOUD SECURITY MODEL
- 873. AN EFFICIENT FILE HIERARCHY ATTRIBUTE-BASED ENCRYPTION SCHEMA IN CLOUD COMPUTING
- 874. AN EXPEDITIOUS DECISION BASED ALGORITHM FOR HIGH AMPLITUDE NOISE ELIMINATION FROM 3D MESHES IN COMPUTER GRAPHICS
- 875. AN INTEGRATION OF BLOCK BASED AND KEYPOINT BASED FORGERY DETECTION SCHEME
- 876. ANALYSIS AND CORRELATIONS BETWEEN DIFFERENT INDUSTRIES STOCKS
- 877. ANALYSIS AND ENHANCEMENTS TO HIGH AVAILABILITY SERVICES AND SELF ADMINISTRATION TECHNIQUES FOR TELECOM NETWORK ELEMENTS
- 878. ANALYSIS AND IMPLEMENTATION OF PROTOCOL DISSECTOR FOR DISTRIBUTED AND REDUNDANT SIGTRAN SOLUTION
- 879. ANALYSIS AND MIGRATION OF LEGACY DATA USING ETL TECHNIQUE
- 880. ANALYSIS AND RECOMMENDATIONS ON LARGE DATA SETS USING SVM, ANN AND K-NN TECHNIQUES
- 881. ANALYSIS OF AIR POLLUTION AND ITS EFFECT ON MORTALITY
- 882. ANALYSIS OF CARGO CONTAINER ALARMS
- 883. ANALYSIS OF GEOPHYSICAL PARAMETERS USING REMOTE SENSING DATA
- 884. ANALYSIS OF SORTING ALGORITHMS IN OPENCL
- 885. ANALYSIS OF WEAPON EFFECTIVENESS
- 886. ANALYTICAL APPLICATIONS USING SERVERLESS COMPUTING ARCHITECTURE
- 887. ANALYTICS AND DATA VISUALISATION COMBINING MULTIPLE DATA SOURCES
- 888. ANALYTICS IN ENTERPRISE APPLICATIONS
- 889. ANALYZING PRODUCT BEHAVIOR BY APPLYING EXTRAPOLATION METHOD ON WARRANTY DATA
- 890. ANDROID APPLICATION FOR CREATING SPORTS EVENTS
- 891. ANDROID BASED MOBILE APPLICATION TO VIEW MIS REPORTS
- 892. ANDROID LIBRARY TO ANALYSE UX DESIGN USABILITY AND ADVANCE ANALYTICS
- 893. ANIMAL RESEARCH MANAGEMENT SYSTEM
- 894. ANOMALY DETECTION IN NETWORK TRAFFIC
- 895. ANOMALY DETECTION IN TIME SERIES DATA
- 896. ANT: AUTOMATED NFR TYPE CLASSIFICATION
- 897. APPLICATION AND IMPLEMENTATIONS OF CLOUD COMPUTING IN DEFENCE
- 898. APPLICATION CENTRIC PROACTIVE ANOMALY DETECTION
- 899. APPLICATION FOR BARCODE PRINTER SOFTWARE USING QT

- 900. APPLICATION OF DATA MINING AND MACHINE LEARNING TECHNIQUES IN PREDICTING EMPLOYEE ATTRITION IN CRITICAL WORKFORCE SEGMENTS
- 901. APPLICATION THAT IMPACTS CONSUMER BUYING DECISIONS POWERED BY DATA
- 902. APPLICATION TO PAY WITH REWARDS FOR CREDIT CARD TRANSACTIONS.
- 903. APPLICATION TO PROCESS THE CREDIT TRANSACTIONS OF CREDIT CARD
- 904. APPLICATION TO PROVIDE SPECIALIZED MEDICAL MANAGEMENT CONSULTING TO HELP MAXIMIZE REVENUE.
- 905. APPLICATION TO SUPPORT QOS TRAFFIC SHAPING IN SOFTWARE DEFINED NETWORKS(SDN)
- 906. APPLICATIONS OF MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE IN EMBEDDED SYSTEMS AND BUILDING TECHNOLOGIES DOMAIN
- 907. APPLICATIONS OF MACHINE LEARNING IN OIL AND GAS DOMAIN
- 908. APPLYING ARTIFICIAL INTELLIGENCE TECHNIQUES IN SOFTWARE AUTOMATION PROBLEMS
- 909. ARBOT
- 910. ARCHITECT CLOUD SERVER PRODUCT BASED ON OPENSTACK
- 911. ARCHIVE/PURGE SOLUTION FOR A DATAWAREHOUSE
- 912. ARINC GRAPHICS SERVER INTEGRATED TOOL KIT
- 913. ASSESSING SUITABILITY OF DIFFERENT COMPUTING PLATFORMS FOR APPLICATION DEVELOPMENT AND DEPLOYMENT
- 914. ASSET MANAGEMENT SYSTEM
- 915. ASSOC 3D VIEWER & ANALYZER
- 916. AUDIENCE MEASUREMENT SYSTEM ON STB
- 917. AUDIO FRAMEWORK FOR MULTICORE ARM + SHARC PROCESSORS
- 918. AUDIT AND FRAUD DETECTION FOR UAM OPERATIONS
- 919. AUDIT FRAMEWORK
- 920. AUGMENTED REALITY IN SMART PHONES
- 921. AUTO BATCHING TOOL
- 922. AUTO GENERATING COMPONENT INTERACTIONS AND ADVANCED DEBUGGING FOR SYSTEMS USING GCC
- 923. AUTO SCALE ARCHITECTURE FOR BACKGROUND JOB WORKERS IN RUBY ON RAILS FRAMEWORK
- 924. AUTO SCALING OF EVOLVED PACKET CODE(EPC)
- 925. AUTO SCALING WITH AWS OPSWORKS USING CUSTOM METRICS
- 926. AUTO TEST GENERATOR TOOL
- 927. AUTOMATE EXPENSE MANAGER
- 928. AUTOMATED ANOMALY DETECTION WHILE MEASURING AMAZON'S DELIVERY ESTIMATE ACCURACY
- 929. AUTOMATED BUILD WITH TEST REGRESSION SYSTEM
- 930. AUTOMATED CHANNEL LINEUP AND GUIDE DATA VALIDATION
- 931. AUTOMATED DATABASE INSTALLATION USING CHEF FOR CLOUD DEPLOYMENTS
- 932. AUTOMATED DEBUGGING TOOL FOR POWER AND PERFORMANCE USES CASES ON IA MOBILE PLATFORMS
- 933. AUTOMATED DOCUMENT SUMMARIZATION AND KEYWORD IDENTIFICATION FOR SEO
- 934. AUTOMATED PERFORMANCE TESTING FRAMEWORK FOR DIGSI 5
- 935. AUTOMATED PRODUCT ACTIVATION AND SUPPORT ASSISTANCE
- 936. AUTOMATED PROVISIONING FOR NETWORK ACCESS
- 937. AUTOMATED TEST FRAMEWORK FOR ANDROID APPLICATIONS
- 938. AUTOMATED WORKFLOW FOR MULTI-SOURCE RECOMMENDATION AGGREGATION
- 939. AUTOMATIC DATABASE TUNNING AND ADMINISTRATION
- 940. AUTOMATIC EXTRACTION OF TRENDING MEDIA PROGRAMS AMONG SOCIAL NETWORKING CIRCLE
- 941. AUTOMATIC INTELLIGENT AGRICULTURAL SYSTEM OVER CLOUD (IOT)
- 942. AUTOMATIC LAYOUT SUGGESTIONS BASED ON TEXTUAL ANALYSIS OF INDESIGN DOCUMENTS
- 943. AUTOMATIC LICENSE NUMBER RECOGNITION USING MATLAB AND EMBEDDED C
- 944. AUTOMATIC ROUTING OF COAL PIPES USING MODIFIED LEE MAZE ALGORITHM
- 945. AUTOMATIC TRADE CANCELLATION SYSTEM
- 946. AUTOMATING THE HOSPITAL WORKFLOW ANALYTICS
- 947. AUTOMATING UAT STATUS TRACKER
- 948. AUTOMATION DASHBOARD USING ELASTICSEARCH AND KIBANA
- 949. AUTOMATION FRAMEWORK FOR SET-TOP BOX APPLICATIONS TESTING USING IMAGE COMPARISON AND OPTICAL CHARACTER RECOGNITION (OCR)
- 950. AUTOMATION IN STRUCTURAL COVERAGE ANALYSIS
- 951. AUTOMATION OF CAMPAIGN MANAGER
- 952. AUTOMATION OF OPENSTACK ORCHESTRATION BASED VIRTUAL IP ROUTER
- 953. AUTOMATION OF POLYSPACE (C-CODE VERIFICATION) FOR VEHICLE IN-HOUSE FEATURES
- 954. AUTOMATION OF RELEASE SDK TESTING

955. AUTOMATION OF TEST CASE AND TEST PROCEDURE GENERATION OUT OF REQUIREMENT
956. AUTOMATION OF TRANSPORT NETWORK FAULT MANAGEMENT THROUGH OSS INTEGRATION
957. AUTOMATION OF XML TEST MESSAGE GENERATION
958. AUTOMATION TESTING ECOSYSTEM
959. AUTOMATION TESTING FOR PROTOCOL AUTHORIZING AND CATALOGUING TOOL (PACT)
960. AV SOLVER
961. AWS AUTOMATION & COST REDUCTION
962. BABY WORLD - A WEB BASED PARENTING APPLICATION
963. BACS TARGET IN RAINBOW PROGRAMME
964. BANDWIDTH DEFRAGMENTATION FOR SERVICE PROVIDER OPTICAL TRANSPORT NETWORK (OTN) NETWORKS
965. BANKING SYSTEM
966. BASEBAND SIMULATOR FOR RFIC VALIDATION
967. BETSOL REFERRAL PORTAL, A UNIQUE WAY TO MANAGE AND PROMOTE EMPLOYEE REFERRALS.
968. BI REPORTING USING JASPER AND JAVA API
969. BIG DATA ANALYSIS AND VISUALIZATION OF MASSIVE DATASETS
970. BIG DATA ANALYSIS USING IBM COGNOS BI AND HADOOP.
971. BIG DATA ANALYTIC TO IMPROVE LOAN PROCESSING TIME & PREDICTIVE ANALYSIS OF LOAN FILES TO IDENTIFY POTENTIAL ERRORS AND ISSUES (BFSI-MORTGAGE)
972. BIG DATA HADOOP®REAL TIME PROJECT - RETAIL - ANALYZE MONTHLY RETAIL TRADE REPORT FOR THE US MARKET
973. BIG DATA IN BANKING WEB-IMPLEMENTATION AND ANALYSIS
974. BIG DATA POLLINATION USING VIRTUAL MIDDLEWARE
975. BIG DATA SOLUTION
976. BINARY TRACE AND BACK TRACE UTILITY (GUI BASED) FOR ENABLING DEBUGGING AND TROUBLESHOOTING
977. BIOGRAPHY OF A SOFTWARE
978. BLA3D - A SOFTWARE SUITE FOR 3D PRINTING
979. BLOCK MALICIOUS FILE TRANSFER EARLY IN THE NETWORK
980. BLUE GREEN DEPLOYMENT WITH HAPROXY
981. BLUETOOTH TECHNOLOGY
982. BRIDGING THE EDUCATIONAL GAP VIA TECHNOLOGY
983. BRIDGING TRADITIONAL FILE SYSTEM WITH CLOUD INFRASTRUCTURE
984. BROWSER BASE HTML DESIGNER (CANVAS) USING ORACLE APPLICATION DEVELOPMENT FRAMEWORK (ADF)
985. BSS PROVISIONING APPLICATION INTERFACE FOR FEDERATED COMMUNICATION
986. BUGS TRACKING AND MANAGEMENT SYSTEM
987. BUILD A LANGUAGE INDEPENDENT AUTOMATION FRAMEWORK
988. BUILDING A ADO.NET PROVIDER TO WORK WITH BOTH EF 5.0 AND EF 6.0
989. BUILDING A LOW COST NETWORK MONITORING SYSTEM
990. BUILDING AN AUTO-FILLING DATABASE USING MACHINE LEARNING
991. BUNDLED PAYMENT FOR US HEALTHCARE PAYER MARKET
992. BUSINESS AND CLOUD ANALYTICS IN TELECOMMUNICATION BUSINESS
993. BUSINESS INTELLIGENCE DASHBOARD FOR RESONANCE
994. BUSINESS INTELLIGENCE FOUNDATION
995. BUSINESS INTELLIGENCE PVM
996. BUSINESS INTELLIGENCE TOOL FOR MANUFACTURING EXECUTION SYSTEM
997. BUSINESS PROCESS FLOW DESIGNER
998. BUSINESS PROCESS MANAGEMENT SYSTEM "BPM" FOR PERFORMANCE EXCELLENCE
999. BUSINESS TRANSFORMATION OF DATA FOR MEDIATION EVENTS - TELECOMMUNICATIONS & MOBILE NETWORKS
1000. C++ AND JAVASCRIPT COMMUNICATION
1001. CALL CENTER OPERATIONAL DATA ANALYSIS USING PIVOTS
1002. CAR DOCTOR - A SMART SYSTEM FOR DIAGNOSING CAR
1003. CARD BASED ATTENDANCE SYSTEM
1004. CASE STUDY ON PERFORMANCE AND SCALE: DYNAMIC GRE TUNNEL FOR IAAS NETWORK
1005. CASEWORKER WEB PORTAL
1006. CEA (CUSTOMER EMERGENCY ANALYSIS)
1007. CENTRALIZED DEBUG LOG PROVISIONING FOR REGRESSION TESTING FRAMEWORK
1008. CENTRALIZED WEB PORTAL FOR ENTERPRISE STORAGE

