SELF STUDY REPORT

FOR 1st CYCLE OF ACCREDITATION

HI-TECH INSTITUTE OF TECHNOLOGY

P-119, BAJAJNAGAR, MIDC WALUJ, 431136 www.hitechengg.edu.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The time was the turn of the millennium, and the place was Aurangabad. India had come to see its true potential for making its mark felt on the world stage. The fruits of the earlier economic reforms were becoming tangible. While the changes still were apparent more in the consumer market, the core industrial sector itself was now experiencing deep qualitative changes, because it was now being exposed to international competition. A mood of dynamism was being felt all over the nation, Aurangabad being no exception.

The industrial estate at MIDC Waluj, near Aurangabad, had come to attract significant investments. At the same time, India had become, demographically, a nation of aspiring youth.

But the so-called Demographic Dividend could not possibly be reaped if the necessary engineering and managerial education were to remain beyond the reach of the youth of India, especially the rural youth. Thus, there was an acute need here in Aurangabad to provide opportunities for high quality engineering education.

It was against this backdrop that a group of mature technocrats and industrialists came forward, and founded a trust called the "Bharatiya Gramin Punarrachana Sansthaa" (Indian Rural Reformation Organization), headed by Mr. J. K. Jadhav, himself a BE (university ranker) + MBA (Distn), and a former Director of Industries (MH), together with his brother Mr. E. K. Jadhav, himself an engineer-turned-industrialist, and their educationist and industrialist friends.

The first institution to be started by the BGPS, in the year 2001, was the "Hi-Tech Institute of Technology, Waluj, Aurangabad."

Vision

The vision that the founders set for the new institute was:

"To become a University-class institution by inculcating confidence in students with knowledge of advanced technologies of respective programs, so as to solve the problems of industry and society."

Mission

The Mission statement of the Institute is:

- To impart industry-oriented education based on practical and theoretical knowledge in the science and technical subjects
- To provide a platform for improving confidence, communication, leadership, and managerial skills
- To provide exposure and practical experience regarding advanced technologies from the respective fields

• To make students competent to serve society, by exposing them to cultural, sports, NSS, etc. activities."

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- *Industry-Institute Interaction:* Our key strength is the extraordinary close rapport with the industry, resulting in industry-sponsored final-year BE student projects in which students work on live industrial problems.
- *The Top Management of the Institute*: The founders of the parent trust have themselves been frontline engineering professionals and academicians. They intuitively understand the subtle balance between theory and practice, between academia and industry, between the long and short runs. They support the Institute's aspirations and growth-plans whole-heartedly.
- *Dedicated faculty*: Our faculty has a deep familiarity with the particular problems faced by our kind of students, i.e., students with a predominantly rural and economically backward background. The faculty has displayed a commitment to be with the students all the way to their graduation, and then even beyond. Further, several of them are pursuing PhDs themselves. Some of the faculty-members have come from IITs, COEP and GECA; others have been university or have AIR < 50 at NET examination.
- *Top-in-Class Infrastructure:* The Institute carries a top-in-the-class kind of laboratory equipment and infrastructure. For instance, in Civil Engineering department, we have full-fledged concrete-testing machines, and even a bacteria-culture incubator for environmental testing. Our Mechanical Department has a modern, computer-controlled, and large-capacity (100 ton) Universal Testing Machine (UTM). Library access arrangements allow access all the leading international journals.
- *Reputation*: Despite all its present difficulties and challenges, HIT still enjoys a first-rate reputation and brand-goodwill in the Marathwada region.

Institutional Weakness

- Being a UG-Only College, Affiliated to a General-Purpose State University: The Institute is constrained sometimes by outdated syllabi, and at other times, by the rigidity of rules. Regulating authorities like AICTE and DTE, too, are not always able to understand the operational context of a college like ours. Constraints are also felt, say in introducing new programs, PG programs, etc.
- Socially Backward Region: The Marathwada region overall falls in the industrially backward region. Aurangabad is the only city with a modern touch. There is a certain lack of professional culture in the general public here.
- Family Background of Students: Parents of our students often come from rural and backward areas, and so, they aren't fully aware about the expectations and demands made by the modern private sector. So, parents are not always able to provide the requisite degree of support to the students. Some of the parents are found to even advise students to opt out for shorter-term gains such as seeking immediate employment in the banking sector rather than pursuing extra courses in CAD/CAM and go for the higher-end and more rewarding engineering careers---even if the students themselves are capable.
- National Trends of Declining Admissions: Even if the post-Diploma (direct second-year admissions) have remained fairly stable until now, there is a national-level trend of declining admissions in engineering colleges. It has already come to adversely affect our first-year admissions. As a result,

financial constraints do exist when it comes to aggressively pursuing any capital-intensive activities.

Institutional Opportunity

- Research Funding for Rural Areas: Research funding especially earmarked for rural areas is now being made available by various government agencies and public sector organizations. Similarly, the State Government has the "Jal-Yukta Shivaar" scheme for micro-scale water-conservation activities. Such schemes can support applied researches oriented towards rural areas.
- Expansion in the Local Industrial Base: Aurangabad has recently received Rs. 3,500 crore worth of capital investments in the new Shendra Industrial Estate, which augers well for industry-institute interaction and employment opportunities.
- Consultancy and R&D Services to Small-Scale Industries: The local and nearby industrial estates of Waluj, Chikalthana, Shendra, Paithan and Jalna carry a great number of small and medium-scale industries who do not have adequate testing or R&D facilities. We could leverage our past investments (e.g. the computer controlled 100 ton UTM) by offering these industries testing and consultancy services. Further, we plan to establish an advanced simulation center, to cater to the design and simulation needs of SSI units in casting and plastic injection molding.
- Academic Collaborations: Definite opportunities exists to form collaborations with certain niche research centers at IITs, e.g., CTARA at IIT Bombay. We are also open to establishing collaborative research clusters with BATU and GECA. The idea is to pursue co-optition, i.e. co-operative competition, so as to foster excellence.
- Entrepreneurship Opportunities for Our Students: With our deep networking with the local industry, opportunities do exist for our students to become entrepreneurs themselves, say by initially becoming suppliers to the bigger companies in this region.

Institutional Challenge

- Students having Poor Background and Academic Preparation: This point has been touched upon before.
- Competition from Newer Colleges: Newer engineering colleges have come up in the nearby regions, not just in Aurangabad city but also near MIDC Waluj.
- Declining Interest in the Engineering Degree Programs: The general trend of declining admissions has implications on all aspects of the institution's functioning, especially, availability of capital for future growth.
- *Timely Availability of Government Funds:* A large number of our students avail of various Government free-ships and scholarships. Such students are too poor to pay returnable deposits, and yet, there can be delays in receiving funds from multiple State and Central government agencies.
- Socio-Cultural Changes in the Aspirations of Students: There is a general social and cultural trend of students to go in for six months' finishing courses in Pune/Mumbai/Hyderabad after completing their BE graduation from Aurangabad, and then to join the IT industry in the big cities. So, they don't pay attention to their UG education and are not interested in jobs from the core engineering industry.
- *Campus Placements:* In optimizing their recruitment costs, the focus of MNCs from the distant Bangalore/Mumbai/Pune regions tends to be on bigger colleges from advanced regions.
- Operational Difficulties of an Affiliated College under the Central Admissions Procedure: Admissions often get delayed in the state-wide CAP process. Further, university results sometimes get delayed. Such factors pose a special challenge to maintaining academic schedules.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

HIT is a self-financing engineering institute, currently affiliated to Dr. Babasaheb Ambedkar Marathwada University (BAMU), Aurangabad, and follows the curriculum prescribed by the university. Faculty-members participate in the curriculum design and revision processes under the appropriate Boards of Studies of the University. While the elective courses must follow the university-prescribed scheme, the Institute provides additional training via special courses, seminars, guest-lectures, conferences, industrial projects, etc.

At the institute level, carefully planned and continuously monitored processes ensure that the University curriculum is implemented effectively.

An Institute-wide academic calendar is prepared well before the term commences, and responsibilities are allocated to staff at that time. Each department then decides on the allocation of subjects to individual faculty according to a process that includes their individual choices, backgrounds, and future growth. The academic calendar is designed with sufficient leeway for accommodating unseen changes in schedules. Sufficient time is left for students and faculty to pursue extra-mural and extra-curricular activities.

As many as 45 Committees are formed to implement and monitor various curricular, extra-curricular, social, and gender-related aspects at a fine-grained level, and also to gather detailed and timely feedback. The depth of planning naturally leads to a clarity regarding what is to be delivered when, and who is responsible for what.

Processes exist to gather timely feedback and take corrective actions, including: analysis of results of unit tests and exams, identifying weaker students and their learning problems, defaulters and their counselling, students displaying special talents, initiatives and ideas, gender-related and social issues, etc.

Teaching-learning and Evaluation

Admissions to the Institute are done by the Directorate of Technical Education (DTE), Government of Maharashtra (GoM). As per the rules by GoM, 80% of the sanctioned intake are filled via a Common Admission Process (CAP), and 20% are filled at the Institute level. The Institute serves as a Local Facilitation Center for state-wide admissions.

The parent trust (BGPS) arranges free JEE coaching program for the XII standard students. The Institute conducts special outreach programs during summer. Guidance and admission-counselling sessions are held at numerous locations, including in the distant rural areas.

Evaluation of students is done on a continuous basis, following a transparent process, which includes: for every unit test, blind-selection out of two candidate question-papers, and showing answer-sheets to students.

Appointments to faculty are done following a careful and comprehensive selection process. Faculty members are actively encouraged to pursue PhD; to attend FDPs, STTPs and conferences; and to pursue industry-sponsored projects.

The COs prescribed by the University are followed. In addition, faculty members are encouraged to study COs of similar courses at IITs, and to use them in the actual delivery. PSOs are prepared by all the departments. Faculty members make use of online resources such as NPTEL. LCD projectors are available for use in class-room teaching.

Freshly admitted students go through an Induction Program, and remedial courses are offered to the weaker students. Extra coaching is made available before the university examinations. Feedback on teachers is collected from students, and analyzed at the HoD and Principal levels.

Research, Innovations and Extension

HIT is an undergraduate degree college. The research output of a UG college cannot be compared to institutions having full-fledged ME and PhD programs. Yet, there is an important difference between having a basic research orientation, from producing concrete research output (i.e., journal papers). Research-orientation, broadly speaking, is an *essential* aspect of *any* cognitive process, *any* learning. Thus, we enthusiastically promote the research culture, both among faculty and students.

Faculty members are encouraged to pursue PhD, and two of them are in an advanced stage of their PhD dissertation work. Students are encouraged to publish their project work at national conferences. One student has successfully obtained a patent, with more students following the suit.

A key strength of HIT is its close rapport with the local industry. Therefore, there exists a scope to offer consultancy services. This aspect is being pursued actively with help from the local industries association.

Younger faculty-members with prior research experience at IIT Kharagpur, IIT Bombay, COEP and GECA have joined the Institute recently. Plans are afoot to obtain funding from agencies like RGSTC. Key focus areas have been identified, which include: computer simulation and field-studies for micro-scale water conservation, simulations of metal casting and plastic injection molding, etc.

A guest lecture on Innovation by an IIT Bombay professor was arranged in the Institute, and his group has confirmed their willingness to enter into collaboration. Work has already begun at the level of literature review and exchange of ideas about research possibilities pertaining to ceramics processing.

Infrastructure and Learning Resources

The Institute has infrastructure facilities that not only meet the norms of the regulating agencies like AICTE, but also satisfy the actual functional requirements. The classrooms and laboratories of the Institute are distributed over two multi-story buildings, each of which has open spaces on both sides. In addition, there is a separate building for workshop, and another for canteen. The central quadrilateral sports a well-manicured lawn. Separate areas are earmarked for sports activities. Adequate hostel facilities are provided to both girls and boys in separate buildings in a nearby plot (less than 500 meters away). Each department has its own seminar hall.

The Central Library carries adequate holdings in terms of text- and reference-books, NPTEL videos, journals, online remote access to international journals through BMAU Central Library, and multimedia terminals. The library runs a book-bank scheme under which a majority of students avail of text-books to take home on loan.

The IT infrastructure includes more than adequate number of desktop computers and servers, with high-speed Internet connectivity. Separately, WI-FI connectivity is provided. Open Source software is being adopted wherever possible. The Institute acts as a nodal center for online examinations conducted by TCS, and for KVPY scheme of IISc Bangalore. A language-lab is provided to improve communications skills.

A 25 KVA D.G. set is provided as a stand-by. Water is made available from MIDC supply as well as from a bore-well. A rainwater-harvesting scheme is implemented; it supplies the collected water to a nearby MIDC pond created for the purpose.

Student Support and Progression

As many as 45 committees are formed for student support and guidance at a fine-grained level, and their work is continuously monitored. Thus there are separate student-related committees such as: FE and DSE admissions and counselling, transportation, sports, soft-skills development, hostels, student council, women's grievances, student welfare schemes, cultural affairs, NSS, etc. The faculty member in-charge of each committee is appointed by rotation.

