## The Annual Quality Assurance Report (AQAR) of the IQAC

of

# MIT ACADEMY OF ENGINEERING 2017-2018

Submitted To



## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

Submitted By,

MIT Academy of Engineering

Alandi (Devachi) | Pune - 412105 | Maharashtra | India

www.mitaoe.ac.in

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## **AQAR for the year:** 2017-18 (Period: July 1, 2017 to June 30, 2018)

## Part – A

#### 1. Details of the Institution:

| 1.1 | Name of the Institution                 | MIT Academy of Engineering |
|-----|---|----------------------------|
| 1.2 | Address Line 1                          | Dehu Phata                 |
|     | Address Line 2                          | Tal: Khed, Dist: Pune      |
|     | City/Town                               | Alandi (Devachi)           |
|     | State                                   | Maharashtra                |
|     | Pin Code                                | 412105                     |
|     | Institution e-mail address              | director@mitaoe.ac.in      |
|     | Contact Nos.                            | 020-30253500               |
|     | Name of the Head of the<br>Institution: | Dr. Yogesh J. Bhalerao     |
|     | Tel. No. with STD Code:                 | 020-30253500               |
|     | Mobile:                                 | 9823015289                 |
|     | Name of the IQAC<br>Coordinator:        | Sandip Lokhande            |
|     | Mobile:                                 | 8805192400                 |
|     | IQAC e-mail address:                    | dean.qa@mitaoe.ac.in       |
| 1.3 | NAAC Track ID (For ex.<br>MHCOGN 18879) | MHCOGN 20189               |

| 1.4 | NAAC Executive<br>Committee No. & Date:                     | EC (SC) /03 / A & A / 54 – September 24, 2014 |
|-----|---|---|
|     | (For Example<br>EC/32/A&A/143 dated 3-5-<br>2004.           |   |
|     | <i>This EC no. is available in the right corner- bottom</i> |   |
|     | of your institution's<br>Accreditation Certificate)         |   |
| 1.5 | Website address:  | www.mitaoe.ac.in                              |
|     | Web-link of the AQAR:                                       | http://www.mitaoe.ac.in/                      |

#### **1.6 Accreditation Details:**

| Sr.<br>No. | Cycle                 | Grade | CGPA           | Year of<br>Accreditation | Validity Period    |  |  |  |  |  |
|------------|-----------------------|-------|----------------|--------------------------|--------------------|--|--|--|--|--|
| 1          | 1 <sup>st</sup> Cycle | А     | 3.13           | 2014                     | September 23, 2019 |  |  |  |  |  |
| 2          | 2 <sup>nd</sup> Cycle |       |                |                          |                    |  |  |  |  |  |
| 3          | 3 <sup>rd</sup> Cycle |       | NOT APPLICABLE |                          |                    |  |  |  |  |  |
| 4          | 4 <sup>th</sup> Cycle |       |                |                          |                    |  |  |  |  |  |

#### **1.7 Date of Establishment of IQAC** (DD/MM/YYYY): 03/03/2014

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

| 1 | AQAR 2014-15 submitted to NAAC on 08/09/2015 |
|---|--|
| 2 | AQAR 2015-16 submitted to NAAC on 11/08/2016 |
| 3 | AQAR 2016-17 submitted to NAAC on 19/12/2017 |

### **1.9 Institutional Status:**

| University:                | State: | ~ | Central: |   | Deemed:   |       | Private:   |  |
|----------------------------|--------|---|----------|---|---|-------|------------|--|
| Affiliated College:        | Yes:   | ~ | No:      |   | Affiliated to Savitribhai Phule<br>Pune University                |       |            |  |
| Constituent College:       | Yes:   |   | No:      | ✓ |   |       |            |  |
| Autonomous college of UGC: | Yes:   | ~ | No:      |   | Autonomous Co<br>Savitribhai Phu<br>w.e.f. 2016-17 (<br>Autonomy) | le Pu | ne Univers |  |

| Regulatory Agency approved Institution (e.g. AICTE, BCI, MCI, PCI, NCI): | Yes: | ~ | No: |  |  |
|--|------|---|-----|--|--|
|--|------|---|-----|--|--|

| Type of Institution: | Co-education: | ✓ | Men:   |              | Women:  |  |
|----------------------|---------------|---|--------|--------------|---------|--|
|                      | Urban:        |   | Rural: | $\checkmark$ | Tribal: |  |

| Financial Status: | Grant-in-aid:                  |  | UGC<br>2(f): | ~ | UGC 12B:                  | $\checkmark$ |
|-------------------|--------------------------------|--|--------------|---|---------------------------|--------------|
|                   | Grant-in-aid + Self Financing: |  |              |   | Totally<br>Self-financing | ✓            |

#### **1.10 Type of Faculty/Programme:**

| Arts:             |  | Science:     |   | Commerce:       |  | Law:        |  | PEI<br>(Phys Edu): |  |  |
|-------------------|--|--------------|---|-----------------|--|-------------|--|--------------------|--|--|
| TEI(Edu)<br>:     |  | Engineering: | ~ | Health Science: |  | Management: |  |                    |  |  |
| Others (Specify): |  |              |   |                 |  |             |  |                    |  |  |

## 1.11 Name of the Affiliating University (for the Colleges): Savitribai Phule Pune University

| Autonomy by State/Central Govt. / Univer- | rsity | Yes, Autonomy by University and UGC |     |
|---|-------|-------------------------------------|-----|
| University with Potential for Excellence  | Nil   | UGC-CPE                             | Nil |
| DST Star Scheme                           | Nil   | UGC-CE                              | Nil |
| UGC-Special Assistance Programme          | Nil   | DST-FIST                            | Nil |
| UGC-Innovative PG programmes              | Nil   | Any other ( <i>Specify</i> )        | Nil |
| UGC-COP Programmes                        |       | Nil                                 |     |

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc.:

#### 2 IQAC Composition and Activities:

| 2.1  | No. of Teachers  | 09 |
|------|--|----|
| 2.2  | No. of Administrative/Technical staff                      | 05 |
| 2.3  | No. of students  | 03 |
| 2.4  | No. of Management representatives                          | 01 |
| 2.5  | No. of Alumni  | 02 |
| 2.6  | No. of any other stakeholder and community representatives | 02 |
| 2.7  | No. of Employers/ Industrialists                           | 02 |
| 2.8  | No. of other External Experts                              | 01 |
| 2.9  | Total No. of members                                       | 27 |
| 2.10 | No. of IQAC meetings held                                  | 01 |

## 2.11 No. of meetings with various stakeholders:

| Faculty                  | Weekly    | Dept. Wise      |
|--------------------------|-----------|-----------------|
| Non-Teaching Staff       | Weekly    | Dept. Wise      |
| Students                 | 02 / Term | Dept. Wise      |
| Alumni                   | 01 / Year | Institute level |
| Others - Parents Meeting | 01 / Term | Dept. Wise      |

| 2.12 Has IQAC received any funding from UGC during the year? |  | <br>No: | ~ |
|--|--|---------|---|
| If yes, mention the amount:                                  |  |         |   |

### 2.13 Seminars and Conferences (only quality related):

| (i) No. of S<br>academic de  |  | s/Conferences/W<br>ents:   | orksho                                   | ops/Symposia                                     | a organi    | ized by the ] | IQAC <sup>·</sup> | with various          |    |
|--|--|--|--|--|-------------|---------------|-------------------|-----------------------|----|
| Total Nos.   | 38   | International  | 01                                       | National:  | 05          | State:        | 03                | Institution<br>Level: | 29 |
| <ul> <li>Ener</li> <li>Eme</li> <li>Intel</li> <li>Eme</li> <li>Eme</li> </ul> | sformin<br>gy Tran<br>rging T<br>lectual<br>rging T<br>rging ti  | ng Engineering E<br>nsformation - Pra<br>Trends in Compu<br>Property Rights<br>Trends in Enginea<br>rends in next gen<br>Things for Indust | akalp 2<br>ter Eng<br>ering U<br>eration | 017<br>ineering and<br>GCON - 201<br>Wireless Co | Techno<br>8 |               |                   |                       |    |
|  | <ul> <li>World Skill Competition and Introduction to Electronics Skill</li> <li>A Science project exhibition event for K.G to U.G level students - SCICON</li> </ul> |  |  |  |             |               |                   |                       |    |

- ISO 9001:2015
- Design of Question Papers
- Moodle
- LATEX
- Canvas
- Google Classroom
- Design Thinking
- Scilab
- Chemical Reaction Engineering
- Transport Operations in Chemical Engineering
- Software applications AFT and Flaresim
- Application of MATLAB in chemical industries
- Piping Design and Engineering
- Project Exhibition
- Data Communication and Networking
- Greedy Algorithm and NP Complete Problems
- Advance Computer Architecture
- Search Strategies in AI and Neural Network Methodology
- Design and Analysis of Algorithm
- Data Science and Analysis
- Machine Learning Algorithms
- Data Science and Big Data Analytics
- Fundamentals of MATLAB
- PCB Design
- A model-making (on solids) event for engineering graphics students
- Autodesk Fusion 360 Software
- Technology for first time Right Design at Auto Cluster Design Tech System
- Electrical Vehicles: Opportunities and challenges in India
- Nanostructure Polymer thin film properties

#### 2.14 Significant Activities and contributions made by IQAC:

- Institute is audited internally and externally through ISO 9001:2008 Quality Management System both for academics and administration to ensure quality of all processes in the institute
- Recently, we have successfully completed transition audit ISO 9001:2015 Quality Management System
- Training of Quality Management System is given to all faculty and staff members of the institute
- All departments and sections in the institute follows proper ISO formats for effective implementation of quality
- Academic audit of every department is done in every term. Experienced industry persons, Academicians from reputed institutions like IIT, NIT and persons from R&D organizations are involved in the process.

## 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 2017-18\*.

| Plan of Action   | Achievements  |
|--|---|
| UGC conferred academic autonomy to MITAOE<br>from 2016-17. Hence, entire documents are<br>developed as per the requirement of academic<br>autonomy.<br>Transition Audit ISO-9001: 2008 to ISO 9001 :<br>2015 | We are implementing all documents to all years<br>of B TECH in progressive manner. In 2017-18<br>we have applied it for FY and SY BTECH.<br>Completed and Certified |
| Project Based, Activity Based, Problem Based<br>and collaborative learning shall be encouraged   | All departments are following mentioned<br>pedagogy for effective learning-teaching<br>process  |

| Use of ICT tools like Moodle, Google<br>classroom, mobile apps etc. | All faculty are effectively using ICT for their<br>courses for better understanding of millennial<br>learners   |
|---|---|
| Train the trainer   | More than 70 % faculty are trained for effective<br>teaching through IUCEE certification course,<br>IIT Bombay FDPs and FDPs organized on<br>campus and conducted by well-known trainers<br>from NITTTR, IITs, Reputed Universities from<br>India and abroad etc. |
| Digitization of System  | Most of the processes like admission process,<br>student feedback, employee feedback, HR are<br>digitalized. Remaining processes are in<br>pipeline.  |

\* Attached the Academic Calendar of the year 2017-18 as Annexure.

| 2.16 Whether the AQAR was placed in statutory bo | dy: | Yes:       | ✓ | No:             |  |
|--|-----|------------|---|-----------------|--|
| Management:                                      | ~   | Syndicate: |   | Any other body: |  |

| Provide the details of the action taken:            |  |
|---|--|
| Actions taken report attached – Refer Annexure - II |  |

## Part – B

## **Criterion I:**

## 1. Curricular Aspects:

## 1.1 Details about Academic Programmes:

| Level of the<br>Programme | Number of<br>existing<br>Programmes | Number of<br>programmes added<br>during the year | Number of self-<br>financing<br>programmes | Number of value<br>added / Career<br>Oriented programmes |
|---------------------------|-------------------------------------|--|--|--|
| PhD                       | Nil                                 | Nil  | Nil  | Nil  |
| PG                        | 3                                   | Nil  | 3  | Nil  |
| UG                        | 7                                   | Nil  | 7  | Nil  |
| PG Diploma                | Nil                                 | Nil  | Nil  | Nil  |
| Advanced Diploma          | Nil                                 | Nil  | Nil  | Nil  |
| Diploma                   | Nil                                 | Nil  | Nil  | Nil  |
| Certificate               | Nil                                 | Nil  | Nil  | Nil  |
| Others                    | Nil                                 | Nil  | Nil  | Nil  |
| Total                     | 10                                  | Nil  | 10   | Nil  |

| Interdisciplinary | Nil | Nil | Nil | Nil |
|-------------------|-----|-----|-----|-----|
| Innovative        | Nil | Nil | Nil | Nil |

#### 1.2 (i) Flexibility of the Curriculum:

| CBCS/Core/Elective option / Open options | Elective Option |
|--|-----------------|
|--|-----------------|

#### (ii) Pattern of programmes:

| Pattern   | Number of programmes |
|-----------|----------------------|
| Semester  | 07 (UG)              |
| Trimester | 03 (PG)              |
| Annual    | Nil                  |

#### 1.3 Feedback from stakeholders\*: (On all aspects)

| Alumni: | ~ | Parents: | ~ | Employers: | ~ | Students: | ✓ |
|---------|---|----------|---|------------|---|-----------|---|
|---------|---|----------|---|------------|---|-----------|---|

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

\*Please provide an analysis of the feedback in the Annexure - Refer Annexure - II

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

The revision of syllabus for university affiliated programs taken place. As the institute is autonomous from academic year 2016-17, new curriculum is designed for first year, second year and third year of UG programs & PG Programs.