- 1009. CINEMATIC RENDERING
- 1010. CLASSIFICATION OF DRIVER BEHAVIOR USING COMPUTER VISION TECHNOLOGY
- 1011. CLASSIFICATION OF PHISHING WEBSITES
- 1012. CLIENT COORDINATION MANAGEMENT FOR SINGH ANSARI & COMPANY-CA FIRM
- 1013. CLINICAL DATA WAREHOUSE
- 1014. CLOUD ANALYTICS AND REPORTING TOOLKIT
- 1015. CLOUD BASED ANDROID APPLICATION FOR NEWSPAPER DISTRIBUTOR BILLING SYSTEM
- 1016. CLOUD BASED ANDROID APPLICATION FOR OFFICE DIARY
- 1017. CLOUD BASED EDUCATION SYSTEM AUTOMATION
- 1018. CLOUD BASED FRAMEWORK FOR NON-FUNCTIONAL TESTING
- 1019. CLOUD BASED HIRING ENGINE FOR JUST-IN TIME RECRUITMENT
- 1020. CLOUD BASED PERFORMANCE TESTING
- 1021. CLOUD BASED PERSONAL INFORMATION & DOCUMENT LOCKER SYSTEM MY BRIEFCASE□
- 1022. CLOUD COMPUTING IMPACT ON BUSINESS
- 1023. CLOUD COMPUTING LAB SETUP
- 1024. CLOUD COMPUTING SECURITY CHALLENGES
- 1025. CLOUD COMPUTING: MULTI-TENANCY RISKS AND MITIGATION
- 1026. CLOUD CONTROLLER
- 1027. CLOUD ENABLEMENT OF ON-PREMISES APPLICATIONS AND ITS PROS AND CONS.
- 1028. CLOUD MIGRATION TOOL
- 1029. CMS(CONTENT MANAGEMENT SYSTEM)
- 1030. CODE CLONE DETECTION USING NN & GENERATOR RULE SET
- 1031. COGNITIVE ANALYSIS OF UNSTRUCTURED DATA USING IBM WATSON API
- 1032. COLD-START PRODUCT RECOMMENDATION WITH USER AUTHENTICATION
- 1033. COLLABORATION AND AUTOMATION IN HEALTHCARE SYSTEM
- 1034. COMBINED MODE ALGORITHM(AES-CCM, AES-GCM AND AES-GMAC) SUPPORT FOR IPSEC ESP AND INTERNET KEY EXCHANGE(IKE) PROTOCOL
- 1035. COMFORT MANAGEMENT MODEL FOR TRANSPORT HVAC
- 1036. COMMIT TIME MATERIALIZED VIEW MAINTENANCE FOR BULK LOAD OPERATIONS.
- 1037. COMMON REPOSITORY OF RESEARCH ARTICLES SUBMITTED BY STUDENTS IN COLLEGE/INSTITUTIONS
- 1038. COMMUNICATING BEACONS USING THE HYBRID MOBILE APP.(IOT)
- 1039. COMPARATIVE ANALYSIS OF PREDICTIVE DATA MINING TECHNIQUES USING STATISTICAL DATA POINTS.
- 1040. COMPARATIVE STUDY OF DIRECTIONAL ANTENNA BASED MEDIUM ACCESS CONTROL (MAC) PROTOCOLS FOR WIRELESS SENSOR NETWORK
- 1041. COMPARISON ANALYSIS OF APM TOOLS TO DETERMINE THE APT TOOL FOR IMPLEMENTATION IN A DISTRIBUTED AND CLOUD ENVIRONMENT
- 1042. COMPETENCY PLANNER
- 1043. COMPLIANCE MANAGEMENT SYSTEM INTEGRATED WITH CMIS REPOSITORY
- 1044. COMPLIMENTS & COMPLAINTS CENTRAL REGISTRY SYSTEM
- 1045. COMPRESSION USING CO-PROCESSOR
- 1046. COMPUTER NETWORKING IN C2 AND SAR
- 1047. CONDITIONAL EVALUATION LANGUAGE
- 1048. CONFIGURABLE XML DRIVEN AUTOCERT UTILITY USING SELENIUM
- 1049. CONFIGURATION MAPPER
- 1050. CONNECTING SMART DEVICES THROUGH IOT
- 1051. CONNECTIVITY MIDDLEWARE SIMULATION ON LINUX PLATFORM
- 1052. CONTAINER AS A SERVICE USING DOCKER
- 1053. CONTAINERS IN OPENSTACK
- 1054. CONTENT BASED AUDIO SEARCHING
- 1055. CONTENT BASED SEARCH SYSTEM
- 1056. CONTENT™S EXHIBIT CATEGORIZING
- 1057. CONTEXT-AWARE CHARGING FOR MOBILE DEVICES
- 1058. CONTINUOUS DELIVERY
- 1059. CONTINUOUS DEPLOYMENT AND SCHEMA EVOLUTION IN SQL DATABASES
- 1060. CONTINUOUS INTEGRATION AND AUTOMATED TESTING OF ECLIPSE RCP APPLICATION.
- 1061. CONTINUOUS INTEGRATION FRAMEWORK FOR TIBCO PRODUCTS
- 1062. CONTINUOUS INTEGRATION WITH SYSTEM VERIFICATION FOR CLOUD PRODUCTS
- 1063. CONTRACT LABOUR MANAGEMENT SYSTEM
- 1064. CORPORATE AND RETAIL ONLINE BANKING
- 1065. CPE WAN MANAGEMENT PROTOCOL

- 1066. CREATING ESSBASE CLIENT MSI AND INTEGRATING IT WITH JENKINS BUILD FRAMEWORK
- 1067. CREATING FRAMEWORK USING SELENIUM
- 1068. CREATION OF GENERIC ROUTING FRAMEWORK FOR SONUS SOFTSWITCH
- 1069. CREATION OF HOME DIRECTORIES ON UNIFIED STORAGE, INTEGRATING ONCOMMAND WORKFLOW INTEGRATION AND SERVICENOW
- 1070. CREATION OF ONLINE OPERATING SYSTEM
- 1071. CREATION OF ORIGAMI FRAMEWORK TO PROCESS TPA FILES
- 1072. CREDIT RISK REPORTING ANALYSIS
- 1073. CROPCART
- 1074. CTD TOOL ANALYSIS
- 1075. CTS TEST SUITE AUTOMATION
- 1076. CURRENT CHALLENGES IN IOT AND PROBABLE SOLUTION
- 1077. CUSTOMER MANAGEMENT SYSTEM WITH REAL TIME CHAT FACILITY
- 1078. CUSTOMER NEED SYSTEMS(CNS)
- 1079. CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM
- 1080. CUSTOMIZED CHAT BOTS FOR AIRLINES POWERED BY NATURAL LANGUAGE PROCESSING ALGORITHMS
- 1081. CYBER THREAT INTELLIGENCE SOLUTION
- 1082. CYBER THREAT INTELLIGENCE SOLUTION
- 1083. DAILY ORDERING DATABASE FOR SEPARATE ETL SYSTEM
- 1084. DATA ANALYSIS ON MULTI RELATIONAL DATA AND MULTI DIMENSIONAL DATA USING VARIOUS DATA MINING TECHNIQUES
- 1085. DATA ANALYTICS IN VEHICLE DATA USING OPENXC ARCHITECTURE
- 1086. DATA ANALYTICS USING R
- 1087. DATA BASE REFRESH PROCESS FOR SMALL SIZE ENVIORNMENT
- 1088. DATA CAPTURE APP
- 1089. DATA CLEANSING, ANALYSIS AND PERFORMANCE MONITORING TOOL QAPC FOR MULTI VARIABLE MODEL PREDICTIVE CONTROLLERS
- 1090. DATA COMMUNICATION NETWORK
- 1091. DATA DASHBOARD
- 1092. DATA EXTRACTION BASED ON DATE USING TEXT MINING
- 1093. DATA HIDING IN AN IMAGE WITH HIGHER IMPERCEPTIBILITY
- 1094. DATA INTEGRATION AND SCHEDULING PORTAL
- 1095. DATA LOSS PREVENTION TECHNIQUES FOR APPLICATIONS WITH SAVE TO WEB FUNCTIONALITY
- 1096. DATA MASKING
- 1097. DATA MINING AND RECOMMENDATION SYSTEMS IN E-COMMERCE
- 1098. DATA MINING WITH NEURAL NETWORKS FOR ACADEMIC STUDENTS ACHIEVEMENTS
- 1099. DATA PROTECTION OF MICROSOFT APPLICATIONS USING SINGLE TOOL
- 1100. DATA SECURITIES IN CLOUDS USING SEMI- TRUSTED THIRD PARTY KEY MANAGERS
- 1101. DATA TRANSFORMATION USING ETL APPROACH
- 1102. DATA VISUALIZATION IN FINACLE
- 1103. DATA VISUALIZATION ON CLOUD BASED SOCIAL MEDIA
- 1104. DATA WAREHOUSE DESIGN AND REPORTING USING BUSINESS INTELLIGENCE
- 1105. DATA WAREHOUSE DESIGNING AND ETL USING MSBI TOOLS
- 1106. DATA WAREHOUSE ENVIRONMENT IMPLEMENTATION USING HADOOP DATA PLATFORM ARCHITECTURE
- 1107. DATABASE DATA DRIVE USAGE FORECASTING
- 1108. DATABASE DIAGNOSTICS STUDIO
- 1109. DATABASE QUERY PERFORMANCE TUNING
- 1110. DATABASE SYSTEM AS A CLOUD SERVICE
- 1111. DATAHUB - SEMANTIC KNOWLEDGE GRAPH
- 1112. DATAWAREHOUSE AND REPORTING FOR MERCHANDISING INDUSTRY
- 1113. DECISION ENGINE PLATFORM
- 1114. DECISION SYSTEM
- 1115. DEEP LEARNING BASED CROSS-DOMAIN RECOMMENDER SYSTEM
- 1116. DEFECT CATEGORY AND APPLICATION PREDICTION SYSTEM
- 1117. DEPLOYMENT AUTOMATION TO ACHIEVE OPERATIONAL EXCELLENCE
- 1118. DESIGN & DEVELOPMENT OF REAL TIME SIMULATION SOFTWARE FOR AEROSPACE SYSTEMS
- 1119. DESIGN AND DEVELOPMENT OF AUTOMATION SYSTEM FOR J&K STATE BOARD OF TECHNICAL EDUCATION IN COLLABORATION WITH NIC, JAMMU
- 1120. DESIGN AND DEVELOPMENT OF ON-BOARD COMPUTER INITIALISATION DATA MANAGEMENT SYSTEM FOR LAUNCH VEHICLES



