



Shram Sadhana Bombay Trust's
COLLEGE OF ENGINEERING & TECHNOLOGY,
BAMBHORI, POST BOX NO. 94, JALGAON- 425001. (M.S.)
Included Under Section 2(f) & 12(B) of the UGC Act, 1956
ISO 9001:2008 Certified

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Self Study Report (SSR)



Submitted to
**National Assessment and Accreditation
Council, Bangalore- 560072**

October 2015



Administrative Building



Top View



Hi-Tech Gym & Yoga Hall



Basket Ball Court



Girls Hostel



Professor Quarter



AC Seminar Hall

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Preface

Located in the north –east region of Maharashtra State (21.1⁰N, 75⁰E), the city of Jalgaon has a rich cultural legacy going back to the era of Mahabharata. It is believed Saint Ved Vyas belonged to this region. Hence it is considered to be the land of saints and sagas. Modern Jalgaon city is emerging up as an educational hub in the region with eight engineering colleges catering to the population of around five lakhs. The industrial revolution is in nascent stage in the region.

SSBT's College of Engineering and Technology is established in 1983 by Her Eminence Smt Pratibha Patil, with a prime vision of societal service with the input of technology. Presently the institute is headed by Dr D R Shekhawat, an eminent educationalist. It is imparting quality education to the engineering aspirants of the region and contributing to societal development. It has successfully undergone NBA accreditation thrice. The college is affiliated to North Maharashtra University Jalgaon, A-Grade NAAC accredited. The university was established in 1991 and enjoys the prestigious status of being ranked as 27th in the country, and 1st in the Maharashtra State, the survey conducted by Career360 Magazine.

In the present scenario of higher education, quality assurance has become inevitable for sustenance. Keeping in mind the core values, we have tried to upgrade and sustain the quality of the institution in best possible manner. Quality promotion and sustenance initiatives require regular self assessment and periodical evaluation by an authentic body like National Assessment and Accreditation Council (NAAC). Quality assessment by NAAC is essential requisite because it has a proper yardstick to judge the strength, weaknesses and area of improvement.

The institute believes in Shram and Sadhana i.e. Karmayoga and I am sure that SSBT's College of Engineering and Technology will certainly reach greater heights in the field of technical education in the years to come.

The institute is well set for the FIRST Cycle Accreditation by NAAC. In view of this, it is our pleasure to submit our Self Study Report (SSR) to the NAAC, Bangalore.

The very fact that the SSR of this quality has been brought out with the concerted efforts of faculty and staff, itself speaks volumes of their involvement, commitment and an ambition to excel in whatever they do.

I take this opportunity to congratulate and thank the management and the members of Steering Committee for sharing the responsibility of drafting the SSR.

PRINCIPAL

Executive Summary

Shram Sadhana Bombay Trust is established in the year 1972, under the guidance of founder chairperson, Smt. Pratibha Devisingh Patil, the former President of India. The trust has a vision to impart education in sectors like engineering, technology and management.

Under the aegis of Shram Sadhana Bombay Trust, the College of Engineering and Technology, Bambhori, Jalgaon was started in 1983 to cater the needs of this region. Initially three programmes viz. Civil Engineering (Construction), Electronics Engineering and Production Engineering with total intake of 180 was introduced. In span of thirty years the institute has grown in size and stature. At present the institute offers following courses:

Under graduate courses (Bachelor of Engineering)

- Biotechnology (30)
- Chemical Engineering (30)
- Civil Engineering (120)
- Computer Engineering (120)
- Electrical Engineering (60)
- Electronics & Telecommunication Engineering (120)
- Information Technology (60)
- Mechanical Engineering (120)

Post graduate courses (Master of Engineering)

- Civil Engineering (Environmental Engineering - 18)
- Computer Science & Engineering (18)
- Electrical Engineering (Electrical Power System - 18)
- Electronics & Telecommunication Engineering (Digital Electronics-18)
- Mechanical Engineering (Machine Design - 18)
- MBA (Marketing, Finance, OMM, System & I.T. and Human Resource Development-60)

Doctoral Programme (Doctor of Philosophy)

- Biotechnology Engineering
- Chemical Engineering
- Civil Engineering

- Electronics & Telecommunication Engineering
- Mechanical Engineering

The institute is approved by AICTE, New Delhi, and three times its programmes are accredited by NBA, New Delhi. It is included under section 2(f) and 12(B) of UGC act 1956 and permanently affiliated to North Maharashtra University, Jalgaon. The quality policy of the institute conforms to ISO 9001:2008.

The college is spread over 25 acres of lush green campus, located on the bank of meandering river Girna. The campus has state of the art infrastructural facilities. Some of the important infrastructural facilities are administrative block, main building, boys and girls hostels, staff quarters, sports complex, gymnasium, open air theatre, cafeteria, bank, ATM, Wi-Fi campus etc.

The institute has qualified, experienced and dedicated faculty members. Among the faculty members 21 are with Ph. D. and 35 are pursuing the same. Around 3000 students are enrolled in various courses offered by the institute, of which nearly 1000 are girls and nearly 900 students are residing in hostels.

The institute provides conducive environment for preparing competent, value added and patriotic engineers. The academic activities of the institute are well planned with co-curricular and extra-curricular activities to empower the students and staff. The academic is augmented with air cooled library having more than 59,000 books, 110 national and international journals, e-journals, e-books, NPTEL videos etc. To promote research attitude among the students and staff the institute provides fund for innovative projects through Innovation and Entrepreneurship Development Centre (IEDC) and Shram Sadhana Research Promotion Scheme (SSRPS).

For the holistic development of the students, the institute organizes numerous co-curricular activities like workshops, guest lectures, conferences etc. and extra-curricular activities like cultural programmes, FEAST etc. The institute also has very good sports facilities, hi-tech gym and yoga hall to keep students physically and mentally fit.

The institute has training and placement cell to ensure honing skills and abilities of the students in today's rapidly changing technology.

Student counseling through Teacher- Guardian Scheme makes the teaching-learning process more effective. Each guardian faculty member takes personal care of students for their overall development. Further, the institute has Shram Sadhana

Scholarship Scheme for needy students.

Thus, Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori, Jalgaon is committed to carry the flame of quality education, knowledge and progressive technology for global societal development.

SWOC Analysis:

Strength

- Qualified, experienced and dedicated faculty members
- Conducive environment for teaching learning
- State of the art laboratory and infrastructure facilities
- State of the art Central Library
- Internet bandwidth of 60 Mbps with Wi-Fi
- Consistent result of Final year students
- Student and staff empowerment facilities
- Scholarships to the needy students
- A Teacher Guardian Scheme for student counseling.
- Permanent affiliation to North Maharashtra University, Jalgaon.
- Three times accredited UG programmes by NBA, New Delhi

Weakness

- Located in rural area
- Less industrial exposure and placement
- Lack of sufficient PhD supervisors
- Less consultancy

Opportunities

- Industry-Institute Interaction
- Rapidly changing technology
- Honing the skills and abilities of the students
- Interdisciplinary research

Challenges

- Attract meritorious students
- Achieving better student placements
- Effectively teaching students from rural and urban backgrounds
- Changing socio-economic scenario leading to unpredictable future
- Achieving R & D projects of societal development
- Getting more consultancy

Profile of the Affiliated / Constituent College

1. Name and Address of the College:

Name :	SSBT's College of Engineering and Technology, Bambhori.	
Address :	Post Box no. 94, Bambhori	
City :Jalgaon	Pin :425001	State :Maharashtra
Website :	www.sscoetjalgaon.ac.in	

2. For communication :

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. K. S. Wani	02572258393	9422787643	02572258392	sscoetjal@gmail.com
Steering committee Co-ordinator	Dr.S.R.Suralkar	02572258393	9421513244	02572258392	shekhar_srs@rediffmail.com

3. Status of the Institution:

Affiliated College

☒

Constituent College

☐

Any other (specify)

☐

4. Type of Institution:

a. By Gender

☐

i. For Men

☐

ii. For Women

iii. Co-education

☒

b. By Shift

i. Regular

☒

ii. Day

☐

iii. Evening

☐

5. It is a recognized minority institution?

No

If yes specify the minority status (Religious/linguistic/any other) and provide documentary evidence

6. a. Sources of funding:

Government

☐

Self-financing

☒

Grant-in-aid

☐

Any other

☐

7.

a. Date of establishment of the college:

29/06/1983
(dd/mm/yyyy)

b. University to which the college is affiliated /or which governs the college (If it is a constituent college).

North Maharashtra University, Jalgaon

c. Details of UGC recognition:

Under Section	Date, month & Year (dd-mm-yy)	Remarks (If any)

i. 2 (f)	02/06/2008	F.No.8-40/2008 (CPP-I),dated 2 June 2008
ii. 12 (B)	01/03/2012	F.No.8-40/2008 (CPP-I/C),dated 1 MAR 2012

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month & Year (dd-mm-yyyy)	Validity	Remarks
AICTE	F.No.Western/1-2452188684 /2015/EOA	07/04/2015	2015-16	-----

(Enclose the recognition/approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes ☒

No ☐

If yes, has the College applied for availing the autonomous status?

Yes ☐

No ☒

9. Is the college recognized?

a. by UGC as a College with Potential for Excellence (CPE)?

Yes ☐

No ☒

If yes, date of recognition: (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes ☐

No ☒

If yes, Name of the agency and Date of recognition:

10. Location of the campus and area in Sq.m.

Location *	Rural
Campus area	100000
Built up area	50914

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium/seminar complex with infrastructural facilities -Yes

- Sports facilities

* Play ground- Yes

* Swimming pool - No

* Gymnasium- Yes

- Hostel

* Boys' hostel

i. Number of hostels - 2

ii. Number of inmates – 650

iii. Facilities- Solar Water Heater RO, Mess

* Girls' hostel

i. Number of hostels - 1

ii. Number of inmates- 350

iii. Facilities - Solar Water Heater , RO, Mess

* Working women's hostel - Nil

i. Number of inmates- NA

ii. Facilities - NA

- Residential facilities for teaching and non-teaching staff (give numbers available—cadre wise)- Yes

Post	Nos.
Teaching	32
Non- teaching	14

- Cafeteria - Yes
- Health center - Yes

First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....

Health Centre staff –

Qualified doctor	Full time	☐	Part-time	☒
Qualified Nurse	Full time	☐	Part-time	☐

- Facilities like banking, post office, book shops- Yes
- Transport facilities to cater to the needs of students and staff- Yes
- Animal house- NA
- Biological waste disposal- NA

- Generator or other facility for management/regulation of electricity and voltage - Yes
- Solid waste management facility- Yes
- Waste water management- Yes
- Water harvesting- Yes

12. Details of programmes offered by the college (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme/ Course	Duration in Years	Entry Qualification	Medium of instruction	Sanctioned/ approved Student Strength	No. of students admitted
1	Under-Graduate (UG)	Bio-Technology Engineering	Four	H.S.C	English	30	24
		Chemical Engineering	Four	H.S.C	English	30	32
		Civil Engineering	Four	H.S.C	English	120	125
		Computer Engineering	Four	H.S.C	English	120	124
		Electrical Engineering	Four	H.S.C	English	60	62
		Electronics & Tele-Communications Engineering	Four	H.S.C	English	120	46
		Information Technology	Four	H.S.C	English	60	33
		Mechanical Engineering	Four	H.S.C	English	120	126
2	Post-Graduate	M.E.in Civil Engineering (Environmental Engineering)	Two	B.E./B.Tech	English	18	15

		M.E.in Computer Science and Engineering	Two	B.E./B.Tech	English	18	15
		M.E.in Electrical Engineering Electrical Power System	Two	B.E./B.Tech	English	18	14
		M.E.in Electronics And Telecommunications Engineering (Digital Electronics)	Two	B.E./B.Tech	English	18	05
		M.E.in Mechanical Engineering (Machine Design)	Two	B.E./B.Tech	English	18	10
3	Post-Graduate	Master in Business Administration (Marketing, Finance, OMM System & I.T. and Human Resource Development)	Two	Graduate	English	60	60
4	Ph.D.	Bio-Technology	Three	M.E./M.Tech	English	04	04
		Chemical Engineering	Three	M.E./M.Tech	English	12	04
		Civil Engineering	Three	M.E./M.Tech	English	08	10
		Electronics & Tele-Communications	Three	M.E./M.Tech	English	08	08

		Mechanical Engineering	Three	M.E./M.Tech	English	08	08

13. Does the college offer self-financed Programmes?

Yes ☐√ No ☐

If yes, how many?

14. New programmes introduced in the college during the last five years if any?

Yes	√	No		Number = 05	
				PG = 01	Ph.D. = 04

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Particulars	UG	PG	Research
Engineering & Technology	Bio-Technology Engineering	--	Bio-Technology
	Chemical Engineering	--	Chemical Engineering

	Civil Engineering	M.E.in Civil Engineering (Environmental Engineering)	Civil Engineering
	Computer Engineering	M.E.in Computer Science and Engineering	--
	Electrical Engineering	M.E.in Electrical Engineering (Electrical Power System)	--
Engineering & Technology	Electronics & Tele-Communications Engineering	M.E.in Electronics and Telecommunications Engineering (Digital Electronics)	Electronics & Tele-Communications
	Information Technology	--	--
	Mechanical Engineering	M.E.in Mechanical Engineering (Machine Design)	Mechanical Engineering

Management	--	Master in Business Administration (Marketing, Finance, OMM)	--

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)

a. annual system

b. semester system

c. trimester system

17. Number of Programmes with

a. Choice Based Credit System

b. Inter/Multidisciplinary Approach

c. Any other (specify and provide details)

CGPA Based System (UG+MBA)

09

Non-CGPA Based System (ME)

05

17. Does the college offer UG and/or PG programmes in Teacher Education?

Yes

No

If yes,

a. Year of Introduction of the

programme(s).....(dd/mm/yyyy)

and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No.:

..... Date:

..... (dd/mm/yyyy)

Validity:.....

- c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes ☐

No ☒

18. Does the college offer UG or PG programme in Physical Education?

Yes ☐

No ☒

If yes,

- a. Year of Introduction of the programme(s).....(dd/mm/yyyy) and number of batches that completed the programme

- b. NCTE recognition details (if applicable)

Notification No.:

.....Date:

..... (dd/mm/yyyy)

Validity:.....

- c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes ☐

No ☒

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	Associate Professor	Assistant Professor		

Sanctioned by the UGC / University / State Government	19	37	125	--	--
Recruited	03	11	49	--	--
Yet to recruit					
Sanctioned by the Management/ society or other authorized bodies	--	--	--	--	--
Recruited	10	07	64	90	26
Yet to recruit	06	19	12	--	--

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
Ph.D.	13	--	03	--	04	01	21
M.Phil.	--	--	--	--	02	03	05
ME/MTech/MSc/MA	--	--	14	01	41	14	70
BE	--	--	--	--	03	--	03
Temporary teachers							
Ph.D.	--	--	--	--	--	--	--
M.Phil.	--	--	--	--	--	--	--
M.E./M.Tech/MSc/MA	--	--	--	--	11	06	17
BE	--	--	--	--	17	11	28
Part-time teachers							
Ph.D.	--	--	--	--	--	--	--
ME/MTech/MSc/MA	--	--	--	--	--	--	--
BE	--	--	--	--	--	--	--

22. Number of Visiting Faculty /Guest Faculty engaged with the College.

01

23. Furnish the number of the students admitted to the college during the last four academic years.

UG

Categories	2015-16		2014-15		2013-12		2012-13		2011-12	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	34	11	38	18	39	15	43	16	46	18
ST	12	02	09	00	12	01	13	03	14	03
OBC	216	90	213	107	185	111	153	96	178	77
General	105	33	118	34	154	56	161	47	181	36
Others	54	15	54	19	64	28	53	21	48	11
Total	572		610		665		606		612	

PG

Categories	2015-16		2014-15		2013-12		2012-13		2011-12	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	05	00	01	01	04	02	01	03	05	02
ST	00	00	00	00	01	01	00	00	02	00
OBC	20	20	20	15	27	13	15	10	26	19
General	47	23	68	37	40	19	63	32	44	13
Others	02	01	04	00	11	03	06	01	09	04
Total	118		146		121		131		124	

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	2479	225	--	35	2739
Students from other states of India	197	25	--	--	222

NRI students	--	--	--	--	--
Foreign students	--	--	--	--	--
Total	2676	250	--	35	2961

25. Dropout rate in UG and PG (average of the last two batches)

UG

PG

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

a) Including the salary component

b) Excluding the salary component

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes

No

If yes,

a) is it a registered centre for offering distance education programmes of another University

Yes

No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes

No

28. Provide Teacher-student ratio (TSR) for each of the programme/course offered

UG	BIO	CHEM	CIVIL	COMP	ELECT	E & TC	IT	MECH	MBA
TSR	1:15	1:13	1:20	1:16	1:20	1:18	1:16	1:18	1:17

29. Is the college applying for

Accreditation: Cycle 1 ☒ Cycle 2 ☐

Cycle 3 ☐ Cycle 4 ☐

Re-Assessment: ☐

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re- accreditation)

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only) : NA

Cycle 1:(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 2:(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 3:(dd/mm/yyyy) Accreditation Outcome/Result.....

*** Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.**

31. Number of working days during the last academic year.

32. Number of teaching days during the last academic year

*(Teaching days means days on which lectures were engaged
Excluding the examination days)*

33. Date of establishment of Internal Quality Assurance Cell

IQAC

23/04/2013 (dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC : NA

AQAR (i) (dd/mm/yyyy)

AQAR (ii) (dd/mm/yyyy)

AQAR (iii) (dd/mm/yyyy)

AQAR (iv) (dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

- The college has NBA accredited programmes. The details are as follows:

Accredited Programmes	Duration
Civil Engineering, Chemical Engineering, Computer Engineering and Mechanical Engineering	2005-08
Civil Engineering, Chemical Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Information Technology, and Mechanical Engineering	2008-13
Biotechnology Engineering, Civil Engineering, Chemical Engineering, Electronics and Telecommunication Engineering	2014-16

-

- The College has received Award for Excellence in 2008-09 by Engineering Education Foundation, Pune.
- Recently it has also received Engineering Education Excellence Award 2015 from Indo Global Chamber of Commerce, Industries and Agriculture, Pune.

Criterion I: Curricular Aspects

1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision:

Today we carry the flame of quality education, knowledge and progressive technology for global societal development; tomorrow the flame will glow even brighter.

Mission:

To provide a conducive environment for preparing competent, value added and patriotic engineers of integrity of par excellence to meet global standards for societal development.

Objectives:

- To impart innovative teaching and learning
- To provide quality education with futuristic trends in engineering and technology
- To develop the institute as a research center for academic excellence
- To ensure continual improvement in quality management system
- To inculcate social values, patriotism and professional ethics among the students

Communication:

The Vision, Mission and the Objectives are disseminated to the students, teachers, staff and other stakeholders by the following ways.

- Through display boards at various locations.
- Website
- Lab Manuals
- News letters
- College Brochure
- Parents' Letters

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

The institution has developed and deployed action plans for effective implementation of the curriculum as follows:

- The institute is affiliated to North Maharashtra University, Jalgaon (M.S.) and follows the syllabus and academic calendar of the university throughout the courses.
- Based on the University calendar institute prepares its academic calendar which includes schedule for Internal Sessional Examination (ISE) and Internal Continuous Assessment (ICA) to evaluate the students' performance.
- At the beginning of the semester, faculty members prepare their teaching plan.
- For maintenance of attendance record of students, syllabus coverage etc. the academic diary is also developed.
- For the weaker students, remedial classes are conducted for respective subjects.
- Industrial visits are arranged to bridge the gap between theoretical knowledge and real life scenario.
- Teaching learning process includes discussion method, experiential learning, use of audio-visual aids, case study, projects, surveys, quiz etc. in the delivery of academic programs.
- Expert lectures of eminent personalities from academics and industries are arranged.
- Each faculty member is a teacher-guardian of 20 to 25 students. They are responsible for academic and personal mentoring.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

Support received to teachers for effectively translating the curriculum is listed below:

- Faculty members are provided, the facilities like accessibility of e-journals, textbooks, reference books, IEEE publications and other technical magazines from

the library.

- Institute acts as a remote center of IIT Bombay through which teachers improve their knowledge in teaching and learning.
- Every department has its own departmental library apart from the central library source.
- The institute deputed faculty members to attend National/International conferences, technical workshops, faculty development programs etc.
- Institute has established Shramya Sadhana Research Promotion Scheme to motivate faculty members for research.
- Institute promotes faculty members for applying under various research promotion schemes such as AICTE /UGC/DST grants for funding.
- Audio visual aids are provided to deliver effective lectures with practical examples and applications.
- University has provided online Teacher's Manual along with syllabi which helps teachers to effective delivery of curriculum.

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

Initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction are:

- Institute sends faculty members to attend orientation programs, faculty development programs and workshops.
- Institute provides well equipped laboratories, classrooms with LCD projectors, Internet/Wi-fi for delivering the curriculum.
- Teacher provides notes for the students through Intranet.
- E-Resources are subscribed by central library such as IEEE, Springer, Elsevier, J-Gate etc.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum?

Institution network and interact with beneficiaries in effective operationalization of the curriculum in following ways:

- Eminent personalities from reputed companies are invited to deliver lectures and interact with the students.
- Industrial visits are arranged to improve industry-institution interaction and to help students in smooth transaction from theory to application.

- Innovation and Entrepreneurship Development Center (IEDC) provides grants to carry out students' projects.
- Institution has Shrama Sadhana Research Promotion Scheme (SSRPS) in which research projects of faculty members are promoted.
- Institute organizes lecture series of eminent scientists under Festival of Engineers, Administrators, Scientists and Technocrats (FEAST) which helps effective operationalization of the curriculum.
- University provides Teacher's Manual for effective delivery of curriculum.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.)

Contributions of the institution and staff members to the development of the curriculum are:

- The institution is affiliated to North Maharashtra University, Jalgaon. The curriculum is prepared under the Faculty of Engineering and Technology.
- Specific suggestions received from different stakeholders are analyzed and conveyed to the university to consider the same in the Board of Studies meetings.
- Faculty members of the college having representation in the university Board of Studies as chairman and members. They are

Year	Departments	Name of Faculty Members	Position in BOS
2014-15	Applied Science	Dr. M. Panigrahi	Member (Applied Science)
	Chemical Engineering	Dr. K. S. Wani	Member (Chemical Engineering)
	Civil	Dr. M. Husain	Member

	Engineering		(Environment Science)
		Mr. S. B. Pawar	Member (Civil Engineering)
	Electrical Engineering	Mr. M. Mujtahid Ansari	Chairman (Electrical and Instrumentation Engg.)
	Mechanical Engineering	Dr. S. P. Shekhawat	Member (Mechanical , Production & Automobile Engg.)
2013-14	Applied Science	Dr. M. Panigrahi	Member (Applied Science)
	Chemical Engineering	Dr. K. S. Wani	Member (Chemical Engineering)
	Civil Engineering	Dr. M. Husain	Member (Environment Science)
		Mr. S. B. Pawar	Member (Civil Engineering)
	Electrical Engineering	Mr. M. Mujtahid Ansari	Chairman (Electrical and Instrumentation Engg.)
	Mechanical Engineering	Dr. S. P. Shekhawat	Member (Mechanical, Production and

			Automobile Engg.)
2012-13	Applied Science	Dr. M. Panigrahi	Member (Applied Science)
	Chemical Engineering	Dr. K. S. Wani	Member (Chemical Engineering)
	Civil Engineering	Dr. M. Husain	Member (Environment Science)
		Mr. S. B. Pawar	Member (Civil Engineering)
	Electrical Engineering	Mr. M. Mujtahid Ansari	Chairman (Electrical and Instrumentation Engg.)
	Mechanical Engineering	Dr. S. P. Shekhawat	Member (Mechanical, Production and Automobile Engg.)
2011-12	Chemical Engineering	Dr. K. S. Wani	Member (Chemical Engineering)

- The institute has organized various syllabus framing workshops.
- Faculty members have participated in syllabus framing workshops organized by the university.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If ‘yes’, give details on the process (‘Needs Assessment’, design, development and planning) and the courses for which the curriculum has been developed.

No

1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

The institute ensures that the stated objectives of the curriculum are achieved in the course of implementation as follows:

- Program educational objectives and Program outcomes are defined at the department level in line with university curriculum.
- The course outcomes are mapped with program outcomes.
- Students undergo theory and practical sessions on each unit.
- Laboratory work/Tutorials are planned in line with the theory, objectives and outcome of the course.
- Two internal assessment tests are conducted in each semester for each course.
- Every practical is evaluated after completion of experiment.
- At the end of semester oral / practical examinations are conducted.

This process provides continuous feedback regarding students' progress both to students and faculty members. Based on above data, continuous assessment record is developed. This record is used to evaluate/analyze, the stated objectives of the curriculum.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution.

Encourage students to enrich the knowledge by filling the gap between industry needs and curriculum to meet their future employability needs.

Goals

- Professional competency
- Employability

Objectives

- To bridge the gap between industry and curriculum
- Know-how of latest technology

Institute organized various training programs for fulfillment of the goals and objectives, some of them are:

- Soft skill training programs
- Personality development programs
- Entrepreneurship awareness programs
- Workshop on Industrial Automation, Aspen Hysys, Solar Photovoltaic and its applications etc.

1.2.2 Does the institution offer programmes that facilitate twinning/dual degree? If ‘yes’, give details.

No

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

Range of Core / Elective options offered by the University and those opted by the college

Choice Based Credit System and range of subject options

Courses offered in modular form

Credit transfer and accumulation facility

Lateral and vertical mobility within and across programme and course

Enrichment courses

Institute is organizing various skill development programs which bring out overall development of the student. This ultimately increases the confidence of the student towards the world. Communication skills and soft skills programs are beyond the prescribed curriculum and are improving the employability of our students. Training and placement department organizes seminars and workshops to enhance industry-institute relationship which train the student for campus interviews.

• **Range of Core / Elective options offered by the University and those opted by the college:**

1. Elective subjects at final year are offered by the university. The students have opted the subjects from the following subjects offered by the institute:

Sr. No	Name of Department	Elective option offered	Elective option opted
1.	Biotechnology	1. Food Biotechnology 2. Plant Biotechnology 3. Animal Biotechnology 4. Environmental Biotechnology	Food Biotechnology
2.	Chemical Engineering	1. Biochemical Engineering 2. Petrochemical Technology 3. Computational Fluid Dynamics 4. Piping Design	Biochemical Engineering
3.	Civil Engineering	1. Numerical Methods in Civil Engineering 2. Sustainable Building Technology 3. Watershed Management 4. Open Channel & Conduit Flow	Watershed Management

4.	Computer Engineering	1. Advanced Computer Architecture 2. Android Programming 3. Human Computer Interaction 4. Advanced Computer Network	Advanced Computer Network
5.	Electrical Engineering	1. Industrial Electrical Engineering 2. Digital Signal Processing 3. Control System-II 4. Electrical Traction Engineering	Industrial Electrical Engineering
6.	E and TC Engineering	1. VLSI Design 2. Broadband Communication 3. Biomedical Engineering 4. Industrial Automation	Broadband Communication VLSI Design
7.	Information Technology	1. Pattern Recognition 2. Android Programming 3. Human Computer Interaction 4. Artificial Intelligence	Artificial Intelligence
8.	Mechanical Engineering	1. Mechatronics 2. Advanced Machine Design 3. Machine Tool Design 4. Automobile Engineering-I	Automobile Engineering – I

2. Interdisciplinary elective subjects at final year are offered by the university. The student have opted following subjects from the offered by the institute:

Sr. No.	Offered by University	Offered by Institute (Department)	Opted by students (Yes/No)
1.	Biotechnology of waste treatment	Biotechnology of waste treatment (Biotechnology)	Yes
2.	Biomedical instrumentation	Biomedical instrumentation (Biotechnology)	No
3.	Energy Engineering	Energy Engineering (Chemical Engineering)	Yes
4.	Industrial hazards and safety	Industrial hazards and safety (Chemical Engineering)	No
5.	Finite element methods	Finite element methods (Civil Engineering)	No
6.	Geographical information systems	Geographical information systems (Civil Engineering)	No
7.	Software engineering and project management	Software engineering and project management (Computer Engineering)	Yes
8.	Automotive electronics	Automotive electronics (E and TC Engineering)	Yes

9.	Image processing	Image processing (E and TC Engineering)	Yes
10.	Renewable energy sources	Renewable energy sources (Electrical Engineering)	Yes
11.	Energy audit and conservation	Energy audit and conservation (Electrical Engineering)	Yes
12.	Enterprise resource planning and SAP	Enterprise resource planning and SAP (Information Technology)	Yes
13.	Operation research techniques	Operation research techniques (Mechanical Engineering)	Yes
14.	Energy resources and technology	Energy resources and technology (Mechanical Engineering)	Yes

- **Choice Based Credit System and range of subject options**

No

- **Courses offered in modular form**

No

- **Credit transfer and accumulation facility**

No

- **Lateral and vertical mobility within and across programme and course**

No

- **Enrichment courses**

Several enrichment courses are organized by the department for the benefit of the students some of them are training programs, seminars and workshops. Communication skills and soft skills programs are conducted which is beyond the prescribed curriculum and has improved the employability of our students.

1.2.4 Does the institution offer self-financed programmes? If ‘yes’, list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

All programs in the institution are self-financed. We don't have grant-in-aid program. However, we follow the same procedure as in grant-in-aid.

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If ‘yes’ provide details of such programme and the beneficiaries.

Yes, the Institute provides skill oriented programs in view of regional and global employment markets for students.

- Trainings / workshops programs have organized by the various companies.
- Soft skill development program for students, faculty are conducted.
- Personality development, Technical skill development program for students are also conducted.

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?

No.

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

The efforts made by the institution to supplement the university curriculum to realize the goals and objectives of the institution are:

- Industrial visits are arranged to enrich student's practical knowledge.
- In-plant training programs at various industries are provided during summer and winter vacations.
- Guest/Expert lectures are organized.
- Content beyond syllabus of respective subjects are delivered in order to have additional knowledge.
- Institute organizes various value added programs like seminars, workshops, career guidance and lecture series of eminent personalities i.e. Festival of Engineers, Administrators, Scientists and Technocrats (FEAST) etc.
- Institute has established university recognized research laboratories.
- MOUs with industries, academic institutions, etc. have been organized.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

Efforts made by the institution to enrich and organize the curriculum are:

- Training and placement department identifies the needs in the dynamic employment market and accordingly conducts the training and workshops.
- Innovation and Entrepreneurship Development Center.
- Professional Students' chapters such as ISTE, IChE, SAEINDIA Collegiate Club, IEEE, IETE.
- Remote Center of IIT Bombay (online)
- Students' Association is functioning in every department to supplement the university's curriculum by inculcating leadership, managerial and technical skills required coping with the needs of industries. Various clubs such as Rural Engineering and Technology Club, Robo Club etc. have been formed to enhance technical creativity.
- Lecture series of eminent personalities i.e. FEAST, Technical competitions and Technical paper presentation i.e. Milestone (2k series) are the regular annual activities which helps to cope with the needs of dynamic employment market.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

The efforts made by the institution to integrate the cross cutting issues such as gender, climate change, environmental education, human rights, ICT etc. are as follows:

- The institute has co-education system.
- As per the curriculum, students study Environmental studies as a subject.
- On the eve of Science Day, Science Exhibition is organized to make students aware of global warming, climate change, pollution control, etc.
- Lectures on human rights and Intellectual Property Rights by eminent personalities are organized.
- The institution has a women grievances redressal committee to handle the sensitive issues regarding the women rights and safety.
- Workshops and seminars are organized on women rights, women empowerment, protection of girls, “Nahi Kase Mhanu Tula”, etc. to provide guidelines related to sexual harassment to female students, teaching and non-teaching women staff of the institute.
- Poster Presentation competitions are conducted on “Mahila Sashaktikaran increase awareness.
- Information and communication technology (ICT) is an integral part of today’s education. Computer fundamentals are already taught as a part of the curriculum. Along with this, a computer center is available for students to enhance their skills.
- The Proctorial board helps to solve issues of students, faculty members and non-teaching staff and see that the rules and regulations are followed.
- The institute has an anti-ragging committee as per the AICTE/UGC norms.
- Campus development committee looks after conducive environment of the campus.

1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

- **Moral and Ethical Values**
 - **Employable and Life Skills**
 - **A better career options**
 - **Community orientation**
-
- **Moral and Ethical Values:** Blood donation camps, guest lecture on awareness of

health issues, art of living courses, yoga camps, CSR activities are organized for the students.

- **Employable and Life Skills:** As communication skill is necessary for employment, the institute takes extra efforts for development of communication skills of the students through personality development programs, group discussions, quiz competitions, etc. Also, Soft Skills sessions are included as a part of class timetable. To improve managerial and leadership qualities students are motivated to take part in various events and activities like technical and cultural programs, seminars, workshops etc. Training Programs and workshops are organized for skill development of the students.
- **A better career options:** Training and placement cell organizes seminars and workshops to enhance industry-institute relationship. The department also organizes Job fair, career counseling, pre-placement talk, orientation/inspiration programs for students. IEDC organizes entrepreneurship awareness camps. Career guidance for competitive examinations such as GATE, MPSC and UPSC is provided.
- **Community orientation:** Swachha Bharat Abhiyan is organized to keep campus/village/city clean. Communal harmony is maintained through activities like Shiv Jayanti, Ganesh Utsav, Iftar Party etc. Community activities like road safety awareness, tree plantation, awareness about use of eco-friendly bags, interaction with orphans and senior citizens are organized.

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

The institute takes feedback from stakeholders like students, alumni, parents, industries, etc. and considers it to the enrichment of the curriculum.

- **Industry feedback:** Each department has advisory board which includes industry person as a member. Suggestions of the members are included for enrichment of curriculum.
E.g. Advisory committee members of Department of Chemical Engineering and industrialist have recommended incorporating interdisciplinary subject in curriculum such as Energy Engineering and Industrial Hazards and Safety.
- **Alumni Feedback:** Every year institute organizes Alumni Meet and the suggestion given by alumina during interaction with HOD and faculty members regarding curriculum are considered for enrichment.

- Employers' Feedback: Specific suggestions received from employers are analyzed and considered.
- Parents Feedback: During parents meet, which organized every year, the suggestions received from the parents regarding enrichment of curriculum are implemented to the extent possible.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

Institution monitors and evaluates the quality of its enrichment programs through the following measures.

- Every year many renowned companies visit to the institution. Through the placement record the quality of enrichment program is reflected.
- Every department prepares result analysis after the declaration of university result.
- Project Competitions are arranged. Industry/academic persons are invited to evaluate the projects.
- Students participate in various co-curricular and extra-curricular activities/competitions at inter collegiate, university, state, national level and won prizes.

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Contributions of the institution in the design and development of the curriculum prepared by the University are:

- The faculty members of the college having representation in the university Board of Studies, Faculty of Engineering and Technology and Academic council.
- Faculty members have participated in syllabus framing workshops organized by the university
- The institute has organized various syllabus framing workshops in different departments in last three years.

Sr. No.	Department	Class	Year
1	Mechanical Engineering	Final Year	2014-15
2	Electrical Engineering	Third Year	2013-14
3	Civil Engineering	Third Year	2013-14
4	E and TC Engineering	Second Year	2012-13

- Specific suggestions received from different stakeholders are conveyed to the university to consider it for development of the curriculum in the Board of Studies' meetings.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

For enrichment of curriculum, feedback is collected from students and other stakeholders in following ways.

- Course end survey: At the end of course the feedback of students is collected and analyzed.
- Graduate survey: At the end of the program the feedback of students is collected and analyzed.
- Parents meet: The College has a regular practice of organization of parents meet for feedbacks which are taken for input in the curriculum.
- Alumni meet: The College regularly organizes Alumni meet. Suggestions from alumina are collected for the improvement of curriculum.
- Interaction with Industry persons: The suggestions provided by the industry persons are used to bridge the gap between curriculum and the need of industry.

Suggestion and inputs from students and stakeholders are discussed in syllabus framing workshops organized by university and college which then put up to the university through the faculty members of the college who represents in Board of Studies, Faculty and Academic Councils at the time of framing the curriculum.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?

Post graduate program **M.E Electrical Engineering (Electrical Power System)** is introduced in 2013. Considering the need and scope of PG course in Electrical Engineering with specialization in Electrical Power System of different industrial sectors and academics the course was necessary. In the North Maharashtra University region such course was not available. Therefore, the college has taken initiative and started the course from 2013.

The laboratories of four departments are recognized for doctoral research. They are

Sr. No.	Departments	Year
1	E and TC Engineering	2014
2	Biotechnology	2012
3	Chemical Engineering	2012
4	Civil Engineering	2012

The students have registered for their Ph.D. in these departments.

Any other relevant information regarding curricular aspects, which the college would like to include

Good teaching emanates from research. The institute has Doctoral Programs in five streams, viz. Civil, Mechanical, Chemical, Biotechnology and Electronics and Telecommunication Engineering. Research experience of Ph.D. faculty members and teacher research scholars leads to quality delivery of the curriculum. The teachers' love for research and their experience in research make the students-learning more innovative.

Criterion II: Teaching-Learning and Evaluation

2.1 Student Enrolment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

The process of Admission is governed by the Director of Technical Education (DTE), Maharashtra State through Centralized Admission Process (CAP). However, college has also role in the admission process for Institute level admission (20% of Sanctioned Intake).

Publicity and transparency in the admission process followed by the DTE are mentioned below.

- Issue of Notification published on DTE website (www.dtemaharashtra.gov.in) and in leading newspapers.
- Display of Provisional Merit List on DTE website.
- Display of Final Merit List on DTE website.
- Display of Allotment of CAP Round seats on DTE website.

Publicity and transparency in the admission process followed by the college are mentioned below.

- College Prospectus
- Institute Website (www.sskoetjalgaon.ac.in)
- Advertisement in leading Newspapers
- Electronic media such as TV and Radio
- Banners and Hoardings
- Display of Provisional Merit List and Final Merit List on Institute Notice Board.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

The process of Admission is governed by the Director of Technical Education (DTE), Maharashtra State through Centralized Admission Process (CAP). Information brochure, published by DTE, Maharashtra State, gives rules, eligibility criteria and process for Admission in Engineering/ Technology and MBA. However, college has also role in the admission process for Institute level admission (20% of Sanctioned Intake).

Eligibility criteria for Admission in **First Year Engineering UG Programs** is: Secured minimum 50% marks (minimum 45% marks in case of backward class categories and Persons with Disability candidates belonging to Maharashtra State only) in the subjects Physics, Mathematics and Chemistry/ Biotechnology/ Technical Vocational subject added together and obtained a positive Composite Score.

Eligibility criteria for Admission in **First Year Engineering PG Programs** is: Secured minimum 50% Aggregate marks (minimum 45% marks in case of backward class categories and Persons with Disability candidates belonging to Maharashtra State only) in the relevant course of Bachelor of Engineering (specified by the concerned University) and with positive GATE Score.

Eligibility criteria for Admission in **First Year MBA PG Programs** is: Secured minimum of 50% marks in aggregate or equivalent CGPA (45% in case of candidates of backward class categories and Persons With Disability belonging to Maharashtra State only) in any Bachelor's degree awarded by any of the Universities.

For UG, 80% seats of sanctioned intake are allocated for admission through CAP by DTE (65% as per Maharashtra State Composite Score and 15% as All India Seats). And remaining 20% seats of sanctioned intake are Institute Level Seats.

For PG (Engineering), 80% seats of sanctioned intake are allocated for admission through CAP by DTE. And remaining 5% seats of sanctioned intake are reserved for sponsored category candidates and 15% seats of sanctioned intake for non-sponsored category candidates. If vacancies remain in sponsored category, then these vacancies may be filled from non-sponsored category candidates and vice versa.

For PG (MBA), 80% seats of sanctioned intake are allocated for admission through CAP by DTE (65% as per Maharashtra State Seats and 15% as All India Seats). And remaining 20% seats of sanctioned intake are Institute Level Seats.

Moreover 30% seats available for Maharashtra State CAP are reserved for female candidates in all the courses. Over and above the sanctioned intake, there are seats for J & K Migrants (ONE seat in each course), GoI nominees, Tuition Fee Waiver Scheme (TFWS) (5% of sanctioned Intake per course) etc.

In addition to 20% seats of sanctioned intake (Institute Level Seats), the seats remaining vacant after CAP Rounds are filled up by the institute.

Process of Admission for UG and PG programs through CAP by DTE is as under.

- Filling of Online Application Form for Centralized Admission by eligible candidates.
- Document verification and Confirmation of Online Application form at Application Receipts Centers (ARCs).
- Display of Provisional Merit List (based on Composite Score i.e., marks obtained after adding 50% of JEE (Main) (Paper 1) marks and 50% of normalized standard XII marks in Physics, Chemistry and Mathematics for UG/ GATE Score for PG Engineering/ MAH-MBA CET or Association CET or GMAT/ CAT/ MAT/ ATMA/ XAT/ CMAT Score for MBA) of candidates on DTE website (www.dtemaharashtra.gov.in).
- Submission of Grievances (if any) at ARC.
- Display of final Merit List of candidates on DTE website.
- Filling and Confirmation of Option form for CAP Round I.
- Display of Allocation of seats for CAP Round I on DTE website.
- Reporting to respective institutes as per allotment of CAP Round I.
- Display of vacant seats for CAP Round II on DTE website.
- Filling and Confirmation of Option form for CAP Round II.
- Display of Allocation of seats for CAP Round II on DTE website.
- Reporting to respective institutes as per allotment of CAP Round II.
- Display of vacant seats for CAP Round III on DTE website.
- Filling and Confirmation of Option form for CAP Round III.
- Display of Allocation of seats for CAP Round III on DTE website.
- Reporting to respective institutes as per allotment of CAP Round III.
- CAP Round IV by counseling and reporting to respective Institute.

Process of Admission for Institute Level Seats at UG and PG by the Institute is as under.

- Advertisement in leading Newspapers.

- Filling of Application Form and Document Verification.
- Display of Provisional Merit List of candidates on the Notice board of the institute.
- Submission of Grievances (if any).
- Display of final Merit List of candidates on the Notice board of the institute and reporting to the institute.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/ district.

Minimum and maximum marks for First Year Engineering UG Programs at entry level for respective programs offered by the college are as follows.

Sr. No.	Programme	Year of Admission	Min. JEE marks of Admitted students	Max. JEE marks of Admitted students
1	Biotechnology Engineering	2015-16	8.55	82.27
		2014-15	19.93	68.20
		2013-14	35	65
		2012-13	18	72
		2011-12	35	66
2	Chemical Engineering	2015-16	15.09	81.83
		2014-15	28.18	76.61
		2013-14	45	118
		2012-13	25	70
		2011-12	41	90
3	Civil Engineering	2015-16	18.51	86.05
		2014-15	17.79	81.37
		2013-14	45	117
		2012-13	45	88
		2011-12	49	100
4	Computer Engineering	2015-16	15.17	81.63
		2014-15	18.93	87.33
		2013-14	40	86
		2012-13	25	88
		2011-12	42	122

5	Electrical Engineering	2015-16	15.77	78.95
		2014-15	40.02	75.78
		2013-14	40	92
		2012-13	35	83
		2011-12	45	99
6	Electronics & telecommunication Engineering	2015-16	13.88	67.81
		2014-15	46.59	77.66
		2013-14	40	79
		2012-13	35	92
		2011-12	50	115
7	Information Technology	2015-16	28.23	70.03
		2014-15	17.24	88.88
		2013-14	38	70
		2012-13	40	66
		2011-12	41	88
8	Mechanical Engineering	2015-16	20.68	87.21
		2014-15	19.61	88.24
		2013-14	45	107
		2012-13	50	123
		2011-12	48	131

Minimum and maximum marks for First Year Engineering PG Programs at entry level for respective programs offered by the college are as follows.

Sr. No.	Programme	Year of Admission	Min GATE/ CET marks of Admitted students	Max GATE/ CET marks of Admitted students
1	Civil Engineering	2015-16	5.79	7.60
		2014-15	3.17	17.4
		2013-14	--	--
		2012-13	--	--
		2011-12	--	--
2	Computer Engineering	2015-16	9.24	21.72
		2014-15	4.6	12.01
		2013-14	--	--
		2012-13	--	--
		2011-12	--	--
3		2015-16	7.88	10.79

	Electrical Engineering	2014-15	3.25	14.52
		2013-14	--	--
		2012-13	--	--
		2011-12	--	--
4	Electronics and telecommunication Engineering	2015-16	2.51	8.47
		2014-15	7.33	23.13
		2013-14	--	--
		2012-13	--	--
		2011-12	--	--
5	Mechanical Engineering	2015-16	4.62	258.00
		2014-15	3.94	18.3
		2013-14	--	--
		2012-13	--	--
		2011-12	19	46
6	MBA	2015-16	1.293	73.551
		2014-15	1.37	65.27
		2013-14	47	90
		2012-13	50	100
		2011-12	48	84

Though the admission process is governed by Director of Technical Education (DTE), Maharashtra State through Centralized Admission Process (CAP), for comparison with other colleges the DTE website does not publish relevant data, in terms of minimum and maximum percentage of marks for admitted students at the entry level.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If “yes” what is the outcome of such an effort and how has it contributed to the improvement of the process?

Although the admission process is governed by Director of Technical Education (DTE), Maharashtra State through Centralized Admission Process (CAP) and it is not in the control of the institute, the institute level admission process is reviewed time to time and following efforts are taken to ensure admissions at UG and PG.

- Carrier counselling for aspirants
- Publicity of the Institute
- Publicity of achievements by the students and faculty members

Further, DTE also invites suggestions regarding admission process from various institutes.

The student profiles are analyzed every year after admission. Statistical details about economically weaker students, academically weaker students, geographical and social background of the students etc. helps us in deciding admission policies for Institute Level Seats.

Some of the policies adopted by the institute are: counselling at specified geographical locations, fees concession for economical weaker section and physically handicapped aspirants, fees concession for children of widows and defense personnel.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

SC/ST

BC

Women

Differently abled

Economically weaker sections

Minority community

Children of Ex-Servicemen

Sports personnel

The process of Admission is governed by the Director of Technical Education (DTE), Maharashtra State through Centralized Admission Process (CAP). Information brochure, published by DTE, Maharashtra State, gives rules, eligibility criteria and process for Admission in Engineering/ Technology and Management.

The percentage of seats reserved for candidates of backward class categories belonging to Maharashtra State is as follows.

Sr. No.	Category of Reservation	Reservation
1	SC	13%
2	ST	7%
3	VJ / DT (NT – A)	3%
4	(NT – B)	2.5%
5	(NT – C)	3.5%

6	(NT – D)	2%
7	OBC	19%

Other reservations under CAP are as follows.

Sr. No.	Category	Reservation
1	For Sons/ Daughters of Defense Service Personnel	5%
2	For Persons with Disability Candidates	3%

Moreover 30% seats available for Maharashtra State CAP are reserved for female candidates in all the courses. Over and above the sanctioned intake, there are seats for J & K Migrants (ONE seat in each course), GoI nominees, Tuition Fee Waiver Scheme (TFWS) (5% of sanctioned Intake per course) etc.

Sample student profiles of First Year Engineering (FE) UG Programs, First Year Engineering PG Programs and First Year MBA PG Programs that demonstrate/reflect the National commitment to diversity and inclusion are as follows.

SR · N O	BRANCH	CATEGORY: F.E. Admission Position 2015-16																		
		SC		ST		VJ/D T		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Biotech	3	1	-	-	1	-	-	-	-	-	-	-	1	1	6	7	2	2	24
2	Chemical	--	--	-	-	1	-	1	-	-	-	-	-	1	1	15	5	8	0	32
3	Civil	7	3	3	2	3	1	3	-	2	2	3	1	2	-	53	9	26	5	125
4	Computer	5	-	2	-	1	-	2	2	3	-	-	3	2	-	28	41	23	11	123
5	Electrical	5	2	2	-	2	1	3	-	3	-	-	-	3	-	30	4	3	4	62
6	E&TC	1	2	1	-	-	-	-	-	-	1	1	-	2	-	16	9	7	6	46
7	IT	1	1	1	-	-	-	-	-	2	-	-	-	-	-	9	9	7	4	34
8	Mechanical	12	2	3	-	1	2	3	-	2	-	1	-	5	-	59	6	30	-	126
TOTAL M+F Category wise		34	11	12	2	9	4	12	2	12	3	5	4	16	2	216	90	105	33	572

SR. NO	BRANCH	CATEGORY: F.E. Admission Position 2014-15																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Biotech	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	3	1	19
2	Chemical	0	0	0	0	2	0	0	0	1	0	0	0	2	0	12	0	13	1	31
3	Civil	7	3	3	0	2	1	4	0	2	0	0	0	1	1	44	11	33	4	116
4	Computer	3	4	0	0	2	1	1	1	0	3	0	3	1	2	29	35	16	14	115
5	Electrical	6	2	2	0	1	1	1	1	3	0	1	0	3	1	24	9	7	1	63
6	E&TC	4	2	0	0	3	0	1	1	1	0	1	0	0	1	40	27	10	8	99
7	IT	1	4	0	0	0	0	0	1	0	0	0	0	3	0	10	13	5	4	41
8	Mechanical	15	3	4	0	2	0	5	1	4	0	4	0	3	0	48	5	31	1	126
TOTAL M+F Category wise		38	18	9	0	12	3	12	5	11	3	6	3	13	5	213	107	118	34	610

SR · N O.	BRANCH	CATEGORY: F.E. Admission Position 2013-14																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Biotech	0	1	0	0	0	0	0	0	0	0	0	0	0	0	01	3	01	5	11
2	Chemical	2	0	0	0	1	0	1	0	1	0	1	0	0	0	12	2	10	2	32
3	Civil	11	2	4	1	4	2	3	0	4	0	1	0	3	1	32	6	48	3	125
4	Computer	2	2	0	0	4	2	0	2	4	2	0	0	1	3	18	41	21	25	127
5	Electrical	7	2	1	0	2	2	1	0	3	0	1	0	2	1	20	9	09	01	61
6	E&TC	3	4	0	0	3	2	2	0	2	5	0	0	2	4	43	30	18	08	126
7	IT	2	1	0	0	2	0	1	0	1	0	0	0	1	2	07	12	19	9	57
8	Mechanical	12	3	7	0	2	0	5	0	3	0	2	0	1	0	52	08	28	3	126
TOTAL M+F Category wise		39	15	12	1	18	8	13	2	18	7	5	0	10	11	185	111	154	56	665

SR · N O	BRANCH	CATEGORY: F.E. Admission Position 2012-13																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Biotech	2	1	-	-	-	1	1	-	-	-	-	-	-	-	6	5	4	3	23
2	Chemical	2	1	0	0	0	1	1	-	1	-	-	-	-	-	10	3	9	2	30
3	Civil	3	1	1	2	3	-	2	-	2	-	2	-	1	-	15	4	28	2	65
4	Computer	8	1	2	1	2	1	2	1	1	1	2	-	2	3	20	28	26	20	122
5	Electrical	5	1	2	-	1	-	1	1	1	1	-	-	3	1	20	5	18	-	60
6	E&TC	9	9	1	-	4	1	1	1	2	-	1	-	3	-	25	21	27	13	118
7	IT	1	1	1	-	1	-	1	2	-	2	-	1	3	1	9	26	6	6	61
8	Mechanical	13	1	6	-	2	-	2	2	2	-	3	-	-	-	48	4	42	1	127
TOTAL M+F Category wise		43	16	13	3	13	4	11	7	9	4	8	1	12	5	153	96	161	47	606

SR. NO	BRANCH	CATEGORY: F.E. Admission Position 2011-12																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Biotech	1	1	-	-	-	-	2	-	1	-	1	-	1	-	5	2	8	2	24
2	Chemical	3	0	0	0	0	0	1	0	1	0	0	0	0	0	16	3	8	0	32
3	Civil	7	2	1	1	1	0	0	0	1	1	1	0	0	0	16	4	26	2	63
4	Computer	7	4	1	1	2	1	2	1	1	0	1	0	0	1	34	22	36	10	124
5	Electrical	8	2	2	0	1	0	1	0	1	0	0	0	1	0	20	7	16	1	60
6	E&TC	9	6	3	1	0	1	3	2	1	0	1	1	1	1	34	19	29	14	126
7	IT	4	2	0	0	1	1	2	0	1	1	1	0	0	0	13	11	13	6	56
8	Mechanical	7	1	7	0	4	0	3	0	5	0	2	0	3	0	40	9	45	1	127
TOTAL M+F Category wise		46	18	14	3	9	3	14	3	12	2	7	1	6	2	178	77	181	36	612

SR · N O	BRANCH	CATEGORY: PG Admission Position 2015-16																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Civil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	7	5	15
2	Computer	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	8	14
3	Electrical	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	7	4	14
4	E&TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	05
5	Mechanical	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	6	0	10
6	MBA	2	0	0	0	0	1	0	0	1	0	0	0	0	0	17	12	23	4	60
TOTAL M+F Category wise		5	0	0	0	0	1	0	0	1	0	1	0	0	0	20	20	47	23	118

SR. NO	BRANCH	CATEGORY: PG Admission Position 2014-15																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Civil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	7	18
2	Computer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	7	5	18
3	Electrical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	11	5	18
4	E&TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	6	14
5	Mechanical	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	3	8	2	18
6	MBA	1	1	0	0	2	0	0	0	1	0	0	0	0	0	12	7	24	12	60
TOTAL M+F Category wise		1	1	0	0	2	0	1	0	1	0	0	0	0	0	20	15	68	37	146

SR. NO	BRANCH	CATEGORY: PG Admission Position 2013-14																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Civil	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	10	1	15
2	Computer	1	1	0	1	0	0	1	1	0	0	0	0	0	0	2	3	3	5	18
3	Electrical	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	4	2	18
4	E&TC	1	0	0	0	0	0	0	0	0	0	0	0	1	1	4	4	2	5	18
5	Mechanical	0	1	1	0	0	0	0	0	0	0	2	0	1	0	3	1	7	1	17
6	MBA	0	0	0	0	1	0	1	0	2	1	0	0	0	0	7	4	14	5	35
TOTAL M+F Category wise		4	2	1	1	1	0	2	1	2	1	4	0	2	1	27	13	40	19	121

SR. NO	BRANCH	CATEGORY: PG Admission Position 2012-13																		
		SC		ST		VJ/DT		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Civil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1	18
2	Computer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	12	18
3	E&TC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	7	18
4	Mechanical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	2	18
5	MBA	1	3	0	0	1	0	1	0	1	0	0	0	3	1	15	10	13	10	59
TOTAL M+F Category wise		1	3	0	0	1	0	1	0	1	0	0	0	3	1	15	10	63	32	131

SR. NO	BRANCH	CATEGORY: PG Admission Position 2011-12																		
		SC		ST		VJ/D T		NT-1		NT-2		NT-3		SBC		OBC		OPEN		TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M+F Branch wise
1	Civil	1	0	1	0	0	0	1	0	0	0	0	0	1	0	3	0	11	0	18
2	Computer	0	1	0	0	0	0	1	0	1	0	0	1	0	0	4	3	5	3	18
3	E&TC	1	1	0	0	0	1	0	0	0	0	0	0	0	0	3	4	5	4	18
4	Mechanic al	1	0	1	0	0	0	0	0	1	0	0	0	0	0	5	0	10	0	18
5	MBA	2	0	0	0	0	0	1	1	2	1	0	0	1	0	11	12	15	6	52
TOTAL M+F Category wise		5	2	2	0	0	1	3	1	4	1	0	1	2	0	26	19	44	13	124

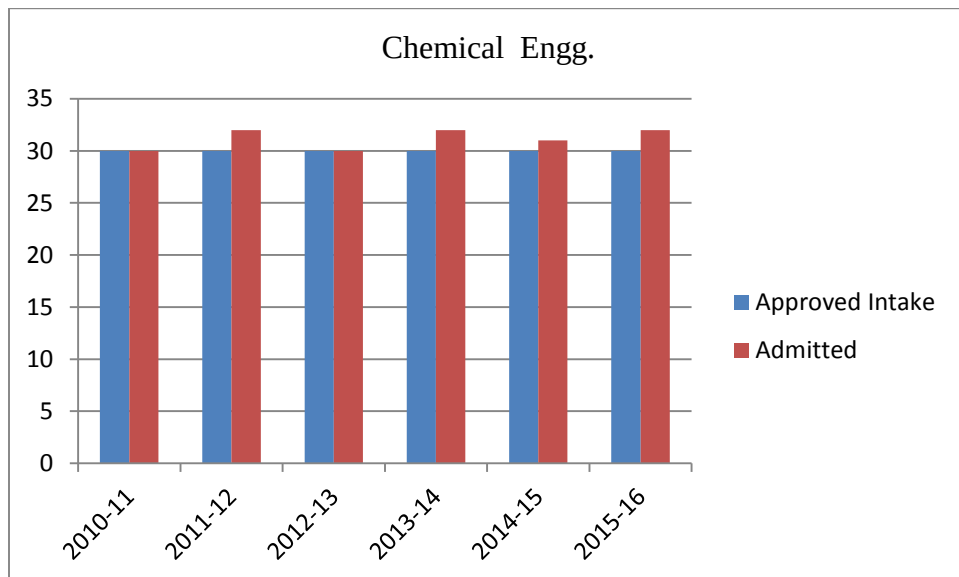
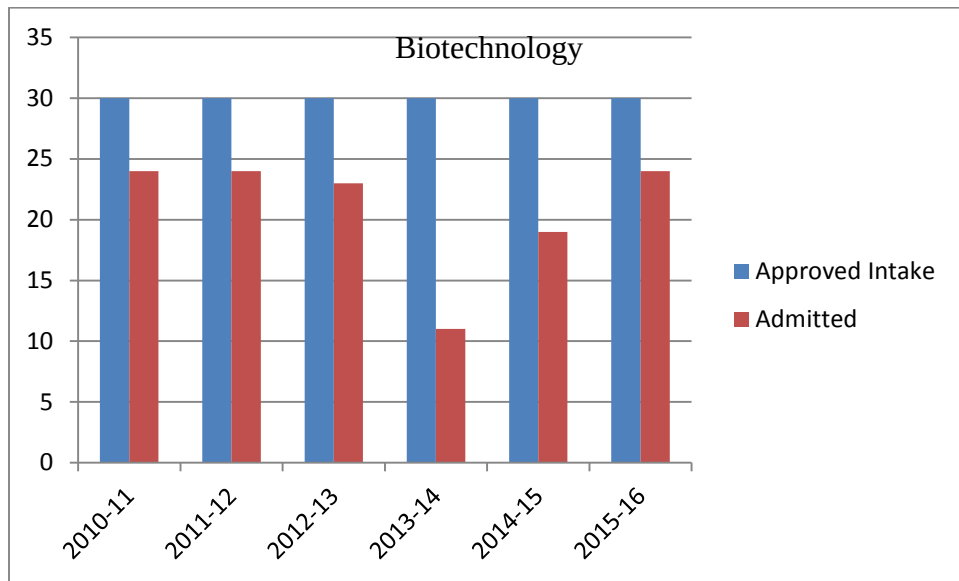
Maharashtra State Government and Government of India offer scholarships to backward category, minority and economically backward students. In addition to this, as a policy the institute provides following facilities to the students.

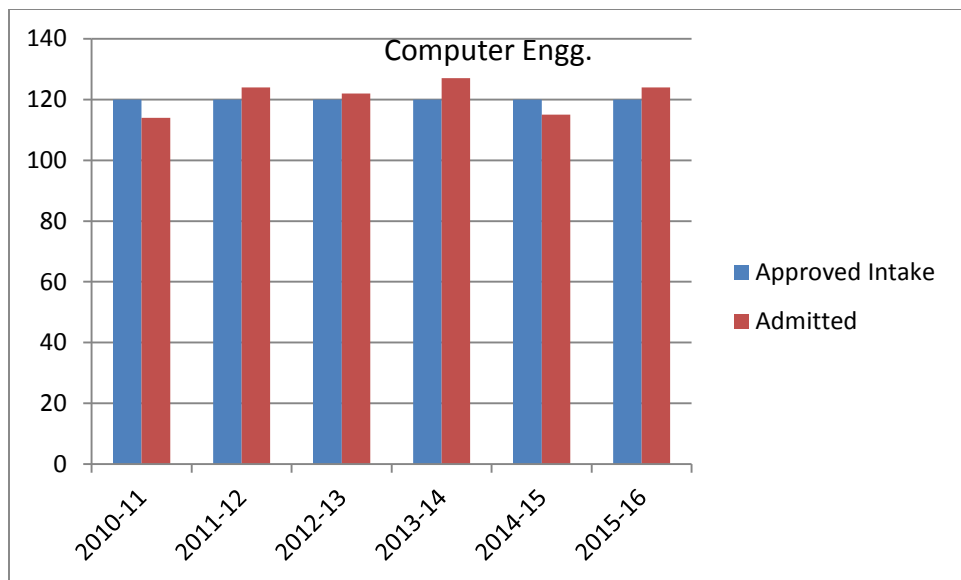
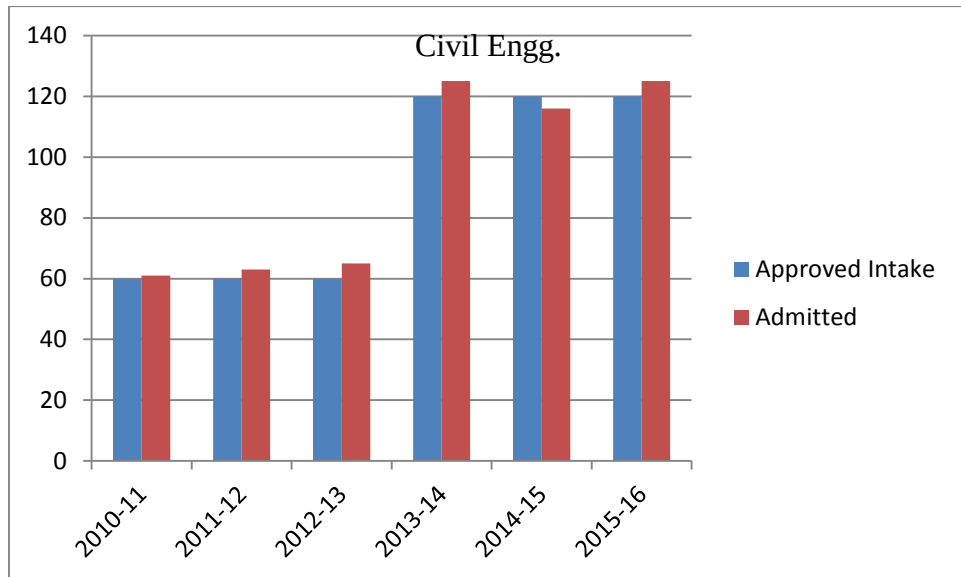
- Shram Sadhana Scholarship Scheme for economically weaker students
- Book Bank facility to backward category students
- Installment in fees
- Fees concession for children of Ex-Servicemen, Widow, orphan, physical handicapped, rural girls, meritorious students

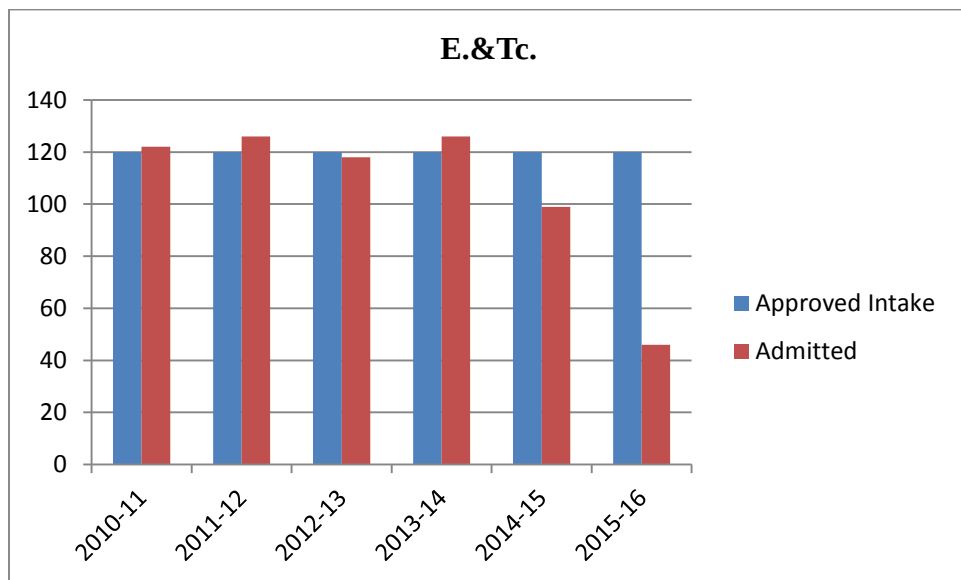
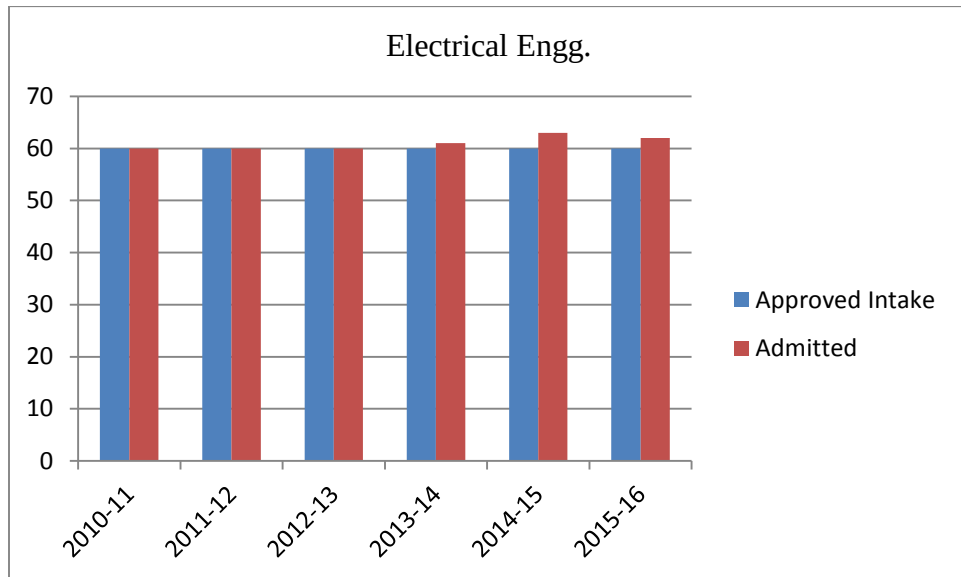
2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.