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 |
|-------|------------------|----------------------|------------|--------|
| 181   | 154              | 11                   | 9          | 7      |

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

|--|

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

| Asst. Pro | ofessors | Associate ] | Professors | Profe | ssors | Othe | ers | То | otal |
|-----------|----------|-------------|------------|-------|-------|------|-----|----|------|
| R         | V        | R           | V          | R     | V     | R    | V   | R  | V    |
| 27        | Nil      | 01          | 25         | 00    | 08    | -    | -   | 28 | 33   |

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

| Guest faculty | 00 | Visiting<br>faculty | 21 | Temporary<br>faculty | 00 |
|---------------|----|---------------------|----|----------------------|----|
|---------------|----|---------------------|----|----------------------|----|

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

| No. of Faculty   | International level | National level | State level |
|------------------|---------------------|----------------|-------------|
| Attended         | 70                  | 2              | 0           |
| Presented Papers | 28                  | 5              | 0           |
| Resource Persons | 1                   | 0              | 0           |

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

- Outcome Based Education
- Multi and interdisciplinary approach in Course Design
- Mini, Minor and Major project concept in course structure
- Use of ICT such as Moodle, Canvas, Google Classroom etc.
- Industrial visits and trainings for students, staff and faculty
- Training on Engineering Education for faculty
- Online evaluation system for student performance
- Use of Virtual Labs, digital library, online journals
- Project Based, Problem Based and Activity based learning-teaching process
- Use of free open source software
- Desk Experiments
- Use of Social networking sites
- Use of NPTEL Lectures, Webinars
- The literature of the professional societies is made available to the students
- Use of LMS for Teaching Learning
- Office hours are provided
- The tools and techniques for self-learning are imbibed among students by conducting addon courses.
- Block study pattern
- Two weeks orientation program for SY BTECH students
- Internship for all SY BTECH Students
- Guest lectures from industry persons and experienced academicians
- Relevant research papers are used (where ever possible) to teach beyond syllabus, also the same papers are provided to students for reference and study

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

- Open book Examination
- Presentations, Demonstrations
- Double valuation
- Online Multiple Choice Question
- Formative and Summative assessment
- Photocopy of answer sheets
- Complete transparency in assessment and evaluation every student views his assessed answer scripts and has the right to get each answer script re-evaluated. The internal assessment marks allotted by the course faculty is also shown to students at every stage of continuous assessment.
- The answer script are assessed by the course faculty and then moderated by another faculty to ensure error free assessment.
- Re-examination for every course conducted within ten days of declaration of result
- All results declared within ten days of the conclusion of examinations
- Good quality Grade cards with security features to prevent duplication / malpractices

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

181

2.10 Average percentage of attendance of students :

| 77 |
|----|
| // |

| Title of the Programme | Total no. of students | Division      |       |      |       |        |  |  |
|------------------------|-----------------------|---------------|-------|------|-------|--------|--|--|
|                        | appeared              | Distinction % | I %   | II % | III % | Pass % |  |  |
| Chemical               | 65                    | 80            | 13.8  | 3.1  | 0     | 0      |  |  |
| Civil                  | 59                    | 83.05         | 5.08  | 5.08 | 0     | 0      |  |  |
| Computer               | 148                   | 60.13         | 27.2  | 4.72 | 0     | 0      |  |  |
| Electronics            | 42                    | 33.33         | 42.86 | 11.9 | 0     | 0      |  |  |
| E & TC                 | 132                   | 55.3          | 29.55 | 2.27 | 0     | 0      |  |  |
| Information Technology | 70                    | 67.14         | 28.57 | 1.42 | 1.42  | 0      |  |  |
| Mechanical             | 167                   | 79.04         | 14.97 | 4.79 | 0     | 0.598  |  |  |

2.11 Course/Programme wise distribution of pass percentage :

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

Experienced industrial persons and academicians from reputed institutions like IIT and NIT are invited for the Academic Audit conducted in every semester.

Internal quality audits are conducted every six months in the following aspects:

- Review of Quality Objectives
- Stake holder's feedback
- Internal audit results
- Product Conformity and Processes Performance
- Non conforming services including students
- Corrective and Preventive action and follow up
- Recommendations for improvement
- Resources and Infrastructure requirement
- Any other point related quality and reviewed during the management review meeting

## 2.13 Initiatives undertaken towards faculty development:

| Faculty / Staff Development Programmes         | Number of faculty<br>benefitted |
|--|---------------------------------|
| Refresher courses                              | 28                              |
| UGC – Faculty Improvement Programme            | 26                              |
| HRD programmes                                 | 5                               |
| Orientation programmes                         | 5                               |
| Faculty exchange programme                     | 0                               |
| Staff training conducted by the university     | 4                               |
| Staff training conducted by other institutions | 22                              |
| Summer / Winter schools, Workshops, etc.       | 117                             |
| Others   | 26                              |

#### 2.14 Details of Administrative and Technical staff:

| Category             | Number of<br>Permanent<br>Employees | Number of Vacant<br>Positions | Number of<br>permanent positions<br>filled during the Year | Number of<br>positions filled<br>temporarily |
|----------------------|-------------------------------------|-------------------------------|--|--|
| Administrative Staff | 162                                 | Nil                           | 25   | Nil  |
| Technical Staff      | 53                                  | Nil                           | 00   | Nil  |

## **Criterion III:**

#### 3. Research, Consultancy and Extension:

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

- Quality objectives are revised at the beginning of academic year and disseminated to all departments through R&D Coordinator meeting
- FDPs / workshops are conducted for promotion of research activities in the institute
- R&D schemes for faculty and staff are discussed in the meetings conducted for all faculty and staff
- Institute gives financial support to attend conference, workshops, STTP, FDP and filing patents
- Institute also offers R&D incentive scheme to motivate faculty and staff

#### 3.2 Details regarding major projects:

|                     | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number              | 1         | 1       | 0          | 16        |
| Outlay in Rs. Lakhs | 5.5       | 3       | 3          | 159.06    |

#### 3.3 Details regarding minor projects:

|                     | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number              | 3         | 5       | 2          | 2         |
| Outlay in Rs. Lakhs | 1.22      | 4.075   | 2.15       | 6.07      |

#### 3.4 Details on research publications:

|                          | International | National | Others |
|--------------------------|---------------|----------|--------|
| Peer Review Journals     | 10            | 0        | 0      |
| Non-Peer Review Journals | 12            | 1        | 0      |
| e-Journals               | 0             | 0        | 0      |
| Conference proceedings   | 31            | 23       | 0      |

#### 3.5 Details on Impact factor of publications:

| Range: | 0 - 5 | Average: | 1.31 | h-index: | 0 - 5 | Nos. in SCOPUS | 24 |
|--------|-------|----------|------|----------|-------|----------------|----|
|--------|-------|----------|------|----------|-------|----------------|----|

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

| Nature of the Project  | Duration<br>Year              | Name of the funding Agency               | Total grant sanctioned | Received   |
|--|-------------------------------|--|------------------------|------------|
| Major projects   | 2016-17<br>2017-18<br>2018-19 | Science & Engg. Research<br>Board, Delhi | 1100000                | 1000000    |
| Minor Projects   |                               |  | 0                      | 0          |
| Interdisciplinary Projects   |                               |  | 0                      | 0          |
| Industry sponsored   | 2017 -<br>2021                | Invictus Pvt. Ltd.                       | 2800000                | 925000     |
| Projects sponsored by the<br>University/ College                           | 2016-18                       | BCUD, SPPU, Pune                         | 495000                 | 194108     |
| Students research projects<br>(other than compulsory by<br>the University) |                               |  | 0                      | 0          |
| Any other(Specify)   | 2017-18                       | Funding for FDP, SPPU                    | 1.45                   | 1.45       |
|  |                               | Total                                    | 4395001.45             | 2119109.45 |
|  |                               |  |                        |            |

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3.8 No. of University Departments receiving funds from :



## 3.11 No. of conferences organized by the Institution :

| Level                  | International                                   | National                   | State | University | College |
|------------------------|---|----------------------------|-------|------------|---------|
| Number                 | 1   | 2                          | 0     | 0          | 0       |
| Sponsoring<br>agencies | IEEE, Pune<br>Section,<br>SPPU and<br>Institute | ACM, SPPU<br>and Institute |       |            |         |



3.15 Total budget for research for current year in lakhs :

From Funding agency: 725000 From Management of University/College: 2575000 Total: 3300000

3.16 No. of patents received this year :

| Type of Patent |         | Number |
|----------------|---------|--------|
| National       | Applied | 10     |
| national       | Granted | Nil    |
| International  | Applied | Nil    |
| International  | Granted | Nil    |
| Commercialized | Applied | Nil    |
| Commercialised | Granted | Nil    |

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 |
|-------|---------------|----------|-------|------------|------|---------|
| 4     | 0             | 1        | 0     | 0          | 0    | 3       |

| 3.18 No. of faculty from the Institution who are Ph. D. Guides and                 | 3         |  |  |  |  |  |  |  |
|--|-----------|--|--|--|--|--|--|--|
| tudents registered under them: 9   |           |  |  |  |  |  |  |  |
| 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)     |  |  |  |  |  |  |  |
| JRF: NA SRF: NA Project Fellows: NA Any c  | other: NA |  |  |  |  |  |  |  |
| 3.21 No. of students Participated in NSS events:                                   |           |  |  |  |  |  |  |  |
| University level: 52 State level: N  | ïl        |  |  |  |  |  |  |  |
|  |           |  |  |  |  |  |  |  |
| National level:NilInternational level:N  | il        |  |  |  |  |  |  |  |
| 3.22 No. of students participated in NCC events:                                   |           |  |  |  |  |  |  |  |
| University level: Nil State level:   | Nil       |  |  |  |  |  |  |  |
|  |           |  |  |  |  |  |  |  |
| National level:     Nil     International level:                                   | Nil       |  |  |  |  |  |  |  |
| 3.23 No. of Awards won in NSS:   |           |  |  |  |  |  |  |  |
| University level: Nil State level:   | Nil       |  |  |  |  |  |  |  |
|  |           |  |  |  |  |  |  |  |
| National level: Nil International level:   | Nil       |  |  |  |  |  |  |  |
| 3.24 No. of Awards won in NCC:   |           |  |  |  |  |  |  |  |
| University level: Nil State level:   | Nil       |  |  |  |  |  |  |  |
|  |           |  |  |  |  |  |  |  |
| National level: Nil International level:   | Nil       |  |  |  |  |  |  |  |

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3.25 No. of Extension activities organized:



#### 4. Infrastructure and Learning Resources:

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

| Facilities   | Existing    | Newly<br>created | Source of<br>Fund      | Total       |
|--|-------------|------------------|------------------------|-------------|
| Campus area (square-meter)   | 44967.40    | Nil              |                        | 44967.40    |
| Class rooms (Nos. and square-meter)  | 34 (2536)   | Nil              | Institute              | 34 (2536)   |
| Laboratories (Nos. and square-meter)   | 71 (5773)   | Nil              | Fund                   | 71 (5773)   |
| Seminar Halls  | 05 (728)    | Nil              |                        | 05 (728)    |
| No. of important equipments<br>purchased (≥ 1-0 lakh) during the<br>current year | 89          | 3                | Institute and research | 92          |
| Value of the equipment purchased<br>during the year (Rs. in Lakhs)               | 23173599.82 | 881560           | Fund                   | 24055159.82 |
| Others   | 00          | 00               |                        | 00          |

#### 4.2 Computerization of administration and library:

#### Administration:

- Online Admission Process
- We are following the Admission process of DTE
- We are keeping the original Documents data of the Students in Scanned format

- Similarly, we are accepting the Fees of the students through online banking payment system
- Admitted Students data base is maintained in our ERP System
- Documents are saved on drive
- Microsoft Office and free open source software like *LATEX* is used

#### Library:

 Central Library uses Slim-21 which is an integrated, multiuser, multitasking Library Management Software which contains various modules like Circulation, Acquisition, Cataloguing, Serials Control and Web-OPAC etc.

