



**INSTITUTIONAL ASSESSMENT AND ACCREDITATION
(Effective from July 2017)**

Accreditation - (Cycle - 4)

**PEER TEAM REPORT ON
INSTITUTIONAL ACCREDITATION OF
BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
U-0391**

**Pilani
Rajasthan
333031**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA**

Section I: GENERAL INFORMATION

1.Name & Address of the institution:	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE Pilani Rajasthan 333031	
2.Year of Establishment	1964	
3.Current Academic Activities at the Institution(Numbers):		
Faculties/Schools:	13	
Departments/Centres:	13	
Programmes/Course offered:	52	
Permanent Faculty Members:	913	
Permanent Support Staff:	1220	
Students:	17137	
4.Three major features in the institutional Context (Asperceived by the Peer Team):	1. Green Eco friendly campus with excellent infrastructure 2. High Quality students intake 3. Integrates Academic learning with practical Industry Exposure	
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	From : 14-11-2024 To : 16-11-2024	
6.Composition of Peer Team which undertook the on site visit:		
	Name	Designation & Organisation Name
Chairperson	DR. RAJAT GUPTA	Director,National Institute Of Technology Mizoram
Member Co-ordinator:	DR. VIJAYALAKSHMI MUVVA	FormerProfessor,ACHARYA NAGARJUNA UNIVERSITY
Member:	DR. SREEJITH P S	Dean,COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY
Member:	DR. MADHUMANGAL PAL	Professor,Vidyasagar University
Member:	DR. KINNARRY THAKKAR	Professor,UNIVERSITY OF MUMBAI
Member:	DR. JENNIFER FERNANDES	Professor,NGSM Institute of Pharmaceutical Sciences
Member:	DR. THENMOZHI RAMANUJAM	FormerProfessor,University of Madras
NAAC Co - ordinator:	Dr. Jagannath Patil	

Section II: CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrics of the key Indicator under the respective criterion (This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion 1 - Curricular Aspects (Key Indicator and Qualitative Metrics (QIM) in Criterion 1)	
1.1	Curriculum Design and Development
1.1.1 QIM	Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs), and Course Outcomes (COs) of the Programmes offered by the University
1.1.2 QIM	The Programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements
1.2	Academic Flexibility
1.3	Curriculum Enrichment
1.3.1 QIM	Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum
1.4	Feedback System

Qualitative analysis of Criterion 1

Birla Institute of Technology and Science has four campuses at Pilani, Goa, Hyderabad and Dubai. The institute has developed and implemented curricula that are relevant to local, national, regional and global developmental needs. The institution followed a semester structure with continuous and internal evaluation, encouraging a modular and adaptable educational environment. The Institute carries out a comprehensive curriculum review once in five years involving external eminent experts and industry professionals and prominent alumni of the institute, whereas minor revisions are made by internal faculty as and when required. The curriculum is meant to expose students to a diverse range of courses including Discipline Core Courses, Discipline Electives, Humanities Courses and Specific Science and Technology courses. General awareness and professional courses like Principles of Economics or Principles of Management are also included in curriculum. The Practice School component comprising Practice School I and Practice School II enhances the curriculum's practical relevance. The institution encourages students to pursue "Minor programs," in various fields such as Aeronautics, Data Science, English Studies, Entrepreneurship, Film and Media, Finance, Materials Science and Engineering, Philosophy, Economics and Politics, Physics, Public Policy, Robotics and Automation and Water and Sanitation. The Entrepreneurship and Innovation program and the E-commerce and Digital Leadership courses are mainly aimed to help students to face the challenges of the digital age. CIIE provides a supportive environment for translating innovative ideas into successful ventures. The Mantra Awards offered by the Center for Entrepreneurial Leadership in collaboration with BITSAA International presented in different categories help to recognize students achievements. BITS established the BITS BioCyTiH Foundation in 2021 mainly aimed to catalyze industry-academia collaborations, addressing crucial challenges in healthcare, agriculture, water and the environment. The curricular structure of each first-degree program offered by the institution includes a number of courses addressing cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment, and Sustainability. Dual degree program is offered by the institute. Although curricular are revised internally as and when required, external audit for the courses may be conducted every 2 years instead of 5 years

Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrics(QIM) in Criterion2)	
2.1	Student Enrollment and Profile
2.2	Catering to Student Diversity
2.2.1 QIM	The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student
2.3	Teaching- Learning Process
2.3.1 QIM	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experience and teachers use ICT-enabled tools including online resources for effective teaching and learning process
2.3.2 QIM	The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues
2.4	Teacher Profile and Quality
2.5	Evaluation Process and Reforms
2.6	Student Performance and Learning Outcomes
2.6.1 QIM	The institution has stated learning outcomes (Program and Course outcomes)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution
2.7	Student Satisfaction Survey

Qualitative analysis of Criterion 2

BITS Pilani has implemented a comprehensive and structured approach to teaching-learning and evaluation across its campuses. The institution emphasizes continuous improvement and quality assurance in academic processes to foster an effective learning environment.

The following report details the key components and processes involved in teaching-learning and evaluation. Each year, BITS Pilani organizes teaching-learning workshops to support faculty development and ensure effective teaching practices. These workshops are instrumental in introducing new pedagogical methods, assessment strategies, and teaching innovations. Each department from each campus invites approximately 5 to 6 subject matter experts to provide talks and insights into contemporary educational practices, discipline-specific advancements, and innovative teaching methods. This initiative enriches the knowledge base of faculty members and promotes an exchange of ideas for enhanced teaching effectiveness. At the beginning of each semester, the Departmental Committee on Academics (DCA) conducts a comprehensive review of the course handouts for all courses scheduled for that semester. This review ensures that the course objectives, content, and learning outcomes are clearly defined, aligning with the academic standards and institutional goals. The DCA's review process helps identify any necessary updates or changes in course structure, materials, or delivery methods, fostering consistency and quality across courses. To facilitate an interactive and engaging learning environment, all classrooms at BITS Pilani are Wi-Fi enabled and equipped with LCD projectors. This technological support allows faculty to use multimedia resources and digital tools during lectures, making learning more dynamic and accessible for students. BITS Pilani has also established a Cisco Tele-Presence Classroom, which connects all campuses. This facility enables collaborative learning and peer engagement across different campuses by offering around four courses per semester through this platform. The Tele-Presence system allows real-time, interactive sessions and contributes significantly to peer learning. The Institution has implemented a well-defined, anonymous feedback system for students. At the end of each semester, students are encouraged to provide feedback on the courses they have attended. This feedback process ensures anonymity to encourage honest responses, allowing the institution to collect valuable insights

regarding the quality of teaching, course content, and classroom experiences.