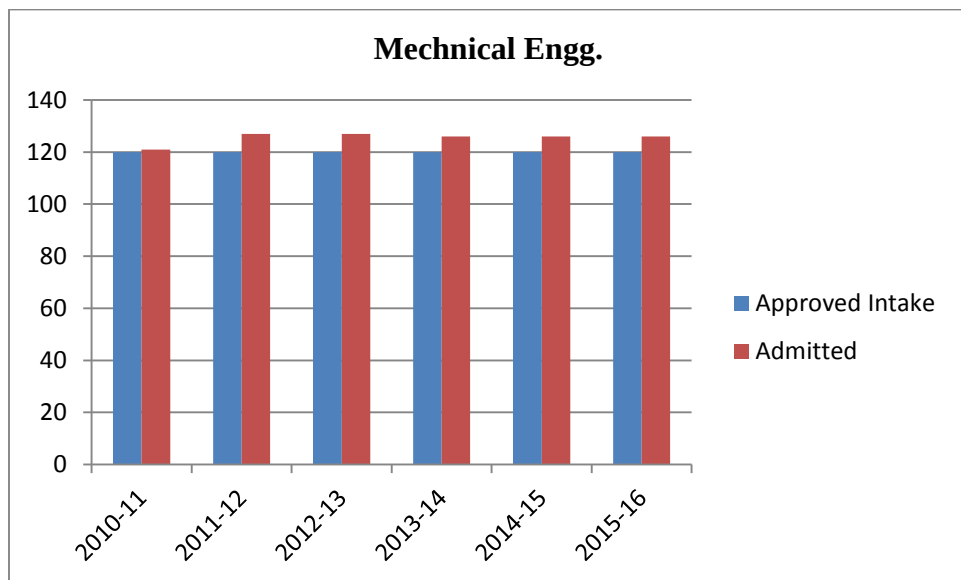
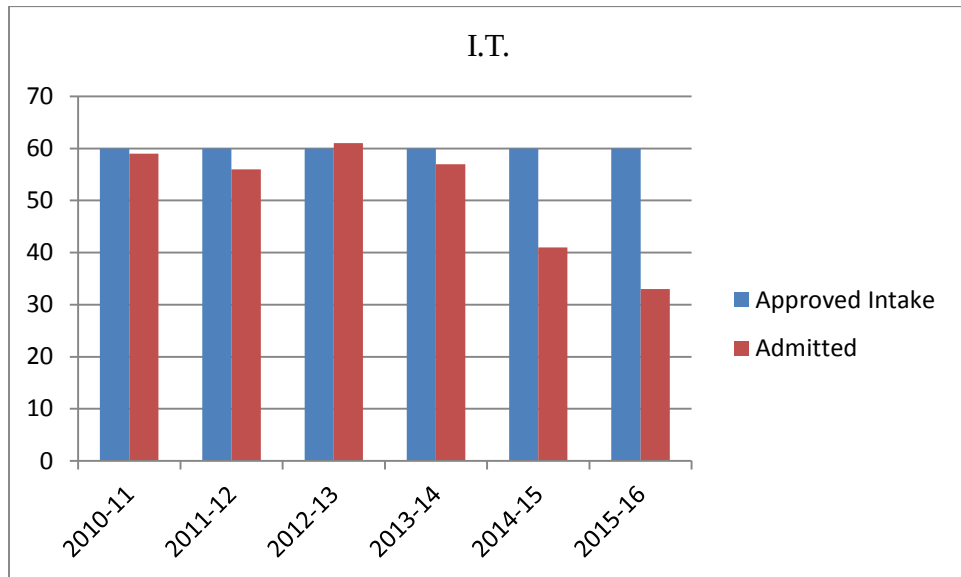
Number of approved intake and students admitted in UG for various programmes during last four years are as follows.

Programme	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	Approved Intake	Admitted	Approved Intake	Admitted	Approved Intake	Admitted	Approved Intake	Admitted	Approved Intake	Admitted	Approved Intake	Admitted
Biotechnology Engg	30	24	30	24	30	23	30	11	30	19	30	24
Chemical Engg	30	30	30	32	30	30	30	32	30	31	30	32
Civil Engg	60	61	60	63	60	65	120	125	120	116	120	125
Computer Engg	120	114	120	124	120	122	120	127	120	115	120	124
Electrical Engg	60	60	60	60	60	60	60	61	60	63	60	62
E&TC Engg	120	122	120	126	120	118	120	126	120	99	120	46
IT	60	59	60	56	60	21	60	57	60	41	60	33
Mechanical Engg	120	121	120	127	120	127	120	126	120	126	120	126
Total	600	591	600	612	600	606	660	665	660	610	660	572



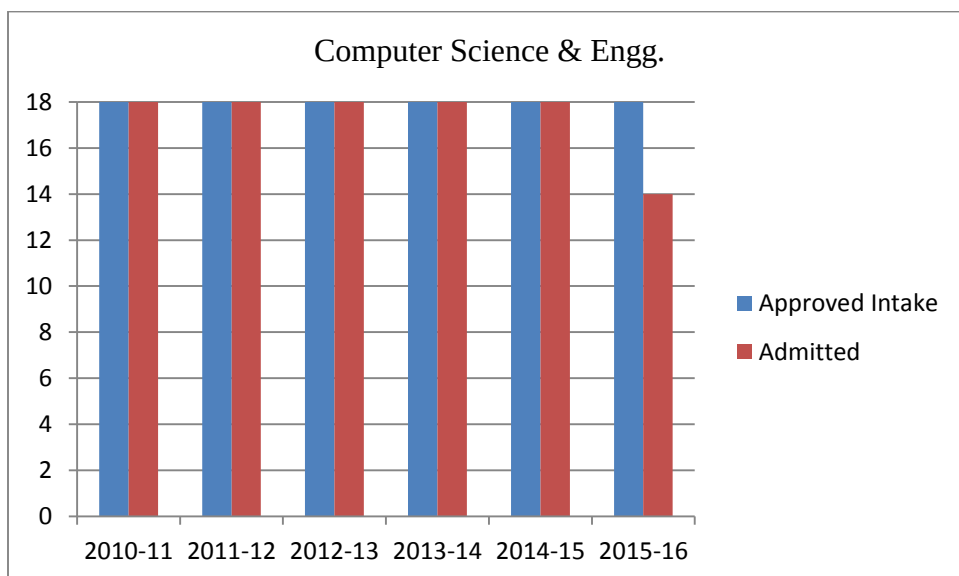
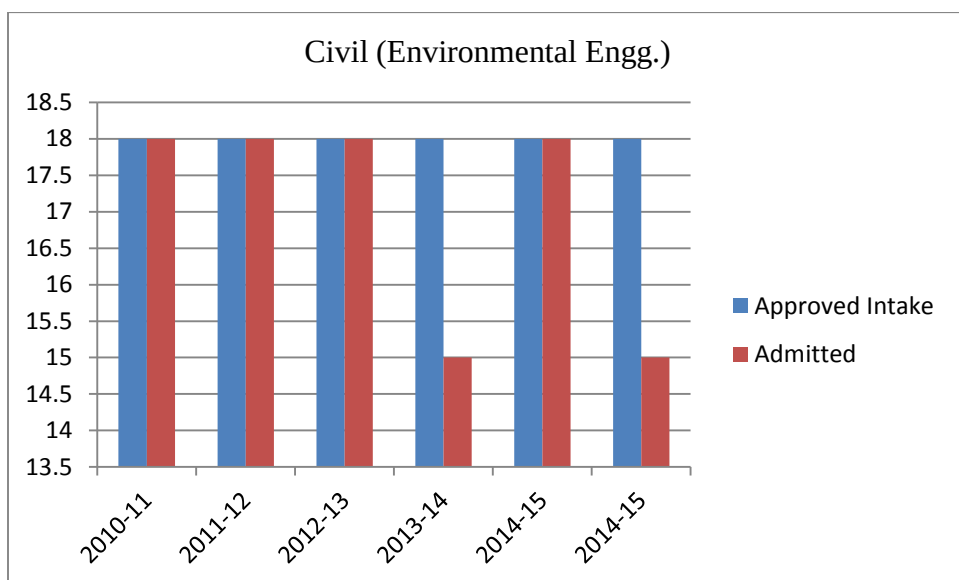


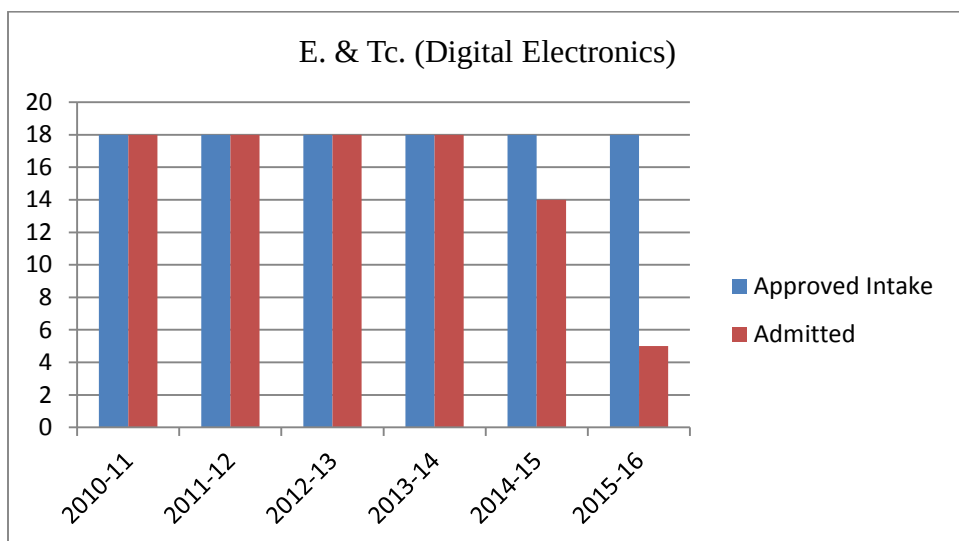
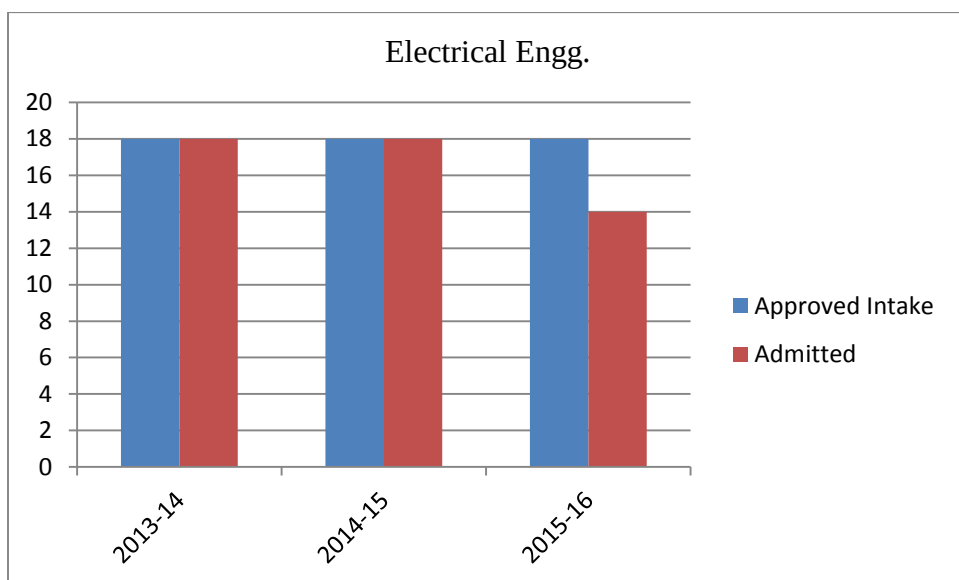


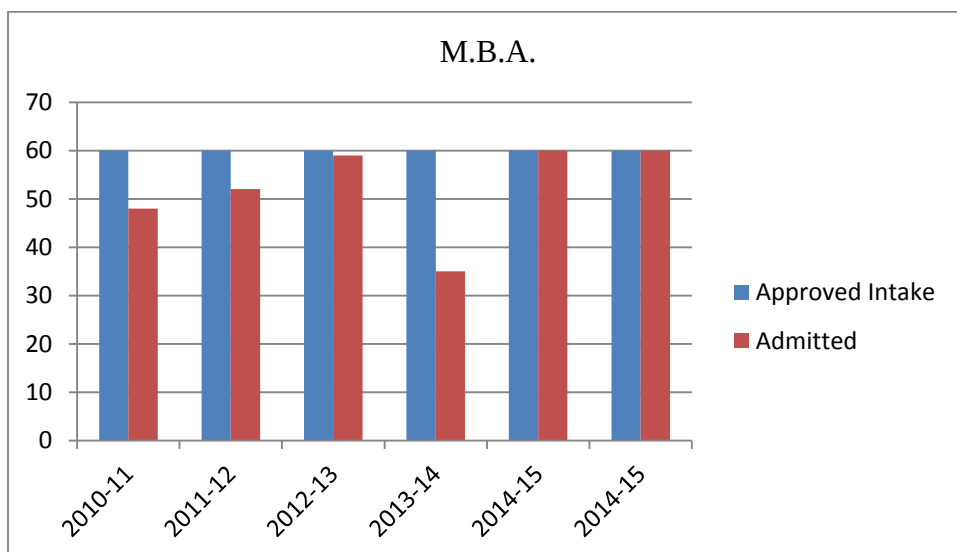
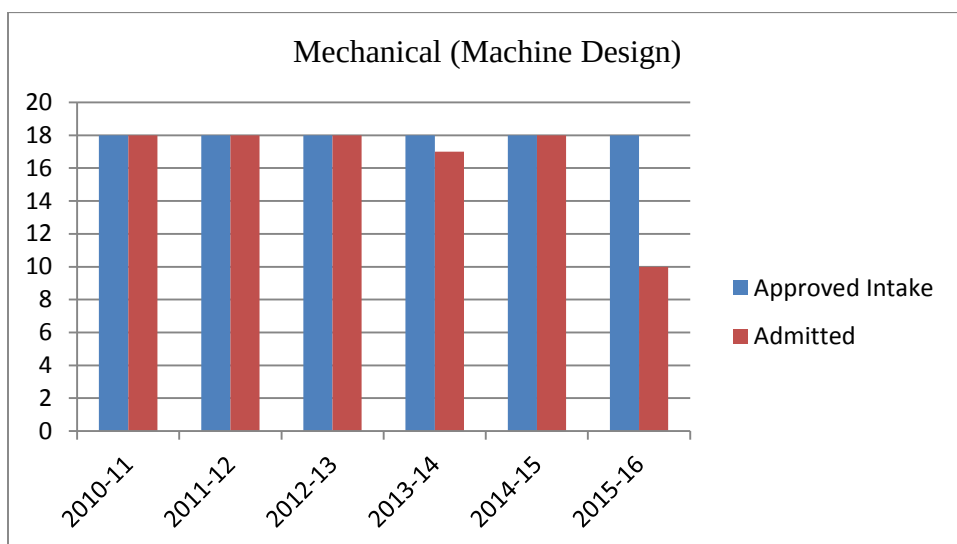


Number of approved intake and students admitted in PG for various programmes during last four years are as follows:

Programme	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	Approv ed Intake	Admitt ed	Approv ed Intake	Admitt ed	Approv ed Intake	Admitt ed	Approv ed Intake	Admitt ed	Approv ed Intake	Admitt ed	Approv ed Intake	Admitt ed
Civil Engg	18	18	18	18	18	18	18	15	18	18	18	15
ComputerEngg	18	18	18	18	18	18	18	18	18	18	18	14
Electrical Engg	NA	NA	NA	NA	NA	NA	18	18	18	18	18	14
E&TC Engg	18	18	18	18	18	18	18	18	18	14	18	05
Mechanical Engg	18	18	18	18	18	18	18	17	18	18	18	10
MBA	60	48	60	52	60	59	60	35	60	60	60	60
Total	132	120	132	124	132	131	150	121	150	146	150	118







The trends in UG programmes are quite consistent except in Biotechnology. It is due to lack of awareness about the stream among the students. Further, biology was one of the subjects under eligibility criteria for getting admission in this programme. However, the students with biology subject opt for medical rather than engineering.

The trend in UG and PG programmes are quite consistent.

Actions initiated by the institute for improvement in admission are as follows.

- Career counseling for aspirants
- Publicity of the Institute through TV, Radio, Newspaper, Hoarding
- Publicity of achievements by the students and faculty members
- Shram Sadhana Scholarship Scheme
- Career guidance program
- Organizing co-curricular and extra-curricular activities
- Providing state-of-the-art infrastructure
- Quality assurance through NBA, ISO-9001:2008

2.2 Catering to Diverse Needs of Students

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

The institution caters to the needs of differently-abled students as per the requirements of the individual ward. Such students are provided special attention in all respect by the respective Teacher-Guardian and Class Teacher.

Institute makes special arrangement for differently-abled students by following means.

- Theory and Practical sessions at the same floor
- Provision of Wheel Chair
- Ramp and wash room at the ground floor
- Assistance by Non-Teaching Staff for easy access of institute resources
- Extra time in the University examination

The institution is fully adhering to governmental policies in regards to the needs of differently-abled students. 3% Seats of total sanctioned intake capacity are reserved under CAP.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If "yes", give details on the process.

Before the commencement of the programme, the institute organizes orientation and induction program for first year students and their parents. In this program, students are made aware with introduction about college, departments, facilities and how to study etc.

Further, the needs are identified through interaction with class teacher and Teacher-Guardian during the orientation and induction program.

2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the

programme of their choice? (Bridge/Remedial/Add-on/Enrichment Courses, etc.)

The strategies drawn and deployed by the Institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice are as follows.

- Well-equipped library with sufficient number of books, Journals, Separate reference section, Reading Room and e-Library (with NPTEL and CDROM) etc.
- Subscription of e-journals (IEEE, Springer, ASCE, J-GATE, Elsevier, McGrawHill etc.)
- Provision of books for Competitive Exam preparation, such as GATE, GRE, TOEFL, UPSC, MPSC etc.
- Book Bank facility to SC / ST Students
- Well-equipped Laboratories
- Teaching aids
- Workshops on Soft Skills
- Technical workshops
- Expert Lecture / Training on latest technologies
- Industrial / Field Visit
- Content beyond the Syllabus
- Extra / Remedial Classes
- Encouraging students participation in co-curricular activities
- Tutorials as per Syllabus
- Seminar, Special study / Case study

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

The Institute sensitizes its staff and students on issues such as gender, inclusion, environment etc. by following means.

- The institute is a Co-education.
- 30% seats available for Maharashtra State CAP are reserved for female candidates in all the courses.
- Institute has constituted Women Grievances Redressal Committee including girl students.
- Several expert talks, such as “Girl Awareness Program”, “Protect the Girl”, “Nahi Kas Mhanu Tula” etc., by eminent personalities were arranged.
- Under “Save and Teach Girl Child Abhiyan”, a hoarding is placed at the main entrance of our campus.
- The students are made aware of social inclusion and equality through Teacher – Guardian Scheme.
- The institute campus is pollution free and has green environment.
- To create awareness of Environment among students and staffs, Guest lectures on Environment, Swachata Abhiyan etc. are arranged.

- A separate subject, known as Environmental studies, is in the curriculum of First Year Engineering.
- Uses of Eco-friendly kits in various events are encouraged.
- Through Corporate Social Responsibility (CSR) Activities by MBA students

2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

Institute identifies special educational/ learning needs of advanced learners by following means.

- Close observation of advanced learners and Discussion with them
- Current Job Opportunities through electronic media
- Latest Technologies through Internet

Institute responds to these needs through:

- Guidance by teacher
- Special guidance about Project/ Prototype, Paper Presentation etc.
- Organizing Expert Lectures, Seminars, Workshops, Training etc.
- Robo Club, SAE Collegiate Club
- Subscription of e-journals (IEEE, Springer, ASCE, J-GATE, Elsevier, McGrawHill etc.).
- e-Books and e-Library (with NPTEL and CDROM)
- DELNET and Collaboration with IIT Bombay Library
- Extra-Curricular Activities such as Cultural, Sports etc.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

Academic performances of the students are analyzed based on teacher evaluation and observation during laboratory sessions and internal tests, and University Examination results. That helps us in identifying the students that are at risk of drop out. Further, interaction with students by faculty members and through Teacher – Guardian scheme also help us in identifying students at risk of drop out.

Student profiles are analyzed every year to identify disadvantaged section of society, physically challenged, economically weaker sections etc.

The risk of drop out is minimized through following means.

- Counseling by the faculty members, HoDs and through Teacher – Guardian scheme
- By solving their problems in curriculum through remedial classes
- Interaction with Parents
- Book bank facility for SC / ST Students
- Motivational Speech i.e. FEAST
- Though Maharashtra Government and Government of India provide scholarships to disadvantaged section of society, the Institute offers Shram Sadhana Scholarship for needy students.
- Institute also offers time relaxation in tuition fee payments.

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

The Teaching Learning process is the back bone of the academic system of any institution. Hence, the Institute takes utmost care on teaching learning process. The affiliating university notifies the academic schedule term-wise at the beginning of every academic session. It includes dates for start and end of each term, and university examination (Theory and Practical) schedule.

Based on the same the Institute prepares academic calendar for UG and PG programs. The academic calendar includes schedule for two internal tests, co-curricular and extra-curricular activities etc. The recent academic calendar is enclosed herewith.

In addition to the regular academic activities, Institute organizes co-curricular and extra-curricular activities such as conference, seminars, guest/expert lectures, Annual sports, cultural program, industrial visit etc and their dates are scheduled in the academic calendar.

As a part of Teaching – Learning Process, the Institute follows the procedure:

- Prepares Academic Calendar in accordance with University Calendar
- Department prepares Time Table
- Faculty prepares/updates Course files
- Faculty prepares Lesson Plan
- Faculty prepares Practical list of prescribed and conducted schedule
- Two Tests per Term
- Teacher - Guardian counsels the students about academic performance
- Feedbacks are collected when teaching is in process and concerned faculty uses the same to meet the requirements
- Evaluation and assessment of Lab Work
- University examination and declaration of result
- Internship / Industrial training / Social Survey / Case Study

- Result Analysis for further improvement

Shree Sadhana Bambay Trust's
COLLEGE OF ENGINEERING & TECHNOLOGY, BAMBHORI, JALGAON.
TENTATIVE ACADEMIC CALENDAR (TERM-II) 2014-15

Sr. No.	Activity	Day	Date / From -To
1.	Start of II Term : Registration of students & Commencement of Classes	Monday	05 Jan. 2015
2.	National Seminar (IT Dept.)	Monday	05 Jan. 2015
3.	International Conference on "Global Trends in Engineering, Technology & Management." (All Depts.)	Friday to Sunday	09 Jan. to 11 Jan. 2015
4.	Parents Meet	Sunday	18 Jan. 2015
5.	Republic Day Celebration	Monday	26 Jan. 2015
6.	MILESTONE 2K14 (All Branches)	Friday	06 Feb. 2015
7.	F.E. S.E. & T.E. : ISE-I B.E.: Class Test - I	Monday to Monday	16 Feb. to 23 Feb. 2015
8.	Entrepreneurship Awareness Camp, for FE & SE Students (By IEDC)	Saturday to Sunday	21 Feb. to 22 Feb. 2015
9.	Feedback from Students	Monday to Friday	23 Feb. to 27 Feb. 2015
10.	Annual Gathering (Vasant Utsav) & Sports	Wednesday to Sunday	25 Feb. to 01 Mar. 2015
11.	Science Exhibition for FE (By Applied Science Dept.) Applied Science Dept. for FE	Saturday	28 Feb. 2015
12.	SSBTFEST (All Branches)	Saturday	07 Mar. 2015
13.	F.E. S.E. & T.E. : ISE-II B.E.: Class Test - II	Monday to Friday	16 Mar. to 20 Mar. 2015
14.	University Level Project Exhibition (By IEDC)	Saturday	28 Mar. 2015 (A. N.)
15.	T.W. Assessment / ICA (F.E. to B.E.)	Monday to Wednesday	13 Apr. to 15 Apr. 2015
16.	End of Term	Saturday	18 Apr. 2015
17.	PR/Oral Exam, SE to BE	Sunday to Wednesday	19 Apr. to 29 Apr. 2015
18.	Theory Exam., FE to BE & ME	Friday to Saturday	01 May. to 30 May. 2015
19.	Project Oral (BE) & FE (PR/Oral)	Monday to Saturday	01 June to 06 June 2015
20.	Commencement of Next Year	Monday	06 July. 2015

(Dr. K.S. Wani)

PRINCIPAL

Copy to:

1) Chairman, G.B. & L.M.C. 2) Managing Trustee Sh. Ramesh B. D. Shinde
3) All H.O.Ds 4) DOAD, 5) DOA 6) Director, T & P 7) DOR&D 8) D.R. Bhatnagar (M.S.)
11) Chairman, Alumni Meet, 12) Store, 13) Library, 14) Chairman, Cultural Activities 15) Physical Director 16) Admission Office, 17) PRO & Coordinator, Parents Meet, 18) Student Welfare Officer, 19) Rector (Boys Hostel), 20) Rector (Girls Hostel), 21) Coordinator, ESTE & IE (I), 22) Principal Office

2.3.2 How does IQAC contribute to improve the teaching –learning process?

Institute has IQAC from last two years with the following objectives:

- To develop a system to improve academic and administrative performance of the institute.
- To enhance research activities in the institute.
- To optimize and integrate modern methods of teaching and learning.
- To develop quality culture in the institute.

IQAC meets once in a year and discusses about the improvement in teaching learning process. The resolutions passed in the meetings are circulated to all HoDs for effective implementation. Director of Academics (DoA) periodically

takes feedback from the HoDs/ Faculty Members/ Students about the effective implementation of the resolution passed in IQAC about teaching – learning process.

IQAC reviews the ongoing academic activities and suggest the reforms to improve teaching learning process such as:

- In class rooms and laboratories teaching learning aids and equipments are to be provided. Class rooms, tutorial rooms and laboratories must be adequately furnished to provide conducive learning environment. Modern teaching aids such as digital interactive boards, Multimedia projectors etc. should be in place to facilitate teaching learning process so that program outcome of the programme can be achieved.
- The laboratories must be equipped with computing resources, equipments and tools relevant to the programme. Equipments in the laboratories should be properly maintained, upgraded and utilizes so that students can acquire required skills through it.
- Improvement in internal examination and internal evaluation process needed.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

In an affiliating institute syllabus content coverage is the highest priority, the traditional approach i.e. Teacher – centered learning is mostly adopted. However, Student – centered learning is more enjoyable and lead to improved student learning.

The adopted strategies for Student – centered learning by the institute are as follows.

- **Interactive Learning:** Interactive instructional strategies aim to strengthen observational skills, listening skills, communication skills, and interpersonal skills of the students. Every teacher ensures that the classroom climate is very conducive in which students feel free to contribute and debate their ideas. Interactive instructional strategies adopted are brainstorming, Question - Answer session, picture prompt, problem-solving, storytelling, starting each session with Recall, Summarize, Question, Connect, and Comment, What/How/Why Outlines, use of facebook to notify the students quickly and as

discussion board, facebook friendship, use of youtube videos embedded into PPT etc.

- **Collaborative Learning:** Discussion during theory and practical sessions
- **Independent Learning:** Students are motivated for independent learning by providing online learning resources.
- **Cooperative Learning:** During practical sessions, individuals seek outcomes that are beneficial to themselves and other group members.
- **Problem-based Learning:** In project work, students are engaged in complex and challenging problems and collaboratively work towards the solution.
- **Peer Instruction:** Lectures are interspersed with questions to expose common difficulties in understanding or in writing skills in examinations. Students are allowed to think about it and discuss the answer in the session.

Support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students are as follows.

- The teachers are encouraged to use LCD Projector and other ICT tools such as PPT, Videos etc.
- Teachers give study materials and assignments to the students.
- The Lab manual is made available to the students to make them in-depth understanding.
- Industrial visits are arranged to make students more practical and informative.
- Students counseling by individual Teacher – Guardian facilitate them to discuss issues related to learning.
- Library resources and its services provide ample opportunity to collaborative and independent learning. It provides a well-stocked fully computerized library with a collection of the latest books, journals, e-journals, video tutorials, magazines etc. which the teachers and students use effectively to gain comprehensive knowledge about any related topic.
- National / International level conferences provide a platform for the teachers and students to acquire additional knowledge apart from regular class teaching.
- Students organize and participate in various co-curricular and extra-curricular activities that is fully “student-centric” and they nurture their organizational, managerial and communication skills apart from enriching their technical knowledge.
- Provision of language lab makes the students good at English communication.
- Interdisciplinary elective in the curriculum caters diversified technical interests among students.
- The college has state of the art seminar halls where students participate in GDs, Debates and Seminars etc.

- Internet Facility and Wi-Fi is available in the Campus for all to keep them abreast of the latest developments in their respective field of study.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

The institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators through various activities such as:

- Lecture series by eminent scientists, entrepreneurs, industry and sports persons, social reformists etc. (FEAST)
- National and International Conferences
- Project exhibitions and competitions
- Seminars and Workshops
- Entrepreneurship Awareness Camp (IEDC)
- Paper Presentations and events (MILESTONE)
- CSR Activities
- Activities through Robo club/ SAE/ Student Associations

During these activities, the students get chance to interact with great personalities and peers. That helps them about know-how of latest developments and societal problems, and motivates for being a life-long learners and innovators.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? E.g.: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

The basic teaching learning method adopted by our faculty members are chalk and talk, use of teaching aids such as LCD projector, OHP etc., interactive class room and lab sessions etc.

In order to make teaching effective, the institute has following facilities.

- LCD projectors in all the departments
- Subscription of IEEE, Springer, ASCE, J-GATE, Elsevier etc.
- Acts as a Remote Center of IIT Bombay for conducting various workshops online.
- Moodle server through AKASH Project by IIT Bombay.
- NPTEL video lectures are available in the library of the Chemical department.
- Allowing faculty members to participate in National / International conferences / Workshops with financial assistance
- Access to Internet through 60 Mbps leased line and Wi-Fi

- Computing facilities with open source application software

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

The various means by which the students are exposed to advanced level of knowledge and skills are through:

- Providing latest reference and text books in the library
- Organizing Conferences / Seminars / Workshops / Expert lectures by eminent scientists, entrepreneurs and industry Persons
- Delivering content beyond syllabus
- Subscribing IEEE, Springer, ASCE, J-GATE, Elsevier etc.,
- Organizing Educational / industrial tour/visit
- Providing Guidance by Faculty members for blended learning, accessed through 60 Mbps Internet leased line
- Signing MOU with industry and academic institutions
- Undertaking innovative projects at UG and PG level

The various means by which the faculty members are exposed to advanced level of knowledge and skills are through:

- Participation in national and international Conferences/ Workshops/ FDP
- Online workshops for faculty members as Remote Center of IIT Bombay

2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/ mentoring/ academic advise) provided to students?

Teacher - Guardian Scheme (TGS) is introduced to assist the students in their learning difficulties and to monitor their academic performance regularly. For a batch of about twenty to twenty five students, a teacher is assigned the role of Teacher - Guardian (TG). Teacher - Guardian works as a friend, philosopher and mentor for these students. This scheme is to provide conducive environment to the students and takes some burden off the parents and lessens their anxiety. The students are free to contact the Teacher - Guardian for any kind of problems at any time during college hours. Students may also contact Teacher – Guardian through mobile after college hours.

In addition to this, hostel warden and hostel superintendent interact with the hostellers regularly and provide them necessary support and guidance not only on academics but also on other day-today issues.

2.3.8 Provide details of innovative teaching approaches/ methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The basic teaching learning method adopted by our faculty members are chalk & talk, use of teaching aids such as LCD projector, OHP etc., interactive class room and lab sessions etc. Innovative teaching approaches/ methods adopted by the faculty members during the last four years are use of ICT tools, such as Presentation tools like LCD projectors, whiteboard, interactive board etc., Power Point presentations, course materials through web pages, Student Management System through ERP, Moodle – Learning Management System etc.

Institute encourages faculty members to use ICT tools by providing necessary infrastructural support. The Institute also encourages faculty members to participate in FDP by providing travel expenses/ registration fees.

The impact of such practices on student learning are creating more learner-centric environment, building of better teacher confidence and professional development, improvement in the retentive memory of students, creation of interactive classes and to make the lessons more enjoyable, which improves student attendance and concentration etc.

2.3.9 How are library resources used to augment the teaching-learning process?

The institute library is very rich with adequate Text Books, Reference Books, encyclopedia, IS codes, Journals, Magazines, CD's, e-journals, e-books, etc. The library also has Kiosk with OPAC to facilitate accession of books. Institute has access of IIT Bombay library and other libraries through DELNET. For ready reference, each department has library with books, manuals, projects and seminar reports. Faculty members utilize these resources to develop course materials, and students utilize the same for their curriculum. However, for additional knowledge these resources are utilized by the faculty members and the students. Additional knowledge includes the knowledge required for project, seminar, special study, technical skill development, competitive examinations etc.

Further, the library has separate reading room, reference section and e-library to facilitate the students and faculty members in teaching – learning process with conducive environment.

2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If “yes”, elaborate on the challenges encountered and the institutional approaches to overcome these.

Yes, the institute faces challenge in completing curriculum within the time frame. The calendar provided by the affiliating university has 15 weeks in a term. However, effectively the instructional days are 11 weeks only, due to holidays, internal sessional examinations etc. Hence, the syllabus coverage may not be 100%. To overcome this, the institute has made provision of 4 Hrs/Week theory lectures instead of 3 Hrs/Week as prescribed in syllabus structure.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

The Institute monitors the quality of teaching by several means such as:

- Scrutiny of course files prepared by faculty members
- Verbal and written feedback from the students
- Students' performance in the internal examinations, results analysis

In the meetings of Academic and Examination Committee these feedbacks are discussed and also with the concerned faculty members to motivate them for improvement.

Further, teaching ability of teachers are also evaluated time – to –time through an internal panel of senior faculty members.

All the faculty members submit self-appraisal report in the prescribed format. The information furnished by the faculty member is analyzed by the HoD and Principal.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

The institute has adequate number of qualified and competent faculty members to handle the courses offered. The institution follows the AICTE, New Delhi and North Maharashtra University (NMU), Jalgaon guidelines in recruitment of faculty members by a well-defined procedure. The institute follows two different procedures for recruitment of teachers; one recruitment through university selection and the other at institute level. The procedures are as follows.

Recruitment through University Selection for Approval	Recruitment at Institute Level
• Requirements are identified as per teaching load • Roster is prepared	• Requirements are sought from HoDs as per teaching load

• Approval of roster from university is taken • Further, approval from Assistant Commissioner, BC Cell, Konkan Vibhag, Mumbai • Vacancies are advertised in leading local / national newspapers and also website of the institute as well of NMU. • AICTE qualification norms are followed while scrutinizing the applications. • University appoints Staff selection Committee • Information of recruitment is sent to social welfare office, employment office and university BC cell • The screened candidates are called for an interview. • Based on the performance in the interview, a list of selected candidates is prepared and recommendations are sent to university. • Appointment order, joining report and other documents of selected candidates are submitted to university. • University releases approval letter of selected candidates.	• Requirements are verified and approve by Director of Academics (DoA) and Local Management Committee (LMC) • Vacancies are advertised in leading local / national newspapers and also website of the institute. • Applications are scrutinized • The screened candidates are called for an interview. • The Staff selection Committee comprises of Local Management Committee, Principal, DoA and two subject experts including HOD. • Based on the performance in the interview, a list of selected candidates is prepared and recommendations are sent to LMC. • The selected candidates are appointed. • The Governing body approves the recommendation of LMC for his / her appointment.

Management gives more focus on retention of faculty members by following means.

- Majority of LMC members are employee of this institute.
- Pay-scale of faculty members is as per AICTE/ University norms.
- Providing adequate facilities for conducive environment
- The Faculty members are encouraged for higher studies and research work.
- Timely promotions, as per AICTE/ NMU norms, are given to faculty members.
- Group insurance scheme is available for Employees
- Gratuity

- The faculty members are having winter and summer vacation leave, Casual Leave, Medical Leave and Earned Leave as per rule.
- Provision of Quarters in the campus

The strategies adopted by the institute to cope-up with the changing requirements are:

- IIT Bombay Remote Center
- Deputes to participate in International/ National Conferences/ Training Programs Workshops/ Seminars/ STTP/ FDP
- Organizes International/ National Conferences/ Training Programs/ Workshops/ Seminars/ Expert Lectures etc.

Average retention ratio during last four years is 82%.

Faculty Qualification Details

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
PHD	13	--	3	--	4	1	21
MPhil	--	--	--	--	2	3	5
ME/M Tech/ MSc/ MA / MBA	--	--	14	1	41	14	70
BE	--	--	--	--	3	--	3
Temporary Teachers							
PHD	--	--	--	--	--	--	--
ME/ MTech/ MSc/ MA / MBA	--	--	--	--	11	6	17

BE	--	--	--	- -	17	11	28
Total							144

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

More or less every institute in this region has the scarcity of qualified senior faculty in the emerging areas. However, the institute makes sincere efforts in this regard by following means.

- Advertisement of vacancy positions in leading news papers, website, through personal contacts etc.
- Encouraging internal faculty members to enhance their qualification and skill.
- Conducive environment and pay-scales as per norms
- Timely promotions and additional increments as an incentive

As a result of the above stated consistent efforts, the institute could grow its PhD qualified faculty members to 21 and 31 more are pursuing.

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

The institute has positive attitude for the enhancement of teacher quality. The strategies adopted by the institute for the same are as follows.

- Explicit budgetary provisions for Faculty members to attend Conferences/ Workshops/ Training programs etc.
- Sanction of duty leaves and registration fees to attend staff development programmes/ Conferences/ Workshops/ Seminars/ STTP
- Financial assistance to organize International/ National Conferences/ Workshops/ Seminars etc.
- Duty leaves to faculty members if invited as resource persons.
- Institute is enrolled as IIT's Remote center for conducting FDP/ STTP courses.
- Promotion to research activities through Shram Sadhana Research Promotion Scheme

A) Nomination to staff development programmes (eg. Refresher courses, FDP programmes, Orientation programmes, Staff training conducted by the

university, Staff training conducted by other institutions, Summer/ winter schools, workshops, etc.)

Academic Staff Development Programmes	2015-16	2014-15	2013-14	2012-13	2011-12
Refresher courses	-	-	3	-	-
HRD programmes	-	6	7	39	14
Orientation programmes	-	-	-	-	-
Staff training conducted by the university	-	-	-	-	-
Staff training conducted by other institutions	-	3	6	4	3
Summer/ winter schools, workshops	10	18	30	54	51

B) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning (eg. Teaching learning methods/ approaches, Handling new curriculum, Content/ knowledge management, Selection, development and use of enrichment materials, Assessment, Cross cutting issues, Audio Visual Aids/ multimedia, OER's, Teaching learning material development, selection and use etc.)

	2015-16	2014-15	2013-14	2012-13	2011-12
Faculty Training programmes organized	0	3	2	6	5

C) Percentage of faculty members

X= Invited as resource persons in Workshops/ Seminars / Conferences organized by external professional agencies (Professional Body/ Institutions/ Organizations)

Y= Participated in external Workshops/ Seminars/ Conferences recognized by national/ international professional bodies (Professional Body/ Institutions/ Organizations)

Z= Presented papers in Workshops/ Seminars/ Conferences conducted or recognized by Professional agencies (Professional Body/ Institutions/ Organizations)

	2015-16	2014-15	2013-14	2012-13	2011-12
X	2.08	3.14	3.03	4.24	3.76
Y	7.63	27.67	31.52	57.58	53.38
Z	3.47	28.30	32.73	36.36	35.34

2.4.4 What policies/ systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications, teaching experience in other national institutions and specialized programmes, industrial engagement etc.)

The institute has a positive attitude for the professional development of the faculty in acquiring the knowledge of recent developments and engaging them in the research activities. The following are some of the highlights.

- The Institution provides seed grants through Shram Sadhana Research Promotion Scheme to faculty members.
- The Institution encourages faculty members to raise their own research funds through project proposals from funding agencies such as AICTE, DST, UGC, NMU etc.
- The Institution provides financial assistance and leave to attend National/ International Conferences/ Seminars/ FDP etc.
- Organizes National/ International Conferences/ Workshops/ Seminars every year
- Hosts online workshops of IIT Bombay as a Remote Center for faculty members
- Subscribing IEEE, Springer, ASCE, J-GATE, Elsevier etc.
- DELNET , IIT Bombay Library

2.4.5. Give the number of faculty who received awards/ recognition at the state, national and international level for excellence in teaching during the last four

years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Following are the faculty members who have received awards at the state and national level.

Year	Sr. No.	Name of faculty having awards/recognition	Title of Awards/recognition	Issuing Body
2015-16	1	Dr. Mujahid Husain	Utkrushtha Shikshak Puraskar	North Maharashtra University, Jalgaon
2013-14	2	Dr. Sanjay P. Shekhawat	Best Teacher Award	Hire Foundation, Nashik
2012-13	3	Mr Sandip. S. Patil	Young Engineer Award-2012-13	The Institution of Engineers, India
2012-13	4	Mr. Surendrs P. Ramteke	Promising Engineer Award-2012	Institute of Engineers “Nasik Local Centre”, Nasik in year of 2012.
2011-12	5	Mr Sandip S. Patil	Promising Engineer Award-2011	The Institution of Engineers, India
2010-11	6	Dr. Paresh J. Shah	“Shiksha Rattan Puraskar” for his meritorious services, outstanding performance and re-makeable role, by Dr. Iqbal Singh, Lt. Governor of Pondicherry	Organized by India International Friendship Society (IIFS) on Dt. 08/09/10 at Dy. Speaker hall, New Delhi.

The institute has provided conducive environment for nurturing good work culture. This has sparked the manifestation of inherent potential in the faculty members. The conducive environment includes infrastructural facilities, motivation, encouragement, support and guidance.

2.4.6. Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes. The institution has a feedback system to evaluate the teachers by students. In the middle of each term, the feedbacks from the students are taken for all subjects. In this feedback, questions regarding performance of the teachers are sought. Their feedback is analyzed by the concerned HoD. In the meetings of Academic and Examination Committee such feedbacks are discussed and also with the concerned faculty members to motivate them for improvement.

Further, teaching ability of teachers are also evaluated time – to –time through an internal panel of senior faculty members.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

University syllabus and teacher manual contain well defined evaluation process. The syllabus and teacher manual are made available to all the stakeholders through website of NMU and the institute.

At the beginning of each term, every faculty member discusses the course content and its evaluation process with the students in their respective theory and practical sessions.

Further, the same is also reviewed time-to-time in the departmental meetings.

Moreover, before the commencement of the programme, the institute organizes orientation and induction program for first year students and their parents. In this program, students are made aware about the evaluation process in the curriculum and how to study, along with the college campus, departments, facilities etc. Parents are also made aware of the evaluation process during parents meet.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

During last three years, the university has come up with a major evaluation reform in its UG and MBA curriculum i.e. Credit-Grade based Performance and Assessment (CGPA) system. The institute has adapted this major evaluation reform of the university.

The CGPA system for UG includes 80-20 marks pattern for Theory Examination with Internal Sessional Examination (ISE) of 20 marks and End Semester Examination (ESE) of 80 marks. Further, minimum 16 audit points for co-curricular activities and minimum 8 audit points for Extra - curricular activities should be obtained by every student during his course of study. Audit points are mandatory for the award of degree.

The CGPA system for MBA includes 60-40 marks pattern for Theory Examination with Internal Examination of 20 + 20 marks and End Semester Examination (ESE) of 60 marks.

In alignment with CGPA system for UG, reforms initiated by the institute are as follows.

- In each term TWO ISEs are conducted. Better mark secured in TWO ISEs is considered as ISE mark in the respective subject.
- Evaluation of Internal Continuous Assessment (ICA) for practical is done on the basis of Attendance (A), Performance (P), Journal (J), and Viva (V).
- To facilitate the students to earn audit points, Institute organizes co-curricular and Extra - curricular activities regularly.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

The institute ensures effective implementation of the evaluation reforms of the university and those initiated by the institution on its own are as follows.

- Institute, as a center, conducts university examinations as per schedule and requirement of the university.
- For Internal Sessional Examination (ISE), Institute has exam coordinator for each department who is responsible for smooth conduct of the same.
- TWO ISEs are conducted as per the academic calendar of the institute.
- For Audit Points, institute has coordinator for each department who maintains and monitors the audit points obtained by each student.
- For ICA, the grades are notified to the students time-to-time.
- Students' performance in terms of attendance and marks in ISE is communicated to parents regularly.
- As per the schedule of submission in the academic calendar of the institute, the concerned faculty member certifies the lab work record as a part of ICA.

2.5.4 Provide details on the formative and summative evaluation approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system

Formative evaluation is the ongoing feedback that helps faculty members to improve their teaching and students to improve their learning. Approaches adopted by the institute for formative evaluation are faculty – student interaction,

assignments, Internal Sessional Examinations, students' meeting with HoD, class – teacher and Teacher – Guardian.

Summative evaluation is the feedback at the end of an instructional unit that helps faculty members for subsequent courses. Approaches adopted by the institute for summative evaluation are performance in End Semester Examination (ESE), final project examination, course end survey etc.

Through the ongoing feedback as part of formative assessment, the institute has initiated remedial classes for the students those who have difficulties in Elements of Civil Engineering and Engineering Mechanics, and Engineering Mathematics subjects. Further, the Institute has initiated classes of English to improve their communication skills.

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)

Significant improvements made in the internal assessment are as follows.

- The Institute has specially developed the evaluation of Internal Continuous Assessment (ICA) for practical by Attendance (A), Performance (P), Journal (J), Viva (V).
- TWO Internal Sessional Examinations (ISE) are conducted in each term, and best of TWO is considered as ISE mark in the respective subject.

For the overall development of the students, minimum 16 audit points for co-curricular activities and minimum 8 audit points for Extra - curricular activities should be obtained by every student during his course of study. Audit points are mandatory for the award of degree.

As a part of transparency, grade of ICA and marks of ISE are notified time to time to the students by displaying on the notice board and to their parents by letter/ SMS.

The UG curriculum includes three courses on soft skills. As a part of summative assessment the courses have grades/marks in Internal Continuous Assessment. For the overall development of students, seminar as independent learning is a part of UG curriculum.

In PG curriculum, students get independent learning opportunity through seminars, projects, industrial visits, class room presentations, group discussions, case studies etc.

UG curriculum has six credits for communication skill at first year and second year, 19 credits for project/seminar/special study/industrial visit at third year and fourth year.

In MBA, two theory subjects, organizational behavior – I and II, cover behavioral aspects.

2.5.6 What are the graduates attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

Graduate attributes adapted by the college are as follows.

- Engineering Knowledge
- Problem analysis
- Design/Development of solution
- Investigation
- Modern Tool Usage
- The Engineer and society
- Environment and Sustainability
- Ethics
- Individual and Team work
- Communication
- Project Management and Finance
- Lifelong Learning

These graduate attributes are mapped with Programme Outcomes (POs), defined by the department for every programme. Attainment of POs are through correlation of Course Outcomes (COs) and POs, correlation of laboratory work and POs. Assessment of attainment of POs are through Direct Assessment Tools such as end semester examination, ICA, ISE etc., and Indirect Assessment Tools such as survey reports.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

University has a well-defined mechanism for redressal of grievances with reference to evaluation. The mechanism has the provision for the students to apply for verification of marks and photocopy of answer books. Further, the student may also challenge the evaluation.

At the college level, the institute has adapted transparent mechanism with reference to evaluation by notifying the internal marks time-to-time to the students. For redressal of grievances, the students can meet subject teacher / HoD for clarification.

2.6 Student performance and Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If “yes” give details on how the students and staff are made aware of these?

Yes, the college has clearly stated programme outcomes for every programme. The same are made aware to the students and staff through college website, display boards in the departments, lab manuals etc.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/ programme? Provide an analysis of the students results/ achievements (Programme/ course wise for last four years) and explain the differences if any and patterns of achievement across the programme/ courses offered.

The institute monitors the progress and performance of students through Attendance, Internal Continuous Assessment (ICA), Internal Sessional Examination (ISE) and End Semester Examination (ESE).

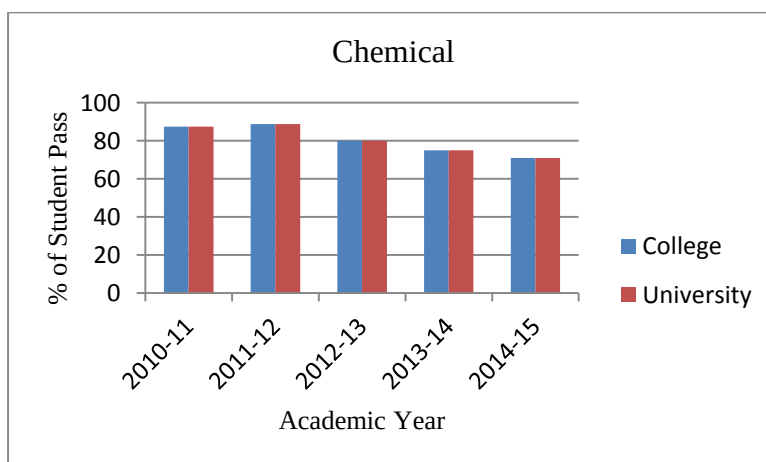
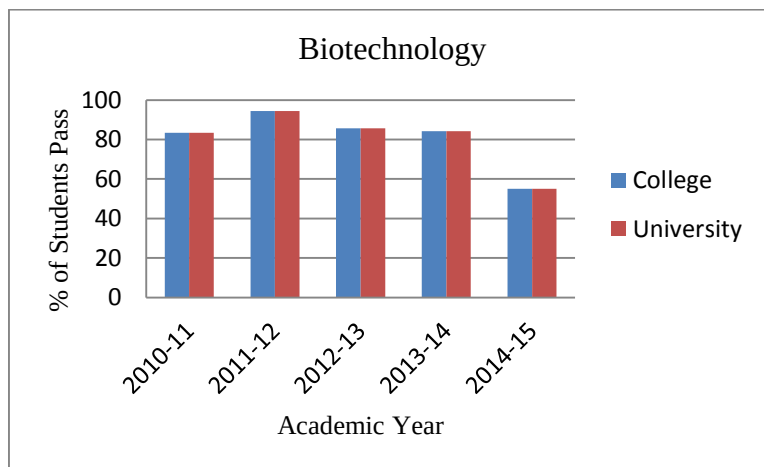
Marks in ISE are communicated to the students by the concerned faculty through their answer papers. Answer papers of ISE are shown to the students and discussed in the class.

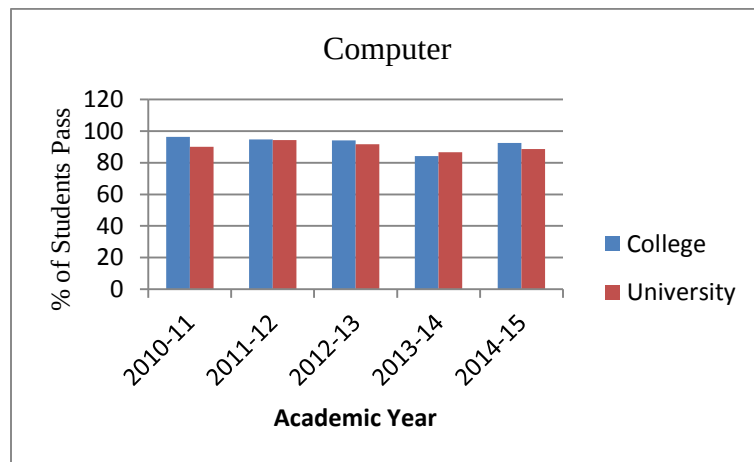
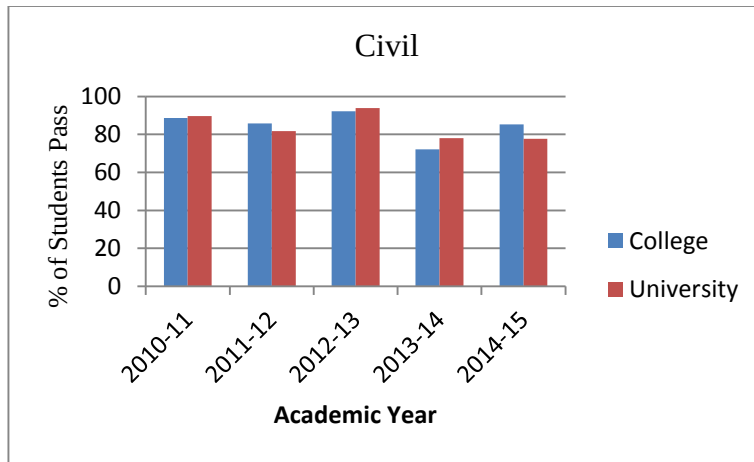
Grade in ICA for the lab work are shown to the students during the lab session time to time.

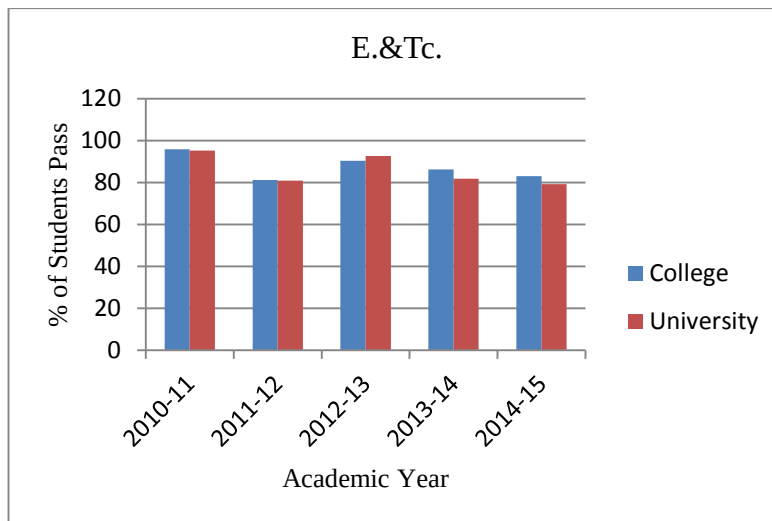
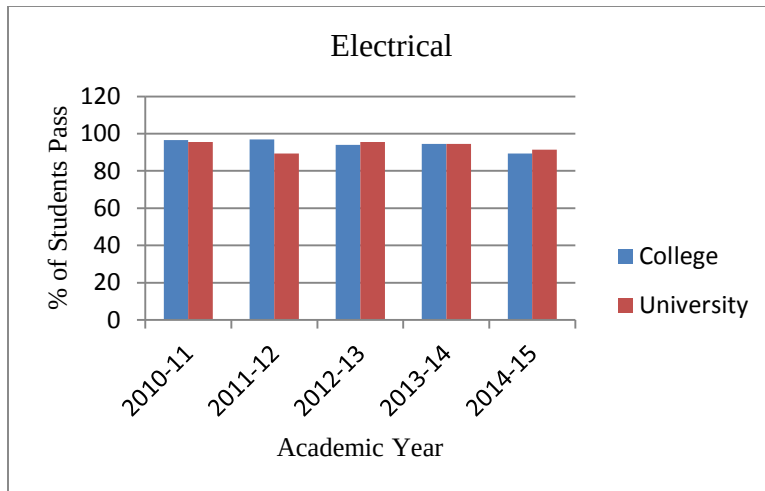
Attendance and marks in ISE of each and every student are communicated to parents through letter / SMS time-to-time.

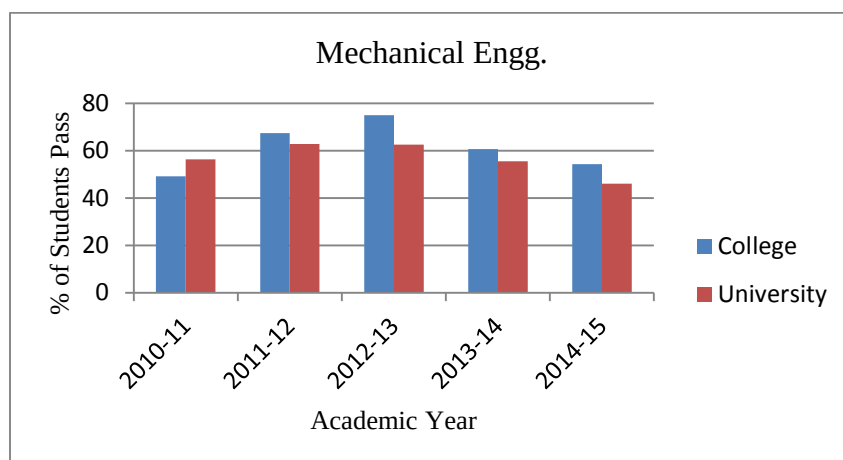
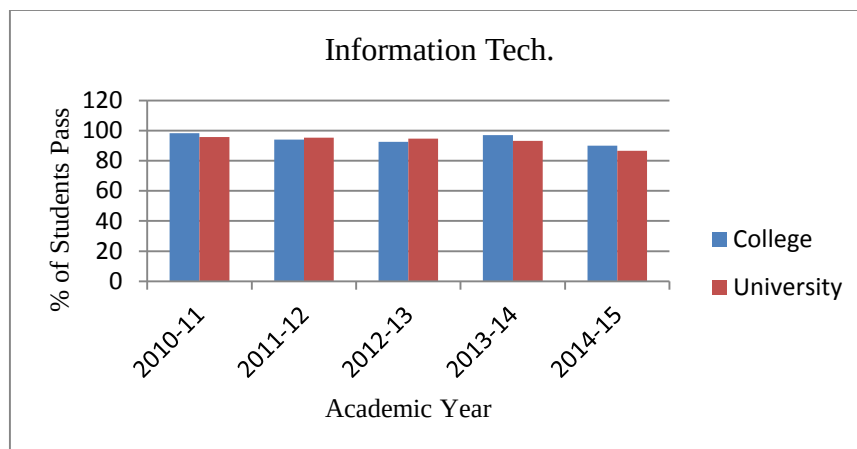
Result Analysis of Final Year Engineering UG Programme (in %):

U.G. Branch	2010-11		2011-12		2012-13		2013-14		2014-15	
	Colleg e	Universit y	Colle ge	Universi ty	Colleg e	Universi ty	Colleg e	Universi ty	Colleg e	Universit y
Biotech	83.33	83.33	94.44	94.44	85.71	85.71	84.21	84.21	55	55
Chemical	87.5	87.5	88.88	88.88	80	80	75	75	70.96	70.96
Civil	88.57	89.72	85.71	81.71	92.16	93.86	72.13	78.08	85.29	77.73
Computer	96.26	90.05	94.62	94.19	94.07	91.55	84.06	86.64	92.46	88.62
Electrical	96.59	95.53	96.97	89.42	93.94	95.53	94.52	94.55	89.39	91.44
E&TC	95.89	95.31	81.25	80.95	90.37	92.67	86.33	81.83	83.11	79.23
I.T.	98.15	95.71	93.94	95.31	92.5	94.6	96.88	93.17	89.87	86.57
Mechanical	49.15	56.29	66.67	62.83	69.42	62.56	59.72	55.47	54.3	46





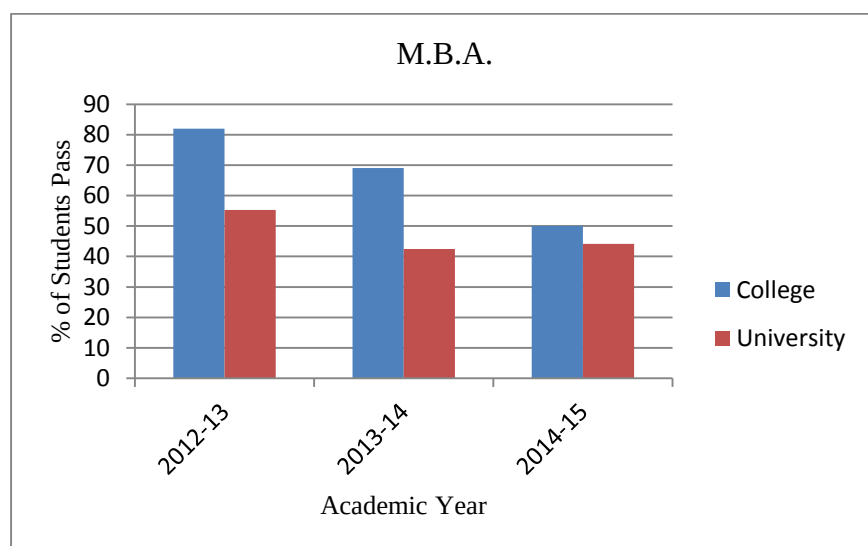




Result Analysis of Final Year Engineering UG Programme shows that it is at par with the university results.

Result Analysis of Final Year MBA PG Programme (in %):

	2012-13		2013-14		2014-15	
	Colleg e	Universi ty	Colleg e	Universi ty	Colleg e	Universit y
MBA	82	55.3	69.09	42.47	50	44.12



Result Analysis of Final Year MBA PG Programme shows that it is at par with the university results.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The institute hierarchical structure to facilitate the achievement of the intended learning outcomes is Principal, Director of Academics (DoA), Head of the Departments (HoDs) and subject teachers.

