

# **YEARLY STATUS REPORT - 2020-2021**

| Part A  Data of the Institution                      |                                    |  |
|--|------------------------------------|--|
|  |                                    |  |
| Name of the Head of the institution                  | Dr. Pradeep B. Mane                |  |
| • Designation  | Principal                          |  |
| • Does the institution function from its own campus? | Yes                                |  |
| Phone no./Alternate phone no.                        | 9102026057983                      |  |
| Mobile no  | 9420918444                         |  |
| Registered e-mail                                    | principal@aissmsioit.org           |  |
| Alternate e-mail                                     | pbmane6829@gmail.com               |  |
| • Address  | 1, Kennedy Road, near R.T.O., Pune |  |
| • City/Town  | Pune                               |  |
| • State/UT   | Maharashtra                        |  |
| • Pin Code   | 411001                             |  |
| 2.Institutional status                               |                                    |  |
| Affiliated /Constituent                              | Affiliated                         |  |
| • Type of Institution                                | Co-education                       |  |
| • Location   | Urban                              |  |

Page 1/178 10-05-2022 08:25:21

| • Financial Status  | Self-financing   |
|---|--|
| Name of the Affiliating University                                      | Savitribai Phule Pune University   |
| Name of the IQAC Coordinator  | Dr. Mousami Vanjale  |
| • Phone No.   | 919423872768   |
| Alternate phone No.   | 9102026057983  |
| • Mobile  | 919423872768   |
| IQAC e-mail address   | iqac@aissmsioit.org  |
| Alternate Email address   | mousami.vanjale@ aissmsioit.org  |
| 3.Website address (Web link of the AQAR (Previous Academic Year)        | https://aissmsioit.org/wp-content/uploads/2020/11/AQAR-2019-20.pdf       |
| 4. Whether Academic Calendar prepared during the year?                  | Yes  |
| • if yes, whether it is uploaded in the Institutional website Web link: | https://aissmsioit.org/wp-content/uploads/2021/06/calendar-year-20-21pdf |

# **5.**Accreditation Details

| Cycle   | Grade | CGPA | Year of<br>Accreditation | Validity from | Validity to |
|---------|-------|------|--------------------------|---------------|-------------|
| Cycle 1 | A     | 3.09 | 2016                     | 29/03/2016    | 28/03/2021  |
| Cycle 2 | A+    | 3.40 | 2021                     | 03/11/2021    | 02/11/2026  |

# 6.Date of Establishment of IQAC 01/06/2011

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Funding Agency | Year of award

Amount

| rtment /Faculty  | Scheme  | Tunding Agency |         | with duration | Amount   |
|--|---|----------------|---------|---------------|----------|
| Dr. Yogesh<br>Patil  | AICTESPICES: Scheme for Promoting In terests,Crea tivity and Ethics among Students (SPICES) | AIC            | TE.     | 2021 1 year   | 1,00,000 |
| 8.Whether composition NAAC guidelines  | ition of IQAC as pe   | r latest       | Yes     |               |          |
| Upload latest notification of formation of IQAC  |   | View File      |         |               |          |
| 9.No. of IQAC mee  | tings held during th  | ne year        | 4       |               |          |
| Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website? |   | Yes            |         |               |          |
| • If No, please upload the minutes of the meeting(s) and Action Taken Report   |   | No File U      | ploaded |               |          |

Institutional/Depa | Scheme

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

No

10. Whether IQAC received funding from any

of the funding agency to support its activities

• If yes, mention the amount

during the year?

1. Organization of state level webinar on "Awareness of National Education Policy 2020" by Dr. P. B. Mane, Principal, AISSMS's IOIT on 28/08/2020 2. Organization of national webinar on "NAAC Related Quality Enhancement for Facing Peer Team as per Report with Related Documentation" by Dr. N. S. Dharmadhikari, (Renowned Educationist, NAAC Peer Team Member Member UGC Committee) on 26/05/2021 3. Submitted suggestions for AICTE approval process handbook 2021-22 4. Establishment of centers of excellence of Forbes Marshall, Emerson,

Page 3/178 10-05-2022 08:25:21

# D. M. Tagare Power Quality Experience Center 5. Participation in NIRF

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

| Plan of Action  | Achievements/Outcomes  |
|---|--|
| 1. To apply for autonomy status to UGC  | 1. UGC committee visited the institute on 18th & 19th September and granted autonomy from A.Y. 2021-22   |
| 2. To apply for cycle 2 of NAAC   | 2. NAAC PTV was completed on 29th & 30th October and institute received A+ grade with CGPA of 3.40   |
| 3. To organize a webinar for preparation of NAAC PTV  | 3. Organized national webinar on "NAAC Related Quality Enhancement for Facing Peer Team as per Report with Related Documentation" by Dr. N. S. Dharmadhikari, (Renowned Educationist, NAAC Peer Team Member, Member UGC Committee) on 26/05/2021 |
| 4. To organize State level webinar on webinar on "Awareness of National Education Policy 2020"              | 4. Organized State level webinar on webinar on "Awareness of National Education Policy 2020" by Dr. P. B. Mane, Principal, AISSMS's IOIT on 28/08/2020   |
| 5. To conduct student satisfaction survey   | 5. Student satisfaction survey was conducted on 14/09/2020   |
| 6. To organize induction program for newly appointed faculty members  | 6. Organized induction program for newly appointed faculty members from 12/10/2020 to 14/10/2020   |
| 7. To conduct internal and external academic and administrative audits 8. To apply for NBA of 5 departments | 7.Conducted internal academic and administrative audits on 13/01/2021 & 14/01/2021.  External Academic Audit was conducted on 18/10/2021   |
| 8. To apply for NBA of 5  | 8.SAR for Dept. of Computer  |

| departments  | Engg., IT, Electrical, E&TC and Instrumentation was submitted on 14/06/2021 and NBA committee visit was on completed from 4th to 6th Feb. 2022  |
|--|---|
| 9. To organize Third IEEE International Conference on Emerging Smart Computing and Informatics (ESCI- 2021)      | 9.Organized Third IEEE International Conference on Emerging Smart Computing and Informatics (ESCI-2021) virtually from 05/03/2021 to 07/03/2021 |
| 10. To inaugurate centers of excellence - Forbes Marshall, Emerson, D. M. Tagare Power Quality Experience Center | 10. Inauguration of centers of excellence - Forbes Marshall, Emerson, D. M. Tagare Power Quality Experience Center was done on 29/08/2021       |
| 11. To participate in NIRF ranking   | 11. Submitted data for NIRF ranking   |
| 12. To prepare AQAR for AY 2020-21   | 12. AQAR for AY 2020-21 was submitted last week of February 2022.   |
| 13. Whether the AQAR was placed before statutory body?   | Yes   |
| Name of the statutory body   |   |
| Name   | Date of meeting(s)  |
| College Development Committee (CDC) and Governing Body (GB)  | 25/01/2022  |

# 14. Whether institutional data submitted to AISHE

| Year    | Date of Submission |
|---------|--------------------|
| 2020-21 | 14/12/2021         |

| Extended Profile |     |  |
|------------------|-----|--|
| 1.Programme      |     |  |
| 1.1              | 338 |  |

Page 5/178 10-05-2022 08:25:21

| File Description   | Documents         |                  |
|--|-------------------|------------------|
| Data Template  |                   | <u>View File</u> |
| 2.Student  |                   |                  |
| 2.1  |                   | 2612             |
| Number of students during the year   |                   |                  |
| File Description   | Documents         |                  |
| Institutional Data in Prescribed Format                                    |                   | <u>View File</u> |
| 2.2  |                   | 230              |
| Number of seats earmarked for reserved category Govt. rule during the year | as per GOI/ State |                  |
| File Description   | Documents         |                  |
| Data Template  |                   | View File        |
| 2.3  |                   | 667              |
| Number of outgoing/ final year students during the                         | he year           |                  |
| File Description   | Documents         |                  |
| Data Template  |                   | <u>View File</u> |
| 3.Academic   |                   |                  |
| 3.1  |                   | 119              |
| Number of full time teachers during the year                               |                   |                  |
| File Description   | Documents         |                  |
| Data Template  |                   | <u>View File</u> |
| 3.2  |                   | 119              |
|  |                   |                  |

| File Description                                   | Documents        |
|--|------------------|
| Data Template                                      | <u>View File</u> |
| 4.Institution                                      |                  |
| 4.1  | 32               |
| Total number of Classrooms and Seminar halls       |                  |
| 4.2  | 120              |
| Total expenditure excluding salary during the year | (INR in lakhs)   |
| 4.3  | 763              |
| Total number of computers on campus for academi    | c purposes       |

### Part B

#### **CURRICULAR ASPECTS**

# 1.1 - Curricular Planning and Implementation

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

The institution meticulously plans for effective implementation of the curriculum. The detailed process is stated below:

- Planning for the Term: All the departments prepare academic calendar in line with the academic calendar prescribed by the University which consist of all technical and nontechnical activities in detail.
- 2. Finalising of faculty member for each subject and Electives to be included in next semester and Preparation of Timetable: Before the end of the term, each faculty member submits his/her subject preferences to the Head of Department (HOD). Likewise, the electives are floated to the students to decide their choice to finalise and plan in advance for the electives. As per preference of subject, HOD assigns the faculty member as per their qualification and expertise and the subject distribution is communicated to the faculty member well in advance for proper preparation. Timetable is prepared as per the availability of infrastructure and shift of faculty member which is approved by authorities. The approved Time table is displayed on notice boards and college website prior to commencement of new term.
- 3. Preparation by each faculty member: Once the subject is

Page 7/178 10-05-2022 08:25:21

- allotted to the faculty member, they prepare teaching plan and course file as per the departmental academic planner. Lab manuals are prepared for each subject by the respective subject in charge along with important oral questions.
- 4. Academic Monitoring Committee: A Guardian Faculty Member (GFM) is appointed for each class to monitor day to day conduction of time table and academic planner. Daily attendance is monitored by each faculty member and defaulter students with poor attendance are identified. Parents of such students are informed by telephone and SMS alerts, if required counselling is done by 3rd party and batch counsellors. HOD takes feedback of the faculty member twice in a semester from students and analysis is done by GFM. If feedback is poor, then corrective measures are advised by HOD and Principal. Faculty member meetings are held every week by the HOD to take academic review and suitable remedial measures are advised if necessary.
- 5. Resource Planning: Instruments which require repair or are obsolete are identified. Yearly budget is prepared based on consumables and equipment and planned lab wise and submitted to "Purchase Committee" to call for quotations. Comparative statements are prepared to release requisition for each item. After receipt of these, demonstration is arranged to check satisfactory operation and test report is prepared.
- 6. Selection process of final year projects: Project coordinator is assigned to final year students who assign project guides to these student groups as per area of specialisation of the faculty member. The students are encouraged to get company/college sponsored projects with innovative idea. Projects with market potential are considered and supported for development of new start-ups.

| File Description                    | Documents        |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |
| Link for Additional information     | Nil              |

- 1.1.2 The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)
- 1.1.2 The Institute adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

AISSMS IOIT is affiliated to SPPU, Pune and thus follows the

Page 8/178 10-05-2022 08:25:21

examination pattern of University. Institute first prepares annual academic planner before the commencement and then it is circulated to all departments. Department Coordinator of Academic Planner takes the responsibility to complete the department planner in association with all the staff members.

Apart from mandatory University examination many other Continuous Internal Evaluations had been followed. Evaluation is based on various activities organised such as training program, workshops, seminars, competitions, participation of students at various level etc. Internal Evaluation is carried out with respect to following points.

- Class test is arranged after the completion of every units. As there are 6 units, there are 6 class test. Test papers are evaluated by respective staff members and if the student scored below the threshold, students are asked to the task assigned by the teacher.
- On the similar ground, assignment is given after the completion of every unit. Staff does the evaluation based on timely submission and for the right answers.
- Mock orals are organised for subjects having practical or oral or term work as the head. Staff organise mock oral while checking the journal in order understand if the students knows the technical details.
- Mock practical examination is also organised after the completion of all practicals, in order to make students ready for practical examination.
- Mock project demo is organised two times in each semester for students at 3rd year and final year course. In 1st semester, 1st demo is based on literature survey and problem statement.
   2nd demo is based on technical parameters of the project.
- In 2nd semester, 3rd and 4th demo is based on hardware and software requirement and successful implementation of project.
   External examiners are called during final demo to assess performance of the students.

Apart from technical internal examination, students are also assessed based on their performance in active participation in technical - non technical, cultural, sports etc. students shows their talent on various platform provided by college like ALACRITY, Department level students association, Inter collegiate level, state level, National level, International level.

Students are assessed on all possible platform and the internal marks are given as per their performance in internal test,

assignments, mock oral, mock practical, mock demo of project and their participation and achievements in each event in order to ensure justice with all students.

This complete process of internal performance evaluation is used for faculties to identify slow and advanced learners in their respective subjects. Counselling is done for slow learners and they are encouraged to improve their further performance. Counselling sessions found to be very useful to overcome personal issues, academic and non-academic problems.

| File Description                    | Documents        |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |
| Link for Additional information     | Nil              |

1.1.3 - Teachers of the Institution participate in A. All of the above following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

| File Description  | Documents        |
|---|------------------|
| Details of participation of<br>teachers in various<br>bodies/activities provided as a<br>response to the metric | <u>View File</u> |
| Any additional information  | <u>View File</u> |

# 1.2 - Academic Flexibility

# 1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

### 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

| File Description  | Documents        |
|---|------------------|
| Any additional information                              | <u>View File</u> |
| Minutes of relevant Academic<br>Council/ BOS meetings   | <u>View File</u> |
| Institutional data in prescribed format (Data Template) | <u>View File</u> |

# 1.2.2 - Number of Add on /Certificate programs offered during the year

# 1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

180

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Brochure or any other document relating to Add on /Certificate programs | <u>View File</u> |
| List of Add on /Certificate programs (Data Template )                   | <u>View File</u> |

# 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

4686

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Details of the students enrolled in Subjects related to certificate/Add-on programs | <u>View File</u> |

### 1.3 - Curriculum Enrichment

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

Institute has taken initiative to sensitize and inculcate values, rights, duties and responsibilities of citizens through activities mainly organized by National Service Scheme (NSS), Student Development/Welfare Organization (SDO/SWO), Internal Complaints Committee (ICC), Staff/Student Grievance committee, SC/ST/OBC Reservation Committee, Committee for students with disabilities,

Page 11/178 10-05-2022 08:25:21

Anti-ragging committee, Discipline Committee and department.

Institute takes consistent effort to inculcate values among students. Institute always put best towards overall development of the students by organizing expert lecture on "Universal Human Values" in early days of their engineering education. Apart from technical subjects, students are asked to enroll for MOOCs courses which promote human values and ethics in them. FE students are engaged in the course "Ethics in Engineering Practices" which helps in the holistic development of the students. Throughout the year, NSS ensures to conduct activities such as visits to historical places, tree plantation, pollution awareness camps etc. in order to preserve national, social, environmental and historical values.

Institute creates awareness about human Rights as per constitution obligation. The preamble of constitution obligation is displayed in college corridor. The Board of Students' Development (BSD) looks after the protection of rights and supervises the Development activities of the students. Internal Complaints Committee (ICC) sensitizes about women rights and gender equity through various activities like "Abhivyakti". NSS and SDO/SWO units take remarkable efforts to celebrate Constitutional day. Voting awareness program is conducted to make students aware about voting rights and also help them to enroll their names in the voters' list.

Students and employees are sensitized about constitutional obligations related to duties and responsibilities through the activities like tree plantation, Swachh Bharat Abhiyan, computer literacy sessions, street plays on social issues, yoga and physical exercises, fort conservation, cloth donation, and volunteering during pilgrimage programs etc. NSS unit regularly organizes various activities and annual residential camp to sensitize students about social responsibility. It also extends support through Unnat Bharat Abhiyan in which students carry out the survey of socio economic problems of the rural areas. NSS and SDO/SWO units take remarkable efforts to celebrate Independence Day, Republic Day, Yoga day, Environment day, Teacher's day, and birth anniversaries of great national heroes etc. to revive the national spirit, duties and rights defined by the constitution.

All the departments actively organize social and techno-social visits. The objectives behind such activities are to make students aware of responsibilities towards environment, persons with disability, senior citizens and poor students by organizing social visits to old age homes, schools for blind, orphanages, etc.

Institute also extends a helping hand to raise fund to support the emergency assistance scheme for relief of the deserving families and individuals affected by natural calamities. College raised "Kerala Relief Fund" in 2018, "Maharashtra Flood Relief fund (Kolhapur and Sangli)" in 2019 and "Funds for martyrs' kins of the Pulwama attack" in 2019. Institute has also donated essentials and food products to the people of affected zones. NSS unit visited the affected zone and joined hands with the rescue team for rehabilitation of flood victims and their families.

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum. | <u>View File</u> |

# 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

42

| File Description   | Documents        |
|--|------------------|
| Any additional information   | No File Uploaded |
| Programme / Curriculum/<br>Syllabus of the courses   | <u>View File</u> |
| Minutes of the Boards of Studies/<br>Academic Council meetings with<br>approvals for these courses | <u>View File</u> |
| MoU's with relevant organizations for these courses, if any  | <u>View File</u> |
| Institutional Data in Prescribed Format  | <u>View File</u> |

# 1.3.3 - Number of students undertaking project work/field work/ internships

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of programmes and number of students undertaking project work/field work//internships (Data Template) | <u>View File</u> |

# 1.4 - Feedback System

# 1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students **Teachers Employers Alumni**

#### A. All of the above

| File Description  | Documents   |
|---|---|
| URL for stakeholder feedback report   | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%201/1.4.2%20Analysis.pdf |
| Action taken report of the<br>Institution on feedback report as<br>stated in the minutes of the<br>Governing Council, Syndicate,<br>Board of Management | <u>View File</u>  |
| Any additional information  | <u>View File</u>  |

# 1.4.2 - Feedback process of the Institution may A. Feedback collected, analyzed be classified as follows

and action taken and feedback available on website

| File Description                  | Documents   |
|-----------------------------------|---|
| Upload any additional information | <u>View File</u>  |
| URL for feedback report           | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%201/1.4.2%20Analysis.pdf |

# TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

# 2.1.1 - Enrolment Number Number of students admitted during the year

# 2.1.1.1 - Number of students admitted during the year

#### 549

| File Description                        | Documents        |
|---|------------------|
| Any additional information              | <u>View File</u> |
| Institutional data in prescribed format | <u>View File</u> |

# 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

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

#### 230

| File Description  | Documents        |
|---|------------------|
| Any additional information                                    | <u>View File</u> |
| Number of seats filled against seats reserved (Data Template) | <u>View File</u> |

# 2.2 - Catering to Student Diversity

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

The students are monitored during their academic journey in the Institute and special efforts are taken toenhance the performance of slow learners. Students with good academics and skills are mentored toachieve higher goals. Students are continuously encouraged to attend challenging goals. At the commencement of the first-year classes, Institute hosts Induction program for the students forfresher students with their parents. On behalf of the management Honourable Secretary/Joint Secretary andPrincipal of institute address the students and the parents, which covers the introduction of AISSM Societyand introduction of teaching pedagogy followed in AISSMS IOIT. Principal also brief about teachinglearning methodology followed by institute and also elaborate on facilities central/departmental library, computer centre, gymnasium, sports centre and cultural activities. Head of First Year Engineering department/Engineering science department briefs about academiccalendar, rules and regulations to be followed by students Institute conduct Psychometric test of individual students which is a scientific assessment tool toanalyse student's capabilities, aptitude, personality and interests. To identify the students as advancedlearner or slow learner, entry level analysis of each

student is done. The GFMs/Mentors in regularmeetings with all faculties of respective classes, carry out discussions based on analysis records availableabout students' learning levels, abilities, characteristics, skills, attitudes, examination results (internal and external) and their current day to day interactions/experiences. Based on this evaluation special activitiesare undertaken as per need. Students are encouraged to summarize concept understood during their class as part of 50:10 teachingmodule, this activity enhances student's confidence, communication skill and provide teacher theindication of student's understanding and learning level. Students are provided with various opportunities to showcase and upgrade their technical skills. Manyworkshops/expert sessions/seminar and competitions are organized at institute level to encourage studentsto demonstrate their learning capabilities. Special attention is provided to slow learners by conducting extrapractical sessions, remedial classes, tutorials, tests, regular mentoring and mock examinations. Institute has also made special provision of exhaustive soft skills training and exclusive counselling tomould the slow and advanced learners to plan their career and placements.

### Activities for Advanced learners:

- Project Based Learning
- Patent Publishing
- Student Association activities
- Project competition like Smart India Hackathon/ University Research Project Competition-
- Avishkar
- Industrial training/Internship
- Participation in Seminars/Conferences/IIT events/Tech Fest
- Encouragement to complete NPTEL Courses
- Application of research papers in projects and paper publication in National/international
- conference
- Training program on soft skills development, professional skill development and aptitude training
- Mini project/model making/building/poster presentations competitions
- Industry sponsored/research project
- Students are involved in the research projects awarded to the institute by various funding agencies
- like University/IE(I)/IEEE etc.
- Industrial Visit

### Activities for Slow learners:

- Entry level Analysis
- Psychometric Test
- Make-up classes
- Remedial classes
- Mock practical sessions
- Mock online test
- Tutorial
- One to one Counselling
- Personal attention in teaching
- Counselling & Mentoring
- Assignments and solving University question papers
- Theory Question bank/Oral Question Bank

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

| Number of Students | Number of Teachers |
|--------------------|--------------------|
| 2612               | 119                |

| File Description           | Documents        |
|----------------------------|------------------|
| Any additional information | <u>View File</u> |

#### 2.3 - Teaching- Learning Process

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

Institute is taking significant efforts to motivate students for the self learning and in enhancing theirlearning experience. Faculty members are shifting the focus to a student centric learning process, instead of conventional teaching-learning process of transferring the knowledge to students, through classroomlectures. The focus is on knowledge transfer and learning through students' active participation and involvement. The faculty members provide a platform to students to explore independently, learn throughself study and from their peers, guide them to develop effective and lifelong skills. The following latest teaching and learning methodologies are used to motivate students to learn for higherretention of knowledge through better understanding, for

Page 17/178 10-05-2022 08:25:21

increased depth and developing positive attitudetowards subjects taught:

- 1) Active learning: The students are directly involved in the learning process through activities like brain storming, quiz, debate, group discussions, role play, games, model making, mini projects, presentations, essay, elocution, case studies and simulations on technical content, PPTs with animations for some topics.
- 2) Collaborative Learning: The group/team of students work jointly to provide solution for complicated problems, complete a task/project, participate in debates or design a product.
- 3) Inquiry-based Learning: Students are informed to make use of resources beyond the classroom forinvestigation of questions/problems. It helps in developing their critical thinking and increasingunderstanding levels by performing review of research papers, surveys, etc.
- 4) Problem based Learning: Various competitions are organized to engage the students in complex, challenging problems by assigning them different tasks, assignments or activities. Students workcollaboratively to obtain the solutions by using interdisciplinary knowledge e.g. design and implementation of Software/Apps, design and building robots etc.
- 5) Peer Learning: Students are engaged in intellectual discussions and work in team for solving difficulttask and problems under the guidance of a peer leader to perform various activities.
- 6) Experiential learning: Field based experiential learning like Internship, service learning and classbased experiential learning like role plays, games, case studies, simulation, virtual lab, presentations are practiced.

| File Description                  | Documents  |
|-----------------------------------|--|
| Upload any additional information | <u>View File</u>   |
| Link for additional information   | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%202/2.3.1%20Student%20Cen<br>tric%20Methods.pdf |

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in

Page 18/178 10-05-2022 08:25:21

#### maximum of 200 words

The traditional chalk & talk method of teaching-learning is monotonous. Hence innovations should beincluded in teaching learning process to make it more attractive for students. Faculty members are realizingthe need of various ICT tools and techniques in teachinglearning process to deliver the contents/knowledge. This will help the students to grasp the ideas quickly and increase their active participation init. Faculty members are attending various Faculty development programs for domain knowledge and fornew trends in education technology/pedagogy which make their teaching more innovative. Following arethe various ICT tools and techniques used by faculty members and institute to make teaching moreinnovative: 1) ICT based teaching-learning (Moodle, etc.) 2) Digital social learning platforms (WhatsApp, blogs, etc.) 3) Microsoft Team for sharing subject notes 4) Open courseware (OCW) assignment 5) Microsoft Team for conduction of Test/MCQ tests. 6) Use of IITB Virtual lab for conduction of Practical. 7) Video Prepared by Faculty members. 8) Google classroom for sharing notes. 9) Google classroom for conduction of test/MCQs test. 10) Google classroom for sharing videos. 11) Google classroom for sharing question bank. 12) Presentation done by students under student's association chapter events

Use of ICT tools in teaching learning process help to improve academic performance of the students, their communication, technical and management skills and makes them industry ready. Use of social networkshas provided the possibility of creating work groups where students expose or discuss different topics, publish content related to the subjects, etc. The use of ICT in the classroom increases the motivation of thestudents, showing more interest and becoming more involved in the areas they study. ICT enables the useof innovative educational resources and the renewal of learning methods, establishing a more active collaboration of students. Use of resources as videos, websites and graphics make traditional subjects moreinteresting. The use of ICT in the classroom promotes the student's active and participatory attitude. Collaboration between students is enhanced due to various digital tools. It is much easier for them to createteam projects, cooperate and learn from each other.

| File Description  | Documents        |
|---|------------------|
| Upload any additional information   | <u>View File</u> |
| Provide link for webpage describing the ICT enabled tools for effective teaching-learning process | <u>View File</u> |

# 2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

# 2.3.3.1 - Number of mentors

#### 119

| File Description   | Documents        |
|--|------------------|
| Upload, number of students enrolled and full time teachers on roll | <u>View File</u> |
| Circulars pertaining to assigning mentors to mentees               | <u>View File</u> |
| Mentor/mentee ratio  | <u>View File</u> |

# 2.4 - Teacher Profile and Quality

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

## 119

| File Description   | Documents        |
|--|------------------|
| Full time teachers and sanctioned posts for year (Data Template) | <u>View File</u> |
| Any additional information                                       | No File Uploaded |
| List of the faculty members authenticated by the Head of HEI     | <u>View File</u> |

- 2.4.2 Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)
- 2.4.2.1 Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template) | <u>View File</u> |

# 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

# 2.4.3.1 - Total experience of full-time teachers

#### 1152.9

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of Teachers including their PAN, designation, dept. and experience details(Data Template) | <u>View File</u> |

## 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

The institute follows all the evaluation reforms as prescribed by the University. In addition, the Institutehas introduced measures on its own. Following are the major evaluation reforms introduced by theUniversity:

College Examination Officer (CEO) - As per University directives, the Institute has appointed a senior and experienced faculty member as College Examination Officer (CEO). The Examination Committee isheaded by Principal, assisted by CEO and senior faculty members from each department.

