

YEARLY STATUS REPORT - 2021-2022

Part A

Data of the Institution

1. Name of the Institution BIRLA INSTITUTE OF TECHNOLOGY

• Name of the Head of the institution INDRANIL MANNA

• Designation VICE CHANCELLOR

• Does the institution function from its own Yes

campus?

• Phone no./Alternate phone no. 06512275402

• Mobile no 8127884422

• Registered e-mail vc@bitmesra.ac.in

• Alternate e-mail address registrar@bitmesra.ac.in

• City/Town Ranchi

• State/UT Jharkhand

• Pin Code 835215

2.Institutional status

• University Deemed

• Type of Institution Co-education

• Location Rural

• Name of the IQAC Co-ordinator/Director SUDIP DAS

Page 1/112 21-08-2023 02:45:29

• Phone no./Alternate phone no 06512276181

• Mobile 9431178604

• IQAC e-mail address dir.iqac@bitmesra.ac.in

• Alternate Email address daac@bitmesra.ac.in

3. Website address (Web link of the AQAR

(Previous Academic Year)

https://www.bitmesra.ac.in/IQAC/p

age?page=igac&pid=170

4. Whether Academic Calendar prepared

during the year?

Yes

• if yes, whether it is uploaded in the Institutional website Web link:

https://bitmesra.ac.in/Visit Other Department 9910?cid=1&deptid=20

5&pid=249

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 2	A	3.17	2022	22/11/2022	21/11/2027
Cycle 1	B+	78.25	2003	16/09/2003	15/09/2008

6.Date of Establishment of IQAC

22/09/2010

7.Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Depart ment/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Nil	Nil	Nil	2021	0

8.Whether composition of IQAC as per latest NAAC guidelines

Yes

Upload latest notification of formation of IOAC

View File

9.No. of IQAC meetings held during the year

Yes

8

 The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website.
 (Please upload, minutes of meetings and

Page 2/112 21-08-2023 02:45:29

action taken report)

• (Please upload, minutes of meetings and action taken report)

View File

10.Whether IQAC received funding from any of the funding agency to support its activities during the year?

• If yes, mention the amount

11. Significant contributions made by IQAC during the current year (maximum five bullets)

Ranking and ratings Accreditation, MOUs, NAAC Accreditation with "A" grade

12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes	
Accreditation	NAAC Peer Team Visit Held and Institute successfully accredited with A grade	

13. Whether the AQAR was placed before statutory body?

No

• Name of the statutory body

Name	Date of meeting(s)
Nil	Nil

14.Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?

Yes

15. Whether institutional data submitted to AISHE

Pa	art A		
Data of th	e Institution		
Name of the Institution	BIRLA INSTITUTE OF TECHNOLOGY		
Name of the Head of the institution	INDRANIL MANNA		
• Designation	VICE CHANCELLOR		
• Does the institution function from its own campus?	Yes		
• Phone no./Alternate phone no.	06512275402		
Mobile no	8127884422		
Registered e-mail	vc@bitmesra.ac.in		
Alternate e-mail address	registrar@bitmesra.ac.in		
• City/Town	Ranchi		
• State/UT	Jharkhand		
• Pin Code	835215		
nstitutional status			
University	Deemed		
• Type of Institution	Co-education		
• Location	Rural		
Name of the IQAC Co- ordinator/Director	SUDIP DAS		
Phone no./Alternate phone no	06512276181		
• Mobile	9431178604		
• IQAC e-mail address	dir.iqac@bitmesra.ac.in		

Alternate Email address	daac@bitmesra.ac.in	
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.bitmesra.ac.in/IQAC/page?page=iqac&pid=170	
4. Whether Academic Calendar prepared during the year?	Yes	
• if yes, whether it is uploaded in the Institutional website Web link:	https://bitmesra.ac.in/Visit Oth er Department 9910?cid=1&deptid= 205&pid=249	

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
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Cycle 1	B+	78.25	2003	16/09/200	15/09/200

6.Date of Establishment of IQAC 22/09/2010

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Institution/ Depar tment/Faculty	Scheme	Funding agency	Year of award with duration	Amount
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Upload latest notification of formation of IQAC	View File		
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The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. (Please upload, minutes of meetings and action taken report)	Yes		

 (Please upload, minutes of meetings and action taken report) 	View File			
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• If yes, mention the amount				
11.Significant contributions made by IQAC d	during the current year (maximum five bullets)			
Ranking and ratings Accreditation	n, MOUs, NAAC Accreditation with			
12.Plan of action chalked out by the IQAC in Quality Enhancement and the outcome achiev	•			
Plan of Action	Achievements/Outcomes			
Accreditation	NAAC Peer Team Visit Held and Institute successfully accredited with A grade			
13.Whether the AQAR was placed before statutory body?	No			
Name of the statutory body				
Name	Date of meeting(s)			
Nil	Nil			
14.Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?	Yes			
15.Whether institutional data submitted to Al	ISHE			
Year	Date of Submission			
2021	02/03/2023			
16.Multidisciplinary / interdisciplinary				

Programmes offered include Undergraduate, Graduate,

Integrated MSc and PhD in various disciplines such as

Page 6/112 21-08-2023 02:45:29

- Engineering, Architecture and Planning, Pharmaceutical Sciences, Hotel Management and Catering, Management and Sciences.
- Establishment of the Centre for Quantitative Economics and Data Science in the year 2021 with the aim to provide fundamental knowledge and problem-solving skills in Quantitative Economics and Data Sciences, an essential tool for a multidisciplinary environment.
- In the process of establishing a Department of Humanities and Social Sciences.
- Implemented Choice based credit system in 2018, which includes programme electives, open electives, NSS, NCC, Creative arts and Games to cater the holistic and multidisciplinary development. Based on the courses taken a student may be awarded with a Major, Minor, In-depth specialization.

(e.g. A student can earn a major degree in Computer Science with a minor in Management, etc.)

- Set up of unique laboratory facilities multidisciplinary/interdisciplinary in nature (e.g. IDEA lab., Satellite, etc.) where the students of almost all disciplines work together to execute a single project of multidisciplinary nature.
- Focus on project-based learning.

17. Academic bank of credits (ABC):

- Uploading of mark sheet and degree certificate in NAD (A backbone of ABC) has been started, and degree certificates of 2019, 2020 and 2021 have already been uploaded.
- An exit plan is available in the existing integrated M.Sc. Curriculum.
- Students are encouraged to take up MOOC under the open elective category, and the credits earned are transferred.
- Provision of temporary withdrawal, which students can avail to pursue the Strat-up.
- Temporary withdrawal can also be utilized during any medical or financial exigencies.

18.Skill development:

- Being addressed through summer internships, project works, and various MoUs signed with the industries.
- Immersive Summer Research Experience offered to give exposure to research in collaboration with foreign

counties.

• UHV2: Understanding Harmony on Value education is included in all the UG curricula

19. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

- Courses on Creative Art and Art and Culture are offered as open electives to the B Tech students.
- MOOC through the Swayam portal.

20. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

- OBE is already in practice after the implementation of the CBCS curriculum since 2018.
- Analysis of outcomes is performed through the inpods.

21.Distance education/online education:

Blending / Hybrid mode M. Tech (EVT) Programme for Tata Motors and M Tech (Computer Science with Specialization in ML) for Cognizant Technologies Employees.

The institute (after getting accredited for NAAC with an A grade) has very recently become eligible for offering the vocational courses through ODL mode. Very soon, the steps will be taken to initiate ODL.

Extended Profile				
1.Programme				
1.1		57		
Number of programmes offered during the year:				
File Description Documents				
Data Template		<u>View File</u>		
1.2		17		
Number of departments offering academic progra				
2.Student				
2.1		4707		
Number of students during the year				

File Description	Documents			
Data Template		View File		
2.2		1356		
Number of outgoing / final year students during the	he year:			
File Description	File Description Documents			
Data Template		View File		
2.3		4683		
Number of students appeared in the University examination during the year				
File Description	Documents			
Data Template		View File		
2.4		0		
Number of revaluation applications during the ye	ar			
3.Academic				
3.1		1278		
Number of courses in all Programmes during the year				
File Description	Documents			
Data Template		<u>View File</u>		
3.2		332		
Number of full time teachers during the year				
File Description Documents				
Data Template		View File		
3.3		313		
Number of sanctioned posts during the year				
	,			

File Description	Documents
Data Template	<u>View File</u>
4.Institution	
4.1	35925
Number of eligible applications received for admit Programmes during the year	ssions to all the
File Description	Documents
Data Template	<u>View File</u>
4.2	696
Number of seats earmarked for reserved category State Govt. rule during the year	as per GOI/
File Description	Documents
Data Template	<u>View File</u>
4.3	78
Total number of classrooms and seminar halls	
4.4	1807
Total number of computers in the campus for acad	demic purpose
4.5	4763.9
Total expenditure excluding salary during the year	r (INR in lakhs)

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

"To become a Globally Recognised Academic Institution in consonance with the social, economic and ecological environment, striving continuously for excellence in education, research, and technological service to the National needs", all the courses of

different programs are related to local/national/regional/global development. A broad outline is given below for enhancing the comprehension. I.Courses related to Infrastructure development: i) Power & Energy - Electrical and Electronics Engg ii) Water (W)-Civil and Env. Engg. iii) Roads (R) - Civil Engg iv) Non-conventional energy materials - Physics v) 5G communication (5G)-Electronics and Communication Engg vi) Building (B)-Civil Engg vii) Smart Grid (SG)-Electronics and Communication Engg and Electrical and Electronics Engg. viii) Urban Planning (UP)-Architecture ix) Building Architecture (BA)-Architecture x) Aerospace - Space Engg and Rocketry (SER) xi) Cyber physical system & Cyber security (CPCS)-Computer Science Engg xii) IoT Application-All departments xiii) Smart Cities (SC)-All departments

xiv) Transportation (TRP)- (Civil) 1.Courses related to Industry (Process industry (PRI), Manufacturing (MI), Hotel &Tourism based Industry (HMT))- All departments 2.Human health - Chemistry, Bioengineering and biotechnology, Pharmaceutical Sciences and Technology 3.Agricultural and Food security - Chemical Engineering, Bioengineering and Biotechnology 4.Courses related to Entrepreneurship (EU) 5.Management - Management 6.Project Management, Project Engineering - Production Engineering

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

16

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

418

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

8

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

The Institution integrates several cross-cutting societal issues into the curriculum. Following are the effortsmade by the university in this direction Gender: Gender issues are included in the course Professional Practice, law and Ethics which ismandatory for all UG programmes of theUniversity. The subject is touched upon in themandatory course on Constitution of India and in various other open electives in Management and Humanities domain. Environment & SustainabilityThe institution offers a large number of courses at UG and PG levels to sensitise thestudents about the challenges of environment and sustainability. Besides the core course on environmental sciences for all UG programmes there are variousMaster's level programmes offered by the Civil, Mechanical, Chemical, Biotechnology and Remote Sensing