Before beginning of every academic year, a meeting is conducted by the Principal along with Director of Academics (DoA) and Head of the Departments (HoDs) to finalize academic calendar. Strategy and issues related to academics, co-curricular activities and extra-curricular activities are also discussed in the meeting with an aim to improve the outcomes.

Staff members prepare Course Outcomes (COs) for the respective subject in accordance with university syllabus and teacher manual. These outcomes contribute towards achievement of Programme Outcomes (POs). Assessment of attainment of POs are through Direct Assessment Tools such as end semester examination, ICA, ISE etc., and Indirect Assessment Tools such as course end survey reports, alumni survey reports etc.

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

In order to enhance the job quality, the students are made aware of future prospects of various options by faculty members and through Teacher – Guardian Scheme.

The students are motivated through expert lectures, personality development programs and also encouraged to participate in co-curricular and extra – curricular activities for their all-round development.

To enhance the social and economic relevance, Institute has formed various committees such as Social welfare committee, Student welfare committee, research and development committee etc.

Apart from this the institute has Training and Placement cell that organizes campus drive/industrial trainings/ workshops/ career guidance for competitive examinations. To enhance employability, Institute provides financial assistance to the students for participation in job oriented and innovative workshops.

Departments also organize expert/ guest lecture of industry persons and eminent academicians. Departments have MOUs with industries and training institutions

Institute organizes FEAST, a lecture series of eminent scientists, entrepreneurs, social activists and industry/ sports persons for social awareness. Dr. Vijay Bhatkar, Social worker Dr. Prakash Amte, Dr. Mandatai Amte, Dr. Ravindra Kolhe, Shri Ram Bhogale, Adv. Ujjawal Nikam and others have visited our college during FEAST lecture series.

Further, the institute organizes Entrepreneurship Awareness Camps under Innovation and Entrepreneurship Development Center (IEDC) for students. The Objective of the same is to create awareness among students about various facets of entrepreneurship as an alternative career option and also to highlight the merits of pursuing such an option. IEDC sponsors five innovative students' projects every year. Institute also provides financial assistance for innovative students' projects.

The institute organizes National and International conferences as a motivation towards innovation and research aptitude. Institute has facilitated with subscription of e-journals for the same.

2.6.5 How does the institution collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning?

The institute collects data on student learning outcomes by following means.

- Learning Outcomes (COs) contribute towards achievement of Programme Outcomes (POs). Assessment of attainment of POs are through Direct Assessment Tools such as semester end examination, progressive assessment of practical, class test etc., and Indirect Assessment Tools such as course end survey reports, alumni survey reports etc.
- After the declaration of University examination results, the institute analyses the results not only of this institute but also of all other institutes under this university.
- Further, at the end of every semester, course end surveys are conducted to identify the deficit in learning outcomes.
- Alumni surveys are conducted to identify the gap in learning outcomes.
- Ongoing student feedback during the semester helps faculty members to improve their teaching and students to improve their learning.

In order to overcome the barriers of learning, the institute has taken following measures.

- Providing question bank to the students.
- Discussing model answer of university question papers with the students.
- Providing course materials for self-learning by the students.
- Special attention to weaker students through remedial classes.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

Assessment of attainment of Programme Outcomes (POs) are through Direct Assessment Tools such as semester end examination, progressive assessment of practical, class test etc., and Indirect Assessment Tools such as course end survey reports, alumni survey reports, Employer survey reports, Student exit survey etc.

The institute ensures the achievement of programme outcomes through effective planning and implementation of academic calendar that amalgamates and enriches academics with co-curricular and extra-curricular activities.

2.6.7 Does the institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning

objectives and planning? If “yes” provide details on the process and cite a few examples.

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

Institute uses university results, participation of students in co-curricular and extra-curricular activities at the university/state level etc. as an indicator. And accordingly the same is reflected in academic calendar.

Teacher uses students’ attendance, performance in sessional examinations, performance in the class/ lab, and feedback by the students as an indicator. And accordingly the teacher plans the course and teaching methodology, provides course materials, delivers content beyond syllabus etc.

Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

Institute has facilitated Ameya Shirwadkar, student of B.E. (Electrical) 2014-15 and Krunal Girase , student of M.E. (Mechanical) 2013-14 to participate in summer school training programme at Tokushima University, Japan with participants of different countries.

Institute has sponsored four GOLD medals to North Maharashtra University, Jalgaon.

Criterion III: Research, Consultancy and Extension

3.1 Promotion of Research

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

The institution is affiliated to the North Maharashtra University, Jalgaon, MS. The laboratories of following departments are recognized for doctoral level research by the University:

- Civil Engineering,
- Mechanical Engineering,
- Electronics and Telecommunication Engineering,
- Chemical Engineering,
- Biotechnology.

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

The college has formed a research committee comprising of Dr. M. Husain (Director of Research), Dr. M. Panigrahi (HoD Applied Science), Dr. G. K. Patnaik and (HoD Computer Engineering) Dr. D. S. Deshmukh (HoD Mechanical Engineering) and Professor V. S. Patil, Professor from North Maharashtra University, Jalgaon.

The committee has following objectives:

- To keep a track of various research funding schemes of funding agencies.
- To encourage the faculty members to prepare research proposals.
- To scrutinize the research proposals
- To keep records of research proposals communicated and sanctioned.
- To coordinate the indigenous research promotion scheme (SSRPS)

The committee has given following recommendations:

- The committee has recommended for budgetary provision in regular budget.
- The committee has recommended for budgetary provisions for SSRPS.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

- **Autonomy to the principal investigator:**
- **Timely availability or release of resources**
- **Adequate infrastructure and human resources**
- **Time-off, reduced teaching load, special leave etc. to teachers**
- **Support in terms of technology and information needs**
- **Facilitate timely auditing and submission of utilization certificate to the funding authorities**
- **Any other**

The institute has a policy and commitment to promote the faculty for research and to pursue doctoral degree. The institute has initiated Shram Sadhana research Promotion Scheme (SSRPS) to promote and sustain indigenous research. It provides all sorts of facilities and support including motivation to the researchers for smooth progress and implementation of research schemes/projects. The notifications of research proposals are circulated to all faculty members through Principal/DoRD/DoA and HoDs. The faculty members send research proposals through the scrutiny of Research and Development Committee.

- **Autonomy to the principal investigator:**

The PI has academic and financial autonomy to execute his/her research schemes/projects. As per the requirement of the project, PI procures the equipments/instruments, consumables etc. visits to national/international reputed labs and industry, undergo training etc. with the approval of the Local Management Committee. The PI has autonomy to work in the research laboratories and to avail other infrastructural facilities and resources round the clock.

- **Timely availability or release of resources**

Research agencies, such as UGC, Vice Chancellor Research Motivation Scheme, Rajiv Gandhi Science and Technology Commission, AICTE, DST, sanction the research grant in the name of PI, the amount is deposited in the institute account. However, the institute releases the required amount to the PI as and when required for the same. In case the research grant sanctioned by the agency is inadequate to meet the research objectives, the institute also provides financial support.

The institute has recognized research laboratories for doctoral research in five departments with adequate resources and facilities. The institute budget has explicit provision for research and development. The institute has subscription of e-

journals (IEEE, ASME, Springer, ASCE, J-GATE, Elsevier, McGraw Hill etc.) and internet facility with 60 Mbps bandwidth which are significant for research. The library is also having DELNET facility which provides access to the books of other eminent libraries also.

- **Adequate infrastructure and human resources**

The institute is having 96 laboratories, out of which seven departments are having post graduate research laboratories with the provision of continuous power supply along with adequate supporting staff.

Presently there are 21 faculty members holding doctoral degree and 31 are pursuing. There are 37 doctoral research scholars working in the research laboratories of the institute. Six faculty members are Ph. D supervisors and twenty two PG recognized teachers.

- **Time-off, reduced teaching load, special leave etc. to teachers**

The institute considers such a request on merit basis. Faculty members have been given duty leaves whenever required for project presentation.

- **Support in terms of technology and information needs**

The institute library is quite rich with reference books, encyclopedia, and subscription of esteemed e- journals (IEEE, ASME, Springer, ASCE, J-GATE, Elsevier, McGraw Hill etc.) and has internet facility with 60 Mbps bandwidth which are potentially useful for research. The library is also having DELNET facility and membership of IIT Bombay.

- **Facilitate timely auditing and submission of utilization certificate to the funding authorities**

The finance section and auditor of the college ensure this aspect. All the projects executed in the college under various heads have been timely completed and their utilization certificates have been submitted to the concerned agencies, as per the rules.

- **Any other**

Students under take projects, which contribute societal service through technology, e.g. water quality monitoring of Jalgaon city, design solar integrated inverter, production of soap from non-conventional oil.

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Students are given several kinds of motivations and encouragements for developing scientific temper, research culture and aptitude. College organizes following activities to inculcate scientific temper and research culture in students:

- FEAST- A lecture series of eminent persons of diversified disciplines.
- Expert lectures of eminent scientists and industry personnel.
- Science exhibition for first year students.
- Project exhibition' for the final year students.
- National level paper contest for the students.
- SSBT Fest event at University level. The event includes variety of activities like poster presentation contest, model contest, design contest, numerical exercises, robotics, digital modeling etc.
- College has a ROBO club and SAE (Society of Automotive Engineers)
- The provision is made in institute budget for innovative student project.
- The innovative student projects are financially supported by IEDC.

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.)

The faculty members of the college are actively involved in the research areas of their interest. Following is the list of faculty members along with their research areas:

Sr. No.	Name of Faculty	No. of Students working under		No. of funded projects undertaken	Area of research	Collaborative research (Y/N)
		PhD	PG			

1.	Dr. K. S. Wani	04	-	01	Chemical technology and biotechnology	Y
2.	Dr. M. Husain	06	20	04	Salt gradient solar pond	Y
3.	Dr. D. S. Deshmukh	10	08	01	Thermal	N
4.	Dr. P. J. Shah	-	04	-	Power electronics and power quality	N
5.	Dr. U. S. Bhadade	09	-	-	Cryptography and information security	N
6.	Dr. G. K. Patnaik	-	02	-	MANET security	N
7.	Dr. V. R. Diware	01	-	02	Chemical technology	Y
8.	Dr. I. D. Patil	04	01	06	Water soluble polymers, waste treatments, nano-technology, fermentation technology, biofuels	Y
9.	Dr. M. Panigrahi	-	-	02	Fuzzy logic, nano materials	Y
10.	Dr. S. P. Shekhawat	-	07	02	Solar, thermal	Y

11.	Dr. S. L. Patil	-	02	-	Use of fly ash in concrete and agriculture	N
12.	Dr. S. R. Suralkar	-	02	-	Image processing	Y
13.	Dr. M. P. Deshmukh	-	02	-	Image processing	Y
14.	Dr. P. H. Zope	-	03	06	Nano technology	Y
15.	Dr. K. S. Patil	-	-	04	Nano materials: application to super capacitor, solar cell and thermo electric generator	Y
16.	Dr.V. S. Rana	-	20	-	Marketing	N
17.	Dr. Saroj B. Patil	-	-	-	Human resource	N
18.	Dr. P. P. Bornare	-	-	-	Marketing	N
19.	Dr. P. V. Thakre	-	05	01	Digital controller based photovoltaic system	N
20.	Dr. A. R. Lokhande	-	-	02	Chemical engineering and technology	Y

21.	Dr. S. A. Thakur	-	-	-	Mass transfer (Chemical engineering), consumer behavior (Management)	N
22.	J. Parpalliwar	-	-	04	Fermentation technology, environmental biotechnology, downstream processing	N
23.	S. B. Pawar	-	02	-	Air pollution	N
24.	P. A. Shirule	-	10	07	Base isolation, Use of scrape rubber tyre in concrete	Y
25.	F. I. Chavan	-	12	-	Anaerobic digestion	N
26.	K. P. Adhiya	-	01	-	Data mining	N
27.	S. S. Patil	-	01	-	Network security	N
28.	A. T. Bhole	-	02	-	Network security	N
29.	M. E. Patil	-	-	-	Network security	N
30.	S. S. Gharde	-	02	01	Image processing and	N

					machine learning	
31.	D. U. Adokar	-	02	01	Micro-controller	N
32.	V. M. Deshmukh	-	03	-	Power electronics	
33.	S. U. Nayti	-	01	-	Signal processing and wireless communications	N
34.	N. M. Kazi	-	02	-	Computer networking	N
35.	A. H. Karode	-	03	-	Image processing	N
36.	A. C. Wani	-	02	-	Micro electronics and communication	N
37.	S. P. Ramteke	-	01	-	Digital image processing	N
38.	V. S. Pawar	-	02	-	Solar energy	N
39.	M. M. Ansari	-	03	01	Power systems	N
40.	N. K. Patil	-	10	-	-	N
41.	K. S. Shrivastava	-	-	02	Thermal	N
42.	P. G. Damle	-	10	-	-	N
43.	D. B. Sadaphale	-	11	-	-	N

44.	P. N. Ulhe	-	18	-	-	-
45.	P. M. Solanki	-	03	-	Thermo-electric generator	N
46.	P. D. Patil	-	-	-	-	-
47.	M. V. Kulkarni	-	-	01	Thermal	N
48.	P. A. Anawade	-	20	-	Hotel industry	N
49.	H. A. Salunkhe	-	20	-	Agriculture economics	N
50.	R. A. Modiyani	-	10	-	General management	N

3.1.6 Give details of workshops/ training programs/sensitization programs conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

The college organizes activities like workshops, short-term training programs etc for capacity building of staff and students in terms of research and imbibing research culture. The conferences are organized at departmental level as well as at central level too. Following is the list of some important workshops organized by the college in the assessment years for students and staff:

Workshops/ Training programmes/ Sensitization programmes	Academic Year	Duration
Two days departmental workshop (Biotechnology) on antibacterial activities of medicinal plant	2013-14	2 days
TRANSCRIPTION 2K13, National level workshop on fermentation technology	2012-13	2 day

ASPEN HYSIS WORKSHOP	2012-13	2 days
ASPEN HYSIS WORKSHOP	2011-12	2 days
STTP on Research Methodology	2011-12	3 Days
ASPEN HYSIS WORKSHOP	2010-11	2 days
STTP on Advances in Tribology	2010-11	1 week

Various departments have also organized workshops and STTPs for their faculty members.

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

Various faculty of the department are actively engaged in the research activities. Some of the prioritized research areas are as follows:

Sr. No.	Prioritized Research Areas	Expertise Available (Y/N)	Name of Expert faculty
1.	Chemical technology and biotechnology	Y	Dr. K. S. Wani
2.	Salt gradient solar pond, photo-catalysis	Y	Dr. M. Husain
3.	Thermal	Y	Dr. D. S. Deshmukh
4.	Power electronics and power quality	Y	Dr. P. J. Shah
5.	Cryptography and information security	Y	Dr. U. S. Bhadade
6.	MANET security	Y	Dr. G. K. Patnaik

7.	Chemical technology	Y	Dr. V. R. Diware
8.	Water soluble polyemers, waste treatment, nano-technology, fermentation technology, bio fuels	Y	Dr. I. D. Patil
9.	Image processing	Y	Dr. S. R. Suralkar
10.	Image processing	Y	Dr. M. P. Deshmukh
11.	Fuzzy logic, nano materials	Y	Dr. M. Panigrahi
12.	Salt gradient solar ponds	Y	Dr. S. P. Shekhawat
13.	Digital controller based photo-voltaic system	Y	Dr. P. V. Thakre
14.	Fly ash reuse in concrete and agriculture	Y	Dr. S. L. Patil
15.	Nano technology	Y	Dr. P. H. Zope
16.	Mass Transfer (Chemical engineering) Consumer behavior (Managamanet)	Y	Dr. S. A. Thakur
17.	Solvent extraction, vegetable oil refining, reaction kinetics, olio chemical production from non-traditional oils	Y	Dr. A. R. Lokhande
18.	Nano material: application to super, capacitor solar	Y	Dr. K. S. Patil

	cell thermoelectric generator		
19.	Marketing	Y	Dr. V. S. Rana
20.	Human resource	Y	Dr. Saroj B. Patil
21.	Marketing	Y	Dr. P. P. Bornare

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Budgetary provision is made every year to invite researchers of eminence by organizing workshops, paper presentations, FEAST lecture series, and guest/expert lectures etc. at institute as well as departmental level. The researchers interact with the students and to share their knowledge and experience. Some of the eminent researchers visited the institute are as follows:

Sr. No.	Topic	Date	Resource Person	Background of Resource Person
2015-16				
1	Entrepreneurship and how to go about it	13/09/15	Er. Mahesh Phadnis	Director, JLS Engineers and Traders, India, (Pvt Ltd)
2	Unarmed self defense	13/09/15	Yogesh Dhadave	Shiv Chatrapati Awardee, Silver Medal commonwealth games
3	Changing rural India	14/09/15	Mr. Pradeep Lokhande	Founder, Rural Relations

4	Role of tribes in the modern development	14/09/15	Ms. Pratibha Shinde	Social activist
5	Success is a journey, not a destination	15/09/15	Dr. Ved Prakash Mishra	VC, Datta Meghe Institute of Medical Science, Nagpur
6	Social media and responsible netizen community	15/09/15	Mr. Nikhi Mahadeshwar	Founder, Cyber Secure India.
2014-15				
1	A Journey towards Melghat	05/09/14	Dr. Ravindra Kolhe and Dr. Smita Kolhe	Social Activist
2	Unconditional Obedience is not a Virtue	05/09/2014	Dr. Raj Kachroo	Founder Trustee, Aman Movement
3	Entrepreneurship from a different Perspective	06/09/14	Shri Ram Bhogale	Industrialist, Nirlep Industries
4	Environmental Sustainability	06/09/14	Dr. Sharad Kale	Padmashri, Outstanding Scientist, BARC
5	The Future of India	07/09/14	Lt. Col. Shashi Anand (Ex. Army)	Founder Chairman, Force 10
6	Importance of Sports in Education	07/09/14	Shri Rajesh Naidu	Shiv Chhatrapati Award Winner

2013-14				
1	Youth Participation in social work	29/08/13	Dr. Prakash Amte	Padmashri, Ramon Magsaysay Awardee, Founder Lok Biradaei Prakalp, Hemalkasa
2	Nuclear Power: “Myths & Truths”	29/08/13	Er. Vaishali Patil	Social Activist
3	Solar PV solutions from μ W to MW	30/08/13	Dr. Chetansing Solanki	Prominent Scientist IITB, Mumbai
4	Consequence of Sports and Health in Individual Development	30/08/13	Shri Vishwajeet Shinde	Shiv Chhatrapati Award winner (Rifle Shooting)
5	Realisation of Human Rights with reference to Professionals	31/08/13	Shri Subhash Avate	Retd. IGP Human Right Commission
2012-13				
1	Self Confidence and Personality Development	30/08/12	Dr. Ravindra Nandedkar	National Award for empowerment of persons with disabilities

2	Research in Space	30/08/12	Dr. P. B. Vidyasagar	Renowned Educationist, Internationally acclaimed Scientist
3	Engineering the Future of India for 2047	31/08/12	Dr. Vijay Bhatkar	Padmabhushan, Padmashri, Architect of India's First Supercomputer "PARAM"
4	Arth niyantrit Gramvikas	31/08/12	Km. Neelima Mishra	Padmashri, Ramon Magsaysay Awardee (2011)
5	Idea to Action	01/09/12	Adv. Ujjwal Nikam	Eminent Lawyer
6	Punctuality & Integrity towards Nation	01/09/12	Shri B. P. Singh	IRS, Joint Commissioner Income Tax

At departmental level the Heads of departments insist the eminent researchers visiting for ME Project examination etc. to interact and share their research experiences with the students.

Conferences at national and international level are organized to share the knowledge, expertise etc. of the eminent speakers and participants who are academicians, scientists, or industry persons with the faculty members participating in the conferences.

Some of the eminent researchers visited the institute are as follows:

Sr. No.	Name of Activity	Name of Eminent Researcher/Resource Person

1	Conferences	Dr. M N A Hawlader from IIU, Malaysia Dr. Paul James, Director UN' Global City Program, Australia Dr. Ajay Dalai, University of Saskechvan, Canada Dr. Rajesh Prasad, Yobe University, Nigeria Dr. Sarita .Nimani ,Georgian Court University Lakewood, NJ, USA Dr. G. Panda (IIT Kharagpur)
2	Guest Lectures	Dr. Achut Godbole, I.T. Expert, Mumbai Er. Michael Kadam, Director, i - Tec – India Dr. J. P. Modak , Dean R&D, PCE, Nagpur Mr. Anil Patil , Executive Engineer, MSETCL, Nagpur Dr. Suraj Pardeshi Sr.Maneger,Cromton Grieves, Mumbai Prof. Dr. Shashikant Kelkar, KK Wagh CoE, Nashik Dr. Kanan Puranik ,Agharkar Research Institute, Pune Dr. Mahesh Yenkie, Pro-VC, Nagpur University

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

No faculty has utilized sabbatical leave for research activity. However, the management encourages and motivates the faculty members to improve the quality of research through SSRPS. The institute has recognized research laboratories for doctoral research.

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).

The institute was established with the primary objective of societal development with technological input. The staff members encourage the students to undertake projects which have relevance for direct field applications. Some notable examples are as follows:

- Sullage recycling technology
- A solar energy based Uniform fertilizer spraying machine
- Green Concrete:
- Soap manufacturing using non-traditional oil

Using the sullage recycling technology, the institute has been successful in maintain green premises in this arid region. Some other institutes of the nearby region have approached to the institute for getting technical guidance. The reports of all the above mentioned projects have been published in newspapers for mass awareness. In some cases they have been broadcasted on news channels also

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

The following table gives details of the same:

Year	Total budget of college in Rs	Budget allocated for research in %	Budget utilized for research in Rs
2014-15	170 285 227	0.47%	0.62%
2013-14	193 424 600	0.44%	0.69%
2012-13	185 506 833	1.04%	0.3%

2011-12	191 448 803	0.29%	0.07%

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

The institute has initiated a research funding scheme namely, Shram Sadhana Research Promotion Scheme (SSRPS) in 2011. Under this scheme research proposals are invited from faculty members. The proposals are scrutinized by the expert committee consisting of HoDs and external expert. Based upon the merit of the proposal, the funds are sanctioned to the concerned faculty member, up to Rs. 5,00,000/-. The following table gives details of the funds given under SSRPS:

Academic year	No. of proposals sanctioned	Total fund allocated, Rs.	% of faculty having availed the facility
2015-16	03	431000/-	6
2014-15	01	174000/-	3
2013-14	01	180000/-	3
2012-13	04	204000/-	8.5
2011-12	02	200000/-	4.2

3.2.3 What are the financial provisions made available to support student research projects?

Based upon the merit of research proposals and recommendations of the guide, HoD and Director R & D, the required funds are provided to the innovative projects. The students are provided basic infrastructure and other facilities in the departmental laboratories. However, for some specific requirement, the students can put up their requirements. Examples of such funds provided to the students are as follows:

Under IEDC, five groups of students are provided 100000/- Rs each for their projects. He details are given as under:

Academic Year	Project title
2015-16	Production, purification and characterization of bacterial Xylanase using spent grains and sugar baggasse as a substrate
	Preparation of nano-catalyst and its applications
	Design and manufacturing of modified two stage reduction gearbox for all terrain vehicle
	Designing of wearable sensor for monitoring human activities
	Solar water heating system using innovative flat plate collector and storage volume
2014-15	Fermentive production of bacillus protease using vegetable waste as substrate
	Energy conservation of water motor pump by modified cooling system
	Smart human transport
	Brainwave control robot
	Effective recycling of paper waste
2013-14	Fermentive production of amino acid as a nutrient supplement to plants from agricultural waste
	Photo-catalytic degradation of detergent: kinetic study under slurry phase reactor
	Investigation of sound and heat insulation properties of rubberized concrete
	Design and fabrication of laboratory scale solid state fermenter for production of value added products

	Water air cooled conditioner
2012-13	Effect of bio film on wastewater treatment using bactericidal activity of nitrogen dopped metal oxide nano-particles
	Preparation of lubricating greases from fatty acids of non traditional oils and its applications
	Green air conditioner with double cooling effect
	Power generation system using dance floor
	Reuse of scrap steel as a reinforcing material and scrap tyre as partial replacement of fine aggregates and its impact on properties of concrete

Externally funded projects:

Amount Sanctioned to Students	Project title
11,000/-	Industry Security System by Suruchi Tea Company, Jalgaon
11,000/-	Industry Security System by Kiran Machine Tools Ltd, Jalgaon
25000/-	Project Context at IIT Madras

Internally funded projects:

Amount Sanctioned to Students	Project title
10000/-	Titanium coated buildings
15000/-	Robocon (Mechatronics related event)

275000/-	BAJA (All terrain Vehicle design competition)
50000/-	Robocon (Mechatronics related event)
40000/-	Robocon (Mechatronics related event)
25000/-	Heat retention solar cooker
20000/-	PLC Based Water Supply Scheme for Irrigation

3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The importance of interdisciplinary research is well recognized by the institute. In present scenario it plays vital role to bridge the gaps between horizons of research. It has become an integral component of the track of human progress. The modes of interactions are as follows:

- Interdisciplinary research projects: a few notable examples are as follows:

Sr. No.	Scheme	Title of project	Amount sanctioned, Rs.	PIs with designation
1	Rajiv Gandhi Science and Technology Commission	Radiation estimation and turbidity control in salt gradient solar ponds under tropical Indian climate	378000/-	1. Dr. S. P. Shekhawat, Mechanical engineering department 2. Dr. M. Husian Civil Engineering Department

2	Vice Chancellor Research Promotion Scheme	Experimental investigations on removal of TiO ₂ from effluent of slurry phase photo-catalytic reactors	48000/-	1. Dr. M. Husain Civil Engineering Department 2. Dr. K. S. Wani, Chemical Engineering Department
3	Shram Sadhna Research Promotion Scheme	An evolutionary approach to reuse of environmentally nuisance discarded tyre rubber as a concrete aggregate	152000/-	1. P. A. Shirule, Civil Engineering Department 2. Dr. A. R. Lokhande Chemical Engineering Department

- Guiding Ph. D/PG/UG students by guides of more than one department:

Sr. No.	Level of guidance	Guides	Candidate
1	Ph. D.	Dr M Husain, Civil Engineering Department, Dr N V Halegowda	S. P. Shekhawat

		Principal, College of Engineering, Adsul	
2	P. G.	Dr K S Wani Chemical Engineering Department Dr M Husain, Civil Engineering Department	Shantanu Pawar
3	U.G.	Dr M Husain, Civil Engineering Department Dr V R Diware Chemical Engineering Department	1. Ganesh S. Chate 2. Nilesh D. Bhilmal 3. Nishant H. Vyas 4. Sagar N. Sahare

- Publishing joint research paper by faculty of institute with the faculty of other institute:

Sr. No.	Name of internal Faculty member	Name of External Faculty Member	Details of Paper
1	Dr. M. Husain,	Dr. S. K. Samdarshi, Tezpur University, Assam	Innovative design of non-convective zone of SGSP for optimum thermal performance and stability, 2012, Applied Energy, 93, 357-363.
2	P. A. Shirule	B. V. Mahajan Rajeshri Sahu, CoE Pune	Response spectrum analysis of asymmetrical building, 2013, International Journal of Science, Spirituality, Business and Technology, 2(2), 85-88.

3	Er. Pankaj Anawade	Dr. Shilpa Bendale KCE Institute of Managemnet and Research, Jalgaon	Social media marketing: Current scenario of Indian market, 2012.

The major challenges faced in the interdisciplinary research are as follows:

- Timing mismatch between faculties of different departments/different institutes
- Lack of high end equipments for characterization and experimentation

3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Institute has high end equipments/instruments like Spectro-photometer, FTIR, Fermenter, CMM Machine, UTM, and software like ASPEN HYSYS, MATLAB, PLC SCADA, ANSYS, SAP for research oriented experimentation, characterization and training. These are shared and made available to the students and staff as and when required.
- Students are allocated projects keeping in view the optimal utilization of existing equipments/instruments.
- The e-journals are subscribed in the institute and are accessible to the staff and students anywhere in the campus. Students and staff refer these e-journals for their projects, seminars and research.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If ‘yes’ give details.

No. However, the faculty members have received financial grants from research funding agencies like AICTE, UGC, North Maharashtra University, Government of Maharashtra etc.

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of ongoing and completed projects and grants received during the last four years.

The institute provides administrative support, infrastructural support, and financial support to the faculty members for securing funds from various agencies for research.

The details of the grant received are given herein:

Nature of the project	Duration year from to	Title of the project	Name of the funding agency	Total grant		Total grant received till date Rs Lakhs
				Sanct- ioned Rs Lakhs	Rece- ived Rs Lakhs	
Minor Projects	2013-2015	Seismic response analysis of base isolated multi-storied building	UGC	1.75	1.75	1.75
	2013-2015	Study of Recovery of Phosphoric Acid from Industrial wastewater	UGC	1.17	1.17	1.17
	2013-2015	Studies of alkanolamide and metallic soaps from non traditional	UGC	1.45	1.45	1.45

Major projects	Nil					
Interdisciplinary project	2014-2016	Radiation estimation and turbidity control in salt gradient solar ponds under tropical Indian climate	Rajiv Gandhi Science and Technology Commission	3.78	3.78	3.78
	2013-2015	Experimental investigations on removal of TiO ₂ from effluent of slurry phase photo-catalytic reactors	Vice Chancellor Research Promotion Scheme	0.48	0.48	0.48
	2012-2014	An evolutionary approach to reuse of environmentally nuisance discarded	Shram Sadhna Research Promotion Scheme	1.52	1.52	1.48

		tyre rubber as a concrete aggregate				
Industry sponsored project	2013-2014	Industry security system	Suruchi Tea company, Jalgaon	0.11	0.11	0.11
	2013-2014	Industry security system	Kiran machine tools Ltd, Jalgaon	0.11	0.11	0.11
Students' research project	2012-2015	Students projects	IEDC	20.00	20.00	20.00
Any other	2015-16	Radiation estimation and turbidity control in SGSP in tropical climate	RGS&TC, NMU Centre, NMU, Jalgaon	3.80	3.80	3.80
	2014-15	Direct synthesis of highly conductive polymer or grapheme composite and their applications for DSSP	Vice Chancellor Research Promotion Scheme	0.7	0.7	0.7
	2014-15	Novel idea to fabricate optimized	Vice Chancellor Research	0.7	0.7	0.7

		thermoelectric generator using organic and polymer Nano composite	Promotion Scheme			
	2014-15	Study on Fermentative Production and Purification of Amino Acids from Agricultural Waste	RGS&TC, NMU Centre, NMU, Jalgaon	2.00	2.00	2.00
	2014-16	An evolutionary approach to reuse of environmentally nuisance discarded tyre rubber as a concrete aggregate	Vice Chancellor Research Promotion Scheme	1.13	0.70	0.70
	2014-16	Identification recognition transformation and analysis of modi script	Vice Chancellor Research Promotion Scheme	0.25	0.17	0.17
	2014-15	Digital system processor based standalone 1000 watt photo voltaic system	RGS&TC, NMU Centre,	2.0	2.0	2.0

			NMU, Jalgaon			
	2013-14	Synchronous machine on infinite bus	MODROB (AICTE)	5.35	5.35	5.35
	2013-2014	An evolutionary approach to reuse of environmentally nuisance discarded tyre rubber as a concrete aggregate	MODROB (AICTE)	9.05	8.68	8.68
	2011-2012	Enhancement of MMM Lab for rural development	MODROB (AICTE)	12.00	12.00	12.00

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

All infra-structural facilities are available to the students and research scholars for carrying out research within the campus.

- Recognized laboratories for doctoral research.
- Internet facilities with bandwidth 60 Mbps and Wi-Fi.
- Well stalked library along with e-journals like ASCE, ASME, IEEE, j-GATE, Springer etc. with DELNET facility and membership of IIT Bombay.
- Software like ASPEN HYSYS, MATLAB, PLC SCADA, ANSYS, SAP.
- Provision of allocation of budget for research.

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

The institute has a prospective plan which gives adequate emphasis to research in new and emerging areas. The prospective plan includes recognition of laboratories of all departments for doctoral research, increasing the number of Ph. D faculty members, and creation and up-gradation of infrastructural facilities. To accomplish the same, following steps are taken:

- Yearly allocation of budget for
 - E journals and books
 - High end equipments/instruments/software.
 - Organizing/participating national/international conference, Training programs, workshops etc.
 - Increase in internet bandwidth.
 - Indigenous research promotion scheme (SSRPS)

3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments / facilities created during the last four years.

No. However, the faculty members have received financial grants from research funding agencies like AICTE, UGC, North Maharashtra University, Government of Maharashtra etc.

The major equipments/instruments obtained through these funds are as follows:

- CMM (MODROB)
- CTM (MODROB)
- SAP software (UGC)
- Synchronous machine infinite bus (MODROB)

3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

The students who wish to avail facilities for their research/projects in some other laboratories are given recommendation letter to seek permission to work. DELNET facility and membership of IIT Bombay library is made available to students and research scholars.

3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

The library is air cooled and well equipped with good books, encyclopedias, magazines, research journals in hard copies as well as e journals. There are over 12000 titles and 58000 volumes in the library costing over Rs. 2.05 crore. There are 110 journals available in hard copy. The library has subscribed e-journals like ASCE, IEEE, Elsevier, J-GATE and Springer etc. with DELNET facility and membership of IIT Bombay. A separate reference section and reading section is provided.

3.3.6 What are the collaborative research facilities developed/created by the research institutes in the college. For example Laboratories, library, instruments, computers, new technology etc.

No

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of

- Patents obtained and filed (process and product)
- Original research contributing to product improvement
- Research studies or surveys benefiting the community or improving the services
- Research inputs contributing to new initiatives and social development

Patents obtained (process)

Sr. No.	Name of faculty member	Details of patent	Year of obtained
1	Dr. K. S. Wani	A Method for production of orange colored aliphatic pigment by <i>Chryseobacterium Indologenes</i> (Patent No. 196509 of 16/12/2003, A-MU/0865).	2005

Patents filed (process)

Sr. No.	Name of faculty member	Title of patent	Year of filing
1	Dr. M. P. Deshmukh	Inprint identification using directional features.	2012

Original research contributing to product improvement

Sr. No.	Description of research contribution for product improvement
1	Reuse of fly ash to enhance concrete properties
2	Reuse of scrape rubber tyre to enhance concrete property
3	Reuse of steel scrape to enhance concrete property
4	Reuse of coarse and fine aggregates made from plastic waste to enhance concrete property
5	Reuse of fly ash to enhance soil fertility
6	Fly ash bricks
7	Press earth bricks
8	Soap from naturally occurring origin has been developed by non-traditional oil
9	Production and purification of Nisin and its application as Preservative in food industry.

Research studies or surveys benefiting the community or improving the services

Sr. No.	Description of Research Study/Survey for Community Benefit
1	Composting of solid waste for village Savda
2	Composting of agricultural Solid waste
3	Composting of flower waste obtained from temples
4	Experimental studies on effect of use of nitrogen fertilizer on ground water
5	Soap from naturally occurring origin has been developed

Research inputs contributing to new initiatives and social development

The students are encouraged to undertake project that have direct benefits to the society, e.g.

- Reuse of plastic and rubber waste in concrete
- Development of solar based uniform fertilizer spray machine
- Development of economical and efficient air cooler
- Saving energy consumption of water motor pump

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

The institute publishes and international journal titled “International Journal of Science Spirituality Business and Technology” since 2012. The editorial members are eminent academicians from esteemed organizations. There are two layers of editors: the Editor – in – Chief and the Editorial Boards Members.

Editors in chief: Principal of SSBT’s College of Engineering and Technology, Bambhori, Jalgaon and a senior professor.

Editorial Board: Comprising of Eminent academicians of esteemed institutes of India and abroad.

The journal is published on line as well as in print form twice a year. The ISSN numbers of the journal are 2277-7261 and 2278-3857 respectively. The papers are invited by email and are scrutinized by the editorial boards. The paper quality, originality and its technical relevance are given importance while selecting the paper.

In Jan 2015 the College organized an international conference on Global Trends in Engineering Technology and Management. The selected papers were published in the International Journal named “Cyber Times International Journal of Technology and Management”. The editorial board of the journal is comprised of eminent academicians of India and abroad.

In Jan 2016 the College is going to organize an international conference on Global Trends in Engineering Technology and Management. The selected papers will be published in the International Journal named “International Journal of Engineering Trends and Technology”. The editorial board of the journal is comprised of eminent academicians of India and abroad.

3.4.3 Give details of publications by the faculty and students:

- **Publication per faculty**
- **Number of papers published by faculty and students in peer reviewed journals (national/ international)**
- **Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**
- **Monographs**
- **Chapter in Books**
- **Books Edited**
- **Books with ISBN/ISSN numbers with details of publishers**
- **Citation Index**
- **SNIP**
- **SJR**
- **Impact factor**
- **h-index**

- **Publication per faculty**

The per faculty publication is 8.21.

- **Number of papers published by faculty and students in peer reviewed journals (national/ international)**

384 numbers of papers are published in the peer reviewed journals by faculty and students.

- **Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

Faculty members have published their papers in esteemed journals listed in international data base like web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc. The total number of papers listed in these data base sites are 71.

- **Monographs**

Nil

- **Chapter in Books**

- ❖ Biopigments Concise Encyclopedia of Bioresource Technology, Haworth Press Publications, New York (by Dr. K. S. Wani)
- ❖ Ponds: Formation, Characteristics and Uses, NOVA Science Publications, New York (by Dr. M. Husain)

- **Books Edited**

Nil

- **Books with ISBN/ISSN numbers with details of publishers**

In all 54 numbers of books are written by the faculty members during 2010-2015.

- **Citation Index**

The numbers of citations of various faculty members of the institute are as follows:

Sr.	Name of Faculty	Citation

No.		
1	Dr. K. S. Wani	25
2	Dr. S. R. Suralkar	156
3	Dr. P. H. Zope	90
4	Dr. M. Husain	89
5	Dr. S. A. Thakur	62
6	Dr. V. R. Diware	45
7	S. S. Gharde	40
8	Dr. P. J. Shah	37
9	K. P. Adhiya	30
10	A. T. Bhole	25
11	S. S. Patil	18
12	S. P. Ramteke	17
13	Dr. I. D. Patil	16
14	Dr. G. K. Patnaik	15
15	N. Y. Ghare	09
16	Y. D. Thakare	09
17	Dr. U. S. Bhadade	09
18	P. A. Shirule	09
19	M. E. Patil	08
20	Dr. D. S. Deshmukh	06

21	P. G. Damle	05
22	S. J. Patil	05
23	N. P. Jagtap	05
24	H. A. Salunkhe	04
25	Dr. P. V. Thakre	03
26	Dr. S. P. Shekhawat	03
27	Dr. S. L. Patil	01
28	K. Srivastav	01
29	M. V. Rawlani	01
30	Dr. A. R. Lokhande	01
31	Dr. M. Panigrahi	51

- **SNIP and SJR**

Some of the faculty members have published their research papers in the journals having SNIP and SJR values. A summary of the same is given here.

Name of Faculty	Name of Journal	SNIP	SJR
Dr. S. P. Shekhawat	Geliotekhnika	0.269	0.158
Dr. M. Husain	Solar Energy	2.574	1.983
	Applied Energy	3.146	3.149
	Renewable energy	2.565	1.962
	Energy conversion and management	2.705	1.842
	Geliotekhnika	0.269	0.158

- **Impact factor**

In all faculty members have published 305 number of papers in the journals having impact factors.

- **h index:**

The h indices of various faculty members of the institute are as follows:

Sr. No.	Name of Faculty	h index
1	Dr. K. S. Wani	4
2	Dr. S. R. Suralkar	7
3	Dr. M. Husain	5
4	Dr. P. H. Zope	4
5	Dr. S. A. Thakur	4
6	Dr. V. R. Diware	4
7	Dr. P. J. Shah	4
8	A. T. Bhole	4
9	Dr. M. Panigrahi	3
10	Dr. G. K. Patnaik	3
11	K. P. Adhiya	3
12	S. S. Gharde	2
13	S. S. Patil	2
14	S. P. Ramteke	2

15	Dr. I. D. Patil	2
16	Dr. U. S. Bhadade	2
17	P. A. Shirule	2
18	M. E. Patil	2
19	H. A. Salunkhe	2
20	Dr. D. S. Deshmukh	1
21	Y. D. Thakare	1
22	P. G. Damle	1
23	S. J. Patil	1
24	N. P. Jagtap	1
25	Dr. P. V. Thakre	1
26	Dr. S. P. Shekhawat	1
27	Dr. S. L. Patil	1
28	K. Srivastav	1
29	M. V. Rawlani	1

3.4.4 Provide details (if any) of

- **Research awards received by the faculty**
- **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**
- **Incentives given to faculty for receiving state, national and international recognitions for research contributions.**
- **Research awards received by the faculty**

Nil

- **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**

Sr. No.	Name of Faculty	Award/recognition received by faculty	Year of Receiving
1	Dr. P. J. Shah	Shiksha Ratan Puraskar, New Delhi	2010
2	S. S. Patil	PROMISING ENGINEER AWARD-2011 given by The Institution of Engineers, India	2011
3	S. P. Ramteke	Promising Engineering Award 2012-13 given by The Institution of Engineers, India	2012
4	S. S. Patil	YOUNG ENGINEER AWARD-2012-13 given by The Institution of Engineers, India	2013
5	Dr. S. P. Shekhawat	Best teacher award given by Hire Foundation, Nashik	2013
6	Dr. M. Husain	Utkrusht Shikshak award given by North Maharashtra University, Jalgaon	2015

- **Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Nil

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

The college believes in a strong bonding between institute and industry. This bonding is established and executed by following steps:

- **Alumni meet:** Every year institute organizes alumni meet. It provides an interface between institute and industry where our alumni serve, and who are entrepreneurs.
- **Consultancy Services:** The College offers consultancy services to industry as well as Government sectors. This helps in strengthening bond between institute and industry.

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The institute has the policy to promote consultancy and to share the revenue generated by the consultancy with the faculty and staff concerned.

The consultancy is advocated and publicized through:

- Alumni
- Displaying the available expertise on institute website.
- Visit to potential clients

3. 5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

The revenue generated by consultancy services is shared with the staff as monetary benefit.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

The college has offered consultancy services mainly in following areas:

- Concrete mix design
- Determination of onsite bearing capacity by Standard penetration test, Plate Load Test, and Terzaghi's Method.
- Cross verification of structural designs
- Software development

The revenue generated by the above-mentioned services is as follows:

Financial Year	Revenue generated, Rs
2014_15	1050000/-
2013_14	1120000/-
2012_13	805000/-
2011_12	700000/-
2010_11	620000/-

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

- The revenue generated by consultancy services is shared by the staff members as follows:

Sr. No.	Position	Share	Sr. No.	Position	Share
1	Institute	25%	7	Lab peon	6%
2	Principal	8%	8	HoD Peon	0.5%
3	HoD	8%	9	Deputy registrar	0.5%
4	Lab In-charge	3%	10	Accountant	0.5%
5	Teacher concerned	36%	11	Cashier	0.5%
6	Lab Assistant	12%		Total	100%

The institute share is merged into the net income of the institute.

3.6 Extension Activities and Institutional Social Responsibility (ISR).

3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The following activities are conducted to contribute to the aspect of good citizenship, service orientation and holistic development of the students:

- The national anthem is sung on all working days in the institute.
- RETC
- Blood donation
- Cloth donation
- FEAST
- CSR activities in MBA department
- Celebration of national and religious festivals
- Communal harmony flags
- Cleanliness drives
- Visit to remand home
- Visit to old age home
- Plantation

3.6.2 What is the Institutional mechanism to track students' involvement in various social movements/activities which promote citizenship roles?

The university curriculum has emphasized on co-curricular and extracurricular activities. The students are awarded audit points for participation in these activities. Minimum audit points required to be qualified for degree are specified by the curriculum. The class teachers keep Xerox copies of participation certificates of such activities.

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

The college recognizes following stakeholders: Students, Staff, Alumni, Parents of students, Employers of students. The college organizes alumni meet, parent meet and employers' meet every year as per the academic calendar. In these meets, the stake holders are appraised with the developments taking place in the college. They are also given time for their responses. They are also given a standard feedback form to fill their response. These responses are analyzed statistically and cognition is taken from time to time.

In some of the committees there is a participation of students and parents also, e. g. Women Grievances Redressal Committee, Anti Ragging Committee, Students Welfare Committee.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

The institute/departmental academic calendar incorporate certain extra-curricular activities that link with the extension and outreach activities. As the university curriculum assigns audit points to such activities, they are well planned and properly tracked also.

The college organizes basically two extension and outreach activities: (1) the rural engineering and technology club (2) students counseling for career selection.

The required expenses for the extension and outreach activities are provided as per the requirements given from time to time, there is no specific provision in the budget for the same.

3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

This does not fit into the academic calendar of the institute.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

The Institute ensures social justice and empowerment of students from under-privileged and vulnerable sections of society by providing relaxation in Institute fees, hostel fees, bus fees and providing scholarships through Shram Sadhana Scholarship Scheme. Value based courses exposes students to issues of gender equity, eco-consciousness and self-esteem. Woman empowerment programmes are organized by the woman grievances redressal committee.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

Through the extension activities qualities like communication/ expressive skills, group work culture, gender equity, eco-consciousness and self-esteem are inculcated in the students. This along with academic learning experience excels the student's career and helps to become a good and responsible citizen.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

This is initiated by following activities:

- The college has joined Rural Engineering and Technology Club in collaboration with IIT Madras. Under this, students work on rural problems in collaboration with local people.
- The faculty members of the institute have initiated environmental awareness program for masses. Faculties have delivered lectures in various organizations to enhance mass awareness regarding environmentally friendly life style. It is an attempt to save environment with mass participation.
- Awareness campaign about Digital India by the faculty members in the nearby rural area, among the students' community.
- Community Internet Awareness initiative for women empowerment.
- Formation of Young Inspirator's network in collaboration with Daily Sakal.

The community involvement in these activities is ensured by written and verbal communication to motivate them to be involved.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

The college has developed collaborative relations with the institutes in the region in following ways:

Blood donation camp in collaboration with red-cross society

Tree plantation in collaboration with schools

Cleanliness drive in village Savkheda.

Awareness camp for villagers about computer literacy, importance of cleanliness.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

The college has received Appreciation Certificates and memento from Red Cross Society of India (Jalgaon Center) for excellent work in blood donation activity.

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives – collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- By inviting eminent researchers from reputed laboratories for lecture sessions for faculty members and students, e.g. Dr. J. S. Pandey, Head Climate Change Department, NEERI, Padmashri Dr. Sharad Kale from BARC Mumbai, Dr. Vijay Bhatkar (Father of Super Computer).
- Research work of Faculty members in laboratories of reputed institutes/organizations.
- Carrying out joint research activities.
- Signing MoUs with industries.
- Executive industry sponsored student projects.
- Deputing PG students for conducting research projects in esteemed laboratories.
- Membership of IIT Bombay Library.

The collaboration has following favorable effects on college activities:

- Publication of joint research papers.
- Opportunity to invite industry related eminent persons for departmental guest/expert lectures, seminar/conferences.
- It helps students to undergo in plant training in various types of industries.

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The institute has MoUs with several esteemed organizations at departmental level. Some industries with whom the MoU has been established are as follows:

- Naturally Yours Biotech, Jalgaon.
- SUHANS Chemicals, Jalgaon.

- PWD Department, Akola
- StellentSuse, Noida
- kWatt solutions, Mumbai
- Campus Component, Pune
- Softaid Limited, Pune
- Kiran Machine tools, Jalgaon
- Master Line Lubricants, Pvt Limited, Bhadgaon (Jalgaon)
- Cyber Times International Journal of Engineering, Technology and Management.
- International Journal of Engineering Trends and Technology.
- Collaborative arrangement with other institutes (MIMS, Jalgaon)

This has facilitated joint research publications, enhancement in publications, industrial training, designing and hands on training, industry linked projects, expert lectures through industrial resource persons for the real world technological exposure to students. A job fair is organized for enhancing the placement in collaboration with MIMS.

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment /creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.

- Jain Irrigation Systems Limited, Jalgaon has donated 55 number of books to enrich the institute library worth Rs. 12160/-.
- Kiran Machine Tools, Jalgaon and Suruchi Tea, Jalgaon has provided financial support for students' projects.
- YIPPE Technologies, Muktai Nagar arranged job fair in our Campus. They provided placement to 30 numbers of students. the details are as follows: 12 students from computer department, 7 from Electronics and Telecommunication engineering department, 6 from IT department, 4 from Mechanical engineering department and one from MBA.

3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

The college organizes national/international level conferences every year. These conferences invite eminent academicians from diversified disciplines. The details of the conferences organized are as follows:

Year	Name of event	Some eminent persons visited
2015-16	*International Conference on Global trends in engineering, technology and management	Prof. Dr. Michael Timko, Director, Echolas Scholar Program, Virginia State University, USA
2014-15	International Conference on Global trends in engineering, technology and management	Pt Dr. Vidyasagar, VC, Swami Ramanand Teerth Marathawada University, Aurangabad. Dr. Rajesh Prasad from Yobe University, Nigeria. Dr. Ajay Dalai, University of Saskchwan, Canada
2013-14	International Conference on Sustainable development	Dr. Paul James, Director UN's Global Compact City Program, RMIT University, Australia
2012-13	International Conference on Advances in energy technology	Dr. M. N. A. Hawlader, International Islamic University, Malaysia, Dr. S. Rangnekar, MANIT, Bhopal, MP Er. M. S. Hiwale, ONGC, New Delhi.
2012-13	International conference on Mathematical Modeling and optimizing techniques for engineering and sciences.	Dr. Sarita Nimani, Georgian Court University Lakewood, NJ, USA Prof. (Dr.) G. Panda (IIT Kharagpur)

		Dr. Sudhir Meshram, VC, North Maharashtra University, Jalgaon.
2011-12	National Conference on Green and Clean Technology	Dr. Ajay Dalai, Canada Research Chair Bio-energy and Environmental friendly chemical processes, University of Saskechavan, Canada
2011-12	National Conference on Bio Technology Advances, Transcription 2k12	Prof. K.V. Venkatesh, IIT Bombay Prof. K. Sreeramulu, Chairman, Department of Biochemistry, Gulbarga University, Gulbarga.

* To be held on Jan 4-6, 2016.

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated

—

- a) Curriculum development/enrichment
- b) Internship/ On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- l) Student exchange
- m) Any other

The institute has 16 numbers of MoUs. Glimpses of the activities conducted under them are given as under:

Sr. No.	Activity	Beneficiary
1	Expert lecture	07 numbers of expert lectures are conducted in various departments under MoU. Faculty members and students are the beneficiary.
2	Workshop	13 numbers of workshops are conducted in various departments under MoU. Faculty members and students are the beneficiary.
3	Students' Projects	Two departments have conducted students' projects under MoU.
4	Industrial visits	Two departments organized industrial visits and trainings under MoU.
5	Publication of conference papers in Cyber Times International Journal of Tech. & Management	Faculty member: 23 Student: 10
6	Joint Publications	Faculty Members
7	Placement	Students
8	Consultancy	Faculty Members, Institute

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

In the meeting of the HoDs and Principal it is discussed to have MoU with industry and academic organizations of all departments. It was put up in the meeting of Local Management Committee and subsequent approval was taken. The departments identified the feasible potential partners for collaboration. Through thorough discussions the MoUs are finalized.

Under the MoUs, following activities are conducted which are beneficial to the faculty members, students and institute:

Sr. No.	Activity
1	Expert lecture
2	Workshop
3	Publication of conference papers
4	Joint publications
5	Placement
6	Consultancy

Criterion IV: Infrastructure and Learning Resources

4.1 Physical Facilities:

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The policy of the institute, to create and enhance the infrastructure that facilitates effective teaching and learning, is to follow the norms laid down by the AICTE, New Delhi.

The following strategies are adopted for creation and enhancement of infrastructure:

- Periodical review of infrastructure availability as per the need of development.
- Approval of the infrastructural requirements by Local Management Committee and Governing Body.
- Provision of budget as per the requirements.
- Execution of the approved requirements.

Accordingly, the institute carries out maintenance of existing infrastructure, creation and enhancement of facilities in the laboratories, strengthening of Computer and Internet surfing Laboratories, purchase of books/e-books/periodicals/Journals/e-journals, play ground, sports facilities and other student centric activities etc.

4.1.2 Detail the facilities available for

- a) **Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**
- b) **Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, cultural activities, Public speaking, communication skills development, yoga, and health and hygiene etc.**
- c) **Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**

The college has an Administrative Building with modern amenities. The institute is having state of the art infrastructure to meet the requirements of curricular and co-curricular activities, viz.

• Well ventilated class rooms • Well-equipped laboratories • Computer Center • Central Library • Training and Placement Department • Seminar Hall in each Department • AC Seminar Hall • Conference Halls • ICT tools (LCD projector, White board, Interactive board)	• Internet facility • Open Auditorium • Girls common room • Boys common room • Staff rooms. • Central Workshop • Drawing halls • Stationary store • Reprographic facility • Hostels for boys and girls

The specialized facilities include:

- Recognized research laboratories
- Language laboratory
- Virtual class room
- Innovation & Entrepreneurship Development Centre (IEDC)
- Shram Sadhana Development Centre
- Wi-Fi

Others:

- Canteen and Cafeteria
- Bank of Maharashtra with ATM facility
- Health center
- Vehicle parking
- Telephone
- Transport facility
- The Institution has a built up area 34316 Sq.m. with sprawling green campus.

Drinking Water :

Water coolers are located at strategic points on all the floors of the SSBT's, COET, R.O. water is available in hostel & library. DTP and repro graphic facilities are available within the campus.

Infrastructure facilities for academic activities are as follows:

Sr. No.	Details	Required Nos. as per AICTE	Available Nos.	Required area as per AICTE Sq.m.	Available Area. Sq.m.
1	Class Rooms	47	48	3102	4019
2	Labs	94	96	6204	8204
3	Drawing Hall	2	3	264	368
4	Seminar Hall	9	9	1188	1379
5	Tutorial Room	28	34	924	1336
6	Workshop	1	1	200	1024
7	Computer Center	1	1	150	162
8	Central Library	1	1	800	1251
	Total				17743

Administrative area – infrastructure facilities are as follows:

Sr. No.	Details	Number	Required area Sq. M.	Available Area. Sq.m.
1	Principal Room	1	30	82
2	Conference Halls	2	20	164
3	Administrative Office	4	150	242
4	IEDC Office	1	66	108
5	Department Office	10	180	260
6	HODs Room	10	90	254
7	Staff Rooms/area	As reqd.	--	1281
8	Central Store	1	30	72
9	Maintenance Rooms	3	10	151
10	Security	1	10	54
11	House keeping	1	10	10
12	Pantry for staff	2	10	33
13	Examination Office	1	30	62

14	Placement Office	1	30	54
	Other Administrative			1070
	Total			3897

Amenities area – infrastructure facilities are as follows:

Sr. No.	Details	Number	Required area Sq m	Available Area. Sq.m.
1	Toilets Ladies & Gents	17	350	433
2	Boys Common Room	1	100	108
3	Girls common Room	1	100	162
4	Cafeteria/Canteen	02	150	663
5	Stationary Store	1	10	72
6	First Aid Room	1	10	18
7	Gymnasium & Sport Club	1	--	374
8	Open Air Auditorium	1	--	1900
9	Other amenities			4418
	Total	---	---	8148
10	Boys Hostel (571 Students capacity)	02	---	6502
11	Girls Hostel (366 Students capacity)	1	---	5432

Total built up area is as follows:

Sr. No.	Details	Required area Sq. m.	Available Area. Sq.m.
1	Instructional Area (carpet area)	16920	17743
2	Administrative Area (carpet area)	2820	3897
3	Amenities Area (carpet area)	5640	8148
4	Circulation Area (carpet area)	--	4528
	Total built up area	32994	34316

Books in central library are as follows:

Course Name	Volumes Required Nos. as per AICTE	Volumes Available Nos.	Cost Rs.	E-Books Sub.	Titles Required Nos. as per AICTE	Titles Available Nos.	National Journals Req. As per AICTE	National. Journals Available	Inter. Jnl. required (Desirable)	Int. Jour Available
Bio-Technology	1625	1628	8,17,282	25	550	558	06	06	--	02
Chemical Engineering	3875	4040	13,31,362	80	1050	1059	06	06	--	02
Civil Engineering (UG)	5875	6911	23,43,446	89	1500	1580	12	12	--	02
Civil Engineering (PG)	1100	1102	4,54,763	70	100	212	--	--	--	--
Computer Engineering (UG)	10000	10136	33,30,824	40	1500	1908	12	12	--	02
Computer Engineering (PG)	900	900	3,87,977	--	100	152	--	--	--	--
Electrical Engineering	3625	3839	11,77,115	112	900	915	06	06	--	02

(UG)										
Electrical Engineering (PG)	400	406	1,69,882	--	100	109	--	--	--	--
E&TC (UG)	6500	6928	24,46,710	44	800	1126	12	12	--	02
E&TC (PG)	900	917	4,34,562	--	100	217	--		--	
Information Tech.	4000	4018	17,75,642	--	800	810	06	06	--	02
Mechanical Engineering (UG)	8000	8084	22,73,178	126	1150	1282	12	12	--	02
Mechanical Engineering (PG)	1100	1104	4,85,849	--	100	235	--	--	--	--
M.B.A.	4000	2488	11,52,749	48	450	850	12	12	--	02
Applied Science	--	6454	21,55,377	31	--	1363	06	06	--	02
Total	51900	58955	2,07,36,718	665	9200	12376	90	90	--	20

b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

For the overall development of the students institute conducts various extra-curricular activities as follows:

Sports facilities:

Total area available for sports is 16830sq.m. Out of which area for outdoor games is 15100 sq.m. and area for indoor games is 1730 sq.m.

a) List of outdoor games:

Sr.No.	Games	Area available
01	Football	102m*68m
02	Cricket	50 Yards(45m radius)
03	Volleyball	9m*18m
04	Basketball	28m*15m
05	Kho-Kho	29m*16m, 25m*14m
06	Kabaddi	13m*10m, 12m*10m
07	Handball	40m*20m
08	Athletics	300m Track
09	Archery	50m Range
10	Hockey	45m*90m

b) List of indoor games:

S.No.	Games	Area available (sq.m.)
01	Badminton	500
02	Gymnasium	1230
03	Table Tennis	
04	Chess	
05	Carrom	
06	Billiards	
07	Fencing	

Gymnasium:

- Hi-tech Gymnasium is available in the institute to help students maintain their fitness.

Auditorium:

- Open air theatre (1900 Sq. m.)
- AC seminar hall (162 sq.m.)
- Air cooled seminar hall (162 sq.m.)
- Departmental seminar halls (8 nos.)

Cultural activities:

The institute has facilities for following cultural activities:

- Vasant Utsav- Annual cultural event
- Drama
- Music
- Traditional day
- Mimicry
- Singing
- Dancing
- Photography
- Debate
- Painting
- Rangoli
- Mono acting
- fashion show

Cultural Committee plans, coordinates and conducts all above cultural activities. The committee consists of faculty members and students.

Public speaking:

Adequate equipment's and instruments are available.

Communication skills development:

Language laboratory with 48 computers and Orell software is available.

Yoga:

Yoga hall (187 sq.m.) with yoga teacher is available for students and staff.

Health:

- Medical care centre with two medical officers
- Vehicle for emergency
- First aid boxes in every department and hostels
- Medical checkup camp for students and staff

Hygiene:

- Cleaning contract
- Permanent staff for cleaning
- Fly catchers
- Mosquito nets
- Exhaust system
- Vending machine and destroyer for sanitary napkins
- RO water systems

Hygiene is ensured throughout the campus specially mess, canteens, hostels, staff quarters. The committee of faculty members ensures food quality and hygiene in mess.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount

spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).

Institute has its perspective plan approved by Governing Body to start new programs and increase in intake. As per the perspective plan, to start new programs to increase in intake in a particular year, the infrastructural equipment's and machinery requirements are identified as per AICTE norms by discussion of concerned faculty members and the Principal. The same is placed before the Governing Body through LMC for approval so that the necessary infrastructure is ready in time for occupation at the beginning of academic session.

The institute plans requirements of infrastructural facilities as per the AICTE norms. Keeping in view of sanctioned intake, infrastructural facilities are developed more than the requirements of AICTE norms. Accordingly the class rooms, laboratory rooms, faculty rooms/cabins etc. are constructed and put in place for utilization. Further, the management with the help of Principal ensures that all the infrastructural facilities available are used to its maximum potential. The institute also ensures that at no point of time it deviates from the minimum prescribed norms of AICTE.

For the laboratories, based on the University syllabus, the equipments required for conducting the laboratory experiments are finalized. After that, the duly constituted purchase committee receives quotations from the leading suppliers and the purchases are made from the supplier which matches the specifications and quality norms. The details of the facilities which have been added are as under:

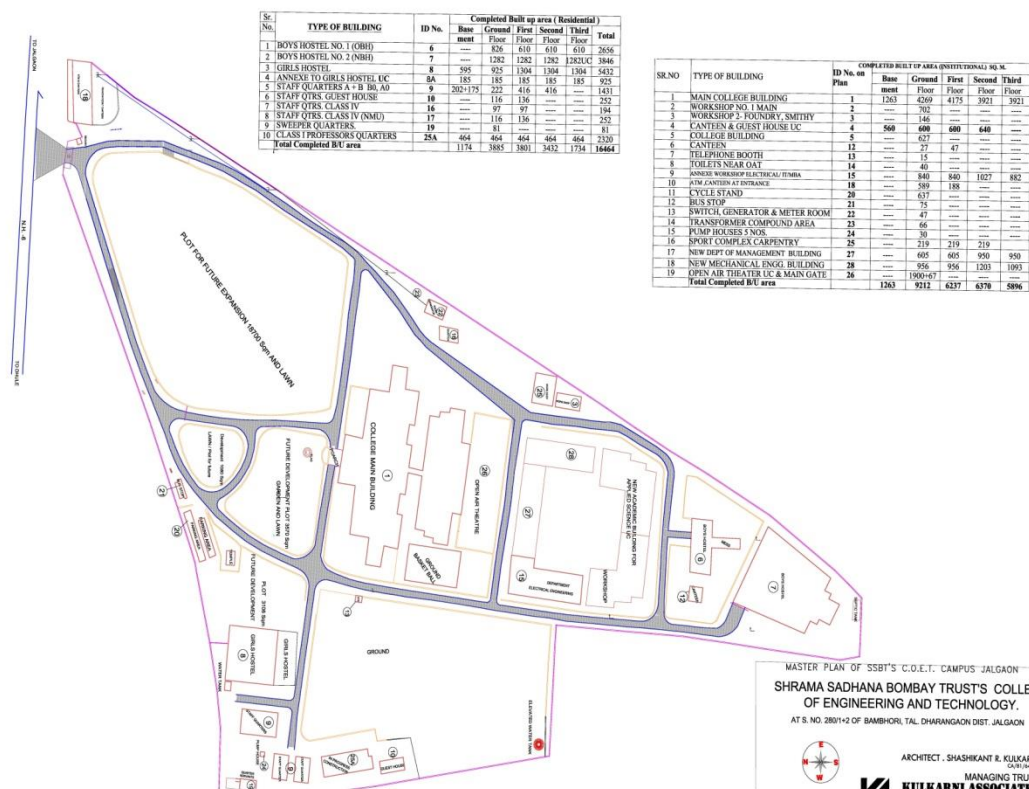
Chronological infrastructural development:

Sr. no.	Academic year	New Progrmme (intake)	Increase in Intake	Infrastructural development	Amount spent in lakhs
1	2006-07	ME Civil (18)	--	2 Labs, 2 Tutorial Rooms	4.40
		BE Biotechnology (30)	--	6 Labs, 2 Class Rooms	6.30
		ME Mechanical (18)	--	2 Labs, 2 Tutorial Rooms	1.10
		--	BE Computer (60 to90)	Furniture	0.7

		--	BE E&TC (60 to 90)	Furniture	0.7
		--	BE Mechanical (60 to 90)	Furniture	0.7
2	2007-08	--	BE E&TC (90 to 120)	Furniture	0.7
		--	BE Mechanical (90 to 120)	New Class Rooms, Labs, Seminar Hall, Faculty Cabins Etc.	22.0
3	2008-09	MBA (60)	--	2 Class Rooms, 3 Tutorial Rooms, Computer Lab, Departmental Library And 3 Faculty Rooms, HOD Cabin With Office	16.0
		--	BE Electrical (30 to 60)	Class Rooms And Furniture	2.5
		--	BE Computer (90 to 120)	Class Rooms And Labs	3.3
		--	BE IT (40 to 60)	Furniture	0.6
4	2009-10	--	BE Civil (30 to 60)	Furniture	0.6
		ME Computer (18)	--	2 Labs, 2 Tutorial Rooms	4.40
		ME E&TC (18)	--	2 Labs, 2 Tutorial Rooms	5.40
5	2013-14	ME Electrical (18)	--	2 Labs, 2 Tutorial Rooms	3.30
		--	BE Civil (60 to 120)	2 Class Rooms	--

Major additional infrastructure developed:

- Open air theatre for cultural activities like Vasant Utsav, Parents meet, Inspiration, Orientation/Induction programme etc.
- R & D laboratories for Chemical Engineering and Biotechnology
- Elevated storage reservoir (2.5 lakhs litre capacity)
- New administrative building
- Cafeteria



Master Plan of Institute

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The infrastructure facilities like Ramp, Wheel Chair and accessible toilet are available for the physically disabled students and these students are normally accommodated in the class rooms available in the ground floor.