- 1121. DESIGN AND IMPLEMENT A CONTINUOUS INTEGRATION AND CONTINUOUS DELIVERY PLATFORM FOR WEB SERVICES USING CONTAINERIZATION ON CLOUD WITH BLUE GREEN DEPLOYMENT USING OPEN SOURCE SOFTWARE
- 1122. DESIGN AND IMPLEMENTATION OF AUTO PRB AND AUTOMATED DATA SETUP TOOL FOR GENEVA BILLING SYSTEM
- 1123. DESIGN AND IMPLEMENTATION OF ENTERPRISE SEARCH CAPABILITY FOR A LARGE SCALE HUMAN CAPITAL MANAGEMENT SYSTEM
- 1124. DESIGN OF RADAR CONTROLLERS DISPLAY FOR SURVEILLANCE AND MISSILE DETECTION RADAR
- 1125. DESIGN PATTERNS IN C++
- 1126. DESIGN PECULIARITIES BETWEEN CELLULAR NETWORK FOR ARMED FORCES AND COMMERCIAL WORLD
- 1127. DESIGN TECHNOLOGY LIB SPECIFICATION EXTRACTOR
- 1128. DESIGNING AND DEVELOPING A SYSTEM THAT GENERATES EXECUTABLE CODE CORRESPONDING TO A TEST CASE BY LEARNING FROM THE PREVIOUSLY CREATED TEST CASES.
- 1129. DESIGNING AND DEVELOPING AN API MOCKING FRAMEWORK TO IMPROVE DEVELOPMENT AND TESTING (FUNCTIONAL AND PERFORMANCE) OF E-COMMERCE PRODUCTS
- 1130. DESIGNING DISTRIBUTED DELAYED MESSAGE PROCESSING TO IMPROVE AVAILABILITY, PERFORMANCE AND SCALABILITY
- 1131. DESIGNING SIGNATURES TO ANALYZE THE HEALTH OF LARGE DATACENTER OPERATIONS
- 1132. DESIGNING SMALL SKILL DATA WARE HOUSE
- 1133. DESIGNING TEMPORAL DATA WAREHOUSE SOLUTION
- 1134. DESIGNING WORKFLOW AUTOMATION FRAMEWORK FOR VMWARE HORIZON VIEW
- 1135. DESKTOP SHARING IN VIDEO CONFERENCE
- 1136. DETECTING AND MITIGATING SECURITY RISKS
- 1137. DETECTING DRIVER DROWSINESS USING ANDROID SYSTEM
- 1138. DETECTING NON-HUMAN TRAFFIC USING USER IP
- 1139. DETECTION OF ANNOTATIONS/SYMBOLS FROM THE IMAGES
- 1140. DETERMINING DOCUMENT ACCESS LOCATION PATTERNS
- 1141. DEVELOP AN EXTENSIBLE FRAMEWORK TO PROCESS ACH BANK TRANSACTIONS
- 1142. DEVELOP ANALYTICAL TOOL FOR MANAGING OF DATA ONTO CLOUD SOLUTIONS IN A COST EFFECTIVE MANNER.
- 1143. DEVELOP WEB BASED SOFTWARE SOLUTION FOR RENTAL PROPERTY BUSINESS
- 1144. DEVELOPING A CLOUD COMPUTING PLATFORM FOR BIG DATA: THE OPENSTACK NOVA CASE
- 1145. DEVELOPING A CONTENT DELIVERY NETWORK ( CDN ) USING OPENSOURCE CACHING TECHNOLOGIES
- 1146. DEVELOPING MAPREDUCE ALGORITHM TO FIND FRIENDS OF FRIENDS AND MATCHING SKILL SET TO OURS.
- 1147. DEVELOPING VIRTUAL PROTOTYPE FOR ANDROID BSP VERIFICATION
- 1148. DEVELOPMENT LIFECYCLE OF RUGGED NETWORK ATTACHED STORAGE
- 1149. DEVELOPMENT NEWS PROJECT
- 1150. DEVELOPMENT OF COMMUNICATION MODULE FOR INTERACTION WITH BMS OF A LITHIUM ION BATTERY PACK FOR UPS APPLICATION
- 1151. DEVELOPMENT OF LOCATION BASED SERVICES (LBS) ENABLED DECISION SUPPORT SYSTEM USING ISRO'S GAGAN ON MOBILE &WEB PLATFORM
- 1152. DEVELOPMENT OF MULTI-CHANNEL CONCURRENCY FOR STA AND P2P MODE OF WI-FI.
- 1153. DEVELOPMENT OF TRAVEL GUIDE ANDROID APP.
- 1154. DEVICE AGNOSTIC POINT OF SALE USER INTERFACE
- 1155. DEVICE ENERGY BASED EFFICIENT, SECURED PACKET SWITCHING AND ROUTING.
- 1156. DEVOPS-COMMITMENT TO QUALITY OVER TRADITIONAL PRACTICES
- 1157. DIGITAL ASSET MANAGEMENT - CROSS CLOUD MEDIA SERVICE MANAGEMENT
- 1158. DIGITAL BANKING WALLET
- 1159. DIGITAL IDENTIFICATION
- 1160. DISCOVERING EMERGING TOPICS IN SOCIAL MEDIA POSTS MENTIONED RELATIONSHIPS
- 1161. DISCOVERING NEW PATTERNS IN DATA WAREHOUSE THROUGH MINING
- 1162. DISCOVERING ALPHA USING DEEPLARNING
- 1163. DISCRETE SOLENOID CONTROL WITH DITHERING
- 1164. DISEASE PREDICTOR & ONLINE CONSULTATION, A DATA MINING APPROACH
- 1165. DISTRIBUTED MONITORING USING SNMP
- 1166. DISTRIBUTED NETWORK MONITORING
- 1167. DISTRIBUTED RAID IMPLEMENTATION IN IBM SPECTRUM VIRTUALIZE RANGE OF PRODUCTS IBM SAN VOLUME CONTROLLER(SVC) AND IBM STORWIZE PRODUCTS
- 1168. DNS RESOLVER
- 1169. DOCKER PLATFORM FOR CREATING OPERATING SYSTEM IMAGES DURING SOFTWARE DEVELOPMENT PROCESS IN ENTERPRISES

- 1170. DOCTOR ON CALL
- 1171. DOCUMENT CLASSIFICATION AND CLUSTERING USING MACHINE LEARNING ALGORITHMS
- 1172. DOCUMENTUM VIDEO SEARCH USING CLOSED CAPTIONS
- 1173. DRIVE SEEKER
- 1174. DRIVER API TEST FRAMEWORK
- 1175. DRIVER AUTHENTICATION FOR A SECURE AUTOMOTIVE SYSTEM
- 1176. DYNAMIC ADAPTIVE STREAMING OVER HTTP ON MOBILE DEVICES
- 1177. DYNAMIC CONNECTION ESTABLISHMENT BETWEEN GRAPHICAL HARDWARE DEVICES IN AN AUTOMATION SYSTEM
- 1178. DYNAMIC DATA MINING ON OLAP SYSTEMS
- 1179. DYNAMIC LOAD BALANCING IN IAAS BASED CLOUD
- 1180. DYNAMIC PRICING USING MACHINE LEARNING, DISTRIBUTED COMPUTED AND NOSQL
- 1181. DYNAMIC PSK ON WIRELESS LAN CONTROLLERS
- 1182. DYNAMIC RECOMMENDATION SYSTEM
- 1183. DYNAMIC REFRESH OF ROUTER PROFILES IN A DATACENTER
- 1184. E - COMMERCE IOS MOBILE APP WITH OFFLINE SUPPORT
- 1185. EAST WEST TRAFFIC ANALYSER FOR OPENSTACK CLOUD
- 1186. E-BUSINESS SOLUTION FOR B2C BUSINESS
- 1187. EDI ORDER AND ORDER RESPONSE IMPLEMENTATION
- 1188. E-DIAGNOSTICS AS A SERVICE
- 1189. EFFECTIVE ANALYSIS AND ENGINEERING ADVERTISEMENT BIDDING
- 1190. EFFECTIVE BUG TRIAGE USING SOFTWARE REDUCTION TECHNIQUES
- 1191. EFFECTIVE DUE DATE PERFORMANCE THROUGH CONSTRAINT BASED JEWELLERY PRODUCTION ORDER RELEASE
- 1192. EFFECTIVE SOLUTION FOR DRIVER INTERACTION WITH CRUISE CONTROL IN AUTOMOBILES
- 1193. EFFICIENT BATTERY MANAGEMENT METHODS FOR IMPROVING BATTERY DURATION
- 1194. EFFICIENT DATA TRANSMISSION CLUSTERING METHOD USING COMPRESSIVE SENSING FOR WIRELESS SENSOR NETWORKS
- 1195. EFFICIENT IMPLEMENTATION OF ENTITLEMENT AND ROLE MANAGEMENT FOR ENTERPRISE APPLICATIONS
- 1196. EFFICIENT IMPLEMENTATION OF RING-LWE CRYPTOSYSTEM
- 1197. EFFICIENT JOB TITLE DEDUCTION USING DECISION TREE
- 1198. EFFICIENT USE OF STORAGE ARRAY SNAPSHOTS TO INCREASE EFFICIENCY OF ENTERPRISE BACKUPS
- 1199. E-GO TRANSPORT MANAGEMENT SYSTEM
- 1200. E-LEARNING MANAGEMENT SYSTEM USING INTERNETWORKING TECHNOLOGIES AND OBJECT ORIENTED CONCEPTS
- 1201. ELECTORAL ROLL MANAGEMENT SYSTEM
- 1202. EMBEDDED DESIGN FOR SMART METERING SOLUTION WITH WIRELESS COMMUNICATION AND ITS PERFORMANCE ANALYSIS
- 1203. EMBEDDED SOFTWARE DESIGN AND DEVELOPMENT
- 1204. EMBEDDED TOUCH UI FOR FIRE SAFETY CONTROL SYSTEM
- 1205. EMPIRICAL VALIDATION AND ASSESSMENT OF WEB METRICS
- 1206. EMPLOYEE SENTIMENT ANALYSIS USING SOCIAL MEDIA FOR UNDERSTANDING EMPLOYEE NEEDS AND EMOTIONS
- 1207. EMPLOYEE SPRINT ANALYZER TOOL
- 1208. EMPOWERING FARMERS TO MAKE INFORMED AND OPTIMAL DECISIONS USING THE INTERNET OF THINGS PLATFORM AND RELATED SERVICES ON THE IBM BLUEMIX CLOUD PLATFORM
- 1209. ENABLING CONNECTED CARE VIA FHIR REST SERVICES
- 1210. ENABLING FINANCIAL SERVICES DATA PLATFORM FOR HIGH DATA VOLUME
- 1211. ENABLING INTEGRATION SERVER WITH CLOUD FEATURES
- 1212. ENABLING INTERNET OF THINGS ON PATIENT MONITORING SYSTEMS
- 1213. ENCRYPTION OF OAM (OPERATIONS ADMINISTRATION AND MANAGEMENT) TRAFFIC
- 1214. END POINT SECURITY SOLUTION IN MILITARY NETWORK (SOLUTION ARCHITECTURE AND IMPLEMENTATION STRATEGY)
- 1215. END TO END QUALITY AND TEST MANAGEMENT TOOL
- 1216. ENDPOINT MANAGEMENT SYSTEM
- 1217. ENERGY EFFICIENT OPTIMAL PROVISIONING OF APPLICATIONS IN A CLOUD ENVIRONMENT
- 1218. ENERGY MODEL TECHNIQUES IN WIRELESS AD-HOC NETWORK
- 1219. ENHANCE PROJECT MANAGEMENT PRESENTATION AND DEVELOP A SOFTWARE APPLICATION TO AUTOMATE THE GENERATION OF PRESENTATION REPORT.
- 1220. ENHANCEMENT IN LTE HANDOVER PROCEDURE DURING ADVERSARIAL UE BEHAVIOR
- 1221. ENHANCEMENT OF EXTRACTION-TRANSFORMATION-LOADING PROCESS(ETL)

1222. ENHANCING THE LINK FAULT DIAGNOSIS BY Y.1731 ETH-TEST  
1223. ENTERPRISE IN THE CLOUD: COST-EFFECTIVE AND SCALABLE PLATFORM DRIVEN BY SERVERLESS MICROSERVICES  
1224. ENTERPRISE LOGGING AND LOG ANALYSIS FRAMEWORK  
1225. ENTERPRISE MOBILE APPLICATION BASED ON CLOUD BASED MEAP PLATFORM (SAP HANA CLOUD PLATFORM MOBILE SERVICES)  
1226. ENTERPRISE SEARCH APPLICATION FOR TRADESTONE ENGINE  
1227. EPROCUREMENT SOLUTION: PROCUREPASS  
1228. EQUIPMENT INVENTORY TRACKER  
1229. ERP ON CLOUD  
1230. E-SOLUTION FOR MEDICAL INSTITUTIONS  
1231. ESTABLISH A COMMUNICATION NETWORK BETWEEN SIS, DCS AND ENGINEERING STATION.  
1232. ESTIMATION OF OIL AND GAS RESERVES BASED ON WELL LOG ANALYSIS  
1233. EXCEPTIONS TRACKING TOOL  
1234. EXPLORATORY ANALYSIS BASED ON WORLD DEVELOPMENT INDICATORS  
1235. EXPLORE AND APPLICATION OF 'DATA ANALYTICAL' CAPABILITIES IN TRADITIONAL ENTERPRISE DATA (DOMAIN- US HEALTH INSURANCE)  
1236. EXPLORING BLOCKCHAIN TECHNOLOGY IN RETAIL VERTICAL  
1237. EXPORT CONTROL FOR DUAL-USE PARTS  
1238. EXTRACTING TEXT FROM IMAGE AND DISPLAYING IT'S INFORMATION  
1239. EXTRACTION OF INSIGHTS FROM BUG DATABASE AND COMMIT LOGS  
1240. EXTRACTION OF REPORTS FROM REDMINE AND IVR DATABASE.  
1241. EXTRACTION TRANSFORMATION LOAD  
1242. EZRECRUIT  
1243. FABRICATING DOMINO SYSTEMS BE CLOUD ACCESSIBLE  
1244. FAIR TRACK  
1245. FAKE PRODUCT REVIEW MONITORING & E-COMMERCE PRODUCT RATING BASED ON CUSTOMER REVIEW USING DATA MINING  
1246. FARM INVENTORY MANAGEMENT FOR THEFT PREVENTION  
1247. FASHION BOOK SOCIAL ECOMMERCE  
1248. FEATURE DETECTION IN IMAGE PROCESSING  
1249. FIBRE CHANNEL SLOW DRAIN DEVICE DETECTION AND CONGESTION AVOIDANCE FEATURE AUTOMATION  
1250. FINANCEAPP  
1251. FINDING SOLUTIONS FOR THE PROBLEMS ON ETL IN THE NEAR REAL-TIME DATAWAREHOUSE  
1252. FIREWALL MIGRATION  
1253. FLEET MANAGEMENT INSIGHT  
1254. FLEXPLM TECH PACK ACCESS APP  
1255. FLIGHT MANAGEMENT SYSTEMS DISPLAY UNIT WIDGET CREATION USING HTML 5  
1256. FORECASTING STOCK PRICE TREND USING MACHINE LEARNING  
1257. FOREIGN TRADE APPLICATION DATABASE PROJECT  
1258. FRAMEWORK TO TEST HIGH AVAILABILITY FEATURE OF INFORMATICA  
1259. FREELANCE-OUTSOURCING MARKET PLACE  
1260. FSR REPORTS DATA VALIDATION TOOL  
1261. FTP SERVER FOR MANAGER FOR 6K, CPL AND CCA  
1262. GAME ENGINE DEVELOPMENT IN C++  
1263. GAMIFICATION OF WEB APPLICATIONS USING RESPONSIVE WEB DESIGN  
1264. GENERIC BILLING INTERFACE  
1265. GPS TRACKER  
1266. GPU'S IN CRYPTANALYSIS  
1267. GRAB OFFERS PORTAL  
1268. GUEST CHECKOUT IMPLEMENTATION FOR E-COMMERCE WEBSITE  
1269. HACKING IS NOT RANDOM: A CASE CONTROL STUDY OF WEB SERVER COMPROMISE RISK  
1270. HANA DATA TO HADOOP  
1271. HANDLING NON FUNCTIONAL REQUIREMENTS IN AGILE SOFTWARE PROJECT MANAGEMENT  
1272. HARDWARE IN LOOP AUTOMATION OF LEGISLATIVE PARAMETER IDENTIFIER FOR GMLAN COMMUNICATION PROTOCOL  
1273. HASSLE FREE TOLLING  
1274. HEALTH DATA MINING  
1275. HEALTHCARE ANALYTICS: PRODUCTS/PLANS FOR THE FUTURE  
1276. HEALTHCARE INFORMATICS USING DATA MINING TECHNIQUES

