

**Shram Sadhana Bombay Trust's**  
**College of Engineering & Technology, Bambhori, Jalgaon, Maharashtra**  
**The Annual Quality Assurance Report (AQAR) of the IQAC**  
**Academic Year: 2017-2018**

Part – A

**1. Details of the Institution**

**1.1 Name of the Institution**

Shram Sadhana Bombay Trust's  
College of Engineering & Technology,

**1.2 Address Line 1**

NH-6, Post Box No.94,

**Address Line 2**

Bambhori

**City/Town**

Jalgaon

**State**

Maharashtra

**Pin Code**

425001

**Institution e-mail address**

sscoetjal@gmail.com

**Contact Nos.**

0257-2258393

**Name of the Head of the Institution:**

Dr. K. S. Wani

**Tel. No. with STD Code:**

0257-2258393

**Mobile:**

9423774254

**Name of the IQAC Co-ordinator:**

Dr. S.P. Shekhawat

**Mobile:**

9423621653

**IQAC e-mail address:**

spshekhawat@rediffmail.com

1.3 NAAC Track ID (For ex. MHCOGN 18879)

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004. This EC no. is available in the right corner-bottom of your institution's Accreditation Certificate)

1.5 Website address:

Web-link of the AQAR:

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

### 1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	B++	2.91	16-09-2016	5 Years
2	2 <sup>nd</sup> Cycle				
3	3 <sup>rd</sup> Cycle				
4	4 <sup>th</sup> Cycle				

1.7 Date of Establishment of IQAC: DD/MM/YYYY

1.8 AQAR for the year (for example 2010-11)

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011))

NOT APPLICABLE

- i. AQAR 21/05/2017 (DD/MM/YYYY)
- ii. AQAR \_\_\_\_\_ (DD/MM/YYYY)
- iii. AQAR \_\_\_\_\_ (DD/MM/YYYY)
- iv. AQAR \_\_\_\_\_ (DD/MM/YYYY)

### 1.10 Institutional Status

University State  Central  Deemed  Private

Affiliated College Yes  No

Constituent College Yes  No

Autonomous college of UGC Yes  No

Regulatory Agency approved Institution Yes  No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education  Men  Women

Urban  Rural  Tribal

Financial Status Grant-in-aid  UGC 2(f)  UGC 12B

Grant-in-aid + Self Financing  Totally Self-financing

### 1.11 Type of Faculty/Programme

Arts  Science  Commerce  Law  PEI (Phys Edu)

TEI (Edu)  Engineering  Health Science  Management

Others (Specify)

### 1.12 Name of the Affiliating University (for the Colleges)

Kavayitri Bahinabai Chaudhari North  
Maharashtra University, Jalgaon, M.S.

### 1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR

etc: No

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (Specify)

UGC-COP Programmes

## 2. IQAC Composition and Activities

2.1 No. of Teachers

2.2 No. of Administrative/Technical staff

2.3 No. of students

2.4 No. of Management representatives

2.5 No. of Alumni

2.6 No. of any other stakeholder and

Community representatives

2.7 No. of Employers/ Industrialists

2.8 No. of other External Experts

2.9 Total No. of members

2.10 No. of IQAC meetings held

2.11 No. of meetings with various stakeholders: No.  Faculty

Non-Teaching Staff  Students  Alumni  Others

2.12 Has IQAC received any funding from UGC during the year? Yes  No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related): Nil

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.  International  National  State  Institution Level

(ii) Themes

2.14 Significant Activities and contributions made by IQAC

1. Training Programmes for students. 2. Special remedial classes for slow learners for first year students are organised. 3. Enhanced student participation in state/ National Level Competitions

**2.15 Plan of Action by IQAC/Outcome**

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year \*

Plan of Action	Achievements
1. Training activities for students.	1. Training programme are organised
2. To arrange Industry visits	2. Industry visits are organised
3. To invite experts from industries	3. Expert lectures are organised in every department.
4. To enhance research activities	4. Shram Sadhana Innovation and Entrepreneurship development centre is established to enhance research activities.
5. Extracurricular activities are to be organised with special focus on social aspects	5. Activities of social awareness for students are organised.