BITS Pilani also gathers feedback from faculty members, industry experts, organizations that host practice schools, campus recruitment teams, alumni, and parents. This multi-source feedback approach enables the institution to receive comprehensive input from all stakeholders, which is used to make continuous improvements in academic quality and relevance. For each course, question papers and other assessment parameters are reviewed by at least two faculty members from the respective department. This practice maintains high standards and consistency across departments, ensuring that assessments are aligned with the intended learning outcomes and course objectives. The DCA prepares detailed question paper review reports, which are then shared with the Deans of Academics for undergraduate (UG) and postgraduate (PG) courses as applicable. This reporting process enhances transparency and allows for a critical review of evaluation standards across departments. Once the final evaluations are complete, faculty members discuss the proposed grades in a departmental meeting. These discussions encourage collaborative decision-making and allow faculty to share their insights and perspectives on student performance, fostering a balanced grading process. After the departmental review, grades are submitted to the Deans of Academics (UG and PG) as applicable. This two-tier review system ensures consistency and fairness in grading practices. The Examination Committee plays a crucial role in the final validation of grades. All grades submitted across departments undergo in-depth discussions within the Examination Committee, ensuring that grading is standardized and equitable across the institution before the grades are officially declared. This committee's oversight is vital in upholding academic standards and ensuring that evaluations align with the institutional policies and expectations for academic rigor. The teaching-learning and evaluation processes at BITS Pilani emphasize both academic rigor and continuous improvement. Through technology-enabled classrooms, structured feedback systems, multi-level evaluation reviews, and collaborative grading processes, BITS Pilani ensures high-quality education and effective teaching practices. The institution's commitment to incorporating stakeholder feedback, regular workshops, and review systems promotes an enriching learning experience that aligns with modern academic standards and the evolving needs of students and society. Specialized academic prog in Architecture and Urban Engineering at undergraduate level in addition to regular program at Dubai campus. BITS Pilani offers a course on Bhagwat Gita under IKS.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrics(QIM) in Criterion3)	
3.1	Promotion of Research and Facilities
3.1.1 QIM	The institution's Research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented
3.2	Resource Mobilization for Research
3.3	Innovation Ecosystem
3.3.1 QIM	Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident
3.4	Research Publications and Awards
3.5	Consultancy
3.6	Extension Activities
3.6.1 QIM	Outcomes of extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)
3.7	Collaboration

Qualitative analysis of Criterion 3

BITS Pilani has demonstrated unwavering dedication to research and innovation, achieving good milestones in academic and applied research over the past five years. With nearly 2700 Ph.D. scholars enrolled, approximately 70% of whom have received prestigious fellowships from renowned agencies, the Institute has fostered a vibrant research ecosystem. Its faculty members have published around 8,000 research papers in reputable UGC CARE-listed journals, averaging roughly 7 publications per faculty member, and secured substantial funding exceeding Rs. 250 crore from government agencies, industry, and international bodies. This funding has enabled the development of cutting-edge research infrastructure, facilitating groundbreaking research in various disciplines. Additionally, BITS Pilani has incubated over 150 startups through initiatives like PIEDS, cementing its position as a leading hub for innovation and entrepreneurship. The Institute's outreach programs have addressed pressing social issues, including health, education, and skill development, with over 300 extension and outreach programs conducted, benefiting thousands of individuals. Strategic collaborations with around 40 domestic and international institutions have further solidified BITS Pilani's reputation as a premier research institution. However, areas for improvement include enhancing faculty involvement in Ph.D. supervision, boosting patentable research, increasing research productivity, and refining documentation of research outputs, with only around 50 patents granted and an average of 1.2 Ph.D.s awarded per recognized guide. By addressing these areas through faculty development programs, research collaboration initiatives, and innovation support mechanisms, BITS Pilani will reinforce its position as a leader in higher education and research, driving innovation and societal impact. The Institute's commitment to research excellence, innovation, and community engagement will continue to yield transformative outcomes, shaping the future of education and research. Installation of Novel Sewage Treatment Facility at Bogmolo Beach at Goa in 2022 for 100 people capacity as outreach program.

Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrics(QIM) in Criterion4)	
4.1	Physical Facilities
4.1.1 QIM	<p><i>The institution has adequate infrastructure facilities for</i></p> <p><i>a. teaching - learning. viz., classrooms, laboratories,</i></p> <p><i>b. ICT enabled facilities such as smart classes, LMS etc.</i></p> <p><i>c. Facilities for cultural and sports activities , yoga centre, games (indoor and outdoor) gymnasium, auditorium etc.</i></p> <p>Describe the adequacy of facilities within a maximum of 500 words</p>
4.2	Library as a Learning Resource
4.2.1 QIM	<p>Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students</p>
4.3	IT Infrastructure
4.3.1 QIM	<p>Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection</p> <p>Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words</p>
4.4	Maintenance of Campus Infrastructure
4.4.2 QIM	<p>There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.</p> <p>Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words</p>