Page 12/112 21-08-2023 02:45:29

departments, that are specially focussed on environment, energymanagement and sustainability issues. Environment and sustainability is covered in Open electives offered by the Civil and Environmental Engineering, Remote sensing and Management department as well. These courses cover various cross cutting issues like Global warming, climate change and their impact on agriculture and forestry, snow and glaciers, environmental sustainability & natural resources Human value & Professional Ethics N.S.S is a core subject for the UG programmes of the institute. Some of the regularinitiatives of NSS are tree plantations drives, clean liness drives, blood donation camps and awareness drives in the villages adopted by the institute regarding nutrition, menstrual hygiene, precautions during pregnancies, symptoms, and prevention and cure of commondiseases.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

16

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

94

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

1028

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni

• All 4 of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.4.2 - Feedback processes of the institution may be classified as follows

 Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	<u>View File</u>

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

2260

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

- 2.1.2 Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)
- 2.1.2.1 Number of actual students admitted from the reserved categories during the year

452

21-08-2023 02:45:29

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

The Institution starts the assessment of the learning level and approach of students towards learning aftertheir admission in their respective programme. The institution has several mechanisms in place to take careof the diversity of learning abilities of the students. One such is through orientation / induction program for those students admitted freshly, theduration of orientation and induction program generally ranges between 2 to 3 weeks as per theAICTE mandate. Senior faculty, officials, librarians, prominent personnel from outside theinstitution and other experts interact with the students. This is one of the mechanisms whichqualitatively provide information on their attitude. The orientation programme is considered by theinstitution as one of the ways the students not only understand the Institute, but teachers also get toknow the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link For Additional Information	https://bitmesra.ac.in/

2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
4707	332

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-

Page 15/112 21-08-2023 02:45:29

solving methodologies are used for enhancing learning experiences

Institute promotes experiential learning, participative learning and problem solving methodologies in the students by including project work/ thesis work, industrial visits, field visits, assignments in the curriculum as well as through technical club activities and internship. A. Experiential learning: 1. Project work/ Thesis work All the UG and PG courses have an essential component of project work/ thesis work in their final year. The project undertaken includes both experimental and computational works. A few selected projects are also funded by the Institute. 2. Summer internship project: Training and Placement division facilitates students (2nd and 3rd year UG) for industrial internship.

Students of B. Arch have to go for a compulsory 16 weeks training / apprenticeship in any registered architectural organization during their 10th semester. Students of B. HMCT. have to go for a compulsory 16 weeks training / apprenticeship in any Hotel/ similar establishment during their 6th semester. Students of MUP have to go for compulsory 6 weeks training / apprenticeship in any registered planning organization at the end of 2nd semester

- 3. Industrial Visit:
- 4. Field visit:
- B. Participative learning:
- C. Problem Solving Methodologies:

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The use of ICT in Teaching Learning strengthens the concept of Participative learning and BIT strongly emphasizes this fact through application of various ICT enabled tools for teaching and learning process. Classrooms are well equipped with internet facilities, multimedia teaching aids such as LCD projectors, and smart boards. Faculty members are adapted to using digital writing pad for effective teaching on cloud-based Google/MS Teams platform. In addition, faculty makes use of virtual laboratory

sessions for remote learning. Institution has the provision of budgetary support every year for upgrading and adopting the latest ICT enabled tools for enhanced teaching and learning experience. WiFi facility exists throughout the campus. WiFi helps the students to access eBooks and other vast library resources. The faculty has access to various database software, e-resources and ebooks through remote library facilities. Faculty are encouraged to develop e-content such as SWAYAM, MOOCs etc. Institute has a systematic approach in development / up gradation of IT infrastructure. The details of IT enabled classrooms, laboratories, presentation hall, seminar halls, and auditorium and staff rooms in the Institute.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

134

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

332

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

249

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

4618

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

2

2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

2

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

0

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

The Examination Section has integrated its activities with IT at various levels for smooth conduction of examinations, publication of results and transcript preparation.

- Examination section uses IT tools
- for proper maintenance of records
- timely publication of results
- hassle-free grievance redressal
- Examination section uses ERP for student enrollment, semester registration, issuance of student's admit card and result processing.

The overall examination activities using IT support can be categorized as follows:

Pre examination Procedure:

- Course registration of students is done through ERP portal
- The examination section displays the examination schedule and seating arrangement in its webpage
- Password protected question papers are collected from the concerned faculty members through dedicated email

Examination Conduction

- Conduction of examination: Examination halls are equipped with CCTV for surveillance in addition to Invigilators
- Examinations were conducted in online mode using Microsoft Teams / Google meet platform for the academic year 2019-20 and 2020-21.

Post Examination procedure

- Answer scripts are bar-coded to ensure double-blind evaluation
- Marks are entered in ERP portal
- Tabulation, grade card generation, transcript generation etc. are done using ERP

Weblinks

Examination Section:

https://www.bitmesra.ac.in/Show_Other_Department?cid=1&deptid=258

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.5.4 - Status of automation of Examination division along with approved Examination Manual

A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Institute offers Undergraduate and Postgraduate programs in all key areas of Engineering, Sciences, Architecture and Management with an excellent teaching environment supported by state-of-artlaboratories and modern classrooms to achieve the outcomes. The institute has adopted the Outcome Based Education (OBE) system for all the programmes by clearly defining the Course Outcomes (CO), Programme Outcomes (PO) and Programme Specific Outcomes(PSO).

The Institute has a practice of disseminating the information related to learning outcomes to students andother stakeholders. Each program structure along with the detailed syllabus for the courses are uploaded onthe website. Each course has course information sheet (CIS) which informs the learners about the objectives, outcomes, the assessment process, lecture delivery methods and important study materials.

Course Information Sheets (CIS) ii. Student Induction Program (SIP) iii. Department Notice Board iv. Laboratory Manuals v. All laboratories vi. Information to BoS members, parents and alumni.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The institute has fully adopted the mandate of the National Board of Accreditation (NBA) for Outcomebasededucation (OBE). Thus, the institute has integrated planning, teaching and learning, assessment andenhancement phase so as to maximize the likelihood that students achieve those outcomes.

OBE model considers the courses to be oriented in a way that they follow aset of learning objectives and means to achieve them during the planning stage and thenimplemented with the help of teaching-learning support system.

The assessment and evaluation are being done both at course level as well as program level.

The assessment process that periodically documents and demonstrates the degree to which the POsand PSOs are attained at program level is based on CO attainment for each course by respectivefaculty members at the end of the semester.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

1356

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://www.bitmesra.ac.in/igac/page?page=igac&pid=239

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented Documents: Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy and its adoption The institute is committed to excellence in research that leads to creation of knowledge and finds adequate applications for the benefit of the society. The R&D activities are focused over a wide horizon covering basic sciences, applied research, interdisciplinary and collaborative research programs. The R&D activities in the institute always ensure highest quality adhering to the ethical values and global standard. In order to encourage R&D activities, the institute has initiated several schemes. These are as follows: Institute Research Fellow (IRF) Scheme Financial Support to UG & PG Students Projects Seed Money Scheme for Faculty Members Financial Support to attend international Conference Financial Support to attend National Conference/Workshop/Seminar etc Research Promotion Grant (RPG) Partial support towards Publication Charge Matching Grant to Procure Equipment(s) Financial Support to file patent applications Research scholars Colloquium. Recognition of contribution to research in CAS for promotion. Intellectual property rights (IPR) policies

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

5415000

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.3 - Number of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/ research during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery

Α.	Any	4	or	more	of	the	above
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File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

13

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2 - Resource Mobilization for Research

3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

595.02

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

0.1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

The Institute has state-of-the-art laboratory facilities for carrying out research and innovation activities. Some of the important initiatives to craete an ecosystem for innovations are: The Institute has Institute Innovation Council (IIC) to promote a cultureof innovation amongst the faculty and students. Recently, the Institute has established an AICTE-IDEA lab with a budget of Rs. 1.06 Crore. Even in 1970, first time in the nation the institute established a Small Industries Research and Development Organisation (SIRDO) for supporting entrepreneurship. This activity was further strengthened by the support of Bihar State Government in 1978and termed as the Small Industries Research Training and Development Organisation (SIRTDO). The Institute regularly hosts innovation contests to support start-ups. There is an Entrepreneurship Development Cell (EDC) whichorganises expert lectures and workshops to encourage students to participate in various events at regional and national level. Students are encouraged to participate in various hackathons at the state and national level. Students also participates in industries organised competitions to solve real world problems and are awardedwith Job offers. Institute has a functional IPR Cell with a clear IPR Policy to encourage faculty members through supporting filing IPR's andawareness workshops.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

24

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

24

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.3.3 - Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year

3.3.3.1 - Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

26

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4 - Research Publications and Awards

3.4.1 - The institution ensures implementation of its stated Code of Ethics for research

3.4.1.1 - The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following

A. All of the above

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bioethics etc)
- 3. Plagiarism check
- 4. Research Advisory Committee

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards
Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

C. Any 2 of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

14

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

75

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

5

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

Page 27/112 21-08-2023 02:45:29

3.4.7 - E-content is developed by teachers For D. Any 2 of the above e-PG-Pathshala For CEC (Under Graduate) For SWAYAM For other MOOCs platform For NPTEL/NMEICT/any other Government Initiatives For Institutional LMS

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

Scopus	Web of Science
NA	NA

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	<u>View File</u>

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

Scopus	Web of Science
NA	72

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

The faculty members of the Institute are encouraged to undertake, individually or in group, consultancy services to any Government

and private organizations using the available infrastructure of the institute partially or fully. Institute has taken up several nationally important consulting projects in various areas of science and engineering. The consultancy services are mainly related to following activities: Providing technical advice Scientific analysis of specific nature Design, vetting and Detailed Project Report (DPR) Demand driven user specific corporate training programmes The institute has well laid down norms for consultancy revenue sharing. The consultancy share between Institute and faculty is 50:50 ratio.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

NA

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

The Institute undertakes a plethora of extension activities, especially in its neighbourhood for creating awareness about social issues, national campaigns and policies along with comprehensive development of the selected rural areas and community groups. For all these campaigns the Institute has created a number of platforms. As per the provisions of academic programs, the Institute offers first and second-year students the option to select NCC, or NSS depending upon their interests. Among the student clubs/societies few clubs like Rotaract Club, Leo Club, EPAC etc. function on these aspects. NSS wing of BIT has adopted 10 nearby villages for the socio-economic upliftment of the families and provides free education to the underprivileged children of different age groups. Besides this NSS, NCC, and other

socio-cultural clubs/societies have also carried out a number of campaigns for the promotion of the following: Swachh Bharat Abhiyan Blood Donation Camps Plantation Drives International Yoga Day World Tobacco Prohibition Day Traffic Safety Week

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.6.2 - Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year

3.6.2.1 - Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

4

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

3

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

911

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

Page 30/112 21-08-2023 02:45:29

3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

39

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

10

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

All the infrastructure and facilities for teaching-learning in terms of quantity as well as physical sprawl are beyond the minimum statutory requirements from AICTE, PCI, CoA, etc. Classrooms: The institute has state-of-the-art facilities to facilitate teaching and learning processes. Smart classrooms and ICT enabled classrooms facilities are available in all of the classrooms of the institute. There are a total of 60 classrooms in the Institute, out of which 50 are ICT enabled and 10 are smart classrooms. ICT enabled classrooms are equipped with features such as projectors, Wi-Fi/ LAN, and etc. In addition to these two classrooms with Video conferencing facilities are also available

Page 31/112 21-08-2023 02:45:29

in the Institute. Laboratories: Program specific laboratories are available in each Department with advanced equipment/ Instruments, few to mention

- Plasma Laboratory (Department of Physics)
- Smart grid Laboratory (EEE)
- Electrical Drives Laboratory (EEE)
- VLSI Laboratory (ECE)
- Wireless communication Laboratory (ECE)
- Wind-tunnel Facility: subsonic, supersonic (SER)
- Rocket propulsion Laboratory (SER)
- Renewable Energy Laboratory (ME)
- Robotics Laboratory (ME)
- Food production Laboratory (HMCT)
- (CADD) labs at Departmental level.