4.1.5 Give details on the residential facility and various provisions available within them:

- Hostel Facility – Accommodation available
- Recreational facilities, gymnasium, yoga center, etc.
- Computer facility including access to internet in hostel
- Facilities for medical emergencies
- Library facility in the hostels
- Internet and Wi-Fi facility
- Recreational facility-common room with audio-visual equipments
- Available residential facility for the staff and occupants, constant supply of safe drinking water
- Security

Hostel facility- accommodations available:

- Boys hostel- 2 hostels with 213 rooms with capacity of accommodating students.
- Girls hostel- 2 hostels with 117 rooms with capacity of accommodating 366 students.

Recreational facilities, gymnasium, yoga center, etc:

- Indoor games: Carom, Chess, Badminton, Table Tennis etc.
- Television with DTH facility
- Yoga centre

Facilities for medical emergencies:

- First aid box
- Vehicle

Internet and Wi-Fi facility:

- Internet leased line 60 Mbps and Wi-Fi.

Recreational Facility – common room with audio-visual equipments:

- Common room with Television having dish facility
- Audio system

Available residential facility for the staff and occupancy, Constant supply of safe drinking water:

- Staff quarters available (occupied) for Professors are 8 (8), for Associate and Assistant professors are 24 (21) and for non teaching staff 14 (13).
- Quarters are well furnished with constant supply of safe drinking water.

Security:

- Contract to security agency
- CCTV cameras at prime locations

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus.

Health care on the campus:

- Medical care centre with two medical officers
- Vehicle for emergency
- First aid boxes in every department and hostels
- Medical checkup camp for students and staff

Health care off the campus:

- Institute has long term association with few private hospitals in Jalgaon city. In emergency the students/staff are taken to these hospitals in vehicle available in the campus.
- Students' accident insurance policy through NMU. Through this insurance policy students can claim for reimbursement of expenses incurred for any kind of accident.

4.1.7 Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

- IQAC of the institute is functioning from last two years. For the smooth functioning of the same space is provided.(M310-30 Sq.m.)
- Institute has constituted and provided space for proctorial board and students grievance redressal committee which sort out the grievances related with discipline. (G21-18 Sq.m.)
- As per UGC and AICTE guidelines, Institute has Women Grievances Redressal Committee including girl students. This facilitates ladies faculty

members and girls students to organize awareness programmes about women empowerment, gender equity, health related issues etc. (G35A- 13 Sq.m.)

- The institute has Teacher guardian scheme for student counseling and career guidance. This scheme is to provide conducive environment to the students in counseling and taking some burden off the parents and lessens their anxiety. This facilitates career guidance to the students.

- Institute has well established training and placement cell to conduct student trainings related with personality development, soft and technical skills. This cell works towards establishing industry institute interaction, organizing industry meet and getting employer's feedback. The cell also organizes campus placement activities. (54 sq.m.)

- Institute has health care centre (10 Sq.m.) with two medical officers. Institute has provided vehicle for emergency. Institute has a cafeteria (589 sq.m.) with recreational facilities at prime location. A canteen (74 sq.m.) is also available to satisfy the needs of inmates. These places are more favorable for students due to delicious and hygienic food.

- The institute has recreational spaces for staff and students in the form of lush green lawns, temple, hi-tech gym, yoga centre, cafeteria, boys and girls common rooms etc.

- Institute has the provision for safe drinking water facility through four RO units at college building and hostels.

- The institute has Open air theatre (1900 Sq. m.), AC seminar hall (162 sq.m.), Air cooled seminar hall (162 sq.m.) with necessary facilities.

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?

Yes,

The Library Advisory Committee consists of the Chairman, (Librarian) and one faculty member from each department. Based on the initiatives of the committee following activities are carried out.

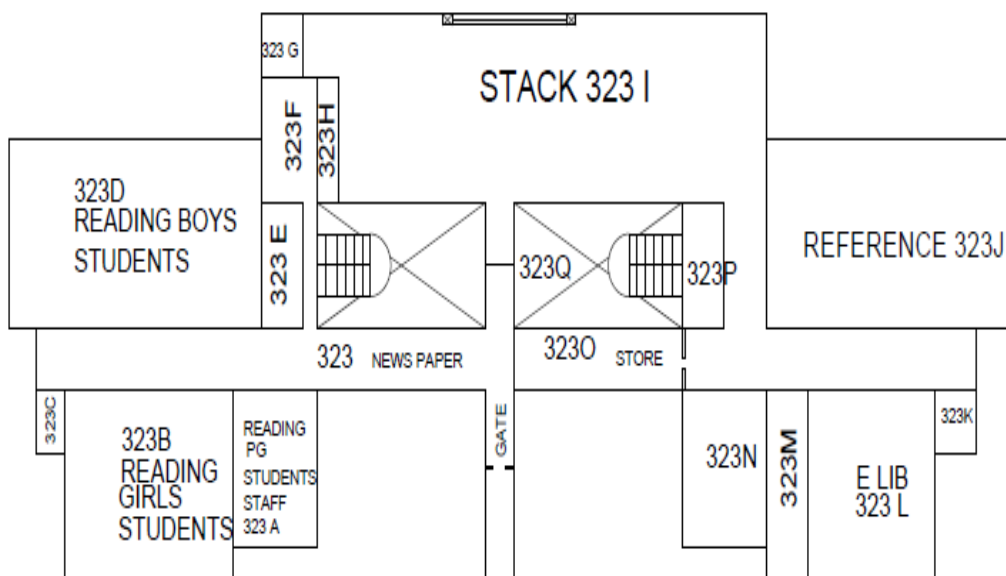
- Open access to the students
- Web based E-Resources in the campus
- Library remains open beyond institute timings
- Air cooled library
- KIOSK machine for Online Public Access Catalogue (OPAC) facility

4.2.2 : Provide details of the following:

- Total area of the library (in Sq. Mts.)
- Total seating capacity
- Working hours (on working days, on holidays, before examination days, during examination days, during vacation)
- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)
- Total area of the library (in Sq. Mt.): 1251
- Total seating capacity : 330 numbers
- Working hours (on working days, on holidays, before examination, during examination, during vacation)

On Working days	08.00 a.m. to 06.00 p.m.
On Holidays	10.00 a.m. to 02.00 p.m.
Before Examination	08.00 a.m. to 08.00 p.m.
During Examination	08.00 a.m. to 08.00 p.m.
During Vacation	10.30 a.m. to 06.00 p.m.

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)



Master Plan of Central Library

Sr.No.	Particulars/Details	Room No.	Size Maximum m x m	Carpet Area in Sq.m.
1	Reading Room PG/Staff	323 A	6 x 7.5	45
	Reading Girls Students	323 B	12 x 9	108
	Reading Boys Students	323 D	18 x 9	162
2	Entrance Lobby	323 F	6 x 9	54
	Counter Clock Room	323 E	6 x 3	18
	Issue Counter	323 H	9 x 3	27
3	Librarian Cabin	323 G	3 x 9	27

4	Stack Room	323I	27 x 9	243
5	Reference Section	323J	18 x 9	162
	E-Library	323L	9 x 9	81
6	Book Bank Section	323M	3 x 9	27
	Magazine	323N	6 x 7.5	45
7	Store	323O	12 x 3	36
8	Pantry for Library Staff	323P	3 x 6	18
9	Xerox	323Q	3 x 3	9
10	Toilets	323 C,K	2 x 3 x 3	18
11	Drinking Water	323	3 x 3	9
12	Passage	323	3 x 3	162
	Total			1251

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during last four years. ?

The library ensures the purchases of number of books, current titles, e-journals etc. as per AICTE norms and University curriculum.

The requirements obtained from the departments, students, research scholars and faculty members are summarized, verified by the librarian and put up to the library advisory committee. After the recommendation of library advisory committee, the estimated annual cost is put up to LMC through the Principal for budgetary provision. As and when required purchases are made after due sanction by purchase committee.

The amount spent on procuring new books, journals and e-resources during last four years.

Libra ry Holdi ngs	2011-12		2012-13		2013-14		2014-15	
	Nos .	Total Cost Rs.	Nos.	Total Cost Rs.	No s.	Total Cost Rs.	Nos.	Total Cost Rs.
Text Books	170 3	85332 2	2650	1065408	30 18	1163403	342 8	1466717
Refer ence Books	15	18678	11	36592	16	18617	15	27610
Journ als/ Perio dicals	104	233511	104	252801	11 0	282849	110	287395
e- resour ces	213 8	125540 2	2088	1375242	1692	139136	1950	113199 5
Any other Memb ership of IIT, Pawai and DELN ET, New Delhi		37500	-	7500	-	38500	-	37500

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collections?

- OPAC
- Electronic Resource Management package for e-journals
- Federated searching tools to search articles in multiple databases
- Library Website
- In-house/remote access to e-publications
- Library automation
- Total number of computers for public access
- Total numbers of printers for public access
- Internet band width/ speed 2mbps 10 mbps 1 gb (GB)
- Institutional Repository
- Content management system for e-learning
- Participation in Resource sharing networks/consortia (like Inflibnet)

OPAC:

SOUL 2.0 software: Online Public Access Catalogue (OPAC) is to find the availability of books and printed journals located at various sections of the Library.

Electronic Resources management package for e- Journals:

IEEE, Springer, ASCE, J-GATE, Elsevier, Access Engineering etc. are subscribed.

Federated searching tools to search articles in multiple databases: No

Library Website:

A separate web page for Library is available on institute website

www.sscoetjalgaon.ac.in

In-house/remote access to e- publications: Institute has IP based access to e-journals.

Library Automation :

The Library is automated using SOUL 2.0 software with KIOSK machine.

Total number of computers for public access:	14 nos.
Total number of printers for public access:	1 no.
Internet band width/speed:	60 Mbps

Institutional Repository:

The Library has developed Institutional Repository with reference to the Research Papers published by College Faculty, University Question Papers, Project Report of Students and syllabus of various courses.

Content management system for e-learning:

Following content management system for e-learning are made available. NPTEL videos with CMS and Moodle

Participation in Resource sharing networks/Consortia (like Inflibnet):

DELNET is available.

4.2.5 Provide details on the following items:

- Average number of walk-ins:
 - Average number of books issued/returned:
 - Ratio of Library books to students enrolled:
 - Average number of books added during last 3 years:
 - Average number of login to opac (OPAC) :
 - Average number of login to e-resources:
 - Average number of e-resources downloaded/printed:
 - Number of information literacy trainings organized:
 - Details of “weeding out” of Books and other materials:
- | | |
|--|-----------------------|
| • Average number of walk-ins: | 202 per day. |
| • Average number of books issued/returned: | 210 to 215 per day. |
| • Ratio of Library books to students enrolled: | 20 books per student. |

- Average number of books added during last 3 years: 3007/year
- Average number of login to opac (OPAC) : OPAC is made available to all as open access, without user authentication.
- Average number of login to e-resources: IP based access to e- resources
- Average number of e-resources downloaded/printed: 2575/ year
- Number of information literacy trainings organized: 2
- Details of “weeding out” of Books and other materials : 3568

4.2.6 Give details of the specialized services provided by the library

- Manuscripts
- Reference
- Reprography
- ILL (Inter Library Loan Service)
- Information deployment and notification (Information Deployment and Notification)
- Download
- Printing
- Reading list/ Bibliography compilation
- In-house/remote access to e-resources
- User Orientation and awareness
- Assistance in searching Databases
- INFLIBNET/IUC facilities

Manuscripts: Nil

Reference: The library has a reference section in which 4101 titles are available.

Reprography:

Reprography facility is available in the library for the benefit of faculty members and students.

ILL (Inter Library Loan) :

The institution has tie-ups with DELNET & IIT Bombay Libraries, faculty members and students avail this facility.

Information deployment and Notification:

The important and latest notifications are displayed on notice boards. The important information is hosted on a separate web page on institute website.

Download:

14 computers are available in the library for downloading web based e-resources. On an average more than 2500 downloads/year has been recorded.

Printing: Printout facility is provided.

Reading List / Bibliography Compilation:

Reading list/Bibliography compilation is provided whenever requested by the users.

In-House/remote access to e-resources:

In-house access to e-journals is available. The institute has in-house e-resources through intranet.

User Orientation and Awareness:

User Orientation and Awareness programs are arranged regularly.

Assistance in searching Databases:

Library staff helps students and staff for searching databases.

INFLIBNET/IUC Facilities: DELNET facility is available.

4.2.7 Enumerate on the support provided by the library staff to the students and teachers of the college

The support provided by the library staff to the students and teachers of the college are as follows:

- Orientation programme for students is organized by the library staff about its facilities.
- The library organizes the expert lecture of renowned persons, like use of e-resources, which benefits the faculty members and research scholars.

- The library staff assist the students and teachers for accessing of books in OPAC and e-journals, if required and also supports for locating the books on the OPAC/shelf and searching required contents in the e-resources.
- Students and staff are made aware about the new arrival of books by keeping them in a special rack at prominent location in library for 15 days.
- Whenever special book is required by students and faculty members the librarian makes it available.
- Library staff supports the students and faculty members in searching the online database through DELNET.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged person? Give details.

Library staff helps physically challenged persons for the issue of books and other procedures of library.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

Yes, feedback is received through questionnaire. The data received are analyzed and the findings are submitted to the authorities along with the recommendations for further improvement of the library services.

In the month of September/ January feedback are collected from its users. The feedback is analyzed by librarian and referred to authority through library advisory committee for scope of improvement.

A suggestion box is available for the library users, in which the students/faculty may drop complaints or suggestions. Any such complaint/suggestion received is addressed by librarian immediately, discuss in advisory committee meeting if necessary then recommendations of committee are informed to the Principal for necessary action.

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- Number of computers with Configuration (provide actual number with exact configuration of each available system)

- Computer-student ratio
- Stand-alone facility
- LAN facility
- Wi-fi facility
- Licensed software
- Number of nodes/ computers with Internet facility
- Any other

The institute has adequate computing facility. Details are as follows:

Number of computers with Configurations: 992 + 7 Laptops.

Sr. No.	Configuration of Computer	Total
1	Desktop Computer Lenovo Intel P-IV,3.2 GHz,512 MB RAM,80GB SATA HDD, Combo drive,10/100 Ethernet, Multimedia keyboard, optical scroll mouse, 17'' CRT Monitor	20
2	Lenovo 1.6 ghz dual core, 1GB DDR RAM,160 GB HDD,DVD writer,10/100 Ethernet card, integrated graphics, optical mouse,17'' TFT monitor	112
3	HCL EZEE BEE, Intel Core 2 Duo @2.93Ghz Processor, 1GB DDR3 RAM, 320 GB SATA HDD, DVD writer, 18.5"TFT Monitor G41 Motherboard, Keyboard, Mouse, (upgraded)	10
4	HCL ezeabee ,intel core 2 duo ,@ 2.80 ghz processor, 2GB ddr3 ram,160 gb sata hdd,dvd writer, 18.5'' tft monitor,g-41, motherboard, keyboard,mouse	45
5	HCL EZEEBEE,INTEL CORE 2 Duo,@2.93GHZ Processor, 3GB DDR RAM, 320GB SATA Hard Disk, DVD Writer, 18.5''TFT Monitor, G41 Motherboard, keyboard, Mouse	378
6	Lenovo Think Center, Intel® Pentium. CPU G630 @2.70GHz, RAM: 2 GB HDD 500GB, DVD writer, 18.5'' LCD Monitor.	294
7	Acer veritron M200 Desktop Intel HCL chip-set Intel care 132100 processor 2gb ddr3 ram,500 gb sata HDD 7200rpm Gigabit Ethernet, keyboard, optical mouse, DVD writer, DOS 3 yr warranty, 18.5'' wide monitor with windows 7 starter	50
8	IBM X3100 M4 Intel Xeon 3.1 GHz Server, 8 GB RAM, IBM 1TB 7200 rpm SATA HDD 3.5'', Lenovo 18.5'' wide LED monitor	1

9	HP Commercial 280 G1MT Desktop- J7V61AV Intel core i3-4160 3.6G 3M HD 4400, CPU- 500GB, 7200-RPM SATA 6G 3.5, HDD4 GB, DDR3, 1600 DIMM RAM, included DVD, EPEAT Silver, ENERGY STAR, WINDOWS 8.1	80
10	DELL 660s Intel i3 2120 3.3 GHz 4 GB RAM, 500 GB Hard Disc, 18.5 LED DVD writer	01
11	Hp Intel ® CPU E 31225 @3.10 GHz 4 GB RAM 230 GB Hard Disc Windows 7 Professional	01
12	Laptops HP Core i3, 4GB DDR3 Ram 500GB HDD, 17" Screen	6
13	Dell Lapto, Inspiron 5520 Intel core i5,500 GB-HD, 1GB Graphic Card, DOS,4GB RAM	1
	Total	999

Computer-student ratio: 1:3.1

- All the computers in the campus are connected in LAN.
- Wi-Fi facility is available in the campus through 54/300 Mbps access points.
- The institute has Microsoft campus agreement. The agreement covers license of Microsoft products for all computers in the campus. In addition to this the institute also has following licensed software.

• MS WIN SL8.1	• (Ore'll) English Language Software (Standard Edition)
• Net Protector	• MATLAB 7.5
• Linux	• MATLAB 6.5
• Rational Rose	• ULTIBOARD
• Quick Heal	• VLSI DESIGN SOFTWARE
• Oracle	• XILINX MAKE ISE SERIES-US-ISE-FND
• Windows Starter kit	• Orcad 15.5
• Win NT 4.0	• ETAP
• Novell Netware 5.12	• PSCAD X4 Academic Five User Software
	• MATLAB/Simulink Ten User Software
• Novel Small Business Suite 6	• Aspen Hysys Software

• Novel Linux Desktop 9	• SAP 2000 ultimate V-15(INDIAN CODE) 10 user EDUCATIONAL LICENCE
• MSDN Academic Alliance Software Product	• I-Deas 11 Nx Series
• Borland TC++ Suite	• Auto CAD 2015
• VB 6.0 Pro.	• Auto Desk Inventor Professional Suite 2010
• Visual Studio .Net (Media kit)	• MAT Lab Software
i) ASP	• Ansys Software 10 Version
ii) VC++	• SOUL(Develop by INFLIBNET Ahmadabad)
iii) VB++ 1.0	• Tick RTOS with Compiler, debugger etc.
iv) VJ++ 1.0	• SUSE Linux Enterprises Server 9
v) C#	

List of Software

Open source software:

The institute encourages use of open source software such as BLAST, FAST, OScad, Linux with C,C++, Java etc. for laboratory work.

Number of nodes/ computers with Internet facility:

The institute has 60 Mbps internet leased line. All computers in the campus are provided with the Internet facility through firewall Forti-300C. The hostels are also provided with internet facility through Wi-Fi. Further Wi-Fi facility is also available in the campus for internet access.

Any other:

The institute has adequate computer peripherals and a virtual class room to conduct online faculty development programmes through IIT Bombay. The institute has Enterprise Resource Planning (ERP) software as step towards e-governance. Moreover, the institute has Biometric system to register the attendance of staff members and hostellers. For security and safety purpose, the institute also has CCTV and DVR system for surveillance.

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

Institute has Lease Line Connectivity of 60 Mbps (1:1) of TATA communications. All the computers in the campus are provided with the Internet facility. Hostellers and staff residing in the campus are provided internet facility through Wi-Fi.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

Institute is optimistic about infrastructural up-gradation in the near future. The college intends to:

- Deploy e-governance through expansion of ERP software.
- Develop e-learning facilities.
- Install smart and hi-tech class rooms.
- Provide video conferencing within the campus.
- Upgrade computing facility.
- Ubiquitous computing in campus.

4.3.4 Provide details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution are as follows:

Academic Year	Procurement (Rs.)	Upgradation (Rs.)	Deployment (Rs.)	Maintenance (Rs.)
2015-16	2746000	Nil	850000	300000
2014-15	4860500	Nil	850000	250000
2013-14	6941000	Nil	1350000	500000
2012-13	10007000	Nil	975000	300000
2011-12	1990000	Nil	2800000	500000

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

The institute facilitates usage of ICT tools, such as Presentation tools like LCD projectors, whiteboard, interactive board etc., power point presentations, course materials through web pages, NPTEL videos, Student Management System through ERP, Moodle – Learning Management System, virtual class room, android application for staff –student interaction etc.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching- learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the center of teaching-learning process and render the role of a facilitator for the teacher.

Suitable examples that place the student at the center of teaching-learning process and render the role of a facilitator for the teacher are NPTEL videos, Course materials through web pages, Moodle – Learning Management System, Interactive board, Spoken tutorials by IIT Bombay etc.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

No

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

- a Building**
- b Furniture**
- c Equipment**
- d Computers**

e Vehicles

f Any other

(garden, electricity, playground, water supply, campus networking)

Every year on an average the institute allocates 3 to 4 % of available financial resources for maintenance and upkeep of various facilities in the campus.

Details of budget allocated and utilized are as follows:

Sr. No .	Descripti on	CFY (2014-15)		CFY (2013-14)		CFY (2012-13)		CFY (2011-12)	
		Allocated budget	Budget Expensed	Allocated budget	Budget Expensed	Allocated budget	Budget Expensed	Allocated budget	Budget Expensed
01	Building	3000000	2857691	2500000	3072614	3000000	2833581	1100000	834585
02	Furniture	600000	897303	800000	896639	200000	93130	100000	71325
03	Equipment	400000	22390	300000	251046	200000	154931	150000	111154
04	Computers	250000	164003	500000	487629	300000	213679	500000	374978
05	Vehicles	300000	391919	200000	159784	200000	172116	400000	289548
06	Any other	3850000	2972015	3500000	3590206	2350000	2013154	2390000	2163865
	Total	8400000	7305321	7800000	8457918	6250000	5480591	4640000	3845455

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

Every year budget proposal is submitted by each department and section to the Principal which includes recurring expenses. Then these are discussed in HODs meeting and the management sanctions the budget at the beginning of every financial year. Every department and section ensures that the respective work is done.

Institute has assigned responsibilities to the faculty members of the concerned departments to supervise the work and specialized supporting staff is appointed for maintenance and upkeep of the infrastructural facilities and equipment. Also specialized agencies are hired for maintenance on AMC/rate contract/call basis as per the requirements.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?

The institute takes up calibration and other precision measures for the equipment/instruments as per the technical requirements specified by the manufacturer. Calibration of the major equipment/instruments is done by certified agencies. The precision level of the instrument is checked and verified time to time by the lab incharge and lab assistant.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

Institute has 11 kV substation and is equipped with automatic voltage regulator to keep constant voltage at supply end. In addition to this some sensitive equipments are connected with UPS and Voltage stabilizer.

Following are the major steps taken for location, upkeep and maintenance of sensitive equipment.

- The sensitive equipment's are located at proper places considering the working requirements and safety measures. E.g. machineries at the workshop (Ground floor), computer labs (away from transformer), air compressor (basement) etc.
- Electricity backup is provided through 250 kVA diesel generator.
- MCBs (Miniature Circuit Breakers) have been installed to prevent from high voltage fluctuation.
- Lightning arrestors are installed.
- The institute has its own overhead water tank (2.25 lakhs liters capacity) for continuous supply.

- Maintenance of sensitive equipment's are through AMC.

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

Criterion V: Student Support and Progression

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If “yes”, what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the institute publishes its updated college prospectus annually. The information provided through this are as follows:

- The Vision and Mission statements
- Objectives of the institute
- Profile of the institute and departments
- Facilities and amenities available in the institution
- Courses offered
- Eligibility criteria for admission
- Admission procedure
- Major activities and achievements
- Placements details
- Fees structure and Scholarships
- Students’ welfare schemes of the university

The institute also publishes hostel prospectus which contains information about hostel facilities, hostel fees, mess charges, rules and regulations for inmates of the hostel ,UGC regulations on curbing the menace of ragging, hostel committee ,students grievance redressal committee and antiragging committee, activities conducted in the hostel and application form for admission to hostel.

Institute ensures its commitment and accountability in the following ways:

- Admission procedure is as per the norms published in the prospectus.
- Facilities and amenities mentioned in the prospectus are fulfilled.
- The Institute adheres to the Shikshan Shulk Samiti, Government of Maharashtra fees structure.
- Courses offered in the institute are approved by AICTE, New Delhi and affiliated to North Maharashtra University, Jalgaon.
- Training and placement cell organizes various training programs, competitive exam awareness seminars and campus placement activities

regularly.

In support of information provided in both prospectuses, the related documents are uploaded on institute website for all stakeholders which ensures commitment and accountability.

5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

Institution spends significant amount for the needy students under **Shram Sadhana Scholarship Scheme** in the form of

- College fees
- Hostel fees
- College bus fees
- Training / Workshops / Soft skill fees

The details of distributed amount in rupees to the needy students under **Shram Sadhana Scholarship Scheme** are as follows.

Academic Year	Number of students benefited	Amount Disbursed
2015-16	25	2,46,895/-
2014-15	12	1,73,250/-
2013-14	07	1,05,000/-

Institute provides Fees concession for children of Ex-Servicemen, Widow, orphan, physical handicapped, rural girls, meritorious students and fees payment in installment.

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

66.66% students receive financial assistance from state and central government; details are shown in following table

Year	State Government			Government of India		
	Number of students received scholarship	Total numbers of the students	Percentage (%)	Number of students received scholarship	Total numbers of the students	Percentage (%)
2014-15	274	2797	9.79	1240	2797	44.33
2013-14	294	2900	10.13	1664	2900	57.37
2012-13	290	2565	11.30	1701	2565	66.31
2011-12	298	2529	11.78	1464	2529	57.88
2010-11	272	2394	11.36	1270	2394	53.04
Average Percentage			10.87	Average Percentage		55.79

5.1.4 What are the specific support services/facilities available for

- ✓ Students from SC/ST, OBC and economically weaker sections
- ✓ Students with physical disabilities
- ✓ Overseas students
- ✓ Students to participate in various competitions/National and International
- ✓ Medical assistance to students: health centre, health insurance etc.
- ✓ Organizing coaching classes for competitive exams
- ✓ Skill development (spoken English, computer literacy, etc.,)
- ✓ Support for “slow learners”
- ✓ Exposures of students to other institution of higher learning corporate/business house etc.
- ✓ Publication of student magazines
- ✓ Students from SC/ST, OBC and economically weaker sections

For newly enrolled SC/ST, OBC and economically weaker section students the institute conducts orientation programme for registration and filling up the online scholarship forms. Further institute extends all the possible help through its staff members and ensures that no student is deprived of the scholarship. Book bank facility for SC/ST is in place

- ✓ Students with physical disabilities

The facilities provided by the institute for students with physical disabilities are conduct of theory and practical sessions at the same floor, provision of wheel chair, ramp and washroom at the ground floor. The institute also provides support services through its non-teaching staff for easy access of institute resources.

- ✓ Overseas students

The institute has no overseas students.

- ✓ Students to participate in various competitions/National and International

The students are encouraged to participate in various National and International competition like Eleccrama, Halious, Robocon, Baja-SAE, etc. Institute provides necessary guidance, mentoring and financial assistance to the students participating.

✓ **Medical assistance to students: health centre, health insurance etc.**

For medical assistance to students institute has health centre with two medical officers. In case of medical emergency the vehicle is provided by the institute to the students. First aid boxes are available in every department and hostel.

The institute facilitates students to avail accident insurance policy (Students Group Insurance for student's safety scheme) by NMU. Through this insurance policy students can claim for reimbursement of expenses incurred for any kind of accident.

✓ **Organizing coaching classes for competitive exams**

The Training & Placement Cell of the institute organizes foundation course for MPSC and UPSC examinations in collaboration with external agency.

Coaching classes for GATE examination are organized in house by the departments.

To support the students for such examinations institute procures the required books and magazines, study material, question bank etc. Further the institute organizes expert lectures to motivate and guide the students to participate in these examinations.

✓ **Skill development (spoken English, computer literacy, etc.)**

The institute has language lab with state of art infrastructure to facilitate students for spoken English. To improve communication skill institute has incorporated additional lectures in the time table.

IIT Bombay spoken tutorials (Linux, Latex, C, C++) are organized regularly to improve the computer literacy of the students.

Training and placement cell and departments organize various training programmes and workshops to improve professional skills of the students to improve their employability.

Presentation and writing skills are developed by organizing events like Milestone 2K series (paper presentation) and preparatory sessions at departmental levels. Product development, team building and analytical skills are imbibed by participation in task based competitions like Robocon and Baja etc.

✓ **Support for slow learners**

Slow learners are found out from the analysis of various assessment processes such as Internal Sessional Examination (ISE), Laboratory Viva session, interaction during the lecture delivery, through teacher guardian scheme etc. These students are asked to discuss with the faculty in person during the extra hours in addition to the special classes conducted for those students. They are also given special attention by solving the important problems in the form of additional assignments. The institute has setup Moodle server to facilitate the students for self-learning and also for slow learners.

✓ **Exposures of students to other institution of higher learning/corporate/business house etc.**

Institute facilitates training/internship programmes in institution of higher learning / industries / financial corporation's /business house. As a specific support service, Institute has facilitated Ameya Shirwadkar, student of B.E. (Electrical) 2014-15 and Krunal Girase, student of M.E. (Mechanical) 2013-14 to participate in summer school training programme at Tokushima University, Japan with participants of different countries.

Further institute helps students to undergo industrial training /internship in organizations like ICICI, SBI, Bajaj Finance, Neplanagar Paper Mill, BSNL, Legrand Industries pvt. Ltd. Jain Group of Industries etc.

Interaction with corporate/entrepreneurs /high profile academicians /guest lecture by eminent faculty and series of leadership lectures are organized periodically by the institute to give exposure to the students in all facets of life.

The institute provides bus facility to visit nearby industries to give exposure of industrial atmosphere and working culture to the students.

✓ **Publication of student magazines.**

Each department publishes Newsletter twice in a year which includes students' achievements and participation in various activities.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

To facilitate entrepreneurial skill institute through its Innovation and Entrepreneurship Development Center organizes Entrepreneurship Awareness

Camp every year. To develop innovative skills among the students every year five innovative projects are funded by IEDC.

Institute organizes expert lectures of eminent industrialists/ industry persons, scientists, administrators, technocrats to inculcate and nurture entrepreneurship / managerial/leadership qualities amongst the students through FEAST lecture series and through department students associations.

Following are some of the examples of our student entrepreneurs.

A group of students of the institute of different streams have started their own company namely, Yippee Technology Pvt. Ltd. which is a computer software solution provider, Technical Process Outsourcing service provider and also manufacture of food products.

Harshal Borse and Rajesh Patil of department of Biotechnology ventured a Green Globe Biotechnology, Chopda.

Pravin B. Nikam of department of Electronics and Telecommunication is the proprietor of Nikam Bulk SMS services, Jalgaon.

Salman Shah and Dipashri Joshi of department of Electronics and Telecommunication are the proprietor of Electro-Unique Creations, Jalgaon.

Other impact is improvement in the quality of project funded by IEDC, e.g. IEDC funded project received award at National level competition Elecrama at International Exhibition at Bangalore

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

- * Additional academic support, flexibility in examinations**
- * Special dietary requirements, sports uniform and materials**
- * Any other**

The policies and strategies of the institution in promoting these activities include:

- ✓ Special provision in the budget is made for sports and cultural activities.
- ✓ Provision of funds are made to conduct extracurricular and co-curricular activities such as Quiz competitions, Debate and

Discussions, Cultural activities etc. through departmental students associations.

- ✓ T.A., D.A., leave, sports uniforms, sports materials etc. are provided to the students, participating in intercollegiate tournaments at different places.
- ✓ Constitution of sports and cultural committees to facilitate extracurricular activities.
- ✓ State of the art sports complex and Open Air Theater.
- ✓ Motivational prizes to winners in various competitions.
- ✓ Organizing interactive sessions of students with renowned personalities of sports/social service sector.

Institute has extended motivational support to students by several means, to enhance their active participation in co-curricular and extracurricular activities.

The students participating in sports and extra-curricular activities are given leaves, flexibility in internal examination schedule and students selected for inter-university tournaments are felicitated with blazers by the institute. Apart from this, yoga classes are organized under the supervision of yoga teacher to improve physical and mental health. Meditation programs to enhance concentration of students are conducted.

Institute organizes intercollegiate tournaments for sports like basketball, table tennis, hockey, football etc. The institute stood 9th in sports ranking among 237 colleges of North Maharashtra University in the year 2011-12 and 7th in the year 2012-13.

Institute has organized state level debate competition twice under “Yuva Next” of Daily Lokmat Newspaper. Institute has also organized Elocution competition for girls in collaboration with North Maharashtra University.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, ATE/ CAT/ GRE/ TOFEL/ GMAT/ Central/ State services, Defense, Civil Services, etc.

The institution encourages the students to prepare for various competitive examinations through awareness programs, special coaching and training. The placement and training cell concentrate to achieve the above goals by giving additional informative classes.

Special lectures are conducted by the departments for GATE examination. For civil service examinations like MPSC and UPSC expert lectures are organized to motivate the students. Foundation course for civil service examinations is organized through training and placement cell of the institute. Books and magazines for competitive examinations are available in the library. Departments are having CDs which help the students to train themselves for GATE examination. So far, 33 students have qualified the GATE examination and 5 have passed in MPSC as per the records.

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

For students' academic, personal, career, psycho-social counseling the institute has Teacher-Guardian Scheme in place. This scheme is to provide conducive environment to the students and takes some burden off the parents and lessens their anxiety. The students are free to contact the Teacher - Guardian for any kind of problems at any time during college hours. Students may also contact Teacher – Guardian through mobile after college hours.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If “yes”, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

Yes, there is a structured mechanism for career guidance and placement of students. There is a separate training and placement cell headed by Training and Placement officer with two coordinators and faculty from each department as a member.

- It renders guidance to the students in formal and informal ways. The cell organizes various lectures and seminars on career opportunities.
- It invites companies for campus recruitments and sometimes students are sent to off-campus interviews.
- Besides campus interviews, it conducts aptitude tests, training programs, personality development and interpersonal development workshops etc.
- Announces opportunities available for placements by displaying on notice boards and through social media.

Efforts are also being made by the departments to organize various training programs for the placement. The department ensures interaction with alumni, during their visits to the campus, to share their experiences about the industry needs and guide the students for their placements.

Sr. No.	Year	Number of Companies Visited	% Placement	Programmes
1	2011-12	33	34.37	Biotechnology, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Information Technology, Mechanical Engineering, Master of Business Administration.
2	2012-13	36	41.08	Biotechnology, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Information Technology, Mechanical Engineering, Master of Business Administration.
3	2013-14	11	9.40	Civil Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Information Technology, Mechanical Engineering, Master of Business Administration.
4	2014-15	15	19.11	Biotechnology, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Information Technology,

				Mechanical Engineering, Master of Business Administration.

Major Recruiters are:

Sr. No.	Name of Company	Sr. No.	Name of Company
1	L&T Infotech	16	Lupin Pharmaceuticals Ltd.
2	TELEYSIA Networks	17	J.K. Paper Ltd.
3	Kotak Securities Ltd.	18	HDFC Life Insurance Co. Ltd.
4	AXIS Bank Ltd.	19	Synergy Technology Services.
5	Supreme Industries Ltd.	20	HCL Technologies Ltd.
6	Power matrix Pvt. Ltd.	21	Naturally Yours Biotech Pvt. Ltd.
7	Netcom Solutions Pvt. Ltd	22	Prothias Engineering Services
8	KPIT Cummins.	23	Techflow Engineers Pvt.Ltd.
9	Aditya Birla Retails Pvt. Ltd.	24	HDFC Sales Ltd.
10	Bridgestone India Pvt. Ltd.	25	Bajaj Capital
11	Thyrocare Pvt. Ltd.	26	Tudip Technologies
12	Richter Themis Medicare(I) Pvt. Ltd.	27	Acme Sujan Chemicals
13	Sterlite Infrastructure Ltd.	28	NCORD Healthcare
14	Honda Motors	29	FACE
15	Quinox	30	Logic Bits

5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Proctorial board and students' grievance redressal committee actively interacts with the students to help them sort out their grievances. It attends to both registered and unregistered grievances of the students with the support of other faculty members. Students are also free to share their grievances with the Teacher-Guardian, HoD, DoA and Principal. Necessary action is taken after the issues are discussed.

Grievances addressed:

1. Internet bandwidth increased from 28 Mbps to 45Mbps and from 45 Mbps to 60 Mbps.
2. Canteen facilities are increased by providing additional Cafeteria.
3. In addition to Aqua guards, 04 units of RO systems are installed.
4. New Gym equipments are installed.
5. Number of buses increased to five from two.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

The following committees carefully monitor and address the grievances of staff and students in the institute:

1. Proctorial board and student grievance redressal committee
2. Anti-ragging committee
3. Women grievance redressal committee

Till date no such case of sexual harassment has been reported to the institution. Continuous vigilance by college authorities/committee members, CCTV at prominent places and the fear of strict punishment has prevented sexual harassment.

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, the institute is very much cautious regarding this menace. The institute has setup a committee, the anti-ragging committee, for this purpose as per UGC guidelines. As per guidelines undertaking from students and parents are taken every year. Anti-ragging slogans and important clauses of anti-ragging act are promulgated at prominent places along with phone numbers of concerned

authorities including Chairman, anti-ragging committee, Rectors and Hostel Superintendents. As a part of awareness programs anti-ragging videos are shown to students in college as well as hostels. The chairman of “Aman Bachao Movement” Mr. Raj Kacharoo, was invited for addressing the students in this context. Till date, no incident of ragging of any kind has been reported or noticed in the institute.

5.1.13 Enumerate the welfare schemes made available to students by the institution

Following are the welfare schemes available to the students:

- Financial assistance to the needy students under “Shram Sadhana Scholarship Scheme” in the form of College fees, Hostel fees, College bus fees, Training/Workshop/Soft skill fees.
- Book bank facility for SC/ST students.
- 25 % concession in tuition fees for orphan, physically handicapped, rural girls, meritorious students, sport persons and children of Ex-Servicemen, Widow.

5.1.14 Does the institution have a registered Alumni Association? If “yes”, what are its activities and major contributions for institutional, academic and infrastructure development?

Institute has functioning Alumni Association under the name “Shram sadhana Engineering Alumni” (SEA), but not registered. The regular meetings of the alumni are organized every year.

Major contributions from alumni:

- Deliver guest lectures and interact with students to enhance their knowledge.
- Guide the students in placement and higher studies.
- Provide employment to the students

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Student progression	Year	Year	Year	Year

	2011-12 (%)	2012-13 (%)	2013-14 (%)	2014-15 (%)
UG to PG	3.11	3.98	6.00	3.92
PG to M.Phil	-	-	-	-
PG to PhD	-	-	-	-
Employed				
• Campus selection	34.37	41.08	9.40	19.11
• Other than campus recruitment	5.60	7.17	10.05	6.50

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/ batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/ district.

U.G. Branch	2010-11		2011-12		2012-13		2013-14		2014-15	
	Colle ge	Unive rsity	Colle ge	Unive rsity	Colle ge	Univ ersity	Colle ge	Unive rsity	Colle ge	Univers ity
Biotech	83.33	83.33	94.44	94.44	85.71	85.71	84.21	84.21	55	55
Chemical	87.5	87.5	88.88	88.88	80	80	75	75	70.96	70.96
Civil	88.57	89.72	85.71	81.71	92.16	93.86	72.13	78.08	85.29	77.73
Computer	96.26	90.05	94.62	94.19	94.07	91.55	84.06	86.64	92.46	88.62
Electrical	96.59	95.53	96.97	89.42	93.94	95.53	94.52	94.55	89.39	91.44
E&TC	95.89	95.31	81.25	80.95	90.37	92.67	86.33	81.83	83.11	79.23
I.T.	98.15	95.71	93.94	95.31	92.5	94.6	96.88	93.17	89.87	86.57
Mechanical	49.15	56.29	66.67	62.83	69.42	62.56	59.72	55.47	54.3	46
MBA	--	--	--	--	82	55.3	69.09	42.47	50	44.12

5.2.3 How does the institution facilitate student progression to higher level of education and / or towards employment?

The institution facilitates student progression to higher level of education and employment by following means –

- The institute has well established library with adequate books for GATE examination and CDs for self-training. It organizes seminars and lectures on opportunities for higher education, and interaction with alumni for education abroad etc.
- The department organizes value added courses and training programs to increase the employability of students.
- The T&P cell organizes Personality development program, technical training/workshops, foundation course for UPSC/MPSC examinations, industrial visits and industrial trainings.

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

The special supports provided to the students who are at risk of failure and drop out are as follows:

- The counseling of students is done through faculty members, HoDs and through Teacher – Guardian scheme which helps them to build their confidence in study. Further motivational speech through FEAST activity also encourages them to study.
- The institute organizes remedial classes for such students. If needed, the faculty members interact with the parents also.
- For the students who are at the risk of drop out due to financial problem, the institute provides funding either through Shram Sadhana Scholarship Scheme or by giving concession in tuition fees.

5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

The institute has excellent sports facilities for the students. Students had participated and won prizes in inter collegiate / university / national level games. Range of sports and games available to students are Football, Cricket, Volleyball, Basketball, Kho-Kho, Kabaddi, Handball, Athletics, Archery, Hockey, Badminton, Table Tennis, Chess, Carom, Billiards, Fencing etc.

The range of cultural activities available for students are Vasant Utsav - Annual cultural event, Music, Traditional day, Mimicry, Singing, Dancing, Photography, Debate, Painting, Rangoli, Mono acting, fashion show etc.

The extra-curricular activity includes tree plantation, blood donation, cleanliness drive, cloth donation, book donation to orphans etc.

Name of Event	Number of Students Participated		
Year 2014-15			
	Inter collegiate	Inter group	Inter university
Basketball, Kho-kho, Fencing, Table Tennis, Badminton, Hockey, Football Chess, Volley Ball, Cricket Kabbadi, Hand Ball, Boxing, Archery, Swimming, Athletics	228	69	28
Year 2013-14			
Basketball, Kho-kho, Fencing, Table Tennis, Badminton, Hockey, Football Chess, Volley Ball, Cricket Kabbadi, Hand Ball, Boxing, Archery, Swimming, Athletics	216	67	21
Year 2012-13			
Basketball, Kho-kho, Fencing, Table Tennis, Badminton, Hockey, Football Chess, Volley Ball, Cricket Kabbadi, Hand Ball, Boxing,	195	68	12

Archery, Swimming, Athletics, Rifle Shooting, Weight Lifting			
Year 2011-12			
Basketball, Kho-kho, Fencing, Table Tennis, Badminton, Hockey, Football Chess, Volley Ball, Cricket Kabbadi, Hand Ball, Boxing, Archery, Swimming, Athletics, Weight Lifting	178	50	12

Department of Sports, SSBT COET, Bambhori, Jalgaon
Tentative Sports Calendar (2015-16)

Sr. No.	Particulars	Day	Date
1	Opening of the College	Monday	13/07/2015
2	Registration of students for different sports activities	Monday	27/07/15 to 06/08/2016
3	Practice session for different sports activities	Thursday	01/08/2015 onwards
4	Selection of teams starts on	Friday	11/08/2015
5	Inter collegiate, Inter group and Inter university sports schedule	Saturday	24/08/2015 to 14/01/2016
6	Annual Sports	Friday	15/01/2016 to 18/01/2016
7	Prize Distribution	Friday	08/04/2016

5.3.2 Furnish the details of major student achievements in Co-curricular, Extracurricular and cultural activities at different levels: University/ State/ Zonal/ National/ International, etc. for the previous four years.

Some of the student achievements in Co-curricular activities:

Name of Event	Level	Awards (Number of Students)

2015-16		
Paper Presentation	National /University	3
Project Exhibition	National /University	1
Managers Day	University	17
2014-15		
Paper Presentation	National /University	34
Poster Presentation	National /University	5
Project Exhibition	National /University	45
Avishkar	University	1
Open house	University	1
Managers Day	University	25
2013-14		
Paper Presentation	National /University	52
Poster Presentation	National /University	5
Project Exhibition	International /National /University	60
Avishkar	University	1
Managers Day	University	4
2012-13		
Paper Presentation	National /University	41
Poster Presentation	National /University/ Institute	4
Project Exhibition	National /University	47
Managers Day	University	13
2011-12		
Paper Presentation	National /University	29
Project Exhibition	National /University/ Institute	50
Avishkar	University	2
Open house	University	4
Managers Day	University	2

Some of the student achievements in Extra-curricular activities
Students selected for Inter-University Sports

Name of Event	Year	Number of Students
Football, Table Tennis, Basketball, Volley ball, Fencing, Archery, Swimming, Kho-kho, Chess	2014-15	28

Table Tennis, Basketball, Volley ball, Kho-kho, Fencing, Archery, Swimming, Cricket, Football	2013-14	21
Kho-kho, Fencing, Basketball, Chess, Rifle Shooting, Archery	2012-13	12
Basketball, Kho-kho, Fencing, Table Tennis, Badminton, Hockey	2011-12	12

Some of the student's achievements in Cultural Activities
Cultural Activities University / State / National Level Events:

- University Level Events: 05
- National Level Events: 07

Medals / Prizes won by the students in Cultural Activities:

Achievements	2014-15	2013-14	2012-13	2011-12
Gold Medal / I Prize	-	1	1	1
Silver Medal / II Prize	2	-	1	-
Bronze Medal / III Prize	1	1	1	3

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The college seeks the written and verbal feedback from its alumni and employers. It also collects the feedback from recruiters, who visit the campus for placement. These feedbacks serve as essential tool for the institution to augment technical and soft skills of the students and to nurture their diverse talents through systematic and planned activities.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications / materials brought out by the students during the previous four academic sessions

The college encourages all the students to publish their articles/papers in

magazines/journals. The college organizes student technical paper presentation under the name “Milestone-2K” series every year. The department also organizes paper and poster presentation competitions. The faculty members guide and mentor the students to carry out novel projects, publish articles/technical papers in various conferences and journals.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Every department has its student association consisting of two students from each class, a student coordinator, two faculty advisors and Head of the department. The association is responsible for conduct of various activities like fresher’s welcome, teachers’ day celebration, aptitude test, quiz, debate competition, group discussion etc. Provision of funds is made to conduct these activities in the institute budget.

The student council is constituted as per the university norms which include a class representative from each class on merit basis, a student representative nominated by sports committee, a student representative nominated by cultural committee, a girl student from backward category. From these students, a University Representative (UR) is elected who represents students of the college at university level. S/he is responsible for putting up the students related issues at university level.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The institution creates a platform for the involvement of students in various academic, administrative and other activities. This empowers students to gain qualities of leadership and governance. The student representatives are allowed on the following academic and administrative bodies.

- IQAC
- Anti-Ragging Committee
- RETC
- Student chapter of Society of Automotive Engineers (SAE INDIA)
- Women Grievance Redressal Cell

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

The institute has Shram sadhana Engineering Alumni Association (SEA). The members of this association interact with alumni through social media. SEA organizes Alumni Meet every year. Some of the alumni who are entrepreneurs recruit the college students. Expert lectures of self-employed alumni and the alumni working in industry are organized to give industrial exposure to the students. Alumni also guide for higher education in India and abroad.

The institute has good relation with its former faculty members, which has resulted in joint paper publications, sponsorship for national conference, organization of industrial visits and expert lectures etc. Some of the alumni are former faculty member of this institute.

Paper publications with former faculty of the institution, Expert lecture, Sponsorship for national conference. Alumni are helping in organizing industrial visit.

Any other relevant information regarding Student Support and Progression which the college would like to include.

The institute has a provision for funding innovative projects for final year students. Institute conducts in house workshops on LaTeX, handling of electronics equipments and instruments, guidance for group discussion and personal interview (GDPI), and pre-placement mock test for final year students. For proficiency in English language, in house classes are scheduled in the time table at pre-final year of students. The institute has recognized research laboratories, which helps students to use advanced instruments/equipments.

Criterion VI: Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision: Today we carry the flame of quality education, knowledge and progressive technology for global societal development, tomorrow the flame will glow even brighter.

Mission: To provide conducive environment for preparing competent, value added and patriotic engineers of integrity of par excellence to meet global standards for societal development.

The institute is located in the rural area of Maharashtra State where the educational opportunities were dim for talented aspirants. In order to groom the inherent potential of such aspirants, this institute provides quality technical education for societal development. Sound academic education with high moral values, social values and patriotism has been the main emphasis of the institution which has assisted in making competent, value added students with integrity.

The institute takes immense efforts to update the faculty members and students on progressive technology and their holistic development. And also their specific professional competence is enhanced by programs at the departmental level. These efforts ensure sustenance of mission and vision of the institute.

The mission has started its fruition as the students are catering the needs of global society by serving all over the globe. The institute is still continuing to improve day by day in its quality education through progressive knowledge and technology.

Quality education, as characteristics of the institute, is provided by recruiting and retaining experienced and quality faculty of good repute, exposing to practical applications and industry, continuous evaluation of students, interaction of students with eminent personality from industry and academics, conducting training and workshops, implementing mentoring system etc.

Institute provides conducive environment through its green and clean campus, well equipped and ventilated class rooms and laboratories, air-cooled library, facilitating transportation, hygienic canteens, sports, yoga hall etc. Cordial and friendly

atmosphere is maintained through cultural activities. Various committees like anti ragging, women grievance redressal etc. ensures the congenial atmosphere.

Institute prepares competent, value added and patriotic engineers by organizing various workshops and training programs, activities like FEAST, experts/guest lectures etc. Patriotism is inculcated through celebration of Independence day, Republic day and singing National anthem daily etc.

Well-equipped library, Wi-Fi campus, subscription of e-journals, Entrepreneurship Awareness Camp, paper presentation, virtual class room, self-study material, robo club etc. increases the competency of the students and faculty members.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The role of top management, Principal and Faculty in design and implementation of its quality policy and plans is as follows:

The management, the Principal and faculty members are always working together for designing and implementing the quality policies and plans. The Principal of the college is the head of the institution and ensures that all provisions of the AICTE, University by laws, the statutes and the regulations are followed. The Head of Departments (HoDs) and faculty members are actively involved in the decision making process. The faculty members in the capacity of teacher representatives are members of the Local Management Committee (LMC). The Principal frequently interact with the management on the account of proposals on infrastructural facilities, funds received and the expenditures incurred for better financial management and accountability. Hence, the management, the Principal, HoDs and faculty members are actively involved in the decision making process to sustain and enhance the quality of education imparted by the institution.

The recommendations of HoDs approved in LMC's are put up to Governing Body (GB) for ratification. After confirmation by GB the plans are implemented by Principal through the concern.

The management always takes step to provide quality infrastructure and updates facilities for better learning. The management has introduced new program- ME-Electrical Engineering (Electrical Power System) in 2013. For this an additional infrastructure viz. two Laboratories and two tutorial rooms are provided. Provision of books and e-journals of IEEE are also made.

6.1.3 What is the involvement of the leadership in ensuring?

- 1. The policy statements and action plans for fulfillment of the stated mission**
- 2. Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**
- 3. Interaction with stakeholders**
- 4. Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**
- 5. Reinforcing the culture of excellence**
- 6. Champion organizational change**

Following are the activities of the leadership showing its involvement in

1. Ensuring the policy statement and action plans for fulfillment of the stated mission.
2. Formulation of action plans for all operations and incorporation of the scheme into the institutional strategic plan.
3. Interaction with the stakeholders.
4. Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.

The leadership has a knack of choosing the right person at right place for design and implementation of the quality policy. The action plans for all operations are formulated by head of the institute and the key persons chosen like Director of academics (DoA), Director of administration (DoAD), Deputy Registrar (DR), Assistant Registrar-Accounts (AR), Chairman and coordinators of various committees.

The institute organizes meets with stake holders such as alumni, parent and industrialists. The feedback, opinions of these stake holders are taken into consideration wherever necessary. The leadership plays the role of mediator and coordinator between the external and internal members contributing to the process of designing and implementation of the policy and plans.

The academic terms, co-curricular and extracurricular activities, review of action plan are considered while formulating the policy statement and action plans. The major policy decisions are taken in the meeting of management and key persons once in two months.

Following are activities of the leadership showing its involvement in reinforcing the culture of excellence.

The leadership appreciates the faculty / staff for their achievements. The leadership invites eminent academicians, scientists, industrialists and others to enlighten the staff on issues of the invitee's expertise. The leadership also organizes orientation programs for teachers.

Following are activities of the leadership showing its involvement in championing the organization change.

The leadership has inculcated a sense of belonging towards the Institute among the staff. The leadership makes the staff aware and persuades them about the need in organizational changes and before initiating the changes takes the staff into confidence.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The meetings of the Governing body are conducted twice in a year. In these meetings, developments and budgets are reviewed.

The Local Management Committee (LMC) meetings are conducted once in two months. In these meetings, policies and plans are decided, reviewed ensuring its implementation.

Meetings of the Finance/Purchase Committee, Building Committee, Staff selection Committee and Hostel Committee are conducted once in a month to monitor and evaluate activities in the respective area.

HoDs meetings with Principal and members of LMC are conducted monthly to monitor all academic and student related activities.

Faculty meetings are conducted in every Department frequently to convey the plans and instructions discussed in HoDs meeting and initiate their implementation as well as take feedback about the plans being implemented.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The top management has imbibed academic leadership quality in its faculty to achieve the vision, mission and objectives.

From time to time, management has started new programs in Engineering and Management.

The details are as follows:

In 2006-07, the institute started UG program in B.E (Biotechnology), and became the only institute in this region to offer this programme.

The institute is pioneer in starting the PG programmes, in 2006-07, M.E Civil (Environmental Engineering) and M.E Mechanical (Machine Design), in 2009-10, M.E. Electronics and Telecommunication (Digital Electronics) and M.E. Computer Science and Engineering in this university.

In 2008-09, the institute started Master of Business Administration and became the first to start M.B.A among the engineering colleges in this region.

According to requirement of stake holders, in 2013-14, the institute started M.E. Electrical (Electrical Power Systems).

To boost the research activity of faculty members, the institute has started PhD programs in the subjects: Civil Engineering, Mechanical Engineering, Chemical Engineering, Biotechnology and Electronics and Telecommunication Engineering.

6.1.6 How does the college groom leadership at various levels?

The college aims at creating not just a few leaders but a leadership ladder i.e. leadership at various levels. The college adopts the practical way of delegating responsibilities to a person to enhance the leadership capabilities which is ascertained by getting feedback on the field of expertise of each faculty, his teaching skills and interpersonal skills. Based on this the college has formed various committees.

The committees are: Academic and Examination committee, Library committee, Cultural committee, Sports committee, T&P cell, Hostel committee, Student Welfare Committee, Proctorial Board and Student Grievance Redressal Committee, Women grievance redressal committee, Anti Ragging committee, Campus Development committee, Alumni committee, Parents Meet committee, Admission committee, Press Release Committee and Website committee.

The college also offers various opportunities to students to help them develop their leadership potential. Active involvement and participation of students in various activities through departmental student associations, in seminars, workshops,

competitions, cultural programs, sports etc. organized by the college to enable them to develop their leadership competencies. Special training programs for students are organized to improve their leadership and entrepreneurial skills.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments/ units of the institution and work towards decentralized governance system?

The college delegate authority and provide operational autonomy to the departments/ units of the institution and work towards decentralized governance system in the following way:

The college has appointed some faculty members as Director of Administration (DoAD), Director of Academics (DoA), Director of Research (DoR) who along with HoDs, Deputy Registrar (DR), Assistant Registrar (AR), are the decision makers apart from the Principal.

The HoDs regularly conduct departmental meetings in which important aspects of the departments such as equipment, laboratory materials, books, journals and others are discussed. This is brought to the notice of Head of institution who in turns put it to the management for further action. In the month of February the requisition for budgetary provisions are collected from all departments and sections. The management approved the budget and communicates to the departments/sections through the Principal. Accordingly the HoDs and section heads carry out the activities of their departments/sections. These are monitored by AR and Principal. Academic, administrative and research activities are monitored by DoA, DoAD and DoR respectively. The delegation of authority and operational autonomy and work to the departments/sections towards decentralization are as given below:

HoD: Academic load distribution, departmental portfolio, equipments and books/journals required, organization of co-curricular and extracurricular activities at department level. They have been delegated with financial power to the tune of Rs.5000 /- to rectify emergency breakdown and for consumables.

DoA: Academic monitoring, students feedback about teacher.

DoAD: Controlling and monitoring staff recruitment process, administrative activities such as attendance and discharge of duties of teaching and non-teaching staff, coordinate NBA/NAAC process, improvement of overall ambience of the college.

DoR: Circulation of notification of funding agencies, scrutinize the project proposals, to invite and process the in house project proposals for funding under Shram Sadhana Research Promotion Scheme (SSRPS) and monitoring of the sanctioned proposals.

DR: Controlling and monitoring of office activities, assisting Principal for the correspondence with external agencies, maintaining the records of governing body and LMC meetings.

AR: Financial planning, budget preparation and monitoring, accounting and auditing, finance related activities.

Thus the college decentralizes the authority and provides operational autonomy to the concerned.

6.1.8 Does the college promote a culture of participative management? If ‘yes’, indicate the levels of participative management.

Yes

The local management committee consist of eleven members, out of which, three are teaching staff members and three are non-teaching staff members along with Principal as Ex-officio Secretary.

Finance/Purchase Committee, Building Committee, Staff selection Committee and Hostel Committee are sub-committees of LMC. In each of these committee representatives from teaching and non-teaching staff are involved.

Hence it indicates that the college promotes a culture of participative management.

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Quality policy of the institute is well reflected through its vision and mission statements. The quality policy is driven and deployed during every process by designing proper strategic plan and action plan. The process is regularly reviewed through systematic monitoring mechanism.

Strategy to provide conducive environment for students:

Institute provides conducive environment through its

- Green and clean campus.
- Well-equipped and ventilated class rooms and laboratories.
- Air-cooled library.
- Facilitating transportation, hygienic canteens, sports, yoga hall etc.
- Maintaining cordial and friendly atmosphere through cultural activities.
- Ensuring the congenial atmosphere through various committees.
- Continual update of facilities.

Strategy to produce competent engineers of excellence:

- Recruiting and retaining experienced, research oriented and quality faculty.
- Exposing to practical applications and industry.
- Continuous evaluation of students.
- Interaction of students with eminent personality from industry and academics.
- Conducting trainings and workshops.
- Implementing mentoring system etc.

Strategy to inculcate value addition and patriotism

- Sound academic education with high moral and social values.
- Organizing various workshops and training programs, activities like FEAST, experts/guest lectures etc.
- Inculcation of patriotism through celebration of Independence day, Republic day and singing National anthem daily etc.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes. Governing Body, LMC, Principal, HoDs have developed perspective plans with an objectives to fulfill the vision of the institute. The views and inputs of stakeholders are taken into consideration for inclusion.

The factors considered for developing perspective plan are:

- Need of stakeholders
- Changing scenario in the field of education
- Relevance and usefulness of plans

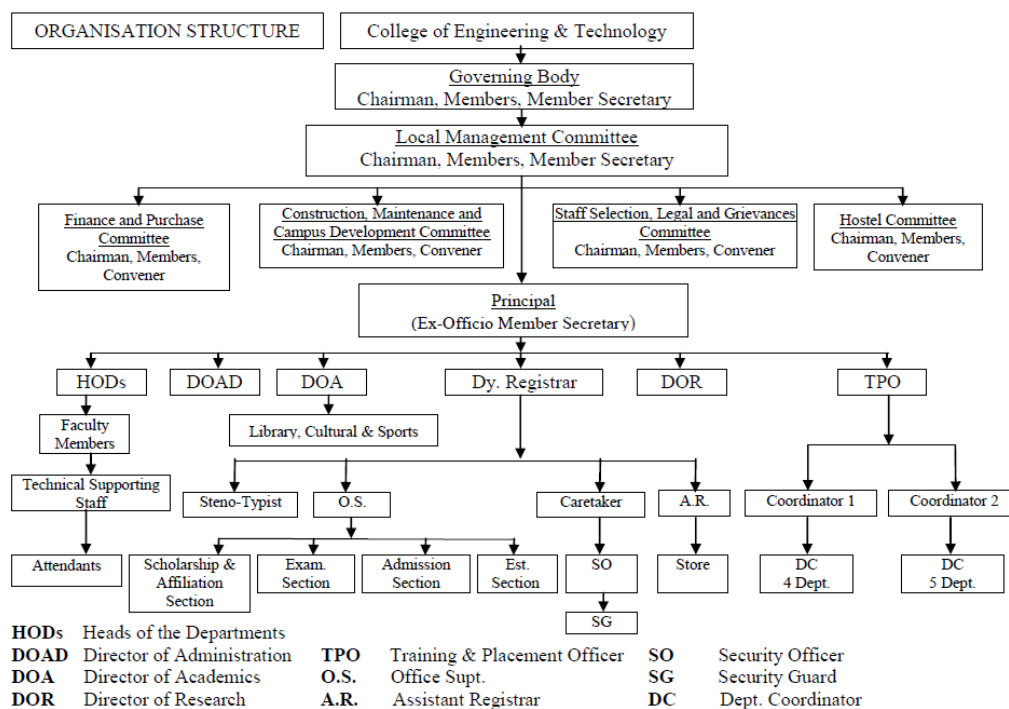
The perspective plans are formulated by the top management, Principal, HoDs, IQAC with an objective of progressing towards realization of the vision. Also, the inputs from stakeholders and vision of the ever changing global scenario are considered for inclusion. The plans are reviewed periodically throughout the year.