Qualitative analysis of Criterion 4

Classrooms are centrally air conditioned and are equipped with modern audio/video facilities and are well connected to the WiFi and LAN. Modern facilities for instruction and learning are available at BITS Pilani viz. classrooms, labs, computing equipment etc. Research laboratories for pharmacy, chemistry, computing and biology, measurement techniques labs in biology, chemistry, physics, and microbiology lab, the central analytical lab, physics research lab, pharma analysis lab, computer-aided drug design (CADD) lab, VLSI CAD lab, and EEE practice lab are set up. The Information Processing Centre (IPC) operates from early morning to midnight through out the year. Central Sophisticated Instrumentation Facility (CSIF) exists. The university's demands are catered by the Learning Management System, which offers a wide range of online assessment modules and tools for controlling teaching-learning activities. The LMS's scalability and secure test browser ensure effective administration and student feedback. The University has got excellent library and their facilities.

The library provides multitude of information to students and faculty through its subscriptions. The library portal enabled interactions, feedback and recommendations. Interlibrary loan service is available. The library subscribes to prestigious repositories like RSC Gold eJournals and IOP's e-Journals. OpenAthens SSO enables convenient retrieval of materials from anywhere and at any time. The IPC manages the

computing/networking infrastructure of the campus. The campus-wide network offers internet and intranet services. Multiple internet service providers (ISPs) with optical fiber leased lines are used for internet needs. Firewall authentication offers protection against worms, viruses, malware and data loss. Campus-wide security system is provided with CCTV cameras. Budget is allocated for the maintenance of IT resources. year A document containing policies is circulated every year to improve the resource utilization of the Computer Centre. Physical, academic and support facilities are maintained by separate units like the Placement Unit and Academic sections. The Institute offers services for family gatherings and parties. The institute has state-of-the-art sports and Gym infrastructure. However, timings and slots for the students may be reviewed. The institution has well-equipped and sophisticated instruments in all the laboratories. The laboratories are equipped with safety features imbibed in the infrastructure and create a good ambience and atmosphere for work. The Language lab is well resourced with latest and updated softwares. The Institute has its Green Policy that emphasizes on clean, green and smart campus. BITS Pilani is a zero discharged campus. Environmental and green audit is carried out through external agencies. Herbal garden with medicinal plants has been provided. The institute has adequate infrastructure with lectures halls. All the staff members are provided with individual sitting space. The institute has adequate Wi-Fi facility in the campus. The institute has CPCSEA approved central animal facility is available at BITS Pilani, Pilani campus to carry out their preclinical studies. The Institution a unique feature of Peacock restoration into the campus established in 2017. During the assessment year Capital expenditures budget were under utilised whereas operating expenses were utilised more than 85 % .

Micro and Nano fabrication facility is provided for Research and Teaching – state-of-the-art-facility for semiconductor device fabrication and characterization. It is 580 sq feet and maintained at (ISO 6) class 100 and the rest is class 100 (ISO5) at Hyderabad campus.

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrics(QIM) in Criterion5)	
5.1	Student Support
5.1.2 QIM	Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years
5.2	Student Progression
5.3	Student Participation and Activities
5.3.2 QIM	Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution. Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words
5.4	Alumni Engagement
5.4.2 QIM	Alumni contributes and engages significantly to the development of institution through academic and other support system Describe the alumni contributions and engagements within a maximum of 500 words