- 1277. HIGH AVAILABILITY FRAMEWORK
- 1278. HIGH AVAILABILITY MODEL OF INFORMACAST SERVER AND ITS MONITORING FRAMEWORK FOR NETWORK OPERATIONS CENTER
- 1279. HIGH PERFORMANCE RAY TRACING AND GLOBAL ILLUMINATION USING VULKAN AND OPENGLES
- 1280. HIGH-THROUGHPUT COMPUTING USING HTCONDOR
- 1281. HIPPOCRATIC DATABASE AND DATA PRIVACY
- 1282. HORIZONTALLY SCALABLE AND CLOUD READY PLATFORM TO ENABLE BIG DATA ANALYTICS
- 1283. HOSPITAL INFORMATION SYSTEMS
- 1284. HOTEL TRACKING SYSTEM
- 1285. HOUSING SOCIETY MANAGEMENT
- 1286. HRIS PROCESSOR
- 1287. HSCODE CLASSIFICATION USING MACHINE LEARNING ALGORITHMS
- 1288. HTTP BASED IOT SOLUTION FOR ENVIRONMENT MONITORING USING WIRELESS SENSOR MOTES
- 1289. HUMAN COMPUTER INTERACTION AND HUMAN CENTRED DESIGN - CONTENT CONSUMPTION OF DIGITAL NATIVES AND DIGITAL IMMIGRANTS WITH FOCUS ON E-READING
- 1290. HUMAN RESOURCE MIS DASHBOARD
- 1291. HWIL TEST BED FOR FLIGHT VEHICLE
- 1292. HYBRID E-LEARNING SYSTEM BASED ON CLOUD ARCHITECTURE
- 1293. HYPERLOCAL PLATFORM TO BRIDGE DEMAND AND SUPPLY BASED ON GEOLOCATION
- 1294. I/O SIGNAL BROWSER
- 1295. IDEAL SALESFORCE SALES CLOUD APPLICATION WITH AUTOMATED SALES FLOW
- 1296. IDENTIFICATION OF THE BOTTLENECKS AND OPTIMIZE SCRUM AGILE FRAMEWORK FOR LARGE DISTRIBUTED TEAM
- 1297. IDENTIFYING DOCUMENTS SIMILARITY USING LOCALITY-SENSITIVE HASHING
- 1298. IDENTITY BASED ENCRYPTION FOR CHAT APPLICATION
- 1299. IDENTITY MANAGEMENT , MOBILE
- 1300. IDENTITY-BASED ENCRYPTION WITH OUTSOURCED REVOCATION IN CLOUD COMPUTING
- 1301. IMA - INTELLIGENT MEDIA ADVISOR
- 1302. IMAGE COMPARISON MECHANISM FOR COMPARING SMARTPLANT® P&ID GRAPHICS.
- 1303. IMAGE COMPRESSION IN ZOHO CREATOR VIEWS
- 1304. IMAGE CONTEXT AWARENESS IN IOS CHAT APPLICATION
- 1305. IMAGE PROCESSING (EDGE DETECTION) IN CLOUD GPU
- 1306. IMAGE PROCESSING BASED WATER LEVEL CHANGE MEASUREMENT & ANALYSIS
- 1307. IMAGE PROCESSING FOR EFFICIENT STORING AND SCALING OF ATTACHMENTS IN ZOHO MAIL
- 1308. IMAGE/VIDEO PROCESSING FOR QUALITY ASSESSMENT
- 1309. IMPLEMENTATION AND PERFORMANCE ANALYSIS OF COMPRESSION AND ENCRYPTION ALGORITHM ON CONSTRAINED DEVICE FOR FIRMWARE OVER THE AIR
- 1310. IMPLEMENTATION OF AN ADAPTIVE INTEGRATION SOLUTION TO CREATE CONFIGURABLE END-TO-END SERVICES ON THE IBM INTEGRATION BUS
- 1311. IMPLEMENTATION OF CONTENT BASED RECOMMENDER SYSTEM
- 1312. IMPLEMENTATION OF CRM SOLUTION IN CLOUD
- 1313. IMPLEMENTATION OF DATA WAREHOUSING IN AN ENTERPRISE
- 1314. IMPLEMENTATION OF DUAL MODE COMMUNICATION IN EMBEDDED SECURE ELEMENT
- 1315. IMPLEMENTATION OF HP APPLICATION LIFE CYCLE MANAGEMENT TOOLS IN SOFTWARE TESTING PROJECT
- 1316. IMPLEMENTATION OF IOT CLIENT COMPONENT
- 1317. IMPLEMENTATION OF ORACLE DATABASE CLUSTER (REAL APPLICATION CLUSTER)
- 1318. IMPLEMENTATION OF RECOMMENDER SYSTEM FOR MOVIES DATABASE AND EXPOSE DATA THROUGH REST API
- 1319. IMPLEMENTATION OF REVERSE GEO CODING IN DOCKERIZED ENVIRONMENT
- 1320. IMPLEMENTATION OF SAP BUSINESS INTELLIGENCE & SAP BUSINESS OBJECTS MODULE AT GHCL LIMITED -SODA ASH DIVISION
- 1321. IMPLEMENTATION OF SEARCH USING ELASTICSEARCH IN CA CLOUD SERVICE MANAGEMENT
- 1322. IMPLEMENTATION OF SIMULATION MODEL AND ROBUST VALIDATION OF Å€€CONTROLLER AREA NETWORK OF AUTOMOTIVE ENGINE ECU (ELECTRONIC CONTROL UNIT) SOFTWARE BASED ON TEST SPECIFICATION BY USING DSPACE HIL SIMULATOR.
- 1323. IMPLEMENTATION OF SPEAKER RECOGNITION ON IVRS
- 1324. IMPLEMENTATION OF THE TRIPLE PLAY SERVICES OVER THE ACCESS NETWORK
- 1325. IMPLEMENTATION OF UDP ENCAPSULATION FEATURE FOR IPSEC ESP PACKETS AND IMPLEMENTATION OF IPSEC TRANSPORT MODE
- 1326. IMPORTANCE OF OBJECT ORIENTED ANALYSIS & DESIGN IN WEB APPLICATION DEVELOPMENT
- 1327. IMPROOVING CUSTOMER SATISFACTION USING ERMS

- 1328. IMPROVE QUALITY OF PRODUCTS & SERVICES USING BIG DATA
- 1329. IMPROVING CUSTOMER EXPERIENCE OF OTT VIDEO MOBILE APPLICATION THROUGH SENTIMENTAL ANALYSIS
- 1330. IMPROVING INTEGRATED SYSTEMS TESTING EFFICIENCY USING API CLOUDS AND INTER-APPLICATION CARTESIAN PRODUCT MODELS
- 1331. IMPROVING OPERATIONAL EFFICIENCY BASED ON CUSTOMER OPERATING PROFILE
- 1332. IMPROVING QUALITY MINDSET WITH PREDICTIVE ANALYTICS
- 1333. IMS PRESENCE SERVICE FOR ENHANCED ADDRESS BOOK ON VXLTE (4G) ENABLED MOBILE DEVICES.
- 1334. INDOOR POSITIONING SYSTEMS: POSSIBILITIES AND OPPORTUNITIES
- 1335. INFIMIT - EMPLOYEE SELF SERVICE APPLICATION
- 1336. INFRASTRUCTURE ADDRESS SERVICE
- 1337. IN-MEMORY DATA ANALYTICAL SYSTEM WITH FORECASTING FEATURE AND ALERTING MECHANISM FOR KPI VARIATIONS FOR A PARCEL EXPRESS INDUSTRY DEPOT OPERATIONS
- 1338. INSURANCE DATA MODEL FOR ANALYTICAL REPORTING
- 1339. INTEGRATED APPLICATIONS FOR BUSINESS MANAGEMENT
- 1340. INTEGRATED COMBAT SIMULATOR
- 1341. INTEGRATED MANAGEMENT SYSTEM IN SAP (FOR WELDING CONSUMABLES IN BHEL, TRICHY)
- 1342. INTEGRATING ARTIFICIAL INTELLIGENCE IN SOFTWARE TESTING
- 1343. INTEGRATING TOOLS WITH ROBOT FRAMEWORK FOR ADVANCED AUTOMATION METHODOLOGIES
- 1344. INTEGRATION - MDM TO BI
- 1345. INTEGRATION MIDDLEWARE FOR DISPARATE SYSTEMS USING DDS
- 1346. INTEGRATION OF EXISTING AUTOMATION FRAMEWORK WITH ANSIBLE
- 1347. INTELLIGENCE AND SURVEILLANCE MANAGEMENT SYSTEM
- 1348. INTELLIGENCE SUPPORT SYSTEM - THREAT EVALUATION AND WEAPON ALLOCATION
- 1349. INTELLIGENT CAMPAIGN TARGETING SYSTEM
- 1350. INTELLIGENT COMPRESSION OF VISUAL MEDIA FOR MOBILE DEVICES BASED ON THEIR PIXEL DENSITY
- 1351. INTELLIGENT DATA QUERYING AND ANALYSIS SYSTEM
- 1352. INTELLIGENT DECISION SUPPORT SYSTEM
- 1353. INTELLIGENT EXPERT SYSTEMS 1.0
- 1354. INTELLIGENT FOCUSED CRAWLING: HUMAN ALIKE BEHAVIOR
- 1355. INTELLIGENT INDOOR LOCATION SYSTEM
- 1356. INTELLIGENT MODERATION
- 1357. INTELLIGENT PATH FINDER
- 1358. INTELLIGENT RECONCILIATION OF USER INTERFACE ELEMENTS IN AUTOMATION TESTING
- 1359. INTELLIGENT SERVICE SUPPORT SYSTEM TO HELP TROUBLESHOOTING
- 1360. INTELLIGENT STORAGE MANAGEMENT USING SHARED DISK CLOUD DATABASE ARCHITECTURE
- 1361. INTER MACHINE COMMUNICATION FOR CLOUD INFRASTRUCTURAL IN THE IOT
- 1362. INTERFACING PLL LIBRARY WITH ORACLE FORMS
- 1363. INTERNAL MESSENGER
- 1364. INTERNATIONAL SPACE STATION TRACKER
- 1365. INTERNET OF THINGS : TRANSFORMING MILITARY CAPABILITIES
- 1366. INTERNET OF THINGS ENHANCED SECURITY MODEL
- 1367. INTERNET OF THINGS IN AUTOMOTIVE INDUSTRY:CHALLENGES AND OPPORTUNITIES
- 1368. INTRANET COMMUNICATOR SYSTEM
- 1369. INTRATRADING COMMUNICATOR WITH BUSINESS INTELLIGENCE TOOL
- 1370. INTRUSION DETECTION SYSTEM IN MOBILE AD HOC NETWORK USING CLUSTER BASED SECURITY ARCHITECTURE
- 1371. INTUITIVE ANALYTICS PLATFORM FOR APPROVED DRUGS
- 1372. IN-VEHICLE INFOTAINMENT SYSTEM STATEMACHINE ANALYZER AND OPTIMIZER
- 1373. INVESTMENT TRACKER
- 1374. INVISIBLE DIGITAL WATERMARKING THROUGH ENCRYPTION
- 1375. INWARD BILLING WORKLIST IN CARGO WEBSITE OF QATAR AIRWAYS
- 1376. IOS MOBILE APPLICATION FOR CLOUD BASED EHR WITH ENHANCED OFFLINE SUPPORT
- 1377. IOT - M2M COMMUNICATION OVER 6LOWPAN NETWORK ON TI CC2650
- 1378. IOT BASED INTELLIGENT PERSONAL ASSISTANT
- 1379. IOT-ENABLED SOLUTION FOR HANDLING AND TRANSPORTATION OF WASTE
- 1380. IP GEOLOCATION MAPPING FOR MODERATELY CONNECTED REGIONS
- 1381. IP OFFICE INTEGRATION WITH AWFOs FOR ACTIVE CALL RECORDING
- 1382. ISCSI: PERFORMANCE OPTIMIZATION WITH MULTIPLE INITIATORS
- 1383. IT DELIVERY FRAMEWORK - A STUDY OF IMPLEMENTATION