*\* Attach the Academic Calendar of the year as Annexure.*

**2.15 Whether the AQAR was placed in statutory body**    Yes     No

Management     Syndicate     Any other body

**Provide the details of the action taken**

Part – B

**Criterion – I**

**1. Curricular Aspects**

**1.1 Details about Academic Programmes**

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	05	02	07	00
PG	03	00	03	00
UG	08	00	08	00
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	16	02	18	00

Interdisciplinary				
Innovative				

**1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options**

**(ii) Pattern of programmes:**

Pattern	Number of programmes
<b>Semester</b>	11
Trimester	
Annual	

**1.3 Feedback from stakeholders\* Alumni**  **Parents**  **Employers**  **Students**   
*(On all aspects)*

Mode of feedback : Online  Manual  Co-operating schools (for PEI)

*\*Please provide an analysis of the feedback in the Annexure*

**1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.**

F.E. new Syllabus is Revised as per AICTE Guidelines

**1.5 Any new Department/Centre introduced during the year. If yes, give details.**

NO

**Criterion – II**

**2. Teaching, Learning and Evaluation**

**2.1 Total No. of permanent faculty**

Total	Asst. Professors	Associate Professors	Professors	Others
92	74	12	06	---

**2.2 No. of permanent faculty with Ph.D.**

28

**2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year**

Asst. Professors		Associate Professors		Professors		Others (Lecturer)		Total	
R	V	R	V	R	V	R	V	R	V
90	35	14	23	13	06	00	00	117	64

**2.4 No. of Guest and Visiting faculty and Temporary faculty**

-----      05      13

**2.5 Faculty participation in conferences and symposia:**

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	31	08	-
Presented papers	55	08	-
Resource Persons	-	-	16

**2.6 Innovative processes adopted by the institution in Teaching and Learning:**

The teaching learning method adopted by the institute mainly deal with the following gray area of the students belongs from the rural background. The identified competencies are as follows:-

- Ability to apply knowledge of Mathematics, Science and Engineering.
- Ability to function in a multi-disciplinary team.
- Ability to communicate effectively.
- Ability to understand professional, ethical and social responsibilities.
- Commitment to quality, timeliness and continuous, improvement with understanding of best practice and standards.
- Ability to engage in life-long learning.
- Ability to demonstrate independent critical thinking and problem-solving skills.

The Impact of such practices on student learning are creating more commitment of students towards skill enhancement, to learn effective communication techniques, to understand professional, ethical and social responsibilities.

**2.7 Total No. of actual teaching days during this academic year**

142
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**2.8 Examination/ Evaluation Reforms initiated by the Institution** (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

1. Photocopy	2. Onscreen evaluation	3. Internal Sessional Examinations
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**2.9 No. of faculty members involved in curriculum Restructuring /revision/ syllabus development**

16	06	20
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**as member of Board of Study/Faculty/Curriculum Development workshop**

**2.10 Average percentage of attendance of students**

83.53 %
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### 2.11 Course/Programme wise distribution of pass percentage:

Title of program	Total Students appeared	Division				
		Distinction	First class	Second class	3 <sup>rd</sup> class	Total Pass
Biotech Department	14	2	6	5	00	13
Chemical Department	29	08	11	07	00	26
Civil department	144	75	19	20	00	114
Computer department	145	59	65	15	00	133
Electrical department	79	54	17	01	00	72
E&TC department	141	68	60	3	00	131
Information technology	42	10	22	7	00	39
Mechanical department	140	59	61	5	00	125
M.B.A. (May 2018)	43	01	08	06	00	15

### 2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

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:

- Motivate faculty members to attend online courses of SWAYAM and NPTEL for knowledge enhancement.
- Suggest to collaborate with industries/Institution of national repute.
- 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.

### 2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
<b>Refresher courses</b>	Nil
<b>UGC – Faculty Improvement Programme</b>	Nil
<b>HRD programmes</b>	05
<b>Orientation programmes</b>	09
<b>Faculty exchange programme</b>	Nil
<b>Staff training conducted by the university</b>	03
<b>Staff training conducted by other institutions</b>	21
<b>Summer / Winter schools, Workshops, etc.</b>	12
<b>Others</b>	02

### 2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
<b>Administrative Staff</b>	62	-	--	22
<b>Technical Staff</b>	20	-	--	02

### Criterion – III

#### 3. Research, Consultancy and Extension

##### 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

In every IQAC meet, Research is an integrated and important agenda. The collage has specifically taken some initiatives in sensitizing Research climate.