Qualitative analysis of Criterion 5
The institution has very vibrant placement cell. To improve students' employability, BITS Pilani provides skill-building programs in areas such as entrepreneurship, leadership development and communication skills. The career services department of the institute is committed to assisting students in determining their career pathways. The Students' Union is a student organization comprising elected representatives from the GBM which is headed by the President and the General Secretary. Communication between the administration and

the student body is facilitated by it. The Students welfare association is very active and supports students in various activities. The BITS Pilani Alumni Association (BITSAA) serves as a liaison between the institute and its global alumni community, facilitating communication, engagement and alumni fundraising. Each year, the institute bestows Distinguished Alumnus honors to alumni who have demonstrated exceptional accomplishments. BITSAA International hosts the BITSAA Global Meet every three years, which brings alumni from all over the world back to network and support their alma mater. The Alumni Relations division of BITS Pilani works with the BITSAA international plays a critical role in building a strong connect with alumni by multiple engagement activities and raising funds for the growth and development of the institution as well as for start up evaluation and mentoring. Guests lecture, consultation curriculum review. Alumni teach a full 3 credit course called new venture creation for developing business idea. Distinguished Alumni in academia are offered Distinguished faculty positions. The repository of alumni is updated on BITSAA India and BITSAA International portal. The Rakesh Kapoor Innovation Centre, one of the renowned centre for promoting innovation and incubation activities is an outcome of Alumni contribution.

Criterion6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrics(QIM) in Criterion6)	
6.1	Institutional Vision and Leadership
6.1.1 QIM	The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.
6.2	Strategy Development and Deployment
6.2.1 QIM	The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc
6.3	Faculty Empowerment Strategies
6.3.1 QIM	The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression
6.4	Financial Management and Resource Mobilization
6.4.1 QIM	Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words
6.4.3 QIM	Institution regularly conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words
6.5	Internal Quality Assurance System
6.5.1 QIM	Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – <ul style="list-style-type: none"> • Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) • Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles) Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words
6.5.3 QIM	Incremental improvements made for the preceding five years with regard to quality (in case of first cycle NAAC A/A) Post accreditation quality initiatives (second and subsequent cycles of NAAC A/A)

Qualitative analysis of Criterion 6

Semester system has been introduced at BITS from its inception which gives greater flexibility to students to select from large number of electives across disciplines and doing minor in emerging areas. Outcome based approach is followed which enables students to become entrepreneurs.

A multi campus governance structure is followed through several division and units like Academic undergraduate studies division (AUGSD), Academic Graduate Studies and Research Division (AGSRD), Sponsored Research and Consultancy Division (SRCD), Faculty Affairs Division (FAD), Practice School Division (PSD), Work Intergrated Learning Program Division (WILPD), International Programs and Collaboration Division (IPCD) and Alumni Relations.

The decentralized structure is largely possible due to custom built (CISCO telepresence), HD Video conferencing facility which was launched in 2013. This facility is also used for instruction in specialized 250 capacity classrooms shared across campuses. Corporates interview students of other campuses either from one campus location or from there own TP facility. Certain policies are implemented to encourage faculty members to present and attend conferences, seminars and workshops which includes, allowance of 1 lakh /year, all faculty can avail one year of sabbatical after completion of 6 years of continuous service. This can be availed in once every six years. There is Extra ordinary leave to enrich the experience of faculty members, Comprehensive policy and guidelines to encourage faculty members to engage in consultancy assignment.

Recruitment of faculty members is by means of a four level process i.e. by department level applications shortlisting committee (DLSE), campus level shortlisting review committee (CLSC), University level shortlisting committee and finally university level selection committee. The faculty performance management system (PMS) has been designed to encouraged periodic constructive discourses between the faculty and their HODs regarding the performance and assessment of students. Every employee at BITS Pilani will get an annual increment of 3%. There is no upper cap limit for Professors and seniors professors which is very unique. the DA is increased at par with Central Government notification. Maternity leave of 6 months with pay is granted. There are 20 half pay leaves, vacation leave for 30 days, with an additional 50% salary payable for the detained period during vacation. LTA of 100% to hometown once in 2 years for self and family and medical expenses upto 90% are reimbursed. The institute makes a detailed budget for its plans for salaries, scholarships, research and other operations of the institute. The institute appoints statutory auditors. Bank Reconciliation are done at regular frequencies. External audits are also conducted regularly.