- 1384. IT RECRUITMENT PORTAL
- 1385. ITU-T G.8275.2 PTP PROFILE FOR CISCO ROUTERS
- 1386. IVR PORT CONSOLIDATION
- 1387. JADE (JAVA APPLICATION DEVELOPMENT) FRAMEWORK
- 1388. JAIL INFORMATION MANAGEMENT SYSTEM
- 1389. JARDEN FP CONTENT MIGRATION - DRUPAL CMS TO DEMANDWARE
- 1390. JOINT ROUTING AND SPECTRUM ALLOCATION FOR MULTI-HOP COGNITIVE RADIO NETWORKS WITH ROUTE ROBUSTNESS CONSIDERATION
- 1391. JPA PERFORMANCE ADVISOR
- 1392. JUNIPER DEVELOPEMENT INITIATIVE - DIAGNOSTICS
- 1393. JUNOS BASED MX/PTX VIRTUALIZATION
- 1394. JVM OUT OF MEMORY PREDICTION OF ORACLE WEBLOGIC SERVER
- 1395. LANE DETECTION AND WARNING SYSTEM
- 1396. LBP (LOCAL BINARY OPERATOR) BASED IMAGE SEGMENTATION ON REMOTE SENSING IMAGES
- 1397. LDAP DATA MIGRATION TOOL
- 1398. LEARNING AND IMPUTATION FOR STREAMING BIG DATA SEQUENCES
- 1399. LEARNING OUTCOMES OF COMMUNICATION SOFTWARE FOR CHILDREN WITH SPEECH DISABILITIES
- 1400. LINE OF CREDIT - LOAN ACCOUNTS
- 1401. LINUX KERNEL MEMORY FRAGMENTATION SIMULATION
- 1402. LIVE CHAT FEATURE IN ORACLE CUSTOMER CARE AND BILLING SOFTWARE.
- 1403. LIVEPLANNER - SCEHDULING & DETAILING
- 1404. LIVER TUMOR SEGMENTATION USING MAGNETIC RESONANCE IMAGING
- 1405. LOAD BALANCING AMONG CLOUD BASED DATA CENTERS
- 1406. LOAD BALANCING AT CLOUD SERVER THROUGH VMS USING ARTIFICIAL INTELLIGENCE
- 1407. LOCATION AWARE STAGING OF ENTERPRISE DEVICES
- 1408. LOCK FREE MEMORY ALLOCATION USING MACHINE LEARNING
- 1409. LOG ANALYSIS IN CLOUD SYSTEM
- 1410. LOG ANALYTICS - BIG DATA
- 1411. LOG EXTRACTION AND ENRICHMENT ENGINE
- 1412. LOYALTY PROGRAM OF TIMES OF INDIA GROUP: TIMES POINTS
- 1413. LTE SMALL CELL COMMUNICATION ENGINEERING FOR DEFENCE FORCES
- 1414. MACHINE LEARNING & ITS SEAMLESS INTEGRATION WITH BUSINESS PROCESS AND EVERYDAY USAGE APPLICATION FOR EFFECTIVE DECISION MAKING
- 1415. MAGNETIC RESONANCE BASED WHOLE BODY TUMOR SEGMENTATION
- 1416. MAINTAIN DATA FRESHNESS IN REPLICATED DATABASE
- 1417. MAKING DESKTOP PUBLISHING APPLICATION APPLE'S APP STORE READY.
- 1418. MAKING WEB BROWSERS SMARTER WITH REAL TIME COMMUNICATION & MOTION SENSING
- 1419. MALWARE ANALYSIS USING MACHINE LEARNING TECHNIQUES
- 1420. MANUFACTURING EXECUTION SYSTEM SOFTWARE PRODUCTS- AN ASSESSMENT
- 1421. MARKET RESEARCH : DATA COLLECTION & ANALYTICS CLOUD BASED SAAS SOLUTION
- 1422. MEASURING COMPLEXITY METRICS OF OBJECT ORIENTED CODE
- 1423. MEDIA AGNOSTIC UNIVERSAL SERIAL BUS
- 1424. MEDIA PLAYER FEATURE FOR SET- TOP BOX
- 1425. MEDIA REDIRECTOR FOR SKYPE FOR BUSINESS SERVER
- 1426. MEMORY BASED ATTACKS IN WINDOWS OPERATING SYSTEMS
- 1427. MESSAGE ORIENTED MIDDLEWARE TESTING
- 1428. METRICS FOR TESTING PROCESS EFFECTIVENESS
- 1429. MIDDLEWARE TRANSFORMATION USING DISTRIBUTED CACHE
- 1430. MIFARE SDK LICENSE MANAGEMENT
- 1431. MIGRATING CUSTOMER SYSTEM FROM LEGACY TO SAP CRM
- 1432. MIGRATION AND RECONCILLATION OF DATA FROM ORACLE COHERENCE TO MONGODB
- 1433. MIGRATION OF ON PREMISE APPLICATION DATABASE TO SQL AZURE
- 1434. MIGRATION OF ORACLE SERVICES TO CLOUD
- 1435. MILITARIZED MOBILE DEVICE MANAGEMENT SOLUTION
- 1436. MILLIMETER WAVES FOR HIGH DATA RATE CELLULAR NETWORKS
- 1437. MINIMIZING FILE DOWNLOAD TIME IN PEER TO PEER NETWORKS
- 1438. MIS (MANAGEMENT INFORMATION SYSTEM ) SYSTEM USING DOT NET TECHNOLOGIES.
- 1439. MOBILE AD INSPECTOR
- 1440. MOBILE AND CELLULAR NETWORK SECURITY
- 1441. MOBILE APPLICATION FOR A CITY GUIDE

1442. MOBILE APPLICATION FOR SAP PURCHASE ORDER PROCESS  
 1443. MOBILE CALENDAR APP WITH ACTIVITY TRACKER  
 1444. MOBILE CAPABILITY FOR FLIGHT CARGO PLANNING  
 1445. MOBILE DEVICE MANAGEMENT - THE SECURITY PERSPECTIVE  
 1446. MOBILE ECOMMERCE APPLICATION TEST AUTOMATION.  
 1447. MOBILE LEARNING WEB FRAMEWORK  
 1448. MOBILE STRATEGY FOR HP NONSTOP SYSTEMS  
 1449. MOBILE USAGE ANALYTICS FOR CONSUMER ENGAGEMENT AND RETENTION  
 1450. MOBILE WAVING PATTERN FOR EMERGENCY SUPPORT SYSTEM  
 1451. MOBILE WORK FORCE MANAGEMENT  
 1452. MODEL BASED DESIGN APPROACH FOR ENGINE TEMPERATURE CONTROL  
 1453. MODERN OFFICE MANAGEMENT WITH AUTOMATION AND INTELLIGENCE  
 1454. MODERNIZATION AND UPGRADATION OF FLEXCUBE PRODUCT TO SUPPORT THE FUNCTIONALITY OF RURAL CREDIT CO-OPERATIVE UNION ( SETTLEMENT ACCOUNTING)  
 1455. MODULAR SOFTWARE ARCHITECTURE AND DEVELOPMENT FRAMEWORK FOR LOAD CENTER SUBSYSTEM OF AGRICULTURE EQUIPMENT  
 1456. MONITOR THE SCALE-ABLE SYSTEMS THROUGH DATAPATH  
 1457. MONITORING AND ALERTING SYSTEM  
 1458. MONITORING STATUS OF PUSH NOTIFICATION IN WARRANTY EXTENSION VIA E-REGISTRATION  
 1459. MOVE TOWARDS CONTINUOUS INTEGRATION THROUGH BUILD AND TEST AUTOMATION  
 1460. MOVIE RECOMMENDATION ENGINE FOR VIDEO ON DEMAND SERVICE  
 1461. MOVIE RECOMMENDATION SYSTEM  
 1462. MOVING BI APPLICATION FROM ON PREMISE TO THE CLOUD  
 1463. MPAGE FRAMEWORK  
 1464. MQ REQUEST DISPATCHER  
 1465. MSC INFRA NATIONAL DATABASE (M.I.N.D)  
 1466. MULTI TEMPORAL GIS ANALYSIS OF CHANGE DETECTION FOR SENSING CONFLICT  
 1467. MULTI-CLOUD APPLICATION DEPLOYMENT AND MANAGEMENT  
 1468. MULTI-KEYWORD SEARCH OVER ENCRYPTED CLOUD DATA SUPPORTING SYNONYM QUERY  
 1469. MULTIMEDIA INDEXING AND INFORMATION RETRIEVAL TECHNIQUES TO ALLOW FAST ACCESS, SEARCH, BROWSING AND NAVIGATION TO THE POINTS OF INTEREST  
 1470. MULTIMEDIA INDEXING AND INFORMATION RETRIEVAL TECHNIQUES TO ALLOW FAST ACCESS, SEARCH, BROWSING AND NAVIGATION TO THE POINTS OF INTEREST  
 1471. MULTIPLE VIRTUAL MACHINES FOR FEATURE PHONES (LOW END PHONES)  
 1472. MULTI-THREADED CALL PROCESSING STACK FOR MULTI-CORE LINUX ENVIRONMENT  
 1473. MULTIVARIATE STATISTICAL DATA ANALYSIS FOR CARDIOVASCULAR DRUG BATCH PROCESS OF PHARMACEUTICAL INDUSTRIES  
 1474. MUSIC RECOMMENDATION SYSTEM  
 1475. MY GROCERY ANALYZER  
 1476. MY ROUTE-AUTOMATED CAB MANAGEMENT SYSTEM FOR COMPANY ENABLED WITH OPTIMIZED ROUTES ASSISTANCE  
 1477. NDMP BACKUP TO CLOUD STORAGE SERVICE  
 1478. NET PROMOTER SCORE® & CUSTOMER EXPERIENCE ANALYTICS  
 1479. NET-RESILIENT ENDPOINT MANAGEMENT SYSTEM  
 1480. NETWORK ADMINISTRATOR TOOL  
 1481. NETWORK CONFIGURATION MONITOR FOR TELES DEVICES  
 1482. NETWORK MANAGEMENT SYSTEM  
 1483. NETWORK MEASUREMENTS & PERFORMANCE ANALYSIS METHODOLOGY  
 1484. NETWORK ON DEMAND SERVICE PROVISIONING  
 1485. NETWORK SECURITY ANALYSIS(MITM ATTACK)  
 1486. NETWORK SYNCHRONIZATION CAPABILITY OF SERVICE ACCESS SWITCHES  
 1487. NEWS PORTAL  
 1488. NEXT GEN CONTROL SYSTEM FOR SEMICONDUCTOR EQUIPMENTS  
 1489. NEXT GENERATION ONLINE REVIEW SYSTEM (TOUCH TO REVIEW)  
 1490. NGDB - NVIDIA GAMES DATABASE  
 1491. NMS AUTOMATION FRAMEWORK  
 1492. NON-INSTRUMENTED OIL WELL SURVEILLANCE  
 1493. NXP SEMANTIC SEARCH  
 1494. OBJECT ORIENTED WORKFLOW DESIGN  
 1495. OBJECT RECOGNITION APPLICATION