PERSPECTIVE PLAN

Planned in the year	Plan	Completed
2007-08	To apply for 2(f) & 12(B) To send proposal for permanent affiliation	2(f) A.Y. 2008-09 12(B) A.Y. 2011-12 A.Y. 2008-09
2008-09	To increase intake of Civil Engg. from 30 to 60 To introduce new P.G. course in Computer, I.T. & E&TC	A.Y. 2009-10 A.Y. 2009-10
2010-11	To apply for P.G. lab. recognition of Civil & Mechanical Engg. Dept. To install CC TV System To increase intake of Civil & Electrical Engg. from 60 to 120 from 2012-13 To construct Open Air Theatre To construct Administrative Block To make Sewage Water Treatment Plan	Civil A.Y. 2012-13 Mech. A.Y. 2014-15 A.Y. 2014-15 Civil A.Y. 2013-14 A.Y. 2011-12 A.Y. 2011-12 A.Y. 2011-12
2011-12	To develop lawn on open space in front of Main building	A.Y. 2013-14
2012-13	To construct new Academic Building Extension of girls hostel Extension of boys hostel To increase Civil Engg. from 60 to 120 To construct cafeteria To start M.E. Electrical (18) To implement rain water harvesting scheme	In progress A.Y. 2014-15 A.Y. 2014-15 A.Y. 2014-15 A.Y. 2014-15 A.Y. 2013-14 Partly completed (In progress)
	To start new courses from A.Y. 2016-17	

	B.E. Computer Networking (60) B.E. Mechantronics (60) M.E. I.T. (18) To increase intake of MBA from 60 to 120 To start new courses from A.Y. 2019-2020 B.E. Industrial Engg. & Management (60) B.E. Petrochemical Engg. (60) M.E. Biochemical Engg. (18)	Stage yet to come

6.2.3 Describe the internal organizational structure and decision making processes.



Decision making Process: The GB is the top management. The policy decisions are taken by the GB. GB has delegated its power to LMC to take decisions time to time in the college matters. GB have constituted sub-committees for smooth functioning viz. Finance and purchase committee, Construction maintenance and campus development committee, Staff selection, legal and grievances committee and Hostel committee, who are the decision making bodies in the respective matters. The requirements/proposals are put up in the monthly meeting of these

committees. The recommendations of these committees are presented in LMC meeting for ratification.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

- **Teaching & Learning**
- **Research & Development**
- **Community engagement**
- **Human resource management**
- **Industry interaction**

The quality improvement strategies of the institution are as follows:

Teaching & Learning:

The institute has qualified and experienced teaching faculty having excellent track record for their professional progression. Faculty is encouraged to participate in training programs, workshops, FDPs, national/international conferences, seminars. Research helps in quality teaching hence, college encourages faculty members to carry out research activities. For this, college has started in house Shram Sadhana Research Promotion Scheme. The college follows the self-appraisal method to evaluate the performance of faculty which is used for correcting the shortfalls.

The use of audio visual aids has been integrated with conventional chalk and board teaching for effective curriculum delivery. The students are provided with self-study material like NPTEL video lectures and notes through MOODLE. The Internet Facility and Wi-Fi in the Campus keep the students abreast of the latest developments in their respective field of study. Field visits, case studies etc. have been made compulsory wherever necessary to make teaching and learning more effective. Further, guest/expert lectures are organized to update the knowledge of students. The method of internal continuous assessment and internal sessional examinations are used for regular evaluation of the student. The evaluation report is informed to the parents.

Research & Development

To promote the research, college has started Shram Sadhana Research Promotion Scheme through which funds are provided to the faculty members. The institute has recognized laboratories for doctoral research in the subjects Civil Engineering, Mechanical Engineering, Chemical Engineering, Biotechnology and Electronics and Telecommunication Engineering, which facilitates the faculty for the research work. The central library has subscription of e-journals like IEEE, Springer, ASCE, J-GATE, Elsevier and McGrawHill.

The college is included under section 2(f) and 12(B) of UGC act 1956. This facilitates the faculty members to apply for major and minor research projects to UGC for getting funds. Further the college encourages its faculty to submit research proposals to various funding agencies like AICTE, Vice Chancellor Research Motivation Scheme (VCRMS), Rajiv Gandhi Science and Technology Commission, Government of Maharashtra (RGSTC). Financial support is provided to faculty to participate in STTP, workshops and training programs to accustom them with the advanced knowledge and techniques.

The college publishes research journal, “PRATIBHA: International Journal of Science, Spirituality, Business and Technology”, to encourage faculty for research publications.

Department of Science and Technology, Government of India, has sanctioned Innovation and Entrepreneurship Development Center (IEDC) with financial support of Rs. 45.3 lakhs to the institute to inculcate entrepreneurship and research culture among the students. IEDC sponsors FIVE innovative student projects every year with financial assistance of Rs. 1 lakh to each project.

Community Engagement

Institute conducts community programs such as blood donation camp, tree plantation, cleanliness drive, Computer literacy drive for women, CSR activities; book donation to orphanages, cloths donations etc. Through women cell the institute conducts sensitization and awareness programs against women exploitation and abuse.

The Institute was a member of Rural Engineering and Technology Club (RETC) in collaboration with IIT Madras, the said project was for two years only i.e. upto 2014-15. Now with the same agenda the institute has continued the club. The agenda of the club is to enhance the awareness and consciousness of students, identify the technical problem of rural area and propose feasible solutions to the people of rural area.

Human Resource Management

The institute has definite strategies and implements them while recruiting and retaining faculty and other staff.

Provision in the budget is made for the professional development of the faculty and staff. College sponsors faculty members for paper presentation in conferences and seminars, STTP, workshops, training programs. The institute encourages faculty members to become member of professional societies. Institute provides training to staff members for skill up gradation viz. computer hardware training program, safety awareness/training program.

Institute appreciates the work of its faculty and staff members by giving promotions and incentives. Thus the institute ensures the quality improvement of its faculty and staff.

Industry Interaction

The institute organizes lectures of industrialist/industry persons to share their experiences with the students. Industrial visits and industrial trainings are organized to give industrial exposure to the students. IEDC conducts Entrepreneurship Awareness Camp (EAC) to motivate and encourage the students to become entrepreneur. The projects of the students in project competition “Shodh Prakalpa Pratiyogita” are evaluated by industry person and an academicians; the competition organized by IEDC. Institute has MoUs with industries and institutes.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The feedback is collected from stake holders by organizing parents meet and alumni meet. It is also collected from all HoDs at the time of HoDs meeting, held every month. The faculty members collect the feedback from student through teacher guardian scheme. The information obtained through these feedbacks is discussed with the management. Based on these discussions the activities are revised.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

Teaching and non-teaching staff members have representation in LMC and sub-committees. The institute has number of committees for smooth conduct of various institutional processes and activities. The staff members through these committees

are involved in planning and implementation of the institutional processes and activities. The direct involvement of the staff members in planning and implementation improves the effectiveness and efficiency of the institutional processes and activities.

The management appreciates, rewards the staff for their achievements and also promotes the staffs to higher posts. Management sponsors staff for STTP, conferences, workshops and orientation programs.

6.2.7 Enumerate the resolutions made by the Management council in the last year and the status of implementation of such resolutions.

The resolutions passed in the meetings of Management council held in the last year (April 2015) and the status of implementation of such resolution is as follows:-

- 1) The actual expenditure for the year 2014-15 was considered and approved. The proposal for finalization of fees is to be sent to Shikshan Shulk Samiti.
- 2) The Budget estimate for the year 2015-16 was considered and approved.
- 3) The status of Training & Placement was reviewed. It is decided to take more efforts to increase the placements.
- 4) The requirement of faculty calculated by the Institute as per university norms was approved and the interviews are to be conducted to fill the vacancies and approve the faculty.
- 5) The discussion on planning of admission activities was done. It is decided to take more efforts for fulfilling the admissions.

Status of implementation of these resolutions

- 1) By evaluating the actual expenditure the proposal is sent to Shikshan Shulk Samiti for finalization of tuition fees.
- 2) The budget is allotted to various depts. as per the approved budget.
- 3) Campus drives have been conducted and online aptitude tests have been conducted.
- 4) The roster has been verified by the North Maharashtra University, Jalgaon and the interviews will be conducted after the approval of roster by the Office of Asst. Commissioner, Backward Class Cell, Konkan Division, Mumbai.
- 5) The staff members of the depts. are visiting the nearby junior colleges and are conducting seminars for the students of rural area to make them aware about importance of engineering education.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If “yes”, what are the efforts made by the institution in obtaining autonomy?

Yes, University has a provision for according the status of the autonomy to the affiliated institution; however, the college is not opting for the status of autonomous institute.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?

The institution has staff selection and grievance redressal committee to resolve the grievances/complaints. The meeting is held every month. If there are any grievances, they are put up in this committee through proper channel. After discussion appropriate decisions are informed to the concern through the Principal.

There is a separate student’s grievance redressal committee which takes care of students grievances.

The institute has women grievance redressal committee for addressing the issues related to the girls students and female faculty members.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

No

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If “yes”, what was the outcome and response of the institution to such an effort?

Yes, Institute has the mechanism for analyzing student feedback on institutional performance. Responses and opinions of the students on various processes, systems and infrastructure are collected in the following formats.

1. Student feedback about teachers
2. Library feedback
3. Hostel feedback

In addition to this, suggestion boxes are kept in each department for taking students

feedback on institutional performance. The feedback is analyzed and corrective measures are taken.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

The efforts made by the institution to enhance the professional development of its teaching and non-teaching staff are as follows:

- Head of the department counsels the newly appointed faculty members to keep abreast of latest technical know-how.
- Faculty members are encouraged to train themselves through NPTEL video lectures of IIT experts.
- Institute has budgetary provision to organize/attend various faculty development programs, seminars, workshops etc.
- Faculty members are encouraged to take the membership of various professional bodies like CSI/ IETE/ IEEE/ ISTE/ IChE/ IE(I)/ SESI/ BRSI/ SAEIndia/ ICA.
- Faculty members are encouraged to engage themselves in various research oriented activities and financial support is given to them under Shram Sadhna research promotion scheme.
- In house skill development programs are organized for non-teaching staff members and are also motivated to attend skill development programs.

6.2.3 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

Following strategies are adopted by the institution for faculty empowerment:

- In house training programs for the teaching and non-teaching staff
- Providing financial assistance/duty leave to attend and participate in seminars, workshops, training programs, faculty development programs, conferences etc.
- Inviting resource persons to update knowledge of the faculty members
- Felicitating faculty members through incentive/letter of appreciation
- Awarding best non-teaching employee

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

The institute has designed indigenous performance appraisal form to capture and evaluate performance of the faculty members. The appraisal form includes general information and academic background, teaching and learning, research and publications, community services and other relevant information. It is ensured that the information is appropriately captured and considered for appraisal.

For the non-teaching staff appraisal a simple format is followed which includes general information, duties performed and achievements.

The consolidated report is prepared by Principal and is appraised to management.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The outcome of performance appraisal system is that each teaching/non-teaching staff becomes aware of self-weaknesses and tries to improve in the next year, and also contributes to the decision about his/her appreciation. Faculty members with major weaknesses are personally counselled by the Principal.

6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

The welfare schemes available for teaching and non-teaching staffs are group gratuity scheme, group insurance scheme, medical aid in severe illness, free medical check-up, salary advance to non-teaching staff.

All retired staff members are benefited by group gratuity scheme. Salary advance is given to needy non-teaching staff.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Experienced and qualified faculty is appointed as and when it is identified. The measures taken by the Institution for attracting and retaining eminent faculty are by following means.

- Pay-scale as per AICTE / University norms
- Facilities for conducive environment
- Encouragement for research work
- Promotions as per AICTE / NMU norms
- All types of leave benefits
- Provision of Quarters in the campus

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

At the beginning of every financial year budget is obtained by account section from departments, library, sports, Site Engineer Civil, Site Engineer Electrical & other concerned heads. Then it is put up to the Principal. It is discussed with the concerned Heads in HoDs meeting and through LMC put up to the Governing Body for its approval.

Staff salary and allowances are given first priority while preparing the institutional budget. The institute ensures this by making term deposit in bank. Administrative and maintenance expenses are at the second priority, followed by expenses for laboratory equipments, computers, networking, consumables etc. A fixed provision of budget is made for Training and Placement, library, workshops, conferences, sports etc.

Finance and purchase committee monitor and ensure effective and efficient use of available financial resources based on budget, monthly review of budget utilization and proper negotiations. Further, for effective monitoring external audit is also carried out quarterly.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The college has a mechanism for internal and external audit. Internal audits are carried out by the account section. External audit is being done by statutory auditors annually. However, for effective monitoring quarterly audit is also carried out. Annual audit report is submitted at the end of year. The last audit was done on 25/06/2015 and there were no major audit objections.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

The major source of institutional receipts is student fees and there was no financial deficit. The details of audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus are available with Institute.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The institute applies for funding to funding agencies like AICTE, UGC, DST, NMU etc. for research projects. The institute also receives the funds through testing and consultancy.

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

- a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If “yes”, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**
- b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?**
- c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**
- d. How do students and alumni contribute to the effective functioning of the IQAC?**
- e. How does the IQAC communicate and engage staff from different constituents of the institution?**

- a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If “yes”, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes, the institution has established an IQAC from academic year 2013-14. Composition of the cell is: Principal as Chairman, Director of Academics as co-ordinator, HoD, two faculty members, two office staff, four students, two alumina, two parents and two employers.

The institutional policy with regard to quality assurance is reflected through the objectives of IQAC. The objectives of the IQAC are:

1. To develop a system to improve the academic and administrative performance of the institution.
2. To enhance research activities in the institute.
3. To optimize and integrate modern methods of teaching and learning.
4. To develop Quality culture in the institution.

IQAC meets once in a year and discusses about the improvement in teaching learning process. The resolutions passed in the meetings are circulated to all HoDs for effective implementation. Director of Academics (DoA) periodically takes feedback from the HoDs/ Faculty Members/ Students about the effective implementation of the resolution passed in IQAC about teaching – learning process.

Contributions of IQAC in academics, administrative, research, usage of ICT are as follows:

- Encouragement to enhance Co-curricular and Extracurricular activities such as workshops, symposium, conferences, Student technical training programs, educational tours, motivational activities for students, faculty members and other staff.
- Suggestion for systematic planning of academic activities for teaching-learning and evaluations.
- Motivating faculty members to develop study material, lab manuals and to increase involvement in research activities.

b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

All the decisions of IQAC are approved by the management for implementation and all are implemented. Some of the decisions implemented are as follows:

- To promote research and consultancy activities
- To provide financial assistance to innovative projects
- To use ICT tools for effective teaching-learning process

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, there are external members in IQAC viz. Parents (2), Alumni (2), Employer (2). Some of the contributions made by them are as follows:

A parent has suggested informing the attendance and marks of internal exam of the students through letters/ sms/ email.

Alumnus has suggested using ICT tools for effective teaching-learning process.
Employer has suggested calling industry people for expert lecture, regular industrial visit and industrial trainings.

d. How do students and alumni contribute to the effective functioning of the IQAC?

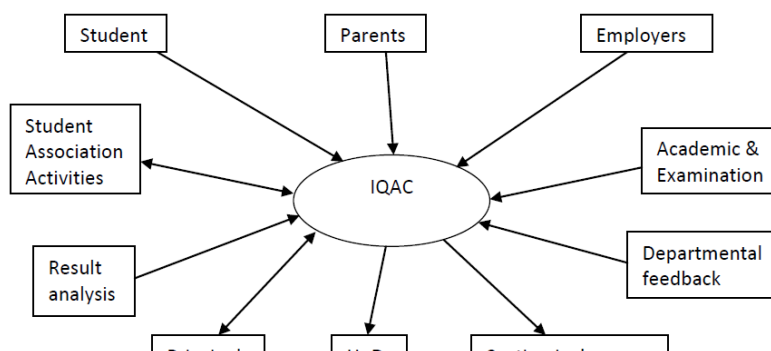
Students and alumni members actively participate in all meetings and discuss the issues related to teaching-learning, co-curricular and extracurricular activities etc. They also give suggestions to improve overall functioning of the institute for the benefit of students.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

The chairman and the coordinator of the IQAC have regular communication and meetings with the teaching staff, alumni, students, parents and employers through departmental meetings, alumni meet, parents meet etc. Also reviews/information obtained from the departments are shared with other members of the IQAC during its meeting for necessary steps.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization?

Yes. The integrated framework for quality assurance of academic and administrative activities and its operationalization is displayed in the following figure



6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If yes, give details enumerating its impact.

The institute policy adheres to quality assurance procedures. The certification of ISO 9001:2008 ensures the effective implementation of the quality assurance procedure. The impact of such practices has led to accreditation by NBA.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If yes, how are the outcomes used to improve the institutional activities?

The NMU has constituted Quality Improvement and Control Committees to review the academic provisions of the institutes. The committee has visited the institute on 26th August 2015. The ISO 9001:2008 committee visits the institute every year for surveillance audit. Review of academic provisions through National Board of Accreditation, New Delhi is conducted.

This has standardized the administrative and academic procedures followed in the institute which has improved the teaching-learning process, facilitated stakeholders, fulfilled needs of students. Further it has enhanced employability among the students and helped in establishing the brand name of the institution which is reflected in the admission and placement scenario.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The institute follows norms and standards of regulatory authorities such as AICTE, Directorate of technical education (DTE), Maharashtra state and affiliating

university. Accordingly, the institute has fixed roles and responsibilities at management level as well as at administrative level. The institute is responsible in governing and implementing the standard procedure for development of state of the art infrastructure, effective learning atmosphere and overall development of the students aligning with the requirements of various quality assurance agencies and authorities.

Permanent affiliation of the institute to North Maharashtra University and inclusion under section 2 (f) and 12 (B) of UGC act 1956 confirms the alignment of internal quality assurance mechanism with the requirements of the university and UGC. Accreditation by NBA and ISO 9001:2008 certification of the institute validates the same.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome.

Following mechanisms are used to continuously review the teaching learning process.

- Lesson plan as written in the academic diary is checked by HoD
- Verbal feedback are taken by Teacher-Guardian and HoD periodically
- HoD collects the feedback from students, analyzes it and shortfalls, if any, are informed to faculty to rectify.
- Internal continuous assessment is carried out for laboratory work.
- Internal sessional examinations are conducted. The answer sheets are shown to the students and the model answer is discussed with them.
- Extra classes and remedial classes are planned, if required.
- University result is analyzed for further improvement.

Outcome of the review are as follows:

- The quality of academic processes in the institute has improved.
- Individual faculty gets inputs to improve his/her performance and hence contribute to the teaching-learning quality.
- Individual attention to students through mentoring contributes to improvement in students' performance.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholder through parents meet, alumni meet, annual functions, students induction program, students mentoring sessions, Principal's address at seminars/ conferences/ interactive sessions with stakeholders etc.

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The institute is a pioneering and leading institute in this region of Maharashtra state. It has maintained a high reputation in quality of teaching-learning processes. Most preferred institute for university level events like Avishkar, Yuvarang, on screen evaluation centre.

Criterion VII: Innovations and Best Practices

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

The Institute does not conduct any official Green Audit by an external agency. However, every effort is made by institute to keep the campus green.

The institute is located in an arid region. The barren land of the institute is now converted into a lush green campus. The institute has developed lawns, gardens and landscapes. Owing to environmental consciousness staff and students are involved in activities such as tree plantation and water conservation. The recycled water from the waste water treatment plant is used for maintenance of gardens. The institute has a separate garden and maintenance section with necessary gardening equipments and trained men power.

The institution is utilizing renewable energy. All hostels are fitted with solar water heaters, buildings are provided water harvesting system and solar street lights are installed at prime places of the campus. All buildings are designed to avail natural light and ventilation so as to minimize electrical energy consumption. The institute promotes green campus activities effectively, to keep the campus clean, hygienic and free from any sort of pollution, making it an eco-friendly campus.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

Energy conservation
Use of renewable energy
Water harvesting
Check dam construction
Efforts for Carbon neutrality
Plantation
Hazardous waste management
e-waste management

Energy conservation:-

The institute is conscious about energy conservation and towards this the institute has taken the following initiatives:

- buildings are designed to avail natural ventilation and day light
- transparent glass windows

- gravity water supply system
- waste-water recycling
- bio-gas plant
- maintaining power factor
- energy conservation awareness placards
- use of CFL and LED lights
- use of five star certified electrical appliances
- use of air coolers
- solar water heaters
- solar street lights
- reuse of paper

Use of renewable energy:-

The institute is aware of energy crisis and moving towards use of renewable energy sources. They are

- use of solar water heaters
- use of solar street lights
- installation of bio-gas plant

Water harvesting:-

Day by day in this region water level is depleting, which necessitates the recharging of the ground water source. Therefore, the institute has designed and implemented water harvesting system in which roof water is channelized towards borewells to raise the ground water level.

Efforts for Carbon neutrality:

Carbon emission is a global issue. As an effort for carbon neutrality the institute has taken following initiatives:

- College buses and vehicles are well maintained and PUC certified
- College organizes special drive for PUC certification of vehicles
- Vehicle parking is located at far of the academic arena
- Plantation of varieties of trees in campus and of the campus
- Wood and plastic burning are prohibited in the campus
- Air cooling facilities are used to minimize use of air-conditioners

Plantation:

The institute has remarkable contribution in plantation in and off the campus. The institute has

- More than 850 trees, the major are Neem, Pippal, Palm, Ashoka, Eucalyptus, Almond, Jamun and Mango
- Lawns and gardens
- Recycled waste water for maintenance of lawns and gardens
- Gardening equipments and trained men power

The students have done tree plantation in schools nearby and in the campus also.

Hazardous waste management:

Chemicals and hazardous materials used for practical purpose are purchased as per requirement and need so that there is no question of managing disposing outdated chemicals. Microbial waste is destroyed by sterilization at 15psi, at 121⁰C for 1 hour and drain into the sink under running tap water, the tubes/plates in which culture is stored is cleaned with 70% ethanol.

Garbage is collected by housekeeping personnel and transported to disposal site. Sanitary napkin destroyers are installed in girls' common room and in girls' hostel. Proper waste water sewer system is provided. Bathroom waste water is treated and recycled. Waste papers are collected and sold to vendor time to time.

e-waste management:

Electronic goods are put to optimum use. The irreparable electronic goods and damaged computers are sold to scrap vendor. UPS Batteries are exchanged by the suppliers. Obsolete computers are buy-backed with new ones.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- Teaching-learning process:-

- ✓ Teacher – Guardian Scheme is implemented for counseling and guidance of students.
The institute has Teacher guardian scheme for student counseling and career guidance. This scheme is to provide conducive environment to the students in counseling and taking some burden off the parents and lessens their anxiety. This facilitates career guidance to the students.

- ✓ Use of Information and Communication Technology (ICT)
The use of audio visual aids has been integrated with conventional chalk and board teaching for effective curriculum delivery. The students are provided with self study material like NPTEL video lectures and notes through MOODLE.

- ✓ Nurturing and nourishment of students mind
A lecture series “FEAST” (Festival of Engineers, Administrators, Scientists and Technocrats) is organized every year. In this, renowned scientists, social activists, sports persons, administrators, industrialist etc. are invited. They share their knowledge and experiences with the students and interact with the students which nurtures and nourish the students mind.

- ✓ Transparent continuous assessment and evaluation process.
Internal sessional examinations are conducted. The answer sheets are shown to the students and the model answer is discussed with them.
Evaluation of Internal Continuous Assessment (ICA) for practical is done on the basis of Attendance (A), Performance (P), Journal (J), and Viva (V) and the grades given are shown to them.

- ✓ Establishment of Innovation and Entrepreneurship Development cell (IEDC)
Department of Science and Technology, Govt. of India has sanctioned Entrepreneurship Development Center (IEDC) with financial support of Rs. 45.3 lakhs to the institute to inculcate entrepreneurship and research culture among the students. IEDC sponsors FIVE innovative student projects every year with financial assistance of Rs. 1 lakh to each project.

- ✓ Recognized research laboratories for doctoral research
The institute is affiliated to the North Maharashtra University, Jalgaon, MS. The laboratories of the following departments are recognized for doctoral research by the University:
 - Civil Engineering
 - Mechanical Engineering
 - Electronics and Telecommunication Engineering
 - Chemical Engineering
 - Biotechnology

- Administrative practices:
 - ✓ Use of ERP software
The institute has Enterprise Resource Planning (ERP) software as step towards e-governance.

 - ✓ Electronic surveillance
For security and safety purpose, the institute also has CCTV and DVR system for surveillance. The institute has Biometric system to register the attendance of staff members and hostellers.

 - ✓ Administrative review through monthly meetings.
The unique feature of administration is that four teaching and three non teaching staff members have representation in eleven member local management committee. Further one teaching and one non teaching staff member is included in each of the following committees: Finance/Purchase Committee, Building Committee, Staff selection Committee and Hostel Committee. Meetings of these committees are conducted once in a month to monitor and evaluate activities in the respective area. Thus the employee participation in management has created a positive impact on the smooth functioning of the college.

- Infrastructure and Campus development:-
 - ✓ New administrative block
The institute has built state of the art administrative block. The block portrays corporate culture to students.

- ✓ Yoga hall and modern Hi-tech gym
Practicing yoga is an asset for students to acquire serenity. In order to facilitate the same, the institute has yoga hall and instructor. Institute also has modern gym with hi-tech equipments to keep students physically fit.
- ✓ Boys and girls hostels
All the hostels are provided with necessary facilities viz. Wi-Fi, RO water units, solar water heater etc. In addition to these, girls hostels are facilitated with vending machines and sanitary napkin destroyer.
- ✓ Overhead water tank
An elevated storage reservoir with a capacity of 2.5 lakhs litre supplies water to different buildings by siphon mechanism.
- Research and Development:-
 - ✓ Laboratory recognition for doctoral research.
The institution is affiliated to the North Maharashtra University, Jalgaon, MS. The laboratories of Civil Engineering, Mechanical Engineering, Electronics and Tele-communication Engineering, Chemical Engineering, Biotechnology departments are recognized for doctoral level research by the University
 - ✓ Shram Sadhana Research Promotion Scheme (SSRPS)
To promote research, college has started Shram Sadhana Research Promotion Scheme through which funds are provided to the faculty members.
 - ✓ Publication of International Journal
The college publishes research journal, “PRATIBHA: International Journal of Science, Spirituality, Business and Technology” with ISSN print (2277-7261) and online (2278-3857), to encourage faculty for research publications.
 - ✓ Funding for Innovative projects of students

IEDC facilitates entrepreneurship qualities and research culture among the students. IEDC sponsors FIVE innovative student projects every year with financial assistance of Rs. 1 lakh to each project. Funds are also provided by the college for innovative working models for the students.

7.3 Best Practices

7.3.1 Elaborate on any two best practices, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

Two Best Practices of the institution

1. Empowering the students
2. Inculcating research attitude

I. BEST PRACTICE:

1. Title of the Practice

Empowering the students

Goal:

The mission of the institute states about preparing competent, value added, patriotic, globally competitive engineers for societal development. It has two significant aspects. Firstly, it puts students at center of all activities. Secondly, it explicitly states that not only the students should be academically nurtured and nourished; but should also be holistically developed.

The planning and execution of all processes is student centric to ensure that the student is academically sound, well-versed with the latest technology and empowered with the soft competencies so as to be globally employable or an entrepreneur. Further the student is well nourished with values which make him/her not only a good engineer, also a good citizen and a good human being too. The student is well aware about his/her role in the development of global society and should have a commitment towards the role.

The Context:

India, with its huge population and socio-economic problems, is ambitiously headed up on the path of transition from developing country to the developed country. Its demography is rich with young age group. This huge human resource has to be transformed to skilled human resource through technical education. Today, the strength of a nation is measured by its technological power. The backbone of economic development, prosperity and security is in the technological excellence. Modern India is ambitiously battling with the challenges of socio-economic uplifting.

As Dr. A. P. J. Kalam has said it has the potential to become techno-economic super power. It has also the potential to become the ‘Jagat guru’, the global preacher in science as well as spirituality, Dr Vijay Bhatkar has said. To realize the visions of these great visionaries we need engineers who are academically sound so that they are at pace with the present day technology, at the same time they have willingness to use their knowledge for the development of nation and service of the society. In this transition era where India is transforming from developing nation to a developed nation, it needs engineers who are capable and committed as well. The goal of the institute is laid down in this context.

The Practice:

A great thought, a great idea may remain confined on the papers if not executed willingly and systematically. The institute has a great vision of empowering students. The process of empowering them is well executed by the systematic and sincere procedures which are described herein. The institute has a visionary management chaired by an eminent academician Dr D R Shekhawat. The local management includes major representation of teaching faculty. Their academic expertise and experience is utilized in the planning and implementation of the best practices in the institute- the student empowerment.

The institution has a meticulously organized and clearly planned teaching, learning and evaluation schedule- the academic calendar. The schedule is quite comprehensive. It gives prime emphasis to the academic empowerment. Yet it finely blends co-curricular and extra-curricular activities with the academics for the holistic empowerment of the students as per the goal laid down by the institute. The schedule is prepared at the beginning of the academic session, keeping in view the span provided by University academic calendar. It is prepared by thorough

discussion of all HoDs with Principal. The practice of the academic calendar is quite versatile e.g. sports, cultural activities, group discussions, debate, elocution etc. Special training program, entrepreneurship development program, soft skill development program, guest lectures and many such activities also contribute to the same. A special feature of the institute is a lecture series FEAST (Festival of Engineers, Administrators, Scientists and Technocrats). Every year the FEAST activity is conducted for three days. It includes motivational lectures of diversified personalities like eminent scientists, researchers, sports persons, social activists etc. This provides inclusive nourishment to the students. This empowers student through a balanced growth of his/ her personality and ensure his/ her robust persistence in real world circumstances.

The students are also empowered by their participation in responsibility sharing. Students are members of several committees. This practice makes them recognize their role in the participatory functioning of the institute and develop a deeper bonding with the organization. Their wisdom is utilized in decision making and they get empowered. Whenever institute organizes an event, the student volunteers are involved in event management. This approach practically teaches several managerial and soft skills to the students which are essential for a good engineer. This practice empowers the students and strengthens the association between student and institute.

For most of the activities in the institute, feedback system is in place, e.g. feedback on teaching-learning, feedback on library facility, feedback on hostel and mess facility etc. Owing to this practice students' opinion is utilized to redesign the functioning of the system and to make it more effective for the student empowerment.

Though the institute is self-financed, it offers fee relaxation and scholarship to students under the scheme Shram Sadhana Scholarship Scheme. This empowers the students coming from socio-economically weaker sections of the society.

Evidence of Success:-

Success of the efforts for student empowering is reflected in some of the achievements given below.

- Achievements in Sports

Sr. No	Year	No. of Inter-collegiate Events		No. of Students Participated in Inter-collegiate	No of Students Selected				No. of Students Participated Annual Sports
		Boys	Girls		Inter Group		Inter University		
					Boys	Girls	Boys	Girls	
1	14-15	18	11	228	47	23	11	10	849
2	13-14	17	8	216	43	20	9	5	702
3	12-13	17	7	195	46	22	3	10	684
4	11-12	15	6	178	30	19	2	8	507

The above table shows the increase in participation and success of the students in various sports activities. Further the college has secured 9th position in the year 2011-12 & 7th position in the year 2012-13 in sports among the colleges of NMU region.

- Academic achievements
54 students of the college are university rank holders and 26 students have secured university gold medal.
- Paper presentation/participation
More than 2200 students have presented/participated in technical paper presentation.
- Achievements/ participation in project competition
 - Two teams of students from Mechanical engineering secured second prize of Rs. One Lakh and Third prize of Rs. Fifty thousand at ELECRAMA 2014, An International Exhibition of Electrical and Industrial Electronics Industry organized by IEEMA during 8th to 12th January 2014, at Bangalore.
 - Team of students from Mechanical Engineering department participated in BAJA SAEINDIA 2015 held at NATRAX facility of NATRiP, competition at Pitampur, Indore. Secured 50th rank out of 110 teams from all over India.
 - Robo-club team secured 17th position among 84 strong engineering colleges like IIT's and NITs and reputed institutions all over India in the

prestigious international Event “ROBOCON” in March 2013. In the academic year 2015 also Robo-club team secured 33rd position in the prestigious international Event “ROBOMINTON, ROBOCON, National robotic contest” organized by Doordarshan and MIT AOE, Pune.

- Placement

During the last four years 850 + students are placed through campus interviews and 850 + students are placed off campus

Problems Encountered and Resources Required:-

- Time constraint: the university curriculum is very compact. The academic schedule does not accommodate for official and personal leaves and even for internal sessional examination. It does not provide separate time for co-curricular and extra-curricular activities. Co-curricular and extra-curricular activities are essential for student empowering. They have to be accommodated in the already compact schedule. Hence students always find shortage of time for other activities which are needed for their empowerment.
Resources required: effective and efficient scheduling of activities, parallel activities and sincerity in implementation.
- Intake quality of students: The quality of students getting admission in engineering is depleting day by day. The students are poor in fundamental science and communication. Their ability to write and express is poor. They need effective and tedious efforts to upgrade.
Resources required: Students need extra efforts in core subjects like mathematics etc. For communication skill and soft skill upgrading, special trainers/ counselors are provided.
- Socio-economic background: socio-economic background plays significant role in the performance of a person. The larger proportion of students coming for engineering are from rural background and are from socio-economically backward sections of the society.
Resource required: effective student counseling and time for the same is required.
- Financial limitations: the institute is a self financed institute. The major resource of income is student fee. Hence finance is a constraint sometimes for student empowerment activities.

- Geographical Location: Owing to rurally located institution, students get less opportunity for industrial exposure during their studies.
Resource required: students may be taken for industrial visits if time and financial resources are available.

II. BEST PRACTICE:

1. Title of the Practice

Inculcating research attitude

Goal

Research comprises "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications." Knowledge is just like a torch in the hands of human being showing him the path ahead.

The institute aims that its engineers must have research orientation. They must not be just followers of knowledge traditions; they must explore new dimensions of knowledge. Research must be imbibed into their attitude. Research must be their very instinct so that they learn to tackle engineering problems to its roots, rather than superficially managing it. They must propose innovative, better solutions to the conventional engineering issues in modern context.

The Context:-

Dr. A. P. J. Abdul Kalam has mentioned that research and teaching are complimentary to each other. Good teachings emanates from research. Considering this the institute strives best to provide conducive environment to its faculty members for research. Through faculty members research attitude is inculcated while guiding UG and PG students for their project works.

The National Knowledge Commission (NKC) of India has recognized the need of research based engineering education for modern India. It has specifically mentioned that "creation of new knowledge principally depends upon strengthening the education system, promoting the domestic research and innovations in laboratories as well as grass root level." Recognizing the directives underscored by the NKC, the institute has given due emphasis in the capacity

building of its faculty members and student in terms of research attitude. It ultimately contributes to the mission of the institute- to provide engineers who are empowered with knowledge and are capable to do global societal development.

The Practice:

In order to inculcate the research attitude in students and faculty members, the institute has taken several initiatives.

The institute has a Director of Research to coordinate the research activities. The director scrutinizes the research proposals submitted by the faculty members. He also keeps a track of various research funding scheme and inspires faculty members to submit proposals under them.

The institute budget has specific provision for research activities for each department. The faculty members can put up their requirements within the budget to carry out their research. There is a separate provision for student projects too. In case of specific student/faculty project, provisions beyond regular budget are also done on the recommendations of HoDs and Director of Research. The institute has initiated an indigenous research promotion scheme (SSRPS). The faculty members can submit their research proposals under this scheme every year at the beginning of the academic session. The proposals are scrutinized by a research committee and based upon the merit the funds are provided for the conduct of research.

The institute has done successful efforts to acquire the status of inclusion in the List of 2(f) and 12(B) under UGC act 1956. This entitles the institute as eligible to receive grants from UGC for research. The laboratories of five departments of the institute are recognized for doctoral research by North Maharashtra University, Jalgaon. The institute has six faculty members, recognized as Ph D supervisors by the university. This provides an opportunity to the faculty members to indigenously carry out research work, leading to doctoral degree. Many of the faculty members are pursuing their PhD.

The institute always encourages faculty members to indulge into research activities, write research proposals, communicate research papers etc. The institute publishes its own international research journal accommodating a broad spectrum of research arenas. This provides opportunity to the faculty members and students to publish their research papers online as well as in hard form. The institute every year organizes international conference which host internationally recognized eminent research scholars. They interact with the faculty members and students thus inculcating research attitude into them. The institute organizes workshops aiming to imbibe research attitude in faculty members and students. The students and

faculty members are also deputed at other institutes to attend conferences and workshops which helps them in developing research attitude. The institute organizes students' paper contest, project exhibition, poster presentation and tech fest like activities.

Evidence of Success:-

The evidence of success of the efforts of inculcating research culture in students and faculty members is reflected through following:

- Faculty research

21 faculty members have acquired doctoral degree and 31 members are registered for doctoral degree and are expected to acquire in near future. Faculty members have received funds for their research work from funding agencies like UGC, AICTE (MODROB), Vice Chancellor Research Motivation Scheme, Rajiv Gandhi Science and Technology Commission etc. In all fifteen such projects are sanctioned. 24 faculty members have received funds for carrying out research under SSRPS. One faculty member received a patent and one filed a patent.

- Students projects

Under IEDC 20 numbers of student innovative research projects are funded.

- Paper presentation

464 research papers are published by faculty members and students in peer reviewed international journals. Over 3000 papers are presented by the students in the technical paper presentation.

- More than 50 workshops/ training sessions are organized by the institute for students and faculty members.

- Every year national/ international conference is organized by the institute.

Problems Encountered and Resources Required:

- Time constraint: Time is the primary requirement for research. Engineering colleges are basically teaching institutions. Hence teaching is the priority. Extra hours are required to complete the curriculum. The

routine administrative responsibilities are inevitable. Researcher has to extract quality time out of it.

Resource required: Reducing the overburden of teachers is the resource required.

- Limitation of funds: Though the institute makes provisions for research funds in the budget, limitation of funds is always an issue in a self financed institute.
- Less industrialization: The institute is located in a rural area.
- Less number of PhD supervisors: The university norms for recognized Ph D supervisor are very stringent. The number of Ph D Faculty available is less. Hence there is a shortage of Ph D Supervisors, though the aspirants are more.

Notes (Optional)

Any other information that may be relevant and important to the reader for adopting/ implementing the Best Practice in their institution (about 150 words):

- University has selected this college to conduct Youth Festival, “Yuvarang 2015” between 7th -10th January 2016
- University event-Avishkar (district level) of this year will be held at our college on 22 November 2015.
- Many of the festivals are celebrated in the college campus to maintain liveliness and harmony among the students, faculty and other stakeholders.
- Daily national anthem is sung at 11:00 am

Contact Details

Name of the Principal: Dr. K. S. Wani

Name of the Institution: Shram Sadhana Bombay Trust's, College of Engineering and Technology, Bambhori

City: Jalgaon, Maharashtra, India

Pin Code: 425001

Accredited Status: Four NBA Accredited U G Programs.

Work Phone: 0257 2258393,

Fax: 0257 2258392

Website: <http://www.sscoetjalgaon.ac.in>

E-mail: sscoetjal@gmail.com

Mobile: 9423774254

Evaluative Report of the Department

1. Name of the department: Biotechnology

2. Year of Establishment: 2006-2007

3. Names of Programs / Courses offered: UG and Ph.D

Programme of Study	Description
UG in Biotechnology Engineering	30Intake

4. Names of Interdisciplinary courses and the departments/units involved:

Biotechnology department is offering two interdisciplinary courses viz. Biotechnology of Waste Treatment and Biomedical Instrumentation. Students have opted the subject Biotechnology of Waste Treatment. The beneficiary departments are Civil Engineering and Information Technology.

5. Annual/ semester/choice based credit system (programme wise):

Semester based system

6. Participation of the department in the courses offered by other departments:

22 BE Biotechnology students have opted Enterprise Resource Planning and SAP and 1 student have opted Energy Audit Conservation as interdisciplinary elective offered by Information Technology and Electrical Engineering respectively.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programs discontinued (if any) with reasons: Nil

9. Number of Teaching Posts:

Name of post	Sanctioned	Filled
Professors	01	01
Associate Professors	02	--
Asst. Professors	06	05

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.):

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
01	Dr. I.D. Patil	Ph.D.	Professor & Head	Chemical Technology	19	04*
02	Mrs. Sarika Pawar	M.Tech. Ph.D. Pursuing	Asst. Professor	Chemical Engineering	08	--
03	Mr. Jayant P. Parpalliwar	B.Tech., M.E.(Pursuing)	Asst. Professor	Biotechnology	06	--
04	Mr. Gaurav D. Khodape	M.Tech.	Asst. Professor	Biotechnology	02	--
05	Mr. Vikas Dongardive	M.Tech.	Asst. Professor	Biotechnology	01	--
06	Miss. Aaisha Sayyad	B.E.	Asst. Professor	Biotechnology	0.5	--

*pursuing

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Year	Percentage of lectures delivered and practical classes
2015-16	54.25

13. Student -Teacher Ratio (programme wise): 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sanctioned: -- Filled: --

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph.D: 01, ME/M.Tech: 03, BE/B.Tech.: 02

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr. No.	Name of the faculty	Funding Agency	Academic Year	Amount Sanctioned
01	Dr. I. D. Patil	NSTEDB, DST, Govt. of India	2012-2013	1 Lakh
	Mr. Sharanappa A.			
02	Dr. I. D. Patil	NSTEDB, DST, Govt. of India	2013-2014	1 Lakh
	Mr. Jayant Parpalliwar			
03	Dr. I. D. Patil			1 Lakh

	Mr. Jayant Parpalliwar	NSTEDB, DST, Govt. of India.	2014-2015	
04	Dr. I. D. Patil	RGS&TC, NMU Centre, NMU, Jalgaon	2014-2015	2 Lakh
	Mr. Jayant Parpalliwar			
05	Dr. I. D. Patil	NSTEDB, DST, Govt. of India	2015-2016	1 Lakh Recommended
	Mr. Jayant Parpalliwar			

Department of Science and Technology, Government of India have sanctioned the proposal of Dr. I. D. Patil, Head, Department of Biotechnology, to establish Innovation and Entrepreneurship Development Centre (IEDC) in the institute, with financial assistance of Rs. 45.3 lakhs.

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr. No.	Title of the Project	Funding Agency	Academic Year	Grant received in Rs.
01	Effect of Biofilm on Waste Water Treatment Using Bactericidal Activity of Nitrogen Doped Metal Oxide Nanoparticles	NSTEDB, DST, Govt. of India	2012-2013	1 Lakh
02	Fermentative Production of Amino Acids As A Nutrient Supplement To Plants From Agricultural Waste	NSTEDB DST, Govt. of India	2013-2014	1 Lakh
03	Design & Fabrication of Laboratory Scale Solid State Fermenter for Production of Value Added Products	NSTEDB DST, Govt. of India	2013-2014	1 Lakh
04	Fermentative Production of Bacillus Protease Using Vegetable Waste As Substrate	NSTEDB DST, Govt. of India	2014-2015	1 Lakh
05	Study on Fermentative Production and Purification of Amino Acids from Agricultural Waste	RGS&TC, NMU Centre, NMU, Jalgaon	2014-2015	2.0 Lakh

18. Research Centre /facility recognized by the University:

The laboratories of the department are recognized for doctoral research in Biotechnology by the North Maharashtra University, Jalgaon, in academic year 2011-12.

19. Publications:

a) Publication per faculty:- 02

- **Number of papers published in peer reviewed journals (national/international)**

12 papers have been published in International journals in last four years.

- **Monographs:** Nil
- **Chapters in Books:** Nil
- **Edited Books:** Nil
- **Books with ISBN with details of publishers :** Nil
- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** Nil
- **Citation Index – range / average**

Name of the Faculty	Citation index
Dr. I.D. Patil	16

- **SNIP**

Name of journal (Published paper by Department faculty)	SNIP
Journal of Scientific And Industrial Research	0.636

- **SJR**

Name of journal (Published paper by Department faculty)	SJR
Journal of Scientific And Industrial Research	0.237

- **Impact Factor – range / average**

Range: 0.13 to 4.8

- **h-index**

Name of the Faculty	h-index
Dr. I.D. Patil	02

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees:
- b) International Committees:
- c) Editorial Boards:

Dr. I. D. Patil:

- Member of Senate of North Maharashtra University, Jalgaon.(Tenure: Sept.,2010 – Sept,2015).
- Member of Board of Studies in Biotechnology Engineering, Shivaji University, Kolhapur.
- Reviewer for the journal of International Food Research.

22. Student projects:

- Percentage of students who have done in-house projects including inter departmental/programme: 100% (Final Year)
- Percentage of students placed for projects in organizations outside the

institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

Students have won awards/prizes in paper presentation and in project contexts etc. Students project titled “Fermentative Production of Amino acids as a nutrient supplement to plants from agricultural waste” have secured 1st prize with cash of Rs. **15,000/-** in National Level Project Exhibition at College of Engineering & Technology, Akola during 20th March 2014.

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Name of eminent personality	Name of Institute /industries
1	Prof. K.V. Venkatesh,	Professor, Chemical Engineering and Associate faculty, School of Bioscience and Bioengineering, IIT Bombay, Powai, Mumbai.
2	Prof. K. Sreeramulu,	Chairman, Dept. of Biochemistry, Gulbarga University, Gulbarga, Karnataka.
3	Prof. S. N. Naik,	Centre for Rural development and Technology, Indian Institute of Technology, Delhi, India.
4	Dr. Sanjay N. Nene,	Scientist & Head, Biochemical Engineering Unit, NCL, Pune.
5	Dr. Bhaskar B. Idage	Scientist, Polymer Science & Engineering Division, National Chemical Laboratory, Pune
6	Dr. V. L. Maheshwari	Professor & Director, , School of Life Sciences, North Maharashtra University, Jalgaon.
7	Dr. S. Mishra	Professor, Polymer & Plastics Technology, UICT, North Maharashtra University, Jalgaon.

25. Seminars/ Conferences/Workshops organized & the source of funding:

d) National:

Sr. No.	Event	Date	Source of Funding
1	Two days workshop on ASPEN HYSIS Organized by Department of Chemical Engineering & Department of Biotechnology.	10/10/2010	SSBTs College of Engineering and Technology, Bambhori, Jalgaon
2	Two days workshop on ASPEN HYSIS Organized by Department of Chemical Engineering & Department of Biotechnology.	03/10/2011	SSBTs College of Engineering and Technology, Bambhori, Jalgaon
3	“TRANSCRIPTION2K12” National Level Conference on Biotechnology Advances	16/03/2012	SSBTs College of Engineering and Technology, Bambhori, Jalgaon
4	Two days workshop ASPEN HYSIS WORKSHOP Organized by Department of Chemical Engineering & Department of Biotechnology.	30/09/2012	SSBTs COET, Bambhori
5	TRANSCRIPTION-2K13 Two days National Level Workshop on “Fermentation Technology”	25/03/2013 to 26/03/2013	SSBTs COET, Bambhori
6	Two days Department level workshop on “Antimicrobial Activity of Medicinal Plants”	18/10/2013 to 19/10/2013.	SSBTs COET, Bambhori

e) International:

- Dr. I. D. Patil, Head of the Department of Biotechnology, worked as a organizing chair in International Conference on Global Trends in Engineering, Technology and Management (ICGTETM 2015) on January 9 to 10 2015 at SSBT's, COET, Bambhori, Jalgaon.
- Dr. I. D. Patil, Head of the Department of Biotechnology, is convener of International Conference on Global Trends in Engineering, Technology and Management (ICGTETM 2016) which will be held on January 4 to 6 2016 at SSBT's, COET, Bambhori, Jalgaon.

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Year	Applications received	Selected	Enrolled		Pass percentage
				M	F	
Biotechnology of Waste Treatment	2015-16	39	39	25	14	Result awaited

*M = Male *F = Female

27. Diversity of Students:

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.E. Biotechnology	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.

Sr. No	Academic year	Name of Students	Course opted/Qualifying Exam
1	2010-11	Dini Kansara	GRE and TOEFEL
2	2011-12	Pritesh Chaudhari	GATE
3	2011-12	Manoj Kamble	GATE
4	2011-12	Krutika Suryawanshi	GRE and TOEFEL
5	2013-14	Shruti Ahuja	GATE
6	2014-15	Shubhra Sharma	GRE and TOEFEL
7	2014-15	Vaibhav Lendekar	GATE

29. Student progression:

Student progression	Against % enrolled			
	2011-12	2012-13	2013-14	2014-15
UG to PG	33	7.1	19	10
PG to M.Phil.	--	--	--	--
PG to Ph.D.	5.5	00	00	00
Ph.D. to Post-Doctoral	00	00	00	00
Campus selection	33	14.2	00	40
Other than campus recruitment	16	7.1	23.8	00
Entrepreneurs/Self-employment	NIL			

30. Details of Infrastructural facilities:**f) Library**

Particulars	Titles	Volumes
Books	91	102
Proceedings	14	--
Project reports	30	--
Seminar reports	90	--

g) Internet facilities for Staff & Students

60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department.

h) Class rooms with ICT facility:

Sr. No.	Particulars	Carpet Area in Sq. Mt.
1	Class Room No. 223	54
2	Class Room No. 224	54
3	Class Room No. 225	45
7	Tutorial Room No. 111A	33
9	Seminar Hall No. 308	162

i) Laboratories:

Total number of Laboratories= 11

Sr. No.	Particulars	Area Sq. m.
	Laboratories	
01	LAB – 1 Microbiology	69
02	LAB – 2 Biochemistry	69
03	LAB – 3 Fermentation Biotechnology	66
04	LAB – 4 Bioprocess Engineering	66
05	LAB – 5 Bioprocess Modeling & Simulation/ Computer Lab	66
06	LAB – 6 Immunology Lab/ Molecular Biology and Genetic Engineering	66
07	LAB – 7 Project Lab	68
08	LAB – 8 Plant Tissue Culture Lab	68
09	LAB – 9 Bioinformatics	108
10	LAB – 10 Down Stream Processing Lab	66
11	LAB – 11 Research Lab	72

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	Number of Students							
	SC	ST	OBC	VJNT	SBC	Minority	EBC	Total
2011-12	02		09	04	01	--	--	16
2012-13	03	--	12	02	--	--	--	17
2013-14	01	--	05	--	--	--	--	06
2014-15	02	--	14	--	--	--	--	16

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Sr. No	Name of the Event	Date	Organized under
Academic Year 2014 - 2015			
1	Guest Lecture by Dr. Kanan Puranik on “ Intellectual Property Rights”	07/02/2015	Department of Biotechnology
2	Guest Lecture by Prof. Nandkishor More on “ Environmental Biotechnology”	24/01/2015	Department of Biotechnology
3	Guest Lecture by Mr. Bhushan Patil on “Career Opportunities in Chemical Industries”	01/09/2014	Department of Chemical Engg.
4	Guest Lecture by Dr. Pravin R. Puranik on “ Newer Applications of most Ancient Prokaryotes Cynobacteria”	13/09/2015	Department of Biotechnology
Academic Year 2013-14			
1	Guest Lecture by Dr. H. P. Singh on “Food & Nutrition security: A Challenge”	10/04/2013	Department of Biotechnology
2	Guest Lecture by Dr. M. Hussain on Spiritual Aspects of Environmental Science”	14/10/2013	Department of Biotechnology

3	Guest Lecture by Prof. K.S. Vishwakarma on “Plant Tissue Culture Techniques”	15/10/2013	Department of Biotechnology
4	Guest Lecture by Mr. Pravin Dagar & Mr. Hrushikesh Patil on “Genetically Modified Crops”	11/01/2014	Department of Biotechnology
5	Guest Lecture by Sandip Kabra on “Expectation from fresh chemical Engineers in Chemical Industries”	25/01/2014	Department of Chemical Engg
Academic Year 2012-2013			
1	Guest lecture By Dini Kansara on “Guiding of students for Abroad Studies in area of Biotechnology “	23/07/2012	BESA
2	Guest Lecture by. Mr. Jagdish Bennale “Entrepreneurship in Biotechnology and Reactor Design”	06/09/2012	BESA
3	Guest lecture By Akshay Narkhede on “Synthetic Biology: Production and Optimization of high yielding engineered strains of <i>E.coli</i> (HPL,wx,DecNos, CEDDEC) for short chain hydrocarbon as potential next generation biofuels”	01/02/2012	BESA
4	Guest lecture By Dr. Mahesh Yenkie on “Design & Substrate Mass Balance in High Performance Aerobic Bioreactors”	09/03/2013	Department of Chemical Engg.
5	Guest Lecture by Dr. Sanjay Nene on “Algal Technology- Present and Future Directions” in Transcription-2k13	25/03/ 2013	Department of Biotechnology
6	Guest Lecture by Dr. M. Talib on “Recent Trends in Fermentation Technology in Food Industries” in Transcription-2k13	25/03/2013	Department of Biotechnology
7	Guest Lecture by Dr. Bhushan L. Chaudhari on “Trouble Shooting in Fermentation” in Transcription-2k13	26/03/ 2013	Department of Biotechnology
Academic Year 2011 - 2012			
1	Guest Lecture by Dr. Jagdish Tandale on the topic “Chromatographic Separation For Biomolecules: Basic Theory”.	06/08/2011	BESA

2	Guest Lecture by Akshay Narkhede on the topic “Admission Process for higher studies in Foreign Universities”.	05/09/2011	BESA
3	Guest Lecture by Dr. V. L. Maheshwari “Genetically Modified Food”	08/10/2011	BESA
4	Guest Lecture by Dr. K. V. Venkatesh on the topic “Systems Biology: Linking Genotype to Phenotype” in Transcription-2k12.	16/03/2012	Department of Biotechnology
5	Guest Lecture by Dr. K. Sreeramulu on the topic “Microbial Proteases / Keratinases: From industrial view point” in Transcription-2k12.	16 /03/2012	Department of Biotechnology
6	Guest Lecture by Dr. Dr. K. D. Sonawane on the topic “Bioinformatics: Future of Life Science Subjects” in Transcription-2k12.	16 /03/2012	Department of Biotechnology

33. Teaching methods adopted to improve student learning:

Teaching methods adopted to improve student learning are as follows.

- **Class room teaching:** The basic teaching method adopted by the teachers is class room teaching in which the teacher delivers lectures. The delivery is supported by electronic audio-video aids.
- **Laboratory work** deals with the hands on training and practical exposure to various high throughput instruments and techniques.
- **Assignments** are given to the students to motivate them for self-study.
- **Projects:** Students are working on Projects related to societal development and adopting clean and green technology. Project work allows them to apply their theoretical knowledge to the real world problems.
- **Seminars:** Students deliver seminar on the recent topics in the field of Biotechnology and allied fields which helps them in personality development and first hand information on current developments.
- **Industrial visits** are arranged to gain the insights of current technological advances and the practices followed by various industries.

Participation in Institutional Social Responsibility (ISR) and Extension activities:

Department faculties & students are involved in social activities like blood donation camp, blood group checking camp. Department have organized social programme “**Ghe Bharari**” for orphan students of Lilai Orphan School, Shiv Colony, Jalgaon on 1st April 2012. At this program, Note Books, Motivational Books, Alphabets Charts, globe and prizes to toppers were distributed from the funds collected from the students and faculty of the department.

34. SWOC analysis of the department and Future plans:

Strength:

1. NBA accredited programme.
2. Dedicated, committed and enthusiastic faculty.
3. Students have opted for higher education.
4. Faculty works on funded research projects.
5. Laboratories are recognized for PG & doctoral research.

Weakness:

1. Fewer placements.
2. Fewer publications.
3. No consultancy services.

Opportunities:

1. Funding for research projects by various agencies such as UGC, AICTE, DST etc.
2. Increase in placements through interaction with alumni and industries.
3. Solution to societal problems through research.
4. Interdisciplinary research.

Challenges:

1. Attract meritorious students.
2. Getting consultancy.

Future Plan:

1. To start PG programme.

Evaluative Report of the Department

1. Name of the Department: Chemical Engineering Department

2. Year of establishment: 1996-97

3. Names of programmes offered: UG and Ph.D

4. Interdisciplinary programmes and Departments involved:

Chemical Engineering department is offering interdisciplinary course Energy Engineering. The beneficiary department is Mechanical Engineering.

5. Examination System: Annual/Semester/Trimester/Choice Based Credit System:

Semester Based System

6. Participation of the Department in the courses offered by other Departments: Nil

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons:
Nil

9. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Assistant Professors/ Others):

	Sanctioned	Filled
Professors	01	01
Associate professors	02	02
Assistant professors	05	05
Other	-	-

10. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance:

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experiences	No. of Ph.D./ M.E. students guided for the last 4years
1	Dr. K. S. Wani	B.Sc. B.Sc. Tech. Chem. M.Tech Chem.Tech, DBM, Ph.D Biotechnology	Principal & Professor	Biotechnology & Chemical Engineering	30	01 + 03#+01* = 05
2	Dr. V. R. Diware	B.Tech. Chemical, PGDPM, Ph.D. (Chem. Tech.)	Associate Professor & HOD	Chemical Engineering	27	01*
3	Dr. A. R. Lokhande	B.Sc., B.Sc. Tech., M.Tech(Chem. Tech.), DBM, DCA, Ph.D. (Chemical Engg.)	Associate Professor	Chemical Engineering	30	--
4	Dr. S.A. Thakur	B.Tech. Chemical, M.B.A., M.Tech. Chemical Engg. Ph.D. Management	Asstt. Professor	Chemical Engineering & Management	26	--

5	Shri. V. P. Sangore	B.Sc. Chemistry, M.Sc. Poly.Chem, Ph.D. Pursuing	Asstt. Professor	Polymer Chemistry	18	--
6	Shri. N.Y. Ghare	B.Tech. Chemical, M.E.Chemical, Ph.D. Pursuing	Asstt. Professor	Chemical Engineering	25	--
7	Shri. Y.D.Thakare	M.Tech. PGPPE Ph.D(Chemical Engineering Applied)	Asstt. Professor	Chemical Engineering	2	--

Pursuing Ph.D

* Provisionally registered

11. List of senior Visiting Fellows, adjunct faculty, emeritus professors:

Nil

12. Percentage of classes taken by temporary faculty – programme-wise information:

Year	Percentage of lectures delivered and practical classes
2015-16	17.94

13. Programme-wise Student Teacher Ratio: 12.86:1

14. Number of academic support staff (technical) and administrative staff sanctioned, filled and actual:

Sanctioned: 01 Filled: 01

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:

Ph.D:04, PG.: 3

16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise:

Sr. No	Name of faculty member	Funding agency	Title of project	Amount sanctioned Rs.
1	Dr. K. S. Wani	Vice Chancellor Research Promotion Scheme, North Maharashtra University, Jalgaon	Experimental investigations on removal of TiO ₂ from effluent of slurry phase photo-catalytic reactors	0.48 lakh
2	Dr. S. A. Thakur Dr. A. R. Lokhande	IEDC, Department of Science and Technology, New Delhi.	Effective Recycling of Paper Waste	1 lakh
3	Dr.A.R. Lokhande	UGC Minor Project	Studies of Alkanolamide and	1.45 lakh

			Metallic Soap from non-traditional oil	
4	Shri. N. Y. Ghare	UGC Minor Project	Study of recovery of Phosphoric Acid from Industrial waste water	1.17 lakh
5	Dr. V. R. Diware Shri. Y. D. Thakare	IEDC, Department of Science and Technology, New Delhi.	Preparation of Nano Catalyst and Its Applications	1 lakh

17. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:

Sr. No	Name of faculty member	Funding agency	Title of project	Amount sanctioned Rs.
1	Shri. A. R. Lokhande	IEDC, Department of Science and Technology, New Delhi.	Study of Calcium Based Lubricating Grease From Non Traditional Oils	1 lakh
2	Dr. V. R. Diware	IEDC, Department of Science and Technology, New Delhi.	Photo – Catalytic Degradation of Detergent : Kinetic study under Slurry Phase Reactor	1 lakh
3	Dr. K. S. Wani	Vice Chancellor Research Promotion Scheme, North Maharashtra University, Jalgaon	Experimental investigations on removal of TiO ₂ from effluent of slurry phase photo-catalytic reactors	0.48 lakh
4	Dr.S.A.Thakur Dr.A.R. Lokhande	IEDC, Department of Science and Technology, New Delhi.	Effective Recycling of Paper Waste	1 lakh

5	Dr. A. R. Lokhande	UGC under Minor Research Project	Studies of Alkanolamide and Metallic Soap from non-traditional oil	1.45 lakh
6	Shri. N. Y. Ghare	UGC under Minor Research Project	Study of recovery of Phosphoric Acid from Industrial waste water	1.17 lakh
7	Dr. V. R. Diware Shri. Y. D. Thakare	IEDC, Department of Science and Technology, New Delhi.	Preparation of Nano Catalyst and Its Applications	1 lakh

18. Research Centre /facility recognized by the University

The laboratories of the Department are recognized for doctoral research in Chemical Engineering by the North Maharashtra University, Jalgaon Vide Letter number NMU/11/Lab. Rcog. / 2917 / 2012 dated 06/11/2012.

19. Publications:

- **Publication per faculty : 10.29**
- **Number of papers published in peer reviewed journals (national/international)**

Publications in International / National journals in last five years: 36

- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 02**
- **Monographs : 01**

1. Monograph of Prof. (Dr.) K. S. Wani, entitled “CONCISE ENCYCLOPEDIA OF BIORESOURCE TECHNOLOGY”, ISBN: 1 – 56022 – 980 – 2, Edited by Ashok Pandey, Ph.D.

- **Chapters in Books: 01**

1. Chapter in Book of Dr. S. A. Thakur: Nurturing Service Industry for Economic Development, Himalaya Publishing House, ISBN: 978-93-5024-768-6, Page 274-280, (2011).

- **Edited Books**

Nil

- **Books with ISBN with details of publishers: 02**

1. Book of Prof. (Dr.) K. S. Wani, entitled “CONCISE ENCYCLOPEDIA OF BIORESOURCE TECHNOLOGY”, ISBN: 1 – 56022 – 980 – 2, Edited by Ashok Pandey, Ph.D.
2. Book Chapter of Dr. S. A. Thakur: Nurturing Service Industry for Economic Development, Himalaya Publishing House, ISBN: 978-93-5024-768-6, Page 274-280, (2011).

- **Book Chapter of Dr. S. A. Thakur : 01**

1. Nurturing Service Industry for Economic Development, Himalaya Publishing House, ISBN: 978-93-5024-768-6, Page 274-280, (2011).

- **Citation Index – range / average**

Sr. No	Name of faculty	Citation index	i10 index
1	Dr. K. S. Wani	25	00
2	Dr. V. R. Diware	45	02
3	Dr. A. R. Lokhande	01	00
4	Dr. S.A. Thakur	62	03
5	Shri N.Y. Ghare	09	00

- **SNIP : Nil**

- **SJR : Nil**

- **Impact Factor – range / average :** Range is 0.785 – 4.896 and Average is 2.91

- **h-index**

Sr. No	Name of faculty	h index
1	Dr. K. S. Wani	04
2	Dr. V. R. Diware	04
3	Dr. A. R. Lokhande	01
4	Dr. S.A. Thakur	04
5	Shri N.Y. Ghare	01

20. Areas of consultancy and income generated:

The Department Offers Consultancy in following area of specializations:

- Erection and Commissioning of Vegetable Oil Refinery.
- Erection and Commissioning of Solvent Extraction Plant.
- Mechanical Oil Extraction Plant.
- Manufacture of Hard Soap and Acid Oil Plant.
- Effluent Treatment Plant.
- Water Analysis.
- Testing of Crude and Vegetable Oils

21. Faculty as member in National Committees/international committees, editorial boards, any other:

Prof. (Dr.) K. S. WANI,

- Member of Board of Studies of Chemical Engineering and Technology, North Maharashtra University, Jalgaon
- EDITOR-IN-CHIEF: Pratibha - International Journal of Science, Spirituality, Business and Technology (IJSSBT) ISSN (Print) 2277-7261.
- Editorial Advisory Board Member of Cyber Times International Journal Technology and Management (CTIJTM) ISSN: 2278 – 7518.
- Reviewer: “Frontiers in Environmental Engineering (FIEE)”, entitled “Specific Microbial Degradation Kinetics of Food Waste: A Case Study” by Patil P. M. , Husain M. ISSN 2326 – 5787.

Dr. V.R. Diware

- Reviewer Pratibha: International Journal Of Science, Spirituality, Business And Technology (IJSSBT) ISSN (Print) 2277-726.

22. Student projects:

Percentage of students who have done in-house projects including inter-Departmental projects: 100 %

Percentage of students doing projects in collaboration with other universities / industry / institute: Nil

23. Awards / recognitions received at the national and international level by Faculty: Nil

Doctoral / Post-doctoral fellows: Nil

Students: Some of the students (51 Students) have won awards /prizes in paper presentation and in project contexts.