Besides these, the Institute has many teaching tools and software with a license for basic engineering. Institute has campus-wide licenses for Office365, Mathworks, ANSYS, NI and LabView, ETAP, SCADA

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

The institute believes in the philosophy of delivering holistic education, hence, the institute has included PT and Games (Course code: MC103, MC203) and Creative Arts (MC104, MC108, MC204, MC208) as an elective subject of total 4 credits in the curriculum of undergraduate programs. Every year the institute organizes national/zonal inter institute sports events: annual athletic meet, an annual fest the "VAJRA' a cricket tournament in the memory of an ex-student Chetan Devraj and a cultural fest 'BITOTSAV' Sports facilities The institute has a centrally created sports complex facility in 25 acres of land existing since 1955, and upgraded on a regular basis for all the games (indoor and outdoor) of national standards.

Music and Cultural facilities: To develop social values in students, the institute has formed various clubs and societies. There are 12 clubs and societies actively involved in promoting social and cultural atmosphere within and outside the campus. These clubs organize events such as Deepotsav, Dance and Music

Fests etc. The institute has two well equipped air conditioned music rooms of 800 square feet area housing the latest Indian and Western musical instruments.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.3 - Availability of general campus facilities and overall ambience

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File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

1991.61

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

The Central Library of BIT is stocked with over 1,52,297 books, 606 Institute Theses, Print Journal 174, 18 thousand+ bound volumes, journals.

BIT library has over 38,683 online journals and more than 2,21,905 online books. All the e-resources are accessible locally within the campus as well as remotely. Plagiarism checking and Grammar checking tools are also subscribed by BIT Mesra Library.

BIT library is housed in the main academic building premises in a separate, two stored building with 3900 sq. meters. The library is equipped with 200 seating capacity. The library is fully automated with all its subsystems having Fiber Optic connectivity and Wi-Fi. It has a separate Research and Computer Lab with provision of 30 workstations to access e-resources and e-databases.

Library is automated with full RFID technology using Open source Software "KOHA".

RFID Technology implemented in Central Library has the following items:

- RFID Security Gate 01
- RFID Book Tags 200000
- RFID Staff Station 02
- RFID KIOSK 02
- Book Drop Box 02
- Handheld RFID Reader 02

Smart I Card - 6000

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals ebooks e-ShodhSindhu Shodhganga Databases A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

204.07

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

1742

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

78

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

The Institute has a well-defined IT policy that details the operational specifications of procurement, deployment, configuration and maintenance of its IT infrastructure

• The Institute is currently serviced by three different ISPs i.e. Internet Service

BSNL Vodafone and Tejas. The current available bandwidth isapproximately 1.6 Gbps.

- Wi-Fi Facilities: There is a large array of WiFi devices both indoor and external,. The number of such devices have consistently increased over the last few years and as ondate we have 254 Wi-Fi access points on campus.
- Video Conferencing facilities The Institute has also developed two different video conferencing

sites to help smooth conduction of meetings with external locations. The Institute also has aseparate facility to conduct classes forremote locations.

- Security the Institute uses SOPHOS as its Unified Threat Management (UTM). As on date we have licensed ESETantivirus being used as our client level anti-virus protection tool.
- The Institute also annually purchases pan University licenses for Office 365 portal, which includes

Microsoft Office, Microsoft Teams and Skype for Business. The Institute also has a TAH (Total Academic Head) license with Mathworks Inc. for MATLAB,

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
4707	1807

4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)

• ?1 GBPS

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3.5 - Institution has the following Facilities A. All of the above for e-content development Media centre

Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Upload the data template	<u>View File</u>

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

2772.29

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The academic infrastructure of the institute, such as laboratories and classrooms are housed in its 17 departments. The upgradation and repair work of Institutefacilities are undertaken by the Planning andDevelopment division, which has a number of experienced engineers.

- The CIF is maintained by a team ofresearch officers, junior superintendents, technical assistants, attendants headed by a professor.
- The BIT Central Library: The procurement., subscription tasks andmaintenance of archives are managed by the Assistant Librarian and information scientist.
- The computers and networking facilities and all digital physical infrastructures on campus aremaintained by the Communication Services section.
- The Estate Office, which has a support staff of mechanics, plumbers, welders, carpenters, masonsand electricians, is responsible for the general maintenance of the campus.
- Sports facilities are managed by the Department of Physical Education having a sports-inclined faculty &students.
- Institute guest houseand auditoriums are

- keptandmaintainedbyEstate Office.
- The campus also has two canteens and several other eating options within the premises, which areentrusted in the supervision of the Committee for Shop Allocation and Vendor Management.
- The campus dispensary is maintained by a team of Doctors.
- The Institute provides transportation facilities maintained by Transport Offices

File Description	Documents
Upload relevant supporting document	<u>View File</u>

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

672

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene)
Awareness of trends in technology

A. All of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

• All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.2 - Student Progression

5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)

5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

5

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	View File

5.2.2 - Total number of placement of outgoing students during the year

817

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

The student bodies/ committees provide a platform for the active participation of the students in the various academic & administrative bodies including other activities. This empowers the students in gaining leadership qualities, rules, regulations and execution skills.

List of various student bodies/ committees in BIT Mesra:

 Hostel - Committees: In each hostel, there is a Hostel-Committee which ensures the proper working and maintenance of the hostels. The committee consists of the following: Position

No. of members

Mess Secretary

1

Maintenance Secretary

1

Network Secretary

1

Sports Secretary

1

Reading Room Secretary

1

Mess Members

4 - 5

Institute Clubs and Societies: The Institute has around 20 clubs/ societies for the development of students in the area of cultural and technical activities. All the clubs/ societies have their own Student-Executive body and are guided by one Faculty advisor.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

18

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

Alumni are among our most potent assets and best brand ambassadors. Many of them have also served as great recruiters of graduating students and have helped in building useful links between academia and industry.

BITOSA Global(Birla Institute of Technology Old Students Association) is Official BIT Mesra Alumni body (Link: https://www.bitosaglobal.org/) and an umbrella organization that was formed to co-ordinate the activities of the various alumni chapters. We have14000+registered alumni and14 chaptersfrom all around the globe. BITOSA Global started with the vision to build a network that connects all BIT Alumni across the globe, to establish and sustain a bonding for learning, caring and sharing.

The primary objectives are:

- Support BIT | Contribution for Global Opportunities,
 Scholarship, Alumni Directory etc.
- Networking | Alumni Talks, Knowledge Sharing, Get Together
- Mentoring | Supporting Students/Juniors for Placement,
 Entrepreneurship and more.
- Social Contribution | With collaborative efforts, supporting society

To achieve its objectives, some of the events conducted by the association are-

BITOSA Innovation Conclave- It was an event to celebrate the people who have travelled down the un-treaded path.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.4.2 - Alumni contribution during the year A. ? 5Lakhs (INR in Lakhs)

File Description	Documents
Upload relevant supporting document	<u>View File</u>

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

Institute Vision

- Institute has clearly stated vision and each Department has
 its own vision statement which is aligned with the
 Institute's vision. To achieve these objectives, required
 action points are planned which percolate to the different
 academic and administrative sections.
- "Institution Governance" describes all those structures, processes and activities which are considered in the planning and subsequent policies of the Institute.
- The governance process of BIT could be listed as below -
 - OBIT has a robust governance process which includes the General Council (GC), Board of Governors (BoG), Finance Committee (FC), Academic Council (AC) and Building and Works Committee aligned to the UGC regulations as applicable from time to time. The different roles and responsibilities of these governing bodies are clearly stated in the Rules and Regulations of the Institute.
 - Operatment Academic Committee (DAC), Department Policy Committee (DPC), and Board of Studies (BoS) of every Department proposes to the Academic Council for any revision of curriculum, syllabus and Department level activities through respective Deans.
- Success of these activities can be validated through illustrious list of alumni, engagement of faculty at the national and international level, student achievements at academic and extracurricular spheres

Link: https://www.bitmesra.ac.in/Show_Content_Section?cid=1&pid=136

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The leadership at the Institute is provided by the Vice Chancellor. The Vice Chancellor is assisted by Deans for various key activities, Heads of Departments/ In-Charges besides the Registrar who looks after the overall administrative and academic activities of the Institute. The Institute has given equal representation in various committees at all levels from Professors, Associate Professor and Assistant Professors in all Departments.

- The major academic activities are delegated through respective Deans, HoDs, Associate Deans, and faculty members grouped as a committee.
- The administrative responsibilities are delegated through the Registrar, Deputy Registrar(s), Assistant registrar(s), Administrative Officer, Section In-charges and staff members. Major academic and administrative decisions are taken through various committees.
- Each Head of the Department delegates academic responsibilities related to teaching-learning to UG, PG and Ph.D faculty coordinators. Individual faculty also have freedom to achieve course outcome in innovative ways at their own discretion. The HoD also constitutes faculty coordinator/ committees such as BoS, DAC, DPC, Budget committee, Purchase committee, ERP, etc. for smooth functioning of the Department with flexibility.
- All the hostel operations (maintenance, mess, recreational activities, etc.) are managed by student bodies through BIT Welfare society having Dean of Student Affairs as patron.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

Short term plan (3 years)

The Institute shall strive to excel in:

- 1. State of the art research in all its academic departments
- 2. Developing high quality human resources
- 3. Enhancing a culture of innovation to meet the industrial and societal

demands

- 4. Creating and adopting new age curricula and delivery techniques
- 5. Highest lab certifications and accreditations (e.g. NABL, ISO etc.)