- The college allocates separate budget for Research activities in each department.
- The college supports financially the students Research project proposals based upon their quality.
- The college established Shram Sadhana Innovation and Entrepreneurship development centre is established to enhance research activities

### 3.2 Details regarding major projects: - Nil

	Completed	Ongoing	Sanctioned	Submitted
Number	--	-	-	-
Outlay in Rs. Lakhs	-	-	-	-

### 3.3 Details regarding minor projects: - 05

	Completed	Ongoing	Sanctioned	Submitted
Number	4	7	-	-
Outlay in Rs. Lakhs	2.84	8.19	-	-

### 3.4 Details on research publications (2017-18)

	International	National	Others
Peer Review Journals	71	0	Nil
Non-Peer Review Journals	Nil	Nil	Nil
e-Journals	71	01	Nil
Conference proceedings	35	01	Nil

### 3.5 Details on Impact factor of publications:

Range  Average  h-index  Nos. in SCOPUS

### 3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	-	-	-	-
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored	09 (National Infotech, Surat)	Nil	-	-
Projects sponsored by the University/ College	02	SSBTCOET	3,25,000/-	-
Students research projects (other than compulsory by	01	SSIEDC	64,000/-	64,000/-

<i>the University)</i>				
Any other(Specify)	01	SSIEDC	40000/-	40000/-
Total	01 (IT)	Vice Chancellor Research Motivation Scheme, NMU, Jalgaon	114000/-	60000/-
	01 (Chem)	Vice Chancellor Research Motivation Scheme, NMU, Jalgaon	80,000/-	66,000/-
	03 (Mech)	Vice Chancellor Research Motivation Scheme, NMU, Jalgaon	03,00,000/-	1,50,000/-
	01 (MBA)	Vice Chancellor Research Motivation Scheme, NMU, Jalgaon	40,000/-	20,000/-

3.7 No. of books published i) With ISBN No.  Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP  CAS  DST-FIST

DPE  DBT Scheme/funds

VCRMS

3.9 For colleges Autonomy  CPE  DBT Star Scheme

INSPIRE  CE  Any other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution:

Level	International	National	State	University	College
Number	01	--	--	--	--
Sponsoring agencies	SSBTCOET				

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations: - NIL International  National  Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs:

From Funding agency  From Management of University/College

Total

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	NIL
	Granted	
International	Applied	
	Granted	
Commercialised	Applied	
	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year

Total	International	National	State	University	Dist	College
Nil						

3.18 No. of faculty from the Institution who are Ph. D. Guides

and students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

NIL

JRF  SRF  Project Fellows  Any other

**3.21 No. of students Participated in NSS events: NA**

University level  State level   
National level  International level

**3.22 No. of students participated in NCC events: NA**

University level  State level   
National level  International level

**3.23 No. of Awards won in NSS:**

NA

University level  State level   
National level  International level

**3.24 No. Of Awards won in NCC:**

NA

University level  State level   
National level  International level

**3.25 No. of Extension activities organized- NIL**

University forum  College forum   
NCC  NSS  Any other

**3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility**

1. Scheme for Economical Backward Class Students
2. Karmveer Bhaurao Patil Earn & Learn Scheme [September, 2017 to March, 2018]
3. Marathi Bhasha Divas [27<sup>th</sup> February, 2018]
4. University Level Elocution competition for Girls
5. Dr.B.R. Ambedkar Jayanti
6. Chhatrapati Shivaji Maharaj Jayanti
7. Anti Tobacco Mission Seminar
8. Blood Donation Camp
9. International Yoga Day
10. Constitution Day
11. National Unity Day
12. National Education Day

## Criterion – IV

### 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area (m <sup>2</sup> )	35530	-	-	35530
Class rooms	48	--	-	48
Laboratories	98	-	-	98
Seminar Halls	08	-	-	08
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.	5	-	-	5
Value of the equipment purchased during the year (Rs. in Lakhs)	980865	-	-	980865
Others	432016	-	-	432016