- 1496. OBJECT REMOVAL AND IMAGE RESTORATION USING IMAGE INPAINTING TECHNIQUES
- 1497. OBTAINING ACTIONABLE DATA FROM WEBMETHODS INTEGRATION SERVER LOGS
- 1498. OCPROXY FOR OPENCONNECT BASED ON LWLP
- 1499. ODATA WEB-SERVICE VALIDATION USING RESTFUL API AND FITNESS
- 1500. OFFLINE HANDWRITTING RECOGNITION USING KNN CLASIFIER IN METLAB
- 1501. OMNI CHANNEL IMPLEMENTATION OF SAP HYBRIS COMMERCE WITH ORACLE RETAIL MICROS (XOFFICE/XSTORE/LOCATE/ORCE) STORE SOLUTIONS
- 1502. ONLINE CRIME REPORTING AND MANAGEMENT SYSTEM
- 1503. ONLINE EXAMINATION
- 1504. ONLINE INVENTORY MANAGEMENT SYSTEM
- 1505. ONLINE MES COMPLAINT SYSTEM
- 1506. ONLINE QUERY GENERATION SYSTEM
- 1507. ONLINE SHOPPING CART APPLICATION
- 1508. ONLINE SHOPPING CART WITH MULTI FACTOR AUTHENTICATION
- 1509. ONLINE STOCK CHARTS AND TRADING PORTAL
- 1510. ONLINE TENANCY BOND SERVICES
- 1511. OPENCONFIG YANG MODEL SUPPORT ON CISCO IOS XR BOX
- 1512. OPTIMIZATION OF SELECTING CUSTOMER ORDERS THROUGH PICKZONE METHODOLOGY
- 1513. OPTIMIZATION OF SYSTEM TESTING AND SECURING THE WEB SERVICES THROUGH AUTOMATION AND SECURITY TESTING
- 1514. ORACLE IDENTITY MANAGER 9.X TO 11.1.2.3.X MIGRATION
- 1515. ORACLE PROCURE TO PAY SYSTEM
- 1516. ORCHESTRATION OF CAPTIVE PORTAL TRAFFIC ACROSS LOCAL CONTROLLERS
- 1517. OVERLAYING OF GRAPHICS ON VIDEO STREAMS FOR EMBEDDED APPLICATIONS
- 1518. OVERVIEW OF APP STORE - APPS AND DEVICE MANAGEMENT
- 1519. PACED ASSESSMENTS FOR CONFIDENCE ENHANCEMENT (IPACE)
- 1520. PARALLEL PROCESSING OF CSL (CALL SUMMARY LOG) FILE FOR NETWORK ANALYSIS AND TUNING
- 1521. PARKING MANAGMENT SYSTEM
- 1522. PATH COMPUTATION ENGINE FOR OPTICAL NETWORKS
- 1523. PATH DISCOVERY AND ANALYSIS
- 1524. PATIENT CONTINUOUS TEMPERATURE MONITORING OVER WI-FI AND I-O-T
- 1525. PC ACTIVITY COMPILER & VISUAL TIME ANALYTICS
- 1526. PCF FILE READER FOR MOBILE
- 1527. PEDESTRIAN DETECTION ACCELERATED ON GPU USINGN CUDA
- 1528. PERFORMANCE ANALYSIS OF TCP/UDP OVER HYBRID-WIRELESS INFRASTRUCTURE FOR REAL-TIME HYPERMEDIA SYSTEMS
- 1529. PERFORMANCE ANALYZER OF HYPERV HYPERVISOR
- 1530. PERFORMANCE EVALUATION OF CLUSTER BASED LEACH PROTOCOL IN WIRELESS SENSOR NETWORKS
- 1531. PERFORMANCE IMPROVEMENT OF CLOUD SERVICES, BY HEURISTIC CLASSIFICATION OF HTTP RESOURCES
- 1532. PERFORMANCE MANAGEMENT FOR RESOURCE OPTIMIZATION ON NETWORK ELEMENT
- 1533. PERFORMANCE MONITORING AND REPORTING IN CLIENT PORTAL
- 1534. PERFORMANCE MONITORING SOFTWARE
- 1535. PERFORMANCE OPTIMIZATION IN DATA EXTERNALIZATION
- 1536. PERFORMANCE TESTING OF THE SAFETY CRITICAL APPLICAITONS SOFTWARE
- 1537. PERSONAL FINANCE MANAGER
- 1538. PERSONAL ID BASED ENCRYPTION RECOVERY MECHANISM
- 1539. PERSONAL SAFETY LOCKET
- 1540. PERSONAL VIDEO RECORDING FEATURE FOR SET TOP BOX
- 1541. PHOTOGRAPH DATABASE MANAGEMENT USING FACE RECOGNITION ALGORITHM
- 1542. PHOTONIC PATH FINDER
- 1543. PILOTING AN AUTOMATED UNIT TEST CASE GENERATION AND EXECUTION TOOL
- 1544. PLAGIARISM DETECTION SCHEME BASED ON VECTOR MODEL COMBINED WITH SEMANTIC ROLE LABELLING
- 1545. PLANNING-MAKING A WORD PRESS WEBSITE, MARKETING IT VIA VARIOUS SOURCES AND ANALYZING ITS SUCCESS IN TERMS OF TIME AND MONEY.
- 1546. PLATFORM APP FOR WEB APPLICATIONS
- 1547. PLM INNOVATION IN DATA ANALYTICS AND IOT
- 1548. POINT OF SALE SYSTEM
- 1549. PORTING MAKEFILE FRAMEWORK TO OPEN SOURCE YOCTO PROJECT



- 1550. PORTING NEW CHARGING IC TO IMPROVE CHARGE EFFICIENCY
- 1551. POWER MANAGEMENT FOR LARGE SCALE MEMORY SYSTEM
- 1552. POWER OF BUSINESS PROCESS MANAGEMENT TOOL AND ITS IMPLEMENTATION.
- 1553. PPG (PHOTOPLETHYSMOGRAM) SIGNAL BASED GESTURE IN SMARTPHONE APPLICATIONS
- 1554. PRECISION TIME PROTOCOL ON JUNOS MX960
- 1555. PREDICATIVE ANALYTICS WITHIN AN EXISTING COURSE MANAGEMENT SYSTEM
- 1556. PREDICTING FALSE FIRE ALARM
- 1557. PREDICTING IMPACT OF DIET ON BLOOD SUGAR USING MACHINE LEARNING
- 1558. PREDICTING WELLBEING OF POPULATION USING TWITTER FEEDS AND ANEW LIST
- 1559. PREDICTION OF SUCCESS OF A MOVIE BASED UPON DIFFERENT FACTORS
- 1560. PREDICTIVE ANALYSIS AND INSIGHTS INTO AGILE PROJECT EXECUTION LIFE CYCLE
- 1561. PREDICTIVE ANALYSIS HUMAN OR ROBOT
- 1562. PREDICTIVE ANALYSIS OF CUSTOMER CREDIT
- 1563. PREDICTIVE ANALYTICS FOR PARTNERS
- 1564. PREDICTIVE ANALYTICS OF COMMUNITY HEALTH
- 1565. PREDICTIVE MAINTENANCE ASSISTANT SOLUTION USING GOOGLE GLASS AND IOT
- 1566. PREDICTIVE MODEL FOR EMPLOYEE ATTRITION
- 1567. PREDICTIVE RISK ASSESSMENT
- 1568. PREEMPTIVE FRAUD DETECTION ON CLAIMS
- 1569. PRELIMINARY EXAMINATION FOR CRITICAL CONGENITAL HEART DISEASE IN NEW BORN BABIES
- 1570. PRESERVING LOCATION PRIVACY IN GEO SOCIAL APPLICATIONS IN CLOUD
- 1571. PRINTED CIRCUIT BOARD MODEL ANALYSIS FOR MICROPROCESSOR BASED DESIGN TO AVOID FAILURES IN FIELD CONDITIONS DURING SHOCK AND VIBRATION FUNCTION.
- 1572. PRIVACY CONSCIOUS SEARCH FRAMEWORK FOR WEB APPLICATION
- 1573. PRIVACY PRESERVATION IN ANALYZING E-HEALTH RECORDS IN BIG DATA PUBLISHING
- 1574. PROACTIVELY ASSISTING INFORMATICA CLOUD CUSTOMER'S DURING REGULAR MAINTENANCE UPGRADE BY PROVIDING INNOVATIVE SOLUTION BUILT-IN DISCOVERYIQ
- 1575. PROCESS COMPASS
- 1576. PROCESS DRIVEN FEDERATED SOA GOVERNANCE
- 1577. PRODUCT CUSTOMER MATCH RECOMMENDATION FOR FINANCIAL PRODUCTS
- 1578. PROFESSIONAL PROFILE CLUSTERING AND RANKING
- 1579. PROFILING OF NX PART DATA
- 1580. PROGRESSION TESTING USING ROBOT FRAMEWORK
- 1581. PROJECT BUDGETING MANAGEMENT SYSTEM (PBMS)
- 1582. PROJECT MONITORING AND TRACKING PORTAL
- 1583. PROJECT MONITORING SYSTEM DESIGN AND IMPLEMENTATION
- 1584. PROJECT TANGO BASED ANDROID APPLICATION
- 1585. PROTECTING ANDROID APPLICATIONS USING SOFTWARE AND HARDWARE LICENSE KEYS
- 1586. PROTECTING MARINE EMAIL COMMUNICATION SYSTEMS FROM CYBER ATTACKS
- 1587. PROTOTYPE FOR RFID BASED VEHICLE AND PARKING IDENTIFICATION SYSTEM FOR RESIDENTIAL COMPLEX
- 1588. PROTOTYPE IMPLEMENTATION OF CHAT BOT - A VIRTUAL MENTOR FOR EDUCATION
- 1589. PROVIDING ODATA-CONNECT AS A SERVICE OVER IBM BLUEMIX (PAAS) FOR EXPOSING DB2 RELATIONAL DATA USING ODATA (OPEN DATA PROTOCOL).
- 1590. PUBLIC KEY INFRASTRUCTURE WITH EST PROTOCOL
- 1591. PUSH PROTOCOL FOR INSTANT MESSENGER
- 1592. PXTAL FRAMEWORK FOR SERVICE CENTER 10.2
- 1593. Q AND Q MODEL
- 1594. QUICK BOOTUP AND ROBUST DOWNLOAD
- 1595. RADIO FREQUENCY GENERATOR
- 1596. RADIO PERSONALITY MANAGER- GLOBAL SETS
- 1597. RANK AGGREGATION OF META SEARCH ENGINE RESULTS
- 1598. RATE ENGINE BATCH PROCESS
- 1599. RDK TEST DEVELOPMENT KIT
- 1600. REAL TIME ANALYTICS PROCESSING WITH APACHE STORM
- 1601. REAL TIME BUSINESS MONITORING
- 1602. REAL TIME CAR HEALTH PREDICTOR
- 1603. REAL TIME DIAGNOSTICS IN FUSION OS
- 1604. REAL TIME INTELLIGENT BUSINESS MONITORING WITH ANOMALY DETECTION
- 1605. REAL TIME NETWORK HEALTH

- 1606. REALIZATION OF NOVEL LOW POWER AUTOMATIC LICENSE PLATE RECOGNITION SYSTEM USING HETEROGENEOUS EMBEDDED DEVICES
- 1607. REAL-TIME AIR QUALITY MONITORING SYSTEM FOR INDUSTRY
- 1608. REAL-TIME CONSTRUCTION AND RENDERING FOR 3-D OBJECTS FROM 2D ORTHOGRAPHIC IMAGES
- 1609. REAL-TIME MONITORING AND CENTRALIZED LOG MANAGEMENT FOR MICROSERVICES
- 1610. REAL-TIME TREND ANALYSIS IN SOCIAL MEDIA
- 1611. REBUILD CRM WITH REACT AND NODE.JS
- 1612. RECHARGE AND BILLING APPLICATION TRANSACTION ANALYTICAL SYSTEM
- 1613. RECIPE BASED CENTRAL ORCHESTRATOR AND EXECUTOR
- 1614. RECOMMENDATION ENGINE FOR E-BOOK PORTAL
- 1615. RECOMMENDATION PLATFORM
- 1616. RECOMMENDATION SERVICE AND INDEXING
- 1617. RECOMMENDATION SYSTEM FOR DFML
- 1618. RECOMMENDATIONS AS A SERVICE
- 1619. RECORD RECOMMENDING ALGORITHM FOR DIGITAL REPOSITORY OF ELECTRONIC RECORDS
- 1620. RECRUITING MANAGEMENT MOBILE APP
- 1621. RECRUITING MANAGEMENT SYSTEM
- 1622. RECRUITMENT SOLUTION THROUGH MACHINE LEARNING
- 1623. RECURRING JOURNAL FOR MICROSOFT DYNAMICS AX
- 1624. REDESIGN OF ORACLE WEB CENTER ARCHITECTURE FOR INVOICE PROCESSING IN ERP
- 1625. RE-DESIGNING SECONDARY LOGGING IN VERITAS VOLUME REPLICATOR
- 1626. REDUCING EFFORT & REDUNDANCY BY INTEGRATING MULTIPLE VARIANTS INTO SINGLE APPLICATION USING CONFIGURATION□
- 1627. REFORMING AGRICULTURE USING DATA SCIENCE
- 1628. REGRESSION OF OUTPUT FILLES OF FUND RECORDS OF INVESTOR
- 1629. REGRESSION TEST UPDATE TOOL
- 1630. RELATIONAL SEARCH FOR RDMBS TABLES USING NORMALISED INDEX
- 1631. RELAY SHIPMENT DELIVERY SCHEDULING USING INDEPENDENT CONTRACTED VEHICLES
- 1632. REMOTE CONFIGURATION OF PHONE SETTINGS USING SMS FOR ANDROID
- 1633. REMOTE DEVICE ACCESSIBILITY FRAMEWORK
- 1634. REMOTE VEHICLE CARE USING TELEMATICS
- 1635. REPUTATION ANALYSIS IN FACEBOOK AND TWITTER
- 1636. REST API ENABLEMENT
- 1637. REST BASED INTEGRATION WITH SERVICE-NOW
- 1638. RESTARTABLE IMPORT UTILITY ENGINE FOR CALL DETAIL RECORD (CDR) PROCESSING
- 1639. RETAIL INVESTMENT PLANNING & REPORTING USING CUCKOO OPTIMIZATION ALGORITHM
- 1640. REVENUE IMPACTING WEB ANALYTICS SOLUTION
- 1641. REVENUE MEASUREMENT TOOL
- 1642. RE-WRITE OF THE VOLVO WARRANTY APPLICATION
- 1643. RIGHT PROJECT VENDORS
- 1644. RMDV2 REQUIREMENTS MANAGEMENT AND DESIGN VERIFICATION/VALIDATION
- 1645. ROAD ASSIST
- 1646. ROBUST WATERMARKING FOR RELATIONAL DATA.
- 1647. RT LINUX SCHEDULER PERFORMANCE TUNING ON NVIDIA IVI DRIVE CX PLATFORM
- 1648. RULES MATCHING ENGINE
- 1649. S1-16\_BITSZG628T
- 1650. SAAS CONTROLLERS UPGRADE VALIDATION TOOL
- 1651. SALES AUTOMATION TOOL FOR QUEST TRIVANDRUM: - MARKET RESEARCH, SELECTION, DESIGN, DEVELOPMENT, INSTALLATION, AND CONFIGURATION AND REPORT DEVELOPMENT.
- 1652. SAP CLOUD BASED VENDOR MANAGEMENT SYSTEM (FIELDGLASS) TO AUTOMATE CONTINGENT WORKFORCE MANAGEMENT AND SERVICE PROCUREMENT PROGRAM
- 1653. SAP FIORI APPS ON SAP HANA CLOUD PLATFORM
- 1654. SAP HCM IMPLEMENTATION, ENHANCEMENT AND QA
- 1655. SAP INTERFACING TO OUTER WORLD
- 1656. SAP MII LOG COGNIZANCE
- 1657. SAP SIMPLIFIED CLOUD SOLUTION FOR ENTERPRISE MANAGEMENT
- 1658. SCALABILITY AND PERFORMANCE IMPROVEMENT ON IPV6 ADDRESSING, ND TIMERS AND DAD STRUCTURES
- 1659. SCALABLE MICROSERVICES USING KUBERNETES
- 1660. SCANNING FINGER PRINTS TO STORE SENSITIVE INFORMATION