#### 4.3 Library services:

|                     | Exist  | ing      | Newly add                                    | ded    | Tota   | 1        |
|---------------------|--|----------|--|--------|--|----------|
|                     | No.  | Value    | No.  | Value  | No.  | Value    |
| Text Books          | 35411  | 10648988 | 1277   | 639122 | 36673  | 11288110 |
| Reference<br>Books  | 2440   | 4168745  | 27   | 41143  | 2467   | 4209888  |
| e-Books             | 2455   |          | 2061   |        | 4516   |          |
| Journals            | 142  | 3060585  | 157  | 114943 | 157  | 3175528  |
| e-Journals          | IEEE, SD,<br>ASME,ASCE,<br>Springer,<br>MGH, Ebsco | 7814296  | IEEE, SD,<br>ASME,ASCE,<br>Springer,<br>MGH, |        | IEEE, SD,<br>ASME,ASCE,<br>Springer,<br>MGH, | 7814296  |
| Digital<br>Database | J-Gate E&T   | 471176   | DELNET                                       | 13570  | DELNET                                       | 484716   |

|            |   | J-Gate Mgt.  |  |                       |       |                       |        |
|------------|---|--|--|-----------------------|-------|-----------------------|--------|
|            |   | DELNET   |  |                       |       |                       |        |
|            |   | 725  | 50739  | 170                   |       | 895                   | 50739  |
|            |   |  | In house<br>Project CD                           |                       |       |                       |        |
| CD & Video |   | 12579  | Video<br>lectures<br>downloaded<br>from<br>NPTEL | 1455                  |       | 14034                 |        |
| Ot         | hers  |  |  |                       |       |                       |        |
| (sp        | pecify)   | BCL, UOP,  | 398370   | Renewed               | 14040 | BCL, ARAI,            | 412410 |
| 1.         | External liasoning:                                   | ARAI etc.<br>AMC   | 464964   | existing<br>AMC       | 33040 | UoP<br>AMC            | 498004 |
| 2.         | BCL,<br>SPPU,<br>ARAI<br>Lib.                         | Computer<br>&Computer<br>Accessory   | 943521   | Computer<br>Accessory | 2200  | Computer<br>Accessory | 945721 |
| 2.         | Software AMC  | Scanned  |  |                       |       |                       |        |
| 3.         | Purchasin<br>g of<br>computer<br>and its<br>accessory | abstract<br>GATE papers<br>Competitive<br>exam papers<br>Question<br>paper |  |                       |       |                       |        |
| 4.         | In-house<br>e-<br>resources                           |  |  |                       |       |                       |        |

4.4 Technology up gradation (overall):

|          | Total<br>Computers | Computer<br>Labs | Internet  | Browsing<br>Centres | Computer<br>Centres | Office | Depart<br>ments | Others |
|----------|--------------------|------------------|---|---------------------|---------------------|--------|-----------------|--------|
| Existing | 1093               | 25               | 200<br>MBPS<br>For<br>Campus<br>and<br>20 MBPS<br>for Girls<br>Hostel | 0                   | 1                   | 15     | 7               | 0      |
| Added    | 0                  | 0                | 20 MBPS<br>for Girls<br>Hostel  | 0                   | 0                   | 0      | 0               | 0      |
| Total    | 1093               | 25               | 200<br>MBPS<br>For<br>Campus<br>and<br>40 MBPS<br>for Girls<br>Hostel | 0                   | 1                   | 15     | 7               | 0      |

- All the Systems in every Laboratories are in the Network with internet facility. Access can be allowed as and when required.
- Institute has subscribed 200 MBPS 1:1 BW Dedicated lease line from Reliance Communication having annual expenses of Rs 12 Lakhs + Taxes.
- Approximately, 50 % campus is WIFI enabled. Students can browse internet through their laptops or smart phones.
- Boys hostel is situated in the college campus. All rooms in the hostel are provided with the internet facility. Around 300 nodes are available for students to access internet through LAN. Students can browse the internet after office hours. (i.e. 4:30 pm to 8:30 am on Monday Friday and 24 Hours on Saturday Sunday)

Lease Line Connectivity of 200 MBPS [1:1BW] is available for Boys hostel students during above timings.

• Girls Hostel has separate Internet Lease line of 40 MBPS BW.

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

- There are 20 training program organized for faculty of institute
- One national level conference and three departmental level programs were conducted for students
- Guest Lectures were conducted for students from industry and academic persons
- Faculty Development Programs like Big Data Analytics, Assessment and Evaluation, Search Strategies in AI and Neural Networks, Data Communication and Networking, Dynamic Programming and Divide and Conquer, OBE by NITTR, Machine Learning Algorithm etc.
- Staff Training on Hardware and Networking
- Dell EMC Certification and SDP on Big Data Analytics for Students
- Orientation Program on Core Java, C++ etc.
- ICT / LMS training Moodle, Canvas, Google classroom etc.
- Matlab Programming Course offered by IIT Madras
- In academic year 2017 institute has setup Moodle Servers as a Learning Management System . Students can access these Server online from anywhere. Every department has its own Moodle Server which was configured with public IP Address to Access it within the campus as well as out of the campus from anywhere.
- Same concept of the LMS is now put on the Cloud Server
- Computer systems get upgraded as per the requirement of curriculum and as per the software installation needs. Institute always tries to offer the latest technology to provide the best education for students.
- All the Class rooms are provided with OHP and / or LED Projectors. Some class rooms are supported with facility of Smart Boards. Also, portable LED projectors are available.
- The institute is having a plan to complete remaining Wi-Fi installation for the remaining campus

4.6 Amount spent on maintenance in lakhs:

|      | ICT   | r:  | 172822 |  |  |  |  |
|------|---|---|--------|--|--|--|--|
|      | HRMS ERP System - ERP Software for Online Admission, Students |   |        |  |  |  |  |
| i)   | Ma  | nagement System & Human Resource Management System            |        |  |  |  |  |
|      | Lec   | urning Management System - Implementation of Moodle Server on |        |  |  |  |  |
|      | Cla   | nud Based Services  |        |  |  |  |  |
| ii)  | Car   |   |        |  |  |  |  |
|      | 1   | Renewal of Microsoft Campus Licenses                          | 410370 |  |  |  |  |
|      | 2   | Symantec Antivirus  | 10300  |  |  |  |  |
| iii) | Equ   | 200000  |        |  |  |  |  |
| iv)  | Otł   | Nil   |        |  |  |  |  |
|      | L   | Total   | 793492 |  |  |  |  |

## **Criterion V:**

#### 5. Student Support and Progression:

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

- Students Counseling and Grievance redressal by faculty and college grievance committee members.
- Organising Technical events such as Robocon, BAJA, Supera, Prakalp, e-Yanyra, NIYANTRA, world Skills international competitions etc.
- Fostering Technical and personality growth of students on the aegis of various students chapters such as IEEE, IE(I), ACM, IETE, CSI, IIChE, IETE etc.
- List of companies visited for placement drive and name of students placed is disseminated through mail, google group, whatsapp group, and also displayed on notice board.
- Placed and entrance exam qualified students interact with batch mates and juniors to share experience.
- Students- guardian faculty scheme is implemented to track progress.
- Soft skills and professional development and German Language extra classes were organized.
- The students are encouraged to participate in national and international seminars and present their research papers.
- Regular guidance provided by interacting with the expertise guest faculty. Student projects are strongly encouraged and support is given.
- Faculty members are positive minded to share their technical exposure/ specialized knowledge to other faculty members in a discussion.
- The department sponsors the students for attending project and paper presentation competitions.

- The department organizes annual exhibition and project competition for final year students.
- Students are also motivated to participate inter colleges / university level competitions.
- The department organizes students visit to industries and R&D organizations.
- The students are involved in faculty research projects.
- Each academic department gives Best Outgoing students award for deserving students and institute gives Best outgoing students Award MAESTRO every year.

5.2 Efforts made by the institution for tracking the progression:

- ISO 9001-2008 Quality Management System (QMS) to monitoring the students progress at each stage
- The attendance and academic non-conformity of students is checked and corrective actions are taken on regular basis
- Continual assessment of curriculum delivery throughout the semester vide assignments, internal class tests, in-semester examinations etc.
- Interim reviews for Projects and Seminars
- Result analysis at the end of every term
- Periodic student feedback system
- Analysis and evaluation of effectiveness of presentation skills, communication skills through presentation / demo / report writing of projects / industrial visits / training
- Organizing make up / problem solving /resource lectures to meet the students requirements
- Course end surveys
- Monitoring participation and achievement of students in co-curricular and extra-curricular activities
- Identifying slow learners and fulfilling their specific needs
- Focus on planning and effective implementation of teaching-learning process

| 5.5 (a) Total Number of students: | 5.3 | (a) Total Number of students: |
|-----------------------------------|-----|-------------------------------|
|-----------------------------------|-----|-------------------------------|

| UG   | PG | Ph. D. | Others |
|------|----|--------|--------|
| 2761 | 47 | NA     |        |

(b) No. of students outside the state:

(c) No. of international students:

| Men | No.  | %  | Women - | No. | %  |
|-----|------|----|---------|-----|----|
| Men | 2037 | 73 | w onnen | 771 | 27 |

315

Nil

| Last Year |     |    | This Year |                          |       |         |     |    |     |                          |       |
|-----------|-----|----|-----------|--------------------------|-------|---------|-----|----|-----|--------------------------|-------|
| General   | SC  | ST | OBC       | Physically<br>Challenged | Total | General | SC  | ST | OBC | Physically<br>Challenged | Total |
| 1651      | 245 | 37 | 806       | 0                        | 2739  | 1670    | 259 | 41 | 838 | 0                        | 2808  |

| Demand Ratio | 73 % | Dropout % | 1.5 % |
|--------------|------|-----------|-------|
|--------------|------|-----------|-------|

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

- Mock GATE Tests
- Problem solving and Extra classes for GATE study
- Professional Development Session
- Counseling regarding the importance of competitive exams
- Guest lectures on Career Opportunities in the respective field of engineering

- Seminars on higher studies
- Counseling for professional behavior and competitive exams
- Aptitude classes

|                                | 50.4 |
|--------------------------------|------|
| No. of students beneficiaries: | 534  |

5.5 No. of students qualified in these examinations:



5.6 Details of student counselling and career guidance:

- Training and placement orientation program for pre-final year students
- Various guest lectures to increase awareness for understanding recent happening in the respective field of engineering
- Interactive sessions with the people from research organizations
- Mock placement drive with individual feedback to student
- Seminars on Carrier Guidance and Project Sponsorship
- Professional Development Sessions
- Interactive sessions with the students to understand their problems and difficulties
- Ensuring student satisfaction, motivating students to participate in co-curricular and extracurricular activities, and professional guidance through counseling sessions

No. of students benefitted:

568

#### 5.7 Details of campus placement:

|                                    | Off Campus                         |                              |                              |
|------------------------------------|------------------------------------|------------------------------|------------------------------|
| Number of<br>Organizations Visited | Number of Students<br>Participated | Number of Students<br>Placed | Number of Students<br>Placed |
| 118                                | 581                                | 185                          | 22                           |

5.8 Details of gender sensitization programmes:

- Guest lecture for girls students about hygiene for monthly cycle
- Counseling of students about gender equality concerns, modification of behaviors and awareness on gender specifications

#### 5.9 Students Activities:

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



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5.10 Scholarships and Financial Support:

|  | Number of<br>Students | Amount    |
|--|-----------------------|-----------|
| Financial support from institution                                   | 09                    | 65359     |
| Financial support from government                                    | 1143                  | 107300000 |
| Financial support from other sources                                 | 14                    | 256020    |
| Number of students who received International/ National recognitions | Nil                   |           |

5.11 Student organised / initiatives:



## **Criterion VI:**

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

6.1 State the Vision and Mission of the institution:

Vision:

To leave no stone unturned in our endeavor to ensure that every alumnus looks back to us and says

- MITAOE has not merely taught us, it has educated us

Mission:

To develop the institute into a world-class learning centre with an excellent ambience for academics and research conjugated with vibrant environment for honing the extra and co curricular skills of all its stake holders to enable them to meet the challenge of a fiercely competitive world

6.2 Does the Institution has a management Information System:

| Yes  |  |  |  |  |  |
|--|--|--|--|--|--|
| Computerization of administration:   |  |  |  |  |  |
| The institution has good computer network and following processes are partially or fully |  |  |  |  |  |
| computerized.  |  |  |  |  |  |
| <ul> <li>Accounts</li> </ul>   |  |  |  |  |  |
| <ul> <li>Student Section</li> </ul>  |  |  |  |  |  |
| • HR   |  |  |  |  |  |
| Library  |  |  |  |  |  |
| <ul> <li>Department offices</li> </ul>   |  |  |  |  |  |
| <ul> <li>Online feedback of stakeholders</li> </ul>                                      |  |  |  |  |  |

- Online examinations
- Online assessment and evaluation
## 6.3 Quality improvement strategies adopted by the institution for each of the following:

## 6.3.1 Curriculum Development:

- Project Based, Problem Based, and Concept Based Curriculum
- Industry Oriented Curriculum Design
- Multi and Inter disciplinary Courses
- Multi level review of curriculum
- Inputs from reputed universities and institutions
- Involvement of persons from industry & professional societies in curriculum development
- Included real life application based problems in Syllabus
- New courses like Psychology, Project Management, Entrepreneurship, System Engineering, Communication and Soft Skills, professional skills, Engineering Informatics, Prototyping, Engineering Tools & Techniques, Design thinking are included in the curriculum to develop skills.
- Club activities are started. More than 10 Clubs are working in institute to cater students requirements.
- Add on modules related to industry requirements started to enhance placement.
- Faculty take active participation in curriculum detailing organised by Savitribai Phule Pune University and institute.
- Training on teaching-learning pedagogy given to all faculties through international and national experts.