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Date	Eminent Academicians and Scientists/Visitors
1	11/02/2012	Dr. Ajay Dalai, Professor, Canada Research Chair and Associate Dean Research and Partnership, Department of Chemical Engineering University of Saskatchewan, Canada
2	03/10/2013	Dr. A. N. Vaidya, Scientist & Head, Solid Waste Management Division, National Environmental Engineering Research Institute, Nagpur
3	29/03/2013	1. Dr. M. N .A. Hawalader, Professor, International Islamic University , Kuala Lumpur, Malaysia 2. Er. M. S. Hiwale, Chief Engineer (Production), ONGC, New Delhi 3. Prof. Ms. Saroj Rangnekar, Head, Department of Energy MANIT, Bhopal
4	09/03/2013	Dr. M. K. N. Yenkie, Pro Vice Chancellor, Rashtrasant Tukdoji Maharaj University, Nagpur.
5	30/08/2014	Dr. Raju Mankar, Vice Chancellor, <u>Dr Babasaheb Ambedkar Technological University, Lonere.</u>
6	25/02/2014 to 26/02/ 2014	1. Dr. Paul James, Director, Global Compact City Program, Sydney, Australia. 2. Dr. S. Deshmukh, Head, Department of Biotechnology, Mumbai University, Mumbai.

		3. Dr. J S Pandey, Sr. Scientist & Head of Climate Change Division, National Environmental Engineering Research Institute, Nagpur. 4. Dr. R. S. Sapkal, Professor, Pulp & Paper Technology, Sant Gadge Baba Amravati University, Amravati 5. Dr. Ratnamala Bendre, Professor, School of Chemical Sciences, North Maharashtra University, Jalgaon
7	09/01/2015	Prof. Dr. S. N. Naik, Centre for Rural Development & Technology, Indian Institute of Technology, Delhi
8	10/01/2015	Dr. Ajay Dalai, Professor, Department of Biological Engineering, University of Saskatchewan, Canada
9	11/04/ 2015	Prof. Dr. S. Mishra, Director, University Institute of Chemical Technology, North Maharashtra University, Jalgaon.

25. Seminars / Conferences / Workshops organized & the source of funding

Sr. No.	Event	Date	Source of Funding
1	National Level conference on Green and clean technology	11/2/2012	SSBT's College of Engg.&Tech, BambhoriJalgaon
2	International Conference on Advances in Energy Technology	29/3/2013	SSBTs COET, Bambhori and North Maharashtra University. Jalgaon
3	International Conference on Sustainable Development	25-26 Feb 2014	SSBT's College of Engg.&Tech, BambhoriJalgaon
4	International Conference on Global Trends in Engineering, Technology and Management-2015	9-11 Jan. 2015	SSBT's College of Engg.&Tech, BambhoriJalgaon

26. Student profile Programme-wise:

Name of the Programme Refer the question no.4	Application	Selected		Pass Percentage	
		Male	Female	Male	Female
UG	31	30	01	16.67	100.00

27. Diversity of students:

Name of Course	Year	% of the students from same University	% of the students other University within state	% of the students from University outside the state	% of the students from other countries
UG	2014 - 15	77.41	22.59	-	-

28. How many students have cleared Civil Services and Defense Services examinations, (NET, SET, GATE and other competitive examinations? Give details category wise.)

Sr. No	Academic year	Name of Students	Course opted/Qualifying Exam
1	2012-13	Jitendra Bisen	GATE
2	2011-12	Jayshri More	GATE
3	2010-11	Vijaya Laxmi	GATE
4		Dhiraj Chaudhari	GRE

29. Student progression:

Student Progression	Percentage against enrolled (%)			
	Year 2014-15	Year 2013-14	Year 2012-13	Year 2011-12
UG to PG	3.22	3.12	13.33	11.11
PG to M.Phil.	-	-	-	-

PG to Ph.D.		-	-	-	-
Employed	Campus selection	22.58	-	46.67	33.33
	Other than campus recruitment	9.67	9.37	23.33	38.89

30. Details of infrastructural facilities

a) Departmental Library:

Particulars	Titles	Volumes
Books	136	144
Project reports	173	-
Seminar Reports	457	20
IIT Video Lecture Series	01	01
National Journals	02	136
Question papers	Last 8 years	-

b) Internet facilities for Staff and Students:

60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department.

c) Class Rooms with ICT facility:

Sr. No.	Particulars	Carpet Area in Sq. Mt.
1	Class Room No 122	54
2	Class Room No 123	54
3	Class Room No 125	54
4	Tutorial Room No 124	45
5	Seminar Hall Room No.162	162

d) Laboratories:

Total number of Laboratories = 11

Sr. No.	Laboratory Name	Area
1	Lab No.1 Mass Transfer – I	68 sqm.
2	Lab No.2 Mass Transfer – II	68 sqm.
3	Lab No.3 Fluid Flow Operation	66 sqm.
4	Lab No.4 Mechanical Operation	66 sqm.
5	Lab No.5 Instrumentation	66 sqm.
6	Lab No.6 Process Control	66 sqm.
7	Lab No.7 Project Lab	81 sqm.
8	Lab No.8 Computer Lab	81 sqm.
9	Lab No.9 Chemical Reaction Engineering	90 sqm.
10	Lab No.10 Chemical Technology	90 sqm.
11	Lab No.11 Research Lab	72 sqm.

31. Number of students receiving financial assistance from college, university, Government or other agencies:

Year	Number of Students								
	SC	ST	OBC	VJ NT	SBC	Minority	EBC	Others	Total
2011-12	12	0	46	7	0	1	10	-	76
2012-13	14	0	48	9	0	5	15	-	91
2013-14	10	0	60	9	0	7	19	-	105
2014-15	7	0	58	10	1	6	15	-	97

32. Give details of student enrichment programmes (Special Lectures / Workshops/Seminar) involving external experts:

2014-15				
Sr No	Name of the Event	Name of the Resource person	Date (Duration)	Targeted Audience (Students) (Class/Branch)
1	Expert lecture on Career Opportunities in	Mr. Bhushan Patil	September 1, 2014	S.E., T.E., B.E. Chemical Engineering

	Chemical Industries			
2	Expert lecture on Industrial Filtration	Mr. Satish Khadke	February 7, 2015	S.E., T.E., B.E. Chemical Engineering
3	Expert lecture on Higher studies and Research opportunities available in Canada	Dr. Ajay Dalai	January 10, 2015	S.E., T.E., B.E. Chemical Engineering
4	Expert lecture on Bio-lubricants	Dr. S. N. Naik	January 9, 2015	S.E., T.E., B.E. Chemical Engineering
5	Workshop on Industrial Automation	Mr. Harish Kathaley	March 12-13, 2015 (2 Days)	T.E. Chemical Engineering
2013-14				
1	Expert lecture on Studies in Australia	Dr. Paul James	February 26, 2014	S.E., T.E., B.E. Chemical Engineering
2	Workshop on Industrial Safety	Dr. V. R. Diware Dr. S. A. Thakur	October 18-19, 2013 (2 days)	S.E. Chemical Engineering
3	Workshop on Aspen HYSYS	Mr. A. R. Lokhande Mr. Sharanappa A.	March 9-10, 2014 (2 days)	B.E. Chemical Engineering
4	Expert lecture on Mechanical Operation	Prof. S. L. Bhagat	January 20, 2014	S.E., T.E., B.E. Chemical Engineering
5	Expert lecture on Expectations from Fresh Chemical Engineers in Chemical Industries	Mr. Sandeep Kabra	January 25, 2014	S.E., T.E., B.E. Chemical Engineering
6	Expert lecture on An Overview Of Environmental Pollution: Chemical	Dr. A. N. Vaidya	October 03, 2013	S.E., T.E., B.E. Chemical Engineering

	Engineering Perspectives			
7	Soft skill Training programme	Mr. Dilip Pinto	For B.E Student on 10/09/ 2012 to 15/ 09/ 2012 and for S.E. and T.E. students from 7/10/12 to 13/10/12 (11 Days)	S.E., T.E., B.E. Chemical Engineering
2012-13				
1	Expert lecture on Design and Substrate Mass Balance in High Performance Aerobic Bioreactors	Dr. Mahesh Yenkie	March 09, 2013	S.E., T.E., B.E. Chemical Engineering
2	Expert lecture on Health and Happiness	Mr. Chirag Patil	February 01, 2013	S.E., T.E., B.E. Chemical Engineering
3	Expert lecture on Hydraulics and Pneumatics	Mr. S. K. Patil	February 12, 2013	S.E., T.E., B.E. Chemical Engineering
4	Expert lecture on Challenges & Opportunities in Chemical Process Industries	Mr. Jayesh Patil	July 27, 2012	S.E., T.E., B.E. Chemical Engineering
5	Expert lecture on Industrial Safety	Mr. Sarang Sangamwar	August 11, 2012	S.E., T.E., B.E. Chemical Engineering
6	Expert lecture on Higher Studies: Abroad	Mr. Dhiraj Chaudhari	August 14, 2012	S.E., T.E., B.E. Chemical Engineering
7	Workshop on Aspen HYSYS	Mr. A. R. Lokhande	October 12-13, 2012 (2 days)	B.E. Chemical Engineering

8	Soft skill Training Programme	Mr. Dilip Pinto	For B.E Student on 10/09/ 2012 to 15/ 09/ 2012 and for S.E. and T.E. students from 7/10/12 to 13/10/12 (11 Days)	S.E., T.E., B.E. Chemical Engineering
2011-12				
1	Expert Lecture on Heterogeneous Catalysis	Dr. Ajai Dalai	March11, 2012	S.E., T.E., B.E. Chemical Engineering
2	Expert Lecture on Chlorinated Poly Vinyl Chloride	Mr. Anand Pandya	September 2, 2011	S.E., T.E., B.E. / Chemical Engineering
3	Workshop on Aspen HYSYS	Mr. A. R. Lokhande	October 1-2, 2011 (2 days)	B.E. Chemical Engineering
4	Softskill Training programme	Mr. Dilip Pinto	September 19-24, 2011 (6 days)	B.E. Chemical Engineering
2010-11				
1	Expert Lecture on Recent Trends in Auditing Energy Aspects in Chemical Process Industry	Dr. M. G. Gharpure	September 25, 2010	S.E., T.E., B.E. Chemical Engineering
2	Expert Lecture on Group Discussion	Shri. Pankaj Anawade	January 01, 2011	S.E., T.E., B.E. Chemical Engineering
3	Workshop on Aspen HYSYS	Mr. A. R. Lokhande and Mr. Sharanappa A	August 21-22, 2010 (2 days)	B.E. Chemical Engineering
4	Softskill Training programme	Mr. N. Y. Ghare	January 24-29, 2011 (5 days)	B.E. Chemical Engineering

33. List the teaching methods adopted by the faculty for different programmes:

Teaching methods adopted to improve student learning are as follows.

- **Interactive Learning:** Interactive instructional strategies aim to strengthen observational skills, listening skills, communication skills, and interpersonal skills of the students. Every teacher ensures the classroom climate as very conducive in which students feel free to contribute and debate their ideas. Interactive instructional strategies adopted are brainstorming, Q&A session, problem-solving, storytelling, starting each session with Recall, Summarize, Question, Connect, and Comment, What/How/Why Outlines, use of facebook to notify the students quickly and as discussion board, facebook friendship, use of youtube videos etc.
- **Collaborative Learning:** Discussion during theory and practical sessions
- **Independent Learning:** Students are motivated for independent learning by providing online learning resources.
- **Cooperative Learning:** During practical sessions, individuals seek outcomes that are beneficial to themselves and other group members.
- **Problem-based Learning:** In project work, students are engaged in complex and challenging problems and collaboratively work towards the solution.
- **Peer Instruction:** Lectures are interspersed with questions to expose common difficulties in understanding or in writing skills in examinations. Students are allowed to think about it and discuss the answer in the session.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

For the holistic development of the students, they need to be involved in extension activities also. Students generally involved in such activities through following modes-

Project, extra-curricular activities such as Tree Plantation Programme, Ozone Day Celebrations etc.

Projects are integral part of the syllabus. Some students undertake projects which are of direct societal importance. The college organizes some activities like blood donation camp, cleanliness drive etc. and students actively participate in it. The college has also joined a Rural Engineering and Technology Club through which students are involved in extension activities.

35. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the Department and Future Plan.

Strength:

- Experienced, Qualified, Dedicated, Committed and Research Oriented enthusiastic Faculty.
- Recognized Research Centre by North Maharashtra University, Jalgaon for doctoral research work
- Accredited by National Board of Accreditation (NBA) w.e.f. February 15, 2005 for 3 Years & Reaccredited w.e.f. July 19, 2008 for 5 Years and again reaccredited provisionally for 2 Years w.e.f. July 01, 2014.
- Modern, Spacious, Well Ventilated and Fully Equipped Laboratory set up with FTIR Spectrophotometer and ASPEN HYSYS Software.
- Excellent Results and Long Tradition of Gold Medalist in North Maharashtra University Examination

Weakness:

- Located in Rural Area.
- Professional Skills among Students.
- Communication Skills among Students
- Industrially Backward Area.

Opportunities:

- Availing more research funds from UGC, DST and other funding agencies
- Alumni as a source for better placement
- Interaction with Industries and Academia
- Encouraging students to perform the task with multidisciplinary teams.

Challenges:

- Curriculum is designed by University.
- Using expertise of faculty for solving specific technical problems of industries
- Specialized Skill Development pertaining to industrial need

Future Plans:

- To increase the intake of programme
- To start the post graduate Programme

Evaluative Report of the Department

1. Name of the Department: Civil Engineering Department

2. Year of establishment: 1983

3. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG, PG, and Ph.D

4. Names of Interdisciplinary courses and the departments/units involved: Nil

5. Annual/ semester/choice based credit system (programme wise)

Semester system

6. Participation of the department in the courses offered by other departments

The curriculum offers two Interdisciplinary courses at final year level that can be taken by any other branch students as per their choice. These courses are as follows

Geographical Information System.

Finite Element methods

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

8. Details of programmes discontinued, if any, with reasons

Nil

9. Number of teaching posts in civil engineering department

	Sanctioned	Filled
Professors	3	2
Associate professors	6	2
Assistant professors	17	13
Other	-	-

10. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experiences	No. of Ph.D./ M.E. students guided for the last 4years
Dr. M. Husain	Ph.D	Professor & Head.	Solar Energy	19	ME 20, Ph D 8
Dr. S. L. Patil	Ph.D	Professor	Geology	26	ME 2
S. B. Pawar	ME	Asso. Prof.	Const. Techs and Management	24	ME 2
P. A. Shirule	ME	Asso. Prof.	Environmental Engineering	17	ME 10
F. I. Chavan	ME	Asst. Prof.	Environmental Engineering	16	ME 12
S. B. Patil	ME	Asst. Prof.	Environmental Engineering	7	ME 7
J. N. Kale	ME	Asst. Prof.	Const. Techs and Management	6+15 Industrial	-
J. R. Mali	ME	Asst. Prof.	Environmental Engineering	6	ME 6
D. G. Pardeshi	BE	Asst. Prof.	--	3	--
K. L. Narkhede	BE	Asst. Prof.	--	1	--
A. M. Kapure	BE	Asst. Prof.	--	1	--

P. A. Nehete	BE	Asst. Prof.	--	1	--
K. S. Mahajan	BE	Asst. Prof.	--	1 (Industrial)	--
K. R. Patil	BE	Asst. Prof.	--	--	--
H. P. Biyani	BE	Asst. Prof.	--	--	--
T. R. Rajput	BE	Asst. Prof.	--	--	--
S. P. Yeshirao	BE	Asst. Prof	--	--	--

11. List of senior Visiting Fellows, adjunct faculty, emeritus professors
Nil.

12. Percentage of classes taken by temporary faculty – programme-wise information
55%

13. Programme-wise Student Teacher Ratio
19.76

14. Number of academic support staff (technical) and administrative staff sanctioned, filled and actual

	Year	Filled	Sanctioned
Number of academic support staff (technical)	2010-11	03	03
	2011-12	02	03
	2012-13	02	03
	2013-14	02	03
	2014-15	02	03
Number of administrative staff		NIL	

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.
Ph.D = 02
PG = 06

16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Sr. No.	Name of faculty member	Funding agency	Title of project	Amount sanctioned
1	Dr. M. Husain	Vice Chancellor Research Promotion Scheme, North Maharashtra University, Jalgaon	Experimental investigations on removal of TiO ₂ from effluent of slurry phase photo-catalytic reactors	48000/-

		Rajiv Gandhi Science and Technology Cell	Radiation estimation and turbidity control in SGSP	380000/-
2	P. A. Shirule	Vice Chancellor Research Promotion scheme, North Maharashtra University, Jalgaon	An evolutionary approach to reuse environmentally nuisance discarded tyre rubber as concrete aggregate	113000/-
		Shram Sadhana Research Promotion Scheme	Experimental prototype studies on long term performance of rubberized concrete.	101000/-

17. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Sr. No.	Name of faculty member	Funding agency	Title of project	Amount Sanctioned
1	Dr. M. Husain	Shram Sadhana Research Promotion Scheme	Experimental investigations on operational parameters of SGSP	105000/-
		Innovation and Entrepreneurship Development Cell (DST)	Photo-catalytic degradation of detergents in slurry phase	100000/-
2	P. A. Shirule	MODROB (AICTE)	An evolutionary approach to reuse environmentally nuisance discarded tyre rubber as concrete aggregate	905000/-
		UGC Minor Project	Seismic response analysis of base isolated multi-storied building	173000/-

		Innovation and Entrepreneurship Development Cell (DST)	Steel scrap fiber reinforced concrete	100000/-
		Innovation and Entrepreneurship Development Cell (DST)	Investigation of sound and heat insulation properties of rubberized concrete	100000/-
		Shram Sadhana Research Promotion Scheme	An evolutionary approach to reuse environmentally nuisance discarded tyre rubber as concrete aggregate	152000/-

18. Research Centre /facility recognized by the University

a. State Recognition

The laboratories of the department are recognized for doctoral research in civil engineering by the North Maharashtra University, Jalgaon.

b. National Recognition

Nil.

c. International Recognition

Nil.

19. Publications:

- Number of papers published in peer reviewed journals (national/international)**

15 Publications in International journals in last three years.

- Monographs:** Nil.

- Chapters in Books :** 01

- Edited Books:** Nil.

- Books with ISBN with details of publishers**

1. Elements of civil Engineering and engineering mechanics, Prakash Publication, 2012.

- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

10

- **Citation Index – Range / Average**

Sr. No.	Name of faculty	Citation index
1	Dr. M. Husain	89
2	P. A. Shirule	9
3	Dr. S. L. Patil	1

- **SNIP**

Name of journal	SNIP
Applied Energy	3.146
Geliotekhnika	0.269
Solar energy	2.574
Renewable energy	2.565
Energy conversion and management	2.705

- **SJR**

Name of journal	SJR
Applied Energy	3.149
Geliotekhnika	0.158
Solar energy	1.983
Renewable energy	1.962
Energy conversion and management	1.842

- **Impact Factor – range / average**
Staff members have published their research papers in esteemed journals having impact factors. The details are available in the department.
- **h-index**

Sr. No.	Name of faculty	h index
1	Dr. M. Husain	5
2	P. A. Shirule	2
3	Dr. S. L. Patil	1

20. Areas of consultancy and income generated

The department offers the consultancy services in following areas:

- Mix design.
- Determination of onsite bearing capacity by SPT and PLT, and in Lab.
- Cross verification of structural designs

Year	2014_15	2013_14	2012_13	2011_12	2010_11
Revenue Generated	1050000/-	1120000/-	805000/-	700000/-	620000/-

21. Faculty serving in National Committees/international committees, editorial boards, any other

Faculty members Dr. M. Husain and P. A. Shirule are working as editors for the some International journals. They also served as referee for some journals.

22. Student projects

- **Percentages of students who have done in-house projects including inter-departmental projects.**
99%
- **Percentage of students doing projects in collaboration with other universities / industry / institute.**
1%

23. Awards/recognitions received at the national and international level by

Faculty : Utkrushta Shikshak award to one faculty member

Doctoral/Post-Doctoral fellows: Nil

Students: Some of the students have won awards/prizes in paper presentation and in project contexts.

24. List of eminent academicians and scientists/visitors to the department

Department routinely invites eminent researchers, academicians and field engineers to interact with the students and faculty. A list of some important visitors is as follows:

Er. Michael Kedem (Scientists from Israel),

Er. N. K. Agrawal (Retired Director, Survey of India),

Dr. Santosh Kumar Deshmukh (Scientist, Jain Irrigations, Jalgaon),

Er. Vilasrao Deshmukh (Deputy Er, PWD, Akola) etc.

25. Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.

Sr. No.	Event	Date	Source of Funding
1.	National Level conference on Green and clean technology	11/2/2012	Indigenous
2	Advances in Energy Technology	29/3/2013	Indigenous, plus, North Maharashtra University. Jalgaon
3	Sustainable Development	25-26 Feb 2014	Indigenous
4	Fluid Mechanics	20-30 May 2014	IIT , Kharagpur (DST)
5	Emerging trends in engineering, technology and management	9-11 Jan, 2015	Indigenous

26. Student profile Programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass Percentage	
		Male	Female	Male	Female
UG	116	96	20	53.25	57.30
PG	18	11	7	100	100
PhD	10	9	1	-	-

27. Diversity of students

Name of Course	Year	% of students from same state	% of students from different state	% of students from abroad
BE Civil	2010-11	98 %	2 %	Nil
	2011-12	98 %	2 %	Nil
	2012-13	96 %	4 %	Nil
	2013-14	91 %	9 %	Nil
	2014-15	100 %	0 %	Nil
M E Civil	2010-11	95%	5%	Nil
	2011-12	100%	0%	Nil
	2012-13	100%	0%	Nil
	2013-14	84%	16%	Nil
	2014-15	89%	11%	Nil

28. How many students have cleared Civil Services and Defense Services examinations, (NET, SET, GATE and other competitive examinations? Give details category wise.)

S. No	Academic Year	Name of Students	Course Opted/Qualifying Exam
1	2014-15	Sudhanshu Mohan Shrey Jain	GATE
2	2013-14	Anil Kumar	GATE
3	2012-13	Swami Suman	GATE

		Rupali Mahajan Neeta Kolpe Pranoti Kolhe Suvarna Sonar Nivedita Wani Ankita Patil	MPSC (Civil Engg.) MPSC (Civil Engg.) MPSC (Civil Engg.) MPSC (Civil Engg.) MPSC (Civil Engg.) MPSC (Civil Engg.)
4	2011-12	Anjul Chauhan	GATE

29. Student progression

Student Progression	Against % enrolled
UG to PG	10%
PG to M. Phil	-
PG to Ph. D.	-
Campus selection	4.5%
Other than campus recruitment	20%
Entrepreneurs/ Self Employed	5%

30. Present details of departmental infrastructural facilities with regard to

a) Departmental Library:

Particulars	Titles	Volumes
IS codes	60	60
Books	30	30
Proceedings	20	20
Project reports	100	-
Seminar reports	300	-
Question papers	Last 10 years	-

b) Internet facilities for Staff and Students:

60 Mbps (1:1) Internet through Ethernet and Wi-Fi.

All laboratories are provided internet access. HODs and senior staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

a) Total number of class rooms 05

b) Class Rooms with ICT facility:

Class rooms have Wi-Fi connectivity and are facilitated with LCDs.

c) Student Laboratories:

Total number of Laboratories= 12

d) Research laboratories

All the above-mentioned laboratories are well equipped and are used for research purpose as per the need of the researcher.

31. Number of students getting financial assistance from the college, university, government or other agencies.

Financial support for fee is made available to following

Academic Year	SC	ST	OBC	EBC	NT	Minority	SBC
2014-15	09	01	39	06	12	05	04

For project support, following students have received funds:

Under IEDC: 09 (Two batches, each batch received Rs. 100000/-)

Through College: 05 (one batch received Rs. 10000/-)

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Sr. No.	Programme	Name of Event	In association with/recourse person
2014-15			
1	Standard penetration test training	Technical training	Pravin Shirule
2	Entrepreneurship awareness camp under IEDC	Training session	IEDC
2013-14			
1	Plate load test training	Technical training	Er. Prakash Pathak
2	Software awareness training	Technical training	CADD Center Jalgaon

3	Personality and communication skill development	Technical training	Eminent speakers of Impression consultants, Mumbai
4	Entrepreneurship awareness camp under IEDC	Training session	Eminent speakers of management science from industry and academia
5	Bridge Design	Expert Lecture under MoU	Er. Vilasrao Deshmukh, Deputy Engineer, PWD, Murtizapur
2012-13			
1	Expert Lecture Global Positioning system		N. K. Agrawal
2	Expert Lecture	Capacity Building for Engineers	Prof. M. Ingale
3	Expert Lecture	Animation its Scope and application in Civil Engg.	Mr. Sajid Shaikh
2011-12			
1	Expert Lecture	Alternative energy sources	Dr. N. R. Chandak
2	Expert Lecture	Watershed Management	Dr. Santosh Deshmukh
2010-11			
1	Expert Lecture	Vastu and Modern Architecture	Er.Mahesh Malpani
2	Expert Lecture	Expert Lecture on Mumbai Flood Incidence of 2013	Sudhir Nimbalkar
3	Expert Lecture	Expert Lecture	Er.A. K. Mahajan Executive Engineer, PWD, Jalgaon

33. Teaching methods adopted to improve student learning

List the teaching methods adopted by the faculty for different programmes.

- ✓ Class room teaching: The basic teaching method adopted by the teachers is class room teaching in which the teacher delivers lectures. The delivery is supported by electronic audio-video aids.
- ✓ Laboratory work: It is also an integral part of the curriculum.
- ✓ Assignment: The curriculum also includes assignments for self-study encouragement of students.
- ✓ Site visits: They are arranged for real world exposure.
- ✓ Expert lectures:
- ✓ Projects:
- ✓ Seminars:

The teachers are also encouraged to discuss old question papers in classes.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The institute recognizes its social responsibility. In fact it is stated in its mission statement also. The holistic development of the students is ensured by involving them in extension activities also. The department has undertaken some extension activities as follows:

- Cleaning Drive in campus
- Cleaning Drive in village Savkheda
- Clothe donation Drive
- Apart from this students are encouraged to go for blood donation.
- Students are also encouraged to undertake projects which are of direct societal relevance. The college has also joined a Rural Engineering and Technology Club through which students involve in extension activities.
- The students of the department have also joined a network “Young Engineers’ Network (YIN)”. The network is planning to undertake several societal development activities.

35. SWOC analysis of the department and Future plans

Strength:

- Admissions are good, though a slowdown is being observed in the economy.

- Dedicated, committed and enthusiastic staff.
- Faculty members have received research grants from various research funding agencies. .
- Good revenue generation through consultancy work.
- Laboratories are spacious and well ventilated, having area quite more than the AICTE prescribed norms. They are recognized for doctoral research.
- Department organizes remedial classes for weaker students.

Weakness:

- Quality of admitted students is inferior.
- Many faculty members have to yet complete their PG and Ph D.
- Faculty specialization diversity needs to be improved.
- Citation, *h* index, SJR and SNIP of faculty members need to be improved.
- The department needs to organize refresher courses, STTPs etc.

Opportunities:

- The college has acquired 2 (f) and 12(B) status from UGC. Hence the department can grab research funds from UGC.
- The department has got accreditation status. Thus department can start new PG courses as well can grab MODOB from AICTE.
- The department has got good reputation in the society which is reflected in relatively good admissions in the department. This opportunity can be utilized to fetch quality students.
- The alumni of the department are placed in esteemed organizations in good positions. They can assist the college in enhancing placement of the college.
- The faculty members have done research work on field oriented problems. Their expertise can be used for solving specific technical problems of industries.

Challenges:

- In the city of Jalgaon numbers of engineering colleges are mushrooming up. Hence, admissions are a challenge to the department. It is challenge for the department to up keep its standard for survival.
- There is a Government college located in the heart of the city. The government college has lesser fee. Hence that is preferred by the students. This affects the admission in the department. It is challenge for the department to up keep its standard for survival.

- Availability of qualified and skilled faculty is a challenge for the department.
- In civil engineering sector, number of Government jobs are being available. Similarly, good private jobs are also available. Hence, the fresh graduates do not have inclination towards teaching profession. Thus it is being difficult to get good faculty in the department.
- The location of the college in a rural area and an industrially under developed zone is a challenge.

2. Future plans of the department

- The department is focusing on qualification improvement of faculty members. One faculty member has already submitted his Ph.D and is likely to face defense exams soon. Another staff member has sought permission to submit his synopsis. Department would like other PG faculty members to join doctoral course soon. it would also like the UG staff members to join PG soon.
- The department would like to enhance its scope of consultancy work and make it broader.
- The department would like to focus on improving the result of its undergraduate students.
- The department would like to organize specialized soft skill development programs for the students so that they get better placement.
- The department would like to organize specialized computer and instrumental skill development programs for the students so that they get better placement.
- The department would like to upgrade its laboratory for research work.

Evaluative Report of the Department

1. Name of the Department: Computer Engineering Department

2. Year of Establishment: 1987-88

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):

Program of Study	Description
UG course in Computer Engineering	120
PG Course in Computer Science and Engineering	18

4. Names of Interdisciplinary courses and the departments/units involved

The syllabus includes common subjects at the first year level for all branches. The department of computer engineering undertakes the course 'Computer Programming' for all branches at the first year. In addition to this, the curriculum offers Interdisciplinary courses at the final year level that can be taken by any other branch students as per their choice. This course is as follows:

Software Engineering and Project Management

5. Annual/ semester/choice based credit system (programme wise): Semester Based System

6. Participation of the department in the courses offered by other departments: Nil

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts

Post	Sanctioned	Filled
Professors	2+1(PG)=3	1

Associate Professors	5+1(PG)=6	4
Assistant Professors	20+1(PG)=21	20
Other	-	-

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M. Phil. etc.,)

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 years
1	Dr. G.K. Patnaik	Ph.D.	Professor	Computer Engineering	25	--
2	K. P. Adhiya	M.E.	Asso. Prof.	Computer Engineering	24	--
3	M. E. Patil	M.Tech.	Asso. Prof.	Computer Engineering	15	--
4	Sandip S. Patil	M.Tech.	Asso. Prof.	Computer Engineering	15	--
5	Ashish T. Bhole	M.Tech.	Asso. Prof.	Computer Engineering	15	--
6	Sanjay Gharde	M.Tech.	Asst. Prof.	Computer Engineering	14	--
7	Dinesh Puri	M.Tech.	Asst. Prof.	Computer Engineering	10	--
8	N. Y. Suryawanshi	M.E.	Asst. Prof.	Computer Engineering	10	--
9	A. D. Waghmare	M.E.	Asst. Prof.	Computer Engineering	9	--
10	Nilima Patil	M.E.	Asst. Prof.	Computer Engineering	10	--
11	Shital Patil	M.E.	Asst. Prof.	Computer Engineering	10	--
12	Yogeshwari Borse	M.Tech.	Asst. Prof.	Computer Engineering	6	--
13	Priti Sharma	M.E.	Asst. Prof.	Computer Engineering	7	--

14	Dipak Bage	M.E.	Asst. Prof.	Computer Engineering	6	--
15	Satpal Rajput	M.E.	Asst. Prof.	Computer Engineering	6	--
16	Atul Dusane	M.E.	Asst. Prof.	Computer Engineering	6	--
17	Vijay Ingale	B.E.	Asst. Prof.	Information Technology	6	--
18	Manoj Mahajan	B.E.	Asst. Prof.	Information Technology	6	--
19	Sushant Bahekar	M.Tech.	Asst. Prof.	Computer Engineering	4	--
20	Jitendra Patil	B.E.	Asst. Prof.	Computer Engineering	4	--
21	Prachi Chaudhari	M.E.	Asst. Prof.	Computer Engineering	2	--
22	Dhanshri Tayade	M.E.	Asst. Prof.	Computer Engineering	1	--
23	Chetana Baviskar	B.E.	Asst. Prof.	Computer Engineering	1	--
24	Vinaya Sawadekar	M.E.	Asst. Prof.	Computer Engineering	1	--
25	Shweta Pande	M.Tech.	Asst. Prof.	Computer Engineering	3	--

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Year	Percentage of lectures delivered and practical classes
2015-16	32

13. Student -Teacher Ratio (programme wise): 15.84:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned: 03 Filled: 03

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph.D:01, ME/M.Tech: 20, BE: 04

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: 01

S. N.	Name of Faculty	Funding Agency	Title of Project	Amount Sanctioned
1	Sanjay S. Gharde	Vice Chancellor Research Promotion Scheme, North Maharashtra University, Jalgaon	Identification, Recognition, Transformation and Analysis of Modi Script	25000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

S. N.	Name of Faculty	Funding Agency	Title of Project	Amount Sanctioned
1	Sanjay S. Gharde	Vice Chancellor Research Promotion Scheme, North Maharashtra University, Jalgaon	Identification, Recognition, Transformation and Analysis of Modi Script	25000/-

18. Research Centre /facility recognized by the University: Nil

19. Publications:

- Publication Per Faculty: 7.64
- Number of papers published in peer reviewed journals (national / international) by faculty and students: 80
- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 01

- Monographs: Nil
- Chapter in Books: Nil
- Books Edited: Nil
- Books with ISBN/ISSN numbers with details of publishers:

Name of Book Written	Author(s)	Publication	ISBN
Embedded System	K.P. Adhiya, Dipak Bage	Prakash Publication	978-81-909164-14-9
Microprocessor-III	K.P. Adhiya, Dipak Bage	Prakash Publication	
Advanced Computer Architecture	K.P. Adhiya, Sandip S. Patil	Prakash Publication	978-81-909164-7-9
Computer Network	K.P. Adhiya	Prakash Publication, Jalgaon	-
Software Engineering	K.P. Adhiya	Nirali	-
Computer Organization	K.P. Adhiya	Nirali	-
System Programming	Sandip S. Patil	Prakash Publication	978-81-909164-3-1
Software Metrics and Quality Assurance	Sandip S. Patil and Manoj E. Patil	Prakash Publication	978-93-81188-00-2
Artificial Intelligence and Neural Networks	Sandip S. Patil	Prakash Publication	978-81909164-8-6
Computer Programming	Sandip S. Patil and Sushant S. Bahekar	Prakash Publication	978-81909164-20-0
Support Vector Machine for Handwritten Numeral Recognition- Based of Indian Devanagari Script	Sanjay S. Gharde	Lap-Lambert Academic Publication, Saarbrücken Germany	978-3-659-23539-9
Data Warehousing And Mining	Sanjay S. Gharde	Prakash Publication, Jalgaon	978-93-81188-07-1
Theory of Computer Science	Sanjay S. Gharde	Prakash Publication, Jalgaon	978.81.909164-8.6

Object Oriented Modeling and Design	Sanjay S. Gharde	Prakash Publication, Jalgaon	978.81.909164-0.0
Computer Graphics	Atul V. Duane Sushant S. Bahekar	Prakash Publication, Jalgaon	9789381188224
Data Structures	Sandip S. Patil Sushant S. Bahekar	Prakash Publication	978-93-8118842-2

- Citation Index: range/average – 20.33
- SNIP: Nil
- SJR: Nil
- Impact factor: range/average – up to 6.14
- h-index: 1 to 3

20. Areas of consultancy and income generated: NIL

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards

- Prof. Dr. G. K. Patnaik is servicing as editor of Australian Journal of Wireless Technologies, Mobility and Security ISSN 2200-1875 Print, ISSN 2200-1883 Online at <http://www.ausjournal.com>
- Following faculty members are servicing a reviewer for various journals and conferences
 - Prof. Dr. G. K. Patnaik
 - Sandip S. Patil
 - Sanjay S. Gharde

22. Student Projects

- a) Percentage of students who have done in-house projects including inter departmental/programme: 100%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students

SN	Name of faculty	Award/recognition received by faculty	Year
1	Sandip S. Patil	YOUNG ENGINEER AWARD-2012-13 given by The Institution of Engineers, India at IEI Nashik	2013
2	Sandip S. Patil	PROMISING ENGINEER AWARD-2011 given by The Institution of Engineers, India at NIT Jaipur	2011

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Name
1	Padmashri Dr. Vijay Bhatkar
2	Dr. Achut Godbole

25. Seminars/ Conferences/Workshops organized & the source of funding a) National b) International

Sr. No.	Event	Date	Source of Funding	Number of Participants	Level
1	Two Weekends ISTE workshop on Aakash Android Application Programming	23-24 Feb. and 2-3 March 2013	IIT Bombay	90	National
2	One Week STTP Workshop on Design of Algorithms	25-31 May 2015	IIT Kharagpur	18	National
3	International Conference on Global Trends in Engineering, Technology and Management-2015	9-11 Jan. 2015	SSBT's College of Engg. & Tech, Bambhori Jalgaon	127	International

26. Student profile programme/course wise

Name of the Programme (refer to question no. 4)	Applications received	Selected	Pass Percentage

		Male	Female	Male	Female
UG	136	94	42	***	***

*** Result not yet declared

27. Diversity of Students

Name of Course	Year	% of students from same state	% of students from different state	% of students from abroad
UG	2015-16	92.74%	7.26%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

GATE Exam:-07

29. Student progression

Student Progression	Percentage / Nos.
UG to PG	17 Nos.
PG to M. Phil	Nil
PG to Ph. D.	Nil
Campus selection	26.35 %
Other than campus recruitment	46.35 %
Entrepreneurs/ Self Employed	02%

30. Details of infrastructural facilities

a) Departmental Library:

Particulars	Titles	Volumes
Books	550	550
Manuals	114	114

Project reports	500	-
Seminar reports	500	-

b) Internet facilities for Staff and Students:
60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department.

c) Class rooms with ICT:

Sr. No.	Particulars	Carpet Area in Sq. Mt.
1	Class Room No 303	108
2	Class Room No 309	108
3	Class Room No 316	108
4	Class Room No 320	108
5	Class Room No 115	108
6	Tutorial Room U G	54
7	Tutorial Room U G	54
8	Tutorial Room P G	33
9	Seminar Hall	162
10	Computer Center	162

d) Laboratories:

Sr. No.	Laboratory	Carpet Area in Sq. Mt.
1	LAB 1	90
2	LAB 2	68
3	LAB 3	66
4	LAB 4	81
5	LAB 5	68
6	LAB 6	67
7	LAB 7	67
8	LAB 8	67
9	LAB 9	81
10	LAB 10	144
11	LAB 11	71
12	LAB 12	71

13	Computer Center	162

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	Number of Students							
	SC	ST	OBC	VJNT	SBC	Minority	EBC	Total
2011-12	48	07	127	39	8	5	48	282
2012-13	49	06	216	42	19	7	38	377
2013-14	47	03	257	34	15	13	40	409
2014-15	43	01	250	45	22	8	32	401

32. Details on student enrichment programmes (Special lectures / Workshops / Seminar) with external experts

Sr. No.	Event	Title	Duration	Venue
1	Seminar on “Career Opportunities in Network”	Seminar on “Career Opportunities in Network”	23/09/2015	Department of Computer Engineering
2	Two Days Workshop on “LaTeX”	Two Days Workshop on “LaTeX”	5 & 6 Sept. 2015	Department of Computer Engineering
3	Expert Lecture by Mr. Rahul Teni, Austere Technology Solutions Pune.	Software Development Process	24/08/2015	Department of Computer Engineering
4	Two Day Workshop on “Hadoop”	Big Data Analysis with Hadoop	8 & 9 Oct. 2014	Department of Computer Engineering
5	Research Paper Writing Guidance Lecture	Research Paper writing guidance lecture	12/09/2014	Department of Computer Engineering
6	Research Paper Writing Guidance	Research Paper writing guidance lecture	12/09/2014	Department of Computer Engineering

	Lecture			
7	LaTeX Workshop for SE Computer (A & B Section) Students	LaTeX Workshop for SE Computer (A & B Section) Students	10/03/2014	Department of Computer Engineering
8	LaTeX Workshop for SE Computer (A & B Section) Students	LaTeX Workshop for SE Computer (A & B Section) Students	11/03/2014	Department of Computer Engineering
9	GATE Mock Test 2014	GATE Mock Test 2014	26/02/2014	Department of Computer Engineering
10	Expert Lecture on “Data mining and Career Guidance”	Expert Lecture on “Data mining and Career Guidance”	15/01/2014	CSI student Branch
11	Expert Lecture on “Career Guidance”	Expert Lecture on “Career Guidance”	15/01/2014	CSI student Branch
12	Oracle WDP Workshop	Oracle WDP Workshop	From 22/02/2014 (Every Saturday)	Department of Computer Engineering
13	Two days Workshop on LaTeX	Two days Workshop on LaTeX	05/08/2013 & 06/08/2013	CSI student Branch
14	One day workshop on “Modeling a system using UML- Project as a Case”	One day workshop on “Modeling a system using UML- Project as a Case”	21/09/2013	COESA
15	Seminar on “Cloud Computing”	Seminar on Cloud Computing	27/09/2013	CSI Student Branch

16	Seminar on “Cloud Computing”	Seminar on “ Cloud Computing ”	21/01/2013	Department of Computer Engg
17	Guest Lecture on “Microsoft Technologies”	Guest Lecture on “Microsoft Technologies”	05/02/2013	Department of Computer Engg
18	Workshop on “Advanced JAVA ”	Workshop on “Advanced JAVA ”	27/02/2013 to 10/03/2013	Department of Computer Engg
19	Seminar on “Awareness & Opportunities in CDAC”	Seminar on “Awareness & Opportunities in CDAC”	27/02/ 2013	Department of Computer Engg
20	Seminar on “Awareness & Opportunities in CDAC	Seminar on “Awareness & Opportunities in CDAC	27/02/ 2013	Department of Computer Engg
21	Online Workshop on “Aakash Android Application programming” Organized by IIT Bombay	Online Workshop on “Aakash Android Application programming” Organized by IIT Bombay	02/03/2013 & 03/03/2013	Department of Computer Engg
22	Online workshop on “Aakash Android Application programming” Conducted by IIT Bombay	Online workshop on “Aakash Android Application programming” Conducted by IIT Bombay	23/02/2013 & 24/02/2013	Department of Computer Engg
23	Spoken tutorial online workshop on “Linux Ubuntu” Conducted by IIT Bombay	Spoken tutorial online workshop on “Linux Ubuntu” Conducted by IIT Bombay	04/03/2013	Department of Computer Engg

24	Spoken tutorial online workshop on “Scilab” Organized by IIT Bombay	Spoken tutorial online workshop on “Scilab” Organized by IIT Bombay	04/03/2013	Department of Computer Engg
25	Workshop on “Cloud Computing”	Workshop on “Cloud Computing” (Batch-I)	09/03/2013 To 10/03/2013	Department of Computer Engg
26	Spoken tutorial online workshop on “Java” Organized by IIT Bombay	Spoken tutorial online workshop on “Java” Organized by IIT Bombay	04/03/2013	Department of Computer Engg
27	Seminar on “Awareness of GDPI & aptitude test” conducted	Seminar on “Awareness of GDPI & aptitude test” conducted	12/03/2013	Department of Computer Engg
28	Seminar on “Awareness of GDPI & aptitude test” conducted	Seminar on “Awareness of GDPI & aptitude test” conducted	13/03/2013	COESA
29	Seminar on “SAP”	Seminar on “SAP”	19/03/2013	Department of Computer Engg
30	Seminar on “SAP”	Seminar on “SAP”	19/03/2013	Department of Computer Engg
31	Workshop on “Cloud Computing”	Workshop on “Cloud Computing”	22/03/2013 To 23/03/2013	Department of Computer Engg
32	Guidance Lecture on “MPSC/ UPSC Exam ”	Guidance Lecture on “MPSC/ UPSC Exam”	06/04/2013	Department of Computer Engg
33	Workshop on “Core Java”	Workshop on “Core Java”	23/08/2012 To 31/08/2012	Department of Computer Engg.
34	Workshop on “Core Java”	Workshop on “Core Java”	01/09/2012 To 09/09/2012	Department of Computer Engg.

35	Project- I report writing guidance lecture	Project- I report writing guidance lecture	22/09/2012	Department of Computer Engg
36	Workshop on “Android”	Workshop on “Android”	23/09/2012 To 24/09/2012	Department of Computer Engg
37	Interview Skill and Carrier in software testing guidance lecture	Interview Skill and Carrier in software testing guidance lecture	30/09/2012	Department of Computer Engg
38	Expert Lecture “IT scenario ”	Expert Lecture “IT scenario ”	16/10/2012	Department of Computer Engg
39	Workshop on “Windows 2003 server”	Workshop on “Windows 2003 Server”	06/02/2012 To 15/02/2012	Department of Computer Engg.
40	Workshop on “JAVA”	Workshop on “JAVA”	02/03/2012 To 04/03/2012	Department of Computer Engg.
41	Workshop on “Oracle”	Workshop on “Oracle”	17/03/2012	Department of Computer Engg.
42	Expert Lecture on “Cloud Computing” Conducted	Expert Lecture on “Cloud Computing” Conducted	24/03/2012	Department of Computer Engg.
43	Project Report writing guidance Lecture	Project Report writing guidance Lecture	29/03/2012	Department of Computer Engg.
44	Workshop on “ Advanced Java ” conducted	Workshop on “ Advanced Java ” conducted	06/02/2011 To 15/02/2012	Department of Computer Engg.
45	Expert Lecture on “Data Structure ”	Expert Lecture on “Data Structure ”	01/03/2012	Department of Computer Engg.
46	Workshop on “Android – Real time embedded system”	Workshop on “Android – Real time embedded system”	02/03/2012 To 04/03/2012	Department of Computer Engg.

47	Demo on Cyberoam	Demo on Cyberoam	14/03/2012 & 15/03/2012	Department of Computer Engg.
48	Guidance lecture on “CDAC Awareness & carrier guidance ”	Guidance lecture on “CDAC Awareness & carrier guidance ”	03/04/2012	Department of Computer Engg.
49	Guidance lecturer on “Project planning & management ”	Guidance lecturer on “Project planning & management ”	04/04/2012	Department of Computer Engg.
50	“ Project Report Guidance” Lecture	“ Project Report Guidance” Lecture	11/04/2012	Department of Computer Engg.
51	“ Mini Project Report Guidance” Lecture	“ Mini Project Report Guidance” Lecture	12/04/2012	Department of Computer Engg.
52	Two days’ workshop on “Embedded system ”	Two days’ workshop on “Embedded System”	06/08/2010 To 07/08/2010	Department of Computer Engg
53	Expert Lecture	Interaction of “Carrier Guidance”	14/08/2010	Department of Computer Engg.
54	Expert Lecture	Interaction of “Carrier Guidance”	14/08/2010	Department of Computer Engg.
55	Workshop on “Flex Software”	Workshop on “Flex Software”	26/02/2011	Department of Computer Engg.
56	Workshop on “Flex Software”	Workshop on “Flex Software”	26/02/2011 2.30 to 6.00	Department of Computer Engg.

33. Teaching Methods Adopted To Improve Student Learning

Teaching methods adopted to improve student learning are as follows.

- **Interactive Learning:** Interactive instructional strategies aim to strengthen observational skills, listening skills, communication skills, and interpersonal skills of the students. Every teacher ensures the classroom

climate as very conducive in which students feel free to contribute and debate their ideas. Interactive instructional strategies adopted are brainstorming, Q&A session, problem-solving, storytelling, starting each session with Recall, Summarize, Question, Connect, and Comment, What/How/Why Outlines, use of facebook to notify the students quickly and as discussion board, facebook friendship, use of youtube videos etc.

- **Collaborative Learning:** Discussion during theory and practical sessions
- **Independent Learning:** Students are motivated for independent learning by providing online learning resources.
- **Cooperative Learning:** During practical sessions, individuals seek outcomes that are beneficial to themselves and other group members.
- **Problem-based Learning:** In project work, students are engaged in complex and challenging problems and collaboratively work towards the solution.
- **Peer Instruction:** Lectures are interspersed with questions to expose common difficulties in understanding or in writing skills in examinations. Students are allowed to think about it and discuss the answer in the session.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Activity
1	Blood Donation
2	Tree Plantation
3	Women's Training
4	Donation to Orphan Kids

35. SWOC analysis of the department and Future plans

Strength:

- Dedicated and enthusiastic staff
- Well-disciplined culture
- State of the art laboratory and infrastructure facilities
- Consistent result of Final year students
- Strong commitment to use Open-source Software

Weakness:

- Less industrial exposure
- English as communicative language
- Less consultancy

Opportunities:

- The department can provide leadership in ways of teaching and learning to the benefit of students and society.
- To offer PhD Programme and Research Lab
- Rapidly changing technology
- Honing the skills and abilities of the students

Challenges:

- High rate of obsolescence
- Attract meritorious students
- Bridge Knowledge gap between Industry and curriculum

Future plans:

- Ph.D. program with recognized research lab
- Center of Excellence

Evaluative Report of the Department

1. Name of the department: Electrical Engineering Department

2. Year of Establishment: 1999-2000

3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):

UG – BE (Electrical Engineering)

PG – ME Electrical Engineering (Electrical Power System)

4. Names of Interdisciplinary courses and the departments/units involved:

Sr. No.	Interdisciplinary programmes	Departments involved
1	Energy Audit & Conservation	Biotech, Civil, Computer, E and TC, Mechanical Engineering
2	Renewable Energy Sources	Computer & Mechanical Engineering

5. Annual/ semester/ choice based credit system (programme wise):

Programme of Study	Type of Credit System
UG in Electrical Engineering	CGPA Pattern (w.e.f. 2012-13)
PG (Electrical Power System)	Semester wise

6. Participation of the department in the courses offered by other departments:

Sr. No.	Sem	Class	Branch	Subject
1	I	SE	E and TC	Electrical Circuit & Machine
2	II	SE	Mechanical	Basic Electrical Drive & Control
3	I	TE	E and TC	Feedback Control System

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Nil

8. Details of courses/ programmes discontinued (if any) with reasons:

Nil

9. Number of Teaching posts

Name of post	Sanctioned		Filled	
	UG	PG	UG	PG
Professors	01	01	02	--
Associate Professors	02	01	--	01
Asstistant Professors	09	01	07	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.E. students guided for the last 4 years
Dr. P. J. Shah	Ph.D. (Electrical Engineering), M.E. Electrical Engineering (Power Electronics)	Professor, HOD	Power Electronics, Power Quality	25	04
Dr. P.V. Thakre	Ph.D. (Energy Engineering), M.E. (Energy Engineering)	Professor	Solar photovoltaic, Power Electronics and DSP	20	02
Mr. V. S. Pawar	M.E. (EPS)	Asso. Prof	Electrical Power System	21	Nil
Mr. M. M. Ansari	M.E. (EPS)	Asst.Prof	Electrical Power System	19	01
Mr. S. M. Shembekar	M.E. (EPS)	Asst.Prof	Electrical Power System	16	01

Mr. D. S. Patil	M.E. (EPS) Pursuing	Asst. Prof.	Electrical Power System	7.6	Nil
Mr. N. S. Mahajan	M.E. (EPS)	Asst. Prof.	Electrical Power System	04	Nil
Mr. S. S. Bhuskute	M.E. (EPS) Pursuing	Asst. Prof.	Electrical Power System	2.5	Nil
Ms. S. S. Chhabra	B.E. (Electrical)	Lecturer	Electrical	01	Nil
Ms. N. D. Sapkar	B.E. (Electrical)	Lecturer	Electrical	01	Nil
Mr. A. R. Khan	B.E. (Electrical)	Lecturer	Electrical	02	Nil

11. List of senior visiting faculty:

Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Year	Percentage of lectures delivered and practical classes
2014-15	55.81

13. Student -Teacher Ratio (programme wise):

20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sanctioned: 02 **Filled:** 02

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.

Ph.D.: 02, ME/M.Tech: 04

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr.No	Name of the funding agency	Name of Staff	Amount Sanctioned
1	Rajiv Gandhi Research Promotion Scheme- UGC Title: DSP based 1 kW photovoltaic System, year of Completion: December 2016	Dr. P.V. Thakre	2,00,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sr.No.	Name of the Funding agency	Name of Staff	Title of project	Amount Sanctioned
1	Rajiv Gandhi Research Promotion Scheme- UGC	Dr. P.V. Thakre	DSP based 1 kW photovoltaic System, year of Completion: December 2016	2,00,000/-
2	All India Council for Technical Education (AICTE), New Delhi Scheme: Modernization & Removal of Obsolescence	Mr. M. M. Ansari	Title:- Synchronous Machine on Infinite Bus Date of Submission : 17/07/2013	5,35,000/-

	Scheme (MODROBS)			
3	IEDC Ms. Pranoti Patil Ms. Supriya Kate Ms. Ashwini Patil Ms. Ashwini Shirode	Mr. D. U. Adokar	Generation of Electricity using Human Power. Year 2012-13	1,00,000/-

18. Research Centre/ facility recognized by the University : Nil

19. Publications:

- * Publication per faculty : 3.73
- * Number of papers published in peer reviewed journals (national / international) by faculty and students: 22
- * Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 11
- * Monographs : Nil
- * Chapter in Books : Nil
- * Books Edited : Nil
- * Books with ISBN/ISSN numbers with details of publishers

SN	Name of faculty	Name of book written	Year of writing	Publication	ISBN
1	Dr. P. J. Shah	Power Electronics	2012-13	Prakash Publication, Jalgaon	978-93-81188-12-5

Citation Index

S.N.	Name of faculty	Citation Index
1	Dr. P. J. Shah	37
2	Dr. P. V. Thakre	03

- * **SNIP** : Nil
- * **SJR**: Nil

* **Impact factor** : 25

* **h-index**

Sr.No.	Name of faculty	h-index
1	Dr. P. J. Shah	04
2	Dr. P. V. Thakre	01

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) **National committees** b) **International Committees** c) **Editorial Boards....:**

a) **National committees** : NIL

b) **International committees**

Sr. No.	Name of faculty	Faculty as Member
1	Dr. P. J. Shah	1. Reviewer of SAP International Journal of Microelectronics and Solid State Electronics. 2. Reviewer of SAP International Journal of Electrical and Electronics Engineering 3. Reviewer of SAP International Journal of Energy & Power 4. Reviewer of IEEE Conference WICT 2011 5. Reviewer of IEEE Conference IICPE 2012 6. Reviewer of IEEE Conference CICON 2012 7. Reviewer of IJSSBT

c) **Editorial Boards** :

Nil

d) **any other (please specify)**

Sr. No.	Name of faculty	Faculty as Member
1	Mr. M. M. Ansari	Board of Studies and Member of University Academic council

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

93.84%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

6.15%

23. Awards/ Recognitions received by faculty and students

- Faculty**

Sr.No.	Name of faculty	Award/ recognition received by faculty	Year of receiving
1	Mr. M. M. Ansari	Letter of Appreciation on behalf of significant work as Teacher and Electrical Maintenance	2013
		Letter of Appreciation on behalf of significant committed work as Electrical Maintenance	2013
		Letter of Appreciation on Energy Audit Review and suggestions.	2011
2	Dr. P. J. Shah	Shiksha Ratan Puraskar, New Delhi	2010

- Doctoral/ Post Doctoral Fellows :**

Nil

- Students**

1. Mr. Ameya Shirwadkar has received “*Best Oral Presentation*” Award in International level event “Summer School 2015” organised by Graduate School of Advance Technology & Science, Tokushima

University, Japan on 17/8/2015

2. The students of the department have won awards/ prizes in paper presentation, project exhibition etc.

24. List of eminent academicians and scientists/ visitors to the department

Sr. No.	Name
1	Mr. M. A. Beg, Associate Professor, SSGMCOE, Shegaon
2	Mr. Vishal S. Ingle, Deputy Executive Engineer, 400KV receiving substation , Akola
3	Dr. P R. Deshmukh, P.D. polytechnic, Amravati
4	Mr. Nitin Dharmadhikari, G.M. Tata Motors, Pune
5	Mr. D. D. Dode, Chief Manager, Electrical Department, Board Machine, J K papers Ltd. Songardh
6	Dr. S. M. Kelo, Principal, SVTC, School of Engineering & Tech. & research, Khamgaon
7	Mr. Devendra Marathe, GATE Forum, Pune
8	Mr. Anil Patil , Executive Engineer, MSETCL, Nagpur
9	Shri. Vijay L Sonawane, Advisor, MERC, Mumbai
10	Mr. Aakash Sharma, kWatt Solution Pvt. Ltd., Mumbai
11	Mr. Rajendra Kabara, Executive Manager, Deepnagar Thermal Power Station, Bhusawal

25. Seminars/ Conferences/ Workshops organized & the source of funding

a)National

Sr. No.	Title	Duration
1	“MATLAB Applications	05 th & 06 th March, 2011
2	Cyborg-The Robotics Workshop	22 nd & 23 rd Feb., 2012
3	“Advances in Power Electronics & its Application”	15 th & 16 th March, 2012

b)International

Sr. No.	Title	Duration
1	International Conference on Global Trends in Engineering, Technology & Management	09 th & 10 th Jan.,2015

26. Student profile programme/ course wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected	Enrolled		Pass Percentage
			*M	*F	
Energy Audit & Conservation	60	60	45	15	--
Renewable Energy Sources	75	73	44	29	--

*M = Male *F = Female

27. Diversity of Students

Name of Course	% of students from same state	% of students from different state	% of students from abroad
Electrical Engineering	87.87%	12.13%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

GATE : 02 GRE/TOFEL : 01

29. Student progression

Student progression	Against % enrolled
UG to PG	6.15
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	9.23
• Campus selection	
• Other than campus recruitment	7.69
Entrepreneurship/ Self-employment	Nil

30. Details of Infrastructural facilities

- a. Library:** 524 Books in Departmental Libraries
- b. Internet facilities for Staff & Students**
60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department. Laboratories are providing internet access. HODs and all staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.
- c. Class rooms with ICT facility :** Yes, 3 LCD projector (One fixed and two movable)
- d. Laboratories**

Sr. No.	Name of the Laboratory	Carpet Area in (Sq m.)
1	Measurement/ NA Lab	68
2	I D C Lab	82

3	Electrical Machine Lab - I	75
4	Electrical Machine Lab - II	81
5	Power System Lab	67
6	Switch Gear& Protection Lab	68
7	High Voltage Lab	67
8	Electronic Lab ADE/ MPMC/ PE	68
9	Control system Lab	68
10	Computer Lab	83
11	P G Lab	68
12	Research Lab PG	68

31. Number of students receiving financial assistance from college, university, government or other agencies:

Acad emic Year	SC	ST	SBC	OB C	VJ/ NT	EBC	Mino rity	SSSS	Total no. of stude nts
2014- 15	31	7	12	143	34	11	3	02	243
2013- 14	30	4	13	114	30	20	7	00	218
2012- 13	31	10	13	111	22	24	2	--	213
2011- 12	27	5	8	97	15	23	6	--	181
2010- 11	14	6	4	76	12	20	0	--	132

(SSSS: Shram Sadhana Scholarship Scheme)

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

Expert Lectures

Sr. No	Name of Experts	Date
Academic Year 2015 – 2016		
1	Guest Lecture by Mr. Aakash Sharma, kWatt Solution Pvt. Ltd., Mumbai on “Scenario of Solar Energy in India.”	28 th July 2015
2	Guest Lecture by Mr. Rajendra Kabara, Executive Manager, Deepnagar Thermal Power Station, Bhusawal on “Power System Scenario in India”.	08 th Oct. 2015
Academic Year 2014 – 2015		
1	Guest lecture by Mr. Anil Patil , Executive Engineer, MSETCL, Nagpur on Topic “Power Grid Management and Role of ALDC”	27 th Sept. 2014
2	Guest Lecture by Shri. Vijay L Sonawane, Advisor, MERC, Mumbai On topic “Challenges on Electricity in India”	27 th Jan. 2015
Academic Year 2013-14		
1	Expert Lecture by Distinguished Alumni Mr. Rahul Sakhala (Trainee Engineer Bridgestone India Pvt. Ltd.), Mr. Kulkarni Saurabh (Lecturer), Mr. Anurag Morankar (Proprietor Elmech Industries), Mr. Sagar Joshi (Trainee Engineer J K Papers)	16 th Aug. 2013
2	Expert Lecture by Atul Damle on PSCAD (Industrial interaction)	13 th Sept. 2013
3	Guest Lecture by Mr. S. R. Mahajan on Topic “ Lead India 2020”	14 th Sept. 2013
4	Guest Lecture by Mr. D. D. Dode, Chief Manager, Electrical Department, Board Machine, J K papers Ltd. Songardh. On Topic VFD Control	17 th Oct. 2013
5	Guest Lecture by Dr. S. M. Kelo, Principal, SVTC, School of Engineering & Tech. & research, Khamgaon	24 th Jan 2014

6	Guest lecture by alumni Mr. M. Shakil (Merchant Navy, Technical Office), Mr. Nazim Ali (Assistant Engineer MSTCL), Mr. Ram Patil (Project Manager, Exportds Siemens) Mr. Sunil Tawade (Oil Industry)	20 th March 2014
7	Guest Lecture by Mr. Swapnil Adokar, Health Care, Philips on Topic Automation	22 nd Feb 2014
8	Guest lecture by Mr. Devendra Marathe, Gate Forum, Pune	22 nd March 2014
Academic Year 2012-2013		
1	Expert Lecture by Distinguished Alumni Mr. Sunil Pandey Mr. Vishal Jawale	14 th Aug. 2012
2	Expert Lecture by Dr. P R. Deshmukh on topic Microcontroller and Applications	08 th Sept. 2012
3	Mr. M. Siddique, DGM, Brunel, on Opportunity of an Electrical Engineer (An interaction with alumni)	21 st Sept. 2012
4	Expert Lecture by Mr. Nitin Dharmadhikari on Topic “ Role of Electrical Engineers in TATA Motors and Industries	6 th Oct. 2012
5	Guest Lecture by Mr. Hemant Sharama	04 th Feb. 2013
6	Dr. M A Beg, Prof and Head, MG,s COE, Shegaon on Power Quality and its Impact on Power System	21 st March 2013
Academic Year 2011 - 2012		
1	Expert Lecture by Mr. Vishal S. Ingle	29 th Sept. 2011
Academic Year 2010– 2011		
1	Expert Lecture by Dr. A. G. Thosar	28 th August 2010
2	Expert Lecture by Mr. M. A. Beg	25 th Sept. 2010

33. Teaching methods adopted to improve student learning

1. Use of blackboard & white-boards.
2. Various teaching aids like OHP projector, LCD projector are used.

3. Videos of eminent personalities from various fields are downloaded and shown to the students.
4. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.
5. Staff members keep their teaching interactive by asking questions to the students as well as clearing their doubts.
6. Student seminars to enhance communication and self-learning skills.
7. Special skill enhancement for practical skills by allowing students to do experiments individually.
8. Students are also acquainted with open courseware which is available on the Institutional website.
9. Staff members teach the concept or technology by stating its analogy with the justification of real life examples.
10. Home assignments are given to the students and checked it regularly.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

For the holistic development of the students, they need to be involved in extension activities also. Students generally involve in such activities through following modes-

Project, extra-curricular activities. Sports activities, Cultural activities. Projects are integral part of the syllabus. Some students undertake projects which are of direct societal relevance. The college organizes some activities like blood donation camp, cleanliness drive etc. and students actively participate in it. The college has also joined a Rural Engineering and Technology Club through which students involve in extension activities.

35. SWOC analysis of the department and Future plans

Strength

- Qualified, experienced and dedicated faculty members
- Conducive environment for teaching learning
- State of the art laboratory and infrastructure facilities
- Consistent result of Final year students
- Student and staff empowerment facilities

- A Teacher Guardian Scheme for student counseling.