In addition, there is a faculty in-charge for each class, and further, one teacher for every 20--25 students. They together coordinate communications with parents.

The Student Council is constituted according the rules of the University, and its student members are selected by merit. The Council carries student-elected posts like General Secretary, Ladies Representative, etc. Events like the Annual Social Gathering are directly managed by students themselves, under the guidance of faculty.

In addition, the departmental student associations (such as CESA, MESA, etc.) organize events like guest lectures and technical competitions. They maintain rapport with professional societies such as IEEE, SAE, etc.

Students are encouraged to share with the faculty their aspirations, e.g., for higher education in engineering or management, or for competitive examinations including UPSC. Suitable guidance is provided by faculty members including Principal. Special cash awards are given to students who show special talents, such as obtaining patents.

Alumni have helped Institute students both financially, e.g. by sponsoring refreshments at events, and non-financially, especially by arranging industrial projects, internships and jobs. Alumni outreach activities are currently being modernized as a part of a comprehensive ERP system.

Governance, Leadership and Management

The Institute has well-articulated Vision and Mission statements, which are exhibited in prominent places in all the buildings and also on the Web site. Over the years, these statements have come to harmonize different strategies and policies, and have guided the Institute on a path towards excellence.

At HIT, smooth functioning is achieved by practising the policy of Management by Objectives (MBO). There is a clear delineation of tasks and roles for the academic and administrative units and their functionaries, with responsibilities judiciously allocated among them. At the same time, open and informal feedback---not just from the top-to-bottom but also from the bottom-to-top---is a way of life at HIT.

The Principal, HODs, and AO are given adequate levels of autonomy in decision-making. Faculty members choose the courses to teach by following a process which includes considerations of the individual teacher's background and strengths, scope for his future growth as an individual, and his order of preferences. Faculty members are encouraged to improve their profiles by pursuing PhD, research, consultancy, and collaborative projects. They are encouraged to attend FDPs, STTPs, conferences, and also to contribute in various capacities at the affiliating University.

The top management delivers on its commitment of mobilizing adequate financial resources in a timely manner. For instance, despite the financial constraints introduced due to the downfall in fresh admissions, salary payments are made on a regular basis. Adequate processes are followed on both the budgeting and expenditure sides, and statutory audits are conducted regularly.

Institutional Values and Best Practices

When it comes to gender-equity issues, the Institute has led by example: a separate hostel for girls was provided right at the time of HIT's founding in 2001.

The Institute has implemented a rainwater-harvesting scheme and has utilized energy-conserving LED lights. Awareness and volunteer service programs are conducted via NSS. Civil engineering students have worked on live field projects of the state government-run water conservation and pollution-control schemes. Mechanical engineering students have worked on renewable energy resources.

The two "best practices" that HIT has come to evolve are: (i) industry-institute interaction, and (ii) development of students coming from weaker sections.

In the Mechanical Engineering Department, more than half of final year BE projects are sponsored by industry (a record better than the best colleges in the state). Other departments are now following this lead. Guest lectures and seminars by industry experts is a routine feature here.

HIT has come to develop a multi-pronged approach to take the poor and awkward XII standard students from rural areas, and turn them into well-trained, confident engineers. Free coaching with hostel facilities is provided in summer to any willing XII standard student from rural areas. In the first year engineering, remedial lectures are conducted especially for subjects like mathematics and applied mechanics. After the term ends, intensive practice sessions are conducted to improve problem-solving in limited time. Special lectures are arranged to teach the more difficult material once again. Advanced learners are identified, and suitable industrial internships and projects are arranged for them.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	Hi-Tech Institute of Technology		
Address	P-119, Bajajnagar, MIDC Waluj,		
City	Aurangabad		
State	Maharashtra		
Pin	431136		
Website	www.hitechengg.edu.in		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Ajit R. Jadhav	240-2553496	9850997479	240-2552240	principal@hitechen gg.edu.in
Associate Professor	Kakasaheb Sheshrao Jadhav	240-2553495	9923009939	240-2554410	hodextc@hitechen gg.edu.in

Status of the Institution	
Institution Status	Private

Type of Institution			
By Gender Co-education			
By Shift	Regular		

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	28-06-2001

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document	
Maharashtra	Dr. Babasaheb Ambedkar Marathwada University	View Document	

Details of UGC recognition		
Under Section	Date	
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC) Validity in Recognition/App Day, Month and Remarks **Statutory** Regulatory roval details Inst year(dd-mmmonths **Authority** itution/Departme yyyy) nt programme **AICTE** 30-04-2016 12 Extension of **View Document** Approval also was later on received for the

Details of autonomy		
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	Yes	
If yes, has the College applied for availing the autonomous status?	No	

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

current academic

year

Location and Area of Campus					
Campus Type Address Location* Campus Area in Acres Built up a sq.mts.					
Main campus area	P-119, Bajajnagar, MIDC Waluj,	Urban	1.5	6622	

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)					
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	XII Science	English	60	5
UG	BE,Compute r Science And Engineering	48	XII Science	English	60	8
UG	BE,Compute r Science And Engineering	48	XII Science	English	60	0
UG	BE,Electroni cs And Telec ommunicatio ns Engineering	48	XII Science	English	60	0
UG	BE,Mechani cal Engineering	48	XII Science	English	60	10

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				4				19				52
Recruited	0	0	0	0	2	0	0	2	11	2	0	13
Yet to Recruit				4				17				39
Sanctioned by the Management/Soci ety or Other Authorized Bodies				4				17	J			39
Recruited	1	0	0	1	0	0	0	0	25	11	0	36
Yet to Recruit				3		1		17				3

	Non-Teaching Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government		7,		0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				25					
Recruited	25	0	0	25					
Yet to Recruit				0					

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				7					
Recruited	7	0	0	7					
Yet to Recruit				0					

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n	Professor atio		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	0	0	0	0	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	2	0	0	36	13	0	51

	Temporary Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	0	0	0	

Part Time Teachers										
Highest Qualificatio n	Qualificatio			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	12	0	0	12		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	352	0	0	0	352
	Female	121	0	0	0	121
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	25	34	38	31
	Female	19	25	15	19
	Others	0	0	0	0
ST	Male	2	3	0	0
	Female	0	1	0	0
	Others	0	0	0	0
OBC	Male	47	55	73	98
	Female	20	25	17	23
	Others	0	0	0	0
General	Male	199	158	147	144
	Female	78	70	36	31
	Others	0	0	0	0
Others	Male	49	60	64	62
	Female	34	34	32	19
	Others	0	0	0	0
Total		473	465	422	427

3. Extended Profile

3.1 Programme

Number of courses offered by the institution across all programs during the last five years

Response: 25

Number of self-financed Programmes offered by college

Response: 25

Number of new programmes introduced in the college during the last five years

Response: 0

3.2 Student

Number of students year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
462	423	430	625	680

Number of seats earmarked for reserved category as per GOI/State Govt rule year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
497	563	650	646	648

Number of outgoing / final year students year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
110	79	108	130	109

Total number of outgoing / final year students

Response: 122

3.3 Academic

Number of teachers year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
52	81	61	58	79

Number of full time teachers year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
52	81	61	58	79

Number of sanctioned posts year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
52	81	61	58	79

Total experience of full-time teachers

Response: 270

Number of full time teachers worked in the institution during the last 5 years

Response: 195

3.4 Institution

Total number of classrooms and seminar halls

Response: 14

Total Expenditure excluding salary year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
158	178	159	183	154

Number of computers

Response: 269

Unit cost of education including the salary component(INR in Lakhs)

Response: 1.07

Unit cost of education excluding the salary component(INR in Lakhs)

Response: 0.34

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

Academic calendar of college is prepared in accordance with the university academic calendar well in advance before the commencement of the actual term. Subject allotment is made during the university examination period, before the staff members proceed on vacations, with a view that the faculty should get enough time for the preparation of subjects to be taught in the next semester. The subject is allocated to faculty by his/her choice in the departmental meeting. All this procedure is done before the end of university end-semester examinations. The Lab Manuals are prepared by the concerned Lab In-Charge and kept in record for future references. The entire process of curriculum delivery can be summarised in the following the stages.

Stage 1: Preparation:

Course files are prepared by faculty members which includes

- 1. Teaching plan
- 2. Lesson plan
- 3. Laboratory manual
- 4. Preparation of Time table as per curriculum guidelines
- 5. Last year university question paper duly solved by the faculty member concerned

Stage2: Monitoring

Attendance and student performance in Unit Tests is notified. Class-Teachers are appointed for each class who monitor whether the classes are engaged as per schedule, and also record the number of students present during each lecture. Teacher-guardians are appointed for each class for the development of academic performance of students. The head of the institute holds meetings with heads of the department at regular intervals to review the academic progress of each class, and to take corrective actions as necessary. Syllabus-completion review is taken at the end of every month for timely completion of syllabus with effective quality. The monthly status of attendance is conveyed to every student and the defaulter's attendance is posted to the parents. Weak students are identified and personal attention is kept on them. Library remains open on 24 X 7 basis during the examination period.

Stage3: Analysis of Performance

There are two unit tests conducted during each semester for evaluating the performance of students. After the completion of syllabus, a prelim exam is conducted to evaluate the overall performance of the student at the end of the semester. The analysis of student feedback is made for overall performance evaluation of the staff. Analysis of results is done by the Principal, Dean, HODs and corrective measures, if required are taken and conveyed to the faculty concerned.

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 0

1.1.2.1 Number of certificate/diploma programs introduced year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of the certificate/Diploma programs	<u>View Document</u>

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 0

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of participation of teachers in various bodies	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years

Response: 0

1.2.1.1 How many new courses are introduced within the last five years

File Description	Document
Details of the new courses introduced	View Document
Any additional information	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 80

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Response: 4

File Description	Document
Name of the programs in which CBCS is implemented	<u>View Document</u>
Any additional information	View Document

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Addon programs as against the total number of students during the last five years

Response: 27.01

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
135	115	126	165	156

File Description	Document
Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

Gender Related Issues:

The college regularly organizes events on women empowerment. About 30% of the students and 20% of the faculty are women. There is a reservation for girl-students in the Student Council. Final-year project group consists of girls and boys performing projects together groups---i.e., there are no separate groups for boys and girls. There is a committee for the redressal of women grievances in the institution, as per directive of Hon'ble Supreme Court of India. This committee is headed by a female faculty member.

Environment and Sustainability:

Courses like "Environmental Science" and "Environmental Engineering" are included as part of the curriculum of the university, and it is mandatory every graduating student to pass them.

The institution as a part of its social responsibility, and commitment to improving energy efficiency, conserving resources and enhancing environmental quality, conducts activities and participates in educating for sustainability, natural resources management, climate change and creating healthy living and learning environment. Tree Plantation is undertaken by every guest whenever he visits the campus. As a part of inculcating a sense of responsibility and increasing awareness about the environmental issues, the institute enthusiastically participates in various schemes organized by the National Service Scheme of the Dr. B.A.Marathwada University. Under this programme, students of the institute have in the past visited several villages and organized various programs for the villagers. Our students mainly focus on computer literacy of rural peoples, arranging blood donation camps, providing technical solutions on the issues of ensuring potable water as well as safe sewage disposal, for the villagers.

Human Values and Professional Ethics:

These vital topics are by and large covered in core/audit subjects like professional ethics and human values, environmental science, organizational behavior and principles of management, industrial psychology and sociology, total quality management etc. Subjects related to human rights are a part of the curriculum. As a part of NSS the college conducts various programs on Human Rights to provide awareness among students.

Anti-ragging awareness program, Communication Act awareness program, Voters day program, blood donation camps, community service initiatives, etc. are implemented by the institute.

A teacher-guardian is assigned who acts as a mentor for a group of students drawn from each class. The teacher-guardian provides information on education objectives, mission and vision of the department and college to students. They also help students in solving their personal as well as academic problems, provide information to parents about their wards through SMS, telephonic talk and letters. The guardian also retains the personal file of the student and keeps record of all discussion with the parents and teacher guardian meets.

1.3.2 Number of valued added courses imparting transferable and life skills offered during the last five years

Response: 5

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 5

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 22.73

1.3.3.1 Number of students undertaking field projects or internships

Response: 105

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback on curriculum obtained from 1) Students 2) Teachers 3) Employers 4) Alumni 5) Parents For design and review of syllabus semester wise/ year wise

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: C. Any 2 of the above

File Description	Document
Any additional information	<u>View Document</u>

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

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

- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

Response: C. Feedback collected and analysed

File Description	Document
Any additional information	<u>View Document</u>

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.36

2.1.1.1 Number of students from other states and countries year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
5	3	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
List of students (other states and countries)	View Document

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 56.62

2.1.2.1 Number of students admitted year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
644	521	480	680	730

2.1.2.2 Number of sanctioned seats year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1080	1140	1200	1200	900

File Description	Document
Institutional data in prescribed format	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 20.37

2.1.3.1 Number of actual students admitted from the reserved categories year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
170	156	190	69	0

File Description	Document
Any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

In the first year (at the time of entry) students with low qualifying score (in CET, AIEEE/JEE), i.e. slow learners, are given additional inputs in subjects like mathematics, engineering graphics and C programming, so as to bring them at par with the students from urban areas or from boards like CBSE/ICSE having more advanced curriculum. The head of the institution himself interacts with the students during an orientation program, on a personal basis.