## 6.3.2 Teaching and Learning:

- Minimum 75% attendance is mandatory to accept the term for each course
- Monitoring of students attendance in class
- Well plan teaching methodology

- Problem based, Project based, Concept based and Activity based teaching-learning in classroom and laboratories.
- Effective use of LMS like Moodle, Google class room, Canvas etc.
- Blended learning model
- Use of ICT in teaching-learning process
- Guest lecture through industry experts
- Collaborative learning

#### 6.3.3 Examination and Evaluation:

- Multiple Choice Questions
- Graded Activities
- Demonstrations
- Poster Presentations
- ICT based Evaluation
- In-course Examination, End-Course Examination, Project Examination etc.
- Internal assessment for continuous evaluation of students
- More weightage for practical assignments
- Online submission and evaluation of assignments
- Innovative assessment and evaluation along with proper rubrics
- Double Evaluation
- Paper showing of all courses and all exams
- Paper setting as per Bloom's Taxonomy level
- Re-examination

## 6.3.4 Research and Development:

- Each academic department has identified their forefront research areas based on current requirement of industry and society
- Faculties and students are working in these selected areas
- Faculties are motivated to register for the PhD and also, encouraged to submit research proposals to various funding agencies
- R&D Cell of institute motivates faculty and students to file patents on their innovations and also supports for same
- R&D incentive scheme is implemented at institute level to encourage faculty for research
- Institute organizes various FDPs, seminar, workshops, conference to sensitize the research culture in institute
- Collaboration with industry for Project Sponsorship
- Collaboration with Research Institutes / Organization
- Institute promotes the industrial sponsored projects for students, and also assist the students in the publication of research work in reputed conferences and peer reviewed journals

6.3.5 Library, ICT and physical infrastructure / instrumentation:

Library:

- Total area of Central Library is 795 Sq. meter
- Library has adequate and good infrastructure to meet student's requirement
- It has centralized reading hall with the seating capacity of 250 students, Periodical Section, Acquisition and Technical Section, a Librarian Office, Checking Counter, Circulation Section, Digital Library and Multimedia Section, Stack Section, Reference Section, Book Bank Section and Bound Volumes and loose issue of periodical section
- Central Library is using the SLIM 21 Library Software with various modules for all library

activity

- Bar coded based issue / return of books
- Central Library has started SMS service
- Softcopy of old question papers and projects

# ICT:

- Various ICT tools like Zipgrade, Edpuzzle, Edmodo, google groups, whatsapp groups etc. are used for teaching-learning as well as official communications
- Teaching-learning is carried out with various Learning Management Systems like Moodle, canvas, Google classroom etc.
- Course teachers have developed course Website for Content Management system
- ICT Tools for Prototyping like Lucid Chart, Invision, Proto IO, Pixate, Smart Draw are used

Physical infrastructure / instrumentation:

- Campus security using surveillance cameras
- More facilities added in Examination section
- Food and canteen facility improvement with new canteen
- New laboratory setups like Engineering Informatics, Oracle Express ExaData, NI Boards for Network Analysis etc.
- Preventive maintenance of all equipment
- Timely calibration of measuring instruments
- Standard purchase procedure for purchasing quality equipment
- Utilization of modern and high-tech equipment and labs
- Purchasing from approved and standard suppliers
- After sales service of equipment from suppliers

- Training to use equipment for staff and faculties
- Standard procedure to discard old equipment
- Maintenance of equipment from standard and skilled agencies
- Training of industrial safety and measures for staff and faculty
- Wi-Fi facility at campus
- Sufficient electricity supply by separate transformer and provision of generator back up
- Full-fledged parking and playground facility
- Medical and hostel facility for girls and boys
- Provision of RO plant for drinking water
- Hygienic canteen and clean washrooms
- Availability of ladies common room
- Garden and recreation facility in the campus
- AMC for housekeeping system
- Timely and proper disposal of paper waste and E-Waste
- Standard inventory control
- Provision of basic fire-fighting
- Weather monitoring system
- Clean and green campus to minimize the pollution
- Production and supply of organic fruits and vegetables for staff and students
- Provision of renewable energy sources
- Seminar halls for conducting various events
- Ambulance facility at emergency
- Reading room, gymkhana and sports facility
- 24 X 7 security force in the campus

- Facility of fax, postage, courier and telephone etc.
- Modern teaching learning aids

6.3.6 Human Resource Management:

- Provision of separate HR department for recruitment of quality manpower
- API system for faculty and staff updated
- HRMS system is implemented

# 6.3.7 Faculty and Staff recruitment:

- In the recruitment process an advertisement is given in all leading newspapers against vacancies various departments, posts etc. Applications in hard copy are invited.
   Applications are sorted against eligibility criteria.
- All eligible candidates are called for written test (which is based on technical knowledge, various skills and outcome based education) followed by presentation / demo lecture
- Selected candidates in the test are called for interviews conducted by UGC panel appointed by University. Generally, panel comprises of VC nominee, Caste Nominee, Executive Director nominee, Director, Registrar, Head of the Department, internal subject experts and subject experts from other reputed academic institutions
- Selected candidates join as per the university acts by producing all required documents defined by University

# 6.3.8 Industry Interaction / Collaboration:

- MOU is signed with Rashtriya chemicals & fertilizers (RCF) Alibag for students Training
- Collaboration with Hitachi and Vigyan Ashram, DELL EMC, Infosys Campus, GS Lab, C-DAC, QA Mentor, Persistent, BMC etc.

- MOU is signed with TSSC
- Certificate course organized in collaboration with BSNL BRBRAITT, Jabalpur, MP
- Certificate course organized in collaboration with BSNL RTTC, Pune

6.3.9 Admission of Students :

- Admission process is through DTE based on MH-CET and JEE merit score
- Marketing of the institute to attract more students to get admission Digital marketing and marketing through printed material
- First phase we collect the leads through single funnel named extra edge the lead managing web site. We then publish the help line number on website which directs leads to college. Here, we keep in touch with prospective students through email or sms.

| 6.4 Welfare schemes for: |   |  |
|--------------------------|---|--|
| Teaching                 | <ul> <li>Sponsorship for Professional Society membership, Research publications, Attending Seminar / Workshop / Conference / training etc.</li> <li>Sabbatical and Study Leaves</li> <li>Sponsorship for Faculty Exchange</li> <li>Rewards for PhD awarded, National / International achievements</li> <li>Best Faculty award every year</li> </ul> |  |
| Non teaching             | <ul> <li>Housing Loan Scheme for staff completed 5 years' service in<br/>Institute</li> <li>Best Staff award every year</li> </ul>  |  |
| Students                 | <ul><li>Fee reduction for merit holder students</li><li>Financial support for poor and meritorious students</li></ul>   |  |

| 6.5 Total corpus fund generated | Nil |
|---------------------------------|-----|
|                                 |     |

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 /<br>No | Agency   |     | Authority   |
| Academic       | Yes         | Faculty from IIT / NIT / Reputed autonomous institutions | Yes | Dean QA, Dean Academics, and<br>Internal ISO Auditors |
| Administrative | Yes         | ISO - NVT QC   | Yes | Dean QA and Internal ISO Auditors                     |

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

| For UG Programmes: |
|--------------------|
|--------------------|

| For PG Program | mes: |
|----------------|------|
|----------------|------|

|--|

| Yes 🗸 |  |
|-------|--|
|-------|--|

No --

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

Complete transparency in assessment and evaluation: In MITAOE in the autonomous
pattern, a culture of transparency has been cultivated. After each examination (in semester
or end semester examination), every student is given an opportunity to view his/her
assessed answer script. The students can discuss the allotted marks with the evaluator and
satisfy themselves that they have been given the marks that they deserve.



- Supplementary examinations conducted for weaker students: The weaker students who are unable to secure passing grades in the examination are given another chance to appear for the same course examination. A re-examination is conducted within ten days after the result declaration. Weaker students can register and re-appear for each course of the current semester in which they have been unable to secure passing grades.
  - Summer/Remedial Term: After the even semester, students who have not obtained passing grades in some courses are registered for the Summer/Remedial term. In this term, which is of 3-4 weeks duration, the courses are taught again to the students. The remedial term examination is conducted after the summer term and the weaker students get yet another attempt to secure passing grades to enable their smooth transition into the subsequent higher class.
- Promotion Scheme: At MITAOE the promotion scheme is such that it has done away with the concept of students being discontinued (Year down) due to failure in several courses. Slow learners are promoted to the higher class, but they only opt for few credits of the higher class, the remaining credits are from the courses that they have not passed in the previous academic year. The slow learner studies at his own pace and is allowed to complete his graduation in a maximum of 12 semesters. Students can be eligible for extra credits based on their CGPA
- Quality of question papers: The question papers are designed to address various lower and higher order thinking skills. Forty percent of the question paper is catering to the average learner with lower order thinking skills and remaining part of the question paper is based on applications of the courses that are taught i.e. higher order thinking skills. The question papers are audited by a moderation committee and reforms and suggestions are given by them for further improvements.

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

• We have implement progressive autonomy for UG and PG w.e.f. academic year 2016-17

## 6.11 Activities and support from the Alumni Association:

- Alumni meet is conducted once in a year
- Alumni provide valuable feedback regarding curriculum, infrastructure
- They provide guidance to students as and when required to the students
- Virtual Campus
- Guest Lecture
- Carrier Guidance
- Feedback from Alumni

## 6.12 Activities and support from the Parent – Teacher Association:

- Parent-Teacher meet is conducted in every term
- Parents are updated about their wards progress
- Parents even meet the faculty in the department and provide some oral suggestions which also contribute to the teaching-learning process
- They give valuable suggestions for the improvement of students, department and institution

## 6.13 Development programmes for support staff:

Various events are organized for the development of the staff:

- Personality Development
- Awareness of NBA
- Professional development workshop
- SDP on Advanced Computational Skills
- Skill Development course on installation engineer organized by BRBRAITT, Jabalpur

- SDP on Leadership and Conflict management and interpersonal relation and problem
- SDP on improving language skills

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

- Some exams are paperless online
- In most of the cases printouts and photocopies are taken on both sides of the paper
- Wasted papers / NEWS papers etc. are forwarded for recycling purpose
- Toner cartridge are recycled
- Biometric attendance is used for all employees
- RO plant of capacity 2000 Lit/hr is set up for pure drinking water
- Greenery campus with ample amount of trees
- Energy saving is implemented
- Department propagates the importance of energy conversion by intimating staff and students to turn of light and fans whenever not required
- Department creates awareness amongst staff and students to turn off water taps whenever not required
- All the computers in computer lab have LCD monitors to consume less energy
- Most of the peripherals used in computer lab are modern and updated
- The waste paper are not burnt but they are shredded
- Many administration and academic processes are online

# **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.:

- Project Based, Activity Based, Problem Based and Collaborative Learning
- Industry Collaboration for Workshop, Seminars, Guest Lectures, FDP and Projects and Technical Certifications
- Internship for SY BTECH and TY BTECH students
- Use of NPTEL and video Lectures from reputed academicians across the world through coursera, edx etc.
- Industrial Visits
- Use of ICT
- Motivating students by giving them awards for their performance in department, extracurricular activities and social services
- Faculty are encouraged to use electronic teaching aids