The institute allocates 50 Lakhs Rupees as funding support for under graduate students projects across other campus. A Quality enhancement endeavor is followed.

Criterion7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrics(QIM) in Criterion7)

7.1	Institutional Values and Social Responsibilities
7.1.1 QIM	Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years. Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words
7.1.3 QIM	Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

	<ul style="list-style-type: none"> • Solid waste management • Liquid waste management • Biomedical waste management • e-Waste management • Waste recycling system • Hazardous chemicals and radioactive waste management
7.1.5 QIM	<p>Green campus initiatives include</p> <p>Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words</p>
7.1.7 QIM	<p><i>The Institution has Differently-abled (Divyangjan) friendly, barrier free environment</i></p> <p><i>Write description covering the various components of barrier free environment in your institution in maximum of 500 words</i></p> <ul style="list-style-type: none"> • Built environment with Ramps/lifts for easy access to classrooms • Divyangjan friendly washrooms • Signage including tactile path, lights, display boards and signposts • Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment • Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading
7.1.8 QIM	<p>Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).</p>
7.1.9 QIM	<p><i>Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens</i></p> <p>Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.</p>
7.2	Best Practices
7.2.1 QIM	Describe two best practices successfully implemented as per NAAC format provided in the Manual.
7.3	Institutional Distinctiveness
7.3.1 QIM	Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Qualitative analysis of Criterion 7

BITS Pilani has established itself as a forward-thinking institution that integrates technology, sustainability, and community engagement into its operations. By embedding institutional values and best practices, BITS Pilani has developed a robust framework for academic excellence, social responsibility, and organizational efficiency. Below are the detailed highlights of these values and practices.

BITS Pilani has consistently leveraged technology across various domains, including academics, governance,

monitoring, and data management. The institution utilizes a comprehensive Enterprise Resource Planning (ERP) system, which fully integrates the student lifecycle, financial transactions, and human resource processes. This ERP system ensures seamless management and supports the decision-making processes through data-driven insights.

In 2005, BITS Pilani introduced BITSAT, the first online entrance test of its kind in India. This innovative approach to entrance testing set a precedent for other institutions and showcased BITS Pilani's commitment to digital solutions in academic assessment.

BITS Pilani extensively uses Learning Management Systems and virtual classrooms, along with Virtual and Remote Laboratories, particularly in programs for working professionals. These resources provide flexible learning opportunities and enable access to practical experiences without the need for a physical lab, addressing one of the key challenges for remote and working students.

Since 2013, BITS Pilani has implemented a custom-built Cisco Tele-Presence HD video conferencing facility. This facility has proven instrumental in enhancing multi-campus administration, instruction, faculty selection, and committee meetings. The centralized virtual setup reduces the need for inter-campus travel, saving over Rs. 20 Crore in travel costs and time over nine years. The Tele-Presence system facilitates the delivery of more than 20 courses annually, including a specialized entrepreneurship course titled "New Venture Creation," taught by entrepreneurs, venture capitalists, and startup mentors from across the globe. This platform enables access to a unique blend of academic and industry expertise, enhancing the learning experience for students and providing exposure to real-world entrepreneurial challenges and opportunities. The video conferencing facility also supports recruitment processes by allowing corporate recruiters to interview students from different campuses remotely. This setup is further utilized to host guest lecturers from around the world, promoting collaborative research, knowledge exchange, and interactive learning. BITS Pilani addresses the challenges faced by working professionals in accessing hands-on lab experiences. The institution has successfully deployed remote labs across various subject domains for the past seven years. These remote labs enable students to engage in practical exercises from their workplace, ensuring continuity in skill development without compromising on experiential learning. BITS Pilani's campuses are actively involved in community service through initiatives like the National Service Scheme (NSS) and NIRMAAN, with a strong focus on health, education, and sustainable development. During the Covid-19 pandemic, NSS volunteers assisted local communities by establishing a stitching center where women were trained to make masks, a crucial resource at the time. NSS initiatives have also promoted environmental sustainability, with volunteers planting saplings across campuses to enhance green spaces and foster an eco-friendly campus environment. The Hyderabad campus chapter of NIRMAAN leads several impactful programs, including the adoption of local schools, livelihood training for underprivileged communities, and various community development projects. The Goa campus has undertaken multiple social programs, including conducting scholarship tests for local students, distributing rations and groceries to those in need, and launching a Distant Learning English Communication course. These initiatives aim to improve educational access and support the well-being of the local communities. BITS Pilani has implemented green initiatives across its campuses, focusing on promoting sustainability and minimizing environmental impact. These initiatives encourage students and staff to engage in eco-friendly practices, such as recycling, waste reduction, and energy conservation, thus fostering an institutional culture that values sustainability.