The heads of the departments give an orientation lecture to the students at the time of the commencement of the second year, so as to orient them towards that specialization so that they are mentally equipped to face the specific demands of that particular program.

The Institute identifies advanced and slow learners in the following ways:

- From the performance in qualifying examinations (JEE, MHCET, AIEEE etc) for admissions to the program.
- From the enthusiasm shown in their participation in co-curricular events.
- From the sincerity in attending and consistency in performing practical sessions which is evaluated on a continuous basis.
- From the performance in internal and University exams conducted periodically

The Institute organizes special programs for the advanced learners in the following ways:

• The institute encourages advanced learners for undergoing internships in industry. These students are exposed to various intercollegiate technical competitions to sharpen their skills and motivate them to win awards

- Advanced learners are given opportunity to prepare for global certifications or value-added training programs.
- Students are encouraged to visit industries, discuss an industrial problem and work on its solution as part of their final year project. Such industry sponsored projects make them professionally competent.
- Special repository of research and e-learning material is made available to such students to get higher level knowledge of their topic of interest.
- These students are also motivated to pursue higher studies and research

For slow learners, the Institute undertakes the following measures, especially in the first year:

- Remedial courses are conducted to strengthen their skills in the pre-requisite (XI and XII standard) mathematics, physics, etc.
- A set of 3--5 past question-papers are discussed during special coaching sessions before the endsemester examinations. About 50% of the questiones are assigned to student as homework, and these questions are again discussed and explained. Possible variations to the questions and their answers are also discussed during these special repetition session.
- To enhance their test-testing skills especially in limited time, special test-taking sessions are conducted.
- All such practices have produced distinctly good effects on the examination results of the slow learners.

2.2.2 Student - Full time teacher ratio

Response: 7.11

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.2.3 Percentage of differently abled students (Divyangjan) on rolls Response: 0 2.2.3.1 Number of differently abled students on rolls File Description Document Institutional data in prescribed format View Document

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

Response:

The Institute has come to adopt the philosophy of Outcome-Based Education (OBE) at an informal level, and efforts are underway to make it uniformly based on formal processes as well. The entire structure of academic processes is designed and oriented towards student learning. Course objectives and course outcomes are defined for every course and communicated to the students. Teachers take feedback from students on the attainment of expected learning outcomes directly during the delivery of lecture, and indirectly through surveys taken in the semester. Based on this feedback, teachers fine tune their mode of delivery.

Teachers are also encouraged and sponsored to attend training programs to improve their teaching and technological skills, both organized by the institute and by other organizations. The Institute organizes inhouse training programs to enable teachers on how to mentor and guide students.

Final-year project is yet another platform available to students for experimental learning. The Institute supports department faculty to organize project competitions so that students can demonstrate the outcome of their participative and problem solving methods. Well-equipped project laboratories are kept open even after working hours for students to work on their projects. In addition, support is also extended to following activities to make learning student centric:

- ICT/ NPTEL Videos
- Guest Lectures
- Industry Visits
- College Events
- Student Feedback
- HOD feedback
- Multimedia Learning
- Mini project/ Major Project
- Mock Viva
- Training for aptitude, quantitative, etc. tests and interview skills, etc.
- Mock interviews

All the above mentioned support-structures i.e. laboratories and sponsorship help teachers and students in honing skills like experimental-learning, problem-solving and participative-learning. Teachers also use NPTEL videos which are available in the institute for teaching and share these videos with students to promote independent learning.

Departmental level events are organized by each department. For instance, events like 'Expiscor', 'Yantras' etc have been organized by students under the guidance of faculty, where student groups demonstrate their projects. These projects undertaken by students from FE to BE are useful for experimental and participative learning.

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 38.46

2.3.2.1 Number of teachers using ICT

Response: 25	
File Description Document	
List of teachers (using ICT for teaching)	View Document
Any additional information	<u>View Document</u>

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 8.72

2.3.3.1 Number of mentors

Response: 53

File Description	Document
Year wise list of number of students, full time teachers and students to mentor ratio	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

In most of the programs, the curriculum includes a mini project, a seminar and a major (final-year) project.

- The domain experts from department are continuously guiding, suggesting and motivating the students to use current technology in the thrust areas, and incorporate innovation and creativity in materializing their projects.
- All the necessary guidelines and information is provided in log book issued to every group undergoing seminar and project.

Research-attitude is developed among the students as the project development based on research papers or articles is highly encouraged.

For Innovation and creativity in teaching learning college provides to students, use is made of

- NPTEL Videos
- LCD Projector
- Wi-Fi facility
- Mini Project
- Sponsored Projects
- Technical Competitions

For Innovation and creativity in teaching learning college provides to Staff, the following measures have been adapted:

• The Institute has made available every department with LCD projector, Wi-Fi and LAN

connection.

- The Institute encourages the faculty to use proactive teaching methodologies such as NPTEL lecture videos for making the session effective.
- Faculty prepares question bank for the students.
- The Institute deputes the faculty for teaching-learning programmes like TCS, Shares Holding, Mahagenco, ONGC etc.
- Teachers are assigned for STPP for training by the experts from industries, which they in turn use in exposing students to best practices.
- Faculty members are deputed for participating in the FDP, Work-shops and Industrial trainings to update their skills on recent technologies.
- Institute provides access to various National and International Journals, both via own subscriptions as well as through the remote acess facility of the library of the affiliating university.

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
List of the faculty members authenticated by the Head of HEI	View Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 1.56

2.4.2.1 Number of full time teachers with Ph.D. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	1	1	1

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document

2.4.3 Teaching experience of full time teachers in number of years

Response: 4.15

File Description	Document
List of Teachers including their PAN, designation,dept and experience details	View Document

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 0

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 0.98

2.4.5.1 Number of full time teachers from other states year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	0	1	0

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

- Induction programmes are conducted for the First Year students as well as parents, and for the second year students where they are made aware about not only the university and institute evaluation procedures but also about the changes that can be anticipated as about to come.
- Institute also declares in advance the criteria for evaluation of term-work marks which includes attendance, timely submission and performance in Class Tests.
- Class Test / Continuous Internal Assessment (CIA) dates and End Semester examination starting dates are provided in the calendar of academic activities right at the beginning of the semester.
- The students are kept informed of all such activities through the Teacher-guardian, through the Class Committee Meetings and by distributing circulars in the class rooms and displaying the same on Notice Boards.
- The complete evaluation procedure in the form of regulations of various programmes are printed in the academic calendar and distributed to all the students.
- The End-Semester Exam results once declared are displayed, and student performance on them discussed. Feedback through appropriate channels is made to the affiliating university.
- Any change/amendments made in the regulations are conveyed to the students via the HoDs, and the Class Teacher, in the Class.
- The evaluation processes are also explained to the parents during the First-year Orientation program, and later on, through Parent-Teacher meetings.
- The information regarding evaluation process is also informed to different industries through placement cell.

All the evaluation processes and policies are disseminated to staff and students.

- Students are evaluated continuously through class test, mid-term feedback and lab performance based on predefined intimated process and criteria.
- Teachers are evaluated on the basis of mid-term feedback and annual appraisal.

The Institute has introduced a system whereby even for class-tests, two candidate papers are prepared for each test of each course. The selection of the actual paper is done by the head of the institution on a random basis.

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

Definite internal assessment system is one of the important things for the institute. To ensure unbiased, fair and justified assessment of the students,

- Attendance to theory and practical sessions are taken into account during grading term-work
- Class room interaction before the unit tests clearly spells out the difficulty level and the kind of

variety of questions which the student can expect on the tests.

- Answers on the class test are discussed with each student and discussions are held openly in which the teacher must justify the marks given.
- Similarly, marks on assignments, and practical/oral examinations are discussed with the students.
- For students undergoing industry-sponsored projects, feedback is actively taken from their industrial supervisors. The same is shared with the students from time to time.
- For students showing poor performance on internal assessments, their parents are kept communicated via SMS, phone calls, letters, and in-person meetings.

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

Redressal of grievances is permitted by the affiliating University only for the end-semester examinations, and not for the online examination, nor for the evaluation of term work, orals, practicals, project, and seminar examinations.

The mechanisms for redressal of grievances with reference to evaluation is as follows:

Institute level:

- Students are made aware of the assessment methods at the beginning of the semester and also during the semester whenever necessary
- The assessed answer sheets of class tests are given to the students and performance is discussed by the course faculty
- Students having grievances with the internal evaluation process can directly discuss their doubts individually with respective faculty members
- Students can approach the Head of the Department, in case of any grievances
- The head of the institution also remains available to the students for any grievances.

University level:

Paper setting, conduction of examination, evaluation and declaration of results is done by the affiliating university (i.e. Dr. BAMU).

- After the results are declared by the University, students can apply for a photo-copy of their answer sheets, which are provided by the University on payment of fees
- If the student has grievance after receiving photo-copy of answer sheet, then he/she can apply for revaluation by paying revaluation fees.
- Practically speaking, it is very common for students to seek guidance from their subject or class-teachers concerning their performance on the university examinations. In exceptional cases, professors have gone to the extent of providing their personal notings on the student-applications to the university, e.g., when a GATE-qualifying student was found to have failed in a course in the university examination.

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

At the beginning of each academic year, the affiliating university gives guidelines about the dates of:

- Commencement of the semester
- The end-date of the semester
- Schedule of the In-Semester, End-Semester, and Online Examinations
- Schedule of Oral, Practical Examinations
- Vacation schedule

Before the start of the semester the Institute prepares plans for

- Academic calendar
- Student Activities calendar
- Time Table
- Teaching Plans
- Lab Status and Lab-Readiness
- Books Requirements
- Class Teacher appointment
- Evaluation of class test papers

Any incidental changes to the academic calender are conveyed to the students and the staff well in advance. Further, the Institute's academic calender itself is designed with sufficient leeway or buffer to accomodate minor unforeseen changes to be made to the academic calender.

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

The Institute has clearly defined the learning outcomes. These are noted on the academic documents distributed to the faculty and students. Learning outcomes are notified and made available on the website as well as on the departmental notice boards.

All learning outcomes in terms of program outcomes (POs), Program specific outcomes (PSO) and course outcomes (COs) are clearly stated and communicated to students by the college.

- The Program Outcomes (POs) define the abilities of the students of that program expected at the time of graduation.
- Program Specific Outcomes (PSOs) are the statements that describe what the graduates of a specific

- engineering program should be able to do
- Course Outcomes (COs) are the learning outcomes that the students should able to do at the end of each course.

The department-wise list of COs are provided in separate files.

File Description	Document
Any additional information	<u>View Document</u>

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

Institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning.

Institute Evaluation: Vision and Mission of the institute are highly correlated with the Programme Educational Objectives (PEOs) of each department, which in turn are mapped to Program outcomes. Therefore, PO, CO and PSO attainment indicate the alignment of academic activities with the vision and mission of the Institute.

Department Evaluation: POs are also aligned with the PSO that a student is expected to develop on completion of the program. Their attainment or lack of it helps in aligning the activities of the department.

Teachers Evaluation

- All the results are critically analyzed to understand the trend and the response. Based on analysis, remedial / corrective measures are applied time to time.
- Every student is made aware of the progress.
- Feedbacks, teacher interactions and student interactions made aware of his performance.
- Following are the parameters on which teachers evaluate students
 - Class tests
 - Assignments
 - Project Reviews
 - Performance of Practicals
 - Presentation
 - Oral Exams
 - Reports of Industrial Visits
 - Student Seminars

2.6.3 Average pass percentage of Students

Response: 83.64

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

Response: 92

2.6.3.2 Total number of final year students who appeared for the examination

Response: 110

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Database of all currently enrolled students	<u>View Document</u>

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years

Response: 0

3.1.1.1 Total Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
List of project and grant details	View Document

3.1.2 Average number of research projects per teacher funded by government and non government agencies during the last five years

Response: 0

3.1.2.1 Number of research projects funded by government and non-government agencies during the last five years

File Description		Document
	List of research projects and funding details	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The institute has taken many initiatives towards creation of an effective eco-system for enabling and nurturing innovations.

One key strength of HIT is that it is physically located right in the midst of a mature and thriving industrial hub of Aurangabad, viz., the Waluj MIDC Area. Several nationally and internationally renowned

companies have set up their manufacturing and R&D facilities here, including: Bajaj Auto, Endurance Group, Savera Group, Birla Precision, Marathwada Auto Cluster, Badave Group, MAN Diesel, and even the internationally leading fiber-optics communications company: Sterlite. Apart from these, there are a large number of other companies, e.g., OEM manufacturers, which operate in their own niche but high-technology areas. Such companies include: DNR Auto, Sheet Shaper, Laxmi Auto, Sanjeev Auto, etc.