Weakness

- Located in rural area
- Less industrial exposure and placement
- Lack of sufficient Ph.D. supervisors
- Less consultancy

Opportunities

- Industry-Institute Interaction
- Rapidly changing technology
- Honing the skills and abilities of the students

Challenges

- Achieving better student placements
- Changing socio-economic scenario leading to unpredictable future
- Achieving R & D projects of societal development
- Getting more consultancy

Future plans of the department

- The department is focusing on qualification improvement of faculty members. Encouraging the staff members for Ph.D.
- The department would like to enhance its scope of consultancy work.
- The department would like to focus on improving the result of its undergraduate students.
- The department would like to organize specialized soft skill development programs for development of students.
- The department would like to upgrade its laboratory for research work.

Evaluative Report of the Department

1. Name of the department: Electronics and Telecommunication Engineering

2. Year of Establishment: 1983

Academic Year	Description
1983-84	2002 Under graduate course in Electronics Engineering with intake 60
2001-02	2002 Programme name changed to Electronics and Telecommunication Engineering with intake 60
2002-03	2003 Intake increased to 90 (from 60)
2008-09	Intake increased to 120 (from 90)
2008-09	Accredited for 5 year vide letter no. vide letter no. NBA/ACCR-414-2005 dated July 19TH
2009-10	PG Electronics and Telecommunication (Digital Electronics) started with intake 18
2014-15	Accredited for 2 year vide letter no. vide letter no. 28-235/2010-NBA dated October 1, 2014
2014-15	The laboratories of the departments are recognized for doctoral research by North Maharashtra University, Jalgaon

3. Names of P r o g r a m m e s / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):

Program of Study	Description
UG in E & TC Engineering	120
PG in E & TC Engineering	18
Ph.D. in E & TC Engineering	08

4. Names of Interdisciplinary courses and the departments/units involved:

The syllabus includes common subjects at first year level for all branches. The department of Electronics & Telecommunication Engineering undertakes the course 'Elements of Electrical and Electronics Engineering' for all branches.. The syllabus also includes subject Analog Electronics at second year computer engineering department. In addition to this, the curriculum offers two Interdisciplinary courses at final year level that can be taken by any other branch students as per their choice. These courses are as follows

- i. Automotive Electronic
- ii. Image Processing

5. Annual/ semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments:

The curriculum offers Interdisciplinary courses at final year level that can be taken by our branch students as per their choice. These courses are as follows

Computer	Software Engineering & Project Management
Electrical	EAC- Energy Audit & Conservation
Mechanical	Operation Research Techniques

7. Courses in collaboration with other universities, industries, foreign institutions etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts:

Post	Sanctioned	Filled
Professors	2+1(PG)=3	2
Associate Professors	5+1(PG)=6	3
Asst. Professors	20+1(PG)=21	17

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experiences	No. of Ph.D./ M.E. students Guided for the last 4 years
Year-2014-15						
1	Dr. S. R. Suralkar	Ph.D	Professor	Control & Instrumentation	24	08
2	Dr. M. P. Deshmukh	Ph.D	Professor	Power Electronics	25	03
3	D U Adokar	M.E.	Associate Professor	Control System	27	01
4	V. M. Deshmukh	M.E.	Associate Professor	Control System	25	03
5	S. U. Nyati	M.E.	Associate Professor	Electronics	17	02
6	N. M. Kazi	M.E.	Assistant Professor	Electronics	17	03
7	P. H. Zope	Ph.D.	Assistant Professor	Digital Electronics	14	14
8	A. H. Karode	M.E.	Assistant Professor	Digital Electronics	13	10
9	A. C. Wani	M.E.	Assistant Professor	Electronics	14	02

10	S. P. Ramteke	M.E.	Assistant Professor	Digital Electronics	12	07
11	S. A. Hingonekar	M.E.	Assistant Professor	EDT	14	--
12	S. K. Khode	M.E.	Assistant Professor	Digital Electronics	10	--
13	A. R. Bari	M.E.	Assistant Professor	Digital Electronics	08	--
14	M. T. Deshmukh	M.E.	Assistant Professor	Digital Electronics	07	--
15	D. R Patil	M.E.	Assistant Professor	Digital Electronics	08	--
16	P. M. Shanbhag	M.E.	Assistant Professor	Digital Electronics	06	--
17	A. B. Sapkal	M.E.	Assistant Professor	Digital Electronics	05	--
18	R. S. Kalsi	M.E.	Assistant Professor	Digital Electronics	05	--
19	Y. S. Santwani	M.E.	Assistant Professor	Digital Electronics	05	--
20	K. K. Pandey	M.E.	Assistant Professor	M.E	06	
21	C..A..Patil	B.E	Assistant Professor	M.E (Persuing)	02	--
22	P. D. Girase	B.E	Assistant Professor	M.E (Persuing)	02	--

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :

Year	Percentage of lectures delivered and practical classes
2011-12	17.45
2012-13	29.01
2013-14	30.75
2014-15	28.5
2015-16	22.5

13. Student -Teacher Ratio (programme wise)

Year	No. of Students	No. of Faculty member	Ratio
2010-11	421	25	16.84
2011-12	412	27	15.25
2012-13	435	31	14.03
2013-14	465	32	14.53
2014-15	427	28	15.25

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned: 02

Filled: 02

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG

Sr.No.	Name	Qualification
1	Dr. S. R. Suralkar	Ph.D.
2	Dr. M. P. Deshmukh	Ph.D.
3	D U Adokar	M.E.
4	V. M. Deshmukh	M.E
5	S. U. Nyati	M.E
6	N. M. Kazi	M.E
7	P. H. Zope	Ph.D.
8	A. H. Karode	M.E
9	A. C. Wani	M.E
10	S. P. Ramteke	M.E
11	S. A. Hingonekar	M.E
12	S. K. Khode	M.E
13	A. R. Bari	M.E
14	M. T. Deshmukh	M.E
15	D. R Patil	M.E
16	P. M. Shanbhag	M.E
17	A. B. Sapkal	M.E
18	R. S. Kalsi	M.E
19	Y. S.. Santwani	M.E
20	K. K. Pandey	M.E

21	C..A..Patil	M.E (Persuing)
22	P. D. Girase	M.E (Persuing)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S. N.	Name of the funding agency	Name of Faculty Member	Amount received in Rs.
1	Shram Sadhana Research Promotion Scheme Title:-Novel procedure to study tunable electronic property of Nano- PANI/Tio2 for supercapacitor application Date of Submission –Sept 2013	Dr. K. S Patil Dr. P. H. Zope	1,80,000/-
2	Shram Sadhana Research Promotion Scheme Title:-Investigate Effect of Anodized Titania Nanotube for Sensor and Dye-Sensitized Solar Cells Date of Submission –Sept 2014	Dr. P. H. Zope Dr. K. S Patil	1,98,000/-
3	“Assistance For S &T Applications Through University System” Rajiv Gandhi Science And Technology Commission Government Of Maharashtra (Location Specific Research & Technology Development (LSR)) Title:- Digital Signal Processor Based Stand Alone 1000 Watts Photovoltaic System Date of Submission –Dec 2014	Mr. P. V. Thakre Dr U S Bhadade	2,00,000/-
4	Vice-Chancellor Research Motivation Scheme Title:-Novel Idea To Fabricate Optimized Thermoelectric Generator Using Organic And Polymeric NanoComposites Date of Submission – Nov 2014	Dr. K. S Patil Dr. P. H. Zope	70,000/-

5	Vice-Chancellor Research Motivation Scheme Title:- Direct Synthesis Of Highly Conductive Polymer / Graphene Composites And Their Application For DSSC Date of Submission –Nov 2014	Dr. P. H. Zope Dr. K. S Patil	70,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

S. N.	Name of the funding agency	Name of Faculty Member	Amount received in Rs.
1	Shram Sadhana Research Promotion Scheme Title:-Novel procedure to study tunable electronic property of Nano- PANI/Tio2 for supercapacitor application Date of Submission –Sept 2013	Dr. K. S Patil Dr. P. H. Zope	1,80,000/-
2	Shram Sadhana Research Promotion Scheme Title:-Investigate Effect of Anodized Titania Nanotube for Sensor and Dye-Sensitized Solar Cells Date of Submission –Sept 2014	Dr. P. H. Zope Dr. K. S Patil	1,98,000/-
3	“Assistance For S &T Applications Through University System” Rajiv Gandhi Science And Technology Commission Government Of Maharashtra (Location Specific Research & Technology Development (LSR)) Title:- Digital Signal Processor Based Stand Alone 1000 Watts Photovoltaic System Date of Submission –Dec 2014	Mr. P. V. Thakre Dr U S Bhadade	2,00,000/-
4	Vice-Chancellor Research Motivation Scheme Title:-Novel Idea To Fabricate Optimized Thermoelectric Generator Using Organic And Polymeric NanoComposites Date of Submission – Nov 2014	Dr. K. S Patil Dr. P. H. Zope	70,000/-
5	Vice-Chancellor Research Motivation Scheme	Dr. P. H. Zope	70,000/-

	Title:- Direct Synthesis Of Highly Conductive Polymer / Graphene Composites And Their Application For DSSC Date of Submission –Nov 2014	Dr. K. S Patil	

18. Research Centre /facility recognized by the University

The laboratories of the department are recognized for doctoral research in Electronics & Telecommunication Engineering by the North Maharashtra University, Jalgaon

19. Publications:

*** a) Publication per faculty**

S.N.	Faculty	Publications
1	Dr. S. R. Suralkar	24
2	Dr. M. P. Deshmukh	03
3	D U Adokar	06
4	V. M. Deshmukh	04
5	S. U. Nyati	08
6	N. M. Kazi	03
7	P. H. Zope	27
8	A. H. Karode	20
9	A. C. Wani	06
10	S. P. Ramteke	15
11	S. A. Hingonekar	00
12	S. K. Khode	05
13	A. R. Bari	02
14	M. T. Deshmukh	04

15	D. R Patil	02
16	P. M. Shanbhag	02
17	A. B. Sapkal	03
18	R. S. Kalsi	01
19	Y. S.. Santwani	02
20	K. K. Pandey	04
21	C..A..Patil	00
22	P. D. Girase	01

* **Number of papers published in peer reviewed journals (national / international I) by faculty and students - 41**

* **Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 35**

- * **Monographs:** Nil
- * **Chapter in Books:** 04
- * **Books Edited:** Nil
- * **Books with ISBN/ISSN numbers with details of publishers:** 06
- * **Citation Index:** 269
- * **SNIP:** Nil
- * **SJR:** Nil
- * **Impact factor:** 0.45 to 6.13

Staff members have published their research papers in esteemed journals having impact factors. The details are available in the department.

* **h-index**

SN	Name of faculty	Citation	h-index
1	Dr. S. R .Suralkar	156	07

2	Dr. M. P .Deshmuh	06	02
3	Dr. P. H. Zope	90	04
4	S. P .Ramteke	17	02
5	A. H. Karode	00	03

20. Areas of consultancy and income generated- Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

Sr.No.	Name of Faculty	Name of Journal	Role	Remark
1	Dr.S.R.Suralkar	“Pratibha”IJSSBT	Editorial Boards	
2	Dr. M. P. Deshmukh	Tata Mc Graw Hill Integrated Electronics by Millman Halkies	Reviewer	
		Tata Mc Graw Hill Electronic Devices & Circuits by Shalivahanan	Reviewer	
3	D. U. Adokar	“Pratibha”IJSSBT	Editorial Boards	
4	S. U. Nyati	Mc Graw Hill foe Basic Electrical & Electronics Engineering,1 st Edition	Reviewer	
5	Dr. P. H. Zope	1. International Journal of Electrical, Electronics and Computer Science Engineering. 2.IAEME	Editorial Boards Editorial Boards	

		3. International Journal of Innovative Research in Science and Engineering. 4. Advances in Electrical and Electronics Engineering Journal. 5.IEEE International Conference on Information Processing	Editorial Boards Reviewer Reviewer	

22. Student projects

- a. **Percentage of students who have done in-house projects including inter departmental/programme :** 100 %
- b. **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:** Nil

23. Awards / Recognitions received by faculty and students

Sr. No.	Name of Faculty	Name of Award
1	Dr. M P Deshmukh	Shiksha Ratna Award
2	Mr. D. U. Adokar	Eminent Educationalist Award
		Rajiv Gandhi Excellence Award by IIEEM, New Delhi
		Jewel of India Award - International Institute of Management & Research, New Delhi
3	Mr. S P Ramteke	-“Promising Engineer Award” from Institute of Engineers Nashik Local

		Centre Nashik on 6 th Oct.2012

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Name
1	Dr.Chandrajeet Solanki,IIT Bombay
2	Dr. G.K.Kharate,Dean,Pune Univ.,Pune
3	Dr. C.Y.Patil, COEP, Pune
4	Dr.P.D.Shendge COEP, Pune
5	Dr.A.A.Gurjar,Sipna's COET,Amravati
6	Dr.K.D.Kulat,VNIT,Nagpur
7	Dr.R.J.Bhivani,B N COE,Pusad
8	Dr.S.A.Ladhake, Sipna's COET,Amravati
9	Dr.S.W.Mohod,RM COE,Badnera

25. Seminars/ Conferences/Workshops organized & the source of funding

National/International

Sr. No.	Event	Date	Source of Funding
1.	Two Days National Level Workshop on "MATLAB & IT's APPLICATIONS	March 5 & 6, 2011	SSBTs COET,Bambhori
2	Two Days National Level Workshop on "Advances In Power Electronics & It's Applications	March 15 & 16, 2012	SSBTs COET,Bambhori
3	National Level Seminar on Applications of Wavelet Transform in Image Processing on	18 th-19th October 2013	AICTE

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected		Pass Percentage	
		M	F	M	F
UG	102	70	32	***	***

*** Result Not Yet declared

27. Diversity of Students

Name of Course	Year	% of students from same state	% of students from different state	% of students from abroad
BE	2010-11	91	09	Nil
	2011-12	93.66	6.34	Nil
	2012-13	94.12	5.88	Nil
	2013-14	99.2	0.8	Nil
	2014-15	97	3	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Academic Year	Name of students	Percentile	Branch	Ranks
2014-15	1. Renuka A.Nimbalkar	22.93	E & TC	22146
2013-14	1. Mahesh Birajdar	36.67	E & TC	11175
	2. Dushyant Kumar	31.33	E & TC	17415
	3. Ashwani Kr. Singh	19.33	E & TC	55001
	4. Stacy A Lynrah	18.67	E & TC	61326
2012-13	1.Vibhuti vivek	24.33	E & TC	31919
	2.Vinay Bijwe	22.67	E & TC	36413
2011-12	1. Ajita Pandey	25	E & TC	10358
2010-11	1.Rajan Kumar Sinha.	30.33	E & TC	13965
	2.Somnath Prasad	26.67	E & TC	19175

29. Students progression

Students Progression	Against % enrolled
UG to PG	0.6 %
PG to M. Phil	Nil
PG to Ph. D.	Nil
Employed Campus selection	23.84%
Other than campus recruitment	20%
Entrepreneurs/ Self Employed	5%

30. Details of Infrastructural facilities

a.Library

Particulars	Titles	Volumes
Books	318	483
Proceedings	03	--
Project reports	283	-
Seminar reports	1007	-
University Question papers	Last 5 years	-

b.Internet facilities for Staff & Students:

60 mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department. All laboratories are provided internet access. HoDs and senior staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

c.Class rooms with ICT facility:

All class rooms have Wi-Fi connectivity and are facilitated with LCDs. OHPs are also available in the department.

d.Laboratories

Total number of Laboratories = 12

Sr. No.	Laboratory Name	Area in Sq.M.
1	EM/EI LAB	71
2	COMM. LAB	71
3	RMT Lab	71
4	TV/CE	71
5	ED/TM Lab	67
6	NAS/FOC Lab	81
7	Basic Electronics & Project	68
8	EEE/PE Lab	75
9	UG Comp Lab	81
10	PG Comp Lab	71
11	PG Research Lab	67
12	EDC	102

31. Number of students receiving financial assistance from college, university, government or other agencies

Academic Year	SC	ST	OBC	EBC	Other	Total
2014-15	45	03	215	37	60	360
2013-14	63	04	248	45	73	433
2012-13	57	02	237	50	58	404
2011-12	45	05	203	45	59	357
2010-11	53	04	187	44	45	333

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sr. No.	Title of Activity	Date	Venue	Time	Targeted Student	No. of Students	Goals & Objectives
2011-12							
1	Competency toolkit for engg students in core sector	31/01/2012	E & TC Seminar Hall	2:00pm to 5:00pm	TE & BE	50	Knowing research in field of artificial intelligence & its importance
2	India & 21 st Century World: prospects & challenges	27/01/2012	E & TC Seminar Hall	2:00pm to 5:00pm	TE & BE	124	To understand Importance of Globalization
3	CNC Machine	21/09/2011	E & TC Seminar Hall	11:00am to 2:00pm	TE & BE	77	To understand working concept of CNC
4	Engineering Research (Radio astronomy)	14/09/2011	E & TC Seminar Hall	11:30am to 2:00pm	TE & BE	80	To understand radio astronomy techniques
5	Advances in Microwave Engg	10/09/2011	AC Seminar Hall	11:00am to 2:00pm	TE & BE	61	To get idea about recent advances in Microwave Engg.
6	Descriptive innovation in Learning process & importance of project activity	30/07/2011	AC Seminar Hall-II	04:00PM to 05:00PM onwards	TE & BE	150	To explore innovative learning method and importance of project activity

7	Artificial Intelligence	18/02/2011	E & TC Seminar Hall	2:00pm to 5:00pm	BE	79	Understand concept of Artificial Intelligence
2012-13							
8	Microprocessor & Microcontroller	08/09/12	E & TC Seminar Hall	2:00pm to 5:00pm	TE & BE	156	Understanding applications of Microprocessor & Microcontroller
9	Industrial Automation	30/03/2013	E & TC Seminar Hall	11:00am to 2:00pm	TE & BE	158	To study various automation technique
10	Microsoft Technologies	05/02/2013	E & TC Seminar Hall	2:00pm to 4:00pm	TE & BE	79	Knowing recent trends of Microsoft Technology
2013-14							
11	Application areas of Microprocessor	21/02/2014	E & TC Seminar Hall	1:00pm to 3:00pm	BE	114	Understanding different Application areas of Microprocessor
12	Automation Technique used in product development	22/2/14	E & TC Seminar Hall	11:00am to 2:00pm	Third year students	112	To understand the process of industrial automation in industry
13	EWSD & IP Tax	21/01/14	E & TC Seminar Hall	1:00Pm	BE	30	To get the knowledge of

							wireless communication
14	Digital Signal Processing & Applications	05/10/13	E & TC Seminar Hall	11:00am to 2:00pm	TE, BE and ME	60	To study various applications of DSP
15	Solar Street Light	05/10/13	E & TC Seminar Hall	2:00pm to 5:00pm	SE	37	To understand working & importance of solar street light
16	Automation Engg. Based on PLC & SCADA	01/10/13	E & TC Seminar Hall	2:00pm to 5:00pm	TE	31	To understand the concepts of PLC & SCCADA
17	Control System & its Applications	28/09/13	E & TC Seminar Hall	9:30am to 1:00pm	TE	78	To understand the basics of control system
18	Advancement in Digital Signal Processing	28/09/13	E & TC Seminar Hall	2:00am to onwards	BE and ME	80	To familiarize the students to recent advancement in DSP
19	Industrial approach for Electronics	13/09/13	Class room 302	11:00am to 2:00pm	SE	84	Understanding & visualizing electronics for Industrial purpose
20	Industrial approach for Electronics	14/09/13	E & TC Seminar Hall	1:30pm to 3:30pm	TE	94	Understanding & visualizing electronics for Industrial purpose

21	Microwave Integrated Circuits	10/08/2013	E & TC Seminar Hall	2:00pm to 5:00pm	BE	49	To study Microwave Integrated Circuits
22	Basic of Networking	5/08/2013	E & TC Seminar Hall	2:00pm to 5:00pm	BE	51	Understanding Basic concept of Networking
2014-15							
23	Research Attitudes	16/03/15	AC Seminar Hall	4:00pm to 6:00pm	Faculty	20	To get acquainted about writing research articles
24	Computer Communication Network	17/10/14	E & TC Seminar Hall	11:00am to 2:00pm	Final year students	50	Understanding Basic concept of Networking
25	Real Time Embedded System and Virtualization for Power System Stability	27/09/14	E & TC Seminar Hall	02:30pm to 04:30pm	Final year students	70	To get the knowledge of real time embedded system

Sr. No.	Name of activity	Professional Bodies	Duration
1	Guest lecture on Wireless networking	IEEE	02.04.2015
2	Two days technical workshop on Nanoelectronics and Mechtronics	IEEE	13-14 Sept 2014
3	Group discussion for BE Students	IEEE	22.09.2014
4	Guest lecture on Computer Communication System	IEEE	17.10.2014

Sr.No	Title of Activity	Date	Venue	Time	Target students	Total no of students
1.	Apti,GD+PI, Spark 11	27.8.2011	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	212
2.	Engineers Day Poster Competition	15.9.11	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	18
3.	Quiz	17.3.12	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	110
4.	Circuit mania	24.3.12	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	95
5.	GD	25.8.2012	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	68
6.	Mind master 2K12	01.9.12	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	116
7.	Engineers Day Poster Competition	15.9.12	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	17

8	Hunt to Success Technical quiz	24.3.12	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	90
9	Aptitude test	09.2.13	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	79
10	Workshop on C/C++	23.8.13- 24.8.13	SSBT COET	11:00 A.M.-06:00 P.M.	SE/TE/BE	130
11	Aptitude test 1	24.8.13	SSBT COET	3:00 P.M. – 5:00 P.M.	BE	57
12	Latex workshop	06.9.13- 07.9.13	SSBT COET	11:00 A.M.-06:00 P.M.	BE	136
13	Fundamentals of ELECTRONICS WORKSHOP	06.9.13- 07.9.13	SSBT COET	11:00 A.M.-06:00 P.M.	SE	125
14	Poster competition	14.9.13	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE	12
15	Aptitude test 2	14.9.13	SSBT COET	3:00 P.M. – 5:00 P.M.	BE	46

16	Bit d byte	07.9.13	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE	35
17	Aptitude test 3	21.9.13	SSBT COET	3:00 P.M. – 5:00 P.M.	BE	32
18	Aptitude Test 4	31.1.14	SSBT COET	3:00 P.M. – 5:00 P.M.	TE	109
19	Introduction to equipment and component testing	22.3.14	SSBT COET	3:00 P.M. – 5:00 P.M.	SE	23
20	Aptitude test 5	25.3.14	SSBT COET	3:00 P.M. – 5:00 P.M.	TE/BE	24
21.	2 days technical course on PLC programming	30.8.14- 31.8.14	SSBT COET	11:00 A.M.-06:00 P.M.	TE	93
22.	2 days technical workshop on	13.9.14- 14.9.14	SSBT COET	11:00 A.M.-06:00 P.M.	TE	20

	nanoelectronics and mechatronics					
23.	Inhancement of practical knowledge for the need of industries	12.9.14- 13.9.14	SSBT COET	11:00 A.M.-06:00 P.M.	SE/TE	128
24.	Quiz competition	15.9.14	SSBT COET	3:00 P.M. – 5:00 P.M.	SE/TE/BE	45
25.	Guest lecture on Real time embedded system and visualization for power system stability	27.9.14	SSBT COET	11:00 A.M.-06:00 P.M.	BE	53
26.	Research article writing	31.1.15	SSBT COET	11:00 A.M.-06:00 P.M.	SE/TE	30
27.	2 days technical course on Embedded C	16.10.15- 17.10.15	SSBT COET	11:00 A.M.-06:00 P.M.	SE/TE	61

33. Teaching methods adopted to improve student learning:

Group Discussions

Group discussions are conducted by the Department among the students to increase awareness of the worldwide events and their effects and also to enhance interpersonal skills – the ability to either convince others or get convinced. During this activity, the students are expected to well prepared about the topic, to abide by the norms during the discussion and also to respond to the feedback with a more logical and assertive approach.

Audio/Visual Aids

The teachers use slide shows as teaching aids to employ a visual mode for flow charts, diagrams, animations etc. for better comprehension and retention.

Simulation / Modeling: - It is a system that behaves *similar to* something else, but is implemented in an entirely different way. It provides the basic behavior of a system, but may not necessarily adhere to all of the rules of the system being simulated. It is there to give you an idea about how something works.

Seminar: - It includes a technical topic which is discussed with a teacher with a small group of students or a gathering of people (Teachers and students) for the purpose of discussing a stated Topic.

Tutorial: - A period of tuition given by a teacher to an individual or a very small group.

Laboratory work: It is also an integral part of the curriculum.

Assignment: The curriculum also includes assignments for the self study encouragement of students.

Industrial visits: They are arranged for real world exposure.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

Sr. No.	Activity Name	Venue	Date
1	Blood Donation Camp	SSBT,s COET, Bambhori, Jalgaon	10/04/2015
2	E & TC Awareness Program	Jr.College,Muktainagar	26/09/2015
3	E & TC Awareness Program	M.F.Taral Jr.College ,Anturli	26/09/2015
4	Digital India and Career in Engineering Education	D S Patil Arts ,Commerce and Sci.College,Erandol	16/10/2015
5	Digital India and Career in Engineering Education	Unnati Founadation,Erandol	16/10/2015
6	Digital India and Career in Engineering Education	Ladkubai Vidya Mandir,Bhadgaon	20/10/2015
7	Digital India and Career in Engineering Education	New English School & Jr. College Bhadgaon	28/09/2015

8	Digital India and Career in Engineering Education	Indirabai Lalwani Science College, Jamner	07/10/2015

35. SWOC Analysis of the Department and Future plans

Strength

- Dedicated and enthusiastic staff.
- Well-disciplined culture.
- State of the art laboratory and infrastructure facilities.
- Consistent result of Final year students.
- Soft skill and add on technical skills for student development.

Weakness

- Less industrial exposure.
- English as communicative language.
- Less consultancy.

Opportunities

- The department can grab research funds from UGC due to 2(f) and 12 (B) status.
- The department can provide leadership in ways of teaching and earning to the benefit of students and society.
- Rapidly changing technology.
- Honing the skills and abilities of the students.

Challenges

- High rate of obsolescence.
- Attract meritorious students.
- Bridge Knowledge gap between Industry and curriculum.

Evaluative Report of the Department

1. **Name of the department:** Information Technology

2. **Year of Establishment:** 2001-2002

3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Programme of Study	Intake
UG in Information Technology	60

4. **Names of Interdisciplinary courses and the departments/units involved:**

IT department is offering two interdisciplinary courses viz. Enterprise Resource Planning and SAP and Software Engineering & Project Management. The beneficiary departments are Mechanical, E&TC, Electrical and Biotechnology.

5. **Annual/ semester/choice based credit system (programme wise):**
Semester based system

6. **Participation of the department in the courses offered by other departments:** Nil

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil

8. **Details of courses/programmes discontinued (if any) with reasons:** No

9. **Number of teaching posts:**

	Sanctioned	Filled
Professor	01	01
Associate Professor	02	01
Assistant Professor	09	09

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No .	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ Students Guided For the last 4 years
1	Dr. U. S. Bhadade	PhD	Professor	Electronics	22 Y	07 + 02
2	Mrs. A. K. Bhavsar	M. Tech	Asso. Prof.	CSE	14 Y	--
3	Mr. S. J. Patil	M. E.	Asst. Prof.	CSE	9 Y	--
4	Mr. N. P. Jagtap	M.E.	Asst. Prof.	CSE	8 Y	--
5	Mr. S. H. Rajput	M.E.	Asst. Prof.	CSE	7 Y, 4 M	--
6	Mr. R. B. Sangore	M. Tech.	Asst. Prof.	I.T.	6 Y	--
7	Mr. P. C. Harne	B.E.	Asst. Prof.	CSE	4 Y, 11 M	--
8	Mr. H. R. Kotwal	M.E.	Asst. Prof.	I.T.	6 Y, 6 M	--
9	Mr. S. K. Singh	B.E.	Asst. Prof.	I.T.	2 Y, 6 M	--
10	Mr. P. K. Patil	M.E.	Asst. Prof.	CSE	1 Y	--
11	Mr. M. S. Patil	B.E.	Asst. Prof.	I.T.	1 Y , 5 M	--

CSE-Computer Science and Engineering, I.T.- Information Technology

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by Temporary faculty: 38%

13. Student -Teacher Ratio (programme wise): 16.36 : 1

14. Number of academic support staff (technical) and administrative staff; Sanctioned and filled:

Sanctioned: -- Filled: --

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ UG:

Ph.D:01, ME/M.Tech: 07

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

- **Publication per Faculty:** 5.36

- **Number of papers published in peer reviewed journals (national/international) by faculty and students**

47 papers have been published in international journals in last four years.

- **Number of publication listed in international database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):**- Nil

- **Monographs:-** Nil

• **Chapters in Books:-** Nil

• **Books Edited :-** Nil

• **Books with ISBN/ISSN numbers with details of publishers**

- Computer Network, ISBN-978-81-909164 -9-3, Prakash Publication.
- Computer Communication Network, ISBN-978-93-81188-13-2, Prakash Publication.
- Advance Computer Network, ISBN-978-93-811088-11-8, Prakash Publication.
- Implementation of Guilt Model with Data Watcher for Leakage System, 978-3-659-29374-0, Lap-Lambert Academic Publication, Saarbrücken Germany, 2012.
- Data Warehousing and Mining, 978-93-81188-07-1, Prakash Publication, 2011.

• **Citation Index:-** 6.33

• **SNIP** Nil

• **SJR** Nil

• **Impact Factor** range 0.26 – 5.442

• **h-index** 1.33

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) **National Committees:-** Nil

b) **International Committees:-** 1

c) **Editorial Boards:-** 1

22. Student projects:

a) **Percentage of students who have done in-house projects including inter –departmental/programme** 100%

b) Percentage of students placed for projects in organization outside the institution i.e. in research laboratories/agencies/industry 0%

23. Awards / Recognitions received by faculty and students:- 44

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Name
1	Dr.Shashikant Kelkar,IIT Bombay
2	Dr. S. S. Sane, KKwagh COE Nashik
3	Dr. V. K. Pachghare, COEP, Pune
4	Mrs. Rubal Agrawal, Collector, Jalgaon District

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National:

Sr. No.	Event	Date	Source of Funding
1.	National Level Seminar on Cryptography and Network Security	5 Jan 2015	North Maharashtra University, Jalgaon

b) International:

Sr. No.	Event	Date	Source of Funding	Number of Participants
1	International Conference on Global Trends in Engineering, Technology and Management	9-11 Jan. 2015	SSBT's College of Engg. & Tech., Bambhori Jalgaon	127
2	International Conference on Sustainable Development	25-26 Feb.2014	SSBT's College of Engg. & Tech., Bambhori Jalgaon	80
3	International Conference on	29 March 2013	SSBT's College of Engg. &	40

	Advances in Energy Technology		Tech., Bambhori Jalgaon	

26. Student profile programme/course wise

Name of the Programme (refer to question no. 4)	Applications received	Selected	Enrolled		Pass Percentage
			*M	*F	
UG	76	76	37	39	--

*M = Male

*F = Female

27. Diversity of Students:

Name of Course	% of students from same state	% of students from different state	% of students from abroad
B.E.Information Technology	87.87%	12.13%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

GATE Exam:-01

29. Student Progression

Student Progression	Against % enrolled
UG to PG	NIL
PG to M. Phil	NA
PG to Ph. D.	NA
Ph.D. to Post-Doctoral	NA
Employed - Campus selection - Other than campus recruitment	25.32%
Entrepreneurs/ Self Employed	NIL

30. Details of Infrastructural facilities:

a) Library: 192 books, Carpet Area= 32 Sq.m.

b) Internet facilities for Staff and Students:- 60 Mbps (1:1)

c) Class Rooms with ICT facility: 3 (2 LCD Projectors)

d) Laboratories: 10

Lab No.	Laboratory Name	Area
1	DSMP LAB	72 sq.m.
2	DSF LAB	67 sq.m.
3	PROGRAMING LAB	72 sq.m.
4	MULTIMEDIA/ WEB DESIGN	67 sq.m.
5	OPERATING SYSTEM LAB	69 sq.m.
6	COMPUTER NETWORK LAB	86 sq.m.
7	DATA BASE & MANAGEMENT LAB	68 sq.m.
8	SOFTWARE ENGG LAB	69 sq.m.
9	COMPUTER GRAPHICS	69 sq.m.
10	PROJECT LAB	67 sq.m.

31. Number of students receiving financial assistance from college, university, government or other agencies.

Academic Year	SC	ST	OBC	EBC	Other*	Total
2014-15	05	00	23	03	04	35

*Other includes VJ/DT, NT-1, NT-2, NT-3, SBC, etc.

The following is the list of projects that received the funding from the sponsoring agencies:

Academic Year	Project Title	Name of Students	Funding Agency	Amount
2014-15	Accident Detection & Notification System using Android	1.S. M. Ahirrao 2.L. A. Mahant 3.P. A. Dhanrale	L. H. Patil Construction Pvt. Ltd., Jalgaon	10,000/-
2013-14	Industry Security System	1.A. V. Bhavsar 2.Y. A. Mahajan 3.C. D. Baviskar	Suruchi Tea Company, Jalgaon	11,000/-

Sharm Sadhana Scholarship Scheme (4S) which is for needy students of the college.

Sr.No.	Name of students	Branch	Amount
1	Mitali S Choudhari	IT	15,000/-
2	Chore Sonali R	IT	15,000/-
3	Nilkanth N Phadnis	IT	15,000/-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts.

Sr. No .	Programme	Name of Event	In association with/recourse person	Date
1	Guest Lecture	Software Development Process	Mr.Sudarshan Mahajan	1/9/2015
2	Workshop	MATLAB Programming and Its Application Development	Mr.S.H. Chudhari	21/8/15 - 22/8/15
3	Workshop	CCNA	Mr,Ritesh Nikam and Mr.Yogesh Patil	21/8/15 - 22/8/15

4	Guest Lecture	Software Engineering	Mr. Rahul Teli	24/8/15
5	Expert Lecture	“Recent Trends in Information Technology”	Mr. Partik Agrawal	10/2/15
6	Expert Lecture	“Career Guidance”	Mr. P. R. Patil	03/2/15
7	Expert Lecture	“Art of Living”	Mr. M. T. Shirole Mr. Vinayak	20/1/15
8	Guest Lecture	‘Career in IT’	Mr. Sagar Sonawane	27/9/14
9	Expert Lecture	Tips and Tricks for preparation of Quantitative Aptitude	Mr. Amit Laddha	22/9/14
10	Expert Lecture	Industry expectation from IT grads	Mr. Rahul Trivedi	20/9/14
11	Workshop	Web Application Development using PHP	LogicBits Systems Pvt. Ltd., Pune	12/9/14 - 28/9/14
12	Workshop	Android	Edu Tech Labs, A-503, Stirling, Dahisar (W)	12/9/14 - 26/9/14
13	Expert Lecture	Career Guidance and opportunities in IT sector	Ms. Pooja Sharma	2/8/14

33. Teaching methods adopted to improve student learning

- **Interactive Learning:** Interactive instructional strategies aim to strengthen observational skills, listening skills, communication skills, and interpersonal skills of the students. Every teacher ensures that the classroom climate is very conducive in which students feel free to contribute and debate their ideas. Interactive instructional strategies adopted are brainstorming, Question - Answer session, problem-solving, storytelling, starting each session with Recall, Summarize, Question, Comment etc.
- **Collaborative Learning:** Discussion during theory and practical sessions
- **Independent Learning:** Students are motivated for independent learning by providing online learning resources.
- **Cooperative Learning:** During the practical sessions, individuals seek outcomes that are beneficial to themselves and other group members.
- **Problem-based Learning:** In project work, students are engaged in complex and challenging problems and collaboratively work towards the solution.
- **Peer Instruction:** Lectures are interspersed with questions to expose common difficulties in understanding or in writing skills in examinations. Students are allowed to think about it and discuss the answer in the session.

34. Participation in Institutional Social Responsibilities and Extension Activities

Swachha Bharat Abhiyan is organized to keep campus/village/city clean. Communal harmony is maintained through activities like Shiv Jayanti, Ganesh Utsav, Iftar Party etc. Community activities like road safety awareness, tree plantation, awareness about use of eco-friendly bags, interaction with orphans and senior citizens are organized. Apart from these activities, the department has conducted following activities outside the campus.

Sr. No.	Activity Name	Venue	Date
1	Flood Relief Camp	Mehrun, Jalgaon	14/07/2014
2	IT Awareness Program	Dhey Academy, Pachora, Jalgaon	20/12/2014

3	Digital India	Tavare Jr. College, Pachora	9/9/2015
4	Digital India and Career in Engineering Education	SSMM Arts, Science and Commerce, Pachora	9/9/2015
5	Digital India and Career in Engineering Education	Jawahar High School and Jr. College, Girad, Tal-Pachora	9/9/2015
6	Digital India and Career in Engineering Education	SGP Art's, Science and commerce college Sakri (Dhule)	16/9/2015
7	Digital India and Career in Engineering Education	Dadasaheb manikrao Patil Jr. College, Dhivel Tal-Sakri (Dhule).	16/9/2015
8	Digital India and Career in Engineering Education	Amar Sanstha's Science College, Chopda.	19/09/2015
9	Digital India and Career in Engineering Education	Pratap College, Chopda.	19/09/2015
10	Digital India and Career in Engineering Education	New English School & Jr. College Bhadgaon	28/09/2015

35. SWOC Analysis of the Department and Future plans

Strength

- Excellent and consistent tradition of result
- State-of-art Laboratories and infrastructure
- Co-curricular and Extra-curricular activities for all round development.
- Conducive environment for teaching learning

Weakness

- Located in rural area
- Less industrial exposure and placement

Opportunities

- Industry-Institute Interaction
- Rapidly changing technology
- To start PG course in Information Technology

Challenges

- To aware the society about the career prospectus in Information Technology.
- Attract meritorious students
- Achieving better student placements
- Effectively teaching students from rural and urban backgrounds
- Getting consultancy

Future plans

- To be recognized as a center of excellence in open source learning.

Evaluative Report of the Department

1. **Name of the Department:** Mechanical Engineering Department
2. **Year of establishment:** 1994-1995
3. **Names of programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG:-B.E. (Mechanical), **PG:-**M.E. (Machine Design), **Ph. D:** –Mechanical Engineering

4. **Names of Interdisciplinary courses and the departments/units involved**
Mechanical Engineering department is offering two interdisciplinary courses viz. Energy Resources & Technology and Operational Research Techniques. The beneficiary departments are Electrical, Chemical, Computer, IT, Electronics and Tele-Communication

5. **Annual/Semester/Trimester/Choice Based Credit System (programme wise):** Semester based system

6. **Participation of the department in the courses offered by other departments**

The syllabus includes common subjects at first year level for all branches. The department of Mechanical engineering undertakes the course ‘Engineering Drawing and Elements of Mechanical Engineering’ for all branches.

Semester	Subject	Department	Class
I	Engineering Mechanics	Applied Science & Humanities	First Year
I	Workshop Practice-I	Applied Science & Humanities	First Year
I	Power Plant Engineering	Electrical Engineering	Second Year
II	Workshop Practice-II	Applied Science & Humanities	First Year
II	Engineering Drawing and Elements of Mechanical Engineering	Applied Science & Humanities	First Year

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:- Nil

8. Details of courses/programmes discontinued (if any) with reasons:- Nil

9. Number of teaching posts

	Sanctioned	Filled
Professors	02+01 (PG) = 03	02
Associate Professors	05+01(PG) = 06	04
Assistant Professors	20+01(PG)= 21	16

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No.	Name of Faculty member	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Academic Year 2015-2016						
1	Dr. D. S. Deshmukh	Ph. D (Mechanical Engineering)	Professor & H.O.D.	Thermal Engineering	20 Years	10 (Registered Provisionally)
2	Dr. S. P. Shekhawat	Ph. D (Mechanical Engineering), M.E. (Machine Design)	Professor	Design	17 Years	Nil
3	Mr. N. K. Patil	M.E. (Machine Design), M. Tech. (Energy), M.B.A., Ph. D. Pursuing	Associate Professor	Design, Thermal, Management	24 Years	Nil
4	Mr. K. Shrivastava	M.E. (Heat power), Ph. D Pursuing	Associate Professor	Thermal	19 Years	Nil
5	Mr. M. V. Rawlani	M.E. (Mechanical) Ph. D Pursuing	Associate Professor	Advance Production System	21 Years	Nil

6	Mr. P. G. Damle	M.E. (Machine Design), Ph. D Pursuing	Associate Professor	Design	17 Years	Nil
7	Mr. D. B. Sadaphale	M.E. (Machine Design) Ph. D Pursuing	Assistant Professor	Design	14 Years	Nil
8	Mr. P. N. Ulhe	M.E. (Machine Design) Ph. D Pursuing	Assistant Professor	Design	16 Years	Nil
9	Mr. P. M. Solanki	M.E. (CAD/CAM) Ph. D Pursuing	Assistant Professor	CAD/CAM	9 Years	Nil
10	Mr. P. D. Patil	M.E. (CAD/CAM) Ph. D Pursuing	Assistant Professor	CAD/CAM	9 Years	Nil
11	Mr. M. V. Kulkarni	M. Tech. (Thermal) Ph. D Pursuing	Assistant Professor	Thermal	10 Years	Nil
12	Mr. Ajay R. Bhardwaj	M.E. (Machine Design) Ph. D Pursuing	Assistant Professor & Workshop Superintendent	Machine Design	17 Years	Nil
13	Mr. D. C. Talele	M. Tech. (CAD/CAM) Ph. D Pursuing	Assistant Professor	CAD/CAM	3 Years	Nil
14	Dr. P. P. Bornare	Ph. D (Management)	Assistant Professor	Management	12 Years	Nil

		M.E. (Mechanical)				
15	Mrs. J. R. Surange	B.E. (Production), M.E. (Machine Design)	Assistant Professor	Production	5 Years	Nil
16	Mr. C. K. Mukhrjee	B.E. (Mechanical), M.E. (Pursuing)	Assistant Professor	Mechanical	14 Years	Nil
17	Mr. A. V. Rajput	B.E. (Mechanical), M.E. (Machine Design)	Assistant Professor	Machine Design	3.5 Years	Nil
18	Mr. S. A. Rajput	B.E. (Mechanical), M.E. (Pursuing)	Assistant Professor	Machine Design	2.5 Years	Nil
19	Miss. T. A. Chaudhari	B.E. (Mechanical), M.E. (Pursuing)	Assistant Professor	Machine Design	6 months	Nil
20	Mr. P. T. Patil	B.E. (Mechanical), M.E. (Pursuing)	Assistant Professor	Thermal Engineering	6 months	Nil
21	Mr. N.B. Dhanore	B.E. (Mechanical),	Assistant Professor	Mechanical	6 months	Nil
22	Miss. Juhi Patil	B.E. (Mechanical)	Assistant Professor	Mechanical	6 months	Nil

11. List of senior Visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

Year	Percentage of lectures delivered and practical classes
2015-16	27.72

13. Student Teacher Ratio (Programme-wise): 18:1

14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sanctioned	Sanctioned	Filled
Technical staff	10	10
Administrative staff	Nil	

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. Ph.D:- 03, ME/M. Tech: 13

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.

Sr. No.	Name of Faculty Member	Name of Funding Agency	Project Title	Amount in Rs.
1	Dr. D.S. Deshmukh, Mr. P.M. Solanki	RGS & TC through NMU, Jalgaon	Investigation of factors affecting on performance of a thermoelectric generator	1,10,000/-
2	Dr S P Shekhawat, Mechanical engineering department	Rajiv Gandhi Science and Technology Commission	Radiation estimation and turbidity control in salt gradient solar ponds under tropical Indian climate	378000/-
3	Mr. M.V Kulkarni	IEDC (DST), SSBT's COET,	Solar water heating system using Innovative Flat Plate	1,00,000/-

		Bambhori, Jalgaon	Collector and Storage volume	
4	Mr. Krishna Shrivastava	IEDC (DST), SSBT's COET, Bambhori, Jalgaon	Design and Manufacturing of Modified Two stage reduction gear box for all Terrain vehicle	1,00,000/-

17. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; and total grants received: 6

Sr. No.	Name of Faculty Member	Name of Funding Agency	Project Title	Amount in Rs.
1	Dr. D.S. Deshmukh, Mr. P.M. Solanki	RGS &TC through NMU, Jalgaon	Investigation of factors affecting on performance of a thermoelectric generator	1,10,000/-
2	Dr. S.P. Shekhawat	IEDC (DST), SSBT's COET, Bambhori, Jalgaon	Development of Economic and Efficient Air Cooler	1,00,000/-
		Shram Sadhana Research Promotion Scheme	Experimental Investigations on Operational Parameters of Salt Gradient Solar Ponds	1,08,000/-
3	Dr S P Shekhawat, Mechanical engineering department	Rajiv Gandhi Science and Technology Commission	Radiation estimation and turbidity control in salt gradient solar ponds under tropical Indian climate	378000/-
4	Mr. M.V Kulkarni	IEDC (DST), SSBT's COET, Bambhori, Jalgaon	Solar water heating system using Innovative Flat Plate Collector and Storage volume	1,00,000/-

5	Mr. Krishna Shrivastav	IEDC (DST), SSBT's COET, Bambhori, Jalgaon	Energy conservation of water motor pump by modified cooling system	1,00,000/-
6	Mr. Krishna Shrivastava	IEDC (DST), SSBT's COET, Bambhori, Jalgaon	Design and Manufacturing of Modified Two stage reduction gear box for all Terrain vehicle	1,00,000/-

18. Research Centre /facility recognized by the University

The laboratories of the department are recognized for doctoral research in Mechanical engineering by the North Maharashtra University, Jalgaon.

19. Publications:

a) Publication per Faculty:-

- **Number of papers published in peer reviewed journals (National / International) by faculty and students:-**
28 have been published in peer reviewed National/ International journals in last four years.
- **Number of publication listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):**- Nil
- **Monographs:-** Nil
- **Chapters in Books:-** Nil
- **Books Edited:-**

Sr. No.	Name of Faculty member	No. of Books Edited
1	Dr. D. S. Deshmukh	01
2	Mr. N. K. Patil	06
3	Dr. S. P. Shekhawat	01
4	Mr. M. V. Rawlani	12
5	Mr. P. G. Damle	01

- **Books with ISBN/ISSN numbers with details of publisher**

Sr. No	Name of Book	Author	Publisher	ISBN
1	Material science	Dr. D. S. Deshmukh	Prakash publication	978-81-909164-6-2
2	Metrology & Quality Control	Er. N. K. Patil	Nirali Publication	978-93-5164-401-9
3	Internal Combustion Engine	Er. N. K. Patil	Nirali Publication	978-93-5164-121-6
4	Applied Thermodynamics	Er. N. K. Patil	Nirali Publication	978-93-5164-34-3
5	Numerical Analysis and Computational Methods	Mr. M. V. Rawlani	Nirali Publication	978-93-5164-400-2
6	Manufacturing Processes	Mr. M. V. Rawlani	Nirali Publication	978-93-83750-59-7
7	Engineering Graphics	Mr. M. V. Rawlani	Nirali Publication	978-93-81962-99-2

- **Citation Index :-**

Sr. No.	Name of faculty Member	Citation index	i10 index
1	Dr. D.S. Deshmukh	6	-
2	Dr. S.P. Shekhawat	2	-
3	Mr. K. Shrivastava	1	-
4	Mr. M.V. Rawlani	1	-

- **SNIP:-** Nil
- **SJR:-** Nil
- **Impact Factor :-**

Staff members have published their research papers in esteemed journals having impact factors. The details are available in the department.

- **h-index:-**

Sr. No.	Name of faculty Member	h index
1	Dr. D.S. Deshmukh	1
2	Dr. S.P. Shekhawat	1
3	Mr. K. Shrivastava	1
4	Mr. M.V. Rawlani	1

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees: - Nil

b) International committees: - Nil

c) Editorial Boards

Dr. D.S. Deshmukh is working as Editor-in-Chief of PRATIBHA: International Journal of Science, Spirituality, Business and Technology (IJSSBT) at SSBT's, COET, Bambhori, Jalgaon from Vol. I, Number-2, February -2013

22. Student projects

a) Percentage of students who have done in-house projects including inter- departmental /programme: 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:-
Nil

23. Awards / recognitions received by Faculty & Students:-

- Faculty:- Nil
- Students: - 104 students (46 groups) have won awards/prizes in paper presentation, project contests etc.

24. List of eminent academicians and scientists / visitors to the department

Sr. No.	Name
1	Dr. J. P. Modak
2	Mr. Vishal Shukla
3	Mr. Arun W. Lele
4	Dr. Manish Deshmukh (PhD Thermal)

5	Dr. R. K. Mandloi
6	Mr. Shekhar Borole
7	Mr. Sarang Dev
8	Prof. S. K. Patil

25. Seminars/ Conferences/Workshops organized and the source of funding

(National/ International):-

Sr. No.	Event	Date	Source of Funding
1.	Expert Lecture on “ Role & Importance of workshop Technology in Technical Education ” by Dr. R. K. Mandloi (Associate Professor & Head, Central workshop, M.A.N.I.T. Bhopal)	24/12/2014	SSBTs COET, Bambhori
2	Expert Lecture on “ Current Scenario of Entrepreneurship ” by Mr. Sandip Kabra (Suhans chemicals)	16/08/2013	SSBTs COET, Bambhori
3	Expert Lecture on “ Hydraulics and Pneumatics ” by Prof. S. K. Patil from S.K. Industries, M.I.D.C., Akola	12/02/2013	SSBTs COET, Bambhori
4	Expert Lecture on “ Industrial Automation ” by Mr. Nilesh Salgaonkar (Director, Technocrat control system)	12/02/2013	SSBTs COET, Bambhori
5	Short Term Training Programme on “ CAD/CAM/CAE ”	14 th -19 th January 2013	CADD centre Jalgaon, Alpha Training & Design Solution Pvt. Ltd. Pune, Foundation brake manufacturing Pvt. Ltd. Jalgaon & SSBTs COET, Bambhori
6	Seminar on “ Robo-Club activity ” by Mr. D. D. Patil	15/09/2012	SSBTs COET, Bambhori

7	Expert Lecture on “ Manufacturing & CNC ” by Mr. Shekhar Borole (Bosch Chassis Ltd.)	08/09/2012	SSBTs COET, Bambhori
8	Expert Lecture on “ ANSYS & its industrial application ” by Mr. Sarang Dev (Executive CAE, C.G. L., Mumbai)	08/09/2012	SSBTs COET, Bambhori
9	Expert Lecture on “ CAD/CAM/CAE & Job ” by Prasana Joshi from CAD/CAM Guru	25/02/2012	SSBTs COET, Bambhori
10	National Level Workshop on “Research Methodology”	17 th -19 th October 2011	Bosch Chassis System India Ltd. Jalgaon, Supreme Industries Jalgaon, The Institution of Engineers
11	Expert Lecture on “ Technical Paper writing ” by Mr. M. S. Murthy	17/09/2011	SSBTs COET, Bambhori
12	Expert Lecture on “ Development of Technical Knowledge & Awareness of Current Scenario ” by Rishicool	08/09/2011	SSBTs COET, Bambhori
13	Guest Lecture on “ Management (about MBA) ” by Mr. Sagar Nikam (MBACET Topper) & Mr. Yajuvendra Mahajan (Deepsthamb Foundation)	05/8/2011	SSBTs COET, Bambhori
14	Guest lecture on “ Importance of Aptitude Test ” by Amit Laddha	09/04/2011	SSBTs COET, Bambhori
15	Expert Lecture on “ CAD/CAM/CAE ” by Prasana Joshi from CAD/CAM Guru	29/01/2011	SSBTs COET, Bambhori
16	Expert Lecture on “ Technical Paper writing & Presentation ” by Mr. M. S. Murthy & K. Shrivastava	05/03/2011	SSBTs COET, Bambhori
17	Short Term Training Programme on “ Advances in Tribology ”	25 th to 29 th October 2010	SSBTs COET, Bambhori

26. Student profile programme/ Course-wise:

Name of the programme (Refer to question no. 4)	Applications Received	Selected	Enrolled		Pass Percentage	
			Male	Female	Male	Female
BE. in Mechanical Engineering	126	126	116	10	***	***

27. Diversity of students

Name of the Course	% of students from same State	% of students From universities outside the State	% of students from Abroad
2015-2016	77.78%	22.22%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Gate exam: - 06

29. Student progression

Student progression	Against Percentage enrolled			
	2011-12	2012-13	2013-14	2014-15
UG to PG	2	8	12	8
PG to M.Phil.	NIL			
PG to Ph.D.	NIL			
Ph.D. to Post-Doctoral	NIL			
Campus selection	29	19	9	19
Other than campus recruitment	12	12	30	20
Entrepreneurs/ Self-employment	NIL			

30. Details of infrastructural facilities

a) Library:-350 books and Area 54 sq.m

b) Internet facilities for staff and students

60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department. All laboratories are provided internet access. HoD and senior staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

c) Class rooms with ICT facility:-

Total number of classrooms: 02 (M-302, M-303)

3 projectors are available in the department, two are fixed in classrooms and one is movable. All class rooms have Wi-Fi connectivity and are facilitated with LCDs. OHPs are also available in the department.

d) Laboratories

Total number of Laboratories= 12 and One Central Workshop

Sr. No.	Name of Laboratory	Area in Sq. m.
1	Material Science & Engineering Metallurgy	114
2	Tribology	107
3	Quality control Metrology	107
4	Model	114
5	Theory of Machine/Dynamics of Machinery	107
6	CAD/CAM	107
7	Computer	109
8	Mechatronics	107
9	Heat Power	141
10	Heat Transfer	75
11	Refrigeration & Air conditioning	85
12	Automobile engineering	73
	Central Workshop	708.66

Total	1954.66

31. Number of students receiving financial assistance from college, university, government or other agencies

Year	Number of Students							
	SC	ST	OBC	VJNT	SBC	Minority	EBC	Total
2010-11	38	6	181	38	7	10	44	324
2011-12	43	6	199	39	10	18	51	366
2012-13	50	14	206	49	9	8	50	386
2013-14	64	12	240	58	12	9	48	443

Sharm Sadhana Scholarship Scheme which is for needy students of the college.

Sr.No.	Name of students	Year	Branch	Amount in Rs.
1	Patil Ishawar D	2013-14	Mechanical(FE)	15,000/-
2	Bornare Gaurav Prakash	2014-15	Mechanical(FE)	17,250/-
3	Marathe Sachine Bhatubhai	2014-15	Mechanical(FE)	17,250/-
4	Fednis Nilkunth Naresh	2014-15	Mechanical(SE)	15,000/-
5	Gholap Kailas Sakharam	2014-15	Mechanical(TE)	10,000/-
6	Nilam S Patil	2014-15	Mechanical(SE)	15,000/-
7	Pratik Popat Choudhary	2015-16	Mechanical(FE)	3,000/-
8	Bagul Sagar Bhagwan	2015-16	Mechanical(FE)	9,000/-
9	Shoaid Khan	2015-16	Mechanical(FE)	9,000/-
10	Marathe Sachine Bhatubhai	2015-16	Mechanical(SE)	17,250/-
11	Fadnis Nilkunth Naresh	2015-16	Mechanical(TE)	15,000/-
12	Nilam S Patil	2015-16	Mechanical(TE)	15,000/-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Topic	Date	Resource Person	Resource Person Details
Academic Year 2014-15				

1	Research Opportunities in Mechanical Field	14-03-15	Dr. J. P. Modak	Dean R&D, PCE, Nagpur
2	Design Approaches in Mechanical Engineering	16-03-15	Mr. Vishal Shukla	Shri Ramdev College of Engg., Nagpur
3	How to write a project report, How to make PowerPoint presentation	21-02-15	Mr. Arun W. Lele	Sr. Tech. Consultant M. E. P. L. ,Nasik
4	Guideline for writing a final year project report	Sept. 2014	Dr. Manish Deshmukh (PhD Thermal)	S. C. Shahu C. O. E. ,Tathawade, Pune
Academic Year 2013-14				
1	Role & Importance of Workshop Technology in Technical Education	24/01/2015	Dr. R. K. Mandloi	Associate Prof.& Workshop Superintendent, AMNIT Bhopal
Academic Year 2012-13				
1	Manufacturing & CNC	08-09-12	Mr. Shekhar Borole	Bosch Chasis Ltd.
2	Ansys & its industrial application	08-09-12	Mr. Sarang Dev	Executive CAE, Crompton Greeves Ltd, Mumbai
3	Hydraulics & Pneumatics	12-02-13	Prof. S. K. Patil	S.K. Industries, MIDC Akola
4	Automation	12-02-13	Mr. Salgaokar	Director, Technocrats Control Systems
Academic Year 2011-12				
1	Experts Lecture (Technical Paper Writing)	17-09-11	Mr. M. S. Murthy	SSBT's, COET, Jalgaon
2	CAD/CAM	25/02/2012	Mr. Prasanna Joshi	CAD/CAM GURU
3	MBA CET	05-08-11	Mr. Sagar Nikam	Deepsthamb Foundation

Academic Year 2010-11				
1	“IMPORTANCE OF APTITUDE TEST”	20-08-10	Mr. Amit Laddha	Laddha Academy, Jalgaon
2	CAD/CAM/CAE & Job Opportunities	29-01-11	Mr. Prasanna Joshi.	CAD/CAM GURU

Workshops:

Sr. No.	Theme of workshop/STTP	Participants	Academic year	Duration
1	Industrial Automation	S.E., T.E., B.E. Students (Mech. Chemical)	2014-15	2 Days
2	Robotryst	F.E., S.E., T.E.(All Dept.)	2014-15	2 Days
3	Hydraulics & Pneumatics	F.E., S.E., T.E. & B.E.	2013-14	2 Days
4	Soft –Skill Development Program by ‘Rishikool’	All S.E. students	2012-13	3 Days, (From 7-10-12 to 9-10-12)
5	Soft –Skill Training Program by ‘Rishikool’	All T.E. students	2012-13	4 Days , (From 11-10-12 to 14-10-12)
7	Soft –Skill Training Program by ‘Rishikool’	All B.E. students	2012-13	1 Week, (From 10-09-12 to 15-09-12)
8	STTP on CAD ,CAM & CAE	100 participants from various colleges all over India.	2012-13	1 Week, (From 14-01-13 to 19-01-13)
9	STTP on Research Methodology	Faculty & Students of Mechanical & MBA Dept.	2011-12	3 Days, (From 17-10-11 to 19-10-11)

10	Soft skill Development Program by 'Rishikool'	All Students	2011-12	1Week (From 8-09-11 to 12-09-11)
11	Aptitude Training Program by 'Rishikool'	BE Students	2011-12	1 Week (From 2-09-11 to 07-09-11)
12	STTP on Advances in Tribology	All Students	2010-11	25 Oct 2010

Seminars:

Sr. No.	Topic	Academic Year	Duration
1.	Roboclub Activity Seminar	2012-13	One day
2.	UPSC guidance seminar	2011-12	1 day (05-09-2011)

Conferences:

Year	Sr. No.	Conference Name	Names of chief guest and guest of honors with affiliation
2014-15	1	ATSciFi 2K14	1. Mr. Jitendra Lathi, Director SOFTAID Computers 2. Shri Vilas Jain, Managing Director, Divya Marathi daily news paper
	2	MILESTONE 2K15	Dr. V. L. Maheshwari, Dept. of Life science. N.M.U, Jalgaon
2013-14	1	MILESTONE 2K14	Dr. K.B. Patil, N.M.U
2012-13	1	MILESTONE 2K13	Dr. Priti Agrawal, GHR COET, Jalgaon
2011-12	3	MILESTONE 2K12	Dr. L. A. Patil, Pratap College , Amalner

33. Teaching methods adopted to improve student learning

- Class room teaching: The basic teaching method adopted by the teachers is class room teaching in which the teacher delivers lectures. The delivery is supported by electronic audio-video aids.
- Laboratory work: It is also an integral part of the curriculum.

- Assignment: The curriculum also includes assignments for self study encouragement of students.
- Site visits: They are arranged for real world exposure.
- Expert lectures
- Projects
- Seminars
- The teachers are also encouraged to discuss old question papers in classes.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Extension activities:-For the holistic development of the students, they need to be involved in extension activities also. Students generally involve in such activities through following modes- Project, extra-curricular activities and RETC. Projects are integral part of the syllabus. Some students undertake projects which are of direct societal relevance. The college organizes some activities like blood donation camp, cleanliness drive etc and students actively participate in it. The college has also joined a Rural Engineering and Technology Club through which students involve in extension activities.

35. SWOC analysis of the department and Future plans

Strength:

- Admissions are good, though a slowdown is being observed in the economy.
- Dedicated, committed and enthusiastic staff.
- Faculty members have received research grants from various research funding agencies.
- Laboratories are spacious and well ventilated, having area quite more than the AICTE prescribed norms. They are recognized for doctoral research.
- Conducive environment for teaching learning

Weakness:

- Located in rural area.
- Many faculty members have to yet complete their Ph D.
- Faculty specialization diversity needs to be improved.
- Citation, h index, SJR and SNIP of faculty members need to be improved.

- The department needs to organize more number of refresher courses, STTPs etc.

Opportunities:

- The college has acquired 2 (f) and 12(B) status from UGC. Hence the department can grab research funds from UGC.
- The department has got good reputation in the society which is reflected in relatively good admissions in the department. This opportunity can be utilized to fetch quality students.
- The alumni of the department are placed in esteemed organizations in good positions. They can assist the college in enhancing placement of the college.
- The faculty members have done research work on field oriented problems. Their expertise can be used for solving specific technical problems of industries.

Challenges:

- In the city of Jalgaon numbers of engineering colleges are mushrooming up. Hence, admissions are a challenge to the department. It is challenge for the department to up keep its standard for survival.
- There is a Government college located in the heart of the city. The government college has lesser fee. Hence that is preferred by the students. This affects the admission in the department. It is challenge for the department to up keep its standard for survival.
- In Mechanical engineering sector, numbers of Government jobs are being available. Similarly, good private jobs are also available. Hence, the fresh graduates do not have inclination towards teaching profession.
- The location of the college in a rural area and an industrially under developed zone is a challenge.

Future plans of the department: -

- The department is focusing on qualification improvement of faculty members. Department would like other PG faculty members to join doctoral course soon.
- The department would like to enhance its scope of consultancy work and make it broader.
- The department would like to focus on improving the result of its undergraduate and Post graduate students.

- The department would like to organize specialized soft skill development programs for the students so that they get better placement.
- The department would like to organize specialized computer and instrumental skill development programs for the students so that they get better placement.
- The department would like to upgrade its laboratory for research work.

Evaluative Report of the Department

1. Name of the department: Master in Business Administration (MBA)

2. Year of Establishment: 2008-09

3. Names of P r o g r a m m e s / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)- PG : Master in Business Administration (MBA).

4. Names of Interdisciplinary courses and the departments/units involved- Nil

5. Annual/ semester/choice based credit system (programme wise):
Semester

6. Participation of the department in the courses offered by other departments- Nil

7. Courses in collaboration with other universities, industries, foreign institutions, etc.- Nil

8. Details of courses/programmes discontinued (if any) with reasons- Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors	01	--
Associate Professors	02	01
Asst. Professors	05	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. V. S. Rana	B.Com, M.Com, M.B.A, Ph.D (Mgmt Science)	Asst. Professor & Head	Marketing	09 Years (Academic) + 07 Month (Industry)	--
Dr. S. B. Patil	B.Sc (Computer), M.B.M (Computer), Ph.D (Comm & Mgmt.)	Assistant Professor	H.R.M	01 Years (Academic)	--
Mr. P. A. Anawade	B.E (Mech), M.B.A	Asst. Professor	Marketing	06 Years (Academic) + 03 Yrs (Industry)	--
Mr. H. A.	B.Sc(Chem.), M.B.A	Asst. Professor	Finance	07 Years (Academic)	--

Salunkhe					
Ms. R. A. Modiyani	B.B.S, M.B.A	Asst. Professor	Finance	06 Year (Academic)	--
Mr. M. B. Ahirrao	M.Com, M.B.A	Asst Professor	Finance	3.6 Years (Academic) & 03 Yrs (Industry)	--
Ms. F. A. Kazi	M.P.M, M.B.A	Asst Professor	HRM	2.7 Years (Academic) & 02 Yrs (Industry)	--

11. List of senior visiting faculty- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty- Nil

13. Student -Teacher Ratio (programme wise)- 17.14:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled- Sanctioned- 1, Filled- 0

15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ M.Phil / PG.