Long term plan (10 years)

- 1. Ranking Targets:
- To reach top 15 in Engineering category and top 25 in Overall and University level NIRF Rankings 44
- To be in Atal Ranking in Innovation Achievement (ARIIA) in private category
- To be ranked in QS/THE Asia level rankings.
- 2. Accreditation Targets:
- To aim for NBA accreditation for all the programs of the Institute
- Achieve and maintain NAAC A++ grade in all future cycles
- Engineering and technology programs to be accredited by ABET

3. Outreach Targets:

- National and international recognition in research and development in Engineering, Technology and allied sciences.
- The Institute shall emerge as preferred destination for faculty, staff, students and employers through incorporation of best international

organisational structures and standards.

- The Institute shall strive to be recognised as a premier Innovation and IPR hub.
- Enable its graduates to lead National and Global level startups.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The vision and mission of the Institute are driven by the aligned policies which drive the academic and administrative processes. The organisational setup of BIT Mesra is shown below:

- 1. Chancellor
- 2. General Council
- 3. Board of Governors
- 4. Finance Committee
- 5. Academic Council
- 6. Building & Works Committee

Other necessary committees as per the requirements are notified by the authorities.

The above authorities are responsible for the functioning and governance of the Institute.

• Appointment

- The appointment of Vice Chancellor and Registrar is as per the UGC norms
- Faculty and staff recruitment is through open advertisements in prominent platforms
- Service rules:
- The Institute has well-defined rules and regulations and also has the Conduct, Disciplinary and Appeal Rule (CDA)
- Promotion policies
 - Promotion of faculty is through Institute Career
 Advancement Scheme (CAS) Rules.
 - The Institute has the Modified Assured Career
 Progression (MACP) Scheme, through its Recruitment and
 Promotion Norms (BITRPN) for non-academic staff.

The procedures followed for promotion, facility utilization, grievance redressal and other subjects are on the Institute webpage.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.3 - Institution Implements e-governance in its areas of operations

6.2.3.1 - e-governance is implemented covering following areas of operation

A. All of the above

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

- Institute has well-documented CAS policy which is modified from time to time to meet the statutory requirements to give opportunities to well-performing faculty members to get promoted
- Faculty members are provided with ample opportunity to improve their knowledge and skills by attending FDP, STTP etc.
- Faculty members also get ample opportunities in administrative positions for the holistic growth of their career
- Non-academic staff perform multiple roles across
 Departments, administrative and utility sections. The
 Institute has the Recruitment and Promotion Norms (BITRPN)
 and Modified Assured Career Progression (MACP) for nonacademic staff
- Institute ensures the welfare of its employees through the following: Salary advance, Mediclaim, Employees State Insurance Scheme, Group Saving Linked Insurance Scheme, Employee Group Insurance, Health Centre, Staff Quarters, Concessional education for wards, Banking, Post Office
- Faculty development programmes, seminars, symposiums etc. on regular basis are conducted in the Institute, earned leave, Gratuity, Provident Fund, Transport Facility, Sabbatical leave/ study leave/ Extraordinary leave/ Maternity and Child adoption leave, Uniform for certain category of staff, Free Internet and Wi-fi facility on Campus, Earned Leave encashment for employees (max 300 days), Sports facility, staff club and Co-operative store and canteen facility

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

48

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

8

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

10

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Institute operates on student centric policies with focus on skill based quality education and research. Institute is self-sustained and has strong financial practices and internal controls in place to ensureoptimum utilisation of financial resources. Institute has various sources of funds the main being student feewhich is collected semester wise. The same is augmented by other sources of revenue like, earnings from consultancy projects, grants and other incomes. Budget preparation process takes into consideration the short term and long term goals set by the Institute. All Institute centres, departments and sections propose their annual financial plans based on academic policy and planning to the Finance Committee of the Institute to achieve educational objectives.

The Budget preparation of the Institute is made following a detailed process carried out by theindividual departments/sections based on their targets. The budget of the Institute is finalised at theInstitute level and thereafter placed before the Board of Governors for approval.

Utilisation of the approved budget and its regular monitoring

occurs at multiple levels (HoDs, Deans and officers) which helps to ensure that Institute funds are being spent according to plan

The Finance committee is responsible for observance of regulations relating to maintenance ofaccounts of Income & Expenditures and consider any other matter referred by the Board ofGovernors.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

914.43

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.4 - Institution conducts internal and external financial audits regularly

The Institute is subjected to three types of Auditing system — audit by Comptroller and Auditor General ofIndia (CAG), Internal audit, and Statutory audit. The Institute has a practice of Internal Audit being doneby reputed agencies on a rotation basis. Last Five years theInstitute engaged three different agencies forinternal audit namely M/s. A.K. Bagri & Associates, M/s. Price Water House Coopers, and M/s. S.S.Kothari & Mehta. The statutory audit is conducted by M/s. K.N.Gutgutia & Co.Duties of Internal Auditors: To check all Journals Cash & Bank vouchers Bank reconciliation of all operative Banks, Store Ledger Physical verification of Cash They prepare reports /observations on:

1.Finance 2.Office of Registrar - such as checking Staff & faculties list - PAN No. & AADHAR Card 3.Purchase, and Store 4.Estate Administration 5.Planning & Development: Building construction 6.Transport Department, Consumption of Petrol & Diesel etc.

To check fee receipt & refund of caution money for pass out students. Compliance of procedure adopted for refund

To check advances against Salary paid to staff & faculties are as per Institute rule and are timely being deducted or not

To check advances issued to parties for supply of goods and for job works and whether the goods has been supplied in time or job work completed.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) 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

Institute established a well-structured Internal Quality Assurance Cell (IQAC) to:

- Maintain the standards in Higher Education, the cell continuously monitors and provides inputs on Academic and Research activities.
- IQAC holds meetings of the members from time to time to ensure the high-quality teaching and research environment in the Institute.
- Quality improvement in teaching is ensured through the course feedback mechanism integrated into our Student Module of ERP System. Systematic feedback from all the stakeholders is also obtained from time to time.
- After collection of the feedback periodic meetings of HoDs with faculty members at department level and organizing the need-based programs to improve the feedback suggestions are undertaken.
- Pedagogy and training programs on outcome-based education

- are some of the need and analyses-based programs which are conducted by IQAC for the faculty members.
- Constant efforts are being made by IQAC for NBA accreditation of all the courses offered by the Institute wherein IQAC reviews the documents, procedure and implementation for each of the courses in various programs.
- IQAC members meet and discuss the NBA accreditation requirements and visit the departments for a preaccreditation verification and its subsequent support.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. Any 5 or all of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting documnent	<u>View File</u>

- 6.5.3 Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)
 - UG/PG Course curriculum revision UG/PG course curriculum are revised at regular intervals to keep the curriculum catering to the need of global demand - industry, higher education and research. In the last five years, several programmes have been revised in accordance with the vision and mission statements.

- Ph.D. ordinance Ph.D. ordinance were implemented to enhance the standard and quality of the research as a post-accreditation step.
- Examination Reforms Adopted Bloom's Taxonomy-based assessment tools, Course outcome-based question paper preparation, ICT-based examination activities through ERP.
- Seed Money Scheme Seed money grants in the range of Rs. 80,000 to 2.0 Lakhs were provided to more than 60 faculty members during the last five years.
- Research Promotion Grant (RPG) Scheme In this scheme, 30% share of the overhead charges of research projects are credited to the account of investigators which can be used for academic and research activities.
- Immersive Summer Research Experience (ISRE-BIT) at U.S.
 Universities Institute has an Immersive Summer Research
 Programme for meritorious UG students with Illinois
 Institute of Technology (IIT), Chicago and Carnegie Mellon
 University (CMU), Pittsburgh.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

- 7.1.1 Measures initiated by the Institution for the promotion of gender equity during the year
 - Institution has adopted co-education in all the programs in true spirit for several decades. Presently, there are around 30% girl students in various programs which is more than the statutory mandate.
 - There are more than 20% women faculty and staff.
 - Out of eight Deans, three positions of Deans are being held by female faculty members.
 - Institute has functional Internal Complaints Committee (ICC)
 - Lady Doctors, and counsellors are available in the Institute dispensary to facilitate the female students, staff and faculty health.
 - The student bodies, especially NSS, consistently strives to address women's concerns through various platforms.
 - The Institute has a common faculty lounge with restroom, TV and dining space.
 - Institute has fully functional ladies club with modern

- multigym and outdoor sporting arena
- Girls' hostels also have a modern multigym in addition to indoor and outdoor sporting facilities
- Institute has female security guards
- Institute is covered by CCTV surveillance at strategic locations to ensure safety and security of women

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Annual gender sensitization action plan(s)	https://drive.google.com/drive/u/2/folders /1STgluWXzt0RvwiXjYXd yxIhFlabsuEZ
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	https://drive.google.com/drive/u/2/folders /1STgluWXzt0RvwiXjYXd yxIhFlabsuEZ

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management
 - 1. Solid Waste Management:
 - Solid waste is divided into two parts biodegradable and nonbiodegradable
 - Separate dustbins are placed at all the waste disposal points including hostels and quarters
 - 1. Liquid Waste Management:
 - · Wastewater is treated through septic tank system in

the campus. It is one of the most common type of decentralized sewage treatment system which consists of a septic tank and soak pit.

2. Biomedical Waste Management:

- Biomedical waste is generated in the Institute dispensary, Pharmacy Department, Bioengineering and biotechnology department and empty chemical bottles from Chemistry and Chemical Engineering Departments.
- All these departments put the waste in colour coded small dustbins thereafter it is placed in large colour coded dustbins at specifically prepared Biomedical waste collection points.

3. E-Waste Management:

- Once the institute upgrades to a higher version then the older one is given to nearby schools for learning of students
- Unusable e-waste is initially stored at one point in shade or store room and thereafter it is disposed of with a vendor who is authorised to collect e-waste through the institute's Scrap Disposal Committee.
- 1. Hazardous Chemicals and Radioactive Waste Management:
- Institute does not produce any radioactive waste.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.4 - Water conservation facilities available A. Any 4 or all of the above in the Institution: Rain water harvesting
Bore well /Open well recharge Construction of tanks and bunds Waste water recycling
Maintenance of water bodies and distribution system in the campus

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

A. Any 4 or All of the above

- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:

C. Any 2 of the above

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions/awards
- **5. Beyond the campus environmental promotional activities**

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software,mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)
 - The process of national level admission in the Institute attracts students from all over India and abroad (NRIs) with diversity in students' profile.
 - Reservation of seats for OBC / SC / ST / EWS and PWD are strictly adhered to as per the statutory reservation policy of State of Jharkhand and Government of India.
 - The interests of students, faculty members and staff are safeguarded without any caste, creed, or gender discrimination.
 - Institute officially declares holidays for various national festivals of different religious faiths. In addition to this there are official holidays to honour the local festivals.
 - There is an active Internal complaint Committee (ICC) which ensures zero tolerance related to gender issues.
 - To promote harmony amongst the different communities within the campus there are different platforms for sharing diversity such as staff club, ladies club, students clubs/societies etc. in the Institute level which are organised at regular intervals.
 - Institute has number of hostels and each one of them individually organizes hostel night and similar activities
 - Students with such wide diversities participate in various committees and student bodies such as sports/hostel/purchase/cultural committees etc.
 - The Institute, with great zeal, celebrates festivals, the birth and death anniversaries of great Indian personalities.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

Understanding the fact well enough that India is a huge nation with diversities in caste, creed, religion, races, it is the first and foremost aim and vision of BIT to contribute to the country that forever stands out.