Physically, the R&D and manufacturing facilities of these industries are just a stone's throw away from our campus. Naturally, it has been easy enough to establish a very close rapport with them. As a consequence, many of our students have availed of these industrial R&D and manufacturing facilities for their final year BE projects. Over the years, as many as 50—70% of our final year BE projects in the Mechanical Engineering department have been sponsored by industries—a feat that has not been possible even to very highly ranked NITs and similar colleges. We are proud to mention that there has been at least one student project done at each and every one of the industries mentioned above.

Thus, at HIT, the Industry-Institute Interaction is not just an attractive buzzword to use, but a matter of routine.

As a natural outcome of these projects, applied knowledge and know-how certainly has got generated. However, due to confidentiality clauses, it has not been possible to divulge all the details even in project reports. In all cases, any solution or know-how generated was transferred to the respective sponsoring company. Most of this know-how has been in the form of specific solutions to specific problems, e.g.: increasing the manufacturing output rate of a certain machine, design of a jig/fixture which is better from the maintenance angle, reduction of waste, reduction of set-up time, etc.

Apart from the interaction with the industry, our faculty takes special efforts to spot and recognize the students having an inventive bend of mind, and encourages them. Special cash prizes and awards also are given. As just an example, one of our students, Akshay Shelke (E&TC Department) got a patent for a project titled "Prevention of Electricity Theft." He also was a finalist in a National Level Invention competition. The Institute has supported his endeavors by giving cash rewards and travel grants.

Among other, more usual measures, we also have instituted awards with Certificates of Excellence for the class-toppers, best final year project work, best outgoing students, etc.

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 29

Kesponse. 23

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
4	2	7	10	6

File Description	Document
List of workshops/seminars during the last 5 years	View Document
Any additional information	View Document

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

File Description	Document	
Institutional data in prescribed format	View Document	
Any additional information	<u>View Document</u>	

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: Yes

File Description	Document
List of Awardees and Award details	<u>View Document</u>

3.3.3 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 0.01

3.3.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	1	0

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.3.4 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

Response: 0.01

3.3.4.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2	2	0	0	0

File Description	Document
List books and chapters in edited volumes / books published	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

The institution always motivates students to participate in various social activities. The various activities and social drives help to embed ethical values among the students. Students are engaged in organizing various Blood Donation Camp, Swach Bharat Abhiyan, Gram Swachata Abhiyan in nearby areas of our college. Through this practice students are made to realize social responsibility and get to know conditions of rural areas. They also understand the need of the society so that they can apply their engineering knowledge to solve the society problems.

The institute has consciously sought to play a role in connecting with its community, and has initiated number of activities. The institute greatly appreciates its social responsibility and promotes student engagement, contributing to good citizenship, service orientation and holistic development of students through a large number of youth development activities which are undertaken by NSS. The college has a very active and enthusiastic NSS team that regularly organizes Blood Donation Camp each year in collaboration with Dattaji Bhale Raktpedhi and Aurangabad Government Hospital's blood bank. More than 300 students donated blood and participated in those camps in the last five year. The NSS team has taken part in many Gram Swach Abhiyan and held awareness Programs to discuss social issues.

The institute has a full-fledged NSS program and women's grievance team which coordinates all social and community activities such as,

- Blood Donation Camp
- Tree plantation program.
- Medical Checkup camps.
- Traffic Awareness.
- Birth Day celebration of Shivaji Maharaj, Dr.Babasaheb Ambedkar, Jyotiba Phule and Savitribai Phule.

- Computer Awareness program for school students.
- Letting the college playground to neighboring communities on weekend, conducting flag hoisting on national days.
- Expert lecture on Gender issues.
- Expert seminar by Police officers, Advocates and cyber security officers.
- Expert lectures on Medical issues of women's.

Some of the activities conducted by NSS and Women's grievance team during the last five years are given via the link for additional documentation.

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 0

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5	<u>View Document</u>
years	

3.4.3 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years

Response: 5

3.4.3.1 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	1	1	1

File Description	Document
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 0.67

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	4	4	5	0

File Description	Document
Average percentage of students participating in extension activities with Govt. or NGO etc.	<u>View Document</u>

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 42

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
8	7	6	12	9

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 1

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	0	0

File Description	Document
Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years	View Document

Criterion 4 - 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.

Response:

The institute meets or exceeds the requirements laid down by governing agencies like AICTE, DTE, University, etc. The Institute focuses on providing and developing good infrastructure like modern classrooms, well-equipped laboratories, canteen, transport facility, Wi-Fi facilities, library with reading rooms, playground, power backup, boys & girls hostels, etc.

The Institute Policy is to provide three major types of space

- 1. Space for Teaching-Learning (classrooms)
- 2. Laboratory space
- 3. Administrative and office space, related amenities and circulation space.

.Details are provided in the tables below:

Sr. No.	Particulars	Area Required	Area	Nos.	
		per AICTE, Sq.M.	inper AICTE	Available, Sq.M.	inAvailable
1	Seminar Hall	132X2=264	2	(151+141) =292	2
2	Computer Centre	150X1=150	1	151	1
3	Laboratory	66X28=1848	8/Course	1848	28
4	Lecture Hall	66X12=792	12	803	12
5	Tutorial Room	33X4=132	0.25 XNo.of Class Room	132	4
6	Workshop	200X1=200	1	200	1
7	Additional Workshop	200X2=400	2	400	2
8	Drawing Hall	132X1=132	1	135	1
9	Library And Reading Room	400X1=400	1	405	1

ADMINISTRATIVE AREA (CARPET AREA, in Sq. M.)						
Sr. No.	Particular	Area Required, as	Nos. Required	Area	Nos. Available	
		per AICTE	as per AICTE	Available I1	1	

		In Sq.M.		Sq.M.	
1	PRICIPAL OFFICE	20X1=20	1	30	1
2		20X1=20	1	20	1
3	OFFICE ALL INCLUSIVE	150X1=150	1	150	1
4	DEPARTMENT OFFICE	20X3=60	3	60	3
5	CABIN FOR HOD	10X3=30	3	30	3
6	FACULTY ROOMS	52X5=260	52	260	52
7	CENTRAL STORE	30X1=30	4	30	1
8	MAINTENANCE	10X1=10	1	20	1
9	HOUSE KEEPING	10X1=10	1	20	1
10	PANTRY	10X1=10	1	10	1
11	EXAM CONTROL OFFICE	30X1=30	1	43	1
12	TRAINING AND PLACEMENT OFFICE	50X1=50	1	50	1

TECHNICAL AIDS

AVAILABLE NO	
LCD Projector	3
Lap top	2
Computers	261
Printers	14
Wi- Fi	1
Scanner	2

File Description	Document	
Any additional information	View Document	

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

Response:

Students are provided with the various platforms and opportunities to participate in sports. The sports facilities are adequately provided. Proactive NSS unit is constantly involved organizing the social,

environmental and service related programmes. Seminar halls are also available with modern facilities. Students are also provided with the facilities to support cultural programmes. Adequate audio-visual aids are available in the Institute. Special infrastructure is provided to conduct health and hygiene related programs. Primary first aid and emergency transport are available in the institute. MoU has been signed with a neighbouring multi-superspecialty hospital less than 300 m away. Judo classes are conducted in the evening on the campus in which students can participate.

The table below provides the specifics of some of the programs or activities conducted over the past few years.

camp 18/03/2015-23/03/2015, Akhathwada, Khuladabad Water Facility camp Water Facility Camp: Di 18/03/2016-23/03/2016, At Dong Paithan Water Facility During 15/03/2017-20/03/2017, Khoradi, a'bad Institute playground sports are 4000 Sq.M. Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*)	Sr.	No. Description	Activity Details	Place
Akhathwada, Khuladabad Water Facility camp Water Facility Camp: Di 18/03/2016-23/03/2016, At Dong Paithan Water Facility During 15/03/2017-20/03/2017, Khoradi, a'bad Institute playground sports are 4000 Sq.M. Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) Cultural A. committee looks Activities for cultural activities.	1		-	
Water Facility camp Water Facility Camp: Do 18/03/2016-23/03/2016, At Dong Paithan Water Facility During 15/03/2017-20/03/2017, Khoradi, a' bad 2 Out- Door Cricket Institute playground sports are 4000 Sq.M. Volley ball With following facilities like: Foot ball Cricket ground athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi 3 In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.			camp	
18/03/2016-23/03/2016, At Dong Paithan Water Facility During 15/03/2017-20/03/2017, Khoradi, a'bad Institute playground sports are 4000 Sq.M. Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities A. committee looks for cultural activities.				
Paithan Water Facility During 15/03/2017-20/03/2017, Khoradi, a'bad Institute playground sports are 4000 Sq.M. Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, A. committee looks Activities for cultural activities.			Water Facility camp	3 1
Water Facility During 15/03/2017-20/03/2017, Khoradi, a'bad Dut- Door Cricket Games Volley ball Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Cultural A. committee looks Activities A. committee looks for cultural activities.				18/03/2016-23/03/2016, At Dongaon,
Cultural A. committee looks Activities Khoradi, a'bad Institute playground sports are 4000 Sq.M. Khoradi, a'bad Institute playground sports are 4000 Sq.M. With following facilities like: Cricket ground athletics Long jump facility Football ground Basketball court Kho-kho facility Kabaddi Organization of Annual S Gathering, Cultural A. committee looks Activities Activities Khoradi, a'bad Institute playground sports are 4000 Sq.M. With following facilities like: Cricket ground athletics Long jump facility Football ground Basketball court Court Court Corganization of Annual S Gathering, Cultural A. committee looks Activities Activities				
Out-Games Volley ball Volley ball Volley ball Foot ball Cricket ground Kabbadi Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) Cultural A. committee looks Activities Activities Institute playground sports are 4000 Sq.M. With following facilities like: Cricket ground athletics Long jump facility Football ground Basketball court Cultural A. committee looks Activities Activities Institute playground sports are 4000 Sq.M.			Water Facility	
Games Volley ball Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) Toom(*) Organization of Annual S Gathering, Cultural A. committee looks Activities Activities				
Volley ball With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) Toom(*) Organization of Annual S Gathering, Cultural A. committee looks Activities Activities Activities Activities	2	Out- Doo	r Cricket	1 10 1
With following facilities like: Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities Activities Activities.		Games		4000 Sq.M.
Foot ball Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural I. Mr. & Miss HITECH, activities.			Volley ball	
Cricket ground Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural activities.				With following facilities like:
Kabbadi athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.			Foot ball	
athletics Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural activities.				Cricket ground
Kho-Kho Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural activities.			Kabbadi	
Long jump facility basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				athletics
basketball Court Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.			Kho-Kho	
Football ground Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				Long jump facility
Basketball court Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.			basketball Court	
Kho-kho facility Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				Football ground
Kabaddi In Door Games Table Tennis Table Tennis, Chess, Carom (*) room(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				Basketball court
In Door Games Table Tennis Table Tennis, Chess, Carom (*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				Kho-kho facility
Toom(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				Kabaddi
Toom(*) Organization of Annual S Gathering, Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.	3	In Door Games	Table Tennis	Table Tennis, Chess, Carom (*)
Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.				
Cultural A. committee looks Activities for cultural 1. Mr. & Miss HITECH, activities.	4			
Activities for cultural 1. Mr. & Miss HITECH, activities.		Cultural	A committee looks	
activities.				
		4 100 1005		11. 141. W 141100 1111 12011 ,
2. Lead the Touth,			activities.	2 Lead the Youth
				2. Lead the Touth,

		i.e. competitions, workshops , stag	
		performances. Student participat	
		in cultural activity is college, inter	n5., Fashion,
		College, universit	6. SAREE Day
		level competition.	7., drama
			8. Mimicry
			9. Songs,
			10. Wall magazine
			11. Debate competitions on social and cultural issues
			12. Youth festival participation and
		A 1	13. National level events.
	Public Speaking	Public Addressing system	gCentral Public Addressing system is available in the campus.
5	Communication	nTech rail conducted	dA good communication skill lab is
	Skills Development		
	Skills Development	training for studen for improving thei soft skill.	tdeveloped for students to train them in r1.interviews,
		for improving their	
		for improving their	r1.interviews,
		for improving their soft skill. One day Art of	r1.interviews, 2.group discussion .and 3. Personality development. through system soft ware and teaching aids f A Yoga center is opened for college
	Development	for improving their soft skill. One day Art or living campregularly organize in	r1.interviews, 2.group discussion .and 3. Personality development. through system soft ware and teaching aids of A Yoga center is opened for college pstudents at boy's hostel.
	Development Yoga	for improving their soft skill. One day Art of living campus	2.group discussion .and 3. Personality development. through system soft ware and teaching aids of A Yoga center is opened for college pstudents at boy's hostel.
,	Development Yoga	for improving their soft skill. One day Art of living campregularly organize is campus ad Blood donation camp organized	r1.interviews, 2.group discussion .and 3. Personality development. through system soft ware and teaching aids of A Yoga center is opened for college pstudents at boy's hostel.
,	Yoga Health An	for improving theis soft skill. One day Art of living campregularly organize is campus ad Blood donation	2.group discussion .and 3. Personality development. through system soft ware and teaching aids of A Yoga center is opened for college pstudents at boy's hostel.