In semester Examination - University has introduced the model of insemester examination for First year(FE), Third year (TE), Final Year (BE) and Master of Engineering (ME) courses.

Computerization - University has introduced online examination for evaluation of First and Second year engineering courses. The Institute conducts online examinations of the University every

#### semester.

Credit system - As per the University guidelines credit system has been introduced for the UG and PGPrograms.

The reforms initiated by the Institute are as follows:

As a regular practice institute conducts unit test examination, mock practical/oral examinations, FEprelims, and conduction of mock online examinations. To support the above reforms, the institute appoints examiners for the conduction of various practice examinations.

The examination pattern, marking scheme and Term work assessment scheme are communicated to thestudents at the beginning of the semester.

The policy for internal assessment is as follows: In the internal assessment, weightage is given to:

- The attendance in theory class and practical sessions
- Understanding by the student
- Presentation skills of the student
- Timely submissions of journal, write-ups and assignments.
- Performance in tests and tutorials.
- Independent learning through projects and presentations
- Communication skill and oral examinations.

The unit test answers and marking scheme is discussed by the faculty with the students. Final year students are given self-evaluation sheets for their projects.

| File Description                | Documents        |
|---------------------------------|------------------|
| Any additional information      | <u>View File</u> |
| Link for additional information | Nil              |

# 2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time-bound and efficient

The institute has adopted the following mechanisms for redressing the grievances of the students with reference to evaluation both at the college and University level Institute level grievance Redressal:-

- 1. If any grievance is raised by a student, then it is reported to Head of the Department, and it will be solved amicably after discussion with concerned faculty.
- The concerned faculty discusses the marking scheme and model answers with the students andhelps them to solve their queries.
- 3. If grievance is not addressable at the department level then the matter is forwarded to the Principalfor further action.

University level grievance Redressal:-

- 1. The institute's Chief examination officer (CEO) and examination section redresses University evaluation grievances.
- 2. They forward these grievances to the University for redressing them. Under the University evaluation redressal system students can apply for photocopy, verification and revaluation.
- 3. After revaluation at the University level, results are communicated to the Institute.4. Institute communicates the same to the concerned students.

| File Description                | Documents        |
|---------------------------------|------------------|
| Any additional information      | <u>View File</u> |
| Link for additional information | Nil              |

# 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Program Outcomes (POs) are based on the graduate attributes prescribed by National Board ofAccreditation and they are uniform for all the programs. While the Program Specific Outcomes (PSOs) asdefined by the Program and they are based on the branch or program specific skills. The institute has clearly defined the course outcomes (COs) which are mapped to the POs and PSOs.

1.The vision and mission statements of the programs and institute are displayed on the institutewebsite and at various key positions in the institute building. 2.POs are printed in institute brochure and newsletter and published on the institute's website. 3.The vision, mission and POs are conveyed to the students during students orientation programconducted at the start of each year. 4.Vision, Mission and POs are discussed during parents meet organized by the department once persemester. 5.Every faculty member discusses

vision, mission, POs, PSOs and COs at the start of course work inevery semester. 6. Head of Department (HoD) discusses vision, mission, PEOs, POs and PSOs with the facultymembers in departmental meeting. 7. Vision, mission, PEOs, POs and PSOs of the department are discussed when the alumni visit toinstitute and during alumni meet conducted once per year. 8. HoD and faculty members discuss vision, mission, PEOs, POs and PSOs with industry experts whovisit to the department for conducting seminars, workshops, expert lectures etc.

| File Description  | Documents   |
|---|---|
| Upload any additional information                       | No File Uploaded  |
| Paste link for Additional information                   | https://aissmsioit.org/computer/vision-<br>mission-peo/ |
| Upload COs for all Programmes (exemplars from Glossary) | <u>View File</u>  |

2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

Attainment of course outcomes:

The calculations of CO attainment is done by using internal and external assessment tools.

The external tools:

The external tools the university examinations like theory, practical, oral and term work etc. The CO areassessed by the performance of students in these examinations.

The internal tools:

Assignments, unit tests, quiz, presentations etc. are considered as internal assessment tools.

Weightages of internal and external assessment tools:

Internal and external assessment tools are assigned weightages as 20% and 80% respectively.

#### Process:

1.Marks scored by the students in all the internal and external tools are entered in the database.

- 2. Average percentage marks of previous years' examinations is set as the target.
- 3. The attainment levels are set based on the results of previous examinations.
- 4. The number of students scoring marks more than set target are counted. The count is converted intopercentage.
- 5. The percentage calculated in step 4 is compared with the range assigned to the three attainmentlevels in step 3 to find out the corresponding level.
- 6.Average of all the attainment levels by using internal tools is calculated.
- 7. Average of all the attainment levels by external tools is calculated.
- 8.20% of the average attainment level by internal tools and 80% of the average attainment level by external tools are added to calculate the CO attainment.
- 9. Average of all CO attainments is calculated to determine the overall CO attainment of the course.

Attainment of Program Outcomes and Program Specific Outcomes:

The calculation of attainment of POs and PSOs is done by using direct and indirect assessment tools.

The direct tool: is the value of CO attainment calculated using marks scored by the students in internal and external examinations as stated above.

The indirect tools: include various feedbacks collected from the stakeholders such as students, alumni, employers etc.

Weightages are given to these feedbacks based on their relevance to PO/PSO.

Weightages of direct and indirect assessment tools:

Direct and indirect assessment tools are assigned weightages as 80% and 20% respectively.

#### Process:

- 1. Attainment by direct tool
- 1. Matrix of CO-PO-PSO and CO attainment values of all the courses from first year to finalyear are considered.
- 2. Product of CO attainment value of a course with the corresponding level of mapping of thecourse with PO/PSO (to get the inference of the strength of mapping) is calculated.
- 3. Summation of all the products is calculated (sum of products).
- 4. Summation of all the levels of mappings of the course with a specific PO/PSO is calculated.
- 5. Sum of products is divided by sum of all the levels of mappings to calculate the totalattainment.
- 2. Attainment by indirect tools
- 1. The feedback forms from various stakeholders are collected and analyzed to calculatepercentage response.
- 2. Total attainment by indirect tools is calculated by taking weighted sum of all thepercentages
- 3. 80% of the direct attainment level and 20% of indirect attainment level are added to calculateoverall PO/PSO attainment.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for Additional information | Nil              |

### 2.6.3 - Pass percentage of Students during the year

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

| File Description  | Documents   |
|---|---|
| Upload list of Programmes and<br>number of students passed and<br>appeared in the final year<br>examination (Data Template) | <u>View File</u>                                  |
| Upload any additional information   | No File Uploaded                                  |
| Paste link for the annual report  | https://aissmsioit.org/college-annual-<br>report/ |

### 2.7 - Student Satisfaction Survey

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

https://aissmsioit.org/wp-content/uploads/2022/01/Student-Satisfaction-Survey-2020-21-Analysis.pdf

### RESEARCH, INNOVATIONS AND EXTENSION

- 3.1 Resource Mobilization for Research
- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)
- 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

1.00

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| e-copies of the grant award<br>letters for sponsored research<br>projects /endowments | <u>View File</u> |
| List of endowments / projects<br>with details of grants(Data<br>Template)             | <u>View File</u> |

- 3.1.2 Number of teachers recognized as research guides (latest completed academic year)
- 3.1.2.1 Number of teachers recognized as research guides

| File Description                        | Documents        |
|---|------------------|
| Any additional information              | <u>View File</u> |
| Institutional data in prescribed format | <u>View File</u> |

# 3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

# 3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

01

| File Description  | Documents                    |
|---|------------------------------|
| List of research projects and funding details (Data Template) | <u>View File</u>             |
| Any additional information                                    | No File Uploaded             |
| Supporting document from Funding Agency                       | <u>View File</u>             |
| Paste link to funding agency website                          | https://www.aicte-india.org/ |

### 3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institution has a well-established ecosystem for innovation, development and incubation activities. The institution has initiated separate research and development (R&D) cell, Incubation and Entrepreneurship Development (ED) cell to encourage students and faculty members to explore their creative ideas and promote innovation. The students are encouraged to undertake design, fabrication and development projects and prove their skills through various technical competitions. Creation and transfer of knowledge wealth are focused through activities like, publications of research papers, industrial project work, innovation, consultancy and development activities.

• The institution has Entrepreneurship Development (ED) cell which organizes entrepreneurship awareness camp, expert lectures for career opportunities, and technology trends in industrial environment, orientation program for new entrepreneurs etc. It nurtures entrepreneurial attitude and

Page 28/178 10-05-2022 08:25:21

skills of the students.

- Students understand the problem of industry and provide the customized solution for it. The innovative ideas of students are implemented in incubation centre to develop products beneficial for the society and industry. The expert faculty members provide technical support to incubate and motivate them to become entrepreneurs. Innovative projects are being designed and implemented under this incubation centre.
- Various workshops and seminars are organized for research methodologies and IPR under R&D cell. Talks of eminent personalities/experts are organized to guide and motivate research ideas and publications among students and faculty members.

### Activities under innovation and incubation cell:

- Guidance sessions for students to prepare them for participation in various technical competitions, exhibitions
- Awareness sessions for students to give guidelines about paper writing, presentation, technical poster presentations and publications in reputed journals.
- Organization of inter/intra college technical competitions

#### Outcomes:

- Students won runner up position in IEEE YESIST12 Innovation challenge at Stamford University, Thailand
- Students won first prize in national level competition Mindspark Makeathon for innovative design and development of Smart Helmet.
- Students won first prize in national level competition Hackathon 2020 for Developing a Software Tool to aid Search and Rescue by Calculating and Plotting Search Area from the Last Known Position of a Missing Aircraft.
- Student won first prize in 6th National Level Technical Expo.
- Student won the best paper award at 2nd IEEE International Conference on Emerging Smart Computing & Informatics ESCI 2020.
- Students' participation in technical competitions like Hackathon, DST & Texas instruments India innovation challenge design contest powered by AICTE, AVISKAR by SPPU, start-ups etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

# 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

# 3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

64

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| List of workshops/seminars<br>during last 5 years (Data<br>Template) | <u>View File</u> |

## 3.3 - Research Publications and Awards

# 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

# 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

03

| File Description  | Documents                        |
|---|----------------------------------|
| URL to the research page on HEI website   | https://aissmsioit.org/research/ |
| List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template) | <u>View File</u>                 |
| Any additional information  | <u>View File</u>                 |

# 3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

# 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List of research papers by title,<br>author, department, name and<br>year of publication (Data<br>Template) | <u>View File</u> |

- 3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during the year
- 3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during year

46

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List books and chapters edited volumes/ books published (Data Template) | <u>View File</u> |

#### 3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

In line with its vision and mission, the institute is very insightful to the impact of various extension activities on its students, employees, as well as on the regional community and the environment. The institute believes in giving back to the neighborhood community.

Institute continuously organizes and participates in various extension activities with the objective to

- Sensitize students about various social issues
- Contribute to community and strengthen it

The institute considers the impact of all extension activities on the local community. The various social and technical activities, events and programs organized by the institute reflect our commitment to operate in a techno-social responsible manner.

The institute motivates the faculty members and students to participate in need-based, participatory initiatives with local

communities, and that range from health, sanitation, education, women's empowerment etc. The participation of the students sensitizes them towards the social issues and challenges faced by the weaker section of the locality; enables them to develop an empathetic understanding of the same and facilitate their initiation in civic engagement. The institute also promotes regular engagement of faculty members, students and staff with neighborhood community for their holistic development and sustained community development through various activities.

Various awareness programs/workshops/rallies/road shows/ voluntary activities with themes like cleanliness, green environment & tree plantation, gender sensitization, traffic rule awareness, road safety awareness, voter awareness, save water, demonetization and digital payment, rural development, national swachh bharat abhiyan, blood donation camps, international yoga day and women empowerment etc. are organized under NSS unit of the institute.

Students and faculty members of all the departments visit schools/orphanages/old age homes in the neighborhood community to share technical knowledge, monetary donations, and distribution of essential things to people affected by natural disasters/epidemics.

#### Impact & Sensitization:

Exposure to extension and outreach activities sensitize the students towards social issues and also to legal and social remedies for matters like domestic violence, dowry, child abuse, beggars, female feticides, victims of violence, etc. The activities conducted imbibe the values of social responsibility such as:

- To help people in need and distress.
- To understand and fulfill the need of under privileged children.
- To promote cleanliness in all span of life and common places.
- To acquire social values and a deep interest in environmental related issues.
- To understand societal/rural problems and provide solutions through projects.
- To develop lifelong skills such as communication, management, leadership, analytical and perceptual etc.

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://aissmsioit.org/wp-content/uploads/20<br>21/04/NSS-Annual-Report-2020-21.pdf |
| Upload any additional information     | No File Uploaded  |

- 3.4.2 Number of awards and recognitions received for extension activities from government / government recognized bodies during the year
- 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

1

| File Description   | Documents        |
|--|------------------|
| Any additional information   | No File Uploaded |
| Number of awards for extension activities in last 5 year (Data Template) | <u>View File</u> |
| e-copy of the award letters  | <u>View File</u> |

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

23

| File Description   | Documents        |
|--|------------------|
| Reports of the event organized   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Number of extension and<br>outreach Programmes conducted<br>with industry, community etc for<br>the during the year (Data<br>Template) | <u>View File</u> |

# 3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

Page 33/178 10-05-2022 08:25:21

# 3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

1320

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Number of students participating in extension activities with Govt. or NGO etc (Data Template) | <u>View File</u> |

### 3.5 - Collaboration

- 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship during the year
- 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year wise during the year

39

| File Description   | Documents        |
|--|------------------|
| e-copies of related Document   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of Collaborative activities with institutions/industries for research, Faculty | <u>View File</u> |

- 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year
- 3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

| File Description   | Documents        |
|--|------------------|
| e-Copies of the MoUs with institution./ industry/corporate houses  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of functional MoUs with institutions of national, international importance, other universities etc during the year | <u>View File</u> |

#### INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

The institute has obligatory infrastructure required for effective teaching-learning (T-L) process, co-curricular and extra-curricular activities to fulfill the norms laid by the AICTE, DTE, SPPU. The available facilities are enhanced by addressing the needs of students and faculty members to support T-L and Research and Development activities in the institute.

Physical infrastructure consists of 31(UG+ PG) classrooms, 07 tutorial rooms, 47(UG + PG) laboratories and 01 seminar hall. In addition, the institute has supporting academic and administrative rooms. Classrooms and seminar halls have adequate ventilation and illumination and are equipped with audio-video system and ICT tools like PA system, LCD projector, internet connectivity. Each department has well-equipped laboratories and a departmental library. The available physical infrastructure is optimally utilized beyond regular institute hours, to conduct certificate courses, co/extra-curricular activities, campus to corporate readiness program, training classes, campus recruitments, meetings, seminars, conferences etc. All the departments have well-furnished separate cabins for the faculty members with the atmosphere conducive for regular interaction with the students who come for counseling, guidance and discussions. Institute also have Medical room, Girls Common room, Boys Common room.

Laboratories are equipped with state-of-the-art machines/equipments like UV-VIS Spectrophotometer, ECG Machine, Programmable logic controller with control panel, Distributed control system, Universal Process Control Trainer, Spectrum Analyzer, Logic Analyzer, Power Quality Analyzer, open source and latest proprietary software such

Page 35/178 10-05-2022 08:25:21

as MATLAB, AUTOCAD, ETAP, SCADA, LabView, Xilinx, Microwind, Multisim, Powersim etc. The charts and models are displayed in the laboratories for better understanding of theory and practical concepts. Laboratories are regularly maintained and updated. Equipment is calibrated on a regular basis.

A part of regular laboratories institute also has various centers of excellence viz. Texas Innovation Lab., IEEE Affordable Agriculture Lab., DCS Delta-V Lab.by Emerson, Flow Lab. byForbes
Marshall,Teknocrats Academy of Automation and Control
Technology(TAACT) Lab.,Oracle Academy Lab., Power Quality Cell,
SignioGlobalTech Solutions Lab.

Institute has Incubation center- Research Innovations Sustainable Entrepreneurship (R.I.S.E.) for prototyping, production and marketing for innovative projects.

Workshop consists of different facilities for imparting practical skills in such as milling, fitting, carpentry, welding, drilling using CNC, VMC, Centre Lathe, BenchGrinder Machine, Turning Machine etc.

For Internet access and computing purpose, the institute has massive network of 763 Computers (of which 640 are dedicated for academics) with 100Mbps bandwidth. Centralized firewall - "Cyber-roam" is used for security and to monitor the usage of internet by individuals. All computers are connected by LAN and Internet. Some computer laboratories are equipped with high end servers and computers with high end processors.

Enterprise Resource Planning (ERP) is deployed for effective academic planning, execution, monitoring and analysis. ERP software is used for automation of academic and administrative processes used in the institute, to maintain and analyze the data related to various processes of institute. This cloud-basedERP software has 40+ modules and it facilitates computerized process for student admission, educational certificates generation, teachers-parents communication, examinations, leave management, attendance and academic monitoring, students' feedback etc.

Central Library has a compilation of books, journals, web-based resources, audio/video materials, etc. with latest software for efficient functioning with 200 seating capacity. There is a provision of having remote access to get e-books, e-journals and e-Learning resources. The Library is using commercial software - SLIM 21 for automation of library services and open source software -Dspace to

maintain digital contents. Urkund software is used for plagiarism checking of the documents. Library also has provision of separate reading room for faculty members.

Training and Placement (T & P) cell has adequate infrastructure for training and placement activities.

For the physically impaired (Divyangjan) students, the institute has ramp, elevator, wheel chair, and washroom with necessary facilities.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

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

The All India Shri Shivaji Memorial Society has always encouraged and supported the co-curricular and extracurricular activities in its institutes. The institutes have also carried forward the legacy of society by promoting the co-curricular and extracurricular activities at their level. As part of this endeavor, the institute has a well-established Gymkhana Department and Art circle for effective and better coordination of various sports and cultural activities which is headed by Physical Director, Cultural In-charge and supported by the students' sports and cultural committees respectively. The society and institute fully support and encourage various sports and cultural activities with the motto that every student should not only be academically fit but also physically fit to face the challenges of the life. Campus has a playground of 172160 sq. feet for sports facilities.

The Institute has following outdoor and indoor sports and cultural facilities.

- Playground and necessary equipment for outdoor games like Cricket, Football, Kho-Kho, Volleyball, Basketball, Athletics, Kabbadi and Hockey etc.
- Space and necessary equipment for indoor games like Table tennis, Chess, Carrom, Judo, Gym and Yoga.

 Open air theatre and cultural room with latest musical instruments and practice area for cultural activities.

Since the establishment of the Institute, the gymkhana has been playing vital role in the overall development of the students. As a result, our students have earned applauds in the various competitions at University, State and National level sports and cultural competitions. Prominent among them are- University Intercollegiate sports competition, Purushottam Karandak, Firodiya Karandak, Zest, MIT Summit, Kaware Trophy etc. Our students have also represented at Net ball competitions at University level.

The students who represent institute in various sports and cultural events are provided with necessary gears/material and paid TA/DA. The students' achievements are acknowledged by felicitating them at Society and Institute level functions.

Apart from participation at various sports and cultural events, the institute organizes following events every year:

- Annual Social gathering.
- National level inter -Collegiate Technical, Sports and Cultural Competition 'ALACRITY'.
- State level Inter-Collegiate T20 cricket tournament "IOIT CRICKET LEAGUE".
- Inter- department technical, sports and cultural competitions.

The students' sports and cultural committees are actively involved in organizing the above events. A separate budget is allocated by the institute for organization of various sports and cultural activities.

The Gymkhana office of institute organizes medical checkup for teachers and newly admitted students. Physician is also made available on request. Institute's ambulance/ vehicle is available for medical emergency.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

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

32

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Paste link for additional information  | Nil              |
| Upload Number of classrooms<br>and seminar halls with ICT<br>enabled facilities (Data<br>Template) | <u>View File</u> |

# 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

# 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

#### 86.05

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Upload audited utilization statements  | <u>View File</u> |
| Upload Details of budget<br>allocation, excluding salary<br>during the year (Data Template | <u>View File</u> |

#### 4.2 - Library as a Learning Resource

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

Page 39/178 10-05-2022 08:25:21

- Integrated Library Management System is used to manage different functions of the library. Institute Central Library is using commercial software. Library is partially automated (yr of automation2013) with System for Library Information Management (SLIM21) software having version 21. Library collection can be browsed / searched on Intranet using the SLIM21 OPAC module. SLIM21 helps for catalogue books, e-books, articles, reports, serials, publications that contain information so vital to the institute.
- SLIM21 cataloguing adheres to popular international standards. With SLIM21 retrieval of information is simple, fast and efficient. SLIM21 supports flexible workflow to cover activities related to acquisition of books, serials control, and funds monitoring. This software has modules like Acquisition, Cataloguing, Circulation, Serial Control. Acquisition modules & Cataloguing Module is utilized for generating accession register reports, adding Bulk student's record, updating item lending policy and its status. Circulation module has books issue, return, and reserve options. Various reports such as loan borrower, item inventory status, circulation status summary, item transactions and operator wise transactions can be generated in this module. Similarly, library barcodes are also generated through this module making cumbersome library work simpler, effective, and time is saving. The Serial Control module maintains the record of print journals and track of subscribed issue in the library. Generation of expected arrival schedule of loose issues can be generated in the serial control module. SLIM21 software also provides statistical analysis required for Library Management systems such as weekly transitions, most issued items, less issued items, reference books, Books sent for binding.
- This software is purchased from Algorhythms consultants Pune, they provide online and offline support for software problems, proper backup, and maintenance of software during the annual maintenance contract period.
- Library web OPAC homepage and link has been displayed in the library. Users can search the catalogue on their mobile phones also. Previous university question papers are available on the college website under facilities tab. Institute library is also using Dspace open source software for institutional repository where AISSMS BE project reports are made available.

| File Description                      | Documents   |
|---------------------------------------|---|
| Upload any additional information     | <u>View File</u>  |
| Paste link for Additional Information | https://aissmsioit.org/central-library/about-<br>central-library/ |

# 4.2.2 - The institution has subscription for the A. Any 4 or more of the above following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

| File Description  | Documents        |
|---|------------------|
| Upload any additional information   | <u>View File</u> |
| Details of subscriptions like e-<br>journals,e-ShodhSindhu,<br>Shodhganga Membership etc<br>(Data Template) | <u>View File</u> |

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

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

#### 11.2

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Audited statements of accounts  | <u>View File</u> |
| Details of annual expenditure for<br>purchase of books/e-books and<br>journals/e- journals during the<br>year (Data Template) | <u>View File</u> |

# 4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

#### 4.2.4.1 - Number of teachers and students using library per day over last one year

#### 64.45

| File Description                                  | Documents        |
|---|------------------|
| Any additional information                        | No File Uploaded |
| Details of library usage by teachers and students | <u>View File</u> |

#### 4.3 - IT Infrastructure

#### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

In this electronic communication era, internet communication is very important in the teaching learning process. To fulfill the norms of AICTE and University, the institute has very strong IT infrastructure. Institute aims at providing futuristic facilities to its students so that they can utilize these resources to reach greater heights. To enable this, the institution frequently updates its IT facilities to provide the best facilities. Our classrooms are equipped with LCD projectors and supported by audio visual systems. The entire campus is monitored by CCTV cameras installed at strategic places.

The institute has massive network of763computers with 165Mbps fiber optic internet connectivity and Wi-Fi facility with public and private connectivity. Centralized firewall "Cyber-roam" is used for network monitoring, management and internet security. Athree layer switching LAN is available for the entire campus. L3 Cisco (GIGABIT Switch) 48-port switch is present on each floor of the institute which are connected to the Main L3 Cisco 48-port switch. All the laboratories on each floor contains 24 port 10/100 L2 switch. All floors and computer laboratories are connected in Star topology and 100 Mbps bandwidth is shared in LAN.Uninterrupted power supply (UPS) is available in all computer laboratories.

Open source and latest proprietary software such as ETAP, LabView Elvis, MatLab etc. are available inlaboratories. Institute has a well established language lab to enhance communication skills of students. Language lab software consisted of the Interactive Instructor and student module, Audio and video recorder, lesson composer and integrated study material. Institute has licensed MS teams software for conduction of online classes and meetings.