#### 4.2 Computerization of administration and library

Using SOUL 2.0 software developed by INFLIBNET, Ahmadabad

#### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	58113	19381097	721	328272	58834	19709369
Reference Books	4226	2545781	61	51936	4287	2597717
e-Books	200	227000	--	--	200	227000
Journals	110	313016	12	37950	122	350966
e-Journals	1691	227535	-	135700	-	135700
Digital Database	--	--	--	--	--	--
CD & Video	1251	--	--	-	1251	--
Others (specify)	--	--	--	--	--	--

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1037	35	60MBPS	Nil	01	01	10	Nil
Added	Nil	Nil	40MBPS	Nil	Nil	Nil	Nil	Nil
Total	1037	35	100MBPS	Nil	01	01	10	Nil

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

The institute has sufficient number of desktop PCs as per the norms laid down by the regulatory body. In addition to computer center, each department has computer labs with desktop PCs and Internet access for students. Each department is provided with computer systems and internet connection for the teaching staff to update their knowledge. Internet access is available to teachers and students throughout the year through 100 Mbps lease line.

Training is given to the teachers and students regularly for technology up-gradation, such as LateX, LMS (Moodle), Excel, open source software etc. MIS software is being implemented in the office.

#### 4.6 Amount spent on maintenance in lakhs :

<b>i) ICT</b>	2,20,468
<b>ii) Campus Infrastructure and facilities</b>	15,42,532
<b>iii) Equipments</b>	75,706
<b>iv) Others</b>	4,25,204
<b>Total :</b>	22, 63,910

## Criterion – V

### 5. Student Support and Progression

#### 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

1. IQAC reviews the ongoing academic activities and suggest the reforms to improve teaching learning process.
2. Contributions of IQAC in academics, administrative, research, usage of ICT are as follows:
  - Motivate faculty members to attend online courses of SWAYAM and NPTEL for knowledge enhancement.
  - Suggest to collaborate with industries/Institution of national repute.
  - 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.

#### 5.2 Efforts made by the institution for tracking the progression

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. Feedbacks are taken from the parents. Feedback is analyzed and accordingly used as input for curriculum development and other activities.
- 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.

#### 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2607	105	30	-

#### (b) No. of students outside the state

12
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(c) No. of international students

No	%
nil	

Men

No	%
nil	

Women

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1058	202	56	1644	0	2960	843	234	73	1607	0	2757

Demand ratio 85% Dropout 3%

#### 5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- MoU with Treezec E-Solutions Mumbai for technical training on CATIA, Android, IOT.  
No. of Students Beneficiaries- Participated 90 students
- Video Conferencing Studio of Kongo, Mumbai for GATE aspirants

No. of students beneficiaries

#### 5.5 No. of students qualified in these examinations

NET  SET/SLET  GATE  CAT   
IAS/IPS etc  State PSC  UPSC  Others

#### 5.6 Details of student counselling and career guidance

- Student Counseling & Career Guidance Process involves empowering students to make them successful professionals for the whole life span; it is a collaborative effort of Various Departments and Training & Placement Cell
- Availing maximizing career opportunities, promoting effective job placement, strengthening employer relations through Training & Placement Cell

No. of students benefitted

### 5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
45	720	245	----

### 5.8 Details of gender sensitization programmes

Through women cell the institute conducts sensitization and awareness programs against women exploitation and abuse.

### 5.9 Students Activities

#### 5.9.1 No. of students participated in Sports, Games and other events

State/ University level  National level  International level   
 Zonal Level / Inter Group  Inter-Collegiate

#### 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level  National level  International level

### 5.10 Scholarships and Financial Support

	Number of students	Amount (Rs)
Financial support from institution	21	3,05,750
Financial support from government	814	4,18,44,089
Financial support from other sources	11	3,30,000
Number of students who received International/ National recognitions	-	-

### 5.11 Student organised / initiatives

Fairs : State/ University level  National level  International level   
 Exhibition: State/ University level  National level  International level

**5.12 No. of social initiatives undertaken by the students**

6

- Blood Donation
- Swachhata Abhiyan
- Vittiya Saksharta Abhiyan
- Maharashtra Digidhan
- Anti Tobacco Mission
- ‘International Yoga Day