			conducted for boys and girls students. & MOU with a hospital is being done.	
9	Fire	Fire Extinguishers	For safety against fire, accidents adequate number of water points, sand buckets and fire extinguisher are	
L			available in the campus	

File Description	Document	
Any additional information	<u>View Document</u>	

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 14

File Description	Document
any additional information	<u>View Document</u>
Number of classrooms and seminar halls with ICT enabled facilities	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 32.78

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
28	77	76	26	63

File Description	Document
Audited utilization statements	View Document
Details of budget allocation, excluding salary during the last five years	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The library functions under the supervision and guidance of the following advisory committee members:

- Dr.Ajit R. Jadhav, Principal, Chairman.
- Mr..A.B. Vidya, Librarian, Secretary
- Prof. K.S.Jadhav, Head (EXTC), Member
- Prof. R.S Khaperde, Head (ME), Member
- Prof. D.K. Mishra , Head (CE), Member
- Prof. G.V Gujar, Head (CSE), Member
- Prof. P.G. Jahao, Head (BSH), Member
- Prof. R. F. Siddiqui, Faculty Representative, Member
- Mr. Pratik Sisode, Student Council, Member
- Mr.B. B. Jadhav, Administrative Officer, Member

Some of the initiatives taken by the Advisory Committee for a better functioning and optimum use of library resources are as follows:

- Requirements of text books, reference books, etc. are gathered from faculty members for their respective subjects in every academic year and it is forwarded to the advisory committee for approval,
- Provisions are made for updating the available and required books,
- Provisions are made for technological upgradation of the library resources
- Preparation of library rules,
- Provisions of infrastructure of library for meeting the students and faculties requirements
- Liasoning with the Library of the affiliating university, especially for accessing international journals through their remote access center.

Salient features of Library:

- Total area of the library (in Sq. Mts.): 405 Sq.m
- Total seating capacity: 150 Students
- e-Journals: Dr BAMU Central Library, MAT, Del-plus
- Del-plus: 1613 volumes
- CDs accompanying books or Software CDs in the library: 1640
- Communication Skill cassettes: 11
- Floppies accompanying books: 60
- Total Volume of Books: 29931

Working hours:

- Monday to Saturday: 10.00 am to 5.00 pm
- Holidays (Except Sundays) : : 10.00 am to 5.00 pm

• Before Exam Day: 8.30 am to 12.00 Midnight or 24 X 7 basis as per student requests

• During Exam Day: 24 X 7 basis

Name of the ILMS software	Nature of automation (fully or partially)	Version
Del-plus	PARTIALLY	2.0
		Del-net

File Description	Document	
Any additional information	<u>View Document</u>	

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

The library has a decent collection of some rare or old books, as illustrated below:

Name of the Book Manuscript	/Name of the Publisher	Name of Author(s)	Number Copies	ofYear o Publishing
Manuscript	i ublisher		Copies	r ublishing
Cyclopedia Of Civ	ilAmerican Technical	Frederic E. Turneature	,1	1908
Engineering	Society	W. G. Bligh, Etc.		
Civil Engineerin Geology	gUnwin Brother Lit London	Cyril S. Fox	1	1926
Civil Engineerin Formulae	gMcgraw Hill	Tyler G. Hicks	1	2002
Base Level Civ Engineering	ilAir Force Institute Of Technology	William A. Gauntt, Et Al.	.1	1977
Design For Welding	Longmans & Co. London	F. Koenigsberger	1	1948
Mechanical Engineering Collection		South Kengsinton	1	1919
Modern Mechanica Engineering	nlGresham Publishing Company Ltd.	A. H. Gibson, Alan E L. Chorlton	.1	1923

Nonlinear OscillationSpringer In Mechanical Engineering	Dr. Ing. Alexander 1 Findlin	2005
A Tyextbook OnOnternational Mechanical And Textbook Company Electrical Engineering	Gordon Sykes 1	1995
	alL. Kruglov 1	1974
Computer Graphics Cornell University And Architecture And Engineering	Donald P. Greenberg 1	1975
Automatic Control Pergamon Press And Computer Engineering	V. V. Solodovnikov 1	1966
	teTheron S. Rose	1985
Afml Scientific And University Of Dayto Engineering Computer Ohio Support	n,Alan R. Miller	1977
Digital Computer And Mcgraw Hill Control Engineering	W. W. Harman, J. G.1 Truxal	1960
Retooling Software Digital Equipme Engineering Corporation	ntChip Nylander 1	1994
Electronics And Radio Mcgraw Hill Engineering	Frederick Emmons1 Terman	1922
Electronics John Wiley & Sons Engineering	C. L. Alley, K. W.1 Atwood	1962
Engineering Cornell Universi Mathematics Ithaca, Tlew York	tyH. D. Block, E.T1 Cranch	1964
Innovative Approaches Utah State universit To Teaching Technical Presslogan, Utah Communication	y,Tracy Bridge fordkarla1 Saari Kitalongrichard Selfe	2004

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books

5. Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc.	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 9.09

4.2.4.1 Annual expenditure for purchase of books and journals year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
1.07	17.7	1.2	9.8	15.7

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Details of remote access to e-resources of the library	View Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 12.14

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 64

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The institute has adequate IT infrastructure to support the staff and students. As per the curricular update and technological advances, institute is deploying the hardware and procuring the necessary software as and when required.

The institute is engaged in deploying a comprehensive and customized ERP system as well as for ensuring infrastructural support for storage virtualization. About half out of 28 modules of the ERP system have already been implemented.

Steps for Updation of IT Facilities Including Wi-Fi:

- Computer systems are upgraded with latest configuration. Individual up gradation of the computers is taken up as per the need and requirements of the various departments.
- Enough provision is made available in the annual budgets for the procurement of the computer systems and related software.
- Once new systems are procured, they replace with the existing systems as per the requirements of the departments.
- All the computer systems in the campus are regularly monitored by the system administrator and maintenance staff.
- The trouble/problems experienced by the computers in the various laboratories are entered by the lab programmers/technicians in the complaint register which is kept in the central office. The maintenance staff then attends to them and try to resolve them.
- In case of major problems i.e. replacement of component/part during warranty they are sent to the respective service centers and got replaced at the earliest.
- All the servers are in AMC with respective service providers and are maintained regularly.
- We are in the process of providing Wi-Fi facility to all students in campus.
- All remaining classrooms will be equipped with projectors and internet connection.
- Development of LAN based software for internal campus communication.

- Institute is developing online feedback system.
- We have recently doubled the Internet bandwidth to 120 mbps.
- We have initiated a drive for adopting Open Source software, right from operating system (Ubuntu-MATE) to advanced simulation software (like the CFD software OpenFOAM)

Year-wise expenditure for IT facilities is given below:

ACAEDAMIC YEAR	TOTAL EXPENDIATURE
2012-2013	Rs. 4,87,350
2013-2014	Rs. 9,25,802
2014-2015	Rs. 3,27,670
2015-2016	Rs. 5,10,116
2016-2017	Rs. 4,67,560

File Description	Document
Any additional information	<u>View Document</u>

4.3.2 Student - Computer ratio

Response: 1.72

File Description	Document
Student - Computer ratio	View Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

<5 MBPS

5-20 MBPS

20-35 MBPS

35-50 MBPS

Response: >=50 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 24.19

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
45.98	38.04	29.60	45.72	41.42

File Description	Document
Audited statements of accounts.	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document

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.

Response:

For maintenance, the head of the section / department which requires maintainence sends a formal request form to the concerned maintenance section. Based on the request, material requisition is sent to Central Stores. After receiving the material, repair/maintenance work is carried out.

Infrastructure and facility	Maintenance Description	
Class Rooms	Class rooms are cleaned daily by in-house staff Cleaning in charge and h	his te
Conference Hall	Class rooms are cleaned daily by in-house staff Cleaning in charge and h	
Reading Hall	Reading hall of the college is maintained	
	By Library-in-charge at regular intervals and is cleaned every day.	
Seminar Halls	Seminar hall of the department is maintained by in house technician at re	egul
Drawing Hall	Drawing hall is maintained by department itself.	
Tutorial Rooms	Tutorial rooms are cleaned the daily by in-house staff. The Cleaning	In C
	take care of it.	
Laboratories	A faculty-in-charge and a laboratory technician looks after the maintena	ınce
Equipment	The lab-in-charge prepares the lab maintenance schedules under the	
	department and gets it done at the beginning of each semester.	
Computers	A team of Technician and a faculty in-charge of computer departm	ient
•	maintenance of systems and software. Faculty in charge get the maintenance	
	done at regular intervals and record in the complaint book.	
Main Library	All the books are accessioned accordingly by the serial number of	acc
	classified subject wise and shelved in the rack according to call numbers	
	year.	
Internet/Intranet and Wi-Fi	Internet & Wi-Fi related matters are maintained by a team of technicia	ans
	department.	
Electricity	Technicians and Attendants look after the maintenance of electricity.	
Water	Sufficient water available to meet the requirements of garden and toile	ets.
	staff & students, Building etc.	
Civil Maintenance	Is done by maintenance cell of civil engineering department as and wher	n re
Security	done by in-house security personals	
Parking	College has adequate parking facility available in college campus.	
Gardening	The gardening and its beautification maintenance is done through main	nten
	engineering department which hires outside person to take care of plants	
Telecom	The college has provided facility for fast communication among the s	
	Maintenance is done through in house staff.	
Girls'/Boys' common room	Separate girl's and boy's common room available in college.	
Canteen	Canteen is located at the far end of the college ground.	
Washrooms	Separate washrooms are available and cleaned every day.	

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 65.15

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
266	297	345	427	336

File Description	Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Upload self attested letter with the list of students sanctioned scholarships	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 9.83

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
84	131	0	0	0

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document

5.1.3 Number of capability enhancement and development schemes –

- 1. For competitive examinations
- 2. Career counselling
- 3. Soft skill development
- 4. Remedial coaching
- 5. Language lab
- 6. Bridge courses
- 7. Yoga and meditation
- 8. Personal Counselling
- A. 7 or more of the above
- B. Any 6 of the above
- C. Any 5 of the above
- D. Any 4 of the above

Response: B. Any 6 of the above

File Description	Document
Details of capability enhancement and development schemes	<u>View Document</u>
Link to Institutional website	View Document

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 10

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
40	67	31	63	56

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling	View Document
during the last five years	

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during

the last five years

Response: 10.43

5.1.5.1 Number of students attending VET year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
35	0	64	135	55

File Description	Document
Details of the students benifitted by VET	<u>View Document</u>

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Details of student grievances including sexual harassment and ragging cases	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 14.92

5.2.1.1 Number of outgoing students placed year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	37	12	5	11

File Description	Document
Details of student placement during the last five years	View Document
Self attested list of students placed	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 2.73

5.2.2.1 Number of outgoing students progressing to higher education

Response: 3

File Description	Document
Details of student progression to higher education	<u>View Document</u>
Any additional information	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: NET/SLET/GATE/ GMAT/CAT, GRE/ TOFEL/ Civil Services/State government examinations)

Response: 0.67

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations) year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	0	0

5.2.3.2 Number of students who have appeared for the exams year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
30	20	30	40	30

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five	View Document
years	

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national / international level (award for a team event should be counted as one) during the last five years.

Response: 0

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The institute has a Student Council which is constituted in accordance with the rules and regulations of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

Formation of Student Council: In the council, every class is represented by one class representative. The class representatives are selected afresh every academic year on the basis of their academic merit in the preceding year. The class representatives together elect the General Secretary and the other student office bearers of the Council.

The Student Council has following members: Principal and one Faculty in-charge, plus students holding the following posts: General Secretary, Cultural Secretary, Sports Secretary, and Ladies' Representative. General Secretary conceives of, monitors and implements various activities in consultation with the other council members as well as the faculty of the Institute.

The main events organized by the Student Council are: (i) Annual Social Gathering, (ii) Sports Competitions, (iii) Special Days Celebrations, (iv) Technical Events, and (v) Social Activities.

The Annual Social Gathering itself comprises of a spectrum of events and competitions, especially those on the cultural side. A large number of students enthusiastically participate in various events such as quizzes and technical competitions, poster competitions, personality contests (i.e. "Mr." and "Ms." HIT), debates and elocution competitions, games, etc. Students also produce music shows and stage their own one-act plays. Prizes for the top performers are distributed at the hands of eminent personalities invited as chief guests. In the academic year 2016—17, two eminent personalities were invited as the Chief Guests: Mr. Pritish Chatterjee, MD, Savera AutoComps Pvt. Ltd., and Mr. Bharat Gangakhedkar, CEO, Marathwada Auto Cluster Pvt. Ltd., a Center of Excellence.