- 1661. SECURE AUDITING AND DE-DUPLICATING DATA IN CLOUD
- 1662. SECURE DATA IN MULTI-CLOUDS WITH SECRET SHARING ALGORITHM
- 1663. SECURE DATA SELF-DESTRUCTING SCHEME IN CLOUD COMPUTING
- 1664. SECURE DATA TRANSMISSION IN RESOURCE CONSTRAINED IOT DEVICES.
- 1665. SECURE ENCRYPTED RELATIONAL DATA BY K-NEAREST NEIGHBOR CLASSIFICATION.
- 1666. SECURE INTERACTIVE API TOOL
- 1667. SECURED CLOUD PLATFORM FOR CONNECTED CAR
- 1668. SECURED PORTABLE OS
- 1669. SECURED SERVER APPLICATION USING ENTITY FRAMEWORK AND MVC ARCHITECTURES
- 1670. SECURING FILES IN CLOUD
- 1671. SECURITY AND RISK ANALYSIS FOR ENTERPRISE CODEBASES
- 1672. SECURITY ENHANCEMENT FOR ANDROID MOBILE DEVICES
- 1673. SECURITY FRAMEWORK FOR AMAZON WEB SERVICES VIRTUAL PRIVATE CLOUD
- 1674. SECURITY IN INTERNET OF THINGS (IOT)
- 1675. SECURITY TEST SUITE FOR ENTERPRISE PRODUCTS
- 1676. SEGMENTATION TECHNIQUE TO DETECT TRAUMATIC BRAIN INJURY FROM CT IMAGES USING NEURAL NETWORKS
- 1677. SELF-LEARNING PERFORMANCE ANALYZER (SLPA)
- 1678. SEMANTIC PMI SUPPORT FOR JT TRANSLATOR
- 1679. SEMICONDUCTOR TECHNOLOGY LIB SPECIFICATION VISUALIZER
- 1680. SENTENCE SENTIMENT ANALYSIS ON TWEETS
- 1681. SENTIMENT ANALYSIS AND OPINION MINING IN DECISION MAKING
- 1682. SENTIMENT ANALYSIS ON SOCIAL MEDIA DATA
- 1683. SERVERS-UNREACHABLE FAILURE HANDLING FOR ONLINE-CHARGING-INTERFACE ON CISCO ASR5000
- 1684. SERVICE AND PROVISIONING
- 1685. SET TOP BOX VIRTUALIZATION
- 1686. SHARE IT - SHARING APP
- 1687. SHARERIDE - CARPOOLING APPLICATION
- 1688. SHARING OF DDR3 MEMORY PRESENT IN A HBA ACROSS PCIE INTERFACE
- 1689. SHELF SPACE OPTIMIZATION
- 1690. SHOWCASE APP ENABLING SHOWCASE OF CREATIVES AND ARTIFACTS WITHOUT DEPENDENCY ON AD-SERVING BY ADSERVER.
- 1691. SIGNAL FLOW IN TRAIN CONTROL AND MANAGEMENT SYSTEM
- 1692. SIMILARITY MEASURE IN TEXT MINING
- 1693. SIMILARITY SEARCH AND CLASSIFICATION OF CLOTHING BASED ON IMAGE PROCESSING AND MACHINE LEARNING
- 1694. SIMULATION OF MPLS ARCHITECTURE IN A BACKBONE NETWORK
- 1695. SIMULATION OF THE LH INTERFACE (INTERFACE BETWEEN GMLC AND HLR NODE) TO SUPPORT SRI-SM MESSAGING TO GET THE MOBILE SUBSCRIBER ROUTING INFORMATION FROM HLR NODE
- 1696. SIMULATOR FOR EMBEDDED SYSTEM SOFTWARE VERIFICATION
- 1697. SMART (SURETY MONITORING AND REPORTING TOOL.)
- 1698. SMART APPLIANCES USING IOT
- 1699. SMART BUS TRANSPORTATION AND TICKETING SYSTEM
- 1700. SMART COFFEE MAKER
- 1701. SMART DATA POPULATION FOR EFFICIENT SYSTEM HANDLING MILLIONS OF REQUESTS PER DAY
- 1702. SMART DATA USAGE THROUGH DEVICE TO DEVICE
- 1703. SMART DOOR LOCK
- 1704. SMART FRAMEWORK FOR POWER SAVING IN IOT DEVICES
- 1705. SMART FREIGHT: AN OPTIMIZED HAULAGE SOLUTION
- 1706. SMART GRIDS
- 1707. SMART HOME SECURITY CAMERA
- 1708. SMART HOME: GATEWAY AND AUTOMATION DEVICE
- 1709. SMART INVENTORY ANALYSER FOR INCREASED PROFIT AND CUSTOMER ENGAGEMENT
- 1710. SMART KITCHEN USING IOT
- 1711. SMART ON FHIR APP BASED CLINICAL DECISION SUPPORT SYSTEM
- 1712. SMART PAYMENT CARD ANALYZER AND HIERARCHICAL DATA MODELER WITH OFFLINE AUTHENTICATION
- 1713. SMART RESTRICT SERVICE
- 1714. SMART UNIFIED SEARCH
- 1715. SMART WIRELESS TRANSITION FROM FEATURE TO SMART PHONES
- 1716. SMS(SCHEME MANAGEMENT SYSTEM)

1717. SOCIAL AUDIO SHARE ON MOBILE P2P NETWORK

1718. SOCIAL MEDIA- CHAT SECURITY SYSTEM

1719. SOCIAL THING 2 THING(T2T) NETWORKING FOR IOT DEVICES

1720. SOCIALSCOREENGINE

1721. SOFTWARE DEFINED NETWORKING IN AN ISP ENVIRONMENT

1722. SOFTWARE DEVELOPMENT FOR MOBILE DEVICES

1723. SOFTWARE INTEGRATION TEST SCRIPT GENERATION TOOL

1724. SPEAKER IDENTIFICATION USING NORMALIZED GFCC AND MFCC FEATURE

1725. SPEECH TRANSCODING USING GPU - WAY TO ACHIEVE HIGH PERFORMANCE ON CLOUD PLATFORM

1726. SPLIT DOWNLOAD FOR ON-DEMAND CONTENT

1727. STANDALONE SERVER MANAGER

1728. START (SIMPLE TEST AUTOMATION FOR REGRESSION TESTS) AS A SERVICE [SAP]

1729. STATE BASED NAVIGATION FOR VIDEO CPE AUTOMATION

1730. STATIC AND DYNAMIC COMPLEXITY ANALYSIS OF SIMULINK MODELS FOR IMPROVING SOFTWARE QUALITY

1731. STATISTICAL QUALITY ASSURANCE TOOL FOR MACHINE VISION SYSTEMS

1732. STEREO IMAGE PROCESSING FOR RASPBERRY PI TARGET

1733. STOCK MARKET- RISK ANALYSIS AND DECISION MAKING

1734. STOP LOSS CONTRACT AUTOMATION

1735. STREAMING & SWITCHING OF AUDIO OVER WLAN

1736. STUDY & IMPLEMENTATION OF SERVER REDUNDANCY IN A CRITICAL AIR DEFENCE SYSTEM USING LINUX HIGH AVAILABILITY TOOLS

1737. STUDY AND ANALYSIS OF PATCH MANAGEMENT PROCESS IN WINDOWS INFRASTRUCTURE

1738. STUDY AND IMPLEMENTATION OF SDN IN COMPLEX IT INFRASTRUCTURES

1739. STUDY AND IMPROVING HUMANIZED COMPUTING TECHNOLOGIES.

1740. SUBJECT AREA IDENTIFICATION

1741. SUBMISSION WHITELIST SYSTEM

1742. SUPPORT FOR ALIAS SETS IN DOCUMENTUM BUSINESS PROCESS

1743. SUPPORT FOR ERASURE CODING IN VERITAS VOLUME MANAGER

1744. SURVEILLANCE SYSTEM USING PUB-SUB FOR MONITORING TRADES

1745. SYNCHONISATION AND FORMAT CONVERSION OF RADAR DATA

1746. SYNCHRONIZED AUDIO-VIDEO RECORD & REPLAY OVER DIFFERENT NETWORKS

1747. SYNERGY- DESIGN AND DEVELOPMENT OF WEB BASED ERP SOFTWARE FOR AUTOMATING THE INTEGRATION ACTIVITIES IN LAUNCH VEHICLE MECHANICAL INTEGRATION GROUP IN VSSC