- Institute understands that being an academic hub of national significance, it has a massive responsibility. From inculcating a deep sense of patriotism and pre-eminence of civic and social duty amongst an individual, BIT takes steps prudently to sensitize the students with these topics.
- The Institute accomplishes this by organizing various sociocultural events that create sensitive individuals.
 Throughout the year, numerous events are organized by the clubs of the Institute. Some of the example events are mentioned below:
 - International Youth Day
 - National Blood Donation Day
 - National Unity Day
 - Constitution Day
 - The important days are celebrated with the motive of fostering the spirit of oneness and unity amongst the students who are still in the learning and developing phase

Institute encourages its employees to actively participate in various socio-cultural events of national importance such as

- Anti-terrorism Day pledge was taken by the employees of the Institute
- Employees pledged on Anti-Tobacco Day
- Institute has established the Rajbhasha Prakoshth
- Institute has established the Human Value Cell
- 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The Institute creates a sense of social responsibility by celebrating national and international important days, events and festivals. Important days are celebrated to foster the spirit of oneness and unity amongst the students, staff and faculty. The Institute encourages everyone to participate in various sociocultural events of national and international significance actively. Many events are celebrated in the Institute some of the following are mentioned below:

National and international commemorative days

- Independence day
- Republic day
- o Women's day
- World music day
- World environment day

Events

- Teacher's Day
- Engineer's Day
- Yoga Day Tribute to our National Heroes

Festivals

- Makar Sankranti
- o Durga Puja
- Saraswati Puja
- Vishwakarma Puja
- Karma Puja
- o Eid
- Diwali
- Holi

Other than these some recent significant events organised are:

1. The event "Tainaat" was organized by the Literary Society, BIT Mesra on 15th August. A reputed army official and BIT alumni Major Eliza Rungta was the speaker and she gave insights on various aspects of military lives and about her life journey.

Part B

CURRICULAR ASPECTS

1.1 - Curriculum Design and Development

1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the University

"To become a Globally Recognised Academic Institution in consonance with the social, economic and ecological environment, striving continuously for excellence in education, research, and technological service to the National needs", all the courses of different programs are related to local/national/regional/global development. A broad outline is given below for enhancing the comprehension. I. Courses related to Infrastructure development: i) Power & Energy - Electrical and Electronics Engg ii) Water (W)- Civil and Env. Engg. iii) Roads (R) - Civil Engg iv) Non-conventional energy materials -Physics v) 5G communication (5G)- Electronics and Communication Engg vi) Building (B) - Civil Engg vii) Smart Grid (SG) -Electronics and Communication Engg and Electrical and Electronics Engg. viii) Urban Planning (UP) - Architecture ix) Building Architecture (BA) - Architecture x) Aerospace - Space Engg and Rocketry (SER) xi) Cyber physical system & Cyber security (CPCS) - Computer Science Engg xii) IoT Application-All departments xiii) Smart Cities (SC)- All departments

xiv) Transportation (TRP)- (Civil) 1.Courses related to
Industry (Process industry (PRI), Manufacturing (MI), Hotel
&Tourism based Industry (HMT))- All departments 2.Human health
- Chemistry, Bioengineering and biotechnology, Pharmaceutical
Sciences and Technology 3.Agricultural and Food security Chemical Engineering, Bioengineering and Biotechnology
4.Courses related to Entrepreneurship (EU) 5.Management Management 6.Project Management, Project Engineering Production Engineering

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

16

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year

1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill development during the year

418

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2 - Academic Flexibility

1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year

8

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year

52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

The Institution integrates several cross-cutting societal issues into the curriculum. Following are the effortsmade by the university in this direction Gender: Gender issues are included in the course Professional Practice, law and Ethics which ismandatory for all UG programmes of the University. The subject is touched upon in themandatory course on Constitution of India and in various other open electives in Management and Humanities domain. Environment & SustainabilityThe institution offers a large number of courses at UG and PG levels to sensitise thestudents about the challenges of environment and sustainability. Besides the core course on environmental sciences for all UG programmes there are variousMaster's level programmes offered by the Civil, Mechanical, Chemical, Biotechnology and Remote Sensing departments, that are specially focussed on environment, energymanagement and sustainability issues. Environment and sustainability is covered in Open electives offered by the Civil andEnvironmental Engineering, Remote sensing and Management department as well. Thesecourses cover various cross cutting issues like Global warming, climate change and theirimpact on agriculture and forestry, snow and glaciers, environmental sustainability &natural resourcesHuman value & Professional Ethics N.S.S is a core subject for the UG programmes of the institute. Some of the regularinitiatives of NSS are tree plantations drives, cleanliness drives, blood donation camps andawareness drives in the villages adopted by the institute regarding nutrition, menstrual hygiene, precautions during pregnancies, symptoms, and prevention and cure of commondiseases.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

16

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.3 - Total number of students enrolled in the courses under 1.3.2 above

1.3.3.1 - Number of students enrolled in value-added courses imparting transferable and life skills offered during the year

94

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.3.4 - Number of students undertaking field projects / research projects / internships during the year

1028

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

1.4 - Feedback System

1.4.1 - Structured feedback for design and review of syllabus – semester wise / is received from Students Teachers Employers Alumni

• All 4 of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

1.4.2 - Feedback processes of the institution may be classified as follows

• Feedback collected, analysed and action taken and feedback available on website

File Description	Documents
Upload relevant supporting document	<u>View File</u>

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Demand Ratio

2.1.1.1 - Number of seats available during the year

2260

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

452

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

The Institution starts the assessment of the learning level and approach of students towards learning aftertheir admission in their respective programme. The institution has several mechanisms in place to take careof the diversity of learning abilities of the students. One such is through orientation / induction program for those students admitted freshly, theduration of orientation and induction program generally ranges between 2 to 3 weeks as per theAICTE mandate. Senior faculty, officials, librarians, prominent personnel from outside theinstitution and other experts interact with the students. This is one of the mechanisms whichqualitatively provide information on their attitude. The orientation programme is considered by theinstitution as one of the ways the students not only understand the Institute, but teachers also get toknow the students.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link For Additional Information	https://bitmesra.ac.in/

2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
4707	332

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3 - Teaching- Learning Process

2.3.1 - Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

Institute promotes experiential learning, participative learning and problem solving methodologies in the students by including project work/ thesis work, industrial visits, field visits, assignments in the curriculum as well as through technical club activities and internship. A. Experiential learning: 1. Project work/ Thesis work All the UG and PG courses have an essential component of project work/ thesis work in their final year. The project undertaken includes both experimental and computational works. A few selected projects are also funded by the Institute. 2. Summer internship project: Training and Placement division facilitates students (2nd and 3rd year UG) for industrial internship.

Students of B. Arch have to go for a compulsory 16 weeks training / apprenticeship in any registered architectural organization during their 10th semester. Students of B. HMCT. have to go for a compulsory 16 weeks training / apprenticeship in any Hotel/ similar establishment during their 6th semester. Students of MUP have to go for compulsory 6 weeks training / apprenticeship in any registered planning organization at the end of 2nd semester

3. Industrial Visit:

- 4. Field visit:
- B. Participative learning:
- C. Problem Solving Methodologies:

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

The use of ICT in Teaching Learning strengthens the concept of Participative learning and BIT strongly emphasizes this fact through application of various ICT enabled tools for teaching and learning process. Classrooms are well equipped with internet facilities, multimedia teaching aids such as LCD projectors, and smart boards. Faculty members are adapted to using digital writing pad for effective teaching on cloud-based Google/MS Teams platform. In addition, faculty makes use of virtual laboratory sessions for remote learning. Institution has the provision of budgetary support every year for upgrading and adopting the latest ICT enabled tools for enhanced teaching and learning experience. WiFi facility exists throughout the campus. WiFi helps the students to access eBooks and other vast library resources. The faculty has access to various database software, e-resources and ebooks through remote library facilities. Faculty are encouraged to develop e-content such as SWAYAM, MOOCs etc. Institute has a systematic approach in development / up gradation of IT infrastructure. The details of IT enabled classrooms, laboratories, presentation hall, seminar halls, and auditorium and staff rooms in the Institute.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.3.3 - Ratio of students to mentor for academic and other related issues during the year

2.3.3.1 - Number of mentors

134

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.4 - Teacher Profile and Quality

2.4.1 - Total Number of full time teachers against sanctioned posts during the year

332

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.2 - Total Number of full time teachers withPh.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

249

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.3 - Total teaching experience of full time teachers in the same institution during the year

2.4.3.1 - Total experience of full-time teachers

4618

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

2

2.5.1.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the year

2

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year

0

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

The Examination Section has integrated its activities with IT at various levels for smooth conduction of examinations, publication of results and transcript preparation.

- Examination section uses IT tools
- for proper maintenance of records
- timely publication of results
- hassle-free grievance redressal
- Examination section uses ERP for student enrollment,

semester registration, issuance of student's admit card and result processing.

The overall examination activities using IT support can be categorized as follows:

Pre examination Procedure:

- Course registration of students is done through ERP portal
- The examination section displays the examination schedule and seating arrangement in its webpage
- Password protected question papers are collected from the concerned faculty members through dedicated email

Examination Conduction

- Conduction of examination: Examination halls are equipped with CCTV for surveillance in addition to Invigilators
- Examinations were conducted in online mode using Microsoft Teams / Google meet platform for the academic year 2019-20 and 2020-21.

Post Examination procedure

- Answer scripts are bar-coded to ensure double-blind evaluation
- Marks are entered in ERP portal
- Tabulation, grade card generation, transcript generation etc. are done using ERP

Weblinks

Examination Section:

https://www.bitmesra.ac.in/Show_Other_Department?cid=1&deptid=2 58

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.5.4 - Status of automation of Examination division along with approved Examination Manual

A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Institute offers Undergraduate and Postgraduate programs in all key areas of Engineering, Sciences, Architecture and Management with an excellent teaching environment supported by state-of-artlaboratories and modern classrooms to achieve the outcomes. The institute has adopted the Outcome Based Education (OBE) system for all the programmes by clearly defining the Course Outcomes (CO), Programme Outcomes (PO) and Programme Specific Outcomes(PSO).

The Institute has a practice of disseminating the information related to learning outcomes to students and other stakeholders. Each program structure along with the detailed syllabus for the courses are uploaded on the website. Each course has course information sheet (CIS) which informs the learners about the objectives, outcomes, the assessment process, lecture delivery methods and important study materials.