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

Quality Objectives of institute were discussed in the meeting by relevant HODs & Subject was well controlled. Number of Quality Objectives and number of achieved Objectives of 2017-18 are

shown in the following table:

| Department / Section | Number of Quality<br>Objectives | Number of Quality Objectives<br>Achieved |
|----------------------|---------------------------------|--|
| Director Office      | 4                               | 4  |
| Dean - Admin         | 7                               | 6  |
| Registrar            | 4                               | 1  |
| Student Section      | 2                               | 1  |
| Estate               | 5                               | 4  |
| Stores & Purchase    | 2                               | 1  |
| Systems              | 3                               | 3  |
| Dean - FSA / HR      | 6                               | 1  |
| Dean - SA            | 3                               | 1  |
| Dean - Academics     | 4                               | 4  |
| Library              | 3                               | 2  |
| Dean - CR            | 5                               | 1  |
| T&P                  | 3                               | 3  |
| Dean - R&D           | 6                               | 4  |
| Hostel               | 2                               | 2  |
| Workshop             | 4                               | 1  |
| COE                  | 4                               | 3  |
| FY BTECH             | 5                               | 4  |
| Applied Science      | 6                               | 2  |
| HPD                  | 6                               | 5  |
| Chemical             | 11                              | 7  |
| Civil                | 11                              | 1  |
| Computer             | 11                              | 10                                       |

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| Electronics                        | 11 | 7 |
|------------------------------------|----|---|
| Electronics &<br>Telecommunication | 11 | 7 |
| Information Technology             | 11 | 7 |
| Mechanical                         | 11 | 8 |

- Director instructed all Deans, HODs and section Heads shall review their Quality Objectives to improve effectiveness
- The dean QA proposed that we should continue with the existing quality policy
- The HODs and section heads presented their department's quality objectives and target were discussed for next academic year

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

• Refer Annexure - IV (i and ii)

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

7.4 Contribution to environmental awareness / protection:

- Eco friendly Ganesh Idol workshop was conducted by well known Sculptor, Prime Minister's *Mann-ki-baat* featured, Maharashtra Shilp Gaurav Shri Abhijit Dhondphale
- Biogas plant in the campus to treat the hostel and canteen waste
- RO plant
- Use of diluted chemical for experimentations and disposal in scientific way
- Tree plantation drive
- Visit to Pimpiri Chinchwad Science Park, Sugar factory, water treatment plan of municipal corporation etc. to create environmental awareness amongst the students and staff
- Minor projects and major projects of students are based on River cleaning, Harvesting of Rain water etc.

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

#### Strengths:

- Academic autonomy
- State-of-the-art infrastructure advanced computing and sophisticated analytical facility
- Funded research projects from the funding agencies
- NBA accreditation of all eligible UG programs
- Enhanced placement
- Qualified & dedicated faculty member
- Commendable performance of Students in academic, co-curricular and extra- curricular activities
- Good industry-institute interaction
- Academic environment
- Curriculum structure
- Teaching-learning process activity based, problem based, project based and collaborative
- Environment friendly campus
- Healthy interaction between students and faculty which goes beyond the classrooms
- Counseling for students at both formal and informal levels; well structured mentoring system

Weaknesses:

- Entrepreneurship development
- IPR
- Consultancy projects

- Quality of students
- Retention of qualified faculty

## **Opportunities:**

- Industry collaboration
- Scope for inter-disciplinary research
- International relations (joint research and PhD programmes) will give international exposure to the students and faculty members
- Collaborative research along with students
- More number of MOUs with esteemed organizations
- Enhancement of R&D activities
- Improvement in Academic Results and placements
- Collaborations with foreign universities

#### Threats:

- Degradation in student placement
- Changing socio-economic scenario leading to unpredictable future
- Rapidly changing technology to cope up with the industrial requirements
- Fill up the gap between ensuing and advanced knowledge
- Less number of quality publications
- Interest of students in learning
- Increasing number of backlog students
- Inadequate research facilities as per latest technology
- Rural location

## 8. Plans of institution for next year:

Curriculum Enrichment:

 To frame syllabus with reference to reputed universities, institutes, guidelines from professional bodies, and requirement of industries in consultation with BoS and Mentors

Training and Skill Enhancement:

- To motivate faculty and staff to participate and successfully complete MOOCs, online and offline courses, industrial training as per thrust areas of the department and individual research interest
- To train all faculty and staff for content delivery by organizing various FDPs, visits to industry, and reputed organizations
- To identify industries for imparting industrial training to students and enhancing placement

Infrastructure Buildout:

• To develop smart class rooms and well equipped laboratories according to thrust areas to facilitate better teaching-learning and research

Research and Development:

- To encourage faculty and students to publish papers in reputed conferences and peer reviewed journals
- To encourage faculty for joint research with renowned institutes and industries
- To seek funding from various agencies
- To spread awareness related to filing of patents and intellectual property
- To promote product development

Holistic Approach:

- To enhance co-curricular and extra-curricular activities through clubs
- To encourage students and faculty to take up membership of professional bodies
- To encourage students to participate in technical and non-technical events of repute
- To inculcate a sense of social responsibility among faculty, staff and students
- To involve parents, alumni, employers and industry in the progress of the department

| Name: Sandip Lokhande              |  | Name: | Dr. Yogesh J. Bhalerao             |
|------------------------------------|--|-------|------------------------------------|
| Lindhand                           |  |       | Chabora                            |
| Signature of the Coordinator, IQAC |  |       | Signature of the Chairperson, IQAC |

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# Annexure - I

# <u>Annexure I</u>

#### Abbreviations:

| C | CAS         | - | Career Advanced Scheme                   |
|---|-------------|---|--|
| C | CAT         | - | Common Admission Test                    |
| C | CBCS        | - | Choice Based Credit System               |
| C | СE          | - | Centre for Excellence                    |
| C | COP         | - | Career Oriented Programme                |
| C | CPE         | - | College with Potential for Excellence    |
| D | <b>D</b> PE | - | Department with Potential for Excellence |
| C | GATE        | - | Graduate Aptitude Test                   |
| N | IET         | - | National Eligibility Test                |
| Р | ΈI          | - | Physical Education Institution           |
| S | AP          | - | Special Assistance Programme             |
| S | F           | - | Self Financing                           |
| S | LET         | - | State Level Eligibility Test             |
| Т | ΈI          | - | Teacher Education Institution            |
| U | JPE         | - | University with Potential Excellence     |
| U | JPSC        | - | Union Public Service Commission          |

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# Annexure - II

| (An Autonomous Institute) | Minutes of Meeting |
|---------------------------|--------------------|
| Alandi (D), Pune – 412105 | Year - 2018-19     |

| Type of Meeting: | Management Review (Quality Assurance) |
|------------------|---------------------------------------|
| Meeting No.:     | MR-XIII                               |
| Date:            | 31/07/2018                            |
| Time:            | 12:20 pm                              |

Director welcomed all the head of departments and section heads for the meeting ISO 9001:2015.

Dean - QA has given the opening remarks regarding ISO 9001:2015 and told the importance of ISO 9001:2015.

Following points were discussed in details:

| Sr.<br>No. | Point   | Action By   | Date  |
|------------|---|---|---|
| 1          | <ul> <li>The status of actions taken from previous MRM</li> <li>As the MRM - XII was cancelled; the review process is done with reference to MRM - XI. (Refer Annexure –I)</li> <li>It was observed that due to change in QMS as per the requirement of ISO 9001:2015, all these points should be cancelled and / or reviewed.</li> <li>As we are going for ISO 9001:2015 all WPMs of ISO 9001:2008 to be discarded and QSM for each department and section is to be prepared.</li> </ul> | Dean - Quality<br>Assurance<br>All Process<br>Owner | Next MRM<br>Academics -<br>1/12/2017 and<br>Non-<br>Academics -<br>1/1/2018 |

|     | Changes in external / int   | ernal issues   |  |           |          |
|-----|---|--|--|-----------|----------|
| 2   | <ul> <li>Changes in external / int</li> <li>UGC conferred a 2016-17. Hence, of the requirement of</li> <li>The director fur</li> <li>Problem based lea</li> <li>Use of ICT tools 1 apps is implement</li> <li>Quality System M 9001:2015</li> <li>The process of or completed before</li> </ul> | Dean - Quality<br>Assurance<br>Dean - Quality<br>Assurance | Next MRM<br>Before 10 <sup>th</sup><br>September<br>2018 |           |          |
|     | guidelines<br>- Dean QA discusse  | -  | -  |           |          |
|     | Customer satisfaction<br>a. Stake Holders Fe<br>department<br>Student Feedback  | edback from all a  | ncademic   |           |          |
|     | Department  | Satisfactory   | Not<br>Satisfactory                                      |           |          |
|     | FY BTECH  | 27   | 04   | Dean -    |          |
| 3 a | Applied Science   | 12   | 00   | Academics | Next MRM |
|     | HPD   | 06   | 00   | Academics |          |
|     | Chemical  | 46   | 04   |           |          |
|     | Civil   | 27   | 03   |           |          |
|     | Computer  | 50   | 03   |           |          |
|     | Information<br>Technology   | 30   | 00   |           |          |
|     | Electronics   | 32   | 02   |           |          |
|     | Electronics &<br>Telecommunication  | 13   | 02   |           |          |
|     | Mechanical  | 59   | 08   |           |          |

| Alumni Feedback   |  |  |  |          |
|---|--|--|--|----------|
| Department  | Received   | Closed   |  |          |
| FY BTECH  | NA   | NA   |  |          |
| Applied Science   | NA   | NA   |  |          |
| HPD   | NA   | NA   |  |          |
| Chemical  | 03   | 01   |  |          |
| Civil   | NIL  | NA   |  |          |
| Computer  | 01   | 01   |  |          |
| Information<br>Technology   | 01   | 01   |  |          |
| Electronics   | 01   | 01   |  |          |
| Electronics &<br>Telecommunication  | 02   | 02   |  |          |
| Mechanical  | 01   | 01   |  |          |
| Parents Feedback  |  | 1  | Academics,<br>Director - T&P,<br>and COE | Next MRM |
| Parents Feedback<br>Department  | No. of<br>Satisfactory   | No. of not<br>Satisfactory   | Director - T&P,                          | Next MRN |
| Department  | Satisfactory   | Satisfactory<br>Feedback   | Director - T&P,                          | Next MRM |
| <b>Department</b><br>FY BTECH   | Satisfactory 01  | Satisfactory<br>Feedback<br>01                                     | Director - T&P,                          | Next MRM |
| Department  | Satisfactory 01 NA   | Satisfactory<br>Feedback<br>01<br>NA                               | Director - T&P,                          | Next MRM |
| <b>Department</b><br>FY BTECH   | Satisfactory<br>01<br>NA<br>NA   | Satisfactory<br>Feedback<br>01<br>NA<br>NA                         | Director - T&P,                          | Next MRM |
| Department FY BTECH Applied Science   | Satisfactory          01         NA         NA         05  | Satisfactory<br>Feedback<br>01<br>NA<br>NA<br>05                   | Director - T&P,                          | Next MRM |
| Department FY BTECH Applied Science HPD   | Satisfactory          01         NA         NA         05         02   | Satisfactory<br>Feedback<br>01<br>NA<br>NA<br>05<br>02             | Director - T&P,                          | Next MRM |
| Department          Department         FY BTECH         Applied Science         HPD         Chemical         Civil         Computer | Satisfactory           01           NA           05           02           02  | Satisfactory<br>Feedback<br>01<br>NA<br>NA<br>05<br>02<br>02<br>02 | Director - T&P,                          | Next MRM |
| DepartmentFY BTECHApplied ScienceHPDChemicalCivil   | Satisfactory           01           NA           05           02           01  | SatisfactoryFeedback01NANA05020201                                 | Director - T&P,                          | Next MRM |
| DepartmentFY BTECHApplied ScienceHPDChemicalCivilComputerInformationTechnologyElectronics   | Satisfactory         01         NA         05         02         01         02         01         02         01         02         01         02         01         02         01         02         01         02 | SatisfactoryFeedback01NANA0502020102                               | Director - T&P,                          | Next MRM |
| DepartmentFY BTECHApplied ScienceHPDChemicalCivilComputerInformationTechnology  | Satisfactory           01           NA           05           02           01  | SatisfactoryFeedback01NANA05020201                                 | Director - T&P,                          | Next MRM |