BITS Pilani's institutional values and best practices demonstrate a holistic approach to excellence, encompassing technological innovation, community engagement, and sustainable development. Through pioneering initiatives like BITSAT, remote labs, and the Cisco Tele-Presence facility, the institution has positioned itself as a leader in digital transformation within academia. Additionally, BITS Pilani's

commitment to social responsibility is evident through various community service projects that positively impact local communities. The combination of these values and practices ensures that BITS Pilani remains at the forefront of educational innovation, social engagement, and environmental stewardship.

Section III: OVERALL ANALYSIS based on Institutional strengths, Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

Overall Analysis

Strength:

- Institute of Eminence
- Green ecofriendly campus with excellent infrastructure
- Highly conducive academic environment
- Qualified and dedicated faculty members
- High quality student intake
- Integrates academic learning with practical industry exposure- practice schools- PS-1 and PS-2
- Academic flexibilities and provision like dual degree programs, minor courses etc.
- Significant number of sponsored extra mural research projects
- Remote and virtual labs such as ADAS, Automobile electronics etc.
- TBI and Innovation centers support incubation of startups by students and faculty
- Pay structure is similar to NITs/IITs but with a distinctive compensation structure with no CAP on the grade pay of Professors and Senior Professors thus enabling to attract and retain high quality senior faculty
- Institute Ph.D. fellowship is very encouraging
- Excellent placement records
- Very Strong Alumni connect

Weaknesses:

- Limited internationalization in terms of faculty exchange, academic collaborations etc.
- Limited Diversity and inclusion in terms of gender
- Less number of regular Ph.D. scholars
- Limited access to Data availability for downloading software's for academic purposes
- There is no anti-ragging sign board displayed in the campus.
- Limited number of patents filed during the assessment period

Opportunities:

- To take the leadership role for imparting quality education to other institutions
- To strengthen the research activities
- To strengthen ties with the international organizations

Challenges:

- To have more female students
- To have better medical facilities in the BITS Pilani Campus
- Making the swimming pool functional at Pilani campus
- To improve NIRF ranking

Section IV: Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- To improve medical facilities within the campus
- Timings for gym to be revised
- Provision to attract International students in higher learning to be revisited
- More girl students may be encouraged for admission
- Consultancy needs to be improved
- A strategic plan may be developed to improve NIRF ranking
- Admission of regular Ph.D. students and patents may be improved
- More wash rooms for ladies in Pilani campus is required
- External Audit of curricula may be conducted every 2 years instead of once in 5 years

I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. RAJAT GUPTA	Chairperson	
2	DR. VIJAYALAKSHMI MUVVA	Member Co-ordinator	
3	DR. SREEJITH P S	Member	
4	DR. MADHUMANGAL PAL	Member	
5	DR. KINNARRY THAKKAR	Member	
6	DR. JENNIFER FERNANDES	Member	
7	DR. THENMOZHI RAMANUJAM	Member	
8	Dr. Jagannath Patil	NAAC Co - ordinator	

Place

Date