**5.13 Major grievances of students (if any) redressed: NIL**

## Criterion – VI

### **6. Governance, Leadership and Management**

#### **6.1 State the Vision and Mission of the institution**

**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.

#### **6.2 Does the Institution has a management Information System. Yes**

Following software's are used for MIS -

1. ERP software
2. MOODLE
3. e-suvidha software by NMU Jalgaon

#### **6.3 Quality improvement strategies adopted by the institution for each of the following:**

##### **6.3.1 Curriculum Development**

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

- The institution is affiliated to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon. The curriculum is prepared under the Faculty of Science 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. From the academic year 17-18, new curriculum for first year of engineering is introduced.
- Faculty members of the college having representation in the university Board of Studies as chairman and members. They are

<b>Year</b>	<b>Departments</b>	<b>Name of Faculty Members</b>	<b>Position in BOS / Member</b>
<b>2017-18</b>	Mechanical Engineering	Dr. S. P. Shekhawat	Member, Board of Studies (Mechanical Engineering)
	Mechanical Engineering	Dr. P.G. Damle	Member, Board of Studies (Mechanical Engineering)
	M.B.A.	Dr. Vishal S.Rana	Member (BOS-Business Administration)
	Electrical	Dr. P. J. Shah	Member (Electrical and Instrumentation)

Engineering		Engg.)
Electrical Engineering	Dr. P. V. Thakre	Member (Electrical and Instrumentation Engg.)
Computer Engineering	Dr. G. K. Patnaik	Member( Computer Engineering)
Computer Engineering	Dr. K. P. Adhiya	Member( Computer Engineering)
E&TC Engineering	Dr. S. R. Suralkar	Member (E&TC Engineering)
E&TC Engineering	Dr. M. P. Deshmukh	Member (E&TC Engineering)
E&TC Engineering	Dr. V. M. Deshmukh	Member (E&TC Engineering)
Chemical Engineering	Dr. K.S. Wani	Chairman (Chemical Engineering, Chemical Technology& Biotechnology Engineering)
Chemical Engineering	Dr. V.R.Diware	Member (Chemical Engineering, Chemical Technology& Biotechnology Engineering)
Bio-Technology	Dr. I.D. Patil	Member, Board of Studies (Chemical Engineering, Chemical Technology & Bio-Technology)
Civil Engineering	Dr M Husain	Chairman (Civil Engineering)
Civil Engineering	Dr. S.B. Pawar	Member( Civil Engineering)
Civil Engineering	Dr P A Shirule	Member (Civil Engineering)

### 6.3.2 Teaching and Learning

The Institute gives utmost importance to teaching and learning process as it is the backbone of any academic system of any Institution. 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.

Faculty also teach content beyond the syllabus so that students will get the knowledge about latest trends of technology. Students use Moodle learning management system to download the course material from anywhere and at any time in campus. NPTEL videos and SWAYAM tutorials are also used to acquire the knowledge from renowned faculty from various well known and reputed institutes, such as IIT's.

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 Course material and upload on moodle
- Faculty prepares Lesson Plan
- Faculty prepares Practical list in the curriculum prescribed and schedule for the conduct.
- 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

### **6.3.3 Examination and Evaluation**

The progress and performance of each student is monitored through Attendance (Theory and Practical), 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. Answer papers of ISE are shown to the students and discussed in the class. The solution of ISE is also submitted to the Department. Mock practical test is conducted by concern faculty, for the subjects having PR head. Grade in ICA for the lab work are shown to the students during the lab session time to time. Remedial classes are conducted for the failed students if required.

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

#### **6.3.4 Research and Development**

- The authorities always encourage staff members, from each and every forum, to conduct/increase involvement in research activities, improve qualification and go for publications and patents.
- There is a special post of director R&D. Under Director R&D, a Research Committee coordinate Research activities in the college and take policy decisions in this regards.
- There is an indigenous Research funding scheme Shram Sadhana Research Promotion Scheme in the college through which funds are provided to quality Research proposals of staff members. Also Shram Sadhana Innovation and Entrepreneurship development centre is established.
- College organizes International Conference every year.
- College organizes workshops, Seminars, Guest Lectures and so many such activities to directly and indirectly boost up R&D activities.