|     | Industry Feedback  |   |  |                                  |          |
|-----|--|---|--|----------------------------------|----------|
|     | Department   | No. of<br>Satisfactory  | No. of not<br>Satisfactory<br>Feedback   |                                  |          |
|     | FY BTECH   | NA  | NA   | Dean -<br>Academics,<br>Director |          |
|     | Applied Science  | NA  | NA   |                                  |          |
|     | HPD  | NA  | NA   |                                  | NEXT MRM |
|     | Chemical   | NIL   | NIL  |                                  |          |
|     | Civil  | 01  | 01   |                                  |          |
|     | Computer   | 01  | 01   |                                  |          |
|     | Information<br>Technology  | 01  | 01   |                                  |          |
|     | Electronics  | 01  | 01   |                                  |          |
|     | Electronics &<br>Telecommunication   | 02  | 02   |                                  |          |
|     | Mechanical   | 01  | 01   |                                  |          |
|     |  | Quality Objectives of Dean Academics, T&P, and examination<br>section are reviewed and discussed.<br>Quality Objectives were discussed by relevant HODs & Subject<br>was well controlled.<br>Quality Objectives of 2017-18 as given in the table: |  |                                  | NEXT MRM |
| 3 b | Quality Objectives were<br>was well controlled.  | discussed by releva   | ant HODs & Subject<br>e table:   |                                  | NEXT MRM |
| 3 b | Quality Objectives were<br>was well controlled.<br>Quality Objectives of 20<br>Department/Section                                    | a discussed by relevant<br>17-18 as given in th<br>Total number<br>of Quality<br>Objectives   | ant HODs & Subject<br>e table:<br>Number of<br>Quality<br>Objectives<br>Achieved           | All Deans, HoDs<br>and Section   | NEXT MRM |
| 3 b | Quality Objectives were<br>was well controlled.<br>Quality Objectives of 20<br>Department/Section                                    | discussed by relevant<br>17-18 as given in th<br>Total number<br>of Quality<br>Objectives   | ant HODs & Subject<br>e table:<br>Number of<br>Quality<br>Objectives<br>Achieved<br>4      | All Deans, HoDs<br>and Section   | NEXT MRM |
| 3 b | Quality Objectives were<br>was well controlled.<br>Quality Objectives of 20<br>Department/Section<br>Director Office<br>Dean - Admin | discussed by relevant<br>17-18 as given in th<br>Total number<br>of Quality<br>Objectives<br>4<br>7   | ant HODs & Subject<br>e table:<br>Number of<br>Quality<br>Objectives<br>Achieved<br>4<br>6 | All Deans, HoDs<br>and Section   | NEXT MRM |
| 3 b | Quality Objectives were<br>was well controlled.<br>Quality Objectives of 20<br>Department/Section                                    | discussed by relevant<br>17-18 as given in th<br>Total number<br>of Quality<br>Objectives   | ant HODs & Subject<br>e table:<br>Number of<br>Quality<br>Objectives<br>Achieved<br>4      | All Deans, HoDs<br>and Section   | NEXT MRM |

|     | Stores & Purchase                                     | 2                   | 1                    |       |                 |          |
|-----|---|---------------------|----------------------|-------|-----------------|----------|
|     | Systems   | 3                   | 3                    |       |                 |          |
|     | Dean - FSA/HR   | 6                   | 1                    |       |                 |          |
|     | Dean-SA   | 3                   | 1                    | -     |                 |          |
|     | Dean - Academics                                      | 4                   | 4                    |       |                 |          |
|     | Library   | 3                   | 2                    |       |                 |          |
|     | Dean - CR   | 5                   | 1                    |       |                 |          |
|     | T&P   | 3                   | 3                    |       |                 |          |
|     | Dean - R&D  | 6                   | 4                    |       |                 |          |
|     | Hostel  | 2                   | 2                    |       |                 |          |
|     | Workshop  | 4                   | 1                    |       |                 |          |
|     | COE   | 4                   | 3                    |       |                 |          |
|     | FY BTECH  | 5                   | 4                    |       |                 |          |
|     | Applied Science                                       | 6                   | 2                    |       | All Deans, HoDs |          |
|     | HPD   | 6                   | 5                    | -     |                 |          |
|     | Chemical  | 11                  | 7                    | -     | and Section     | NEXT MRM |
|     | Civil   | 11                  | 1                    | _     | Heads           |          |
|     | Computer  | 11                  | 10                   | _     |                 |          |
|     | Information   | 11                  | 7                    |       |                 |          |
|     | Technology  |                     |                      |       |                 |          |
|     | Electronics   | 11                  | 7                    |       |                 |          |
|     | Electronics &   | 11                  | 7                    |       |                 |          |
|     | Telecommunication                                     |                     |                      |       |                 |          |
|     | Mechanical  | 11                  | 8                    |       |                 |          |
|     | Director instructed all                               |                     |                      | shall |                 |          |
|     | review their Quality Obj                              | ectives to improv   | e effectiveness.     |       |                 |          |
|     | The dean QA proposed                                  | that we should co   | ntinue with the exis | stino |                 |          |
|     |   |                     |                      | , ing |                 |          |
|     | quality policy.                                       |                     |                      |       |                 |          |
|     | The HODs and section l                                | nead presented the  | eir department's qu  | ality |                 |          |
|     | objectives and target we                              | re discussed for n  | ext academic year    |       |                 |          |
|     | objectives and arget we                               | re discussed for it | ext deddenne yeur.   |       |                 |          |
|     | Process Performance a                                 |                     |                      |       |                 |          |
| 3 c | Quality Objectives of 20                              | )17-18 to be refer  | red.                 |       |                 |          |
|     | Director instructed all D<br>review their Quality Obj |                     |                      |       |                 |          |

|     | Department   | No. of Subjects<br>where the<br>syllabus is not<br>completed as<br>per plan | Cause                  | All Deans, HoDs<br>and Section<br>Heads | Next MRM |
|-----|--|---|------------------------|---|----------|
|     | FY BTECH   | NIL   | NA                     |   |          |
|     | Applied Science  | NIL   | NA                     |   |          |
|     | HPD  | NIL   | NA                     |   |          |
|     | Chemical   | NIL   | NA                     |   |          |
|     | Civil  | NIL   | NA                     |   |          |
|     | Computer   | NIL   | NA                     |   |          |
|     | Information<br>Technology                                  | NIL   | NA                     |   |          |
|     | Electronics  | NIL   | NA                     |   |          |
|     | Electronics &<br>Telecommunication                         | NIL   | NA                     |   |          |
|     | Mechanical   | NIL   | NA                     |   |          |
|     | Non-conformance and  | Corrective action   |                        | All Deans, HoDs                         | Next MRM |
|     | Non-Conformance:   |   |                        | and Section                             |          |
|     | All Academic HoDs p<br>Examination Section F               |   | ned Students. (Refer - | Heads                                   |          |
| 2 1 | Director instructed the action should be taken             |   |                        |   |          |
| 3 d | <b>Corrective Action:</b>                                  |   |                        |   |          |
|     | The record of cumulat and it is linked with th             |   |                        |   |          |
|     | These were discussed                                       | and all the Academic  | c HODs reported that   |   |          |
|     | the process is well con                                    | trolled. (Refer - Aca   | demic Department       |   |          |
|     | Records)   |   |                        |   |          |
|     | Monitoring and Measu                                       | arement Result  |                        | All HoDs                                | Next MRM |
| 3 e | HOD presented the academic result of their own department. |   |                        |   |          |
| 3 e | The target has been re-                                    | vised based on previ  | ous status.            |   |          |
|     | Director appreciated th                                    | ne result.  |                        |   |          |

|     | Audit Result                           |                           | All Deans, All | Next MRM |
|-----|--|---------------------------|----------------|----------|
|     | Academic Audit by Academic Standi      | HODS and<br>Section Heads |                |          |
|     | This was carried at the end of semeste | er and the result was     |                |          |
|     | satisfactory.                          |                           |                |          |
|     | Department/Section                     | Total No. of NCs          |                |          |
|     | Director Office                        | 0                         |                |          |
|     | Dean - Admin                           | 1                         |                |          |
|     | Registrar                              | 1                         |                |          |
|     | Student Section                        | 2                         |                |          |
|     | Estate                                 | 2                         |                |          |
|     | Stores & Purchase                      | 3                         |                |          |
|     | Systems                                | 1                         |                |          |
|     | Dean - FSA/HR                          | 2                         |                |          |
| 3 F | Dean - SA                              | 2                         |                |          |
|     | Dean - Academics                       | 1                         |                |          |
|     | Library                                | 1                         |                |          |
|     | Dean – CR                              | 1                         |                |          |
|     | T&P                                    | 1                         |                |          |
|     | Dean - R&D                             | 0                         |                |          |
|     | Hostel                                 | 4                         |                |          |
|     | Workshop                               | 3                         |                |          |
|     | COE                                    | 3                         |                |          |
|     | FY BTECH                               | 6                         |                |          |
|     | Applied Science                        | 1                         |                |          |
|     | HPD                                    | 3                         |                |          |
|     | Chemical                               | 2                         |                |          |
|     | Civil                                  | 3                         |                |          |
|     | Computer                               | 3                         |                |          |
|     | Information Technology                 | 3                         |                |          |
|     | Electronics                            | 3                         |                |          |

|   |     | Electronics &<br>Telecommunication                                  | 2                      |         | All Deans, All | Next MRM |
|---|-----|---|------------------------|---------|----------------|----------|
|   |     | Mechanical  | 4                      |         | HODS and       |          |
|   |     | International Relation Office                                       |                        |         |                |          |
|   |     | Anti-ragging & Disciplinary   |                        |         | Section Heads  |          |
|   |     | Committee   | 0                      |         |                |          |
|   |     | Internal Complaint Committee  | 0                      |         |                |          |
|   |     | Caste Grievance Committee   | 0                      |         |                |          |
|   |     | Chief Learning Officer  | 0                      |         |                |          |
|   |     | These were carried from 9 <sup>th</sup> May to 28 <sup>th</sup>     | May 2018. There wer    | e total |                |          |
|   |     | of 58 Number of NCs for maximum m                                   | umber of Clause 7.5.   | 3. FY   |                |          |
|   |     | BTECH engineering department has got                                | maximum number of      | NCs.    |                |          |
|   |     | All NCs has been closed effectively. T                              | he period for the nex  | t ISO   |                |          |
|   |     | audit is from 1 <sup>st</sup> of July 2018 to 30 <sup>th</sup> of D | December 2018.         |         |                |          |
|   |     | Dean QA conveyed his views that as r                                | number of NCs were     | more,   |                |          |
|   |     | change overall QMS and refer to 1                                   | Data Analysis of Q     | uality  |                |          |
|   |     | Objectives.   |                        |         |                |          |
|   |     | Director instructed that all efforts must b                         | be made by all concer  | ned to  |                |          |
|   |     | ensure effective implementation of next                             | standards and internal | l audit |                |          |
|   |     | NCs must be reduced.  |                        |         |                |          |
|   |     | The performance of External Provider                                | rs                     |         | Section Head - | Next MRM |
| 3 | G   |   | 4 . 1 41 <b>. .</b>    | C 41    | Store and      |          |
| 5 | U U | Section Head, store and purchase present                            | ted the performance o  | i the   | Purchase       |          |
|   |     | external providers and stated that it was                           | satisfactory.          |         | ruichase       |          |
|   |     | The adequacy of resources   |                        |         | All HoDs and   | Next MRM |
|   |     | Restricted funds allocation was done to a                           | all the department for |         | Section Heads  |          |
|   |     | financial year 2017 - 2018. However, all                            | HODs and Section H     | eads    |                |          |
| 4 |     | sorted that they were well off.                                     |                        |         |                |          |
|   |     | Director stated that fund allocated for the                         | e current academic ve  | ar has  |                |          |
|   |     |   | e current academic yea | ai 1100 |                |          |
|   |     | been utilized judiciously.  |                        |         |                |          |
|   |     |   |                        |         |                |          |