Sports competitions are held during the same week as the Annual Social Gathering. In the academic year 2016—17, competitions were held in the following six categories: cricket, volleyball, kho-kho, kabaddi, and athletics. Competitions were also held for indoor games and sports.

We are committed to encouraging participation of students in the administrative activities of the Institute at appropriate levels because we believe that such measures help inculcate not only provides a platform for the students to voice their concerns and opinions, but more importantly, it also inculcates a sense of responsibility among them. Accordingly, apart from running the Student Council, Student Representatives are also appointed on various bodies of the Institute such as: (i) Anti-Ragging Committee, (ii) Committee for the prevention of harassment of women and the redressal of their problems, and (iii) National Service Scheme. In 1016—17, for instance, students organized a blood-donation camp in which more than 100 bottles were collected, and participated in activities such as the Swachh Bharat Abhiyan. They also assisted the local police in crowd- and traffic-management during the local cultural festivals such as the Ganapati and Navaratri festivals.

In addition, Departmental Student Associations (such as MESA, CESA, etc.) is another major avenue through which students organize and participate in various events such as projects and paper competitions, industrial visits, seminars, organizing guest lectures, etc. These associations also maintain contact with the related professional societies such as IEEE.

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 16.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
11	20	18	19	14

File Description	Document
Number of sports and cultural activities / competitions organised per year	View Document

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 non financial means during the last five years

Response:

The alumni-related activities are mainly looked after by the Training and Placement Officer (TPO). One Alumni Association Coordinator is appointed from each department to assist the TPO in carrying out these activities. The Institute interacts with the alumni on a regular basis. Visits of the alumni to the Institute campus is a regular feature.

Alumni contribute significantly to the development of the institute, especially of the current student body, through various means such as the following:

- Sharing their experiences through Expert Talks.
- Suggestions for betterment of the academic activities, including those for improvement of the university syllabi.
- Help in arranging guest lectures by eminent personalities through their network
- Help in arranging industrial visits, esp. at the places where they are employed
- Help in getting industry-sponsorships for the Final Year Projects

Apart from the above, we are happy to note that our alumni also contribute significantly through direct and indirect means such as what the following examples demonstrate:

- Ms. Priti Bandal & Ms. Rutuja Dabhade, graduates from the department of Electronics & Telecommunications, sponsored for the snacks served on the occasion of EESA Inauguration function during 2012-13.
- Mr. Sanjeev Kutty & Mr. Ajay Deshamukh from the department of Electronics & Telecommunication department sponsored for the refreshments served on the occasion of 15th August 2012.
- Mr. Prashant Desale (mobile: 8983646494) provided special award to the economically weak but hard working student in the annual gathering 2014—15.
- Mr. Umesh Moghal (mobile: 9921917883) and Mr. Vaibhav Khatave, graduates from the Department of Mechanical Engineering, sponsored awards for various competitions during the annual social gathering 2015—16.
- Mr. Vishal Kshirsagar (mobile: 8484090754) and Mr. Sagar Zine (mobile: 997553810) sponsored lunch for the students and faculty on the occasion of the Ganpati Festival during the academic year 2016—17.
- Nitin Dhage (mobile: 9763819193), Yogesh kadam (mobile: 9404876312), and Pranav Nair provided financial support and valuable guidance to the student on the occasion of Annual Social gathering 2016—17.

The above list is only indicative and not complete.

Our alumni network was, until now, being managed in a rather informal manner. One reason is that the social networks in Aurangabad have tended to be rather informal. However, times are changing, and in keeping with them, the Institute has already embarked on implementing a comprehensive ERP system. Concerning the alumni association, efforts are currently underway to systematize all our alumni-related activities by implementing a special module in this ERP system. This module is slated to have not only a comprehensive alumni database but also custom-designed functionality, which will allow us to keep in touch with our alumni in a systematic manner. A record of the follow-up activities and their results also is being implemented. Thus, the ERP system will help us in making our alumni outreach programs comprehensive and effective. We expect to have the first phase of the Alumni-related module of the ERP system deployed right by mid-2018.

5.4.2 Alumni contribution during the last five years

<1 Lakh

1 Lakh - 3 Lakhs

3 Lakhs - 4 Lakhs

4 Lakhs - 5 Lakhs

Response: <1 Lakh

File Description	Document
Alumni association audited statements	<u>View Document</u>

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 2

5.4.3.1 Number of Alumni Association /Chapters meetings held year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	0	0	1	0

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

The Institute is run by the parent trust "Bharatiya Gramin Punarrachana Sanstha" (i.e., Indian Rural Reformation Organization), Aurangabad.

The Institute Vision and Mission Statements are exhibited in prominent places in all the buildings and also on the Web site. Over the years, these statements have come to harmonize different strategies and policies, and have guided the Institute on a path towards excellence. The statements are given below:

The Institute Vision Statement:

"To become a University-class institution by inculcating confidence in students with knowledge of advanced technologies of respective programs, so as to solve the problems of industry and society."

The Institute Mission Statement:

- "To impart industry-oriented education based on practical and theoretical knowledge in the science and technical subjects
- To provide a platform for improving confidence, communication, leadership, and managerial skills
- To provide exposure and practical experience regarding advanced technologies from the respective fields
- To make students competent to serve society, by exposing them to cultural, sports, NSS, etc. activities."

Local Governing Council:

The parent trust has formed a Local Governing Council (LGC). It has for its members distinguished personalities coming from industry, academia, and also representatives from the teaching and non-teaching staff. This LGC formulates the broad quality policy for the Institute, and defines the roles and qualitative expectations being kept from the various constitutent units as well as personnel. The LGC is committed to protecting the rights of, and ensuring equitable treatment to, all the stakeholders: students, parents, potential employers of the students, the institute staff, and the society at large. The Council:

- provides sound strategic guidance to the management
- undertakes effective monitoring of the institute at a broad level
- acts as a bridge between the external and the internal stakeholders
- helps represent the interests of the Institute in front of various governmental agencies, the affiliating university, and academia in general

The responsibilities of the LGC are:

- Reviewing & guiding the Academic Strategy.
- Setting & monitoring achievement of performance.

The top management delivers on its commitment of mobilizing adequate financial resources in a timely manner. Adequate processes are followed on both the budgeting and expenditure sides, and statutory audits are conducted regularly.

At HIT, smooth functioning is achieved by practicing the policy of Management by Objectives (MBO). The Institute has formulated Perspective Plans covering the following objectives:

- To start post-graduate programs
- To start a research and development center, especially involving advanced computational modeling and rural development
- To enahance the Institute-Industry Interaction to the next level, by increasing the number of MoUs
- To endeavor towards getting the status of an autonomous institute.

The individual faculty member is the real owner of the implementation process, under the guidance and monitoring of the respective HoDs and the Principal. Open and informal feedback, not just from the top-to-bottom but also from the bottom-to-top, is a way of life at HIT. Faculty-members are free to air their opinions concerning the current state of academia, and the stakeholders' expectations.

6.1.2 The institution practices decentralization and participative management

Response:

The Principal, HODs, and AO are given adequate levels of autonomy in decision-making.

Academic responsibilities are fairly divided among all the staff members. As many as 42 committees are formed to implement and monitor various curricular, extra-curricular, social, and gender-related issues at a fine-grained level, and also to gather detailed and timely feedback. The depth of planning naturally leads to a clarity regarding what is to be delivered when, and who is responsible for what. This ensures transparency in policy execution.

Various co-curricular and extracurricular activities are conducted through student committees having a lecturer-in-charge. The Principal holds regular meetings with the teaching and nonteaching staff. In these meetings, various issues are taken up for discussion before arriving at a final decision. The Heads of Departments monitor the functioning of the various departments. The Administrative Officer manages the senior clerks, junior clerks, and class III and class IV staff. He co-ordinates the day-to-day aspects of implementation in consultation with the Principal.

The top management is always open for discussion with the teaching and non-teaching staff which, in turn, encourages the involvement of the staff for improvement of effectiveness and efficiency of the institutional processes. There are regular communication channels between the office bearers of the institute and the top management representatives. There is a Local Managing Committee in the College.

The Local Managing Committee (LMC) comprises of:

- The Chairman of the Governing Body or his nominee
- The Secretary of the Governing Body or his nominee
- A representative of management
- Local members representing different areas, as nominated by the top management
- Representative of teaching staff (elected by the staff)
- Representative of non-teaching employees.
- The Principal, serving as the Secretary of Local Management Committee:

The Local Managing Committee functions to ensure improvement and up gradation of existing curricular or co-curricular activities.

Batch-wise mentors have been appointed to guide students.

The responsibilities of staff are discussed, even brainstormed, during the meetings with the faculty-members and non-teaching staff. The ideas so generated are taken up for careful consideration and evaluated, and if found good, specific action-items are formulated from them. These action-items are then taken up on for implementation. Thus, success for a participative management style is ensured by pursuing the policy of Management by Objectives.

Here is a recent decision which is illustrative of our participative management style:

The work-week for the college was changed from six days to five days, so that faculty-members can find a continuous two-days' slot for working on their own development (e.g. PhD research). We decided to follow a five-day work-week even if the university and the other colleges from the city follow only a six-day week, and indeed, some of the university functionaries expressed surprise at the decision. The suggestion for a five-day week had originally come from some of our junior faculty members.

File Description	Document
Any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

In recent years, higher education has been undergoing a sea-change in India. Competitive education environments, increased pressures and expectations from students, parents and governmental agencies, along with decreased governmental support have come to put academic institutions under pressure to formulate and adopt new strategies in order to improve their performance.

As mentioned earlier, the Institute has formulated Perspective Plans covering the following objectives:

- To take the already existing interaction with the Industry to the next level, by signing MoUs with specially tailored objectives.
- To start a research and development center, especially involving advanced computational modeling and rural development
- To start post-graduate programs
- To endeavor towards getting the status of an autonomous institute.

Development of the interaction with industry as a matter of strategy:

One strategic advantage our Institute enjoys is that it is physically located in the middle of a major manufacturing hub of Aurangabad, viz., MIDC Waluj.

By way of deployment of this strategy, we pursue several activities. We arrange guest lectures from industry experts on a regular basis. Resource persons from different sectors and from various industries are identified, and conscious efforts are made to remain in regular touch with them.

Arrangements are made to provide In-Plant training to students, so that they can experience the atmosphere of the industry first-hand, and begin developing a sense of the specific challenges faced by the industry, and come to appreciate the kind of expectations which the industry keeps from young graduate engineers. Students of final year are provided with opportunities to work on live industry projects. This improves their design skills, team-work and work-management skills.

The quantitative and qualitative improvement in student projects and placements have been a direct result of deployment of this strategy. The various aspects of the deployment are well documented.

Establishment of an R&D Cell as a part of strategic development of the Institute:

The most important resource available to any organization is the human resource. Further, in the context of academia, the central activity---viz. teaching-learning process---is not conducted in isolation. Indeed, teaching is like a performing art. One certain way to improve the critical human resource---viz., the individual faculty member---is to involve him in research and development activities. Through R&D activities, a teacher not only comes to acquire the specific technical knowledge of a specific target area. It also broadly improves his conceptual, abstraction and communication skills, which in turn help improve his performance as a teacher. The involvement of students in research activities also helps build informal bonds, and has a spill-over effect in enriching their education. It is with this broad understanding that an R&D Cell has been established at the Institute. We have been able to attract young faculty members with research experience at IIT Kharagpur, IIT Bombay, COEP, and GECA, and involve them in R&D activities.

Thus, our strategies do not just remain on paper; they are being actively deployed.

6.2.2 Organizational structure of the institution including governing body, administrative setup, an
functions of various bodies, service rules, procedures, recruitment, promotional policies as well as
grievance redressal mechanism

Response:

The organizational structure chart is provided as a separate file in the additional information for this question.