Four servers are available for smooth conduction of various activities such as online examinations, webinars, online workshops, virtual lab, hosting proprietary software etc.

Enterprise Resource Planning (ERP) is deployed for effective

academic planning, execution, monitoring and analysis. ERP software is used for automation of academic and administrative processes used in the institute, to maintain and analyze the data related to various processes of the institute. This cloud based ERP software has 40+ modules and it facilitates computerized processes for student admission, educational certificates generation, teachersparents communication, examinations, leave management, attendance and academic monitoring, students' feedback, learning management system (LMS) etc.

Computers with internet connection are made available to all the faculty members at their respective locations.

All the HoDs and IQAC coordinator are provided with laptops for administrative work.

The institute has a separate centralized maintenance system in order to support the IT infrastructure, campus facilities and equipment. All the IT facilities are periodically updated. Details of the same are given in the document of additional information.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

#### **4.3.2 - Number of Computers**

763

| File Description                  | Documents        |
|-----------------------------------|------------------|
| Upload any additional information | <u>View File</u> |
| List of Computers                 | <u>View File</u> |

### **4.3.3 - Bandwidth of internet connection in the** A. ? 50MBPS Institution

| File Description   | Documents        |
|--|------------------|
| Upload any additional<br>Information                                     | No File Uploaded |
| Details of available bandwidth of internet connection in the Institution | <u>View File</u> |

#### 4.4 - Maintenance of Campus Infrastructure

# 4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

# 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

#### 70.94

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Audited statements of accounts   | <u>View File</u> |
| Details about assigned budget<br>and expenditure on physical<br>facilities and academic support<br>facilities (Data Templates) | <u>View File</u> |

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

The institute has established standard systems and procedures for utilizing and maintaining the physical, academic and support facilities as explained below:

There are college level committees that look after the various aspects of the utilization and maintenance of the physical, academic and support facilities.

Maintenance and utilization of facilities (laboratory, computers, classrooms etc.)

#### Laboratory:

The institute regularly maintains the laboratory equipment there by checking the working status of instruments. The laboratories are maintained by means of annual maintenance contract for computers,

peripherals, networking, UPS etc. A history card is maintained for all the equipment. The minor maintenance is carried out by the laboratory assistants/technicians/workshop staff. In case of major maintenance of equipment, the concerned laboratory in-charge submits a maintenance request to the "Purchase Committee" through the HoD. Based on the request, the equipment maintenance work is assigned to an external agency through work order. All such records are maintained in the history card of the equipment.

Laboratory assistants are maintaining dead stock register and register for consumable material and undertake physical deadstock verification of laboratory material. Laboratory assistants are maintaining log book in the laboratory, updating laboratory boards periodically, and maintaining equipment, kits, wires, probes etc. Laboratory assistants are issuing equipment, components and manuals to the students, other laboratories and departments by making entry in the issue book. They are updating the display of laboratory with respect to laboratory time-table, list of experiments, list of major equipment along with cost, lab area, and charts as well as keeping record of consumables required for the laboratory.

#### Library:

Central Library Committee looks after all the updation of library resources like call and verification of books and journals requirement, prepare library budget, update and maintain the digital library setup, regularly update the text, reference books, journals, and perform dead stock checking. Irreparably damaged books are weeded out once in 3 years. SLIM 21 software is used for in house processes of the library. Books are arranged department wise and Dewey Decimal Classification (DDC) tool is used for classification of books. Barcode system is used for maintaining the records of the daily transactions. Web OPAC (Open Public Access Catalogue) link has been provided for searching books and other resources available in the library. Central library also maintains Institution Repository by using Dspace software. Previous university question papers are maintained department wise by the central library for students' reference. Printing and photocopying facility is available in the library.

The institute's librarian and department library coordinators are regularly reviewing and evaluating resource materials, such as book reviews and catalogs, in order to select and order print, audiovisual, and electronic resources. Departmental library incharge prepares a list of books and displays the updated list semester wise as well as make a new entry of books in the department

library records. Arrange the books or copies of books subject wise in the book shelf and make the entry accordingly. At the end of the semester they prepare a report about how many books were issued, returned or misplaced. Prepare requirements of new books and journals that are required according to the new syllabus and submit the proposal to the central library through HoD. Departmental project and seminar coordinators submit all the project and seminar reports of students to the departmental library.

#### Computers:

The maintenance of computer hardware and software of the institute is carried out by external agency through annual maintenance contracts (AMCs). The minor maintenance is carried out by the laboratory assistants. In case of major maintenance of computer hardware and software, the concerned laboratory in-charge submits a maintenance request to the "Purchase Committee" through the HoD. Based on the request, the maintenance work is assigned to an external agency through AMC. All such records are maintained in the history card of the laboratory.

#### Sports Facilities:

Physical director of the institute ensures the utilization and maintenance of the institute's sports facilities. Physical Director gives requisition to the purchase committee for purchase of new sports equipment and maintenance of sport facilities. Physical director also plans and manages resources, budget and identifies potential opportunities for external funding. The sports section facilitates teachers and students with sports, recreation, and health checkups etc.

#### Canteen:

The central canteen committee looks after the cleanliness, hygiene of the canteen. The committee also ensures that the quality of water and food is maintained.

#### Institute Infrastructure:

The central "Civil, Electrical Repair and Maintenance" committee looks after the maintenance of the institute's infrastructure including the class-rooms, laboratories, building etc. The Housekeeping Cell looks after the cleanliness of premises and monitors the work done by peons and sweepers, ensures proper upkeepment of institute campus including all common facilities.

Daily cleaning of common areas and washrooms is done by an external agency. Pest control and sanitization of the entire building is done regularly by external agency. Maintenance of elevators, fire fighting system, EPABX, CCTV, Air conditioners, water tanks, water coolers, RO plant, DG set, garden etc. is done through AMC. External agency take care of campus security.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

#### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

# 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1678

| File Description  | Documents        |
|---|------------------|
| Upload self attested letter with<br>the list of students sanctioned<br>scholarship  | <u>View File</u> |
| Upload any additional information   | No File Uploaded |
| Number of students benefited by<br>scholarships and free ships<br>provided by the Government<br>during the year (Data Template) | <u>View File</u> |

- 5.1.2 Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year
- 5.1.2.1 Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

11

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Number of students benefited by<br>scholarships and free ships<br>institution / non- government<br>agencies in last 5 years (Date<br>Template) | <u>View File</u> |

# 5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

| File Description  | Documents   |
|---|---|
| Link to Institutional website   | https://naac2021cycle2.aissmsioit.org/AOAR%2<br>02020-21/Criterion%205/5.1.3 Skill%20Enhance<br>ment%20Scheme.pdf |
| Any additional information  | <u>View File</u>  |
| Details of capability building and skills enhancement initiatives (Data Template) | <u>View File</u>  |

# 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

380

# 5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

380

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template) | <u>View File</u> |

Page 48/178 10-05-2022 08:25:21

# 5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

#### A. All of the above

| File Description   | Documents        |
|--|------------------|
| Minutes of the meetings of<br>student redressal committee,<br>prevention of sexual harassment<br>committee and Anti Ragging<br>committee | <u>View File</u> |
| Upload any additional information  | <u>View File</u> |
| Details of student grievances including sexual harassment and ragging cases  | <u>View File</u> |

#### 5.2 - Student Progression

#### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

380

| File Description   | Documents        |
|--|------------------|
| Self-attested list of students placed                        | <u>View File</u> |
| Upload any additional information                            | No File Uploaded |
| Details of student placement during the year (Data Template) | <u>View File</u> |

#### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

10

| File Description                                   | Documents        |
|--|------------------|
| Upload supporting data for student/alumni          | <u>View File</u> |
| Any additional information                         | No File Uploaded |
| Details of student progression to higher education | <u>View File</u> |

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

03

| File Description  | Documents        |
|---|------------------|
| Upload supporting data for the same   | <u>View File</u> |
| Any additional information  | <u>View File</u> |
| Number of students qualifying in<br>state/ national/ international level<br>examinations during the year<br>(Data Template) | <u>View File</u> |

#### 5.3 - Student Participation and Activities

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

00

| File Description   | Documents        |
|--|------------------|
| e-copies of award letters and certificates   | No File Uploaded |
| Any additional information   | No File Uploaded |
| Number of awards/medals for<br>outstanding performance in<br>sports/cultural activities at univer<br>sity/state/national/international<br>level (During the year) (Data<br>Template) | <u>View File</u> |

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

At the beginning of every academic year the institute constitutes the Student Council by following the norms laid down by the University. Class representative from each class will be nominated as a member of the Student Council. The student members elect General Secretary, Cultural Secretary, Sports Secretary, and Girls representative for a term of one year. The Student Council aims at the all-round development of students and organizes several academic, co-curricular, and extracurricular events throughout the year in association with the University and other organizations.

Meetings of the Student Council are conducted at least once in each term with Student's Welfare Officer, discipline, and antiragging committee.

The details of various academic and administrative committees under the Student Council are Cultural committee, Sports committee, NSS committee, Magazine committee AAYAM, Departmental Student Associations namely INSATS, ITSA, CESSA, ELEXA, and EESA.

The functions and events conducted by above mentioned committees are as follows:

- 1. Students' Council: Under section 40 (3) of the Maharashtra Universities act, 1994, this council is established every year in the institute and it performs prescribed duties.
- 2. Student Grievance: This committee addresses complaints lodged by any student and effectively resolves the grievances of students. It maintains discipline among the students. It also empowered to look into matters of harassment.

- 3. Ant-Ragging: This committee ensures zero ragging incidents in the institute and also spreads awareness among students against any type of ragging activities.
- 4. Cultural: This committee co-ordinates various cultural activities and events throughout the year. "Alacrity" is national level fest and an annual social gathering which showcases the cultural talent of students. Intercollegiate cultural & sports competitions are also organized in Alacrity. Our students participate in prestigious intercollegiate competitions such as Firodiya Karandak and Purushottam Karandak every year and bag prizes.
- 5. Sport: This committee organizes various sport events at the local, state, national levels. It also organizes the interdepartmental sports events. Our students actively participate in various sports in intercollegiate, interuniversity, state, national and international levels.
- 6. Magazine: 'AAYAM' is our annual magazine published by Magazine committee. Students express their talent in the form of articles, poetry, interviews of eminent personalities, and so on. This exercise imbibes societal values in students.
- 7. Technical Activities: Every Department is having an active Student Chapter associated with the Institution of Engineers, India (IEI), Computer Society, India (CSI), Indian Society of Technical Education (ISTE), and Institute of Electrical and Electronics Engineer (IEEE). These chapters conduct various programs viz; Expert lectures; Industrial visits to name a few. Institute also organizes international conferences every year.

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%205/5.3.2_various%20bodie<br>s+index.pdf |
| Upload any additional information     | <u>View File</u>  |

- 5.3.3 Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)
- **5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution** participated during the year

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Upload any additional information  | No File Uploaded |
| Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template) | <u>View File</u> |

#### 5.4 - Alumni Engagement

- 5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services
- 1.Webinar on "Civil Service Examination: Information and Approach needed" by Alumna Ms. Prajakta Thakur on 08/06/2020.
- 2.Webinar on "Grid Integration of Renewable Energy" by Alumna Ms.Vishakha Chandhere on 29/06/2020
- 3.Alumni-Connect Webinar Series by Alumni Mr. Akshay Dumare, Mr.Omkar Gurav, Mr. Parag Sanyashiv, Mr.Tejas Shah, Mr. Shreyash Pawar, Ms. Samruddhi Kulkarni, Ms. Reshma Wable, Mr. Milan Singh Thakur on 03/07/2020 to 08/07/2020
- 4. Webinar on "career Opportunities in Facility management" by Alumnus Mr. Anirudha Pawar on 23/07/2020
- 5.Webinar on "Research & Innovation in the Automotive Industry" by Alumnus Mr. Vinit Tirnagawar on 24/07/2020
- 6.Webinar on "Entrepreneurship opportunities for Engineering Students" by Alumnus Mr.Nandan Ghawate on 24/07/2020
- 7.Webinar on "Real Optimization of T&P Resources" by Alumnus Mr. Anand Gundecha on 24/07/2020
- 8.Webinar on "Job opportunities in Instrumentation Engineering and Higher Studies in U.S."

- by Alumnus Mr. Rohit Ghole on 27/07/2020
- 9.Webinar on "Block Chain Technology" by Alumna Ms. Sonali Patwe on 01/08/2020
- 10.Webinar on "How to build Career in Digital Marketing" by Alumna Ms. Samruddhi Kulkarni on 11/08/2020
- 11. Workshop on Time management and productivity in association with IEEE student chapter and Alumni Association" by Alumna Ms. Reshma Wable on 18/08/2020 to 19/08/2020
- 12. Webinar on "Entrepreneurship Opportunities for Engineering Students" by Alumnus Mr. Nandan Ghawate on 05/09/2020
- 13. Webinar on "Real Optimization of T&P Resources" by Alumnus Mr. Anand Gundecha on 5/09/2020
- 14. Webinar on "PLC and SCADA in Automation" by Alumnus Mr. Guruprasad Samasgikar on 12/09/2020
- 15. Webinar on "Journey from Campus to Company" by Alumna Ms. Revati Umak on 21/09/2020
- 16.Workshop on Solar System Design and AC-DC System cost analysis by Alumna Ms. Sujata Powniker on 26/10/2020 TO 30/10/2020
- 17. Webinar on Entrepreneurship by Alumnus Mr. Yash Sultana on 28/10/2020
- 18.Coffee and Conversation with Alumni by Alumna Ms. Sonali Patwe on 18/12/2020
- 19. Coffee and Conversation with Alumni by Alumnus Parth Bhimani on 16/02/2021
- 20. Virtual Annual Meet for all Branches on 13/03/2021
- 21.Webinar on "Project based Learning & Project Management" by Alumnus Mr.Kiran Belle on 13/03/2021
- 22.Coffee and Conversation with Alumni by Alumna Mrs.Ankita Pawar on 24/04/2021
- 23. Coffee and Conversation with Alumni in association with Alumni cell by Alumna Miss. Krutika Kharde, Jr. Scada engineer at Sintag

Technology, Miss.Shrutika Kharde, trainee Electrical Engineer at Vanderlande on 19/05/2021

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%205/5.4.1 Scan.pdf |
| Upload any additional information     | <u>View File</u>  |

# 5.4.2 - Alumni contribution during the year D. 1 Lakhs - 3Lakhs (INR in Lakhs)

| File Description                  | Documents        |
|-----------------------------------|------------------|
| Upload any additional information | <u>View File</u> |

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

The Vision and Mission statement of the Institute are as follows:

VISION

"To uplift the common masses by rendering value added education"

**MISSION** 

"Empowering Society through dynamic education."

AISSMS IOIT has distinctive characteristics which are satisfied through its mission in the sense that the Institute empowers its students to become technocrats, researchers, scientists, administrators and entrepreneurs by inculcating professional ethics, leadership qualities, being good team players, social awareness and responsibility. The institute believes in holistic development of students by including value added courses and making the education process dynamic in nature.

The governance within Institute consists of Governing body (GB), Local Management Committee (LMC) now termed as College Development Committee (CDC), and Internal Quality Assurance Cell (IQAC). The Management, IQAC, Principal and Central Committee co-coordinators are the four important leader who frame and Implement the policies which are in tune with Vision and Mission of the institute which in the governance of the Institute as a whole. The Principal holds meetings with Heads of the departments as the Faculty representatives, every week, during the weekly meetings with the Heads of the departments; the Principal reviews the processes and plans of each department. All the decisions, policies and planning to improve the quality are reviewed and discussed in these meetings before their implementation. . The Head of departments conduct weekly meetings with the staff to review the activities of the previous week and plan for the next week. These decisions, policies and planning are further reviewed by the College Development Committee (CDC) and the Governing Body. The CDC and Governing body are the statutory bodies formed as per the provision of Statutory Regulating Authorities (SRA's). The CDC and Governing body conduct meeting twice and thrice in a year in order to have effective implementation of the of the policies to monitor the value addition in the academic possesses.

The Management and Principal ensure that the Institute moves ahead with all the planning, to become one of the renowned Institutes. The policy statements and action plans are formulated, after careful consideration of all the stakeholders.

Every department prepares a well-planned academic calendar before the commencement of each semester. This calendar lists down all the curricular, co-curricular and extra-curricular activities which are in line with Vision and Mission of the Institute. The Institute maintains effective co-ordination and monitoring mechanism with departments and committees formed for these activities, IQAC monitors the functioning of all the committees relevant to teaching -learning, student's enrichment and overall development of the institute to identify areas of improvement and suggest the necessary action plan. These policies result in overall development of the student imparting dynamic education. There are various central committees in the institute the leader of these committees plan development activities and ensure their timely execution, this reflects effective governance which are in tune with Vision and Mission of the Institute.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

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

The institute has inculcated the practice of decentralized and participative Management with will established mutual relationships among all the stakeholders. Effective leadership is visible through designing, planning, implementing and executing quality policy of the Institute to achieve its Vision and Mission.

The Principal conducts weekly meeting with the Heads, in order to delegate different responsibilities and roles to be performed by the faculty members in line with the quality policy. All the decisions, policies and planning to improve the quality are reviewed and discussed in these meeting before execution. At the end of every semester the meetings of prominent bodies like CDC and GB are scheduled to check the success rate of the decisions taken and to review the efficacy of the policy.

The representatives of the management are the members of the CDC and GB of the Institute who play a significant role in designing, implementing and planning its quality policy. The management also ensures that the opinions and suggestions made by faculty members and staff members are included in decisions implemented for college development which is reflection of participative Management in the Institute.

The institute welcomes the innovative ideas, concepts and thoughts from the employees and involves them in decision making process. The participative management is observed at levels right from class IV to the top management. Even the students are promoted to organize events in their own with limited involvement of faculty members.

The action plans for operations are prepared under the supervision and guidance of the Principal and Senior faculty members. The Institute has in total 34Central committees. The committees are formulated such that the committee has a coordinator with expertise in the domain along with the members from each department. These committees meet to define, monitor and evaluate the policies for implementation and improvement, if any, from time to time.

In order to illustrate that the Institute practices decentralization and participative Management, a case study of participative management is the Research and Development committee (R&D) of the Institute. The intention of the committee is to promote industrial collaboration, extend consultancy services and development services as per industry needs. To inculcate research culture among the faculty members and students of Institute, R&D committee promotes participations in quality events so that the participants get an opportunity to interact with renowned personalities in their domain. As a result of this, the Institute has received grants from various government and autonomous agencies from time to time. Even the Institute could host and organize the International conferences so far. The outcome of the decentralized and participative Management is generation of 28 patents, 6 copyrights, 18 of our teams qualified for Inter University Technical competitions and Hackathon, there are a total of 35 industry sponsored projects and a total of 126 publications in reputed research journals.

The committee has been instrumental in policy decisions such as distributing remuneration to staff members undertaking testing and consultancy projects, research funding or financial rewards to faculty members and students for quality publications etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The perspective/strategic plan of the institution since the 1st cycle of NAAC includes:

- Permanent affiliation and accreditation of all branches
- PG courses and research centers of all branches
- More foreign collaborations
- Establishing center of excellence
- Autonomy of the Institute

We would like to highlight the "Establishment of centre of excellence" as the successfully implemented activity based on the Perspective/Strategic Plan.

Power Quality and Energy Conservation Cell:-

The Department of Electrical Engineering established Power Quality and Energy Conservation Cell in the year 2017-18. Recently, Power Quality has gained a lot of importance in the industriesdue to increasinguse of sophisticated equipment in business, to increase efficiency, productivity etc. and industry needs expertise/consultancy to measure, understand and analyze Power Quality issues.

The important objectives of the PQ cell are

- 1. To impart PQ training to studentsas well industry,
- 2. To conduct Power Quality audits for industries,
- 3. To recommend techno economical solutions to solve the PQ related problems,
- 4. To develop energy/PQ monitoring systems,
- 5. To help industries to reduce their electricity bill.

PQ Cell has state of the art instruments to conduct the audits. Students as well as faculties are involved in all the activities. The major benefit to studentsis to get hands-on experience in the industries and increase the employability.

#### Outcomes: -

- 1. Total Consultancy amount earned 2017-18 to 2020-21 (till Oct 2020): Rs. 9,31,890/-.
- Received Gridvis Software from Janitza GMBH Germany worth Rs.
   4,00,000/- (5000 Euro)
- 3. Received UMG 512 Class A PQ Analyser from Janitza GMBH Germany worth Rs. 2,00,000/- (2400 Euro)
- 4. Total trainings to industries 14+.
- 5. In-house projects 03
- 6. Products developed 02

We have fivemore center of excellence

- IEEE HAC Affordable Agriculture Laboratory
- Texas Instruments Inovation Lab
- Emersion Centre of Excellence
- Forbes Marshal Center of Excellence
- AICTE Modrob Biomedical Instrumentation Laboratory

| File Description                                       | Documents        |
|--|------------------|
| Strategic Plan and deployment documents on the website | <u>View File</u> |
| Paste link for additional information                  | Nil              |
| Upload any additional information                      | <u>View File</u> |

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

Academic and Administrative set up and various bodies. The GB is the uppermost decision making body consisting of members of management, member secretary, distinguished members from the field of education and nominated faculty members. College Development Committee (CDC) includes members of management, member secretary, elected teaching staff, IQAC coordinator, elected non-teaching staff, alumni and student representatives. CDC provides inputs to the Chairman for all-round institutional development. All the stake holders of the organization are involved in the decision making and policy framing process.

The representatives of the management are the members of the CDC and Governing Body of the Institute who play the most significant role in designing, implementing and planning of its policies. The Management and the Principal ensure that the institution moves ahead with all the planning, to become one of the renowned institutions. The Leadership strives to empower society by providing dynamic education.

Some of the major policy decisions which reflect the effective and efficient functioning of the institutional bodies are as follows:

- 1. Permanent affiliation for all branches.
- 2. Accreditation of all branches.
- 3. Establishing centre of excellence.
- 4. Autonomy for the Institute.
- 5. PG course and research centre for all branches.
- 6. Foreign collaborations.
- 7. Research motivation scheme
- 8. Promotion of testing and consultancy activities
- 9. Cash awards for best teaching and non-teaching staff
- 10. Higher education promotion

These decisions, policies and planning are reviewed by CDC and GB. The CDC and GB are the statutory videos formed as per provisions of Statutory Regulatory Authorities (SRA). CDC and GB conduct regular meetings in order to have effective implementation of policies and to monitor the value addition in the Academic processes.

Action plans for implementation are prepared under the guidance of Principal and the Heads is the Department. These policies result in overall development of students. There are various Central committees in the Institute, the leaders of these committees plan development activities and ensure their timely execution. IQAC monitors the functioning of all the committees relevant to Teaching-Learning, student enrichment and overall development of the Institute to identify areas of improvement and suggest necessary actions.

Appointment and service rules, procedures also reflect the effective and efficient functioning as stated below:

The institute follows the recruitment procedure prescribed by the affiliating university which is as given below:

- 1. Approval of roster for recruitment from the affiliating university.
- 2. Publishing advertisement in leading newspapers and Institute's Web site.
- 3. Conduction of interviews through the panel constituted by the affiliating university.
- 4. Issuing appointment orders and joining of the newly recruited teachers.

The institute follows similar procedure of recruitment mentioned above through a committee constituted by Management if the procedure of recruitment through University selection committee is likely to cause delays in appointment of teaching faculty, or to fill up the vacancies created on account of resignations tendered by existing staff, termination, or death of staff.

| File Description                              | Documents  |
|---|--|
| Paste link for additional information         | Nil  |
| Link to Organogram of the institution webpage | https://www.naac2021cycle2.aissmsioit.org/Cr<br>iterion6/6.2.2.pdf |
| Upload any additional information             | <u>View File</u>   |

# 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

B. Any 3 of the above

| File Description   | Documents        |
|--|------------------|
| ERP (Enterprise Resource Planning)Document   | <u>View File</u> |
| Screen shots of user inter faces   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of implementation of e-<br>governance in areas of operation,<br>Administration etc(Data<br>Template) | <u>View File</u> |

#### 6.3 - Faculty Empowerment Strategies

- 6.3.1 The institution has effective welfare measures for teaching and non-teaching staff
  - 1. EPF: The Employee Provident Fund (EPF) is a scheme that helps people saves up a sufficient corpus for retirement. Institute contributes 12% of basic salary of all employees ascontributiontowardsEPF.
  - 2. Gratuity: Gratuity is given by the Institute to all employees for the services rendered by him/her during the period of employment. It is usually paid at the time of retirement but can be paid earlier, provided certain conditions are met. As per the Gratuity Act, 1972, the formula for calculation of gratuity for employers covered under the law goes as follows -15 days of last drawn salary by an employee for each completed year of service rendered by him/her or partly completed with more than 6 months of service. It is further divided by 26.
  - 3. Co-operative Credit Society: Started by the AISSM society for

the welfare of all employees. The loan facilities are given to all employees working in the institute. Following two types of loans are available for the employees. The amount of Rs 1500 per month is deducted from the salary account of the permanent employees as the share to the Co-operative credit society. The dividend is also shared with all the employees every year.

Emergency Loan Facility: This type of loan is available for the emergency of the employee or his family as per the need arises. The maximum available loan amount is Rs 20,000 repayable in 10 months.

Ordinary Loan Facility: This type of loan is available for the employees as per the demand with low rate of interest. The maximum available loan amount is Rs 5 Lacs repayable in 5 years.