| <b>Risk and Oppo</b>   | rtunities   |  |  | All Deans,  | Next MRM  |
|--|---|--|--|---|---|
| Dean QA read the<br>departments/sector<br>Dean - QA explained<br>by all concerned<br>The summary of<br>documented and<br><b>Risk</b>   | ne risk and opportu<br>tions.<br>ained that all the a<br>`very important R<br>considered for the<br>Action Taken  | All Deans,<br>HoDs and<br>Section Heads  | Next MKM   |   |   |
| Attendance of<br>students for<br>SY,TE,BE<br>Unavailability<br>of Human<br>Resources as<br>per the<br>requirement<br>of statutory  | Given<br>Advertisement<br>in various new<br>papers for<br>faculty<br>recruitments   | involvement<br>of students<br>increased<br>Industry<br>Experts are<br>appointed  | detained<br>students in<br>defaulter list<br>reduced<br>Faculty<br>appointed as<br>per UGC<br>norms  |   |   |
| Director stated th   |   |  | take action for  |   |   |
| Opportunities for the improvement<br>Purchase of new books, journals, subscriptions for library<br>Purchase of new equipments, hardware, software, components to<br>develop the infrastructure |   |  |  | All Deans,<br>HoDs and<br>Section Heads   | Next MRM  |
|  | Dean QA read the<br>departments/sector<br>Dean - QA explained<br>by all concerned<br>The summary of<br>documented and<br><b>Risk</b><br>Less<br>Attendance of<br>students for<br>SY,TE,BE<br>Unavailability<br>of Human<br>Resources as<br>per the<br>requirement<br>of statutory<br>bodies<br>Director stated the<br>identified risks of<br><b>Opportunities for</b><br>Purchase of new<br>Purchase of new | departments/sections.Dean - QA explained that all the areby all concerned.The summary of very important Rdocumented and considered for the <b>Risk</b> Action TakenLessImplementationAttendance of<br>students for<br>SY,TE,BEImplementationUnavailability<br>of Human<br>Resources as<br>per the<br>requirement<br>of statutory<br>bodiesGiven<br>Advertisement<br>in various new<br>papers for<br>faculty<br>recruitmentsDirector stated that the HODs/Section<br>identified risks of their department<br>Purchase of new books, journals, s<br>Purchase of new books, journals, s | Dean QA read the risk and opportunities of all<br>departments/sections.Dean - QA explained that all the aspects are adequate<br>by all concerned.The summary of very important Risk and opportunit<br>documented and considered for the further continuateRiskAction TakenOpportunitiesIcessImplementation<br>of Detention<br>PolicyAcademic<br>involvement<br>of students<br>increasedUnavailability<br>of Human<br>Resources as<br>per the<br>papers for<br>requirement<br>of statutory<br>bodiesIndustry<br>Experts are<br>appointedDirector stated that the HODs/Section heads should<br>identified risks of their department.Opportunities for lip<br>Purchase of new books, journals, subscriptions for lip<br>Purchase of new equipments, hardware, software, col<br>develop the infrastructure | Dean QA read the risk and opportunities of all<br>departments/sections.Dean - QA explained that all the aspects are adequately addressed<br>by all concerned.The summary of very important Risk and opportunities are<br>documented and considered for the further continual improvement: <b>Risk</b> Action TakenOpportunitiesEffectivenessLessImplementation<br>of DetentionAttendance of<br>students for<br>SY,TE,BEImplementation<br>of students<br>increasedUnavailability<br>of Human<br>erquirement<br>of statutory<br>bodiesGiven<br>requirement<br>faculty<br>recruitmentsIndustry<br>bodiesFaculty<br>appointed as<br>per UGC<br>normsDirector stated that the HODs/Section heads should take action for<br>identified risks of their department.Opportunities for the improvement<br>Purchase of new books, journals, subscriptions for library<br>Purchase of new equipments, hardware, software, components to | Dean QA read the risk and opportunities of all<br>departments/sections.HoDs and<br>Section HeadsDean - QA explained that all the aspects are adequately addressed<br>by all concerned.Section HeadsThe summary of very important Risk and opportunities are<br>documented and considered for the further continual improvement:Section HeadsImage: Section Taken<br>documented and considered for the further continual improvement:Count of<br>detained<br>students for<br>of Detention<br>of Students<br>increasedCount of<br>detained<br>students in<br>defaulter list<br>reducedUnavailability<br>of Human<br>of stututory<br>bodiesGiven<br>papers for<br> |

Dean - QA has given the concluding remark and has expressed his sincere gratitude towards all the members.

| Prepared by,                                | Approved by,                           |
|---|--|
| Lindoms                                     | Phaloren                               |
| Sandip Lokhande<br>Dean - Quality Assurance | <b>Dr. Yogesh Bhalerao</b><br>Director |

# Annexure - III

22)

|                        | AN AUTONOMOUS INSTITUTE |                                |            | DNAL<br>LENDER |  |
|------------------------|-------------------------|--------------------------------|------------|----------------|--|
| Alandi (D), Pu         | ine - 412 105           | ACADEMIC YEAR                  | :          | 2017-2018      |  |
| Class                  | Third Year &            | SEM                            | :          | I              |  |
| Class                  | Final Year              | w.e.f.                         | :          | 12 06 2017     |  |
| Descri                 | ption                   | Start Date                     |            | End Date       |  |
| Admissions of Thi      | ird & Final Year        | 8 06 2017                      |            | 10 06 2017     |  |
| Commencemen            | t of Teaching           | 12 06 2017                     | 18 10 2017 |                |  |
| Feedback I by Student  | for Course Teacher      | 17 07 2017                     |            |                |  |
| Feedback II by Student | t for Course Teacher    | 30 08 2017                     |            |                |  |
| In-sem Exa             | mination                | Not declared till date by SPPU |            |                |  |
| Practical /Oral/       | Project exam            | 24 10 2017                     | 9 11 2017  |                |  |
| Theory Exa             | mination                | 14 11 2017                     | 11 12 2017 |                |  |
| Student A              | Activity                | 18 08 2017                     | 19 08 2017 |                |  |
| Brofs. M. Bhegar       | () Ja.<br>M.D. Goudar   | S                              |            | 2              |  |
| Coordinator: Dea       | an Academics            | Dire                           | ctor       |                |  |

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|                      | Academy of           | INSTITUTION   | AL ACADEMIC  |
|----------------------|----------------------|---------------|--------------|
|                      | ngineering           | CALE          | NDER         |
| Alandi (D), Pun      |                      | ACADEMIC YEAR | : 2017-2018  |
| Class                | SYBTech              | SEM           | : I          |
| Class                | STBTECH              | w.e.f.        | : 03 07 2017 |
| Descript             | tion                 | Start Date    | End Date     |
| Admission to S       | SY BTech             | 26 06 2017    | 1 07 2017    |
| Last date for Cours  | se adjustment        | 1 07 2017     | 1 07 2017    |
|                      |                      | Cycle I       |              |
| Commencemen          | nt of Cycle          | 3 07 2017     | 16 08 2017   |
| Course Feed          | dback I              | 17 07 2017    |              |
| In course Exa        | mination             | 24 07 2017    |              |
| Course Feed          | Iback II             | 7 08 2017     |              |
| End course Examin    | ation of Cycle       | 14 08 2017    | 16 08 2017   |
| Showing the evaluate | d Answer sheet       | 18 08 2017    |              |
| Submission of grad   | les by Faculty       | 21 08 2017    |              |
| Technical Stude      | nt Activity          | 18 08 2017    | 19 08 2017   |
|                      |                      | Cycle II      |              |
| Commencemen          | t of Cycle           | 21 08 2017    | 4 10 2017    |
| Course Feed          | lback I              | 4 09 2017     |              |
| In course Exa        | mination             | 11 09 2017    |              |
| Course Feed          | back II              | 25 09 2017    |              |
| End course Examin    | ation of Cycle       | 3 10 2017     | 4 10 2017    |
| Showing the evaluate | d Answer sheet       | 6 10 2017     |              |
| Submission of grad   | les by Faculty       | 10 10 2017    |              |
| Cultural Prog        | Iramme               | 16 09 2017    |              |
|                      |                      | Cycle III     |              |
| Commencemen          | t of Cycle           | 9 10 2017     | 28 11 2017   |
| Course Feed          | lback l              | 30 10 2017    |              |
| In course Exa        | mination             | 6 11 2017     |              |
| Course Feed          | back II              | 20 11 2017    |              |
| End course Examin    | ation of Cycle       | 27 11 2017    | 28 11 2017   |
| Showing the evaluate | d Answer sheet       | 30 11 2017    |              |
| Submission of grad   |                      | 2 12 2017     |              |
| Re Examin            | ation                | 4 12 2017     | 8 12 2017    |
| Diwali Holi          |                      | 14 10 2017    | 22 10 2017   |
| Winter Holi          |                      | 29 11 2017    | 17 12 2017   |
| BODA S. M. Bhays     | (Dol<br>m. D. Goudar | Z             | e            |
| Coordinator: Dean    | Academics            | Direc         | ctor         |

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Rev. No. : 00

Rev. Date : 01/12/201

| APRIL CONTRACTOR                             | Academy of Engineering   | INSTITUTIONAL ACADEMIC<br>CALENDAR |                              |
|--|--------------------------|------------------------------------|------------------------------|
| IAn A  | Autonomous Institute)    | ACADEMIC YEAR                      |                              |
| Ala  | andi (D), Pune - 412 105 | TERM / TRIMESTER                   | 2017 - 2018<br>• II (TE, BE) |
| 100 M  | AEM                      | W.E.F.                             | 18/12/2017                   |
|  | Description              | Start Date                         | End Date                     |
| entre la | Commencement of Semester | 18/12/2017                         | 6/04/2018 01/12              |
| - Hand<br>                                   | Annual Social Gathering  | 12/02/2018                         | 17/02/2018                   |
|  | Robocon 2018             | 01/03/2018                         | 3/03/2018                    |

18/12 Time Table Coordinator Dean / Associate Dean (Academics)

|                     | Academy of<br>Engineering<br>MOUS INSTITUTE |               |         |            |
|---------------------|---|---------------|---------|------------|
|                     | Pune - 412 105                              | ACADEMIC YEAR | :       | 2017-2018  |
| Class               | SYBTech                                     | SEM           | :       | II         |
| 01035               | OTDIECH                                     | w.e.f.        | :       | 01 01 2018 |
| Des                 | cription                                    | Start Date    | 1       | End Date   |
|                     |   | Cycle I       |         |            |
| Commenc             | ement of Cycle                              | • 2 01 2018   |         | 16 03 2018 |
| Cours               | e Feedback                                  | 6 02 2018     |         |            |
| In course           | Examination                                 | 05,12/02/2018 |         |            |
| End course Ex       | amination of Cycle                          | 12 03 2018    |         | 14 03 2018 |
| Showing the eva     | luated Answer sheet                         | 19 03 2018    |         | 21 03 2018 |
| In Sem Examination  | of Semester Long Course                     | 16 03 2018    |         |            |
| Showing the eva     | luated Answer sheet                         | 23 03 2018    |         |            |
| Robo                | ocon 2018                                   | 1 03 2018     |         | 3 03 2018  |
|                     |   | Cycle II      |         |            |
| Commenc             | ement of Cycle                              | 19 03 2018    |         | 31 05 2018 |
| Course              | e Feedback                                  | 24 04 2018    |         |            |
| In course           | Examination                                 | 23,30/04/2018 |         |            |
| End course Ex       | amination of Cycle                          | 28 05 2018    |         | 31 05 2018 |
| End Sem Examination | of Semester Long Course                     | 24 05 2018    |         |            |
| Showing the eva     | luated Answer sheet                         | 5 06 2018     |         |            |
| Registration f      | or Re Examination                           | 6 06 2018     |         | 7 06 2018  |
| Re Ex               | amination                                   | 11 06 2018    |         | 16 06 2018 |
| Annual Social G     | athering and Sports                         | 12 02 2018    |         | 17 02 2018 |
| Summe               | er Intership                                | 1 06 2018     |         | 31 07 2018 |
| Commenceme          | nt of Next Semester                         | 1 08 2018     |         | -          |
| Bar                 | (P: 1/2                                     | ht            | A       | Et D.      |
| Associate           | Dean  | -             | irector | M LITT     |