The committees formed for the academic year 2017--18 are noted below:

Sr. No.	Name of the Committee	In-Charge	
1	FE Admission (Eligibility, Merit List Verification) and Admissions Regulating Authority (FE)	P. G. Jadhao	
2	SE Admissions (Eligibility, Merit List Verification) and Admissions Regulating Authority (DSE)	K. S. Jadhav	
3	Time-Table and Academic Calender	Yetalkar	
4	AICTE	K. S. Jadhav	
5	UGC Documentation	P. G. Jadhao	
6	BAMU Documentation, General Correspondence. Interviews, and L.I.C. Matters	P. G. Jadhao	
7	DTE Documentation	P. G. Jadhao	
8	Bus Facility	N. P. Patil	
9	Fees Regulating Authority	R. F. Siddiqui	
10	Internet/Wi-Fi Server Implementation, Other S/W and Sanghvi H/W Issues		
11	Web-site Implementation & Emails	Sanghvi	
12	ERP Implementation	G. V. Gujar	
13	Labs: Development, New Purchase, and Maintenance	Principal + Respective HoDs	
14	Maintenance (General), and Civil Works	B. B. Jadhav	
15	Sports	B. N. Kandharkar	
16	Training and Placements, Soft Skills Training, Etc.	Naigaonkar	
17	Alumni Committee	R. S. Khaparde + Naigaonkar	
18	Publicity Committee	B. B. Jadhav + Naigaonkar	
19	Exam. Coordinator: BAMU Exams and All Competitive Exams	G. V. Gujar	
20	Day Celebrations	A. B. Diggikar + Shikhare	
21	Hostel Monitoring and Maintenance (Girls' and Boys'). Hostel Visiting Committee	R. L. Sable	
22	Discipline, Anti-Ragging Committee	R. S. Khaparde	
23	Student Council	D. K. Mishra	
24	Cultural Committee	R. S. Khaparde	
25	Women's Grievances and Empowerment Cell	M. B. Kadu + Shaikh	
26	Academic Monitoring: Proper Conduction of Class Tests, Theory and Practicals of All Depts; Monitoring Defaulters' List; Syllabus Completion Status; Students Feedback; Meeting with Students and Solving Their		

	Problems	
27	Staff Appraisals and Increments	Principal + Respective HoDs
28	Right to Information Act	Principal + B. B. Jadhav
29	Scholarships/Social Welfare Scheme (SC,ST,OBC,EBC,Minority, Etc.)	esB. B. Jadhav
30	Fees Collection	B. B. Jadhav
31	Practical Exams and Term-Work	A. B. Diggikar
32	NSS	N. P. Patil
33	Library Purchase and Verification of e-Journals Usage	A. B. Vaidya
34	Library Audit	Yetalkar
35	Brochures and Printing	G. V. Gujar + Naigonkar
36	NAAC Accreditation	Principal
37	Industry-Institute Interaction Cell	R. S. Khaparde
38	Research and Development	G. V. Gujar + Yetalkar
39	Store Audit	Principal + B. B. Jadhav
40	Projects Coordination	Respective HoDs
41	Class Teachers/Coordinators	Respective HoDs
42	Online Examinations of External Agencies	D. K. Mishra + Muli
43	SC/ST	R. S. Khaperde
44	Grievence Redressal	Principal
45	Internal Complaints	M. B. Kadu

File Description	Document
Any additional information	<u>View Document</u>

6.2.3 Implementation of e-governance in areas of operation: 1.Planning and Development 2. Administration 3. Finance and Accounts 4. Student Admission and Support 5.Examination A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: C. Any 3 of the above

File Description	Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document
Any additional information	View Document
Screen shots of user interfaces	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The work of the aforementioned committees proceeds in both informal and formal ways.

Meetings are regularly held and their minutes are recorded.

By way of an example, a brief description of the Grievance Redressal is provided below:

The Structure of the Committee:

The structure of the Grievance Redressal-related matters is the following:

Sr. No.	Committee	Designation
1	GRM- Grievances Redressal Committee	Members as per AICTE guidelines
2	GRM- Anti Ragging Committee	Members as per AICTE/UGC guideline
3	GRM- Internal Complaints Committee	Members as per Government guideline
4	GRM- SC/ST Committee	Members as per general guidelines
5	Member Secretary	Sr. faculty member

Procedure for Redressal of Grievances (ROG) is as under:

- (a) An aggrieved student who has the Grievance or Grievances shall make an application first to the Programme Coordinator with a copy to the IT Registrar. The Programme Coordinator, after verifying the facts will try to redress the grievance within a week of the receipt of application of the student. If the student is not satisfied with the verdict or solution of the Programme Coordinator, then the same should be placed before the HOD for redressal.
- (b) If the student is not satisfied with the redressal offered by the HOD and feel that his/her Grievance is not redressed, he/she can submit an appeal to the Students Grievance Redressal Committee with the relevant details, with a copy to the Dean (Student Affairs) and Registrar through the Programme Coordinator of his department.
- (c) The Student Grievance Redressal Committee would consider the appeal of the student and make appropriate recommendations to the Principal, possibly through the Anti-Ragging Committee Coordinator, within a reasonable time, preferably within 15 days. On approval by the Principal the final decision would be communicated to the student through the Registrar of the Institute.

- (d) The Student Grievance Redressal Committee, if needed, may recommend to the Principal, necessary corrective action as it may deem fit, to ensure avoidance of recurrence of similar grievance.
- (e) While dealing with the complaint, the committee at all levels would observe law of natural justice and hear the complainant and concerned officials.
- (f) While passing an order on any Grievance at any level, the relevant provisions of all statutory regulations would be kept in mind and no such order would be passed in Contradiction of the same.
- (g) The decision of Principal shall be final and binding on all students grievances related matters.

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The institute has a positive approach for the welfare of the teaching and non-teaching staff.

1. Study leave for pursuing higher studies.

Example: Institute had approved the lean leave of Mr. Ashish Anirudh Rokade, staff of the F.E. Department for higher Ph D work in chemistry from Pukyong National University (PNU), South Korea, on behalf of Hi-tech institute of technology Aurangabad, and also of Mr. Sushil Nanderkar, a staff-member of the I.T. Dept., for pursuing his master's degree M.S (CS) from Canada.

- 2. The Institute gives uniforms to peons & non-teaching staff.
- 3. The Institute provides free transportation facility to all the teaching and non-teaching staff who wish to avail of it.
- 4. Facilities of salary advance and zero interest loans are made available to all the teaching and non-teaching staff members.
- 5. Provision for provident fund.

The Institute provides PF facility to all institute members after completions of their probation period.

File Description	Document	
Any additional information	<u>View Document</u>	

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 1.23

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	1	0	1	1

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 0.8

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	1	1	1	1

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programmes viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programme during the last five years

Response: 1.9

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	2	1	2	0

File Description	Document
Any additional information	<u>View Document</u>
Details of teachers attending professional development programs during the last five years	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

Performance Appraisal System is implemented as per the guidelines from the UGC. The appraisal report of the faculty is submitted to the Principal through the respective heads of the departments.

The procedure adopted for performance appraisal is as follows:

Review of Performance Appraisals:

Performance Appraisals are conducted at the end of every semester. The Performance Appraisal reports are initially submitted to the Academic Monitoring committee which is also the review committee.

The performance appraisals are discussed with the Principal by the respective HoDs. For the poorly performing staff, possible corrective actions are discussed, and the findings shared with the staff member.

Outcome: The outcome of the performance appraisal is that each faculty/staff becomes aware their strengths, weaknesses, opportunities for growth and challenges. This in turn acts as a motivation for improvement, The remarks obtained in the performance appraisal report contribute to the decision about faculty appreciation, increments, etc.

File Description	Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Institute carries out internal and external audit on a yearly basis. Thus, for example, the last external audit was performed in March 2017, by the Gaikwad Shah & Co., Chartered Accountants. After the audit, a report is sent to the top management for review.

Since proper processes are followed at the Institute, major objections have not been reported so far. For minor observations made by the auditors or for incorporating their suggestions for improvement in the processes, meetings are held in the presence of the principal and all departmental HODs and the administrative officer.

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III)

Response: 0

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year wise during the last five years (INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from non-	View Document
government bodies during the last five years	

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The financial resources to run the institutional come in the main from the student fees. Other minor avenues are the revenue generated from various online/offline exams conducted at the institute and consultancy.

Every year, each department has to prepare their requirements which are forwarded to the Principal. The Principal along with the departmental heads finalize the requirement, consolidate them in the form of a budget and submit it to the Executive Council Committee for approval. The Executive Council Committee modifies the budget as necessary and approves it. Accordingly, the Institute plans for the expenses.

Major utilization of financial resources is as follows:

- 1. Towards salary of staff
- 2. Civil infrastructural maintenance and upgradation
- 3. Purchasing of books, laboratory equipment, furniture and teaching aids etc.
- 4. Tax, insurance payments, and loan disbursement.
- 5. Bill payments and others

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

Response:

This is the first time that we are going in for any accreditation, whether ISO, NAAC or NBA. As such, we have not so far constituted an Internal Quality Assurance Cell.

The measures for ensuring quality thus are rather tightly integrated with the other procedures followed in the functioning of the Institute. The measures have not yet been organized into a separate cell, with the specific charge of sustaining and improving the levels of quality being given them.

However, once our Institute gets accreditated, we plan to immediately establish an IQA Cell.

The staff-members have been made aware of the broad nature, purpose, and methods of functioning of such a cell.

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The staff-members have been made aware of the broad nature, purpose, and methods of functioning of such a cell. The documentation available at the NAAC site has been circulated to the staff members, and its points discussed.

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

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The staff-members have been made aware of the broad nature, purpose, and methods of functioning of such a cell. The documentation available at the NAAC site has been circulated to the staff members, and its points discussed.

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 0

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
0	0	0	0	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document

6.5.4 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- 4.ISO Certification
- 5.NBA or any other quality audit
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: E. None of the above

File Description	Document
Details of Quality assurance initiatives of the	View Document
institution	

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)

Response:

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Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 16

7.1.1.1 Number of gender equity promotion programs organized by the institution year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
2	4	1	3	6

File Description	Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2

- 1. Institution shows gender sensitivity in providing facilities such as:
 - 1. Safety and Security
 - 2. Counselling
 - 3. Common Room

Response:

Institute is committed to women empowerment since inception of the institute. Institute arranging the different programs to promote towards women empowerment and encourage their contribution for the development of the nation. Institute established girls hostel in the year of 2001 i.e. starting from the first year of first batch of the institute. This facility is exclusively for girls convenience to abode at Aurangabad to get technical education in friendly circumstances. Institute appointed warden & securities in hostel for their safety and security. There are no such issues reported to the authorities regarding women's security in hostel and college.

Institute arranges Health Checkup programs at a regular interval of time during the academic session. We have provided a vending machine for girl's students & Ladies faculty members so that they can maintain their hygiene. These types of machine are installed at institute as well as in hostel also. Vending machines are fully updated by technologies & napkins.

Institute appointed a committee under the head of senior ladies faculty member which ensures the safety and dignity of the female faculty members and girl's students. To live them in comfort zone, institute has

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arranged programs by Police Administration. Girl class representative is appointed to communicate any issues concerning girls to the Committee & the institute. For Academic Year 2017-18, a lady senior faculty member i.e. Mrs. Madhuri B. Kadu has been serving as in charge of Internal Complaint Committee and Sexual Harassment at workplace committee. Institute nominates one student from First Year Engineering Department in the committee.

Women Grievance Redressal Cell is not just a complaint center for the member of the campus community who has been sexually harassed, but also an educational resources for all students and staff members of the Institute. It is headed by Senior lady faculty members. The cell disseminates information of sexual harassment and violence at the work place through the distribution of printed materials, posters and handouts as well as arranging the meetings. The cell conducts effective programs about sexual harassment for faculty, non teaching staff and students. The aim is to develop nonthreatening and nonintimidating atmosphere of mutual learning.

To facilitate our girls students, the institute has arranged a capacious and comfortable common room. This facility is utilized by girls to relax, study, have informal discussions in free time available. The common room is fully equipped with first aid facility and separate cots. Suggestion and complaint box is arranged at ladies hostel and girls common room. Also other medical facilities are available there as per the suggestion of gynecologist for their convenience.

7.1.3 Alternate Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 0

- 7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)
- 7.1.3.2 Total annual power requirement (in KWH)

Response: 47.6

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 0.09

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 0.008

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 8.523	
File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

In India, waste generated is varying from 0.2 to 0.6 kg per capita per day. Garbage thrown on the street creates health hazard, dumping in river results into contamination of water and burning of waste creates air pollution and hence, solid waste is a big issue to be resolved.

As an educational institute, we have zero tolerance about garbage, and continuously following the advance ways and creative ideas to solve the garbage problem. Institute does not produce much of hazardous waste till date. Every day the institute campus and surrounding is cleaned by regular appointed peons. They segregate out the waste and dispose accordingly. Most of the solid waste collected in separate container like paper, dust, other stationary materials, etc.. This solid waste materials is deposited towards the garbage collecting vehicle of competent authority. Also the biodegradable wastes like remaining food items, leaves, etc. are collected in separate labeled containers and the same is used to produce compost for improving the soil quality as well as , nutritional component for proper growth of plants in the institute area. In case of waste generated by human, the institute has taken the proper care for disposal as per the guidelines of competent sanitary authority. The wastewater generated from canteen area, lab and institutional premises was properly disposed after meeting the discharge standards. The e-waste which is of no use is broken to pieces like copper, aluminium, iron, etc., which are sold to scrap vendors.