1. Group Insurance: The master group insurance policy was taken for all employees. Premium amount is deducted from the salaries of all employees. Upon the death of the member before retirement, following life insurance benefit is ensured.

Teaching faculty (Category I)-

Rs. 2, 00,000/-

Lab technician (Category II)-

Rs. 1, 40,000/-

Attendant (Category III) - Rs. 90,000/-

5)Uniform for class IV staff:

Uniforms are provided to all class IV staff twice in a year.

1. Maternity Leave:

6 Months maternity leaves are provided to women employee after completing probation of 2 years.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

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

03

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Details of teachers provided with<br>financial support to attend<br>conference, workshops etc during<br>the year (Data Template) | <u>View File</u> |

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

80

| File Description  | Documents        |
|---|------------------|
| Reports of the Human Resource<br>Development Centres (UGCASC<br>or other relevant centres).   | No File Uploaded |
| Reports of Academic Staff<br>College or similar centers   | <u>View File</u> |
| Upload any additional information   | <u>View File</u> |
| Details of professional<br>development / administrative<br>training Programmes organized<br>by the University for teaching<br>and non teaching staff (Data<br>Template) | <u>View File</u> |

Page 64/178 10-05-2022 08:25:22

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

# 6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

89

| File Description  | Documents        |
|---|------------------|
| IQAC report summary   | <u>View File</u> |
| Reports of the Human Resource<br>Development Centres (UGCASC<br>or other relevant centers)        | No File Uploaded |
| Upload any additional information   | <u>View File</u> |
| Details of teachers attending professional development programmes during the year (Data Template) | <u>View File</u> |

#### 6.3.5 - Institutions Performance Appraisal System for teaching and non-teaching staff

#### Response:

The Institute has well defined Performance Based Appraisal System (PBA) for Teaching Staff and Evaluation system for non teaching staff.

1) Performance Based Appraisal System for Teaching Staff:

The Institute strictly follows all the essential recruitment and promotional policies as stipulated by Savitribai Phule Pune University, All India Council for Technical Education (AICTE) and Government of Maharashtra. Each and every faculty member completes the self-appraisal procedure every semester in the format prescribed by Savitribai Phule Pune University / AICTE.

Self-appraisal is done on the basis of the following points:

- 1. Teaching, Learning and Evaluation Related Activities:-
- Lectures, seminars, tutorials, and Practical Conducted

- Project guided
- Additional knowledge and resources provided
- Examination related work
- Academic Progress Record
- Students feedback
- Result analysis
- 1. Co-curricular, Extension and professional development related activities:-
  - Co-curricular Extension
  - Professional development related activities
  - Contribution to Corporate Life and Management of the Institution
- 2. Research, Publications and academic contributions
  - Publications-Papers in conference proceedings / workshops/ seminars / symposium, etc. and papers in journals, books, articles / chapters published in books.
  - Research guidance
  - Faculty development Programs attended / organized
  - Research Projects and Consultancies: ongoing projects/consultancies and completed projects/ consultancies.
- 3. Official conduct
- 4. Other relevant information

The HOD and the Principal reviews the performance appraisal of all the staff. It is obligatory for all the staff to qualify in the appraisal. This is used in deciding the regular increments, promotions and for regularizing the staff after probation period. The award for Best Teacher is also based on this score. Since last two years institute gives cash award to first three PBA toppers worth Rs. 50000/- and 25000/- and 15000/- respectively.

The performance based appraisal score of all the teaching and non teaching staff members are put up in the CDC and GB meeting for discussing the rewards and punitive actions. The staff members who do not qualify minimum criteria are communicated by their respective HODs and a list of such staff members is sent to the management. The management then interacts one to one with these staff members and tries to figure out their problems, difficulties for improving their performance.

#### 2) Evaluation System for Non-Teaching Staff:

Evaluation System for non-teaching staff is monitored on the parameters like - work assigned and completed by staff, performance, length of the service etc. The Head of Department assesses the performance and the Principal reviews the remarks. The system is transparent. After the evaluation, concerned staff is directed for further improvements if required. Based on the reviews, the report is submitted to the management for further necessary action. Best performing staff members are given cash awards worth Rs 35000/- and 15000/- and 10000/-

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The Institute has a well-defined procedure to monitor effective and efficient utilization of available financial resources for infrastructure development and academic processes. Institute budget is prepared every year after compiling requirement regarding recurring and non-recurring expenditures.

All the major financial transactions are monitored by the by the college development committee (CDC) and Governing body (GB) which comprises of the Institute authorities and the Members of the Society. The budget is discussed in the CDC and GB of the Institute. The resolutions of the CDC and GB regarding approval for budget is forwarded to the Managing Committee and Governing Council of the society for Final Approval of the budget to be spent during the academic year under various heads.

The society has constituted a separate purchase committee comprising of management members. The purchase procedure such as calling quotations, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources.

In addition to this, the account of each financial year of the Institute is audited by internal and external auditors. Thus the utilization of financial resources is monitored at two tier level.

Internal and external auditors are appointed by the AISSM Society. The internal and external audits are carried out in each half of the financial year.

The internal and external auditor appointed by the Society, executes the statutory audit. Statutory financial audit is conducted in two sessions, one in the month of October/November for the period of April to September and second in the month of April /May for the period of October to March. Finalization of the account is completed in June/July and audited statements are prepared in June/July duly signed by the Principal, and Chartered Accountant. This audited report is submitted by Chartered Accountant.

No major objections are found in the audit by the statutory auditors and minor audit suggestions are complied as per procedure.

The objection raised in the Internal and External audit reports are reviewed by the Management, Principal and Accountant, and the necessary compliances are carried out toward the fulfillment of the objections raised.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

## 6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

# 6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

#### 25.4

| File Description   | Documents        |
|--|------------------|
| Annual statements of accounts  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of Funds / Grants<br>received from of the non-<br>government bodies, individuals,<br>Philanthropers during the year<br>(Data Template) | <u>View File</u> |

#### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

#### Response:

The Institute has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purpose. This ultimately helps in realizing the Institute's Vision and Mission.

Institute has made the necessary provision in the account of books towards efficient use of available funds for each academic year. As per the guidelines of the Management and Principal, variance report of sanctioned budget and actual expenditure are regularly maintained.

Every year, the budget is prepared well in advance after taking into consideration the requirement of every Department. Each Department prepares the budget based on the requirement such as equipment, computer and consumables required for next academic session. Principal put up the budget in College Development Committee (CDC) and Governing Body (GB) meeting and after discussion and necessary corrections/modifications; College Development Committee and Governing Body recommends the budget for approval. The budget is reviewed by the management and approved after necessary changes. As and when required, the Institute makes a provision for advance additional fund. The Principal and the Head of Departments discuss the requirement and decide the priorities while allotting financial resources for various purposes; and also ensure optimum use of

available financial resources. The College Development Committee and Governing body studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources. The Institute has standardized procedure for sanctioning of funds for various activities and also for settlement of advance and passing of bills for payment.

The Management has given complete support to Principal for organization of various co-curricular and extra- curricular activities like technical events, sponsoring of faculty and staff for various FDPs, skill development programs, providing financial support for attending conferences, workshops, pursuance of higher education etc. Financial support is also provided for participation of students at various national level events.

All the major financial transactions are monitored by the College Development Committee (CDC) and Governing body (GB) The budget is discussed in the meetings of CDC and GB of the Institute.

The resolutions of the CDC and GB regarding approval for budget are forwarded to the society for final approval of the budget.

The Society has constituted a separate purchase Committee comprising of Management representative, Principal and concerned staff. The purchase procedure such as calling quotation, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. The committee ensures that suitable equipment with right specification is procured at competitive and optimal prices.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

IQAC takes efforts to guide the teachers to focus on outcome based education by conducting session on

- Course Outcome(CO)formation, assessment and CO, PO attainment
- Quality of internal semester question papers, assignments and

evaluation

- Examination reform
- Product development
- Introduction and hands on training of LMS

The teachers discuss COs with students at the commencement of the course. Teachers identify the gaps between CO and PO to plan the activities to bridge them. IQAC has prepared and circulated standard formats for maintaining the relevant documentation.

Teachers use different T-L methodologies to motivate students to learn for higher retention of knowledge. For increased depth and developing positive attitude towards subjects teachers use methods such as active, collaborative, problem based, peer and experiential learning etc.

Academic monitoring committee looks after the attendance and conducts regular review meetings of guardian faculty members. Students with poor attendance are counselled to improve the attendance.

Teachers upgrade themselves through NPTEL course certifications. To motivate teachers for certifications, half amount of registration fees is reimbursed to those whose consolidated score is greater than 60%. Compensatory off is granted for preparation of the examination.

Research and Development (R&D)

R&D committee motivates teachers and students to participate in conferences, seminars, and technical competitions etc. Promotional policies such as marks in PBA for applying for research grants, relaxation in teaching load for research work, financial support to attend FDP/conferences and presenting proposals to funding agencies, financial rewards for quality publications etc. have been approved by CDC.

To promote testing and consultancy, revenue distribution policy has been approved by CDC.

Industry interaction

IQAC has initiated iConnect (Industry Institute Individual Connect) program for strengthening interaction between institute and industry which involves contribution by every individual teacher. Every faculty member connects with at least one industry to organize

visit/hands on training/expert lecture/internships/sponsored project/placements. It is made mandatory for third year students to undergo internship after the end sem. examination.

#### Training and placement (T&P)

Various value addition programs according to the need of the industry are organized regularly. IQAC initiated "Campus to Corporate Readiness Program" for employability skill development of the students to enhance the placement rate.

'Changing gears' initiative was organized in association with Forbes Marshall Pvt. Ltd. and CII for underprivileged students to inculcate English reading, writing, listening, and speaking skills for personality development and to improve employability skills.

#### Internal Academic Audit

IQAC conducts internal academic audit at the end of each semester to ensure all the academic processes are carried out regularly and documentation is maintained.

#### Reward system

In order to motivate and appreciate the work done by the teachers, non-teaching staff and students, IQAC organizes award function on the occasion of Teachers' Day every year. Cash awards of 50000/-, 25000/- and 15000/- are given to the winners. IQAC verifies the applications to analyze scores and announce the winners.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

#### Internal Academic Audit (IAA)

IQAC conducts IAA at the end of each semester. All the teachers calculate the CO attainment of their respective course(s) and it is submitted to the departmental coordinator for calculation of PO

attainment. The members of assessment committee check the CO and PO attainment documents during the IAA. If the attainment values of CO and PO are less than the set target then necessary actions are planned.

Assignments based on Bloom's Taxonomy

### Bloom's Taxonomy helps

- to define measurable course outcomes
- students to better understand the questions and hence write the satisfactory answers
- teachers in assessment of course outcomes

The assignment questions are set based on the learning levels of Bloom's Taxonomy. Different weightages are assigned to learning levels for first year to final year courses. More weightage is given to the lower learning levels for first year courses, while weightages for higher levels go on increasing from second year onwards. This helps students to develop critical thinking which in turn makes them able to design solutions for complex engineering problems.

The institution has initiated separate Incubation and Entrepreneurship Development (ED) cell to encourage students and faculty members to explore their creative ideas and promote innovation. The students are encouraged to undertake design, fabrication and development projects and convert them into products. Total 39 students became entrepreneurs in last five years.

### Outcomes:

- Runner up position in IEEE YESIST12 Innovation challenge at Stamford University, Thailand
- First prize in national level competition Mindspark Makeathon for innovative design and development of Smart Helmet.
- First prize in Hackathon 2020 for Developing a Software Tool to aid Search and Rescue by Calculating and Plotting Search Area from the Last Known Position of a Missing Aircraft.
- First prize in 6th National Level Technical Expo.
- Best paper award at 2nd IEEE International Conference on Emerging Smart Computing & Informatics ESCI 2020.
- Participation in technical competitions like Hackathon, DST & Texas instruments India innovation challenge design contest

powered by AICTE, AVISKAR by SPPU etc.

### Open Course Ware (OCW) module assignments

Students are asked to watch video lectures available on open course ware modules and write brief description of it in the prescribed format as an assignment. This improves the listening and writing skills of the students as well as inculcates habit of self-study which further increases their confidence. The effectiveness of OCW assignments is measured through noteworthy participation of students in paper publications, project competitions, and significant improvement in the placement.

iConnect - IQAC has initiated iConnect (Industry Institute Individual Connect) program for strengthening interaction between institute and industry which involves contribution by every individual teacher. Every faculty member connects with at least one industry to organize visit/hands on training/expert lecture/internships/sponsored project/placements. It is made mandatory for third year students to undergo internship after the end sem. examination.

Training and Consultancy -

To promote testing and consultancy, revenue distribution policy has been approved by CDC.

This has motivated teachers to undertake testing and consultancy.

Campus to Corporate Readiness Program (CCRP) - To inculcate employability skills in the students, various programs are conducted at institute level in collaboration with reputed industries like Forbes Marshall, Institute of Holistic Healing etc. CCRP has 4 levels starting from first year to final year to enhance the employability of students. It covers all the required skills such as aptitude, communication skills, personality development, resume writing, group discussion etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | No File Uploaded |

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

### B. Any 3 of the above

| File Description   | Documents   |
|--|---|
| Paste web link of Annual reports of Institution                                    | https://aissmsioit.org/wp-content/uploads/20<br>21/09/AISSMS-IOIT-Annual-<br>Report 2020-21 A.pdf |
| Upload e-copies of the accreditations and certifications                           | <u>View File</u>  |
| Upload any additional information  | No File Uploaded  |
| Upload details of Quality assurance initiatives of the institution (Data Template) | <u>View File</u>  |

### INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

To create awareness of gender equity in students & staff, Institute provide equal opportunity to male & female staff and students for all the activities & process which include administrative, teaching, co-curricular, extracurricular, sports, deputation to the courses, programs, higher studies, appointments, committees, placements etc. Institute has taken major initiative for the promotion of gender equity by providing equal opportunity to male and female candidates in recruitment as well as appointment of female candidate on various academic posts.

### National Service Scheme:

The Institute organizes various programmes under the National Service Scheme (NSS) to sensitize students about gender equity. The boys and girls are the members of NSS. Every year, institute organizes seven days camp in one village in which male and female students attend the camp and equally participate in various activities.

Similarly, there is equal participation of female students in Unnat Bharat Abhiyan also.

Participation in co-curricular and extra-curricular activities:

Institute has taken initiative to promote gender equity among all students during formation of peer study groups as well as final year project group. Students are insisted to have minimum one girl student in each project group and peer study groups. Institute is promoting all girl students to participate in various co-curricular and extra-curricular activities.

Institute organizes events like "Alacrity" Technical & Cultural Fest, Women's Day celebration, Shiv Jayanti Celebration and inter department sports competition to promote harmony & inclusion. Female students teams of the institute participate in various intercollegiate/university level tournaments. Institute always participates in state level drama competitions such as Firodiya and Purushottam Karandak with equal participation of female students.

Our institute shows a great concern in providing the diversified facilities in terms of the following:

- 1. Safety and Security
- 2. Counselling
- 3. Common room

### Safety and Security:

The institute is emphasizing more on the safety and security of students and staff. Institute has made mandatory for everyone to wear i-cards daily in the college campus. At the entrance, there is strict security checks for all the persons. Institute has installed CCTV cameras at different locations such as institute entrance, library, workshop, student section, all departments and parking. Security guards are available for twenty four hours at different places in campus. The contact numbers and toll free help line numbers of nearby police stations are displayed on notice boards and at strategic locations. Pick up and drop facility is available for girl students at the time of late night events such as Alacrity held in the institute.

Internal Complaints Committee:

Institute has formed the internal complaints committee (ICC) for female students and staff to address the issues related to gender and human rights. The committee mainly works for resolving various issues and problems raised by female students and staff as well.

### Counselling:

Institute has allocated batch counsellors for female students who is responsible for monitoring academic and co-curricular performance of the students. Counsellor conducts one to one meetings with students to resolve their academic as well as personal issues. In case of issues related to femininity, the female students can discuss with female counsellor. In addition to this, professional counsellors are appointed at the institute level for addressing issues of female staffs and students.

### Common Room:

Institute has allocated a common room for the girl students. It is equipped with necessary facilities such as bed, first aid box and wash basin with mirror etc. Sanitary napkin vending machines and incinerators are available in ladies toilets.

| File Description  | Documents  |
|---|--|
| Annual gender sensitization action plan   | https://aissmsioit.org/wp-content/uploads/20<br>21/06/calendar-year-20-21pdf     |
| Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%207/7.1.1.pdf |

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

A. 4 or All of the above

| File Description               | Documents        |
|--------------------------------|------------------|
| Geo tagged Photographs         | <u>View File</u> |
| Any other relevant information | <u>View File</u> |

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

The Institute is committed to create an eco-friendly campus. The campus is kept clean & tidy with full of greenery. The institute ensures the green environment by a dedicated team of gardeners to take care of lawns, gardens and planting maintenance. The Institute has conducted the Green Audit and strives to implement the suggestions. Institute practices the waste management including solid waste management, liquid waste management, E-waste management and hazardous chemicals waste management. Usage of plastic is banned in the college premises.

Solid waste management: Institute practices the segregation of Solid Waste and its effective management in the campus. The collected waste is segregated at the source of the generation. The separate bins for dry and wet waste are used. The dry waste bins are also placed in laboratories, library, classrooms, etc. The dry and wet waste is handed over to municipal waste collection agency for further treatment. Old newspapers, used papers and journal files, workshop scrap etc. are given for recycling to external agencies. Faculty members are instructed to reuse the single side used papers for writing and printing work. In order to dispose sanitary napkins institute has properly installed sanitary napkin incinerator machine.

Liquid waste management: All the toilets and bathrooms waste water lines are directly connected to the municipal drainage system. Wastewater from laboratories is treated through proposed novel cavitation. Well-constructed drainage system in the form of closed collection tanks prevail in our campus. The tanks are regularly cleaned by external agency to avoid stagnation of water.

E-waste management: The institute has the write off policy for managing the E-waste. The institute has identified and appointed a vendor for managing E-waste. After complete inspection and verification, E-waste management is done by collecting all the electronic waste generated in the institute premises at a central storage space allocated for the same and sent for recycling through an E-waste management vendor. The cartridge of laser printers is refilled outside the college campus. UPS Batteries are recharged / repaired / exchanged by the suppliers.

The students are motivated to reuse the electronic components from

the E-waste for their mini and major projects.

Hazardous waste management: As per the university structure and syllabus all the branches in the institute have only one subject on chemistry in their first year. The chemistry lab has limited quantity of hazardous chemicals which are properly stored and maintained.

| File Description  | Documents        |
|---|------------------|
| Relevant documents like agreements / MoUs with Government and other approved agencies | <u>View File</u> |
| Geo tagged photographs of the facilities  | <u>View File</u> |

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

| File Description                                  | Documents        |
|---|------------------|
| Geo tagged photographs / videos of the facilities | <u>View File</u> |
| Any other relevant information                    | <u>View File</u> |

### 7.1.5 - Green campus initiatives include

- 7.1.5.1 The institutional initiatives for greening the campus are as follows:
- A. Any 4 or All of the above
- 1. Restricted entry of automobiles
- 2. Use of bicycles/ Battery-powered vehicles
- 3. Pedestrian-friendly pathways
- 4. Ban on use of plastic
- 5. Landscaping

| File Description   | Documents        |
|--|------------------|
| Geo tagged photos / videos of the facilities                       | <u>View File</u> |
| Various policy documents / decisions circulated for implementation | <u>View File</u> |
| Any other relevant documents                                       | No File Uploaded |

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

| File Description  | Documents        |
|---|------------------|
| Reports on environment and energy audits submitted by the auditing agency | <u>View File</u> |
| Certification by the auditing agency                                      | <u>View File</u> |
| Certificates of the awards received                                       | No File Uploaded |
| Any other relevant information  | <u>View File</u> |

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

A. Any 4 or all of the above

10-05-2022 08:25:22

| File Description   | Documents        |
|--|------------------|
| Geo tagged photographs / videos of the facilities                        | <u>View File</u> |
| Policy documents and information brochures on the support to be provided | <u>View File</u> |
| Details of the Software procured for providing the assistance            | No File Uploaded |
| Any other relevant information   | No File Uploaded |

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

Institute has taken following efforts /initiatives for providing inclusive environment to enhance harmony towards cultural regional, linguistic communal social economic and other diversities.

- Every year the institute prepares an academic calendar to keep students, faculty, and staff reminded of key dates throughout the academic semester and year. It can also be useful for prospective students, alumni, and parents as well. Academic calendar reflects information related to all major days (Like Teachers Day, Yoga Day, Shahu Jayanti, Shiv Jayanti etc.) which are celebrated at the institute level and all key dates which are important from the academic perspective.
- To celebrate multilingualism and cultural diversity as well as to promote equal use of all national languages throughout theInstitution, we celebrate Marathi Diwas and Hindi Bhasha Diwas in our institute to cater linguistic diversity of our students. The aim of this celebration is to inform students about the history, culture and achievements associated with thelanguage. Thedayoften features book-reading events, quizzes, poetry and literature exchanges, and other activities that promote the language. The annual magazine of the institute, "Aayam" contains articles in different languages.
- The students of our institute along with faculty members actively help Warkaris during Palkhi celebration. They collect garbage and plastic waste during the procession (Dindi) from Pune to Pandharpur wherein more than five lakh devotees participate every year. They also distribute bio degradable plates among warkaris to keep Pune city clean and sanitized

during Palkhi celebration.

- Every year, the National Service Scheme(NSS) unit of the institute organize a week long residential camp in rural areas. Students performs street plays during to make citizens aware of various social issues such as women empowerment, farmer suicide, female foeticide and gender equity etc.
- The institute always contributes at the time of natural disasters by providing financial help, supplying food items, and cloth donation to the people of affected area through NSS unit. Apart from that institute organize disaster management workshop with the support of National Disaster Response Force (NDRF), Fire and Security Association of India (FSAI) and municipal fire brigade to train students to deal with any natural calamity.
- To celebrate Women's day, the institute organize various lectures and sessions for women employees and students for increasing awareness related to women's rights, safety, security and health issues.
- To protect environment and to preserve our ecosystem institute routinely organize activities like fort conservation, tree plantation, riverside cleaning and traffic management. These activities protect our cultural heritage and make our students active citizen of Swachh Bharat Mission.
- Donating bloodis a great way of giving back to our community because there is a constant need for blood in blood banks. The institute organizes blood donation camps in every semester to motivate students and staff members to donate bloodvoluntarily.
- Student Development Organization (SDO) of college looks after the protection of rightsand supervises the development activities of the students. Board of Student Development (BSD) promotes and co-ordinates the different students' activities for better corporate life. BSD tries to nurture students' mental, physical, cultural growth with various activities to improve their overall personality and to make them civilized Indian citizens to compete in the globalized world. The activities like Personality Development, Nirbhay Kanya Workshop, Disaster Management Workshop, Special Guidance Scheme, Earn and Learn Scheme etc. are carried out every year under SDO.

| File Description   | Documents        |
|--|------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | <u>View File</u> |
| Any other relevant information   | <u>View File</u> |

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

Institute has taken initiative to sensitize and inculcate values, rights, duties and responsibilities of citizens through activities mainly organized by National Service Scheme (NSS), Student Development/Welfare Organization (SDO/SWO), Internal Complaints Committee (ICC), Staff/Student Grievance committee, SC/ST/OBC Reservation Committee, Committee for students with disabilities, Anti-ragging committee, Discipline Committee and department.

Institute takes consistent effort to inculcate values among students. Institute always put best towards overall development of the students by organizing expert lecture on "Universal Human Values" in early days of their engineering education. Apart from technical subjects, students are asked to enroll for MOOCs courses which promote human values and ethics in them. FE students are engaged in the course "Ethics in Engineering Practices" which helps in the holistic development of the students. Throughout the year, NSS ensures to conduct activities such as visits to historical places, tree plantation, pollution awareness camps etc. in order to preserve national, social, environmental and historical values.

Institute creates awareness about human Rights as per constitution obligation. The preamble of constitution obligation is displayed in college corridor. The Board of Students' Development (BSD) looks after the protection of rights and supervises the Development activities of the students. Internal Complaints Committee (ICC) sensitizes about women rights and gender equity through various activities like "Abhivyakti". NSS and SDO/SWO units take remarkable efforts to celebrate Constitutional day. Voting awareness program is conducted to make students aware about voting rights and also help them to enroll their names in the voters' list.

Students and employees are sensitized about constitutional obligations related to duties and responsibilities through the

activities like tree plantation, Swachh Bharat Abhiyan, computer literacy sessions, street plays on social issues, yoga and physical exercises, fort conservation, cloth donation, and volunteering during pilgrimage programs etc. NSS unit regularly organizes various activities and annual residential camp to sensitize students about social responsibility. It also extends support through Unnat Bharat Abhiyan in which students carry out the survey of socio economic problems of the rural areas. NSS and SDO/SWO units take remarkable efforts to celebrate Independence Day, Republic Day, Yoga day, Environment day, Teacher's day, and birth anniversaries of great national heroes etc. to revive the national spirit, duties and rights defined by the constitution.

All the departments actively organize social and techno-social visits. The objectives behind such activities are to make students aware of responsibilities towards environment, persons with disability, senior citizens and poor students by organizing social visits to old age homes, schools for blind, orphanages, etc.

| File Description   | Documents  |
|--|--|
| Details of activities that inculcate values; necessary to render students in to responsible citizens | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%207/7.1.9.pdf |
| Any other relevant information   | Nil  |

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

| File Description   | Documents        |
|--|------------------|
| Code of ethics policy document   | <u>View File</u> |
| Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims | <u>View File</u> |
| Any other relevant information   | <u>View File</u> |

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

Institute celebrates/organizes various national and international commemorative days, events and festivals along with birth anniversaries of the great Indian personalities which are as follows:

### Republic Day and Independence Day

Every year Institute celebrates Republic Day and Independence Day with great enthusiasm where all staff and students gather at one campus along with the office bearers. The program starts with flag hoisting by the chief guest; usually a personality from defense background is invited as a chief guest; followed by National Anthem and cultural programs.