# Annexure - IV

# **Best Practices**

# **Best Practice - 1**

| 1 | Title of the Practice (This title should capture the keywords that describe the Practice.)  |
|---|---|
|   | Quality Enhancement in Minor, Mini, and Major Projects of Students  |
| 2 | <b>Goal</b> (Describe the aim of the practice followed by the institution. Brief the underlying principles or concepts in about 100 words.)   |
|   | Minor and Mini Project: (These projects are different than projects developed at a course level)  |
|   | In autonomous curriculum, we have started students projects from second year level. We are offering a multidisciplinary approach in project. Students of different disciplines can perform in a team to complete the project work. For example, a group of 3 students may have students from Chemical Engineering, Mechanical Engineering and Electronics &   |
|   | Telecommunication Engineering.<br><u>Major Project:</u>   |
|   | A general practice for the projects of UG program is to start it in 7 <sup>th</sup> semester and ends at 8 <sup>th</sup> semester (final semester). It is observed that if student has to work on innovative project ideas or industry sponsored project; this span is too small and many project cannot be completed with good results. Hence, we have extended span of this major project to 02 years. (Third year to Final year) |
|   | In 6 <sup>th</sup> semester a course "Mini Project" is offered to the students. The mini project can be<br>a part of major project with a condition that at least 30 % work of Final year major project<br>should be completed in TE Mini project. Maximum part of the project must be hardware<br>part / manufacturing. Remaining 70 % part will be completed in final year.   |

| 3 | <b>The Context</b> (Describe any particular contextual feature or challenging issues that have had to be addressed in designing and implementing the Practice in about 150 words.)   |
|---|--|
|   | <ul> <li>More time is allotted to BE Project work i.e. 02 years</li> <li>Multidisciplinary approach is adapted</li> <li>Effective interaction with project advisor / guide is increased</li> <li>Identification of research groups according to department forefront / thrust areas</li> <li>Complex innovative project ideas can be handled in sufficient time</li> <li>Project work procedure and documentation is improved</li> <li>Lab utilization increased</li> <li>Research activity / research culture in the institute is improved</li> <li>Continuous evaluation of projects by industry and subject experts</li> <li>Improvement in quality of projects</li> <li>Involvement of students in publications</li> <li>Exposure to the students to participate in reputed competitions, conferences to present their work</li> </ul> |
| 4 | <b>The Practice</b> (Describe the Practice and its implementation. Include anything about this practice that may be unique in the Indian higher education. Please also identify constraints or limitations, if any, in about 400 words.)   |
|   | <ul> <li>Initially in department meeting project proposals are invited from project advisors / guides.</li> <li>Each faculty project advisor can give five proposals, but maximum 03 project groups are allotted to one faculty.</li> <li>At the same time all the students of third year are informed to form project groups. Each project group can have maximum three students.</li> <li>Proposals for industry sponsored projects are called and external industry project advisor along with internal project advisor is assigned.</li> <li>Each faculty is associated to at least one research group in the department. These research groups are forefront / thrust areas of the discipline.</li> <li>For example, in department of Electronics &amp; Telecommunication Engineering,</li> </ul>                                     |

four research groups are identified,

- 1. Wired and Wireless Communication WiCOM
- 2. Signal and Image Processing SIP
- 3. Embedded Systems and VLSI EmSys
- 4. Systems and Control- SysCon
- Each research group is headed by one faculty (Research Group Coordinator).
- Each Research group coordinator calls a meeting of project advisors associated in that particular group. In this meeting each submitted proposals are reviewed for project feasibility, division of work in third and final year, complexity level & targets, internal & external resources available, industry sponsorship etc.
   Suggestions given in the forum are recorded in minutes of meeting and communicated to project advisors and students.
- An introductory seminar for project proposal is arranged by research group coordinator for each research group and associated projects. The students presents proposal of work. Each seminar is presented and evaluated in presence of Head of Department, Project Coordinator, Project Advisor and Faculty of research group. If seminars are not up to the mark, then project group repeats the seminar with corrections.
- After successful seminar, project title is registered and project group starts working on TE mini Project. At the end of semester each project group delivers seminar on work done in third year. Also, final demonstration is organized.
   Students present a documentary report on third year work. After clearing these two steps students appear for third year project examination.
- In final year, at Semester VII students start with review seminar and review of
  project status is taken in presence of Head of Department, Project Coordinator,
  Project Advisor and Faculty of research group. Necessary suggestions are given to
  students Project group. At the end of Semester VII students deliver progress
  seminar and Project work is reviewed again. Students Project group present a
  Documentary report on work done up to this semester. After clearing this seminar
  students appear for University viva examination.
- In final year, students continue to work on project.

|   | When the project group succeeds to get satisfactory results, they along with                            |
|---|---|
|   | project advisors are allowed to publish their work in reputed conference or journal.                    |
|   | <ul> <li>Some students also participate in project competitions of repute.</li> </ul>                   |
|   | • Also, students deliver seminar / paper in national contest organized by the institute                 |
|   | / department like "UGCON". Also, students demonstrate their project in project                          |
|   | competition organized by the institute / department.  |
|   | • A documentary final project report on entire work done in the project is prepared,                    |
|   | and submitted for final examination.  |
| 5 | Evidence of Success (Provide evidence of success such as performance against targets and                |
|   | benchmarks and review results. What do these results indicate? Describe in about 200 words.)            |
|   | <ul> <li>Patent have been filed based on students project - 02</li> </ul>                               |
|   | <ul> <li>Student publications based on project: more than 50</li> </ul>                                 |
|   | <ul> <li>Student participation in project competitions: more than 100</li> </ul>                        |
|   | <ul> <li>Student participation in conference and symposium: more than 100</li> </ul>                    |
|   | <ul> <li>Participation in paper presentation: more than 50</li> </ul>                                   |
|   | <ul> <li>Participation and awards in various national and international contests like</li> </ul>        |
|   | Hackathon, Mitsubhishi, ACM ICTC, Google programming, TechFest etc.                                     |
|   | The result shows that students are actively involved in project work. They are really                   |
|   | enjoying the project performance. More exposure is given to the students through various                |
|   | competitions. They are involved in number of outside events other than organized by the                 |
|   | institute. Students learns number of skills like communication skills, collaborative                    |
|   | learning, work as an individual as well as in team, life skills etc.                                    |
| 6 | Problems Encountered and Resources Required (Please identify the problems encountered                   |
|   | and resources required to implement the practice in about 150 words.)                                   |
|   | Drop-out students   |
|   | <ul> <li>Whenever student is failed in third year and is not eligible for final year Project</li> </ul> |
|   | group student's strength is reduced.  |
|   | <ul> <li>Similarly, whenever drop-out student clears subjects and takes admission in final</li> </ul>   |
|   |   |

|   | year, there is no previous work support.   |
|---|--|
|   | Solution: In 7 <sup>th</sup> semester either vacancies in previous groups are filled in consultation with  |
|   | existing student project group members and project advisor or new group of new entrant   |
|   | students is formed.  |
|   | Final demonstration of industry sponsored projects   |
|   | <ul> <li>In case of industry sponsored projects, some of the companies are not allowing to</li> </ul>  |
|   | take the project work out of industry campus due to either non feasibility or as a   |
|   | policy part.   |
|   | Solution: if possible in final demo, examiner can visit to industry campus or analogous  |
|   | extended project work is assigned in college campus and will be supported by proof of  |
|   | work at industry campus.   |
|   |  |
| 7 | <b>Notes (Optional)</b> (Any other information that may be relevant and important to the reader for adopting/<br>implementing the Best Practice in their institution about 150 words.)   |
| 7 |  |
| 7 | implementing the Best Practice in their institution about 150 words.)  |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded</li> </ul>   |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded along with other subjects</li> </ul>   |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded along with other subjects</li> <li>Each project group maintains project logbook duly signed by project advisor and project coordinator</li> <li>Necessary formats for the documentation like project registration form, project</li> </ul>   |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded along with other subjects</li> <li>Each project group maintains project logbook duly signed by project advisor and project coordinator</li> <li>Necessary formats for the documentation like project registration form, project attendance, industry evaluation etc. are prepared and used</li> </ul>  |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded along with other subjects</li> <li>Each project group maintains project logbook duly signed by project advisor and project coordinator</li> <li>Necessary formats for the documentation like project registration form, project attendance, industry evaluation etc. are prepared and used</li> <li>Identification of research groups in the department is done</li> </ul> |
| 7 | <ul> <li><i>implementing the Best Practice in their institution about 150 words.</i>)</li> <li>Separate time table slot for project is allotted and attendance of project is recorded along with other subjects</li> <li>Each project group maintains project logbook duly signed by project advisor and project coordinator</li> <li>Necessary formats for the documentation like project registration form, project attendance, industry evaluation etc. are prepared and used</li> </ul>  |

# <u>Annexure IV - ( ii )</u>

# **Best Practices**

# **Best Practice - 2**

| 1 | Title of the Practice (This title should capture the keywords that describe the Practice.)   |  |  |
|---|--|--|--|
|   | Institute level club activity for the holistic development of students   |  |  |
| 2 | <b>Goal</b> (Describe the aim of the practice followed by the institution. Brief the underlying principles or concepts in about 100 words.)  |  |  |
|   | To encourage students for curricular, co-curricular and extra-curricular activities for the overall development  |  |  |
| 3 | <b>The Context</b> (Describe any particular contextual feature or challenging issues that have had to be addressed in designing and implementing the Practice in about 150 words.) |  |  |
|   | <ul><li>Joining clubs and volunteering gives number of benefits to the students:</li><li>New friends - students gets opportunities to interact with students of similar</li></ul>  |  |  |
|   | interests as well as different backgrounds   |  |  |
|   | • Respect to others, self-confidence, real-world skills, team work, time management skills etc these life skills are build through active participation                            |  |  |
|   | • Relieve stress - involvement in hobby of own interest easily relives the stress of students  |  |  |
|   | Total 16 Clubs are identified to explore and nurture different kinds of talent:  |  |  |
|   | 1. Drama Club  |  |  |
|   | 2. Music and Dance club  |  |  |
|   | 3. Singing club  |  |  |

| 4. Art Elated club   |
|--|
| 5. Ignited Minds(A social club)  |
| 6. Hacker Rank (Programming club)  |
| 7. Shutterbugs Photography Club  |
| 8. Vidyudanu – Electronic Hardware club  |
| 9. Prakruti - the life Club  |
| 10. Google Student & Firefox Club  |
| 11. Literary Writing and speaking Club   |
| 12. Yoga and Meditation Club   |
| 13. MIT Master Blasters Sports Club  |
| 14. Robotics Club  |
| 15. Automotive Club  |
| 16. Design club  |
| may be unique in the Indian higher education. Please also identify constraints or limitations, if any, in about 400 words.)                    |
| Guidelines for Setting up Club:  |
| <ul> <li>Finalize Club title: Club title should be distinct, describe nature of club</li> </ul>  |
| <ul> <li>Design Logo: Design logo for club. Do not copy logo from internet. You can</li> </ul>   |
| include department and / or college name in logo. You can also have slogan or  |
| motivating quotes, year of establishment for club can be included in logo design   |
| <ul> <li>Set and Define - a) Aims b) Objectives c) Outcomes d) Area covered (Scope) etc.</li> </ul>  |
| • Finalize organizing body structure: 1) President 2) Vice President 3) Treasurer 4)   |
| Secretary 5) Members (All Students either by election or nomination) 6) Patrons  |
| 7) Faculty Advisers  |
|  |
| <ul> <li>Define Member ship structure: 1) Membership forms 2) Maximum number of</li> </ul>   |
| <ul> <li>Define Member ship structure: 1) Membership forms 2) Maximum number of<br/>Members 3) Free or with charge 4) Receipts etc.</li> </ul> |
|  |
| Members 3) Free or with charge 4) Receipts etc.  |

|   | <ul> <li>provided.</li> <li>Budget: Provide budget of club activities for current year, Format for budget is provided.</li> <li>Documents: 1) List of activities done 2) Reports 3) Photographs 4) Expenditure statements</li> <li>Web site Update: Update website through department website coordinator or institute website coordinator</li> <li>Affiliating Skills to Club: Select a skill set and affiliate to the club, perform different activities to enhance skills of club members.</li> </ul>  |
|---|---|
| 5 | <b>Evidence of Success</b> (Provide evidence of success such as performance against targets and benchmarks and review results. What do these results indicate? Describe in about 200 words.)  |
|   | <ul> <li>Sports achievements in state / national events - Target - 8 / year, Partially Achieved - 4 / year</li> <li>Cultural event like firodiya (Firodiya is reputed drama, music, singing a multi talent competition in Maharashtra, MITAOE Team was among top 15 teams)</li> <li>Target - Rank - Top 20, Achieved - Rank 9<sup>th</sup> and two individual prizes are bagged by our students.</li> <li>Social activities among student - Target 3 / year</li> <li>Achieved -</li> <li>Master Blaster Club -</li> <li>1. Mahesh More wins Gold Medal in Karate</li> <li>2. Dilraj Husain wins the Bronze Medal in Boxing</li> <li>3. Third place won by our students for Badminton in intercollegiate tournament</li> <li>4. Fourth Place won by Shubham Ingale in Ring Tennis</li> <li>5. Ayesha Chakure participated in Korf ball Maharashtra Team</li> </ul> |

|   | Social Activities:  |
|---|---|
|   | Students have contributed in many social activites like Swatcha Bharat Abhiyan, Blood                         |
|   | Donation camp, Eco-friendly Ganesh Idol making competition, Indrayani River and Ghat                          |
|   | Swatchta Abhiyan, Food conservation and Distribution through Robinhood Student                                |
|   | Chapter.  |
| 6 | Problems Encountered and Resources Required (Please identify the problems encountered                         |
|   | and resources required to implement the practice in about 150 words.)   |
|   | Lack of systematic approach in club activity execution  |
|   | • Lack of training for club skills in 2017-18 which will be improved by providing                             |
|   | skilled trainers for various clubs  |
|   | Lack of cohesiveness  |
|   | • Poor time management between study and club activities  |
|   | • Inappropriate allocation of budget  |
|   | • Inconvenient time of club activities  |
|   | Insufficient infrastructural facilities   |
| 7 | <b>Notes (Optional)</b> (Any other information that may be relevant and important to the reader for adopting/ |
|   | implementing the Best Practice in their institution about 150 words.)   |
|   | As a appreciation, a Holistic Achievement Card will be given to all students participating                    |
|   | in co-curricular and extra-curricular activities.   |