Course Information Sheets (CIS) ii. Student Induction Program (SIP) iii. Department Notice Board iv. Laboratory Manuals v. All laboratories vi. Information to BoS members, parents and alumni.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The institute has fully adopted the mandate of the National Board of Accreditation (NBA) for Outcomebasededucation (OBE). Thus, the institute has integrated planning, teaching and learning, assessment andenhancement phase so as to maximize the

likelihood that students achieve those outcomes.

OBE model considers the courses to be oriented in a way that they follow aset of learning objectives and means to achieve them during the planning stage and thenimplemented with the help of teaching-learning support system.

The assessment and evaluation are being done both at course level as well as program level.

The assessment process that periodically documents and demonstrates the degree to which the POsand PSOs are attained at program level is based on CO attainment for each course by respectivefaculty members at the end of the semester.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

2.6.3 - Number of students passed during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

1356

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://www.bitmesra.ac.in/igac/page?page=igac&pid=239

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is

uploaded on the institutional website and implemented Documents: Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy and its adoption The institute is committed to excellence in research that leads to creation of knowledge and finds adequate applications for the benefit of the society. The R&D activities are focused over a wide horizon covering basic sciences, applied research, interdisciplinary and collaborative research programs. The R&D activities in the institute always ensure highest quality adhering to the ethical values and global standard. In order to encourage R&D activities, the institute has initiated several schemes. These are as follows: Institute Research Fellow (IRF) Scheme Financial Support to UG & PG Students Projects Seed Money Scheme for Faculty Members Financial Support to attend international Conference Financial Support to attend National Conference/Workshop/Seminar etc Research Promotion Grant (RPG) Partial support towards Publication Charge Matching Grant to Procure Equipment(s) Financial Support to file patent applications Research scholars Colloquium. Recognition of contribution to research in CAS for promotion. Intellectual property rights (IPR) policies

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

5415000

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.3 - Number of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery

A. Any 4 or more of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year

13

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2 - Resource Mobilization for Research

3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)

595.02

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.2.3 - Number of research projects per teacher funded by government and nongovernment agencies during the year

0.1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

The Institute has state-of-the-art laboratory facilities for carrying out research and innovation activities. Some of the important initiatives to craete an ecosystem for innovations are: The Institute has Institute Innovation Council (IIC) to promote a culture of innovation amongst the faculty and students. Recently, the Institute has established an AICTE-IDEA lab with a budget of Rs. 1.06 Crore. Even in 1970, first time in the nation the institute established a Small Industries Research and Development Organisation (SIRDO) for supporting entrepreneurship. This activity was further strengthened by the support of Bihar State Government in 1978 and termed as the Small Industries Research Training and Development Organisation (SIRTDO). The Institute regularly hosts innovation contests to support start-ups. There is an Entrepreneurship Development Cell

(EDC) whichorganises expert lectures and workshops to encourage students to participate in various events at regional and national level. Students are encouraged to participate in various hackathons at the state and national level. Students also participates in industries organised competitions to solve real world problems and are awardedwith Job offers. Institute has a functional IPR Cell with a clear IPR Policy to encourage faculty members through supporting filing IPR's andawareness workshops.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

24

3.3.2.1 - Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year wise during the year

24

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

- 3.3.3 Number of awards / recognitions received for research/innovations by the institution/teachers/research scholars/students during the year
- 3.3.3.1 Total number of awards / recognitions received for research/innovations won by institution/teachers/research scholars/students year wise during the year

26

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4 - Research Publications and Awards

3.4.1 - The institution ensures implementation of its stated Code of Ethics for research

3.4.1.1 - The institution has a stated Code of | A. All of the above **Ethics for research and the implementation** of which is ensured through the following

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bioethics etc)
- 3. Plagiarism check
- 4. Research Advisory Committee

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website

C. Any 2 of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.3 - Number of Patents published/awarded during the year

3.4.3.1 - Total number of Patents published/awarded year wise during the year

14

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.4 - Number of Ph.D's awarded per teacher during the year

3.4.4.1 - How many Ph.D's are awarded during the year

75

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.6 - Number of books and chapters in edited volumes published per teacher during the year

3.4.6.1 - Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings during the year

5

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.7 - E-content is developed by teachers For e-PG-Pathshala For CEC (Under Graduate) For SWAYAM For other MOOCs platform For NPTEL/NMEICT/any other Government Initiatives For Institutional LMS

D. Any	2	of	the	above
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File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.4.8 - Bibliometrics of the publications during the year based on average Citation Index

in Scopus/ Web of Science/PubMed

Scopus	Web of Science
NA	NA

File Description	Documents
Any additional information	<u>View File</u>
Bibliometrics of the publications during the year	View File

3.4.9 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

Scopus	Web of Science
NA	72

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	<u>View File</u>

3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

The faculty members of the Institute are encouraged to undertake, individually or in group, consultancy services to any Government and private organizations using the available infrastructure of the institute partially or fully. Institute has taken up several nationally important consulting projects in various areas of science and engineering. The consultancy services are mainly related to following activities: Providing technical advice Scientific analysis of specific nature Design, vetting and Detailed Project Report (DPR) Demand driven user specific corporate training programmes The institute has well laid down norms for consultancy revenue sharing. The consultancy share between Institute and faculty is 50:50 ratio.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

3.5.2 - Revenue generated from consultancy and corporate training during the year (INR in Lakhs)

3.5.2.1 - Total amount generated from consultancy and corporate training during the year (INR in lakhs)

NA

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

The Institute undertakes a plethora of extension activities, especially in its neighbourhood for creating awareness about social issues, national campaigns and policies along with comprehensive development of the selected rural areas and community groups. For all these campaigns the Institute has created a number of platforms. As per the provisions of academic programs, the Institute offers first and second-year students the option to select NCC, or NSS depending upon their interests. Among the student clubs/societies few clubs like Rotaract Club, Leo Club, EPAC etc. function on these aspects. NSS wing of BIT has adopted 10 nearby villages for the socioeconomic upliftment of the families and provides free education to the underprivileged children of different age groups. Besides this NSS, NCC, and other socio-cultural clubs/societies have also carried out a number of campaigns for the promotion of the following: Swachh Bharat Abhiyan Blood Donation Camps Plantation Drives International Yoga Day World Tobacco Prohibition Day Traffic Safety Week

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year
- 3.6.2.1 Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

4

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

3

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

911

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

39

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the year

10

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

All the infrastructure and facilities for teaching-learning in terms of quantity as well as physical sprawl are beyond the minimum statutory requirements from AICTE, PCI, CoA, etc. Classrooms: The institute has state-of-the-art facilities to facilitate teaching and learning processes. Smart classrooms and ICT enabled classrooms facilities are available in all of the classrooms of the institute. There are a total of 60 classrooms in the Institute, out of which 50 are ICT enabled and 10 are smart classrooms. ICT enabled classrooms are equipped with features such as projectors, Wi-Fi/ LAN, and etc. In addition to these two classrooms with Video conferencing facilities are also available in the Institute. Laboratories: Program specific laboratories are available in each Department with advanced equipment/ Instruments, few to mention

- Plasma Laboratory (Department of Physics)
- Smart grid Laboratory (EEE)
- Electrical Drives Laboratory (EEE)
- VLSI Laboratory (ECE)
- Wireless communication Laboratory (ECE)

- Wind-tunnel Facility: subsonic, supersonic (SER)
- Rocket propulsion Laboratory (SER)
- Renewable Energy Laboratory (ME)
- Robotics Laboratory (ME)
- Food production Laboratory (HMCT)
- (CADD) labs at Departmental level.

Besides these, the Institute has many teaching tools and software with a license for basic engineering. Institute has campus-wide licenses for Office365, Mathworks, ANSYS, NI and LabView, ETAP, SCADA

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

The institute believes in the philosophy of delivering holistic education, hence, the institute has included PT and Games (Course code: MC103, MC203) and Creative Arts (MC104, MC108, MC204, MC208) as an elective subject of total 4 credits in the curriculum of undergraduate programs. Every year the institute organizes national/zonal inter institute sports events: annual athletic meet, an annual fest the "VAJRA' a cricket tournament in the memory of an ex-student Chetan Devraj and a cultural fest 'BITOTSAV' Sports facilities The institute has a centrally created sports complex facility in 25 acres of land existing since 1955, and upgraded on a regular basis for all the games (indoor and outdoor) of national standards.

Music and Cultural facilities: To develop social values in students, the institute has formed various clubs and societies. There are 12 clubs and societies actively involved in promoting social and cultural atmosphere within and outside the campus. These clubs organize events such as Deepotsav, Dance and Music Fests etc. The institute has two well equipped air conditioned music rooms of 800 square feet area housing the latest Indian and Western musical instruments.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.3 - Availability of general campus facilities and overall ambience

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File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the vear (INR in Lakhs)

1991.61

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

The Central Library of BIT is stocked with over 1,52,297 books, 606 Institute Theses, Print Journal 174, 18 thousand+ bound volumes, journals.

BIT library has over 38,683 online journals and more than 2,21,905 online books. All the e-resources are accessible locally within the campus as well as remotely. Plagiarism checking and Grammar checking tools are also subscribed by BIT Mesra Library.

BIT library is housed in the main academic building premises in a separate, two stored building with 3900 sq. meters. The library is equipped with 200 seating capacity. The library is fully automated with all its subsystems having Fiber Optic connectivity and Wi-Fi. It has a separate Research and Computer Lab with provision of 30 workstations to access e-resources and e-databases.

Library is automated with full RFID technology using Open source Software "KOHA".

RFID Technology implemented in Central Library has the following items:

- RFID Security Gate 01
- RFID Book Tags 200000
- RFID Staff Station 02
- RFID KIOSK 02
- Book Drop Box 02
- Handheld RFID Reader 02

Smart I Card - 6000

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e – journals e-books e-ShodhSindhu Shodhganga Databases

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

204.07

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)

1742

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3 - IT Infrastructure

4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

78

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

The Institute has a well-defined IT policy that details the operational specifications of procurement, deployment, configuration and maintenance of its IT infrastructure

• The Institute is currently serviced by three different ISPs i.e. Internet Service

BSNL Vodafone and Tejas. The current available bandwidth isapproximately 1.6 Gbps.

Wi-Fi Facilities: There is a large array of WiFi devices

 both indoor and external,. The number of such devices
 have consistently increased over the last few years and
 as ondate we have 254 Wi-Fi access points on campus.

 Video Conferencing facilities - The Institute has also developed two different video conferencing

sites to help smooth conduction of meetings with external locations. The Institute also has aseparate facility to conduct classes forremote locations.