### Mahatma Gandhi birth anniversary

Institute celebrates Mahatma Gandhi Jayanti by paying tribute. The NSS unit organizes mass pledge in institute in accordance with the Prime Minister's urge for 'Swaachh Bharat Abhiyaan'.

### Shahu Maharaj Jayanti

Chhatrapati Shahu Maharaj Jayanti program is organized every year by All India Shri Shivaji Memorial Society(AISSMS) in campus on 26th June. All the institutes under the ambit of AISSMS gather for the program wherein staff and students are felicitated for their remarkable achievements in academics and various activities.

### Shivaji Maharaj Jayanti

Institute celebrates Chhatrapati Shivaji Maharaj Jayanti every year

Page 85/178 10-05-2022 08:25:22

on 19th February. On this occasion rallies and tableaus are organized to commemorate our respect towards him. Students perform traditional "Dhol Vaadan" on this occasion.

### Teachers' Day

Institute celebrates Teachers' Day every year on 05th September in remembrance of Dr. Sarvepalli Radhakhrishnan. Felicitation and awards are given to the teachers for excellent performance.

### Engineers' Day

Every year, 15th September is celebrated as Engineers' Day in the honour of Bharat Ratna Mokshagundam Visvesvaraya. Institute organizes technical projects and poster competition related to the social issues and technical advancement.

### National Science Day

Institute celebrates National Science Day every year on 28th February to mark the discovery of the Raman Effect by Indian physicist Sir C. V. Raman. Visit to Inter-University Centre for Astronomy and Astrophysics (IUCAA) and Science Park are organized. Guest speakers from industry and science laboratories are invited for their valuable knowledge and recent inventions.

### International Yoga Day Celebration:

Institute celebrates International Yoga Day every year on 21st June. On this day students and staff members are motivated to perform yoga and other physical exercises. Expert talks are organized to create awareness of yoga.

### Dr. Babasaheb Ambedkar Jayanti

Institute celebrates Dr. B.R. Ambedkar jayanti every year on 14th April. A tribute is given to Dr. Ambedkar by conducting a cordial ceremony in his memory.

### Hindi Bhasha Divas

Institute celebrates "Hindi Bhasha Divas" every year on 14th September. Various activities like essay writing competition, poetry recitation, idioms writing competitions etc. are conducted.

### Marathi Bhasha Divas

Institute celebrates "Marathi Bhasha Divas" every year on 27th February to mark the birth anniversary of eminent Marathi Poet Kusumagraj aka V. V. Shirwadkar. A book exhibition on Marathi literature is organized in the library. Through different competitions Marathi language is promoted.

### Akshay Urja Divas

Institute celebrates "Akshay Urja Divas" every year on 20th August to create awareness about development of renewable energy in India. Energy forms such as solar, wind, and hydropower are a few examples of renewable energy.

| File Description  | Documents        |
|---|------------------|
| Annual report of the celebrations and commemorative events for the last (During the year) | <u>View File</u> |
| Geo tagged photographs of some of the events  | <u>View File</u> |
| Any other relevant information  | No File Uploaded |

### 7.2 - Best Practices

7.2.1 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

### 1. Title: Virtual Lab

### Objectives:

- To provide remote-access to Labs in various disciplines of Engineering.
- To enthuse students to perform experiments by arousing their curiosity.
- To make available a complete Learning Management System around the Virtual Labs.
- To share state of the art equipment and resources.

### The context:

Physical distances and the lack of resources make us unable to perform experiments, especially when they involve sophisticated instruments. Also, good teachers are always a scarce resource. Webbased and video-based courses address the issue of teaching to some extent. Conducting joint experiments by two participating

institutions and also sharing costly resources has always been a challenge. With the present day internet and computer technologies the above limitations can no more hamper students and researchers in enhancing their skills and knowledge. Also, in a country such as ours, costly instruments and equipment need to be shared with fellow researchers to the extent possible. Web enabled experiments can be designed for remote operation and viewing so as to enthuse the curiosity and innovation into students. This would help in learning basic and advanced concepts through remote experimentation. Today most equipment has a computer interface for control and data storage. It is possible to design good experiments around some of this equipment which would enhance the learning of a student. Internet-based experimentation further permits use of resources, knowledge, software, and data available on the web, apart from encouraging skillful experiments being simultaneously performed at points separated in space (and possibly, time).

### This helps to

- practice more experiments for slow learners
- perform experiments beyond syllabus for advanced learners
- self-learning

### The practice:

- Teacher uploads the semester planner at the beginning of the semester.
- Teacher informs students about the date and time as per schedule in the planner.
- Teacher explains the procedure of using Vlab. for his/her subject.
- Students perform experiment and fills the in-house feedback.

### Problem encountered and resource required:

- Students sometimes do not have enough IT resources at hand.
- High bandwidth internet connection is required.

### Evidences of Success:

- Improvement in students' understanding of experiments.
- Improvement in practical and oral examination performance.
- This has helped students in learning basic and advanced concepts through remote experimentation.
- Joyful learning.

### 2. Title: Multidimensional personality development Program

### Objectives:

- To enhance the technical and verbal communication skills
- To make the students function effectively as an individual and as a member of team
- To make the students comprehend and demonstrate knowledge and understanding of engineering principles
- To appreciate and reward the participation of students
- To instill life long learning skills and realize the responsibility towards society.

### The context

Along with academics, it required to groom the overall personality of the students .Taking this into consideration, the department has the Multidimensional Personality development program for the all round development of students. The program aims to enhance the different skills of the student such as communication skills , presentation skills , life long learning skills etc .The students are given exposure to various activities wherein they can participate and improve their skills .

### The Practice:

- 50:10 Module: During a 60 minute lecture , 50 minutes are for teaching by the faculty member and 10 minutes are given to students to summarize the contents . This helps to improve the communication skills and confidence of the students
- ELECTROFUNDA: Every year the contest named ELECTOFUNDA is organized wherein the students are asked to working team and demonstrate nay one principle of Electrical engineering. This improves the ability of student to work as group member. It also improves their presentation and communication skills.
- Energy Conservation Drive: The renewable energy club of the department organizes the Energy Conservation Drive ever year . The students visit the residential premises. schools, Ganpati pandals etc give information about the importance of energy conservation and use of renewable sources . By doing this drive they understand their responsibility as an engineer towards the society.
- Reward System: Anything Done good needs appreciation. The students are rewarded not only for their academic performance but for participation in various activities too. This boosts the overall moral of the students and they look forward for

Page 89/178 10-05-2022 08:25:22

- various activities
- Year Book Publication: Every year the department publishes
  the Year Book which has the records of all the activities of
  the organized by the department in the academic year. It also
  has all the details of the achievements of the faculty members
  as well the students

### Problems Encountered

 A lot of motivation is required to be given to the students to participate in the activities,

### Evidence of Success

- Significant improvement in the placement .
- Students are able to communicate effectively during seminar, project oral and practical examinations

| File Description                            | Documents   |
|---|---|
| Best practices in the Institutional website | https://naac2021cycle2.aissmsioit.org/AQAR%2<br>02020-21/Criterion%207/Best%20Practices-2020<br>-21.pdf |
| Any other relevant information              | Nil   |

### 7.3 - Institutional Distinctiveness

- 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words
- 1. The saga of Royal Heritage- All India Shri Shivaji Memorial Society, established in 1917, is a premier educational institution in Pune. It is founded by visionary Shri Shrimant Chattrapati Shahu Maharaj of Kolhapur to promote the noble cause of education. The foundation stone of AISSM Society was laid by the auspicious hands of his Royal Highness, the Prince of Wales on 19th November, 1921 in Pune. It was established with the well-defined objective to bring about holistic development of students and to create technically skilled manpower in various fields. It is a result-oriented Society dedicated to the noble cause of Military, General, Technical, and Management Education in India. It functions beyond race, caste, creed, religion political spirit. The Society Management is very pragmatic progressive. Since its inception in 1917, it has been the Society's endeavor to continuously improve its initiatives. Today

the Society has made a huge foray into the noble field of education, meeting the all-around requirements on various fronts including emerging areas. For it is to succeed, we have preserved our royal heritage and also provided the most modern infrastructure to our institute. With its distinctive mission a history that has made it a leader in the field of education. Education today, not only focuses on imparting knowledge skills but also on the overall development of the students. With state-of-the-art infrastructure and dynamic faculty, ASSMS is marching ahead on all avenues of education right from primary schooling to specialized technical institutes. With this legacy of over 100 years we have enriched the educational scenario in the city by offering a rich heritage, quality education and a dynamic incubation cell for the young minds to perform experiment.

2. Location Privilege- Our institute is centrally located in the heart of the Pune city. The institute is just a few steps away from Pune Railway station and at a walking distance from the Bus Terminus. The Pune international airport is just 6 Km away. As it share close proximity with city center, it has an added advantage of location so it provides best connectivity in terms of all types of transport and easy access to students living in various parts of city. Apart from this it is convenient and time saving for all professional and experts from various industries to commute to institute for various activities like seminars, workshops and placement drives. The neighborhood of institute is surrounded by many industries and commercial buildings still it has green lavish campus with plenty of space for all cultural and sports activities. Our institute is also considered as first choice and most preferred location for organizing various pool campus and various competitive examinations. The institute has the vision to uplift common masses by rendering value added education. To achieve this institute is continuously working towards creating engineers receptive to the changing demands of the global market.

### Part B

### **CURRICULAR ASPECTS**

### 1.1 - Curricular Planning and Implementation

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

The institution meticulously plans for effective implementation of the curriculum. The detailed process is stated below:

- 1. Planning for the Term: All the departments prepare academic calendar in line with the academic calendar prescribed by the University which consist of all technical and nontechnical activities in detail.
- 2. Finalising of faculty member for each subject and Electives to be included in next semester and Preparation of Timetable: Before the end of the term, each faculty member submits his/her subject preferences to the Head of Department (HOD). Likewise, the electives are floated to the students to decide their choice to finalise and plan in advance for the electives. As per preference of subject, HOD assigns the faculty member as per their qualification and expertise and the subject distribution is communicated to the faculty member well in advance for proper preparation. Timetable is prepared as per the availability of infrastructure and shift of faculty member which is approved by authorities. The approved Time table is displayed on notice boards and college website prior to commencement of new term.
- 3. Preparation by each faculty member: Once the subject is allotted to the faculty member, they prepare teaching plan and course file as per the departmental academic planner.

  Lab manuals are prepared for each subject by the respective subject in charge along with important oral questions.
- 4. Academic Monitoring Committee: A Guardian Faculty Member (GFM) is appointed for each class to monitor day to day conduction of time table and academic planner. Daily attendance is monitored by each faculty member and defaulter students with poor attendance are identified. Parents of such students are informed by telephone and SMS alerts, if required counselling is done by 3rd party and batch counsellors. HOD takes feedback of the faculty member twice in a semester from students and analysis is done by GFM. If feedback is poor, then corrective measures are advised by HOD and Principal. Faculty member meetings are

- held every week by the HOD to take academic review and suitable remedial measures are advised if necessary.
- 5. Resource Planning: Instruments which require repair or are obsolete are identified. Yearly budget is prepared based on consumables and equipment and planned lab wise and submitted to "Purchase Committee" to call for quotations. Comparative statements are prepared to release requisition for each item. After receipt of these, demonstration is arranged to check satisfactory operation and test report is prepared.
- 6. Selection process of final year projects: Project coordinator is assigned to final year students who assign project guides to these student groups as per area of specialisation of the faculty member. The students are encouraged to get company/college sponsored projects with innovative idea. Projects with market potential are considered and supported for development of new start-ups.

| File Description                    | Documents        |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |
| Link for Additional information     | Nil              |

- 1.1.2 The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)
- 1.1.2 The Institute adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

AISSMS IOIT is affiliated to SPPU, Pune and thus follows the examination pattern of University. Institute first prepares annual academic planner before the commencement and then it is circulated to all departments. Department Coordinator of Academic Planner takes the responsibility to complete the department planner in association with all the staff members.

Apart from mandatory University examination many other Continuous Internal Evaluations had been followed. Evaluation is based on various activities organised such as training program, workshops, seminars, competitions, participation of students at various level etc. Internal Evaluation is carried out with respect to following points.

Class test is arranged after the completion of every units.

As there are 6 units, there are 6 class test. Test papers are evaluated by respective staff members and if the student scored below the threshold, students are asked to the task assigned by the teacher.

- On the similar ground, assignment is given after the completion of every unit. Staff does the evaluation based on timely submission and for the right answers.
- Mock orals are organised for subjects having practical or oral or term work as the head. Staff organise mock oral while checking the journal in order understand if the students knows the technical details.
- Mock practical examination is also organised after the completion of all practicals, in order to make students ready for practical examination.
- Mock project demo is organised two times in each semester for students at 3rd year and final year course. In 1st semester, 1st demo is based on literature survey and problem statement. 2nd demo is based on technical parameters of the project.
- In 2nd semester, 3rd and 4th demo is based on hardware and software requirement and successful implementation of project. External examiners are called during final demo to assess performance of the students.

Apart from technical internal examination, students are also assessed based on their performance in active participation in technical - non technical, cultural, sports etc. students shows their talent on various platform provided by college like ALACRITY, Department level students association, Inter collegiate level, state level, National level, International level.

Students are assessed on all possible platform and the internal marks are given as per their performance in internal test, assignments, mock oral, mock practical, mock demo of project and their participation and achievements in each event in order to ensure justice with all students.

This complete process of internal performance evaluation is used for faculties to identify slow and advanced learners in their respective subjects. Counselling is done for slow learners and they are encouraged to improve their further performance. Counselling sessions found to be very useful to overcome personal issues, academic and non-academic problems.

| File Description                    | Documents        |
|-------------------------------------|------------------|
| Upload relevant supporting document | <u>View File</u> |
| Link for Additional information     | Nil              |

# 1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

### A. All of the above

| File Description  | Documents        |
|---|------------------|
| Details of participation of<br>teachers in various<br>bodies/activities provided as a<br>response to the metric | <u>View File</u> |
| Any additional information  | <u>View File</u> |

### 1.2 - Academic Flexibility

# 1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

### 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

11

| File Description  | Documents        |
|---|------------------|
| Any additional information                              | <u>View File</u> |
| Minutes of relevant Academic<br>Council/ BOS meetings   | <u>View File</u> |
| Institutional data in prescribed format (Data Template) | <u>View File</u> |

### 1.2.2 - Number of Add on /Certificate programs offered during the year

### 1.2.2.1 - How many Add on /Certificate programs are added during the year. Data

Page 95/178 10-05-2022 08:25:22

### requirement for year: (As per Data Template)

180

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Brochure or any other<br>document relating to Add on<br>/Certificate programs | <u>View File</u> |
| List of Add on /Certificate programs (Data Template )                         | <u>View File</u> |

# 1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

4686

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Details of the students enrolled in Subjects related to certificate/Add-on programs | <u>View File</u> |

### 1.3 - Curriculum Enrichment

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

Institute has taken initiative to sensitize and inculcate values, rights, duties and responsibilities of citizens through activities mainly organized by National Service Scheme (NSS), Student Development/Welfare Organization (SDO/SWO), Internal Complaints Committee (ICC), Staff/Student Grievance committee, SC/ST/OBC Reservation Committee, Committee for students with disabilities, Anti-ragging committee, Discipline Committee and department.

Institute takes consistent effort to inculcate values among students. Institute always put best towards overall development of the students by organizing expert lecture on "Universal Human Values" in early days of their engineering education. Apart from technical subjects, students are asked to enroll for MOOCs courses which promote human values and ethics in them. FE students are engaged in the course "Ethics in Engineering Practices" which helps in the holistic development of the

students. Throughout the year, NSS ensures to conduct activities such as visits to historical places, tree plantation, pollution awareness camps etc. in order to preserve national, social, environmental and historical values.

Institute creates awareness about human Rights as per constitution obligation. The preamble of constitution obligation is displayed in college corridor. The Board of Students' Development (BSD) looks after the protection of rights and supervises the Development activities of the students. Internal Complaints Committee (ICC) sensitizes about women rights and gender equity through various activities like "Abhivyakti". NSS and SDO/SWO units take remarkable efforts to celebrate Constitutional day. Voting awareness program is conducted to make students aware about voting rights and also help them to enroll their names in the voters' list.

Students and employees are sensitized about constitutional obligations related to duties and responsibilities through the activities like tree plantation, Swachh Bharat Abhiyan, computer literacy sessions, street plays on social issues, yoga and physical exercises, fort conservation, cloth donation, and volunteering during pilgrimage programs etc. NSS unit regularly organizes various activities and annual residential camp to sensitize students about social responsibility. It also extends support through Unnat Bharat Abhiyan in which students carry out the survey of socio economic problems of the rural areas. NSS and SDO/SWO units take remarkable efforts to celebrate Independence Day, Republic Day, Yoga day, Environment day, Teacher's day, and birth anniversaries of great national heroes etc. to revive the national spirit, duties and rights defined by the constitution.

All the departments actively organize social and techno-social visits. The objectives behind such activities are to make students aware of responsibilities towards environment, persons with disability, senior citizens and poor students by organizing social visits to old age homes, schools for blind, orphanages, etc.

Institute also extends a helping hand to raise fund to support the emergency assistance scheme for relief of the deserving families and individuals affected by natural calamities. College raised "Kerala Relief Fund" in 2018, "Maharashtra Flood Relief fund (Kolhapur and Sangli)" in 2019 and "Funds for martyrs' kins of the Pulwama attack" in 2019. Institute has also donated essentials and food products to the people of affected zones. NSS

unit visited the affected zone and joined hands with the rescue team for rehabilitation of flood victims and their families.

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum. | <u>View File</u> |

# 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

42

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Programme / Curriculum/<br>Syllabus of the courses  | <u>View File</u> |
| Minutes of the Boards of<br>Studies/ Academic Council<br>meetings with approvals for<br>these courses | <u>View File</u> |
| MoU's with relevant organizations for these courses, if any   | <u>View File</u> |
| Institutional Data in Prescribed Format   | <u>View File</u> |

### 1.3.3 - Number of students undertaking project work/field work/ internships

### 2522

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of programmes and number of students undertaking project work/field work//internships (Data Template) | <u>View File</u> |

### 1.4 - Feedback System

Page 98/178 10-05-2022 08:25:22

# 1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

### A. All of the above

| File Description  | Documents   |
|---|---|
| URL for stakeholder feedback report   | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%201/1.4.2%20Analysis.<br>pdf |
| Action taken report of the<br>Institution on feedback report as<br>stated in the minutes of the<br>Governing Council, Syndicate,<br>Board of Management | <u>View File</u>  |
| Any additional information  | <u>View File</u>  |

# 1.4.2 - Feedback process of the Institution may be classified as follows

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

| File Description                  | Documents   |
|-----------------------------------|---|
| Upload any additional information | <u>View File</u>  |
| URL for feedback report           | https://naac2021cycle2.aissmsioit.org/AOAR<br>%202020-21/Criterion%201/1.4.2%20Analysis.<br>pdf |

### TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

### 2.1.1 - Enrolment Number Number of students admitted during the year

### 2.1.1.1 - Number of students admitted during the year

549

| File Description                        | Documents        |
|---|------------------|
| Any additional information              | <u>View File</u> |
| Institutional data in prescribed format | <u>View File</u> |

Page 99/178 10-05-2022 08:25:22

# 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

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

230

| File Description  | Documents        |
|---|------------------|
| Any additional information                                    | <u>View File</u> |
| Number of seats filled against seats reserved (Data Template) | <u>View File</u> |

### 2.2 - Catering to Student Diversity

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

The students are monitored during their academic journey in the Institute and special efforts are taken toenhance the performance of slow learners. Students with good academics and skills are mentored toachieve higher goals. Students are continuously encouraged to attend challenging goals. At the commencement of the first-year classes, Institute hosts Induction program for the students forfresher students with their parents. On behalf of the management Honourable Secretary/Joint Secretary andPrincipal of institute address the students and the parents, which covers the introduction of AISSM Societyand introduction of teaching pedagogy followed in AISSMS IOIT. Principal also brief about teachinglearning methodology followed by institute and also elaborate on facilities central/departmental library, computer centre, gymnasium, sports centre and cultural activities. Head of First Year Engineering department/Engineering science department briefs about academiccalendar, rules and regulations to be followed by students Institute conduct Psychometric test of individual students which is a scientific assessment tool toanalyse student's capabilities, aptitude, personality and interests. To identify the students as advancedlearner or slow learner, entry level analysis of each student is done. The GFMs/Mentors in regularmeetings with all faculties of respective classes, carry out discussions based on analysis records availableabout students' learning levels, abilities, characteristics, skills, attitudes, examination results (internal andexternal) and their current day to day interactions/experiences. Based on this evaluation special activities are undertaken as per need. Students are encouraged to

summarize concept understood during their class as part of 50:10 teachingmodule, this activity enhances student's confidence, communication skill and provide teacher theindication of student's understanding and learning level. Students are provided with various opportunities to showcase and upgrade their technical skills. Manyworkshops/expert sessions/seminar and competitions are organized at institute level to encourage studentsto demonstrate their learning capabilities. Special attention is provided to slow learners by conducting extrapractical sessions, remedial classes, tutorials, tests, regular mentoring and mock examinations. Institute has also made special provision of exhaustive soft skills training and exclusive counselling tomould the slow and advanced learners to plan their career and placements.

### Activities for Advanced learners:

- Project Based Learning
- Patent Publishing
- Student Association activities
- Project competition like Smart India Hackathon/ University Research Project Competition-
- Avishkar
- Industrial training/Internship
- Participation in Seminars/Conferences/IIT events/Tech Fest
- Encouragement to complete NPTEL Courses
- Application of research papers in projects and paper publication in National/international
- conference
- Training program on soft skills development, professional skill development and aptitude training
- Mini project/model making/building/poster presentations competitions
- Industry sponsored/research project
- Students are involved in the research projects awarded to the institute by various funding agencies
- like University/IE(I)/IEEE etc.
- Industrial Visit

### Activities for Slow learners:

- Entry level Analysis
- Psychometric Test
- Make-up classes
- Remedial classes
- Mock practical sessions

- Mock online test
- Tutorial
- One to one Counselling
- Personal attention in teaching
- Counselling & Mentoring
- Assignments and solving University question papers
- Theory Question bank/Oral Question Bank

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

| Number of Students | Number of Teachers |
|--------------------|--------------------|
| 2612               | 119                |

| File Description           | Documents        |
|----------------------------|------------------|
| Any additional information | <u>View File</u> |

### 2.3 - Teaching- Learning Process

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

Institute is taking significant efforts to motivate students for the self learning and in enhancing theirlearning experience. Faculty members are shifting the focus to a student centric learning process, instead ofconventional teaching-learning process of transferring the knowledge to students, through classroomlectures. The focus is on knowledge transfer and learning through students' active participation andinvolvement. The faculty members provide a platform to students to explore independently, learn throughself study and from their peers, guide them to develop effective and lifelong skills. The following latest teaching and learning methodologies are used to motivate students to learn for higherretention of knowledge through better understanding, for increased depth and developing positive attitudetowards subjects taught:

1) Active learning: The students are directly involved in the learning process through activities like - brain storming,

quiz, debate, group discussions, role play, games, model making, mini projects, presentations, essay, elocution, case studies and simulations on technical content, PPTs with animations for some topics.