#### **6.3.5 Library, ICT and physical infrastructure / instrumentation**

1. E – Library: Purchased e-books, e-journals, etc
2. Institutional Repository: Paper published by the faculty members, university question papers, syllabus copy, project and seminar reports are maintained
3. State of the Art infrastructure is developed.
4. Labs are equipped with modern equipments.

#### **6.3.6 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.

1. The faculty applies for the faculty development programmes conducted at various colleges
2. The registration fee upto Rs. 5000/- is borne by the institute.
3. The faculty is granted Duty Leave for FDP, etc.
4. FDP's, Workshops, Conferences, Seminar, etc are organized by the institute regularly.
5. IIT Remote center

### **6.3.7 Faculty and Staff recruitment**

The process of faculty recruitment is conducted at university level and college level.

For university level the advertisement is prepared as per the teaching load calculated. The advertisement is submitted to the university for the approval. After that the approved advertisement is published in state level and local level newspapers and the applications are called.

The faculty is selected by the committee constituted by the university. The selection report is sent to the university and the approval letter of faculty is sought from the university.

For the vacant posts the faculty is selected by college. The advertisement of faculty recruitment is published in the newspapers and the applications are called. The faculty are selected by the selection committee of the college.

### **6.3.8 Industry Interaction / Collaboration**

#### **❖ MoU**

- National Infotech, Surat from 1<sup>st</sup> April 2017 for a period of 2 years.
- kWatt Solutions, IIT Bombay from 1<sup>st</sup> July 2017 for a period of 3 years
- Reliance Jio from 13.01.2018 for a period of 3 years.
- Treezac E-solutions, Mumbai from 27.09.2017 for a period of 1 year
- Entrepreneurship cell (E-Cell) from 17.07.17 for a period of 1 year
- Studenting Era from 27.02.2018 for a period of 2 years
- Lectures of Industrialists, Industry Personnel
- Industrial Training
- Industrial Visit
- SSIEDC- Entrepreneurship Awareness Camp (EAC)
- Departmental MoU's with Industries
- Testing & Consultancy
- Industrial Projects

- Industry Experts in academic development
- Joint Research Publication

### 6.3.9 Admission of Students

The Admission to college is promoted through following activities:

- Career counselling Programs
- Advertisements through Press, T.V., Radio and Hoarding
- Participation in career fair
- Publishing career guidance Articles
- Special Scholarship to Meritorious Students

### 6.4 Welfare schemes for

Teaching	Gratuity scheme is implemented for permanent staff.
Non teaching	
Students	Scholarship scheme are implemented

### 6.5 Total corpus fund generated

2.18 Cr

### 6.6 Whether annual financial audit has been done

Yes  No

### 6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	<b>NO</b>		<b>NO</b>	
Administrative	<b>NO</b>		<b>NO</b>	

### 6.8 Does the University/ Autonomous College declare results within 30 days?

For UG Programmes Yes  No

For PG Programmes Yes  No

### 6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

NA

**6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?**

NA

**6.11 Activities and support from the Alumni Association**

1. Organized Alumni meet every year
2. Alumni – Student Interaction session
3. Expert lectures of eminent alumni members

**6.12 Activities and support from the Parent – Teacher Association**

1. Organisation of Parents Meet
2. Suggestion from parents discussed and implemented in the current academic year.
3. Student progress reports are sent to parents regularly through post and SMS.

**6.13 Development programmes for support staff: - NIL**

**6.14 Initiatives taken by the institution to make the campus eco-friendly**

- 100 m<sup>3</sup>/day capacity silage recycling scheme is working in the campus. Thus the campus is maintain lush green in this arid weather of Jalgaon city (21<sup>0</sup>N, 75<sup>0</sup>E), which is water scare too.
- The Garbage produced by mess and canteen is digested under anaerobic conditions to form biogas.
- The litter is vermi composted and used in garden.
- There is a plan to gradually switch over to silicon based solar panels and to reduce use of grid based electricity.
- There is a lawn spreading over 5 acres and tree plantation is done where ever possible

## **Criterion – VII**

### **7. Innovations and Best Practices**

#### **7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.**

##### **Inculcating research attitude**

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 and development 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 schemes 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 seven departments of the institute are recognized for doctoral research by North Maharashtra University, Jalgaon. The institute has 13 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.