- Security the Institute uses SOPHOS as its Unified Threat Management (UTM). As on date we have licensed ESETantivirus being used as our client level anti-virus protection tool.
- The Institute also annually purchases pan University licenses for Office 365 portal, which includes

Microsoft Office, Microsoft Teams and Skype for Business. The Institute also has a TAH (Total Academic Head) license with Mathworks Inc. for MATLAB,

File Description	Documents
Upload relevant supporting document	View File

4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
4707	1807

4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)

• ?1 GBPS

File Description	Documents
Upload relevant supporting document	<u>View File</u>

4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

A. All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Upload the data template	<u>View File</u>

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

2772.29

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

The academic infrastructure of the institute, such as laboratories and classrooms are housed in its 17 departments. The upgradation and repair work of Institutefacilities are undertaken by the Planning andDevelopment division, which has a number of experienced engineers.

- The CIF is maintained by a team ofresearch officers, junior superintendents, technical assistants, attendants headed by a professor.
- The BIT Central Library: The procurement., subscription tasks andmaintenance of archives are managed by the Assistant Librarian and information scientist.
- The computers and networking facilities and all digital physical infrastructures on campus aremaintained by the Communication Services section.
- The Estate Office, which has a support staff of mechanics, plumbers, welders, carpenters, masonsand electricians, is responsible for the general maintenance of the campus.
- Sports facilities are managed by the Department of Physical Education having a sports-inclined faculty &students.
- Institute guest houseand auditoriums are keptandmaintainedbyEstate Office.

- The campus also has two canteens and several other eating options within the premises, which areentrusted in the supervision of the Committee for Shop Allocation and Vendor Management.
- The campus dispensary is maintained by a team of Doctors.
- The Institute provides transportation facilities maintained by Transport Offices

File Description	Documents
Upload relevant supporting document	<u>View File</u>

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

672

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology

A. All of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

• All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.2 - Student Progression

- 5.2.1 Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)
- 5.2.1.1 Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

5

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.2.2 - Total number of placement of outgoing students during the year

817

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.2.3 - Number of recently graduated students who have progressed to higher education (previous graduating batch) during the year

12

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter -university/state/national/international events (award for a team event should be counted as one) during the year

1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

The student bodies/ committees provide a platform for the active participation of the students in the various academic & administrative bodies including other activities. This empowers the students in gaining leadership qualities, rules, regulations and execution skills.

List of various student bodies/ committees in BIT Mesra:

 Hostel - Committees: In each hostel, there is a Hostel-Committee which ensures the proper working and maintenance of the hostels. The committee consists of the

following: Position No. of members Mess Secretary 1 Maintenance Secretary 1 Network Secretary 1 Sports Secretary 1 Reading Room Secretary 1 Mess Members

4 - 5

Institute Clubs and Societies: The Institute has around 20 clubs/ societies for the development of students in the area of cultural and technical activities. All the clubs/ societies have their own Student-Executive body and are guided by one Faculty advisor.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

18

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

Alumni are among our most potent assets and best brand ambassadors. Many of them have also served as great recruiters of graduating students and have helped in building useful links between academia and industry.

BITOSA Global(Birla Institute of Technology Old Students Association) is Official BIT Mesra Alumni body (Link: https://www.bitosaglobal.org/) and an umbrella organization that was formed to co-ordinate the activities of the various alumni chapters. We have14000+registered alumni and14 chaptersfrom all around the globe. BITOSA Global started with the vision to build a network that connects all BIT Alumni across the globe, to establish and sustain a bonding for learning, caring and sharing.

The primary objectives are:

- Support BIT | Contribution for Global Opportunities, Scholarship, Alumni Directory etc.
- Networking | Alumni Talks, Knowledge Sharing, Get -Together
- Mentoring | Supporting Students/Juniors for Placement,
 Entrepreneurship and more.
- Social Contribution | With collaborative efforts, supporting society

To achieve its objectives, some of the events conducted by the association are-

BITOSA Innovation Conclave- It was an event to celebrate the people who have travelled down the un-treaded path.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

5.4.2 - Alumni contribution during the year (INR in Lakhs)

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File Description	Documents
Upload relevant supporting document	<u>View File</u>

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

Institute Vision

- Institute has clearly stated vision and each Department has its own vision statement which is aligned with the Institute's vision. To achieve these objectives, required action points are planned which percolate to the different academic and administrative sections.
- "Institution Governance" describes all those structures, processes and activities which are considered in the planning and subsequent policies of the Institute.
- The governance process of BIT could be listed as below -
 - BIT has a robust governance process which includes the General Council (GC), Board of Governors (BoG), Finance Committee (FC), Academic Council (AC) and Building and Works Committee aligned to the UGC regulations as applicable from time to time. The different roles and responsibilities of these governing bodies are clearly stated in the Rules and Regulations of the Institute.
 - Department Academic Committee (DAC), Department Policy Committee (DPC), and Board of Studies (BoS) of every Department proposes to the Academic Council for any revision of curriculum, syllabus

and Department level activities through respective Deans.

 Success of these activities can be validated through illustrious list of alumni, engagement of faculty at the national and international level, student achievements at academic and extracurricular spheres

Link :
https://www.bitmesra.ac.in/Show_Content_Section?cid=1&pid=136

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

The leadership at the Institute is provided by the Vice Chancellor. The Vice Chancellor is assisted by Deans for various key activities, Heads of Departments/ In-Charges besides the Registrar who looks after the overall administrative and academic activities of the Institute. The Institute has given equal representation in various committees at all levels from Professors, Associate Professor and Assistant Professors in all Departments.

- The major academic activities are delegated through respective Deans, HoDs, Associate Deans, and faculty members grouped as a committee.
- The administrative responsibilities are delegated through the Registrar, Deputy Registrar(s), Assistant registrar(s), Administrative Officer, Section In-charges and staff members. Major academic and administrative decisions are taken through various committees.
- Each Head of the Department delegates academic responsibilities related to teaching-learning to UG, PG and Ph.D faculty coordinators. Individual faculty also have freedom to achieve course outcome in innovative ways at their own discretion. The HoD also constitutes faculty coordinator/ committees such as BoS, DAC, DPC, Budget committee, Purchase committee, ERP, etc. for smooth functioning of the Department with flexibility.
- All the hostel operations (maintenance, mess, recreational activities, etc.) are managed by student bodies through BIT Welfare society having Dean of Student

Affairs as patron.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic plan is effectively deployed

Short term plan (3 years)

The Institute shall strive to excel in:

- 1. State of the art research in all its academic departments
- 2. Developing high quality human resources
- 3. Enhancing a culture of innovation to meet the industrial and societal

demands

- 4. Creating and adopting new age curricula and delivery techniques
- 5. Highest lab certifications and accreditations (e.g. NABL, ISO etc.)

Long term plan (10 years)

- 1. Ranking Targets:
- To reach top 15 in Engineering category and top 25 in Overall and University level NIRF Rankings 44
- To be in Atal Ranking in Innovation Achievement (ARIIA) in private category
- To be ranked in QS/THE Asia level rankings.

- 2. Accreditation Targets:
- To aim for NBA accreditation for all the programs of the Institute
- Achieve and maintain NAAC A++ grade in all future cycles
- Engineering and technology programs to be accredited by ABET
- 3. Outreach Targets:
- National and international recognition in research and development in Engineering, Technology and allied sciences.
- The Institute shall emerge as preferred destination for faculty, staff, students and employers through incorporation of best international

organisational structures and standards.

- The Institute shall strive to be recognised as a premier Innovation and IPR hub.
- Enable its graduates to lead National and Global level start-ups.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The vision and mission of the Institute are driven by the aligned policies which drive the academic and administrative processes. The organisational setup of BIT Mesra is shown below:

- 1. Chancellor
- 2. General Council
- 3. Board of Governors
- 4. Finance Committee
- 5. Academic Council

6. Building & Works Committee

Other necessary committees as per the requirements are notified by the authorities.

The above authorities are responsible for the functioning and governance of the Institute.

- Appointment
 - The appointment of Vice Chancellor and Registrar is as per the UGC norms
 - Faculty and staff recruitment is through open advertisements in prominent platforms
- Service rules:
- The Institute has well-defined rules and regulations and also has the Conduct, Disciplinary and Appeal Rule (CDA)
- Promotion policies
 - Promotion of faculty is through Institute Career Advancement Scheme (CAS) Rules.
 - The Institute has the Modified Assured Career Progression (MACP) Scheme, through its Recruitment and Promotion Norms (BITRPN) for non-academic staff.

The procedures followed for promotion, facility utilization, grievance redressal and other subjects are on the Institute webpage.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.3 - Institution Implements e-governance in its areas of operations A. All of the above **6.2.3.1** - e-governance is implemented covering following areas of operation 1. Administration 2. Finance and Accounts 3. Student Admission and Support 4. Examination

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3 - Faculty Empowerment Strategies

- 6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff
 - Institute has well-documented CAS policy which is modified from time to time to meet the statutory requirements to give opportunities to well-performing faculty members to get promoted
 - Faculty members are provided with ample opportunity to improve their knowledge and skills by attending FDP, STTP etc.
 - Faculty members also get ample opportunities in administrative positions for the holistic growth of their career
 - Non-academic staff perform multiple roles across
 Departments, administrative and utility sections. The
 Institute has the Recruitment and Promotion Norms
 (BITRPN) and Modified Assured Career Progression (MACP)
 for non-academic staff
 - Institute ensures the welfare of its employees through the following: Salary advance, Mediclaim, Employees State Insurance Scheme, Group Saving Linked Insurance Scheme, Employee Group Insurance, Health Centre, Staff Quarters, Concessional education for wards, Banking, Post Office
 - Faculty development programmes, seminars, symposiums etc.
 on regular basis are conducted in the Institute, earned
 leave, Gratuity, Provident Fund, Transport Facility,
 Sabbatical leave/ study leave/ Extraordinary leave/
 Maternity and Child adoption leave, Uniform for certain
 category of staff, Free Internet and Wi-fi facility on
 Campus, Earned Leave encashment for employees (max 300
 days), Sports facility, staff club and Co-operative store
 and canteen facility

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

48

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

8

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

10

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Institute operates on student centric policies with focus on skill based quality education and research. Institute is selfsustained and has strong financial practices and internal controls in place to ensureoptimum utilisation of financial resources. Institute has various sources of funds the main

Page 99/112 21-08-2023 02:45:31

being student feewhich is collected semester wise. The same is augmented by other sources of revenue like, earnings from consultancy projects, grants and other incomes. Budget preparation process takes into consideration the short term and long term goals set by the Institute. All Institute centres, departments and sections propose their annual financial plans based on academic policy and planning to the Finance Committee of the Institute to achieve educational objectives.

The Budget preparation of the Institute is made following a detailed process carried out by theindividual departments/sections based on their targets. The budget of the Institute is finalised at theInstitute level and thereafter placed before the Board of Governors for approval.