- 2) Collaborative Learning: The group/team of students work jointly to provide solution for complicated problems, complete a task/project, participate in debates or design a product.
- 3) Inquiry-based Learning: Students are informed to make use of resources beyond the classroom for investigation of questions/problems. It helps in developing their critical thinking and increasing understanding levels by performing review of research papers, surveys, etc.
- 4) Problem based Learning: Various competitions are organized to engage the students in complex, challenging problems by assigning them different tasks, assignments or activities. Students workcollaboratively to obtain the solutions by using interdisciplinary knowledge e.g. design and implementation of Software/Apps, design and building robots etc.
- 5) Peer Learning: Students are engaged in intellectual discussions and work in team for solving difficulttask and problems under the guidance of a peer leader to perform various activities.
- 6) Experiential learning: Field based experiential learning like Internship, service learning and classbased experiential learning like role plays, games, case studies, simulation, virtual lab, presentations are practiced.

| File Description                  | Documents  |
|-----------------------------------|--|
| Upload any additional information | <u>View File</u>   |
| Link for additional information   | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%202/2.3.1%20Student%2<br>0Centric%20Methods.pdf |

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The traditional chalk & talk method of teaching-learning is monotonous. Hence innovations should beincluded in teaching

learning process to make it more attractive for students. Faculty members are realizingthe need of various ICT tools and techniques in teaching-learning process to deliver the contents/knowledge. This will help the students to grasp the ideas quickly and increase their active participation init. Faculty members are attending various Faculty development programs for domain knowledge and fornew trends in education technology/pedagogy which make their teaching more innovative. Following arethe various ICT tools and techniques used by faculty members and institute to make teaching moreinnovative: 1) ICT based teachinglearning (Moodle, etc.) 2) Digital social learning platforms (WhatsApp, blogs, etc.) 3) Microsoft Team for sharing subject notes 4) Open courseware (OCW) assignment 5) Microsoft Team for conduction of Test/MCQ tests. 6) Use of IITB Virtual lab for conduction of Practical. 7) Video Prepared by Faculty members. 8) Google classroom for sharing notes. 9) Google classroom for conduction of test/MCQs test. 10) Google classroom for sharing videos. 11) Google classroom for sharing question bank. 12) Presentation done by students under student's association chapter events

Use of ICT tools in teaching learning process help to improve academic performance of the students, their communication, technical and management skills and makes them industry ready. Use of social networkshas provided the possibility of creating work groups where students expose or discuss different topics, publish content related to the subjects, etc. The use of ICT in the classroom increases the motivation of thestudents, showing more interest and becoming more involved in the areas they study. ICT enables the useof innovative educational resources and the renewal of learning methods, establishing a more active collaboration of students. Use of resources as videos, websites and graphics make traditional subjects moreinteresting. The use of ICT in the classroom promotes the student's active and participatory attitude. Collaboration between students is enhanced due to various digital tools. It is much easier for them to createteam projects, cooperate and learn from each other.

| File Description  | Documents        |
|---|------------------|
| Upload any additional information   | <u>View File</u> |
| Provide link for webpage<br>describing the ICT enabled<br>tools for effective teaching-<br>learning process | <u>View File</u> |

# 2.3.3 - Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year )

### 2.3.3.1 - Number of mentors

119

| File Description   | Documents        |
|--|------------------|
| Upload, number of students enrolled and full time teachers on roll | <u>View File</u> |
| Circulars pertaining to assigning mentors to mentees               | <u>View File</u> |
| Mentor/mentee ratio  | View File        |

### 2.4 - Teacher Profile and Quality

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

119

| File Description   | Documents        |
|--|------------------|
| Full time teachers and sanctioned posts for year (Data Template)   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| List of the faculty members<br>authenticated by the Head of<br>HEI | <u>View File</u> |

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

| 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C | Superspeciality / |
|--|-------------------|
| D.Sc. / D.Litt. during the year  |                   |

24

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List of number of full time<br>teachers with Ph. D. / D.M. /<br>M.Ch./ D.N.B Super specialty /<br>D.Sc. / D.Litt. and number of<br>full time teachers for year (Data<br>Template) | <u>View File</u> |

# 2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

### 2.4.3.1 - Total experience of full-time teachers

### 1152.9

| File Description   | Documents        |
|--|------------------|
| Any additional information   | <u>View File</u> |
| List of Teachers including their PAN, designation, dept. and experience details(Data Template) | <u>View File</u> |

### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

The institute follows all the evaluation reforms as prescribed by the University. In addition, the Institutehas introduced measures on its own. Following are the major evaluation reforms introduced by the University:

College Examination Officer (CEO) - As per University directives, the Institute has appointed a senior and experienced faculty member as College Examination Officer (CEO). The Examination Committee isheaded by Principal, assisted by CEO and senior faculty members from each department.

In semester Examination - University has introduced the model of in-semester examination for First year(FE), Third year (TE), Final Year (BE) and Master of Engineering (ME) courses.

Computerization - University has introduced online examination for evaluation of First and Second year engineering courses. The Institute conducts online examinations of the University every semester.

Credit system - As per the University guidelines credit system has been introduced for the UG and PGPrograms.

The reforms initiated by the Institute are as follows:

As a regular practice institute conducts unit test examination, mock practical/oral examinations, FEprelims, and conduction of mock online examinations. To support the above reforms, the institute appoints examiners for the conduction of various practice examinations.

The examination pattern, marking scheme and Term work assessment scheme are communicated to thestudents at the beginning of the semester.

The policy for internal assessment is as follows: In the internal assessment, weightage is given to:

- · The attendance in theory class and practical sessions
- Understanding by the student
- · Presentation skills of the student
- Timely submissions of journal, write-ups and assignments.
- Performance in tests and tutorials.
- Independent learning through projects and presentations
- Communication skill and oral examinations.

The unit test answers and marking scheme is discussed by the faculty with the students. Final year students are given self-evaluation sheets for their projects.

| File Description                | Documents        |
|---------------------------------|------------------|
| Any additional information      | <u>View File</u> |
| Link for additional information | Nil              |

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

The institute has adopted the following mechanisms for redressing the grievances of the students with reference to evaluation both at the college and University level Institute level grievance Redressal:-

- 1. If any grievance is raised by a student, then it is reported to Head of the Department, and it will be solved amicably after discussion with concerned faculty.
- The concerned faculty discusses the marking scheme and model answers with the students andhelps them to solve their queries.
- 3. If grievance is not addressable at the department level then the matter is forwarded to the Principalfor further action.

### University level grievance Redressal:-

- 1. The institute's Chief examination officer (CEO) and examination section redresses University evaluation grievances.
- They forward these grievances to the University for redressing them. Under the University evaluation redressal system students can apply for photocopy, verification and revaluation.
- 3. After revaluation at the University level, results are communicated to the Institute.4. Institute communicates the same to the concerned students.

| File Description                | Documents        |
|---------------------------------|------------------|
| Any additional information      | <u>View File</u> |
| Link for additional information | Nil              |

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Program Outcomes (POs) are based on the graduate attributes prescribed by National Board ofAccreditation and they are uniform for all the programs. While the Program Specific Outcomes (PSOs) asdefined by the Program and they are based on the branch or program specific skills. The institute has clearly defined the course outcomes (COs) which are mapped to the POs and PSOs.

1. The vision and mission statements of the programs and institute are displayed on the institutewebsite and at various key positions in the institute building. 2. POs are printed in institute brochure and newsletter and published on the institute's website. 3. The vision, mission and POs are conveyed

to the students during students orientation programconducted at the start of each year. 4. Vision, Mission and POs are discussed during parents meet organized by the department once persemester. 5. Every faculty member discusses vision, mission, POs, PSOs and COs at the start of course work inevery semester. 6. Head of Department (HoD) discusses vision, mission, PEOs, POs and PSOs with the facultymembers in departmental meeting. 7. Vision, mission, PEOs, POs and PSOs of the department are discussed when the alumni visit toinstitute and during alumni meet conducted once per year. 8. HoD and faculty members discuss vision, mission, PEOs, POs and PSOs with industry experts whovisit to the department for conducting seminars, workshops, expert lectures etc.

| File Description  | Documents   |
|---|---|
| Upload any additional information                       | No File Uploaded  |
| Paste link for Additional information                   | https://aissmsioit.org/computer/vision-<br>mission-peo/ |
| Upload COs for all Programmes (exemplars from Glossary) | <u>View File</u>  |

#### 2.6.2 - Attainment of Programme outcomes and course outcomes are evaluated by the institution.

#### Attainment of course outcomes:

The calculations of CO attainment is done by using internal and external assessment tools.

#### The external tools:

The external tools the university examinations like theory, practical, oral and term work etc. The CO areassessed by the performance of students in these examinations.

#### The internal tools:

Assignments, unit tests, quiz, presentations etc. are considered as internal assessment tools.

Weightages of internal and external assessment tools:

Internal and external assessment tools are assigned weightages as 20% and 80% respectively.

#### Process:

- 1.Marks scored by the students in all the internal and external tools are entered in the database.
- 2. Average percentage marks of previous years' examinations is set as the target.
- 3. The attainment levels are set based on the results of previous examinations.
- 4. The number of students scoring marks more than set target are counted. The count is converted intopercentage.
- 5. The percentage calculated in step 4 is compared with the range assigned to the three attainmentlevels in step 3 to find out the corresponding level.
- 6.Average of all the attainment levels by using internal tools is calculated.
- 7. Average of all the attainment levels by external tools is calculated.
- 8.20% of the average attainment level by internal tools and 80% of the average attainment level by external tools are added to calculate the CO attainment.
- 9. Average of all CO attainments is calculated to determine the overall CO attainment of the course.

Attainment of Program Outcomes and Program Specific Outcomes:

The calculation of attainment of POs and PSOs is done by using direct and indirect assessment tools.

The direct tool: is the value of CO attainment calculated using marks scored by the students in internal examinations as stated above.

The indirect tools: include various feedbacks collected from the stakeholders such as students, alumni, employers etc.

Weightages are given to these feedbacks based on their relevance to PO/PSO.

Weightages of direct and indirect assessment tools:

Direct and indirect assessment tools are assigned weightages as 80% and 20% respectively.

#### Process:

- 1. Attainment by direct tool
- 1. Matrix of CO-PO-PSO and CO attainment values of all the courses from first year to finalyear are considered.
- 2. Product of CO attainment value of a course with the corresponding level of mapping of thecourse with PO/PSO (to get the inference of the strength of mapping) is calculated.
- 3. Summation of all the products is calculated (sum of products).
- 4. Summation of all the levels of mappings of the course with a specific PO/PSO is calculated.
- 5. Sum of products is divided by sum of all the levels of mappings to calculate the totalattainment.
- 2. Attainment by indirect tools
- 1. The feedback forms from various stakeholders are collected and analyzed to calculatepercentage response.
- 2. Total attainment by indirect tools is calculated by taking weighted sum of all thepercentages
- 3. 80% of the direct attainment level and 20% of indirect attainment level are added to calculateoverall PO/PSO attainment.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for Additional information | Nil              |

#### 2.6.3 - Pass percentage of Students during the year

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

#### 633

| File Description  | Documents   |
|---|---|
| Upload list of Programmes and<br>number of students passed and<br>appeared in the final year<br>examination (Data Template) | <u>View File</u>                                  |
| Upload any additional information   | No File Uploaded                                  |
| Paste link for the annual report  | https://aissmsioit.org/college-annual-<br>report/ |

#### 2.7 - Student Satisfaction Survey

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

https://aissmsioit.org/wp-content/uploads/2022/01/Student-Satisfaction-Survey-2020-21-Analysis.pdf

#### RESEARCH, INNOVATIONS AND EXTENSION

- 3.1 Resource Mobilization for Research
- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)
- 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

#### 1.00

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| e-copies of the grant award<br>letters for sponsored research<br>projects /endowments | <u>View File</u> |
| List of endowments / projects with details of grants(Data Template)                   | <u>View File</u> |

- 3.1.2 Number of teachers recognized as research guides (latest completed academic year)
- 3.1.2.1 Number of teachers recognized as research guides

01

| File Description                        | Documents        |
|---|------------------|
| Any additional information              | <u>View File</u> |
| Institutional data in prescribed format | <u>View File</u> |

## 3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

## 3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

01

| File Description  | Documents                    |
|---|------------------------------|
| List of research projects and funding details (Data Template) | <u>View File</u>             |
| Any additional information                                    | No File Uploaded             |
| Supporting document from Funding Agency                       | <u>View File</u>             |
| Paste link to funding agency website                          | https://www.aicte-india.org/ |

#### 3.2 - Innovation Ecosystem

## 3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institution has a well-established ecosystem for innovation, development and incubation activities. The institution has initiated separate research and development (R&D) cell, Incubation and Entrepreneurship Development (ED) cell to encourage students and faculty members to explore their creative ideas and promote innovation. The students are encouraged to undertake design, fabrication and development projects and prove their skills through various technical competitions. Creation and transfer of knowledge wealth are focused through activities like, publications of research papers, industrial project work, innovation, consultancy and development activities.

 The institution has Entrepreneurship Development (ED) cell which organizes entrepreneurship awareness camp, expert lectures for career opportunities, and technology trends in

- industrial environment, orientation program for new entrepreneurs etc. It nurtures entrepreneurial attitude and skills of the students.
- Students understand the problem of industry and provide the customized solution for it. The innovative ideas of students are implemented in incubation centre to develop products beneficial for the society and industry. The expert faculty members provide technical support to incubate and motivate them to become entrepreneurs. Innovative projects are being designed and implemented under this incubation centre.
- Various workshops and seminars are organized for research methodologies and IPR under R&D cell. Talks of eminent personalities/experts are organized to guide and motivate research ideas and publications among students and faculty members.

#### Activities under innovation and incubation cell:

- Guidance sessions for students to prepare them for participation in various technical competitions, exhibitions
- Awareness sessions for students to give guidelines about paper writing, presentation, technical poster presentations and publications in reputed journals.
- Organization of inter/intra college technical competitions

#### Outcomes:

- Students won runner up position in IEEE YESIST12 Innovation challenge at Stamford University, Thailand
- Students won first prize in national level competition -Mindspark Makeathon for innovative design and development of Smart Helmet.
- Students won first prize in national level competition Hackathon 2020 for Developing a Software Tool to aid Search and Rescue by Calculating and Plotting Search Area from the Last Known Position of a Missing Aircraft.
- Student won first prize in 6th National Level Technical Expo.
- Student won the best paper award at 2nd IEEE International Conference on Emerging Smart Computing & Informatics ESCI 2020.
- Students' participation in technical competitions like Hackathon, DST & Texas instruments India innovation challenge design contest powered by AICTE, AVISKAR by SPPU,

start-ups etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

## 3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

## 3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

64

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| List of workshops/seminars<br>during last 5 years (Data<br>Template) | <u>View File</u> |

#### 3.3 - Research Publications and Awards

#### 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

#### 3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

03

| File Description  | Documents                        |
|---|----------------------------------|
| URL to the research page on HEI website   | https://aissmsioit.org/research/ |
| List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template) | <u>View File</u>                 |
| Any additional information  | <u>View File</u>                 |

## 3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year

## 3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year

11

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List of research papers by title,<br>author, department, name and<br>year of publication (Data<br>Template) | <u>View File</u> |

- 3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year
- 3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during year

46

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| List books and chapters edited volumes/ books published (Data Template) | <u>View File</u> |

#### 3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

In line with its vision and mission, the institute is very insightful to the impact of various extension activities on its students, employees, as well as on the regional community and the environment. The institute believes in giving back to the neighborhood community.

Institute continuously organizes and participates in various extension activities with the objective to

- Sensitize students about various social issues
- Contribute to community and strengthen it

The institute considers the impact of all extension activities on the local community. The various social and technical activities, events and programs organized by the institute reflect our commitment to operate in a techno-social responsible manner.

The institute motivates the faculty members and students to participate in need-based, participatory initiatives with local communities, and that range from health, sanitation, education, women's empowerment etc. The participation of the students sensitizes them towards the social issues and challenges faced by the weaker section of the locality; enables them to develop an empathetic understanding of the same and facilitate their initiation in civic engagement. The institute also promotes regular engagement of faculty members, students and staff with neighborhood community for their holistic development and sustained community development through various activities.

Various awareness programs/workshops/rallies/road shows/ voluntary activities with themes like cleanliness, green environment & tree plantation, gender sensitization, traffic rule awareness, road safety awareness, voter awareness, save water, demonetization and digital payment, rural development, national swachh bharat abhiyan, blood donation camps, international yoga day and women empowerment etc. are organized under NSS unit of the institute.

Students and faculty members of all the departments visit schools/orphanages/old age homes in the neighborhood community to share technical knowledge, monetary donations, and distribution of essential things to people affected by natural disasters/epidemics.

#### Impact & Sensitization:

Exposure to extension and outreach activities sensitize the students towards social issues and also to legal and social remedies for matters like domestic violence, dowry, child abuse, beggars, female feticides, victims of violence, etc. The activities conducted imbibe the values of social responsibility such as:

- To help people in need and distress.
- To understand and fulfill the need of under privileged children.
- To promote cleanliness in all span of life and common places.
- To acquire social values and a deep interest in environmental related issues.
- To understand societal/rural problems and provide solutions

- through projects.
- To develop lifelong skills such as communication, management, leadership, analytical and perceptual etc.

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://aissmsioit.org/wp-content/uploads/<br>2021/04/NSS-Annual-Report-2020-21.pdf |
| Upload any additional information     | No File Uploaded  |

- 3.4.2 Number of awards and recognitions received for extension activities from government / government recognized bodies during the year
- 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

1

| File Description   | Documents        |
|--|------------------|
| Any additional information   | No File Uploaded |
| Number of awards for extension activities in last 5 year (Data Template) | <u>View File</u> |
| e-copy of the award letters  | <u>View File</u> |

- 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year
- 3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

23

| File Description   | Documents        |
|--|------------------|
| Reports of the event organized   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template) | <u>View File</u> |

#### 3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

## 3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

1320

| File Description  | Documents        |
|---|------------------|
| Report of the event   | <u>View File</u> |
| Any additional information  | No File Uploaded |
| Number of students<br>participating in extension<br>activities with Govt. or NGO<br>etc (Data Template) | <u>View File</u> |

#### 3.5 - Collaboration

## 3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/internship during the year

## 3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

39

| File Description  | Documents        |
|---|------------------|
| e-copies of related Document  | <u>View File</u> |
| Any additional information  | No File Uploaded |
| Details of Collaborative<br>activities with<br>institutions/industries for<br>research, Faculty | <u>View File</u> |

## 3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

## 3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

15

| File Description   | Documents        |
|--|------------------|
| e-Copies of the MoUs with institution./ industry/corporate houses  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of functional MoUs with institutions of national, international importance, other universities etc during the year | <u>View File</u> |

#### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

The institute has obligatory infrastructure required for effective teaching-learning (T-L) process, co-curricular and extra-curricular activities to fulfill the norms laid by the AICTE, DTE, SPPU. The available facilities are enhanced by addressing the needs of students and faculty members to support T-L and Research and Development activities in the institute.

Physical infrastructure consists of 31(UG+ PG) classrooms, 07 tutorial rooms,47(UG + PG) laboratories and 01 seminar hall. In addition, the institute has supporting academic and administrative rooms. Classrooms and seminar halls have adequate ventilation and illumination and are equipped with audio-video system and ICT tools like PA system, LCD projector, internet connectivity. Each department has well-equipped laboratories and a departmental library. The available physical infrastructure is optimally utilized beyond regular institute hours, to conduct certificate courses, co/extra-curricular activities, campus to corporate readiness program, training classes, campus recruitments, meetings, seminars, conferences etc. All the departments have well-furnished separate cabins for the faculty members with the atmosphere conducive for regular interaction

with the students who come for counseling, guidance and discussions. Institute also have Medical room, Girls Common room, Boys Common room.

Laboratories are equipped with state-of-the-art machines/equipments like UV-VIS Spectrophotometer, ECG Machine, Programmable logic controller with control panel, Distributed control system, Universal Process Control Trainer, Spectrum Analyzer, Logic Analyzer, Power Quality Analyzer, open source and latest proprietary software such as MATLAB, AUTOCAD, ETAP, SCADA, LabView, Xilinx, Microwind, Multisim, Powersim etc. The charts and models are displayed in the laboratories for better understanding of theory and practical concepts. Laboratories are regularly maintained and updated. Equipment is calibrated on a regular basis.

A part of regular laboratories institute also has various centers of excellence viz. Texas Innovation Lab., IEEE Affordable Agriculture Lab., DCS Delta-V Lab.by Emerson, Flow Lab. byForbes Marshall, Teknocrats Academy of Automation and Control Technology(TAACT) Lab.,Oracle Academy Lab., Power Quality Cell, SignioGlobalTech Solutions Lab.

Institute has Incubation center- Research Innovations Sustainable Entrepreneurship (R.I.S.E.) for prototyping, production and marketing for innovative projects.

Workshop consists of different facilities for imparting practical skills in such as milling, fitting, carpentry, welding, drilling using CNC, VMC, Centre Lathe, BenchGrinder Machine, Turning Machine etc.

For Internet access and computing purpose, the institute has massive network of 763 Computers (of which 640 are dedicated for academics) with 100Mbps bandwidth. Centralized firewall - "Cyberroam" is used for security and to monitor the usage of internet by individuals. All computers are connected by LAN and Internet. Some computer laboratories are equipped with high end servers and computers with high end processors.

Enterprise Resource Planning (ERP) is deployed for effective academic planning, execution, monitoring and analysis. ERP software is used for automation of academic and administrative processes used in the institute, to maintain and analyze the data related to various processes of institute. This cloud-basedERP software has 40+ modules and it facilitates computerized process

for student admission, educational certificates generation, teachers-parents communication, examinations, leave management, attendance and academic monitoring, students' feedback etc.

Central Library has a compilation of books, journals, web-based resources, audio/video materials, etc. with latest software for efficient functioning with 200 seating capacity. There is a provision of having remote access to get e-books, e-journals and e-Learning resources. The Library is using commercial software - SLIM 21 for automation of library services and open source software -Dspace to maintain digital contents. Urkund software is used for plagiarism checking of the documents. Library also has provision of separate reading room for faculty members.

Training and Placement (T & P) cell has adequate infrastructure for training and placement activities.

For the physically impaired (Divyangjan) students, the institute has ramp, elevator, wheel chair, and washroom with necessary facilities.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

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

The All India Shri Shivaji Memorial Society has always encouraged and supported the co-curricular and extracurricular activities in its institutes. The institutes have also carried forward the legacy of society by promoting the co-curricular and extracurricular activities at their level. As part of this endeavor, the institute has a well-established Gymkhana Department and Art circle for effective and better coordination of various sports and cultural activities which is headed by Physical Director, Cultural In-charge and supported by the students' sports and cultural committees respectively. The society and institute fully support and encourage various sports and cultural activities with the motto that every student should

not only be academically fit but also physically fit to face the challenges of the life. Campus has a playground of 172160 sq. feet for sports facilities.

The Institute has following outdoor and indoor sports and cultural facilities.

- Playground and necessary equipment for outdoor games like Cricket, Football, Kho-Kho, Volleyball, Basketball, Athletics, Kabbadi and Hockey etc.
- Space and necessary equipment for indoor games like Table tennis, Chess, Carrom, Judo, Gym and Yoga.
- Open air theatre and cultural room with latest musical instruments and practice area for cultural activities.

Since the establishment of the Institute, the gymkhana has been playing vital role in the overall development of the students. As a result, our students have earned applauds in the various competitions at University, State and National level sports and cultural competitions. Prominent among them are- University Intercollegiate sports competition, Purushottam Karandak, Firodiya Karandak, Zest, MIT Summit, Kaware Trophy etc. Our students have also represented at Net ball competitions at University level.

The students who represent institute in various sports and cultural events are provided with necessary gears/material and paid TA/DA. The students' achievements are acknowledged by felicitating them at Society and Institute level functions.

Apart from participation at various sports and cultural events, the institute organizes following events every year:

- Annual Social gathering.
- National level inter -Collegiate Technical, Sports and Cultural Competition 'ALACRITY'.
- State level Inter-Collegiate T20 cricket tournament "IOIT CRICKET LEAGUE".
- Inter- department technical, sports and cultural competitions.

The students' sports and cultural committees are actively involved in organizing the above events. A separate budget is allocated by the institute for organization of various sports and cultural activities.

The Gymkhana office of institute organizes medical checkup for teachers and newly admitted students. Physician is also made available on request. Institute's ambulance/ vehicle is available for medical emergency.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

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

32

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Paste link for additional information  | Nil              |
| Upload Number of classrooms<br>and seminar halls with ICT<br>enabled facilities (Data<br>Template) | View File        |

### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

## 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

86.05

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Upload audited utilization statements  | <u>View File</u> |
| Upload Details of budget<br>allocation, excluding salary<br>during the year (Data Template | <u>View File</u> |

#### 4.2 - Library as a Learning Resource

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

- Integrated Library Management System is used to manage different functions of the library. Institute Central Library is using commercial software. Library is partially automated (yr of automation2013) with System for Library Information Management (SLIM21) software having version 21. Library collection can be browsed / searched on Intranet using the SLIM21 OPAC module. SLIM21 helps for catalogue books, e-books, articles, reports, serials, publications that contain information so vital to the institute.
- SLIM21 cataloguing adheres to popular international standards. With SLIM21 retrieval of information is simple, fast and efficient. SLIM21 supports flexible workflow to cover activities related to acquisition of books, serials control, and funds monitoring. This software has modules like Acquisition, Cataloguing, Circulation, Serial Control. Acquisition modules & Cataloguing Module is utilized for generating accession register reports, adding Bulk student's record, updating item lending policy and its status. Circulation module has books issue, return, and reserve options. Various reports such as loan borrower, item inventory status, circulation status summary, item transactions and operator wise transactions can be generated in this module. Similarly, library barcodes are also generated through this module making cumbersome library work simpler, effective, and time is saving. The Serial Control module maintains the record of print journals and track of subscribed issue in the library. Generation of expected arrival schedule of loose issues can be generated in the serial control module. SLIM21 software

also provides statistical analysis required for Library Management systems such as weekly transitions, most issued items, less issued items, reference books, Books sent for binding.

- This software is purchased from Algorhythms consultants Pune, they provide online and offline support for software problems, proper backup, and maintenance of software during the annual maintenance contract period.
- Library web OPAC homepage and link has been displayed in the library. Users can search the catalogue on their mobile phones also. Previous university question papers are available on the college website under facilities tab. Institute library is also using Dspace open source software for institutional repository where AISSMS BE project reports are made available.

| File Description                      | Documents   |
|---------------------------------------|---|
| Upload any additional information     | <u>View File</u>  |
| Paste link for Additional Information | https://aissmsioit.org/central-<br>library/about-central-library/ |

#### 4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership ebooks Databases Remote access toeresources

A. Any 4 or more of the above

| File Description  | Documents        |
|---|------------------|
| Upload any additional information   | <u>View File</u> |
| Details of subscriptions like e-<br>journals,e-ShodhSindhu,<br>Shodhganga Membership etc<br>(Data Template) | <u>View File</u> |

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

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

#### 11.2

| File Description  | Documents        |
|---|------------------|
| Any additional information  | No File Uploaded |
| Audited statements of accounts  | <u>View File</u> |
| Details of annual expenditure<br>for purchase of books/e-books<br>and journals/e- journals during<br>the year (Data Template) | <u>View File</u> |

## 4.2.4 - Number per day usage of library by teachers and students (foot falls and login data for online access) (Data for the latest completed academic year)

#### 4.2.4.1 - Number of teachers and students using library per day over last one year

#### 64.45

| File Description                                  | Documents        |
|---|------------------|
| Any additional information                        | No File Uploaded |
| Details of library usage by teachers and students | <u>View File</u> |

#### 4.3 - IT Infrastructure

#### 4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

In this electronic communication era, internet communication is very important in the teaching learning process. To fulfill the norms of AICTE and University, the institute has very strong IT infrastructure. Institute aims at providing futuristic facilities to its students so that they can utilize these resources to reach greater heights. To enable this, the institution frequently updates its IT facilities to provide the best facilities. Our classrooms are equipped with LCD projectors and supported by audio visual systems. The entire campus is monitored by CCTV cameras installed at strategic places.