Institute has provided 1 dust bin per floor, i.e. 12 dust bins in various buildings only, plus more than 4 larger dustbins are placed in the ground, canteen and other area for the collection of various waste. For the compost manufacturing, institute has reserved a 1000 sq ft area near the canteen, so that solid waste can be managed properly. Management of liquid waste focuses on finding a way to dispose of the waste in a way that is safe for humans and the environment. Institute managed to collect all the liquid waste all together in the chamber and then pass it towards the dam nominated by the competent authority of the area for further processing. Institute often conduct cleanliness drive in the campus premises with active participation from students and faculty members.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

The campus of Hi-Tech institute of Technology is located at the center of industrial area, so the quality and quantity of water is important, considering limited rainfall scenario in Aurangabad zone. As an academic institution, we strongly believe that no water wastage can be done and harvesting the power of every drop of this precious commodity. Institute building has rain water harvesting system. Use of rainwater harvesting and storage facilitates to fulfill the water demand for gardening and trees inside the campus.

Average annual rainfall in Aurangabad district is about 710 mm. Hi-Tech Institute of Technology has area about 5 acres and has taken up steps towards rain harvesting for water conservation and minimize their dependence on the civic water supply. The rainwater collected on the terrace is channelized to the sedimentation pit. Rain water precipitating on the rooftop of the buildings are collected and supplied into the lawn for percolation and allowed for groundwater recharge. The slope of lawn and ground are managed in such a way that after percolation, remaining water is collected in the chamber and released into the nearby dam declared by the competent authority. We are following this system deliberately as nearby localities benefited to get groundwater in summer through bore well.

7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

Response:

A green campus of HIT demonstrates its commitment towards ecological sustainability through its academic programs, its research, its campus life, and its physical operation as well as practices. It also conducts seminars and workshops related to "go green" initiative to enhance the knowledge of students, faculties and other workforce those who are working under the management tree.

Creating pollution free campus, institute encourages use of bicycles and public transport facilities. Parking is an essential component of the transportation system. Parking facility is provided at the entrance of institute for the convenience of students and visitors. Also, separate parking facility is available for two-wheeler & four wheeler cars.

As the institute is located in the MIDC area and far away from the city, so that institute has made agreement with the public transport to receive & drop the student & staff. Institute also encourages the students and staffs to avail the facility of public transport, which indirectly affects on Pollution, Fuel consumption & risk of life.

The roadways available in the institute are the important from connectivity point of view. They are well planned and designed to accommodate all modes of transportation. Some of these roads are made from the RCC interlocking tiles so as in the summer they didn't get hotter. Rest of the roads is made from the RCC

cement.

Bye-bye plastic: Plastic Free Institute is a program that aims to measurably reduce plastic waste generation from institute campus, with a special focus on the reduction and ultimately the elimination of plastic bottles, bags, plastic straws and utensils, and plastic food packaging. For office & faculty, institute use the stainless steel travel mug for supplying drinking water. For students, glasses are attached with the water cooler. Additionally, a large bin is placed in every department to collect the plastic garbage. Faculty members also use of complete abandon of paper in class room teaching and prefer delivering lectures through presentations. At a regular interval of time, garbage is handed over to sanitary office for further processing.

Institute strongly takes initiative to the culture of paperless activity. To support such activities, institute uses the ERP system to create a paperless work in office. Technical work, official notices and tendering practices have been provided through emails and online system. Institute provides institute webmail to faculty members to promote paperless activities and faster.

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.25

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year wise during the last five years(INR in Lakhs)

2016-17	2015-16	2014-15	2013-14	2012-13
1.25	0.13	0.06	0.56	0.054

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

7.1.9 Differently abled (Divyangian) Friendliness Resources available in the institution:

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities
- 5. Rest Rooms
- 6. Scribes for examination
- 7. Special skill development for differently abled students

8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: C. At least 4 of the above

File Description	Document
Any additional information	<u>View Document</u>
Resources available in the institution for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 35

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
1	7	7	20	0

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 5

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year wise during the last five years

2016-17	2015-16	2014-15	2013-14	2012-13
3	0	1	1	0

File Description	Document
Details of initiatives taken to engage with local community during the last five years	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
URL to Handbook on code of conduct for students and teachers, manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website Response: Yes File Description Document

View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about

national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

Provide URL of website that displays core values

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: No

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 16

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Every year, the Institute organizes activities relating to national festivals, birth/death anniversaries of great Indian personalities, in respect of the following:

- Republic Day
- Independence Day
- Boodha Poornima
- Gurunanak Birth anniversary
- Eid a Milad, the birth anniversary of prophet Muhammad Paigamber
- Mahavir birth anniversary
- Chatrapati Shivaji Maharaj birth anniversary
- Dr. Babasaheb Ambedkar birth anniversary
- Mahatma Gandhi birth anniversary
- Mahatma Gandhi death anniversary
- Sir Vishweshwaraiya birth anniversary
- Mahatma Jyotiba Phule birth anniversary
- C. V. Raman birth anniversary
- Savitribai Phule birth anniversary
- Sardar Vallabhbhai Patel birth anniversary

- Swami Vivekanand birth anniversary
- Dr. A. P. J. Abdul Kalam birth anniversary
- Veermata Jijabai birth anniversary
- Lokmanya Tilak birth anniversary
- Dr. Sarvepalli Radhakrishnan birth anniversary.

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Yes. Institute maintain complete transparency in its financial, academic, administrative and auxiliary functions. The details are as follows-

In Administration:

- 1. To promote human values and ethics amongst each and every individual, (who is directly or indirectly part of HIT), the institute has developed Code of conduct and Ethics for:
 - 1. The Students
 - 2. The Staff
 - 3. The Governing Body.
- 2. Cells like the Women Empowerment Cell, Anti-Ragging Committee are an integral part of the daily management and administration.
- 3. A Feedback system for students including but not limited to Suggestion Box is maintained.

The Administration department takes efforts to maintain these practices all the time. A periodic review is discussed in Principal & HOD Meeting, weekly. This helps to ensure that Integrity and ethics are established in institutional policies, practices, and procedures.

In Academics:

Policies regarding matters such as attendence, performance standards, and evaluation are made clear in advance. For class-tests, two sets of candidate question papers are designed, and one of them selected at random. For the class-tests, the students are shown their answer-books and their marks discussed. They are given regular feedback as to the standards expected for their practical work, journals, assignments, etc. The feedback from the industrial supervisors for in-plant training or sponsored projects is shared with the students.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice 1:

Title:

Industry-Institute Interaction

Objectives:

- 1. To make students aware of the contemporary work culture in organizations, through direct first-hand experience or interactions with industry personnel.
- 2. To help students acquire in-depth knowledge of industrial technologies
- 3. To develop an eco-system whereby high-cost equipment and other resources affordable only to industries becomes accessible by our students and staff

Context:

With the advent of globalization and opening up of the Indian economy, competition faced by Indian industries has become stiff. For having their problems solved, they look for locally available but well-trained engineering graduates. Similarly, local students need to be exposed to newer technologies, workplace practices and expectations.

The Practice:

- Organizing guest lectures and workshops with joint participation
- Hiring faculty-members with prior industrial experience
- Targeted efforts for industry-sponsored final-year projects and in-plant training
- MoUs to bring the two sides operationally and strategically closer

Evidence of Success

- More than 50% of final-year projects in the Mechanical department are now industry-sponsored, a percentage higher than other colleges.
- Students have begun filing for patents.
- A great many students doing sponsored projects also get placed in the same company.

Problems Encountered and Resources Required:

- The academic time-table and calendar for each individual student had to be adjusted so as to match the availability of his industrial supervisor.
- A substantial gap exists between the professional work culture and the typical habits of students. The solution was to increase the involvement of the industry-experienced faculty members.

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Title:

Development of Students from Weaker Sections

Objectives:

To take students from weaker background, and to turn them into engineers fit for the modern, globalized industry.

Context:

A large number of our students come from rural areas, and economically and socially backward family backgrounds. They are weak in both English and mathematics. They cannot express themselves well---in any language. The direct second-year students are admitted late into the course, and have inadequate preparation in mathematics.

The Practice:

- Our faculty members often come from a rural background, and take special efforts to bond with students. Essentially, our faculty-members act as confidence-builders.
- We have a culture of informal discussions in faculty meetings on simple and creative ways to meet challenges like the above. Both the problems as well as tips get exchanged freely.
- Remedial courses, repetition lectures, lectures in English complemented by explanations in Marathi, etc. are a routine practice here.
- Faculty members take special efforts to help students write assignments and technical reports in English.

Evidence of Success:

- Every year we see raw rural youth get turned into engineers good enough to find placements in reputed industries, even MNCs.
- Some students were only average till XII standard, but slowly turn into high-achievers, securing high marks in the university examinations. Others have filed for patents.

Problems Encountered and Resources Required:

- Practically speaking, adequate time is not always available for conducting these activities. We overcome it by giving enough flexibility in the time-tables to our faculty members.
- Not all students respond well to our efforts.

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Our institute vision is: "To become a University-class institution by inculcating confidence in students with knowledge of advanced technologies of respective programs, so as to solve the problems of industry and

society."

The location of Hi-tech Institute is in the heart of an industrial area, and away from the heart of the Aurangabad city. We enjoy certain unique advantages, arising out of our location. Our campus is physically situated right in the middle of a thriving industrial hub, viz., the Waluj MIDC Area. The manufacturing and R&D facilities of many nationally and internationally renowned names are a stone's throw away from the Institute campus. Further, the members of our parent trust come from both kinds of backgrounds: industrialists and academicians. A very close interaction of the institute with the industry was, therefore, an easy possibility, and we have managed to exploit this opportunity to the hilt.

We can easily manage fast and effective communications with various industries because they are so nearby. As a result, our Institute has managed to arrange for more than 70 industrial expert talks in the last 5 years.

Our Mechanical Engineering Department has created a record of consistently having more than half of their final-year student projects sponsored by industries---a feat not achieved even by the top-ranking colleges in the state. Other departments too are following the suit and remain engaged in increasing their interaction with industry.

Guidance from the top echelons of industrial experts and managers is actively sought, and attempts are made to incorporate their suggestions into the syllabi-revision process at the University.

We now intend to take the same approach in building closer interactions also with research-based institutes like IITs and governmental organizations (e.g. DRDO, WALMI, etc.)

Our parent trust has performed a great deal of work for water conservation, especially under the State government's "Jalyukta Shivar" (agricultural fields replete with water) scheme. We plan to obtain research funding for advanced computational hardware (e.g. cluster computers) so as to optimally select the locations of check-dams through simulations of groundwater seepage. The same hardware would also be put to use, in the Mechanical department, for CFD simulations involving metal casting and plastic injection moulding. Our recent faculty recruitments reflect this strategy.

5. CONCLUSION

Additional Information:

All in all, over the course of last 1.5 decades, HIT has produced thousands of engineering graduates who have gone on to make their mark felt in diverse spheres: in industry, entrepreneurship, business, higher-education, research, government, and social sectors. Indeed, when it comes to engineering education in the Marathwada region, HIT can proudly say that a large number of professors and even principals in the other engineering colleges from this region have once been associate with it.

With growth also come challenges. The environment in which a private engineering college operates is not at all static but a very dynamic one, requiring coordination with multiple stakeholders and government agencies like AICTE, university and DTE. The ride is not always smooth, but HIT has well-managed to align itself with the demands of the changing times. For instance, recognizing the global downturn in the IT sector at the right time, it chose to close its BE (IT) and BE (E&TC) programs.

Another difficulty faced by all private engineering colleges has been: the general declining trends in the number of admissions in recent years. HIT, too, has had its share of this serious difficulty.

However, despite the dynamics of any adverse changes in its environment, the parent trust (BGPS) as well as the top management have astutely steered HIT out of all such difficult patches, and kept it on to a path of success.

Concluding Remarks:

HIT enjoys certain unique advantages, for instance, our physical location. Being situated right in the middle of a thriving industrial hub, viz., the Waluj MIDC Area, a very close interaction with the industry was an easy possibility. HIT has managed to exploit this opportunity, and will continue to do so also in future.

Today, HIT is busy in pursuing a plan of modernization and upgradation of the quality of education. Young faculty members trained at IIT Kharagpur, IIT Bombay, COEP, and GECA have joined over the last year. Collaborations with IIT Professors are being forged. A cloud-based ERP system is being implemented.

Of course, we are also realistic when it comes to keeping hopes, anticipations or aspirations. All our front-line efforts would sure yield a fruit, but they would do so rather over a long run, and not necessarily immediately. Yet, there also is this intervening uncertainty regarding the declining number of student enrollments, and the direct impact it has on the financial and operational aspects of the Institute.

However, the management of HIT remains committed to overcoming these current challenges just as it has in the past, and emerge a winner. Their commitment to the Institute is evident from the fact that despite the falling student enrollments for several years by now, the Institute has remained steadfast on all its upgradation and modernization programs.

The present NAAC accreditation-related effort is just a part of this overall vision and strategy—and its daily pursuit by the management and the staff alike.