1748. SYSTEM ARCHITECTURE DIGITALIZATION OF SOFTWARE APPLICATION

1749. SYSTEM FOR MEASURING AND REPORTING PERFORMANCE OF ADVANCED GRAPHICAL CAD TOOLS

1750. SYSTEM UPGRADE FRAMEWORK 5.0

1751. TALENT DISCOVERY & MAPPING PORTAL

1752. TALENT SEARCH

1753. TANK DATA ANALYSER

1754. TAX FILING RE-CREATION

1755. TAX RETURN MODULE IN SAP

1756. TCP THROUGHPUT TESTING FRAMEWORK

1757. TECHNIQUES WITH THE LINUX KERNEL IN ENABLING THE DEBUG

1758. TECHNOLOGY AGNOSTIC HYBRID (TAH) FRAMEWORK FOR MOBILE PERFORMANCE TESTING

1759. TECHNOLOGY UPGRADE DATA WAREHOUSE MICROSOFT SQL 2000 TO ORACLE 11G R2

1760. TELCART WEB APPLICATION

1761. TERMINAL PERFORMANCE MANAGEMENT ANALYTICS

1762. TERRITORY ASSIGNMENT AND COMPENSATION MATRIX IN SALESFORCE.COM

1763. TEST AUTOMATION FRAMEWORK DESIGN

1764. TEST AUTOMATION TOOL FOR SET TOP BOX

1765. TEST AUTOMATION USING CLOUD INFRASTRUCTURE (IAAS)

1766. TEST DRIVEN DEVELOPMENT TECHNIQUES FOR JAVA EE WEB APPLICATIONS

1767. TEST INFRASTRUCTURE MIGRATION TO UFT

1768. TEST REPORTS MANAGER (VIEW, ANALYZE, MAINTAIN HISTORY OF TEST REPORTS AT ONE PLACE)

1769. TESTING OF NETWORK AND APPLICATION SECURITY ASPECTS IN SMART GRID

1770. TEXT MINING AND CLASSIFICATION

1771. TEXT TO SPEECH CONVERSION FOR THE BENEFIT OF VISUALLY IMPAIRED PEOPLE

1772. THE RSS SOLUTION FOR MULTIORTAL INFORMATION RETRIEVAL

1773. THE STUDY OF LARGE SCALE DATA PROCESS AND ANALYSIS ARCHITECTURE BASED ON BIG DATA

1774. THE UNIVERSAL AND MASSIVE SMS SENDER

- 1775. THESIS ON IMPLEMENTATION OF TESTING TECHNIQUES ON THE VARIOUS NOSQL DATABASES LIKE MONGODB, HBASE, CASSANDRA.
- 1776. TIBCO CEP PRODUCT AUTOMATION FRAMEWORK FOR CLOUD
- 1777. TIME SYNCHRONIZATION OF FIRE AND GAS SYSTEM
- 1778. TMF FOR SPRING
- 1779. TO PROVIDE HR FACILITY FOR HR TEAM AT IDBI BANK LTD FOR IMPLEMENTING TRANSFERS ONLINE TO THEIR OFFICERS THROUGH THEIR EXISTING ORACLE HRMS MODULE
- 1780. TOOLS AND TECHNIQUES FOR MAINTAINING QUALITY
- 1781. TOUCH DETECTION ON A REFLECTIVE SURFACE USING A MOBILE PHONE CAMERA
- 1782. TRACKING AND INSTRUMENTATION SYSTEM
- 1783. TRACKING SYSTEM
- 1784. TRADING COMPLIANCE FOR EUROPEAN BANKING SYSTEMS
- 1785. TRAFFIC DATA ANALYTICS FOR RETAIL INDUSTRY
- 1786. TRAFFIC GENERATION TOOL BASED ON PYTHON AND VIRTUALIZATION
- 1787. TRAFFIC SIGN RECOGNITION
- 1788. TRAIN CONTROL SYSTEM DATA MANAGEMENT
- 1789. TRAINING AND WORKFORCE MANAGEMENT
- 1790. TRANSACTIONAL PROCESS DATA MART
- 1791. TRANSACTIONAL SUPPORT FOR NOSQL DATABASE
- 1792. TSUNAMI MONITORING AND FORECAST USING DATA MINING TECHNIQUES
- 1793. UNDERSTANDING SALESFORCE BEHAVIOR USING GENETIC ASSOCIATION STUDIES
- 1794. UNDERSTANDING SYNOPSIS ARC PROCESSORS & A PRACTICAL ASSESSMENT OF CREATING AN IOT FRAMEWORK LEVERAGING THE SAME
- 1795. UNIFIED LOGGING LAYER
- 1796. UNIFIED TESTTASK ARCHITECTURE FOR MULTIPLE SOC PLATFORMS
- 1797. UPNP TEST BED
- 1798. UPOINT-HEALTH AND BENEFITS PORTAL
- 1799. URJA SURAKSHA SETU
- 1800. USB CONTROLLED I2C BASED DATA ACQUISITION APPLICATION
- 1801. USE OF DEEP LEARNING(CNN) FOR TEXT MINING/NLP
- 1802. USER MANAGEMENT FEATURE ON ULTRASOUND SYSTEM
- 1803. USER PLANE PACKET ROUTING USING OPTIMIZED IP STACK
- 1804. UTILITY FOR SENDING & RECEIVING NOTIFICATIONS
- 1805. VEHICLE FUNCTIONS SIMULATOR USING VISUAL STUDIO
- 1806. VEHICLE TO ROAD SIDE INFRASTRUCTURE COMMUNICATION
- 1807. VERIFICATION OF NETWORK SWITCH
- 1808. VIDEO SUMMARIZATION USING KEY FRAME EXTRACTION
- 1809. VIDEO SURVEILLANCE USING CLOUD STORAGE
- 1810. VIRTUAL ENGINE TORQUE SENSOR BASED ON SENSOR FUSION
- 1811. VIRTUAL EXTEND OF DISPLAYS ACROSS SYSTEMS
- 1812. VIRTUAL PUBLIC NOTICE BOARDS USING LOCATION
- 1813. VIRTUAL ROUTE REFLECTOR - NETWORK FUNCTIONS VIRTUALIZATION IMPLEMENTATION
- 1814. VISUAL EXAMINATION DEVICE FOR CLINICAL USE
- 1815. VISUAL SURFACE DETERMINATION FOR 3D OBJECTS
- 1816. VISUALIZING SMART GRID DATA
- 1817. VULNERABILITY MANAGEMENT
- 1818. VXLAN SUPPORT FOR MICROSOFT HYPER-V VIRTUALIZATION PLATFORM & SUPPORT SECURITY GROUP IMPLEMENTATION FOR TENANT VM'S TRAFFIC
- 1819. WAFER DETAILING AND DISPLAY
- 1820. WAREHOUSE MANAGEMENT SYSTEM
- 1821. WATER LEAKAGE PREDICTION SYSTEM USING TENSORFLOW
- 1822. WEATHER READINESS AND ACCESSORIES REMINDER
- 1823. WEB APPLICATION DETECTION FIREWALL
- 1824. WEB APPLICATION FOR PEER TO PEER COMMUNICATION USING WEBRTC
- 1825. WEB APPLICATION SECURITY ASSESSMENT
- 1826. WEB APPLICATION TO REPORT SERVER HEALTH AND STATISTICS USING SNMP AND SSH
- 1827. WEB BASED CIVIL REGISTRY
- 1828. WEB BASED CLIENT SOFTWARE CONFIGURATION MANAGER
- 1829. WEB DATA MINING TO IDENTIFY ONLINE SPREAD OF TERRORISM, A DATA MINING APPROACH
- 1830. WEB PERSONALISED RECOMMENDER SYSTEM FOR E-COMMERCE

- 1831. WEB SERVICE INTEGRATION USING ADF IN ORACLE CLOUD APPLICATION
- 1832. WEB STREAMING
- 1833. WEB-BASED, RECRUITING AUTOMATION SOFTWARE THAT ENSURES QUICK RESUME AGGREGATION, EXTRACTION, COUPLED WITH POWERFUL SEARCH AND INTELLIGENT PREDICTION BASED MATCHING BASED ON THE GIVEN JOB DESCRIPTION.
- 1834. WELKIN EDUTECH INDIA PVT. LTD. - WEB APPLICATION
- 1835. WIDGET LAYOUT APPLICATION
- 1836. WINDOWS CLIENT IMPORT APPLICATION WITH OAUTH2 AUTHENTICATION FOR ACCESSING CLOUD SERVICES
- 1837. WINDOWS SERVER RESOURCE ANALYTICS
- 1838. WINSHUTTLE STUDIO LANGUAGE INDEPENDENT EXTENSIONS
- 1839. WIRELESS SENSOR NETWORK
- 1840. WIRELESS TROLLEY CONTROL
- 1841. WORD SENSE DISAMBIGUATION IN DECISION MAKING
- 1842. WORK ORDER MANAGEMENT SYSTEM ON CLOUD AND EXPLORING IOTS
- 1843. WORKFLOW VISUALIZATION WITH PREDICATION MODEL
- 1844. WORKPLACE FRIEND FINDER
- 1845. XML GENERATION TOOL
- 1846. XML PARSING AND STORING IN DB TABLES WITH AN ALGORITHM THAT ISOLATES DATA FROM CODE
- 1847. ZIGBEE BASED SMART CAMPUS AUTOMATION

**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees	
	78 <sup>th</sup> Award (19.03.2016)	79 <sup>th</sup> Award (15.07.2016)
<b>A. Integrated First Degrees</b>		
<b>B.S.</b>		
Engineering Design	1(00)	
Engineering Technology	141(02)	240(03)
Information Systems	165(60)	19(01)
Manufacturing Engineering	28(00)	73(04)
Marine Engineering	53(00)	3(00)
Nautical Technology	27(00)	9(00)
B.Optom.	-	12(09)
Optometry	66(48)	46(31)
Physician Assistant	-	8(08)
Power Engineering	72(00)	-
Process Engineering	133(01)	5(00)
<b>B.Tech.</b>		
Marine Engineering	206(02)	16(00)
Nautical Technology	46(00)	44(00)
		-
<b>Sub Total</b>	<b>938(113)</b>	<b>475(56)</b>
<b>B. Higher Degrees</b>		
<b>M.S.</b>		
Automotive Engineering	8(00)	
Consultancy Management		
Design Engineering		7(00)
Embedded Systems		
Engineering Management		
Manufacturing Management	65(00)	10(00)
Microelectronics	3(00)	
Pharmaceutical Operations & Management		16(00)
Quality Management	13(00)	4(01)
Science Communications	1(00)	
Software Engineering	1215(675)	94(24)
Software Systems	63(20)	120(32)
Systems Engineering	180(84)	5(02)
Telecommunications & Software Engineering	16(03)	25(04)
<b>MBA</b>		
Consultancy Management		57(06)
Manufacturing Management	8(01)	64(06)
Quality Management	1(00)	48(10)
<b>M.Tech.</b>		

Degrees	No. of degrees	
	78 <sup>th</sup> Award (19.03.2016)	79 <sup>th</sup> Award (15.07.2016)
Automotive Engineering	-	29(02)
Design Engineering	64(08)	19(00)
Embedded Systems		6(01)
Engineering Management		
Manufacturing Management	197(21)	239(16)
Microelectronics	25(08)	
Pharmaceutical Operations & Management	6(00)	68(08)
Project Engineering & Management		
Quality Management	10(03)	132(16)
Software Engineering	2102(1038)	238(63)
Software Systems	478(143)	675(191)
Systems Engineering	157(70)	5(01)
Telecommunications & Software Engineering	19(12)	19(06)
<b>M.Phil.</b>		
Hospital and Health Systems Management	5(02)	21(07)
Optometry	-	11(06)
<b>Sub Total</b>	<b>4634(2093)</b>	<b>1912(402)</b>
<b>Total</b>	<b>5574(2206)</b>	<b>2387(458)</b>

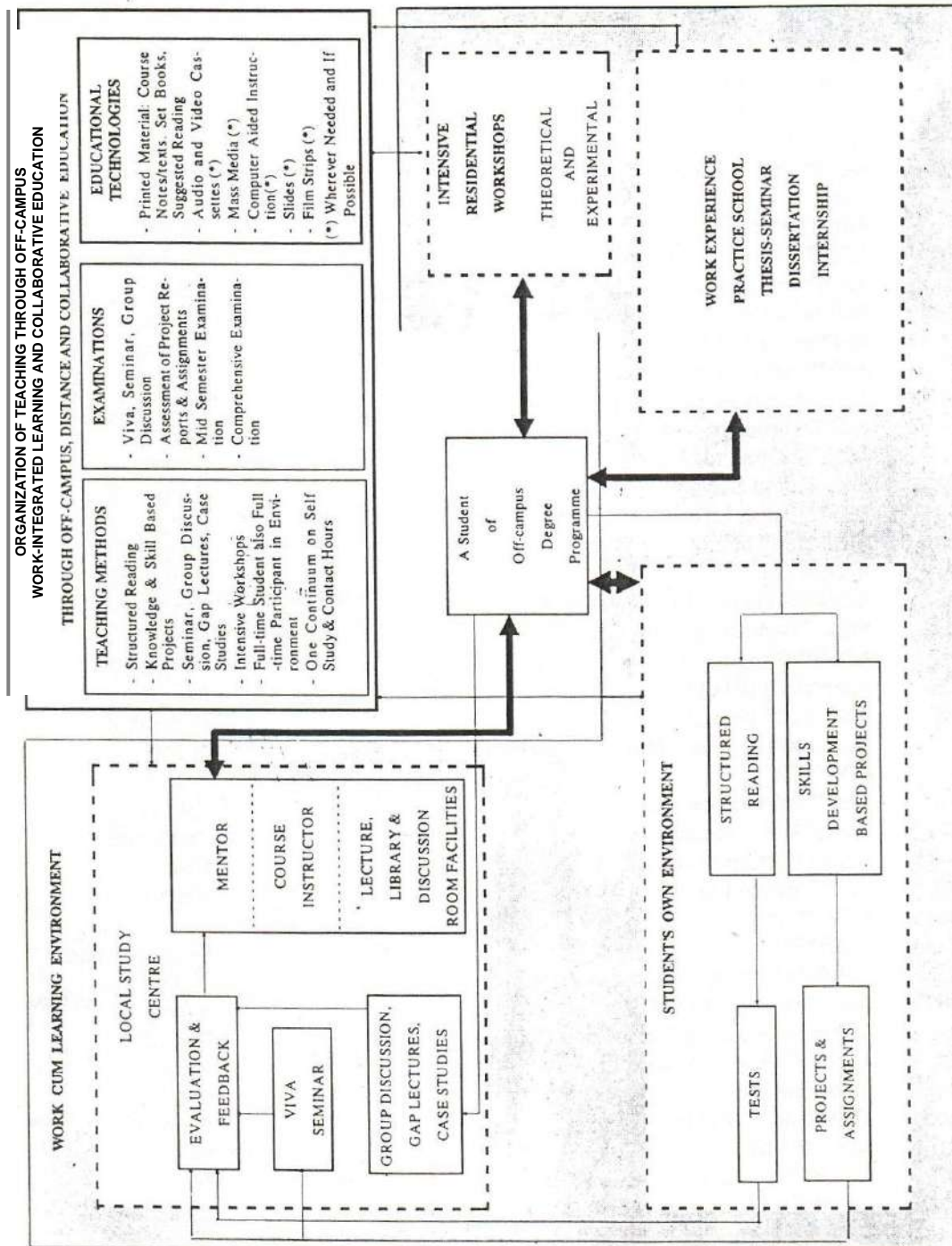
**Note:** The numbers in brackets indicate number of female students.

#### SUMMARY

Award	78 <sup>th</sup>	79 <sup>th</sup>	Total
Integrated First Degrees	938(0113)	475(056)	1413(0169)
Higher Degrees	4636(2093)	1912(402)	6548(2495)
<b>Total</b>	<b>5574(2206)</b>	<b>2387(458)</b>	<b>7961(2664)</b>

**Note:** The numbers in brackets indicate number of female students.





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



**BITS Pilani**  
Pilani | Dubai | Goa | Hyderabad

**Dr. Kumar Mangalam Birla**  
Chancellor

**Smt. Shobhana Bhartia**  
Pro-Chancellor

**Prof. Souvik Bhattacharyya**  
Vice-Chancellor

**Prof. Ashoke Kumar Sarkar**  
Director, Pilani Campus

**Prof. G Raghurama**  
Director, K.K. Birla Goa Campus

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

**Prof. Ranendra N. Saha**  
Director, Dubai Campus

**Prof. Ashwin Srinivasan**  
Deputy Director, K.K. Birla Goa Campus

**Prof. S.C. Sivasubramanian**  
Acting Registrar

**Prof. Sunil Bhand**  
Dean, Sponsored Research and Consulting

**Mr. Arun Khetan**  
Chief Financial Officer (On deputation)

**Prof. Sanjay Kumar Verma**  
Dean, Academic Research (Ph.D. Programme)

**Prof. S. Balasubramaniam**  
Dean, Academic and Resource Planning

**Prof. R. Mahesh**  
Dean, Faculty Affairs

**Prof. Niranjana Swain**  
Dean, Practice School

**Prof. S. Gurunayanan**  
Dean, Admissions and Work Integrated Learning Programmes

**Prof. Suman Kapur**  
Dean, International Programmes and Collaboration



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