Utilisation of the approved budget and its regular monitoring occurs at multiple levels (HoDs, Deans and officers) which helps to ensure that Institute funds are being spent according to plan

The Finance committee is responsible for observance of regulations relating to maintenance ofaccounts of Income & Expenditures and consider any other matter referred by the Board ofGovernors.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

914.43

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

0

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	<u>View File</u>

6.4.4 - Institution conducts internal and external financial audits regularly

The Institute is subjected to three types of Auditing system audit by Comptroller and Auditor General ofIndia (CAG), Internal audit, and Statutory audit. The Institute has a practice of Internal Audit being doneby reputed agencies on a rotation basis. Last Five years the Institute engaged three different agencies forinternal audit namely M/s. A.K. Bagri & Associates, M/s. Price Water House Coopers, and M/s. S.S.Kothari & Mehta. The statutory audit is conducted by M/s. K.N.Gutgutia & Co.Duties of Internal Auditors: To check all Journals Cash & Bank vouchers Bank reconciliation of all operative Banks, Store Ledger Physical verification of Cash They prepare reports /observations on: 1.Finance 2.Office of Registrar - such as checking Staff & faculties list - PAN No. & AADHAR Card 3. Purchase, and Store 4. Estate Administration 5.Planning & Development: Building construction 6.Transport Department, Consumption of Petrol & Diesel etc.

To check fee receipt & refund of caution money for pass out students. Compliance of procedure adopted for refund

To check advances against Salary paid to staff & faculties are as per Institute rule and are timely being deducted or not

To check advances issued to parties for supply of goods and for job works and whether the goods has been supplied in time or job work completed.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) 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

Institute established a well-structured Internal Quality Assurance Cell (IQAC) to:

- Maintain the standards in Higher Education, the cell continuously monitors and provides inputs on Academic and Research activities.
- IQAC holds meetings of the members from time to time to ensure the high-quality teaching and research environment in the Institute.
- Quality improvement in teaching is ensured through the course feedback mechanism integrated into our Student Module of ERP System. Systematic feedback from all the stakeholders is also obtained from time to time.
- After collection of the feedback periodic meetings of HoDs with faculty members at department level and organizing the need-based programs to improve the feedback suggestions are undertaken.
- Pedagogy and training programs on outcome-based education are some of the need and analyses-based programs which are conducted by IQAC for the faculty members.
- Constant efforts are being made by IQAC for NBA accreditation of all the courses offered by the Institute wherein IQAC reviews the documents, procedure and implementation for each of the courses in various programs.
- IQAC members meet and discuss the NBA accreditation requirements and visit the departments for a preaccreditation verification and its subsequent support.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Conferences, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme

A. Any 5 or all of the above

on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting documnent	<u>View File</u>

- 6.5.3 Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)
 - UG/PG Course curriculum revision UG/PG course curriculum are revised at regular intervals to keep the curriculum catering to the need of global demand industry, higher education and research. In the last five years, several programmes have been revised in accordance with the vision and mission statements.
 - Ph.D. ordinance Ph.D. ordinance were implemented to enhance the standard and quality of the research as a post-accreditation step.
 - Examination Reforms Adopted Bloom's Taxonomy-based assessment tools, Course outcome-based question paper preparation, ICT-based examination activities through ERP.
 - Seed Money Scheme Seed money grants in the range of Rs. 80,000 to 2.0 Lakhs were provided to more than 60 faculty members during the last five years.
 - Research Promotion Grant (RPG) Scheme In this scheme,
 30% share of the overhead charges of research projects
 are credited to the account of investigators which can be used for academic and research activities.
 - Immersive Summer Research Experience (ISRE-BIT) at U.S.
 Universities Institute has an Immersive Summer Research
 Programme for meritorious UG students with Illinois
 Institute of Technology (IIT), Chicago and Carnegie
 Mellon University (CMU), Pittsburgh.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

- Institution has adopted co-education in all the programs in true spirit for several decades. Presently, there are around 30% girl students in various programs which is more than the statutory mandate.
- There are more than 20% women faculty and staff.
- Out of eight Deans, three positions of Deans are being held by female faculty members.
- Institute has functional Internal Complaints Committee (ICC)
- Lady Doctors, and counsellors are available in the Institute dispensary to facilitate the female students, staff and faculty health.
- The student bodies, especially NSS, consistently strives to address women's concerns through various platforms.
- The Institute has a common faculty lounge with restroom,
 TV and dining space.
- Institute has fully functional ladies club with modern multigym and outdoor sporting arena
- Girls' hostels also have a modern multigym in addition to indoor and outdoor sporting facilities
- Institute has female security guards
- Institute is covered by CCTV surveillance at strategic locations to ensure safety and security of women

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Annual gender sensitization action plan(s)	https://drive.google.com/drive/u/2/folder s/1STgluWXzt0RvwiXjYXd_yxIhFlabsuEZ
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	https://drive.google.com/drive/u/2/folder s/1STgluWXzt0RvwiXjYXd yxIhFIabsuEZ

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

1. Solid Waste Management:

- Solid waste is divided into two parts biodegradable and non-biodegradable
- Separate dustbins are placed at all the waste disposal points including hostels and quarters

1. Liquid Waste Management:

- Wastewater is treated through septic tank system in the campus. It is one of the most common type of decentralized sewage treatment system which consists of a septic tank and soak pit.
- 2. Biomedical Waste Management:
 - Biomedical waste is generated in the Institute dispensary, Pharmacy Department, Bioengineering and

- biotechnology department and empty chemical bottles from Chemistry and Chemical Engineering Departments.
- All these departments put the waste in colour coded small dustbins thereafter it is placed in large colour coded dustbins at specifically prepared Biomedical waste collection points.
- 3. E-Waste Management:
- Once the institute upgrades to a higher version then the older one is given to nearby schools for learning of students
- Unusable e-waste is initially stored at one point in shade or store room and thereafter it is disposed of with a vendor who is authorised to collect e-waste through the institute's Scrap Disposal Committee.
- 1. Hazardous Chemicals and Radioactive Waste Management:
- Institute does not produce any radioactive waste.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways

4. Ban on use of plastic

5. Landscaping

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
- C. Any 2 of the above

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions/awards
- **5. Beyond the campus environmental promotional activities**

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software,mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)
 - The process of national level admission in the Institute attracts students from all over India and abroad (NRIs) with diversity in students' profile.
 - Reservation of seats for OBC / SC / ST / EWS and PWD are strictly adhered to as per the statutory reservation policy of State of Jharkhand and Government of India.
 - The interests of students, faculty members and staff are safeguarded without any caste, creed, or gender discrimination.
 - Institute officially declares holidays for various national festivals of different religious faiths. In addition to this there are official holidays to honour the local festivals.
 - There is an active Internal complaint Committee (ICC) which ensures zero tolerance related to gender issues.
 - To promote harmony amongst the different communities within the campus there are different platforms for sharing diversity such as staff club, ladies club, students clubs/societies etc. in the Institute level which are organised at regular intervals.
 - Institute has number of hostels and each one of them individually organizes hostel night and similar activities
 - Students with such wide diversities participate in various committees and student bodies such as sports/hostel/purchase/cultural committees etc.
 - The Institute, with great zeal, celebrates festivals, the birth and death anniversaries of great Indian personalities.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

Understanding the fact well enough that India is a huge nation with diversities in caste, creed, religion, races, it is the first and foremost aim and vision of BIT to contribute to the country that forever stands out.

- Institute understands that being an academic hub of national significance, it has a massive responsibility.
 From inculcating a deep sense of patriotism and preeminence of civic and social duty amongst an individual, BIT takes steps prudently to sensitize the students with these topics.
- The Institute accomplishes this by organizing various socio-cultural events that create sensitive individuals. Throughout the year, numerous events are organized by the clubs of the Institute. Some of the example events are mentioned below:
 - International Youth Day
 - National Blood Donation Day
 - National Unity Day
 - Constitution Day
 - The important days are celebrated with the motive of fostering the spirit of oneness and unity amongst the students who are still in the learning and developing phase

Institute encourages its employees to actively participate in various socio-cultural events of national importance such as

- Anti-terrorism Day pledge was taken by the employees of the Institute
- Employees pledged on Anti-Tobacco Day
- Institute has established the Rajbhasha Prakoshth
- Institute has established the Human Value Cell

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

All of the above

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

The Institute creates a sense of social responsibility by celebrating national and international important days, events and festivals. Important days are celebrated to foster the spirit of oneness and unity amongst the students, staff and faculty. The Institute encourages everyone to participate in various socio-cultural events of national and international significance actively. Many events are celebrated in the Institute some of the following are mentioned below:

National and international commemorative days

- Independence day
- Republic day
- o Women's day
- World music day
- World environment day

Events

- Teacher's Day
- Engineer's Day
- Yoga Day Tribute to our National Heroes

Festivals

- Makar Sankranti
- o Durga Puja
- o Saraswati Puja
- o Vishwakarma Puja
- ∘ Karma Puja
- Eid
- Diwali
- Holi

Other than these some recent significant events organised are:

1. The event "Tainaat" was organized by the Literary Society, BIT Mesra on 15th August. A reputed army official and BIT alumni Major Eliza Rungta was the speaker and she gave insights on various aspects of military lives and about her life journey.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

Immersive Summer Research Experience (ISRE): The objective of the "Immersive Summer Research Experience" for the undergraduate students of engineering is to expose them to world class research in American institutes of repute. Apart from inculcating a research bent of mind in the students, this practice also aids in enhancing the employability of the students by making them aware of the contemporary practices in their subject domain on an international level. The cross cultural interactions with international students imbibe a mindset with a global outlook and are conducive to overall development of personality.

Presently the institutes to which the students are being sent are:

- 1. Illinois Institute of Technology,
- 2. Chicago Carnegie Mellon University, Pittsburgh
- 3. Georgia Institute of Technology, Atlanta

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

- BIT Mesra carries a distinction of being one of the foremost Institutes of Technology in the country (ahead of all but only one IIT).
- BIT Mesra initiated a programme on Space Engineering and Rocketry ahead of country's flagship organization called ISRO, way back in 1964
- BIT Mesra has always upgraded its academic curriculum and teaching-learning exercise as per the prevailing norms, government directives and international standards. As a result, the graduates of this institution have always been the most sought-after engineers valued by the industries in the country.
- Besides advanced technological subject domains, BIT Mesra also imparted education for socioeconomic development of

- the rural and tribal population in the states of Bihar and Jharkhand.
- BIT Mesra is a rare university that houses a University Polytechnic besides various engineering departments and centres.
- BIT Mesra was a pioneer in establishing the first-ever Science and Technological Entrepreneurship Park (STEP) in the country as a part of the Small Industries Research and Development Organization (SIRDO) way back in 1974.
- In recognition of its overall contribution, BIT Mesra was the first institution in India to be granted autonomous status in 1970s.

7.3.2 - Plan of action for the next academic year

The following points describes the proposal of plan of action to be implemented for the next academic year in consonance with the Institute vision and mission.

- 1) Participation in NIRF and other rankings.
- 2) UG programs Accreditation to reach a target of 100 percent.
- 3) Re-appropriation of PG Programs.
- 4) Increase in MoU's with Industry, research labs and academic institutions.
- 5) Implementation of a robust ERP system.