Details of Qualifications of existing teaching faculty is as shown as follows-

PG: 05 Faculty, Ph.D: 02 Faculty

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received- Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received- Nil

18. Research Centre /facility recognized by the University- Nil

19. Publications:

- **Publication per faculty:** 6.57
- **Number of papers published in peer reviewed journals (national / international) by faculty and students:**
05 national and 23 international paper have been published in last four years (Faculty)
- **Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** 21
- **Monographs:** Nil
- **Chapter in Books:** Nil

- **Books Edited:** Nil
- **Books with ISBN/ISSN numbers with details of publishers:** Nil
- **Citation Index:** 04
- **SNIP:** Nil
- **SJR:** Nil
- **Impact factor:** range/average- 1.4 - 5.049
- **h-index:** 02

20. Areas of consultancy and income generated- Nil

21. Faculty as members in

j) National committees b) International Committees c) Editorial Boards....

- Dr. V. S. Rana is a Life Member of Indian Commerce Association.
- Dr. V. S. Rana is a member of AIMS International-The Association of Indian Management Scholars.
- Mr. M. B. Ahirrao is a member of AIMS International-The Association of Indian Management Scholars.
- Mr. P. A. Anawade is a member of All India Management Association.
- Dr. V. S. Rana is serving as member-Local review committee for the International journal named "Pratibha International Journal of Science, Spirituality, Business and Technology.
- Dr. V. S. Rana is serving as member of review board of International Association of Scientific Innovation & Research (IASIR) Georgia, United States.
- Mr. H. A. Salunkhe is serving as advisory/Editor board member of Associated Asia Research Foundation Asia Journals.
- Mr. H. A. Salunkhe is serving as review board member for the International journal named," International Journal of Innovative Research (IJIR).

22. Student projects

1. Percentage of students who have done in-house projects including inter departmental/programme- Nil

2. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies-

- **Research Laboratories-** Nil

- **Industry-** As per the North Maharashtra university curriculum guidelines of MBA, during the course i.e after SEM-II, all MBA students are required to undergo training of 50 days in any Industry/organizations outside the institution.
- **Other Agencies-** Nil

23. Awards / Recognitions received by faculty and students

- **Faculty-** 01. Dr. Sanjay P. Shekhawat got Best Teacher Award 2013 by Hire Foundation, Nasik.
- **Students-** Some of the MBA students have won awards/prizes in paper presentation and in few management programs/events organized by other MBA institutes.

24. List of eminent academicians and scientists / visitors to the department

Name of the Academicians/Visitors	Designation
Dr. Anil P. Dongre	Professor, School of Management Studies, North Maharashtra University, Jalgaon
Prof. Dr. P. W. Kale	Dean- Commerce Faculty, Sant Gadge Baba University, Amravati.
CA Kaushal Mundada	Chartered Accountant & Chairman- Western India Chartered Accountants Student Association- Jalgaon Branch
Dr. V. P. Sonwane	Former Unit Head-Crompton Greaves, Jalgaon.
Mr. Sameer Jain	Managing Director- Master Line Lubricants Pvt. Ltd., Bhadgaon, District- Jalgaon
Dr. Arvind Chaudhari	Prof. P. O. Nahata College, Bhusawal
Prof. B. J. Lathi	KCE's Institute of Management and Research, Jalgaon
Mr. R. B. Jain	General Manager- Bosch Chassis Systems Ltd, Jalgaon
Mr. D. D. Bachchav	Owner-Satpuda Automobiles Pvt. Ltd., Jalgaon

25. Seminars/ Conferences/Workshops organized & the source of funding

a.National

Sr. No.	Event/Programme	Date	Source of Funding
01	National Workshop on, “Research Methodology” jointly organized by MBA department and Mechanical Engineering department of SSBT COET, Jalgaon	17-19 October 2011	SSBTs COET, Bambhori, Jalgaon

b.International-

Sr. No.	Event	Date	Source of Funding	Number of Participants
1	International Conference on Global Trends in Engineering, Technology and Management	9-11 Jan. 2015	SSBT's College of Engg. & Tech., Bambhori Jalgaon	127

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received (admitted)	Selected	Enrolled		Pass percentage
			*M	*F	
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*M = Male *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
Master in Business Administration (MBA)	100 %	Nil	Nil

28.How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.

- Nil

29.Student progression

Student Progression	Against % Enrolled
UG to PG	NA
PG to M. Phil	NA
PG to Ph. D.	5.45
Ph.D. to Post-Doctoral	---
Employed	7.6 %
• Campus Selection • Other than Campus Recruitment	Nil
Entrepreneurs/ Self Employed	Nil

30.Details of Infrastructural facilities

k) Library

- Total area of the Library- 40 Sqm.

Particular	Number
Books	158
Project Reports	Available (Last 4 Years)
Question Papers	Available

l) Internet facilities for Staff & Students-

60 Mbps (1:1), Wi-Fi is available in MBA department.

m) Class rooms with ICT facility- Yes (02 Class Room). Two projectors are available in the department, two are fixed and one is movable.

n) Laboratories-

Sr. No	Laboratory Name	Area (in Sqm)
01	Computer Lab	102

31.Number of students receiving financial assistance from college, university, government or other agencies-

Sr No	Type of Assistance and Yea	OBC Scholarship	SC	ST	SBC	NT
1	2011-12	35	04	00	02	06

2	2012-13	48	08	00	04	07
3	2013-14	32	04	00	03	06
4	2014-15	16	02	00	00	04
5	2015-16	--	--	--	--	--

32.Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Programme	Name of Event	In association with/recourse person
2015-16			
1	Expert Lecture	Financial Current Scenario & Mutual Fund	Mr. Vaibhave Sonawane
2	Expert Lecture	Career Opportunities in Insurance Sector	Mr. Arun Mahajan
3	Expert Lecture	HR Practices & Labour Law	Prof. M.K. Godbole
4	Induction Function (Soft skill training)	Personality Enrichment Programme	Mr. Dilip Pinto & Ms. Nikshikha Shetty (Impressions Consulting, Mumbai)
2014-15			
1	Expert Lecture	Incidences of Modern Globalization-Historic and current review	Dr.Anil P.Dongre (Professor-School of Mgmt Studies, NMU, Jalgaon)
2	Workshop	Stock Market Investment	CS Chetan Gandhi, Mumbai.

3	Student Training Programme	Advanced Excel	CA Darshan Jain and CA Kaushal Mundada
2013-14			
1	Expert Lecture	Corporate Social Responsibility: An Overview	Dr. Prashant Bhosale- (College of Social Work, Jalgaon)
2	Expert Lecture	Marketing Strategies of Telecom sector in changing scenario	Mr.Prashant Mastai (Manager-Airtel Ltd, NMU region)
3	Induction Function	Opportunities in corporate sector	Mr. Dinesh Desai (PRO-Jain Irrigation System Ltd, Jalgaon)
4	Workshop	Sources of finance for MSME's	Mr. Prakash Pandya & Mr.Srinivasan (Regional Officer- ICSI-WIRO, Mumbai)
2012-13			
1	Expert Lecture	Importance of Hypothesis Testing using SPSS software	Dr. Parag Narkhede
2	B-Storm (University level Management event)	Employability	Mr. Vivek Sad (Manager-Customer Account, Jain Irrigation Systems Ltd, Jalgaon)
3	Expert Lecture	Opportunities in Rural Entrepreneurship	Mr. Suyog Jain- Director (Master Line Lubricants Pvt Ltd, Bhadgaon, Dist.Jalgaon)

2011-12			
1	Expert Lecture	Goal Setting	Mr. Rohit Mishra (Manager-HDFC Mutual Fund, Jalgaon)
2	Induction Function	Case Study in HRM	Mr. Shankar Chakraborty (Manager-Nilons Ltd, Jalgaon)
3	Induction Function	Case Study of Satpuda Automobiles	Mr.D.D.Bachchav (Owner-Satpuda Automobiles Pvt Ltd, Jalgaon)

33. Teaching methods adopted to improve student learning-

- Teaching through power point presentations using LCD projectors.
- Teaching is supplemented with “discussion and interaction” wherever needed.
- Teaching through practical examples and through case study, group discussions/debate etc.
- Teaching through field work activity for e.g- Survey, SIP and CSR activities.
- Teaching through industrial visits, guest/expert lecturers of industry experts.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities-

The MBA department has a CSR Cell in which every year the students along with staff organizes various CSR activities for society which includes-

Year	Title of CSR Activity	Description
2015-16	Free vehicle PUC check up camp	With an object to create awareness about impact of vehicle pollution on environment and human being and As a part of university curriculum the MBA dept organized free vehicle PUC check up camp for two wheelers in Stadium Complex, Jalgaon city.
2014-15	"Swacchh Bharat Nirogi Bharat"	Social Awareness camp on hygienic food preparation habits among Street Food Vendors in Jalgaon City. MBA-I & II Students distributed free Polythene hand glows and insisted people to adopt hygienic food preparation habits.
2013-14	"Premdan"- Visit to Old age Home	In this activity the MBA students spent 1 day with old Age People at Matoshri Vridhhashram, Near Girana Pumping Station, Jalgaon. Students offered one time lunch and entertained them by singing songs & Poems.
2012-13	"Social Street Marketing"	This activity was actually social awareness camp on environmental Issues. In this activity the MBA students distributed handmade news paper eco-friendly bag absolutely free to people in Jalgaon City. The students distributed the bags in market place, college square, ST bus Stand, Railway station, Vegetable markets etc.
2011-12	"Visit to Remand Home- Jalgaon"	The MBA Department donated 100 steel glass & 12 steel buckets to children at Remand Home on the occasion of Children's Day. The objective of this project to contribute to

		the weaker section of society on the occasion of Children Day.

35. SWOC analysis of the department and Future plans

Strengths

- Qualified, experienced and dedicated faculty members
- State of the art infrastructure facilities
- Conducive environment for teaching learning

Weaknesses

- Located in rural area
- Less industrial exposure and placement

Opportunities

- Industry-Institute Interaction
- Rapidly changing technology
- Scope to create interest about entrepreneurship among students.

Challenges

- Attract meritorious students
- Achieving better student placements

Future plans of the MBA department.

- To increase MOU with industries.
- To improve placement ratio.

Evaluative Report of the Department

1. Name of the department: Applied Science

2. Year of Establishment: 1983

3. Names of Programmes / Courses offered:

Programme of Study	Description
First year of 8 branches	660

4. Names of Interdisciplinary courses and the departments/units involved:

ECEME (Civil & Mechanical Engineering), EDEME (Mechanical Engineering), Computer Programming (Computer Engineering), EEEE (E & TC Engineering).

5. Annual/ semester/choice based credit system (Programme wise):

Semester based system

6. Participation of the department in the courses offered by other departments: Engineering Mathematics-III

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: No

9. Number of teaching posts:

	Sanctioned	Filled
Professor	01	01
Associate Professor	--	--
Assistant Professor	16	16

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experiences	No. of Ph.D./ Students Guided for the last 4years
1	Dr. Motilal N. Panigrahi	Ph.D, M. Phil Maths	Professor & HOD	Mathematics	18	--
2	Dr. K. S. Patil	M. Sc. (Physics) Ph.D	Asstt.Prof	Physics	16	--
3	Y. K. Chitte	M.A. (English)	Asstt.Prof	English	18	--
4	Mahendra B. Patil	M.Sc. (Physics)	Asstt.Prof	Physics	6	--
5	Miss. Sunita S. Patil	M.Sc.Maths M.Phil	Asstt.Prof	Mathematics	15	--
6	C.U. Nikam	M.Sc. (Physics)	Asstt.Prof	Physics	11	--
7	Ms. Deepmala I. Desai	M.Sc. (Chemistry) M.Phil	Asstt.Prof	Chemistry	6	--
8	Ms. Meera V. Deshpande	M.Sc.Maths M.Phil	Asstt.Prof	Mathematics	12	--
9	Parag Vijay Patil	M. Sc. (Maths)	Asstt.Prof	Mathematics	8	--
10	Nago Bhika Bhoi	M.A. (English)	Asstt.Prof	English	6	--
11	Mali Anil Raju	M.Sc. (Chemistry)	Asstt.Prof	English	5	--
12	Ujjwalsing T. Patil	M.Sc. (Org. Chemistry)	Asstt.Prof	Chemistry	5	--
13	Avinash V. Khambayat	M. Sc. (Maths) M.Phil(Maths)	Asstt.Prof	Mathematics	15	--
14	Mrs. Hemlata A. Wani	M.Sc. (Analytical Chemistry) M.Phil (Chemistry)	Asstt.Prof	Chemistry	9.5	--

15	Mr. S. B. Ahire	M.A. English	Asstt.Prof	English	3	--
16	Ms. Renuka Amrutlal Kukkar	M. Sc. (Maths)	Asstt.Prof	Maths	2.5	--
17	Ms. Reema Adakmol	M.A. English	Asstt.Prof	English	0.3	--

11. List of senior visiting

Faculty: NIL

12. Percentage of lectures delivered and practical classes handled (programme wise) by Temporary faculty:

Year	Percentage of lectures delivered and practical classes
2010-11	20%
2011-12	27.88%
2012-13	35.20%
2013-14	28.32%
2014-15	39.80%
2015-16	39.92%

13. Student -Teacher Ratio (programme wise): 39:1

14. Number of academic support staff (technical) and administrative staff; Sanctioned and filled:

Sanctioned: 02 Filled: 02

15. Qualifications of teaching faculty with D Sc/ D. Litt/ Ph. D/ M Phil/PG.:

Ph. D: 02, M.Phil: 05

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr. No.	Name of the funding agency	Name of Faculty Member	Amount received in Rs.

1	Shram Sadhana Research Promotion Scheme Title:-Novel procedure to study tunable electronic property of Nano- PANI/Tio2 for super capacitor application Date of Submission –Sept 2013	Dr. K. S Patil Dr. P. H. Zope Dr. M. Panigrahi	1,80,000/-
2	Shram Sadhana Research Promotion Scheme Title:-Investigate Effect of Anodized Titania Nanotube for Sensor and Dye-Sensitized Solar Cells. Date of Submission –Sept 2014	Dr. P. H. Zope Dr. K. S Patil Dr. M. Panigrahi	1,98,000/-
3	Vice-Chancellor Research Motivation Scheme Title:-Novel Idea To Fabricate Optimized Thermoelectric Generator Using Organic And Polymeric Nano Composites. Date of Submission – Nov 2014	Dr. K. S Patil Dr. P. H. Zope	70,000/-
4	Vice-Chancellor Research Motivation Scheme Title:- Direct Synthesis Of Highly Conductive Polymer / Graphene Composites And Their Application For DSSC. Date of Submission – Nov 2014	Dr. P. H. Zope Dr. K. S Patil	70,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: NIL

18. Research Centre /facility recognized by the University: NIL

19. Publications:

a) Publication per faculty

- **Number of papers published in peer reviewed journals (National/International) by faculty and students**
21 have been published in international journals in last four years.
- **Number of publication listed in international database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database -**

International Social Sciences Directory, EBSCO host, etc.)

NIL

- **Monographs** : Nil
- **Chapters in Books** : Nil
- **Books Edited** : Nil
- **Books with ISBN/ISSN numbers with details of publishers**

Sr. No	Book	Authors	Title	ISBN/ISSN	Publisher	Year
1	01	Dr. M Panigrahi	Engg. Mathematics I	978-81-909164-16-3	Prakash Publication	Aug-2012
2	01	Dr. K S Patil	Engg. Physics II	978-93-82448-96-9	Nirali Publication	2012-13

Citation Index

Dr. M. Panigrahi Citation Index 51

- **SNIP**
Nil
- **SJR**
Nil
- **Impact Factor**
Range 2-3
- **h-index**

Dr. M. Panigrahi h- index 03

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National Committees:-NIL

b) International Committees:-NIL

c) Editorial Boards:-

Dr. M. Panigrahi		
Sr.No.	Professional Bodies	Role

1	IJSSBT (International Journal)	Local Review Committee

22. Student projects:

- Percentage of students who have done in-house projects including inter-departmental/programme : NA
- Percentage of students placed for projects in organization outside the institution i.e. in research laboratories/agencies/industry : NA

23. Awards / Recognitions received by faculty and students

Faculty: - Nil

Doctoral / post-doctoral fellows: - 04 Doctoral fellows.

Students: - (Number) the students have won awards/prizes in paper presentation, project contests etc.

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Name of eminent personality	Name of Institute/Industries
1	Dr. Sarita Nemani	Associate Professor & Chair Mathematics & Computer Science, Georgian Court University, 900 Lakewood Avenue, Lakewood NJ 08701
2	Dr. Geetanjali Panda	Associate Professor, Dept of Mathematics, IIT Kharagpur, Kharagpur, W.B. 721302
3	Dr. Sudhir U. Meshram	Vice Chancellor, North Maharashtra University , Jalgaon.
4	Dr. A. M. Mahajan	The Registrar North Maharashtra University, Jalgaon.
5	Dr. Bibhudatta Mishra	Associate Professor & Head, Department of Mathematics Birla Institute of Technology & Science, Pilani Hyderabad Campus, Jawahar Nagar Shamirpeet Mandal, Ranga Reddy Dist Telangana - 500078

6	Dr. Sushanta Kumar Kamilla	Associate Professor, Department of Physics, Institute of Technical Education and Research, S“O“A University, Bhubaneswar (Odisha).
7	Dr. Shrimant Kumar Sahu	Diabetologist, J Watumull Global Hospital & Research Centre, Mt. Abu, (Rajasthan)
8	Mr. Ankit Tiwari	Investor Service Cell National Stock Exchange’s, Ahmedabad RO
9	Dr. R. P. Singh	Principal, SGBCOET, Bhusaval.
10	Dr. J. N. Chaudhury	Professor, M. J. College Jalgaon.
11	Dr. C. T. Aage	Professor, NMU Jalgaon.

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National:

b) International Conferences:

- Dr. M. Panigrahi, Head of the Department of Applied Science, worked as Convener in 1st International conference on “Mathematical Modeling and Optimization Techniques in Science and Engineering” 2013 during JULY, 26 & 27, 2013 at SSBT’s, COET, Bambhori, Jalgaon.

- Dr. M. Panigrahi, Head of the Department of Applied Science, worked as a event management chair in International Conference on Global Trends in Engineering, Technology and Management (ICGTETM 2015) during January 9 to 11, 2015 at SSBT’s, COET, Bambhori, Jalgaon.

Sr. No.	Event	Date	Source of Funding
1.	1 st International conference on “Mathematical Modeling and Optimization Techniques in Science and Engineering”.	JULY, 26 & 27, 2013	SSBTs COET, Bambhori

c. Workshop

Sr. No	Event	Date	Source of Funding
1	Confidence building	17.10.2015	SSBTs

	Workshop		COET,Bambhori
2	Art of Living camp	29.01.2013 to 03.02.2013	SSBTs COET,Bambhori
3	Workshop on Disaster management	11.02.2013	SSBTs COET,Bambhori

26. Student profile programme/course wise

Name of the Programme (Refer to question no. 4)	Applications received	Selected	Enrolled	
			*M	*F
2015-16	572	572	421	151
2014-15	610	610	432	178
2013-14	665	665	454	211
2012-13	606	606	423	183
2011-12	612	612	467	145

27. Diversity of Students:

Name of the Course /Programme:

Name of Course	Year	% of students from same state	% of students from different state	% of students from abroad
FE	2015-16	96%	4%	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? (14-15): NA

29. Student Progression

Student Progression	Against % enrolled
UG to PG	---
PG to M. Phil	---
PG to Ph. D.	----
Campus selection	---
Other than campus recruitment	---
Entrepreneurs/ Self Employed	---

30. Details of Infrastructural facilities:

a) Departmental Library: 87 books

b) Internet facilities for Staff and Students:

60 Mbps (1:1) Internet through Ethernet and Wi-Fi is available in the Department. All laboratories are providing internet access. HODs and all staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

c) Class Rooms with ICT facility:

Total number of classrooms: 10

04 projectors are available in the department, one is fixed in G-34 and three are movable.

d) Laboratories:

Total number of Laboratories = 04

Lab No.	Laboratory Name	Area
1	Engg. Physics Lab.	153
2	Engg. Chemistry Lab.	135
3	Language Lab.	135
4	Environmental Lab. & Mathematics Lab.	135

31. Number of students receiving financial assistance from college, university, government or other agencies.

Number of students receiving financial assistance from government during last five years:

Year	SC	ST	OBC	EBC	VJ/NT	SBC	Minority	other	Total
2014-15	53	05	275	36	62	19	20	00	470

The beneficiaries of Shram Sadhana Scholarship Scheme:

Sr.No.	Name of students	Year	Branch	Amount
1	Pratik Popat Chaudhari	2015-16	FE Mech.	3000/-
2	Jadhav Laxman Anil	2015-16	FE Bio.	3000/-
3	Ashwini S. Mahale	2015-16	FE Bio	3000/-
4	Sumit C. Patil	2015-16	FE Computer	17250/-
5	Hardeep B. Jethwani	2015-16	FE Computer	9000/-
6	Bagul Sagar Bhagwan	2015-16	FE Mech.	9000/-
7	Shoaid Khan	2015-16	FE Mech.	9000/-

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

a. Workshop

Academic Year	Name of Programme	Experts	Number of Students participated	Date of programme	venue	National/ International /or any other
2015-16	Confidence building Workshop	Mr. D.C. Gokhale Mrs. R. D. Gokhale	140	17.10.2015	SSBT's COET	Oneday workshop
2012-13	Art of Living Camp	Mr. Chirag Patil Mr. Dhiraj Patil	190	29.01.2013 to 03.02.2013	SSBT's COET	One Week workshop

	Workshop on Disaster Management	Mr. N. P. Rawal Mr. Nandkishor Pandya Mr. Vinod P Dhage	600	11.02.2013	SSBT's COET	Oneday workshop

b. Science Exhibition

Every year University level Science Exhibition is organized by Department of Applied Science on Science day 28th February.

33. Teaching methods adopted to improve student learning (Select which are applicable for department)

- **Interactive Learning:** Interactive instructional strategies aim to strengthen observational skills, listening skills, communication skills, and interpersonal skills of the students. Every teacher ensures that the classroom climate is very conducive in which students feel free to contribute and debate their ideas. Interactive instructional strategies adopted are brainstorming, Question - Answer session, picture prompt, problem-solving, storytelling, starting each session with Recall, Summarize, Question, Connect, and Comment, What/How/Why Outlines, use of youtube videos embedded into PPT etc.
- **Collaborative Learning:** Discussion during theory and practical sessions.
- **Independent Learning:** Students are motivated for independent learning by providing online learning resources.
- **Cooperative Learning:** During practical sessions, individuals seek outcomes that are beneficial to themselves and other group members.
- **Problem-based Learning:** In mathematics tutorials, students are engaged in complex and challenging problems and collaboratively work towards the solution.
- **Peer Instruction:** Lectures are interspersed with questions to expose common difficulties in understanding or in writing skills in examinations. Students are allowed to think about it and discuss the answer in the session.

34. Participation in Institutional Social Responsibilities and Extension Activities

For the holistic development of the students, they need to be involved in extension activities also. Students generally involved in such activities through following modes-

Science Exhibition, extra-curricular activities such as Tree Plantation Programme, etc.

The college organizes some activities like blood donation camp, cleanliness drive etc. and students actively participate in it.

35. SWOC Analysis of the Department and Future plans

Strength:

- Excellent and consistent tradition of result
- State-of-art Laboratories and infrastructure
- Co-curricular and Extra-curricular activities for all round development.

Weakness:

- Admission of students having low merit.
- Unable to attract international students.

Opportunities:

- As college has acquired 2(f) and 12(B) status from UGC, the department can grab research funds from UGC.
- To upgrade the knowledge as new technologies are emerging.

Challenges:

- To make the students to stand out in the competitive world.
- Lack of communication skill among the students

Future plans of the department.

- To be recognized as a center of excellence in basics science & engineering.



Shram Sadhana Bombay Trust's
COLLEGE OF ENGINEERING AND TECHNOLOGY
BAMBHORI, POST BOX NO. 94, JALGAON – 425001. (M.S.)
Included under section 2 (f) & 12 (B) of the UGC Act, 1956
ISO 9001: 2008 certified

Website- www.sscoetjalgaon.ac.in
Email: sscoetjal@gmail.com
Principal: Dr. K.S.Wani
M. Tech, DBM, Ph.D.

Phone No. (0257) 2258393
Fax No. (0257) 2258392

Ref. : COET/*NAC* / 2028 / 10 / 15

Date :28/10/2015

DECLARATION BY THE HEAD OF THE INSTITUTION

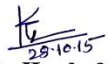
I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer tem will validate the information provided in this SSR during the peer team visit.



Place : Jalgaon.
Date: 28/10/2015


Signature of the Head of the institution
PRINCIPAL

SSBT's College of Engg. & Technology
Bambhori, Jalgaon-425001(M.S.)



Shram Sadhana Bombay Trust's
COLLEGE OF ENGINEERING AND TECHNOLOGY
BAMBHORI, POST BOX NO. 94, JALGAON - 425001. (M.S.)
Included under section 2 (f) & 12 (B) of the UGC Act, 1956
ISO 9001: 2008 certified

Website- www.ssoetjalgaon.ac.in
Email: ssoetjal@gmail.com
Principal: Dr. K.S.Wani
M. Tech, DBM, Ph.D.

Phone No. (0257) 2258393
Fax No. (0257) 2258392

Ref. : COET/NAAC/2027/10 /15

Date :28/10/2015

Certificate of Compliance

This is to certify that SSBT's College of Engineering and Technology, Bambhori, fulfils all norms

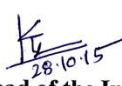
1. Stipulated by the affiliating University and/or
 2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc] and
 3. The affiliation and recognition [if applicable] is valid as on date.
- In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 28/10/2015
Place: Jalgaon




Principal / Head of the Institution
(Dr. K.S.Wani)
PRINCIPAL
SSBT's College of Engg. & Technology
Bambhori, Jalgaon-425001(M.S.)

UG Programs - Engineering: Bio-Technology*, Chemical*, Civil*, Computer, Electrical, Electronics & Telecommunication*, Information Technology, Mechanical
PG Programs - Engineering: Civil, Computer, Electrical, Electronics & Telecommunication, Mechanical
- Management: MBA
* NBA Accredited

Annexure-I: Approval of Courses of Affiliating University

2015 North Maharashtra University, Jalgaon : OAASIS (Affiliation Online)

प्रत्येक माहितीसाठी तसेच सुटीस कार्यावाहीसाठी :-

- १) मा. अवर सचिव, महाराष्ट्र शासन, उच्च व तंत्र शिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई-३२
- २) मा. शिक्षण संचालक, तंत्र शिक्षण, तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य, ३, महापालिका मार्ग, पत्रगोदी क्रमांक ११३३, मुंबई - १
- ३) मा. सहसंचालक, तंत्र शिक्षण, विभागीय कार्यालय, सविन शामकीय तंत्र विज्ञान परिसर, पो.वॉ.क्र.२१९, सामनगांव रोड, नाशिक रोड, नाशिक
- ४) मा. परीक्षा नियंत्रक, उ.म.वि., जळगांव
- ५) मा. पदवी शिक्षक, संगणक विभाग, उ.म.वि., जळगांव
- ६) मा. उप/सहा. कुलसचिव, संबंधित विद्याशाखा, परीक्षा विभाग, उ.म.वि., जळगांव
- ७) मा. सहा. कुलसचिव, प्रदेश पात्रता व अभ्यासमंडळ विभाग, उमवि, जळगांव
- ८) मा. समन्वयक, ई मुद्रिका केंद्र, उमवि, जळगांव

जा.क्र. उमवि/प/नृतनी/वे.वि.२०१५-१६/ सी.ओ. 8/ 185/२०१५. दिनांक : 27-04-2015 चे सहपत्र
अंतिमिक वर्षी २०१५-१६ करिता नृतनीकरण / नैमित्तिक विस्ताराच्या मान्यतेचाचतथा तक्ता

Name of College / Recognized Institute	Details of Additional Division for Nutanikaran for A.Y 2015-16 [As per Proposal]	Details of Courses/Subjects for Nutanikaran for A.Y 2015-16 [As per Proposal]	Details of Courses/Subjects for Natural Growth for A.Y 2015-16 [As per Proposal]	Approval of University to Continuation of Affiliation / Natural Growth for A.Y 2015-16	Remarks of University regarding admission for A.Y. 2015-16
01	02	03	04	05	06
E100007] SHRAM SADHNA BOMBAY TRUST SANCHLIT COLLEGE OF ENGINEERING AND TECHNOLOGY BAMBHORI Tal. Dharangaon Dist. Jalgaon	M.B.A - First Year - 1[60] M.B.A - Second Year - 1[60] B.E. (BIO TECHNOLOGY) - First Year - 1[30] B.E. (BIO TECHNOLOGY) - Second Year - 1[30] B.E. (BIO TECHNOLOGY) - Third Year - 1[30] B.E. (BIO TECHNOLOGY) - Fourth Year - 1[30] B.E. (CIVIL) - First Year - 2[90] B.E. (CIVIL) - Second Year - 2[80] B.E. (CIVIL) - Third Year - 1[30] B.E. (CIVIL) - Fourth Year - 1[30] M.E. (CIVIL) ENVIRONMENTAL ENGINEERING - First Year - 1[18] M.E. (CIVIL) ENVIRONMENTAL ENGINEERING -	M.B.A - First Year - All Compulsory Subjects - 60 M.B.A - Second Year - All Compulsory Subjects - 60 B.E. (BIO TECHNOLOGY) - First Year - All Compulsory Subjects - 30 B.E. (BIO TECHNOLOGY) - Second Year - All Compulsory Subjects - 30 B.E. (BIO TECHNOLOGY) - Third Year - All Compulsory Subjects - 30 B.E. (BIO TECHNOLOGY) - Fourth Year - All Compulsory Subjects - 30 B.E. (CIVIL) - Third Year - All Compulsory Subjects - 90 B.E. (CIVIL) - Second Year - All Compulsory Subjects - 90 B.E. (CIVIL) - Third	Third Year-B.E. (CIVIL) [All Compulsory Subjects Compulsory-60	Continuation of Affiliation/Natural Growth, as mentioned in column no. 02,03 & 04 of the chart has been granted for Academic Year 2015-16.	The College be considered for Centralized Admission process.

M.E (COMPUTER SCIENCE & ENGG.) - First Year - 1[18]	B.E. (CIVIL) - Fourth Year - All Compulsory Subjects - 30
M.E (COMPUTER SCIENCE & ENGG.) - Second Year - 1[18]	M.E. (CIVIL) ENVIRONMENTAL ENGINEERING - First Year - All Compulsory Subjects - 18
M.E. (ELECTRONICS & TELICOMM) DIGITAL ELECTRONICS - First Year - 1[18]	M.E. (CIVIL) ENVIRONMENTAL ENGINEERING - Second Year - All Compulsory Subjects - 18
M.E. (ELECTRONICS & TELICOMM) DIGITAL ELECTRONICS - Second Year - 1[18]	M.E. (COMPUTER SCIENCE & ENGG.) - First Year - All Compulsory Subjects - 18
M.E. (MECHANICAL) MACHINE DESIGN - First Year - 1[18]	M.E. (COMPUTER SCIENCE & ENGG.) - Second Year - All Compulsory Subjects - 18
M.E. (MECHANICAL) MACHINE DESIGN - Second Year - 1[18]	M.E. (ELECTRONICS & TELICOMM) DIGITAL ELECTRONICS - First Year - All Compulsory Subjects - 18
M.E. ELECTRICAL POWER SYSTEM - First Year - 1[18]	M.E. (ELECTRONICS & TELICOMM) DIGITAL ELECTRONICS - Second Year - All Compulsory Subjects - 18
M.E. ELECTRICAL POWER SYSTEM - Second Year - 1[18]	M.E. (MECHANICAL) MACHINE DESIGN - First Year - All Compulsory Subjects - 18
	M.E. (MECHANICAL) MACHINE DESIGN - Second Year - All Compulsory Subjects - 18
	M.E. ELECTRICAL POWER SYSTEM - First Year - All Compulsory Subjects - 18
	M.E. ELECTRICAL POWER SYSTEM - Second Year - All Compulsory Subjects - 18

Annexure-II: UGC 2(f) and 12B Certificate

Ph. 22286351, 22287001, 22287721, 22284116
22287333, 22287317, 22286738, 22289457
UGC Website: www.ugc.ac.in



विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002 **126**
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F.8-40/2008 (CPP-I)

May, 2008

The Registrar,
North Maharashtra University,
Jalgaon-425 001 (M.S.)

2 JUN 2008

Sub:- List of Colleges prepared under Section 2 (f) of the UGC Act, 1956- Inclusion of New Colleges.

Sir,

I am directed to refer to the letter No. COET/UGC/08 dated 10.05.2008 received from the Principal, Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon (M.S) on the subject cited above and to say that the name of the following College has been included in the list of Colleges prepared under Section 2 (f) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Bachelor's Degree:-

Name of the College	Year of Establishment	Remarks
Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon-425 001 (M.S) (On temporary affiliation)	1983	The College is <u>not</u> eligible to receive Central assistance in terms of the Rules framed under Section 12 (B) of the UGC Act, 1956.

The Indemnity Bond and other documents submitted in respect of the above College have been accepted by the Commission.

Yours faithfully,

(P.K. Sharma)
Under Secretary

Copy forwarded to:-

1. The Principal, Ranibai Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon (M.S).
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary Education & Higher Education, Shastri Bhavan, New Delhi-110 001.
3. The Secretary, Government of Maharashtra, Higher Education Department, Mumbai (M.S).
4. The Additional Secretary, UGC, Western Regional Office, Ganeshkhind, Poona University Campus, Pune (M.S)-411 007.
5. Publication Officer, UGC-Website, New Delhi.
6. Section Officer (F.D.-III Section) U.G.C., New Delhi.
7. All Sections, U.G.C, New Delhi.
8. Guard file.

Ph. 23236351, 23232701, 23237721
23234116, 23235733, 23232317
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)
UGC Website: www.ugc.ac.in



बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

127
To, D.R. 12001/R.R. Pahl
for J.R.R.
February, 2012
1 MAR 2012

F. No. 8-40/2008 (CPP-I/C)

The Registrar,
North Maharashtra University,
P.B. No. 80, Umavi Nagar,
Jalgaon - 425 001,
Maharashtra.

Sub: - Change the status of the College under Section 12 (B) of the UGC Act, 1956.

Sir,

In supersession of this office letter of even No. dated 23.09.2010 on the above subject and to say that Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon - 425 001, (Maharashtra) is **un-aided/self financed college and permanently** affiliated to **North Maharashtra University** and the name of aforesaid college has been included in the list of colleges prepared under Section 12 (B) of the UGC Act, 1956 under the head 'Non-Government, self financed Colleges teaching upto Bachelor's Degree' to make it eligible to receive Central assistance from sources other than UGC:-

Name of the College	Year of Establishment	Remarks
Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon - 425 001, (Maharashtra).	1983	As the College is charging fee as per University norms and a certificate in this regard has been received in UGC. The College would also be eligible to get grant for all UGC schemes related to teachers and students only as per the decision of the Commission dated 8 th July 2011.

The documents submitted in respect of the above College have been accepted by the University Grants Commission. The earlier letter dated 23.09.2010 may please be treated as cancelled.

Yours faithfully,

Shashi
(Shashi Bala Arora)
Under Secretary

Copy to:-

1. The Principal, Shram Sadhana Bombay Trust's College of Engineering and Technology, Bambhori Post Box No. 94, Jalgaon - 425 001, (Maharashtra).
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi - 110 001.
3. The Principal Secretary, Tech. & Higher Education Department, Government of Maharashtra, Mantralaya, Annexe Building, Mumbai - 400 032 (Maharashtra).
4. The Deputy Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona - 411 007, (Maharashtra).
5. Publication Officer (Website-UGC), New Delhi.
6. Section Officer (F.D.III Section), UGC, New Delhi.

Annexure-III: ISO 9001 – 2008 Certificate



Annexure-IV: NBA Accreditation Letter

File No. 28-235/2010-NBA

Dated: October 01, 2014

To,

The Principal/Director
Shram Sadhna Bombay Trust's
College of Engineering & Technology,
Post Box No. 94, N.H.6,
Bambhori, Jalgaon,
Maharashtra -425001

Subject: Accreditation status of programmes applied by Shram Sadhna Bombay Trust's, College of Engineering & Technology, Post Box No. 94, N.H. 6., Bambhori, Jalagaon, M.S.-425001, M.S

Sir,

This has reference to your applications dated 27/02/2013 and 18/03/2013 in **Tier-II format** seeking accreditation by National Board of Accreditation to Engineering programmes offered by Shram Sadhna Bombay Trust's, College of Engineering & Technology, Post Box No. 94, N.H. 6., Bambhori, Jalagaon, M.S.-425001

2. Two Expert Teams conducted an on-site evaluation of the programmes during 28th – 30th March, 2014 and 18th-20th April 2014. The reports submitted by the Expert Teams were considered by the concerned Committees constituted for the purpose in NBA. The competent authority has approved the following accreditation status to the programmes as given in the table below:

Sl. No.	Name of the Programme	Basis of Evaluation	Accreditation Status	Period of validity w.e.f. 01-07-2014	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1	UG-Civil Engineering	Tier II Document	Provisionally accredited.	2 years	Accreditation status granted is valid for the period indicated in Col.5 or till the program has the approval of the competent authority, whichever is earlier.
2.	UG- Biotechnology		Provisionally accredited.	2 years	
3.	UG- Chemical Engineering		Provisionally accredited.	2 years	
4.	UG- Electronics and Telecommunication Engineering		Provisionally accredited.	2 years	

The accreditation status awarded to the programmes as indicated in the above table does not imply that the accreditation has been granted to Shram Sadhna Bombay Trust's, College of Engineering & Technology, Post Box No. 94, N.H. 6., Bambhori, Jalagaon, M.S.-425001 as a whole. As such the Institute should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is programme accreditation and not Institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the programme(s) accredited, level of programmes and the period of validity of accreditation, as well as the date from which the accreditation is effective, should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

contd..2/-

File No. 28-235/2010-NBA

Dated: October 01, 2014

To,

The Principal/Director
Shram Sadhna Bombay Trust's
College of Engineering & Technology,
Post Box No. 94, N.H. 6,
Bambhori, Jalgaon,
Maharashtra -425001

Subject: Accreditation status of programmes applied by Shram Sadhna Bombay Trust's, College of Engineering & Technology, Post Box No. 94, N.H. 6., Bambhori, Jalagaon, M.S.-425001

Sir,

1. This has reference to your applications dated 27/02/2013 and 18/03/2013 in **Tier-II format** seeking accreditation by National Board of Accreditation to Engineering programmes offered by Shram Sadhna Bombay Trust's, College of Engineering & Technology, Post Box No. 94, N.H. 6., Bambhori, Jalagaon, M.S.-425001
2. Two Expert Teams conducted an on-site evaluation of the programmes during 28th – 30th March, 2014 and 18th-20th April 2014.. The reports submitted by the Expert Teams were considered by the concerned Committees constituted for the purpose in NBA. The competent authority has approved the following accreditation status to the programmes as given in the table below:

Sl. No.	Name of the Programme	Basis of Evaluation	Accreditation Status
(1)	(2)	(3)	(4)
1.	UG- Computer Engineering	Tier II Document	Not accredited (618 marks given by visiting team reduced to 582 as attainment of PEOs adversely affected due to non-availability of qualified senior faculty. PO affected by non-availability of qualified senior faculty)
2.	UG- Information Technology		Not accredited (615 marks given by visiting team reduced to 577 as attainment of PEOs adversely affected due to non- availability of qualified senior faculty. PO affected by non-availability of qualified senior faculty)
3.	UG- Electrical Engineering		Not accredited (622 marks given by visiting team reduced to 586 as Programme Educational Objectives and Programme Outcomes are adversely affected due to non-availability of competent faculty.)
4.	UG. Mechanical Engineering		Not accredited (615 marks given by visiting team reduced to 588 as Programme Educational Objectives and Programme Outcomes are adversely affected due to non-availability of competent faculty.)

3. Copies of the Comprehensive Reports submitted by the Chairmen of the Expert Teams along with the detailed reports submitted by the Expert teams, which visited the Institute for the programs evaluated, are enclosed for reference and to take necessary action to overcome the shortcomings, if any, pointed out by the Expert Teams.

4. If the Institute is not satisfied with the decision of NBA, it may appeal within thirty days of receipt of this communication giving reasons for the same and by paying the requisite fee.

Yours faithfully,

(Dr. Anil Kumar Nassa)
Member Secretary

Encls: 1. Copies of Reports of Chairmen of the Visiting Teams.
2. Copies of Expert Reports of the Visiting Teams.

424

SR NO	TYPE OF BUILDING	ID NO on Plan	COMPLETED BUILT UP AREA (INSTITUTIONAL) SQ.M					
			Base	Ground	First	Second	Third	Fourth
1	MAIN COLLEGE BUILDING	1	1263	4269	4175	3921		
2	WORKSHOP	2	166					
3	WORKSHOP-2, GUESTY, SMITHY	3	166					
4	PATENTEN & GUEST HOUSE UC	4	560	600	600	640		
5	COLLEGE BUILDING	5	627					
6	TELEPHONE BOOTH	7	15					
7	TELEPHONE BOOTH	13	15					
8	TOILETS NEAR AOT	14	40					
9	TOILETS NEAR AOT	15	40	640	1027	882		
10	MANAGER'S QUARTERS ELECTRICAL PHARM	16	556	556	556	556		
11	CYCLE STAND	20	637					
12	BUS STOP	21	75					
13	SWITCH GENERATOR & METER ROOM	22	47					
14	STAFF ROOM	23	47					
15	PUMP HOUSE & NURS	24	30					
16	SPORT COMPLEX CARPENTRY	25	219	219	219	219		
17	NEW DEPT OF MANAGEMENT BUILDING	27	605	605	605	950	950	
18	NEW MECHANICAL ENGG. BUILDING	28	956	956	956	1203	1093	
19	NEW ELECTRICAL ENGG. BUILDING	29	956	956	956	1203	1093	
20	NEW MAIN GATE	30	956	956	956	1203	1093	
21	NEW COMPLETE LAB AREA	31	1263	911	637	637	5896	

Annexure-VI: Research Center Recognition Letter

NORTH MAHARASHTRA UNIVERSITY, JALGAON Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA																					
Fax : (91)-0257-2258403 Website : www.nmu.ac.in Email : bcudresearch@rediffmail.com	Telephone : (O) : 0257-2258409 (O) : 0257-2257224																				
 (NAAC ACCREDITED)																					
NMU/11/Lab.Rcog./ 2917/2012 Date : 05/11/2012																					
To, The Principal, S.S.B.T's College of Engineering & Technology, Bambhori, Jalgaon - 425 002																					
Sub.: Recognition for Post Graduate Research Centre. Ref : Your letter dated 23.02.2012																					
Dear Sir,																					
With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prin. Dr.J.B.Patil, Shirpur for recognition of Post Graduate Research Centre of your college vide this office letter No. 1) जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/अभियांत्रिकी/३३८/२०१२, दि.०९.०४.२०१२, 2) जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/अभियांत्रिकी/८४०/२०१२, दि.०९.०४.२०१२ & 3) जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/अभियांत्रिकी/२०१२/२०१२, दि.०७.०८.२०१२. The committee has visited to your college on 02.08.2012, After verification of existing facilities, the committee unanimously recommended to grant recognition for Post Graduate Research Center of your college. (A copy of the committee's report is enclosed herewith for ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Centre as per resolution No. वि. प. ए.-१२९/२०१२, दि.१०.१०.२०१२ व वि. प. ए.-१४२/२०१२, दि.१०.१०.२०१२. In view of the above recommendation and decision taken by the Hon'ble Vice Chancellor on behalf of Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Center of your college in the following subjects:																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sr. No.</th> <th>Subject</th> <th>Research students allowed</th> <th>Period of recognition</th> </tr> <tr> <th>1.</th> <th>2.</th> <th>3.</th> <th>4.</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>Biotechnology Engineering</td> <td>04 students</td> <td>3 years</td> </tr> <tr> <td>02</td> <td>Chemical Engineering</td> <td>12 students</td> <td>3 years</td> </tr> <tr> <td>03</td> <td>Civil Engineering</td> <td>08 students</td> <td>3 years</td> </tr> </tbody> </table>		Sr. No.	Subject	Research students allowed	Period of recognition	1.	2.	3.	4.	01	Biotechnology Engineering	04 students	3 years	02	Chemical Engineering	12 students	3 years	03	Civil Engineering	08 students	3 years
Sr. No.	Subject	Research students allowed	Period of recognition																		
1.	2.	3.	4.																		
01	Biotechnology Engineering	04 students	3 years																		
02	Chemical Engineering	12 students	3 years																		
03	Civil Engineering	08 students	3 years																		
Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the proposal along with necessary fees as per rules.																					
Thanking you, Award No 919 Yours sincerely, 																					

To, Dr. J. B. Patil
 Inward & Pl. send
 Copy to concerned
 photo repl. 8/11/12
 8/11/12

NORTH MAHARASHTRA UNIVERSITY, JALGAON
Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA

Fax: (91)-0257-2258403
Website: www.nmu.ac.in
Email: bcudresearch@rediffmail



Telephone (O): 0257-2256409
(O): 0257-2257224

(NAAC ACCREDITED)

NMU/HLab.Reog/Engg./1908/2014

Date: 14.11.2014

To,
The Principal,
SSBT's College of Engineering & Tech.,
Bambhori, Jalgaon

To,
1- HOD, E&TC
2- O.S-I

Kc
29.11.14

Sub: Recognition for Post Graduate Research Lab.
Ref: Your letter dated 12.03.2014

Dear Sir/Madam,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Dr. J. B. Patil, Shirpur for recognition of Post Graduate Research Lab. recognition of your college vide this office letter No. जा.क्र.उमवि/११/प्रयोगशाला मान्यता/अभियांत्रिकी/५४८/२०१४, दि.०४.०४.२०१४. The committee has visited to your college on 03.09.2014. After verification of existing facilities, the committee unanimously recommended to grant recognition for Post Graduate Research Lab. recognition of your college. (A copy of the committee's report is enclosed herewith for ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Lab. recognition as per resolution No. वि.प.प. २०६/२०१४, दि.११.१०.२०१४.

In view of the above recommendations of the committee and resolution passed in the Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Lab recognition of your college in the following subjects:

Sr. No.	Subject	Research students allowed	Period of recognition
1	2	3	4
1	Electronics & Telecommunication Engineering	08 students	2014-15 to 2016-17

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Thanking you,

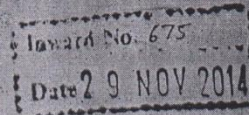
Yours sincerely,

(Prof. D.G. Hundriwale)

Director,

Board of Colleges and University Development

Encl: a/a



D:\backup\1D Drive\all D. KPW\Lab.Rec.doc



*A*Grade
NAAC Re-accredited
(3rd Cycle)

॥ अंतरी पेटवू ज्ञान्योत ॥

उत्तर महाराष्ट्र विद्यापीठ, जळगाव- ४२५ ००१

NORTH MAHARASHTRA UNIVERSITY, JALGAON
Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA

Fax : (91)-0257-2258406
Website : www.nmu.ac.in

Telephone : (O) : 0257-2257224, 0257-2258409
Email : bcudresearch@rediffmail.com

NMU/11/Lab.Recog./Engg./ 1164 /2015

Date : 23.05.2015

To,
The Principal,
SSBT's College of Engineering & Tech.,
Bambhori, Jalgaon

Sub.: Recognition for Post Graduate Research Lab.
Ref : Your letter dated 26.07.2014

To,
① KOD Mech. (Original)
② ~~Shri R. Patil~~ Dr. Husa
③ P.O.
K
10.6.15

Dear Sir/Madam,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Dr. J. B. Patil, Shirpur for recognition of Post Graduate Research Lab. recognition of your college vide this office letter No. जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/अभियांत्रिकी/१३२२/२०१४, दि.११.०८.२०१४. The committee has visited to your college on 16.03.2015. After verification of existing facilities, the committee unanimously recommended to grant recognition for Post Graduate Research Lab. recognition of your college. (A copy of the committee's report is enclosed herewith for ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Lab. recognition as per resolution No. वि. प. ए.-२८/२०१५, दि.१६.०८.२०१५.

In view of the above recommendations of the committee and resolution passed in the Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Lab. recognition of your college in the following subjects:

Sr. No.	Subject	Research students allowed	Period of recognition
1	2	3	4
1	Mechanical Engineering	08 students	2009-10 to 2016-2017

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Annexure-VII: Research Guide Recognition Letter

॥ अंतरी पेटवू ज्ञानज्योत ॥

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Umavinagar, Post Box 80, Jalgaon - 425 001, (M.S.) INDIA

Fax : (91)-0257-2258406
Website : www.nmu.ac.in
Email : bcudresearch@rediffmail.com



Telephone : (0) : 0257-2257224
() : 0257-2258409

(NAAC ACCREDITED)

Ref No.: NMU/11/PGR/Chem.Engg./ /2009.

Date: 12th August, 2009

To,
Dr. Wani Kishor Sopan.
Head,
Department of Chemical Engg. & Biotechnology
SSBT's C.O.E.T. Bambhori, Post Box 94, Jalgaon

Subject : Regarding Post Graduate Teacher recognition..
Reference : B.U.T.R. Meeting dated 24.07.2009 Item No. Chem.Tech 03 (4)

Sir,

With reference to your application for recognition as a Teacher of this University, I have to state that on the recommendations of the committee for recognition of teachers, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 24.07.2009 to 23.07.2016 for imparting instructions in the subject Chemical Engineering & Chemical Technology - M.E./M.Tech.(by paper/research) and Ph.D. (by Research) under the faculty of Engineering & Technology.

2. I am further to add for your information and guidance that the teachers, who are recognized for imparting instruction to the Post Graduate classes, will continue to be so recognized for a period of Seven Years. Thereafter, you will have to submit information of your independent Research Publications, designation in the College, etc. for reconsideration by the University Authorities of the recognition now granted.

Yours sincerely,


(D.B. Neelwama)

Asstt. Registrar
Board of Colleges and
University Development

Note : As per resolution of B.U.T.R., research guides are entitled to accept research students for registration maximum upto the age of 65 years and guide registered students maximum upto the age of 70 years.

Copy to -
The Principal/Head,
SSBT's C.O.E.T. Bambhori, Post Box 94, Jalgaon

॥ अंतरी पेटवू ज्ञानज्योत ॥

NORTH MAHARASHTRA UNIVERSITY, JALGAON

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Telephone : (O) : 0257-2257224
(O) : 0257-2258409

(NAAC ACCREDITED)

Ref No.: NMU/11/PGR/CivilEngg./ 2057 /2009. Date: 12th August, 2009

To,
Dr. Mujahid Fayaz Hussain,
S.S.B.T.'s College of Engineering & Technology,
Bambhori, Jalgaon

Subject : Regarding Post Graduate Teacher recognition.
Reference : B.U.T.R. Meeting dated 20.06.2008 Item No. Civil 03 (1)

Sir,

With reference to your application for recognition as a Teacher of this University, I have to state that on the recommendations of the committee for recognition of teachers, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 24.07.2009 to 23.07.2016 for imparting instructions in the subject Civil - M.E./M.Tech. By Paper and Ph.D. by Research under the faculty of Engineering & Technology.

2. I am further to add for your information and guidance that the teachers, who are recognized for imparting instruction to the Post Graduate classes, will continue to be so recognized for a period of Seven Years. Thereafter, you will have to submit information of your independent Research Publications, designation in the College, etc. for reconsideration by the University Authorities of the recognition now granted.

Yours sincerely,

(D.B. Neelwara)
Asstt. Registrar
Board of Colleges and
University Development

Copy to -

The Principal,
S.S.B.T.'s College of Engineering & Technology, Bambhori, Jalgaon

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Umavinagar, Post Box 80, Jalgaon - 425 001, (M.S.) INDIA

Fax : (91)-0257-2258406
Website : www.nmu.ac.in
Email : bcudresearch@rediffmail.com



Telephone : (O) : 0257-2257224
(O) : 0257-2258409

(NAAC ACCREDITED)

Ref No.: NMU/11/PGR/ Chem.Engg./ /2009.
१०६८

Date: 12th August, 2009

To,
Dr. Patil Indrasing Dagadu
Department of Chemical Engg. & Biotechnology
SSBT's C.O.E.T.Bambhori, Post Box 94, Jalgaon

Subject : Regarding Post Graduate Teacher recognition..
Reference : B.U.T.R. Meeting dated 24.07.2009 Item No. Chem.Tech 03 (5)

Sir,

With reference to your application for recognition as a Teacher of this University, I have to state that on the recommendations of the committee for recognition of teachers, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 24.07.2009 to 23.07.2016 for imparting instructions in the subject Chemical Engineering & Chemical Technology - M.E./M.Tech.(by paper/research) and Ph.D. (by Research) under the faculty of Engineering & Technology.

2. I am further to add for your information and guidance that the teachers, who are recognized for imparting instruction to the Post Graduate classes, will continue to be so recognized for a period of Seven Years. Thereafter, you will have to submit information of your independent Research Publications, designation in the College, etc. for reconsideration by the University Authorities of the recognition now granted.

Yours sincerely,

(D.B. Neelwama)

Asstt. Registrar

Board of Colleges and

University Development

Note :As per resolution of B.U.T.R., research guides are entitled to accept research students for registration maximum upto the age of 65 years and guide registered students maximum upto the age of 70 years.

Copy to -

The Principal/Head,
SSBT's C.O.E.T.Bambhori, Post Box 94, Jalgaon

॥ अंतरी पेटवू ज्ञानज्योत ॥

NORTH MAHARASHTRA UNIVERSITY, JALGAON
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Telephone : (O) : 0257-2257224
(O) : 0257-2258409

(NAAC ACCREDITED)

Ref No.: NMU/11/PGR/Mech. Engg./ 2390 /2013

Date: 18.11.2013

To,
Dr. Dheeraj Sheshrao Deshmukh,
Dept. of Mechanical Engg.
SSBT's, College of Engineering & Technology,
P.O. No.94, Bambhori, Jalgaon – 425003.

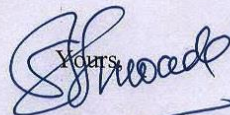
Subject : Recognition as a Post Graduate Teacher/Ph.D.Guide

Reference : B.U.T.R. Meeting dated 08.11.2013, Item No. 03(3)01

Sir,

With reference to your application for recognition as a P.G.Teacher/Ph.D.Guide of this University, I have to state that, on the recommendations of the Research & Recognition committee, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 08.11.2013 for imparting instructions in the subject Mechanical Engineering - P.G. Teacher (by paper) and Ph.D. by Research under the faculty of Engineering & Technology.

2. I wish to add for your information that you can accept research students for registration up to the age of 65 years and guide registered students up to the age of 70 years. Further it is mandatory to get the Research Laboratory recognized by the North Maharashtra University, Jalgaon for registering Ph.D. students.



(S.B. Surwade)

Dy. Registrar

Board of Colleges and University Development

नमो भगवते वासुदेवाय
NORTH MAHARASHTRA UNIVERSITY, JALGAON
Umavinagar, Post Box 80, Jalgaon - 425 001, (M.S.) INDIA

Fax : (91)-0257-2258406
Website : www.nmu.ac.in
Email : bcudresearch@rediffmail.com



Telephone : (O) : 0257-2257224
(O) : 0257-2258409

(AAC ACCREDITED)

Ref No.: NMU/11/PGR/Elect. Engg./ 2411 /2013

Date: 18.11.2013

To,
Dr. Umesh Shantilal Bhadade,
Dept. of Electronics Engg.
GF's Godavari College of Engineering,
P-51, Dr. Ulhas Patil Nagar, M-Sect
M.I.D.C., Bhusawal Road, Jalgaon

Subject : Recognition as Post Graduate Teacher/Ph.D. Guide

Reference : B.U.T.R. Meeting dated 08.11.2013 Item No. 03(3)01

Sir,

With reference to your application for recognition as a P.G. Teacher/Ph.D. Guide of this University, I have to state that, on the recommendations of the Research & Recognition committee, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 08.11.2013 for imparting instructions in the subject Electronics Engineering - P.G. Teacher (by paper) and Ph.D. (by Research) under the faculty of Engineering & Technology.

2. I wish to add for your information that you can accept research students for registration up to the age of 65 years and guide registered students up to the age of 70 years. Further it is mandatory to get the Research Laboratory recognized by the North Maharashtra University, Jalgaon for registering Ph.D. students.

Yours,
S. B. Surwade
(S.B. Surwade)
Dy. Registrar

Board of Colleges and University Development

॥ अंतरी पेटवू ज्ञानज्योत ॥

NORTH MAHARASHTRA UNIVERSITY, JALGAON
Umavinagar, Post Box 80, Jalgaon - 425 001, (M.S.) INDIA

Fax : (91)-0257-2258406
Website : www.nmu.ac.in
Email : bcudresearch@rediffmail.com



Telephone : (O) : 0257-2257224
(O) : 0257-2258409

(NAAC ACCREDITED)

Ref No.: NMU/11/PGR/Chem. Engg./ 774 /2015

Date: 27.04.2015

To,
Dr. Vijay Ramkrishna Diware,
SSBT's College of Engineering & Technology,
Bambhori, Post Box 94, Jalgaon

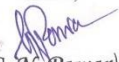
Subject : Recognition as a Post Graduate Teacher/Ph.D.Guide
Reference : B.U.T.R. Meeting dated 23.04.2015. Item No. 03(3)01

Sir,

With reference to your application for recognition as a P.G.Teacher/Ph.D.Guide of this University, I have to state that, on the recommendations of the Research & Recognition committee, the University Authorities are pleased to recognize you as Post Graduate Teacher of the North Maharashtra University, Jalgaon from 23.04.2015 for imparting instructions in the subject Chemical Engineering & Technology - P.G.Teacher (by paper/research) and Ph.D. by Research under the faculty of Engineering & Technology.

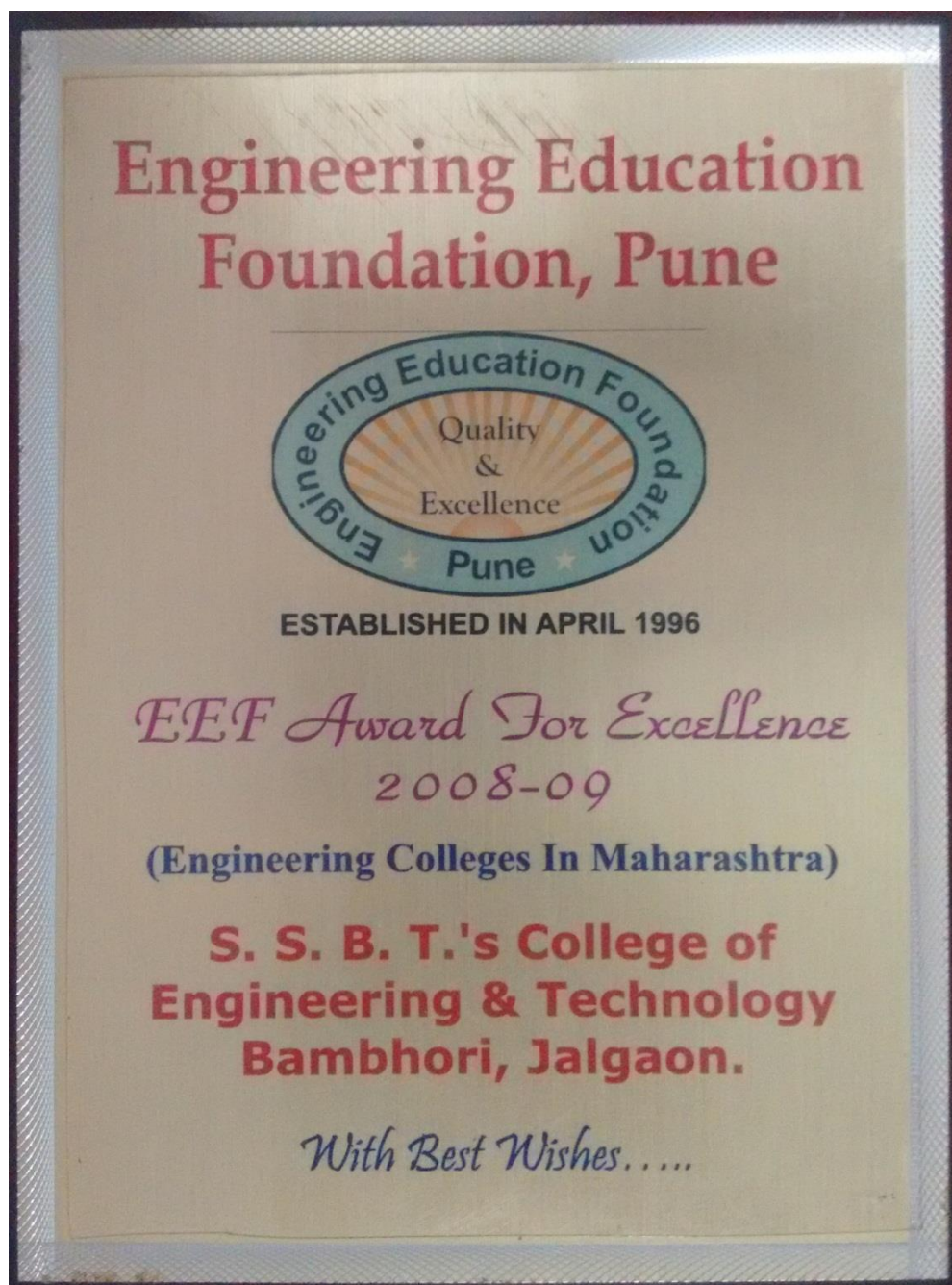
2. I wish to add for your information that you can accept research students for registration up to the age of 65 years and guide registered students up to the age of 70 years. Further it is mandatory to get the Research Laboratory recognized by the North Maharashtra University, Jalgaon for registering Ph.D. students.

Yours,


(G. N. Pawar)
Dy. Registrar

Board of Colleges and University Development

Annexure-VIII: Award of Excellence in 2008



**Annexure-IX: Engineering Education Excellence Award 2015 by Indo Global Chamber of Commerce,
Industries and Agriculture, Pune**



Annexure-X: AISHE

Rediffmail

Mailbox of jitendra_patil1103@rediffmail.com

From: helpdesk-aishe@nic.in

To: jitendra_patil1103@rediffmail.com

Subject: Your DCF has been uploaded on AISHE portal

Date: Fri, 28 Nov 2014 12:37:09 IST

Dear User,

DCF for **100007-SSBT'S COLLEGE OF ENGINEERING & TECHNOLOGY, BAMBHORI**. has been uploaded successfully on AISHE portal. To refer to this form please use DCF reference number **C-8977-2014**.

We appreciate your sincere efforts in compiling and providing the information.

(This is an auto generated email, kindly do not reply back)

Thanks,
AISHE Team

Print Cancel

Information send to
AISHE ON 28.11.14

(Signature)

Glimpses of SSBT COET



Motivational Speech by Her Excellency Smt. Pratibhatai Patil, Former President of India



Dr. Pandit Vidyasagar



Padmashri
Dr. Vijay Bhatkar



Padmashri
Dr. Prakash Amte



Adv. Ujwal Nikam



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Nilima Mishra

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