## **7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year**

### **ATR:**

#### **1. Feedback mechanism from the stake holders**

Students, Parents, Employers, Alumni feedback on various aspects must be carefully considered and carried out by all departments annually. Also internal reviews of quality assurance procedures are carried out periodically.

#### **2. To increase faculty participation in conferences and workshops, etc.**

It is decided to invite academicians, industry peoples, scientists as resource persons in Workshops/Seminars/Conferences organized by the institute in various departments. Further it is decided to provide registration fees upto Rs.5000 /- to the faculty members to participate in external Workshops / Seminars / Conferences recognized by national / international professional bodies and to present papers in Workshops / Seminars / Conferences conducted / recognized by professional agencies.

Also budget provisions have been made for the same.

#### **3. Improvement in Teaching Learning process.**

It is decided to maintain the adequate number of faculty members so as to enable them to engage in activities outside their teaching duties, especially for the purposes of professional development, curriculum development, student mentoring / counseling, administrative work, training, and placement of students and interaction with industrial and professional practitioners. The number of faculty members must be sufficiently large in proportion to the number of students, so as to provide adequate levels of faculty-student interaction. In any

educational programme, it is essential to have adequate levels of teacher-student interaction, which is possible only if there are enough teachers, or in this case, faculty members.

Also in class rooms and laboratories teaching learning aids and equipments should be provided as per university curriculum. Classrooms, tutorial rooms and laboratories must be adequately furnished to provide an environment conducive to learning. Modern teaching aids such as digital interactive boards, multimedia projectors etc., should be in place to facilitate the teaching-learning process so that outcomes of the programme can be achieved.

The laboratories must be equipped with computing resources, equipments, and tools relevant to the programme. The equipments of the laboratories should be properly maintained, upgraded and utilized so that the students can acquire required skills through it. There is always scope for improvement, so wherever possible improvement in internal Examination and Internal Evaluation process should be made.

#### **4. Students participation in extracurricular activities**

It is decided that the enhancement in the facilities for extracurricular activities such as sports, outdoor and indoor games, gymnasium, auditorium, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc should done. Institute may provide motivational awards, TA DA, Certificates and Trophies to the students for their excellence in the all above activities.

#### **5. To promote research and consultancy activities**

It is suggested to enhance research by providing seed money by the institute for research activities of the faculty members. Also it is suggested to advertise the consultancy facilities available in the institute on college website and in newspapers, so that it will help to promote available expertise for the benefit of industry and society.

**6. Student Training:** It is decided to organize training sessions for students to prepare them for paper presentation, project exhibitions, technical quizzes, etc. This type of training sessions are to be organized at department levels as per their convenience.

7. Latex Workshop: Dr.Patnaik has given information that some of the departments have organized Latex workshop and other departments are going to organize the same. It is made

compulsory to all final year BE students and ME students to prepare their project reports in Latex only.

### **7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)**

#### **1. 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.

#### **2. Recognized research laboratories for doctoral research**

The institute is affiliated to the Kavayitri Bahinabai Chaudhari 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
- Computer Engineering
- Electrical Engineering

*\*Provide the details in annexure (annexure need to be numbered as i, ii,iii)*

#### **7.4 Contribution to environmental awareness / protection**

- Cleanliness drive is observed in campus every year in order to enforce awareness in students regarding environmental protection.
- Environmental studies are compulsory to all branches of engineering as per the verdict of SC.
- At suitable positions environmental awareness related posters are displayed.
- The campus culture not only integrates the physical environmental awareness rather it takes care to develop healthy social environment too. The campus adds vitality to its life by enthusiastically celebrating all festivals of various religions.

7.5 Whether environmental audit was conducted? Yes  No

7.6 Any other relevant information the institution wishes to add. (For example SWOT Analysis)

8. **Plans of institution for next year**

1. To enhance Training and Placement activities
  2. To organise GATE coaching classes and awareness programmes for students
  3. To organise co-curricular and extra-curricular activities for overall development of students
  4. To upgrade laboratories as per new syllabus.
  5. To arrange online or distance education courses for faculty and students
  6. To establish student counselling centre.

Name: Dr. S.P. Shekhawat

Name: - Dr. K.S. Wani

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Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

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## **Annexure I**

### **Abbreviations:**

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

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