The institute has massive network of763computers with 165Mbps fiber optic internet connectivity and Wi-Fi facility with public and private connectivity. Centralized firewall "Cyber-roam" is used for network monitoring, management and internet security. Athree layer switching LAN is available for the entire campus. L3

Cisco (GIGABIT Switch) 48-port switch is present on each floor of the institute which are connected to the Main L3 Cisco 48-port switch. All the laboratories on each floor contains 24 port 10/100 L2 switch. All floors and computer laboratories are connected in Star topology and 100 Mbps bandwidth is shared in LAN.Uninterrupted power supply (UPS) is available in all computer laboratories.

Open source and latest proprietary software such as ETAP, LabView Elvis, MatLab etc. are available inlaboratories. Institute has a well established language lab to enhance communication skills of students. Language lab software consisted of the Interactive Instructor and student module, Audio and video recorder, lesson composer and integrated study material. Institute has licensed MS teams software for conduction of online classes and meetings.

Four servers are available for smooth conduction of various activities such as online examinations, webinars, online workshops, virtual lab, hosting proprietary software etc.

Enterprise Resource Planning (ERP) is deployed for effective academic planning, execution, monitoring and analysis. ERP software is used for automation of academic and administrative processes used in the institute, to maintain and analyze the data related to various processes of the institute. This cloud based ERP software has 40+ modules and it facilitates computerized processes for student admission, educational certificates generation, teachers-parents communication, examinations, leave management, attendance and academic monitoring, students' feedback, learning management system (LMS) etc.

Computers with internet connection are made available to all the faculty members at their respective locations.

All the HoDs and IQAC coordinator are provided with laptops for administrative work.

The institute has a separate centralized maintenance system in order to support the IT infrastructure, campus facilities and equipment. All the IT facilities are periodically updated. Details of the same are given in the document of additional information.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

#### 4.3.2 - Number of Computers

763

| File Description                  | Documents        |
|-----------------------------------|------------------|
| Upload any additional information | <u>View File</u> |
| List of Computers                 | <u>View File</u> |

## **4.3.3** - Bandwidth of internet connection in the Institution

A. ? 50MBPS

| File Description   | Documents        |
|--|------------------|
| Upload any additional<br>Information                                     | No File Uploaded |
| Details of available bandwidth of internet connection in the Institution | <u>View File</u> |

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

## 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

70.94

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Audited statements of accounts   | <u>View File</u> |
| Details about assigned budget<br>and expenditure on physical<br>facilities and academic support<br>facilities (Data Templates) | <u>View File</u> |

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

The institute has established standard systems and procedures for utilizing and maintaining the physical, academic and support facilities as explained below:

There are college level committees that look after the various aspects of the utilization and maintenance of the physical, academic and support facilities.

Maintenance and utilization of facilities (laboratory, computers, classrooms etc.)

#### Laboratory:

The institute regularly maintains the laboratory equipment there by checking the working status of instruments. The laboratories are maintained by means of annual maintenance contract for computers, peripherals, networking, UPS etc. A history card is maintained for all the equipment. The minor maintenance is carried out by the laboratory assistants/technicians/workshop staff. In case of major maintenance of equipment, the concerned laboratory in-charge submits a maintenance request to the "Purchase Committee" through the HoD. Based on the request, the equipment maintenance work is assigned to an external agency through work order. All such records are maintained in the history card of the equipment.

Laboratory assistants are maintaining dead stock register and register for consumable material and undertake physical deadstock verification of laboratory material. Laboratory assistants are maintaining log book in the laboratory, updating laboratory boards periodically, and maintaining equipment, kits, wires, probes etc. Laboratory assistants are issuing equipment, components and manuals to the students, other laboratories and departments by making entry in the issue book. They are updating the display of laboratory with respect to laboratory time-table, list of experiments, list of major equipment along with cost, lab area, and charts as well as keeping record of consumables required for the laboratory.

#### Library:

Central Library Committee looks after all the updation of library resources like call and verification of books and journals

requirement, prepare library budget, update and maintain the digital library setup, regularly update the text, reference books, journals, and perform dead stock checking. Irreparably damaged books are weeded out once in 3 years. SLIM 21 software is used for in house processes of the library. Books are arranged department wise and Dewey Decimal Classification (DDC) tool is used for classification of books. Barcode system is used for maintaining the records of the daily transactions. Web OPAC (Open Public Access Catalogue) link has been provided for searching books and other resources available in the library. Central library also maintains Institution Repository by using Dspace software. Previous university question papers are maintained department wise by the central library for students' reference. Printing and photocopying facility is available in the library.

The institute's librarian and department library coordinators are regularly reviewing and evaluating resource materials, such as book reviews and catalogs, in order to select and order print, audiovisual, and electronic resources. Departmental library incharge prepares a list of books and displays the updated list semester wise as well as make a new entry of books in the department library records. Arrange the books or copies of books subject wise in the book shelf and make the entry accordingly. At the end of the semester they prepare a report about how many books were issued, returned or misplaced. Prepare requirements of new books and journals that are required according to the new syllabus and submit the proposal to the central library through HoD. Departmental project and seminar coordinators submit all the project and seminar reports of students to the departmental library.

#### Computers:

The maintenance of computer hardware and software of the institute is carried out by external agency through annual maintenance contracts (AMCs). The minor maintenance is carried out by the laboratory assistants. In case of major maintenance of computer hardware and software, the concerned laboratory incharge submits a maintenance request to the "Purchase Committee" through the HoD. Based on the request, the maintenance work is assigned to an external agency through AMC. All such records are maintained in the history card of the laboratory.

#### Sports Facilities:

Physical director of the institute ensures the utilization and

maintenance of the institute's sports facilities. Physical Director gives requisition to the purchase committee for purchase of new sports equipment and maintenance of sport facilities. Physical director also plans and manages resources, budget and identifies potential opportunities for external funding. The sports section facilitates teachers and students with sports, recreation, and health checkups etc.

#### Canteen:

The central canteen committee looks after the cleanliness, hygiene of the canteen. The committee also ensures that the quality of water and food is maintained.

#### Institute Infrastructure:

The central "Civil, Electrical Repair and Maintenance" committee looks after the maintenance of the institute's infrastructure including the class-rooms, laboratories, building etc. The Housekeeping Cell looks after the cleanliness of premises and monitors the work done by peons and sweepers, ensures proper upkeepment of institute campus including all common facilities. Daily cleaning of common areas and washrooms is done by an external agency. Pest control and sanitization of the entire building is done regularly by external agency. Maintenance of elevators, fire fighting system, EPABX, CCTV, Air conditioners, water tanks, water coolers, RO plant, DG set, garden etc. is done through AMC. External agency take care of campus security.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Upload any additional information     | <u>View File</u> |
| Paste link for additional information | Nil              |

#### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

- 5.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year
- 5.1.1.1 Number of students benefited by scholarships and free ships provided by the Government during the year

1678

| File Description  | Documents        |
|---|------------------|
| Upload self attested letter with the list of students sanctioned scholarship  | <u>View File</u> |
| Upload any additional information   | No File Uploaded |
| Number of students benefited<br>by scholarships and free ships<br>provided by the Government<br>during the year (Data Template) | View File        |

## 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

## 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

11

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Number of students benefited<br>by scholarships and free ships<br>institution / non- government<br>agencies in last 5 years (Date<br>Template) | <u>View File</u> |

| 5.1.3 - Capacity building and skills           | A. | All | of | the | above |  |
|--|----|-----|----|-----|-------|--|
| enhancement initiatives taken by the           |    |     |    |     |       |  |
| institution include the following: Soft skills |    |     |    |     |       |  |
| Language and communication skills Life         |    |     |    |     |       |  |
| skills (Yoga, physical fitness, health and     |    |     |    |     |       |  |
| hygiene) ICT/computing skills                  |    |     |    |     |       |  |
|  |    |     |    |     |       |  |

| File Description  | Documents   |
|---|---|
| Link to Institutional website   | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%205/5.1.3_Skill%20Enh<br>ancement%20Scheme.pdf |
| Any additional information  | <u>View File</u>  |
| Details of capability building<br>and skills enhancement<br>initiatives (Data Template) | <u>View File</u>  |

## 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

380

## 5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

380

| File Description  | Documents        |
|---|------------------|
| Any additional information  | <u>View File</u> |
| Number of students benefited<br>by guidance for competitive<br>examinations and career<br>counseling during the year<br>(Data Template) | <u>View File</u> |

# 5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

#### A. All of the above

Page 134/178 10-05-2022 08:25:23

| File Description   | Documents        |
|--|------------------|
| Minutes of the meetings of<br>student redressal committee,<br>prevention of sexual harassment<br>committee and Anti Ragging<br>committee | <u>View File</u> |
| Upload any additional information  | <u>View File</u> |
| Details of student grievances including sexual harassment and ragging cases  | <u>View File</u> |

#### **5.2 - Student Progression**

#### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

380

| File Description  | Documents        |
|---|------------------|
| Self-attested list of students placed                           | <u>View File</u> |
| Upload any additional information                               | No File Uploaded |
| Details of student placement<br>during the year (Data Template) | <u>View File</u> |

#### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

10

| File Description                                   | Documents        |
|--|------------------|
| Upload supporting data for student/alumni          | <u>View File</u> |
| Any additional information                         | No File Uploaded |
| Details of student progression to higher education | <u>View File</u> |

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

Page 135/178 10-05-2022 08:25:23

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

03

| File Description   | Documents        |
|--|------------------|
| Upload supporting data for the same  | <u>View File</u> |
| Any additional information   | <u>View File</u> |
| Number of students qualifying in state/ national/ international level examinations during the year (Data Template) | <u>View File</u> |

#### 5.3 - Student Participation and Activities

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

00

| File Description   | Documents        |
|--|------------------|
| e-copies of award letters and certificates   | No File Uploaded |
| Any additional information   | No File Uploaded |
| Number of awards/medals for outstanding performance in sports/cultural activities at univ ersity/state/national/internationa l level (During the year) (Data Template) | <u>View File</u> |

5.3.2 - Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

At the beginning of every academic year the institute constitutes the Student Council by following the norms laid down by the University. Class representative from each class will be nominated as a member of the Student Council. The student members elect General Secretary, Cultural Secretary, Sports Secretary, and Girls representative for a term of one year. The Student Council aims at the all-round development of students and organizes several academic, co-curricular, and extracurricular events throughout the year in association with the University and other organizations.

Meetings of the Student Council are conducted at least once in each term with Student's Welfare Officer, discipline, and antiragging committee.

The details of various academic and administrative committees under the Student Council are Cultural committee, Sports committee, NSS committee, Magazine committee AAYAM, Departmental Student Associations namely INSATS, ITSA, CESSA, ELEXA, and EESA.

The functions and events conducted by above mentioned committees are as follows:

- 1. Students' Council: Under section 40 (3) of the Maharashtra Universities act, 1994, this council is established every year in the institute and it performs prescribed duties.
- 2. Student Grievance: This committee addresses complaints lodged by any student and effectively resolves the grievances of students. It maintains discipline among the students. It also empowered to look into matters of harassment.
- 3. Ant-Ragging: This committee ensures zero ragging incidents in the institute and also spreads awareness among students against any type of ragging activities.
- 4. Cultural: This committee co-ordinates various cultural activities and events throughout the year. "Alacrity" is national level fest and an annual social gathering which showcases the cultural talent of students. Intercollegiate cultural & sports competitions are also organized in Alacrity. Our students participate in prestigious intercollegiate competitions such as Firodiya Karandak and Purushottam Karandak every year and bag prizes.
- 5. Sport: This committee organizes various sport events at the local, state, national levels. It also organizes the interdepartmental sports events. Our students actively participate in various sports in intercollegiate,

interuniversity, state, national and international levels.

- 6. Magazine: 'AAYAM' is our annual magazine published by Magazine committee. Students express their talent in the form of articles, poetry, interviews of eminent personalities, and so on. This exercise imbibes societal values in students.
- 7. Technical Activities: Every Department is having an active Student Chapter associated with the Institution of Engineers, India (IEI), Computer Society, India (CSI), Indian Society of Technical Education (ISTE), and Institute of Electrical and Electronics Engineer (IEEE). These chapters conduct various programs viz; Expert lectures; Industrial visits to name a few. Institute also organizes international conferences every year.

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%205/5.3.2_various%20b<br>odies+index.pdf |
| Upload any additional information     | <u>View File</u>  |

## 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

## 5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

06

| File Description   | Documents        |
|--|------------------|
| Report of the event  | <u>View File</u> |
| Upload any additional information  | No File Uploaded |
| Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template) | <u>View File</u> |

#### 5.4 - Alumni Engagement

- 5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services
- 1.Webinar on "Civil Service Examination: Information and Approach needed" by Alumna Ms. Prajakta Thakur on 08/06/2020.
- 2.Webinar on "Grid Integration of Renewable Energy" by Alumna Ms.Vishakha Chandhere on 29/06/2020
- 3.Alumni-Connect Webinar Series by Alumni Mr. Akshay Dumare, Mr.Omkar Gurav, Mr. Parag Sanyashiv, Mr. Tejas Shah, Mr. Shreyash Pawar, Ms. Samruddhi Kulkarni, Ms. Reshma Wable, Mr. Milan Singh Thakur on 03/07/2020 to 08/07/2020
- 4. Webinar on "career Opportunities in Facility management" by Alumnus Mr. Anirudha Pawar on 23/07/2020
- 5.Webinar on "Research & Innovation in the Automotive Industry" by Alumnus Mr. Vinit Tirnagawar on 24/07/2020
- 6.Webinar on "Entrepreneurship opportunities for Engineering Students" by Alumnus Mr.Nandan Ghawate on 24/07/2020
- 7.Webinar on "Real Optimization of T&P Resources" by Alumnus Mr. Anand Gundecha on 24/07/2020
- 8.Webinar on "Job opportunities in Instrumentation Engineering and Higher Studies in U.S."
- by Alumnus Mr. Rohit Ghole on 27/07/2020
- 9.Webinar on "Block Chain Technology" by Alumna Ms. Sonali Patwe on 01/08/2020
- 10.Webinar on "How to build Career in Digital Marketing" by Alumna Ms. Samruddhi Kulkarni on 11/08/2020
- 11. Workshop on Time management and productivity in association with IEEE student chapter and Alumni Association" by Alumna Ms. Reshma Wable on 18/08/2020 to 19/08/2020
- 12. Webinar on "Entrepreneurship Opportunities for Engineering Students" by Alumnus Mr. Nandan Ghawate on 05/09/2020
- 13. Webinar on "Real Optimization of T&P Resources" by Alumnus Mr. Anand Gundecha on 5/09/2020

- 14. Webinar on "PLC and SCADA in Automation" by Alumnus Mr. Guruprasad Samasgikar on 12/09/2020
- 15. Webinar on "Journey from Campus to Company" by Alumna Ms. Revati Umak on 21/09/2020
- 16.Workshop on Solar System Design and AC-DC System cost analysis by Alumna Ms. Sujata Powniker on 26/10/2020 TO 30/10/2020
- 17. Webinar on Entrepreneurship by Alumnus Mr. Yash Sultana on 28/10/2020
- 18.Coffee and Conversation with Alumni by Alumna Ms. Sonali Patwe on 18/12/2020
- 19. Coffee and Conversation with Alumni by Alumnus Parth Bhimani on 16/02/2021
- 20. Virtual Annual Meet for all Branches on 13/03/2021
- 21. Webinar on "Project based Learning & Project Management" by Alumnus Mr. Kiran Belle on 13/03/2021
- 22.Coffee and Conversation with Alumni by Alumna Mrs.Ankita Pawar on 24/04/2021
- 23.Coffee and Conversation with Alumni in association with Alumni cell by Alumna Miss. Krutika Kharde, Jr. Scada engineer at Sintag Technology, Miss.Shrutika Kharde, trainee Electrical Engineer at Vanderlande on 19/05/2021

| File Description                      | Documents   |
|---------------------------------------|---|
| Paste link for additional information | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%205/5.4.1_Scan.pdf |
| Upload any additional information     | <u>View File</u>  |

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

| D. | 1 | Lakhs | _ | 3Lakhs |
|----|---|-------|---|--------|
|    |   |       |   |        |

| File Description                  | Documents        |
|-----------------------------------|------------------|
| Upload any additional information | <u>View File</u> |

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

The Vision and Mission statement of the Institute are as follows:

**VISION** 

"To uplift the common masses by rendering value added education"

**MISSION** 

"Empowering Society through dynamic education."

AISSMS IOIT has distinctive characteristics which are satisfied through its mission in the sense that the Institute empowers its students to become technocrats, researchers, scientists, administrators and entrepreneurs by inculcating professional ethics, leadership qualities, being good team players, social awareness and responsibility. The institute believes in holistic development of students by including value added courses and making the education process dynamic in nature.

The governance within Institute consists of Governing body (GB), Local Management Committee (LMC) now termed as College Development Committee (CDC), and Internal Quality Assurance Cell (IQAC). The Management, IQAC, Principal and Central Committee cocoordinators are the four important leader who frame and Implement the policies which are in tune with Vision and Mission of the institute which in the governance of the Institute as a whole. The Principal holds meetings with Heads of the departments as the Faculty representatives, every week, during the weekly meetings with the Heads of the departments; the Principal reviews the processes and plans of each department. All the decisions, policies and planning to improve the quality are reviewed and discussed in these meetings before their implementation. . The Head of departments conduct weekly meetings with the staff to review the activities of the previous week and plan for the next week. These decisions, policies and planning are further reviewed by the College Development Committee (CDC) and the Governing

Body. The CDC and Governing body are the statutory bodies formed as per the provision of Statutory Regulating Authorities (SRA's). The CDC and Governing body conduct meeting twice and thrice in a year in order to have effective implementation of the of the policies to monitor the value addition in the academic possesses.

The Management and Principal ensure that the Institute moves ahead with all the planning, to become one of the renowned Institutes. The policy statements and action plans are formulated, after careful consideration of all the stakeholders.

Every department prepares a well-planned academic calendar before the commencement of each semester. This calendar lists down all the curricular, co-curricular and extra-curricular activities which are in line with Vision and Mission of the Institute. The Institute maintains effective co-ordination and monitoring mechanism with departments and committees formed for these activities, IQAC monitors the functioning of all the committees relevant to teaching -learning, student's enrichment and overall development of the institute to identify areas of improvement and suggest the necessary action plan. These policies result in overall development of the student imparting dynamic education. There are various central committees in the institute the leader of these committees plan development activities and ensure their timely execution, this reflects effective governance which are in tune with Vision and Mission of the Institute.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

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

The institute has inculcated the practice of decentralized and participative Management with will established mutual relationships among all the stakeholders. Effective leadership is visible through designing, planning, implementing and executing quality policy of the Institute to achieve its Vision and Mission.

The Principal conducts weekly meeting with the Heads, in order to delegate different responsibilities and roles to be performed by

the faculty members in line with the quality policy. All the decisions, policies and planning to improve the quality are reviewed and discussed in these meeting before execution. At the end of every semester the meetings of prominent bodies like CDC and GB are scheduled to check the success rate of the decisions taken and to review the efficacy of the policy.

The representatives of the management are the members of the CDC and GB of the Institute who play a significant role in designing, implementing and planning its quality policy. The management also ensures that the opinions and suggestions made by faculty members and staff members are included in decisions implemented for college development which is reflection of participative Management in the Institute.

The institute welcomes the innovative ideas, concepts and thoughts from the employees and involves them in decision making process. The participative management is observed at levels right from class IV to the top management. Even the students are promoted to organize events in their own with limited involvement of faculty members.

The action plans for operations are prepared under the supervision and guidance of the Principal and Senior faculty members. The Institute has in total 34Central committees. The committees are formulated such that the committee has a coordinator with expertise in the domain along with the members from each department. These committees meet to define, monitor and evaluate the policies for implementation and improvement, if any, from time to time.

In order to illustrate that the Institute practices decentralization and participative Management, a case study of participative management is the Research and Development committee (R&D) of the Institute. The intention of the committee is to promote industrial collaboration, extend consultancy services and development services as per industry needs. To inculcate research culture among the faculty members and students of Institute, R&D committee promotes participations in quality events so that the participants get an opportunity to interact with renowned personalities in their domain. As a result of this, the Institute has received grants from various government and autonomous agencies from time to time. Even the Institute could host and organize the International conferences so far. The outcome of the decentralized and participative Management is generation of 28 patents, 6 copyrights, 18 of our teams qualified

for Inter University Technical competitions and Hackathon, there are a total of 35 industry sponsored projects and a total of 126 publications in reputed research journals.

The committee has been instrumental in policy decisions such as distributing remuneration to staff members undertaking testing and consultancy projects, research funding or financial rewards to faculty members and students for quality publications etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### 6.2 - Strategy Development and Deployment

#### 6.2.1 - The institutional Strategic/perspective plan is effectively deployed

The perspective/strategic plan of the institution since the 1st cycle of NAAC includes:

- Permanent affiliation and accreditation of all branches
- PG courses and research centers of all branches
- More foreign collaborations
- Establishing center of excellence
- Autonomy of the Institute

We would like to highlight the "Establishment of centre of excellence " as the successfully implemented activity based on the Perspective/Strategic Plan.

Power Quality and Energy Conservation Cell:-

The Department of Electrical Engineering established Power Quality and Energy Conservation Cell in the year 2017-18. Recently, Power Quality has gained a lot of importance in the industriesdue to increasinguse of sophisticated equipment in business, to increase efficiency, productivity etc. and industry needs expertise/consultancy to measure, understand and analyze Power Quality issues.

The important objectives of the PQ cell are

- 1. To impart PQ training to studentsas well industry,
- 2. To conduct Power Quality audits for industries,
- 3. To recommend techno economical solutions to solve the PQ related problems,
- 4. To develop energy/PQ monitoring systems,
- 5. To help industries to reduce their electricity bill.

PQ Cell has state of the art instruments to conduct the audits. Students as well as faculties are involved in all the activities. The major benefit to studentsis to get hands-on experience in the industries and increase the employability.

#### Outcomes: -

- 1. Total Consultancy amount earned 2017-18 to 2020-21 (till Oct 2020): Rs. 9,31,890/-.
- 2. Received Gridvis Software from Janitza GMBH Germany worth Rs. 4,00,000/- (5000 Euro)
- 3. Received UMG 512 Class A PQ Analyser from Janitza GMBH Germany worth Rs. 2,00,000/- (2400 Euro)
- 4. Total trainings to industries 14+.
- 5. In-house projects 03
- 6. Products developed 02

We have fivemore center of excellence

- IEEE HAC Affordable Agriculture Laboratory
- Texas Instruments Inovation Lab
- Emersion Centre of Excellence
- Forbes Marshal Center of Excellence
- AICTE Modrob Biomedical Instrumentation Laboratory

| File Description                                       | Documents        |
|--|------------------|
| Strategic Plan and deployment documents on the website | <u>View File</u> |
| Paste link for additional information                  | Nil              |
| Upload any additional information                      | <u>View File</u> |

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

Academic and Administrative set up and various bodies. The GB is the uppermost decision making body consisting of members of management, member secretary, distinguished members from the field of education and nominated faculty members. College Development Committee (CDC) includes members of management, member secretary, elected teaching staff, IQAC coordinator, elected non-teaching staff, alumni and student representatives. CDC provides inputs to the Chairman for all-round institutional development. All the stake holders of the organization are involved in the decision making and policy framing process.

The representatives of the management are the members of the CDC and Governing Body of the Institute who play the most significant role in designing, implementing and planning of its policies. The Management and the Principal ensure that the institution moves ahead with all the planning, to become one of the renowned institutions. The Leadership strives to empower society by providing dynamic education.

Some of the major policy decisions which reflect the effective and efficient functioning of the institutional bodies are as follows:

- 1. Permanent affiliation for all branches.
- 2. Accreditation of all branches.
- 3. Establishing centre of excellence.
- 4. Autonomy for the Institute.
- 5. PG course and research centre for all branches.
- 6. Foreign collaborations.
- 7. Research motivation scheme
- 8. Promotion of testing and consultancy activities
- 9. Cash awards for best teaching and non-teaching staff
- 10. Higher education promotion

These decisions, policies and planning are reviewed by CDC and GB. The CDC and GB are the statutory videos formed as per provisions of Statutory Regulatory Authorities (SRA). CDC and GB conduct regular meetings in order to have effective implementation of policies and to monitor the value addition in the Academic processes.

Action plans for implementation are prepared under the guidance of Principal and the Heads is the Department. These policies result in overall development of students. There are various Central committees in the Institute, the leaders of these

committees plan development activities and ensure their timely execution. IQAC monitors the functioning of all the committees relevant to Teaching-Learning, student enrichment and overall development of the Institute to identify areas of improvement and suggest necessary actions.

Appointment and service rules, procedures also reflect the effective and efficient functioning as stated below:

The institute follows the recruitment procedure prescribed by the affiliating university which is as given below:

- 1. Approval of roster for recruitment from the affiliating university.
- 2. Publishing advertisement in leading newspapers and Institute's Web site.
- 3. Conduction of interviews through the panel constituted by the affiliating university.
- 4. Issuing appointment orders and joining of the newly recruited teachers.

The institute follows similar procedure of recruitment mentioned above through a committee constituted by Management if the procedure of recruitment through University selection committee is likely to cause delays in appointment of teaching faculty, or to fill up the vacancies created on account of resignations tendered by existing staff, termination, or death of staff.

| File Description                              | Documents  |
|---|--|
| Paste link for additional information         | Nil  |
| Link to Organogram of the institution webpage | https://www.naac2021cycle2.aissmsioit.org/<br>Criterion6/6.2.2.pdf |
| Upload any additional information             | <u>View File</u>   |

| 6.2.3 - Implementation of e-governance in | в. | Any | 3 | of | the | above |
|---|----|-----|---|----|-----|-------|
| areas of operation Administration Finance |    |     |   |    |     |       |
| and Accounts Student Admission and        |    |     |   |    |     |       |
| Support Examination                       |    |     |   |    |     |       |

| File Description   | Documents        |
|--|------------------|
| ERP (Enterprise Resource Planning)Document   | <u>View File</u> |
| Screen shots of user inter faces   | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of implementation of e-<br>governance in areas of<br>operation, Administration<br>etc(Data Template) | <u>View File</u> |

#### **6.3 - Faculty Empowerment Strategies**

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

- 1. EPF: The Employee Provident Fund (EPF) is a scheme that helps people saves up a sufficient corpus for retirement. Institute contributes 12% of basic salary of all employees ascontributiontowardsEPF.
- 2. Gratuity: Gratuity is given by the Institute to all employees for the services rendered by him/her during the period of employment. It is usually paid at the time of retirement but can be paid earlier, provided certain conditions are met. As per the Gratuity Act, 1972, the formula for calculation of gratuity for employers covered under the law goes as follows -15 days of last drawn salary by an employee for each completed year of service rendered by him/her or partly completed with more than 6 months of service. It is further divided by 26.
- 3. Co-operative Credit Society: Started by the AISSM society for the welfare of all employees. The loan facilities are given to all employees working in the institute. Following two types of loans are available for the employees. The amount of Rs 1500 per month is deducted from the salary account of the permanent employees as the share to the Co-operative credit society. The dividend is also shared with all the employees every year.

Emergency Loan Facility: This type of loan is available for the emergency of the employee or his family as per the need arises. The maximum available loan amount is Rs 20,000 repayable in 10 months.

Ordinary Loan Facility: This type of loan is available for the employees as per the demand with low rate of interest. The

10-05-2022 08:25:23

maximum available loan amount is Rs 5 Lacs repayable in 5 years.

1. Group Insurance: The master group insurance policy was taken for all employees. Premium amount is deducted from the salaries of all employees. Upon the death of the member before retirement, following life insurance benefit is ensured.

Teaching faculty (Category I)-

Rs. 2, 00,000/-

Lab technician (Category II)-

Rs. 1, 40,000/-

Attendant (Category III) - Rs. 90,000/-

5) Uniform for class IV staff:

Uniforms are provided to all class IV staff twice in a year.

- 1. Maternity Leave:
- 6 Months maternity leaves are provided to women employee after completing probation of 2 years.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

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

03

| File Description   | Documents        |
|--|------------------|
| Upload any additional information  | <u>View File</u> |
| Details of teachers provided<br>with financial support to attend<br>conference, workshops etc<br>during the year (Data Template) | <u>View File</u> |

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

08

| File Description  | Documents        |
|---|------------------|
| Reports of the Human Resource<br>Development Centres<br>(UGCASC or other relevant<br>centres).  | No File Uploaded |
| Reports of Academic Staff<br>College or similar centers   | <u>View File</u> |
| Upload any additional information   | <u>View File</u> |
| Details of professional<br>development / administrative<br>training Programmes organized<br>by the University for teaching<br>and non teaching staff (Data<br>Template) | <u>View File</u> |

- 6.3.4 Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)
- 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

89

| File Description  | Documents        |
|---|------------------|
| IQAC report summary   | <u>View File</u> |
| Reports of the Human Resource<br>Development Centres<br>(UGCASC or other relevant<br>centers)     | No File Uploaded |
| Upload any additional information   | <u>View File</u> |
| Details of teachers attending professional development programmes during the year (Data Template) | <u>View File</u> |

#### 6.3.5 - Institutions Performance Appraisal System for teaching and non-teaching staff

#### Response:

The Institute has well defined Performance Based Appraisal System (PBA) for Teaching Staff and Evaluation system for non teaching staff.

1) Performance Based Appraisal System for Teaching Staff:

The Institute strictly follows all the essential recruitment and promotional policies as stipulated by Savitribai Phule Pune University, All India Council for Technical Education (AICTE) and Government of Maharashtra. Each and every faculty member completes the self-appraisal procedure every semester in the format prescribed by Savitribai Phule Pune University / AICTE.

Self-appraisal is done on the basis of the following points:

- 1. Teaching, Learning and Evaluation Related Activities:-
- Lectures, seminars, tutorials, and Practical Conducted
- Project guided
- Additional knowledge and resources provided
- Examination related work
- Academic Progress Record

- Students feedback
- Result analysis
- 1. Co-curricular, Extension and professional development related activities:-
  - Co-curricular Extension
  - Professional development related activities
  - Contribution to Corporate Life and Management of the Institution
- 2. Research, Publications and academic contributions
  - Publications-Papers in conference proceedings / workshops/ seminars / symposium, etc. and papers in journals, books, articles / chapters published in books.
  - Research guidance
  - Faculty development Programs attended / organized
  - Research Projects and Consultancies: ongoing projects/consultancies and completed projects/ consultancies.
- 3. Official conduct
- 4. Other relevant information

The HOD and the Principal reviews the performance appraisal of all the staff. It is obligatory for all the staff to qualify in the appraisal. This is used in deciding the regular increments, promotions and for regularizing the staff after probation period. The award for Best Teacher is also based on this score. Since last two years institute gives cash award to first three PBA toppers worth Rs. 50000/- and 25000/- and 15000/- respectively.

The performance based appraisal score of all the teaching and non

teaching staff members are put up in the CDC and GB meeting for discussing the rewards and punitive actions. The staff members who do not qualify minimum criteria are communicated by their respective HODs and a list of such staff members is sent to the management. The management then interacts one to one with these staff members and tries to figure out their problems, difficulties for improving their performance.

#### 2) Evaluation System for Non-Teaching Staff:

Evaluation System for non-teaching staff is monitored on the parameters like — work assigned and completed by staff, performance, length of the service etc. The Head of Department assesses the performance and the Principal reviews the remarks. The system is transparent. After the evaluation, concerned staff is directed for further improvements if required. Based on the reviews, the report is submitted to the management for further necessary action. Best performing staff members are given cash awards worth Rs 35000/- and 15000/- and 10000/-

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The Institute has a well-defined procedure to monitor effective and efficient utilization of available financial resources for infrastructure development and academic processes. Institute budget is prepared every year after compiling requirement regarding recurring and non-recurring expenditures.

All the major financial transactions are monitored by the by the college development committee (CDC) and Governing body (GB) which comprises of the Institute authorities and the Members of the Society. The budget is discussed in the CDC and GB of the Institute. The resolutions of the CDC and GB regarding approval for budget is forwarded to the Managing Committee and Governing Council of the society for Final Approval of the budget to be

spent during the academic year under various heads.

The society has constituted a separate purchase committee comprising of management members. The purchase procedure such as calling quotations, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources.

In addition to this, the account of each financial year of the Institute is audited by internal and external auditors. Thus the utilization of financial resources is monitored at two tier level.

Internal and external auditors are appointed by the AISSM Society. The internal and external audits are carried out in each half of the financial year.

The internal and external auditor appointed by the Society, executes the statutory audit. Statutory financial audit is conducted in two sessions, one in the month of October/November for the period of April to September and second in the month of April /May for the period of October to March. Finalization of the account is completed in June/July and audited statements are prepared in June/July duly signed by the Principal, and Chartered Accountant. This audited report is submitted by Chartered Accountant.

No major objections are found in the audit by the statutory auditors and minor audit suggestions are complied as per procedure.

The objection raised in the Internal and External audit reports are reviewed by the Management, Principal and Accountant, and the necessary compliances are carried out toward the fulfillment of the objections raised.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

## **6.4.2** - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

Page 154/178 10-05-2022 08:25:23

### 6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

#### 25.4

| File Description   | Documents        |
|--|------------------|
| Annual statements of accounts  | <u>View File</u> |
| Any additional information   | No File Uploaded |
| Details of Funds / Grants<br>received from of the non-<br>government bodies, individuals,<br>Philanthropers during the year<br>(Data Template) | <u>View File</u> |

#### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

#### Response:

The Institute has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purpose. This ultimately helps in realizing the Institute's Vision and Mission.

Institute has made the necessary provision in the account of books towards efficient use of available funds for each academic year. As per the guidelines of the Management and Principal, variance report of sanctioned budget and actual expenditure are regularly maintained.

Every year, the budget is prepared well in advance after taking into consideration the requirement of every Department. Each Department prepares the budget based on the requirement such as equipment, computer and consumables required for next academic session. Principal put up the budget in College Development Committee (CDC) and Governing Body (GB) meeting and after discussion and necessary corrections/modifications; College Development Committee and Governing Body recommends the budget for approval. The budget is reviewed by the management and approved after necessary changes. As and when required, the Institute makes a provision for advance additional fund. The Principal and the Head of Departments discuss the requirement and decide the priorities while allotting financial resources for various purposes; and also ensure optimum use of available financial resources. The College Development Committee and Governing body studies the annual expenditure, scrutinizes the

10-05-2022 08:25:23

budget and provides feedback for efficient use of financial resources. The Institute has standardized procedure for sanctioning of funds for various activities and also for settlement of advance and passing of bills for payment.

The Management has given complete support to Principal for organization of various co-curricular and extra-curricular activities like technical events, sponsoring of faculty and staff for various FDPs, skill development programs, providing financial support for attending conferences, workshops, pursuance of higher education etc. Financial support is also provided for participation of students at various national level events.

All the major financial transactions are monitored by the College Development Committee (CDC) and Governing body (GB) The budget is discussed in the meetings of CDC and GB of the Institute.

The resolutions of the CDC and GB regarding approval for budget are forwarded to the society for final approval of the budget.

The Society has constituted a separate purchase Committee comprising of Management representative, Principal and concerned staff. The purchase procedure such as calling quotation, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. The committee ensures that suitable equipment with right specification is procured at competitive and optimal prices.

| File Description                      | Documents |
|---------------------------------------|-----------|
| Paste link for additional information | Nil       |
| Upload any additional information     | View File |

#### **6.5 - Internal Quality Assurance System**

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

IQAC takes efforts to guide the teachers to focus on outcome based education by conducting session on

- Course Outcome(CO)formation, assessment and CO, PO attainment
- Quality of internal semester question papers, assignments

and evaluation

- Examination reform
- Product development
- Introduction and hands on training of LMS

The teachers discuss COs with students at the commencement of the course. Teachers identify the gaps between CO and PO to plan the activities to bridge them. IQAC has prepared and circulated standard formats for maintaining the relevant documentation.

Teachers use different T-L methodologies to motivate students to learn for higher retention of knowledge. For increased depth and developing positive attitude towards subjects teachers use methods such as active, collaborative, problem based, peer and experiential learning etc.

Academic monitoring committee looks after the attendance and conducts regular review meetings of guardian faculty members. Students with poor attendance are counselled to improve the attendance.

Teachers upgrade themselves through NPTEL course certifications. To motivate teachers for certifications, half amount of registration fees is reimbursed to those whose consolidated score is greater than 60%. Compensatory off is granted for preparation of the examination.

Research and Development (R&D)

R&D committee motivates teachers and students to participate in conferences, seminars, and technical competitions etc. Promotional policies such as marks in PBA for applying for research grants, relaxation in teaching load for research work, financial support to attend FDP/conferences and presenting proposals to funding agencies, financial rewards for quality publications etc. have been approved by CDC.

To promote testing and consultancy, revenue distribution policy has been approved by CDC.

Industry interaction

IQAC has initiated iConnect (Industry Institute Individual Connect) program for strengthening interaction between institute and industry which involves contribution by every individual teacher. Every faculty member connects with at least one industry

to organize visit/hands on training/expert lecture/internships/sponsored project/placements. It is made mandatory for third year students to undergo internship after the end sem. examination.

Training and placement (T&P)

Various value addition programs according to the need of the industry are organized regularly. IQAC initiated "Campus to Corporate Readiness Program" for employability skill development of the students to enhance the placement rate.

'Changing gears' initiative was organized in association with Forbes Marshall Pvt. Ltd. and CII for underprivileged students to inculcate English reading, writing, listening, and speaking skills for personality development and to improve employability skills.

#### Internal Academic Audit

IQAC conducts internal academic audit at the end of each semester to ensure all the academic processes are carried out regularly and documentation is maintained.

#### Reward system

In order to motivate and appreciate the work done by the teachers, non-teaching staff and students, IQAC organizes award function on the occasion of Teachers' Day every year. Cash awards of 50000/-, 25000/- and 15000/- are given to the winners. IQAC verifies the applications to analyze scores and announce the winners.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | <u>View File</u> |

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Internal Academic Audit (IAA)

IQAC conducts IAA at the end of each semester. All the teachers calculate the CO attainment of their respective course(s) and it is submitted to the departmental coordinator for calculation of PO attainment. The members of assessment committee check the CO and PO attainment documents during the IAA. If the attainment values of CO and PO are less than the set target then necessary actions are planned.

Assignments based on Bloom's Taxonomy

#### Bloom's Taxonomy helps

- to define measurable course outcomes
- students to better understand the questions and hence write the satisfactory answers
- teachers in assessment of course outcomes

The assignment questions are set based on the learning levels of Bloom's Taxonomy. Different weightages are assigned to learning levels for first year to final year courses. More weightage is given to the lower learning levels for first year courses, while weightages for higher levels go on increasing from second year onwards. This helps students to develop critical thinking which in turn makes them able to design solutions for complex engineering problems.

The institution has initiated separate Incubation and Entrepreneurship Development (ED) cell to encourage students and faculty members to explore their creative ideas and promote innovation. The students are encouraged to undertake design, fabrication and development projects and convert them into products. Total 39 students became entrepreneurs in last five years.

#### Outcomes:

- Runner up position in IEEE YESIST12 Innovation challenge at Stamford University, Thailand
- First prize in national level competition Mindspark
   Makeathon for innovative design and development of Smart
   Helmet.
- First prize in Hackathon 2020 for Developing a Software Tool to aid Search and Rescue by Calculating and Plotting Search Area from the Last Known Position of a Missing Aircraft.

- First prize in 6th National Level Technical Expo.
- Best paper award at 2nd IEEE International Conference on Emerging Smart Computing & Informatics ESCI 2020.
- Participation in technical competitions like Hackathon, DST & Texas instruments India innovation challenge design contest powered by AICTE, AVISKAR by SPPU etc.

Open Course Ware (OCW) module assignments

Students are asked to watch video lectures available on open course ware modules and write brief description of it in the prescribed format as an assignment. This improves the listening and writing skills of the students as well as inculcates habit of self-study which further increases their confidence. The effectiveness of OCW assignments is measured through noteworthy participation of students in paper publications, project competitions, and significant improvement in the placement.

iConnect - IQAC has initiated iConnect (Industry Institute Individual Connect) program for strengthening interaction between institute and industry which involves contribution by every individual teacher. Every faculty member connects with at least one industry to organize visit/hands on training/expert lecture/internships/sponsored project/placements. It is made mandatory for third year students to undergo internship after the end sem. examination.

Training and Consultancy -

To promote testing and consultancy, revenue distribution policy has been approved by CDC.

This has motivated teachers to undertake testing and consultancy.

Campus to Corporate Readiness Program (CCRP) - To inculcate employability skills in the students, various programs are conducted at institute level in collaboration with reputed industries like Forbes Marshall, Institute of Holistic Healing etc. CCRP has 4 levels starting from first year to final year to enhance the employability of students. It covers all the required skills such as aptitude, communication skills, personality development, resume writing, group discussion etc.

| File Description                      | Documents        |
|---------------------------------------|------------------|
| Paste link for additional information | Nil              |
| Upload any additional information     | No File Uploaded |

# 6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

B. Any 3 of the above

| File Description   | Documents   |
|--|---|
| Paste web link of Annual reports of Institution                                    | https://aissmsioit.org/wp-content/uploads/<br>2021/09/AISSMS-IOIT-Annual-<br>Report 2020-21 A.pdf |
| Upload e-copies of the accreditations and certifications                           | <u>View File</u>  |
| Upload any additional information  | No File Uploaded  |
| Upload details of Quality assurance initiatives of the institution (Data Template) | <u>View File</u>  |

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

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

To create awareness of gender equity in students & staff,
Institute provide equal opportunity to male & female staff and
students for all the activities & process which include
administrative, teaching, co-curricular, extracurricular, sports,
deputation to the courses, programs, higher studies,
appointments, committees, placements etc. Institute has taken
major initiative for the promotion of gender equity by providing
equal opportunity to male and female candidates in recruitment as

well as appointment of female candidate on various academic posts.

#### National Service Scheme:

The Institute organizes various programmes under the National Service Scheme (NSS) to sensitize students about gender equity. The boys and girls are the members of NSS. Every year, institute organizes seven days camp in one village in which male and female students attend the camp and equally participate in various activities.

Similarly, there is equal participation of female students in Unnat Bharat Abhiyan also.

Participation in co-curricular and extra-curricular activities:

Institute has taken initiative to promote gender equity among all students during formation of peer study groups as well as final year project group. Students are insisted to have minimum one girl student in each project group and peer study groups.

Institute is promoting all girl students to participate in various co-curricular and extra-curricular activities.

Institute organizes events like "Alacrity" Technical & Cultural Fest, Women's Day celebration, Shiv Jayanti Celebration and inter department sports competition to promote harmony & inclusion. Female students teams of the institute participate in various intercollegiate/university level tournaments. Institute always participates in state level drama competitions such as Firodiya and Purushottam Karandak with equal participation of female students.

Our institute shows a great concern in providing the diversified facilities in terms of the following:

- 1. Safety and Security
- 2. Counselling
- 3. Common room

#### Safety and Security:

The institute is emphasizing more on the safety and security of students and staff. Institute has made mandatory for everyone to wear i-cards daily in the college campus. At the entrance, there is strict security checks for all the persons. Institute has

installed CCTV cameras at different locations such as institute entrance, library, workshop, student section, all departments and parking. Security guards are available for twenty four hours at different places in campus. The contact numbers and toll free help line numbers of nearby police stations are displayed on notice boards and at strategic locations. Pick up and drop facility is available for girl students at the time of late night events such as Alacrity held in the institute.

#### Internal Complaints Committee:

Institute has formed the internal complaints committee (ICC) for female students and staff to address the issues related to gender and human rights. The committee mainly works for resolving various issues and problems raised by female students and staff as well.

#### Counselling:

Institute has allocated batch counsellors for female students who is responsible for monitoring academic and co-curricular performance of the students. Counsellor conducts one to one meetings with students to resolve their academic as well as personal issues. In case of issues related to femininity, the female students can discuss with female counsellor. In addition to this, professional counsellors are appointed at the institute level for addressing issues of female staffs and students.

#### Common Room:

Institute has allocated a common room for the girl students. It is equipped with necessary facilities such as bed, first aid box and wash basin with mirror etc. Sanitary napkin vending machines and incinerators are available in ladies toilets.

| File Description  | Documents  |
|---|--|
| Annual gender sensitization action plan   | https://aissmsioit.org/wp-content/uploads/<br>2021/06/calendar-year-20-21pdf     |
| Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%207/7.1.1.pdf |

Page 163/178 10-05-2022 08:25:23

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

#### A. 4 or All of the above

| File Description               | Documents        |
|--------------------------------|------------------|
| Geo tagged Photographs         | <u>View File</u> |
| Any other relevant information | <u>View File</u> |

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

The Institute is committed to create an eco-friendly campus. The campus is kept clean & tidy with full of greenery. The institute ensures the green environment by a dedicated team of gardeners to take care of lawns, gardens and planting maintenance. The Institute has conducted the Green Audit and strives to implement the suggestions. Institute practices the waste management including solid waste management, liquid waste management, E-waste management and hazardous chemicals waste management. Usage of plastic is banned in the college premises.

Solid waste management: Institute practices the segregation of Solid Waste and its effective management in the campus. The collected waste is segregated at the source of the generation. The separate bins for dry and wet waste are used. The dry waste bins are also placed in laboratories, library, classrooms, etc. The dry and wet waste is handed over to municipal waste collection agency for further treatment. Old newspapers, used papers and journal files, workshop scrap etc. are given for recycling to external agencies. Faculty members are instructed to reuse the single side used papers for writing and printing work. In order to dispose sanitary napkins institute has properly installed sanitary napkin incinerator machine.

Liquid waste management: All the toilets and bathrooms waste water lines are directly connected to the municipal drainage system. Wastewater from laboratories is treated through proposed novel cavitation. Well-constructed drainage system in the form of closed collection tanks prevail in our campus. The tanks are regularly cleaned by external agency to avoid stagnation of

#### water.

E-waste management: The institute has the write off policy for managing the E-waste. The institute has identified and appointed a vendor for managing E-waste. After complete inspection and verification, E-waste management is done by collecting all the electronic waste generated in the institute premises at a central storage space allocated for the same and sent for recycling through an E-waste management vendor. The cartridge of laser printers is refilled outside the college campus. UPS Batteries are recharged / repaired / exchanged by the suppliers.

The students are motivated to reuse the electronic components from the E-waste for their mini and major projects.

Hazardous waste management: As per the university structure and syllabus all the branches in the institute have only one subject on chemistry in their first year. The chemistry lab has limited quantity of hazardous chemicals which are properly stored and maintained.

| File Description   | Documents        |
|--|------------------|
| Relevant documents like<br>agreements / MoUs with<br>Government and other approved<br>agencies | <u>View File</u> |
| Geo tagged photographs of the facilities   | <u>View File</u> |

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

A. Any 4 or all of the above

| File Description                                  | Documents        |
|---|------------------|
| Geo tagged photographs / videos of the facilities | <u>View File</u> |
| Any other relevant information                    | <u>View File</u> |

#### 7.1.5 - Green campus initiatives include

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

A. Any 4 or All of the above

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

| File Description   | Documents        |
|--|------------------|
| Geo tagged photos / videos of the facilities                       | <u>View File</u> |
| Various policy documents / decisions circulated for implementation | <u>View File</u> |
| Any other relevant documents                                       | No File Uploaded |

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

| File Description  | Documents        |
|---|------------------|
| Reports on environment and energy audits submitted by the auditing agency | <u>View File</u> |
| Certification by the auditing agency                                      | <u>View File</u> |
| Certificates of the awards received                                       | No File Uploaded |
| Any other relevant information  | <u>View File</u> |

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment

A. Any 4 or all of the above

#### 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

| File Description   | Documents        |
|--|------------------|
| Geo tagged photographs / videos of the facilities                        | <u>View File</u> |
| Policy documents and information brochures on the support to be provided | <u>View File</u> |
| Details of the Software procured for providing the assistance            | No File Uploaded |
| Any other relevant information   | No File Uploaded |

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

Institute has taken following efforts /initiatives for providing inclusive environment to enhance harmony towards cultural regional, linguistic communal social economic and other diversities.

- Every year the institute prepares an academic calendar to keep students, faculty, and staff reminded of key dates throughout the academic semester and year. It can also be useful for prospective students, alumni, and parents as well. Academic calendar reflects information related to all major days (Like Teachers Day, Yoga Day, Shahu Jayanti, Shiv Jayanti etc.) which are celebrated at the institute level and all key dates which are important from the academic perspective.
- To celebrate multilingualism and cultural diversity as well as to promote equal use of all national languages throughout the Institution, we celebrate Marathi Diwas and Hindi Bhasha Diwas in our institute to cater linguistic diversity of our students. The aim of this celebration is to inform students about the history, culture and achievements associated with the language. The dayoften features book-reading events, quizzes, poetry and literature exchanges, and other activities that promote the language. The annual magazine of the institute, "Aayam" contains articles in different languages.

- The students of our institute along with faculty members actively help Warkaris during Palkhi celebration. They collect garbage and plastic waste during the procession (Dindi) from Pune to Pandharpur wherein more than five lakh devotees participate every year. They also distribute bio degradable plates among warkaris to keep Pune city clean and sanitized during Palkhi celebration.
- Every year, the National Service Scheme(NSS) unit of the institute organize a week long residential camp in rural areas. Students performs street plays during to make citizens aware of various social issues such as women empowerment, farmer suicide, female foeticide and gender equity etc.
- The institute always contributes at the time of natural disasters by providing financial help, supplying food items, and cloth donation to the people of affected area through NSS unit. Apart from that institute organize disaster management workshop with the support of National Disaster Response Force (NDRF), Fire and Security Association of India (FSAI) and municipal fire brigade to train students to deal with any natural calamity.
- To celebrate Women's day, the institute organize various lectures and sessions for women employees and students for increasing awareness related to women's rights, safety, security and health issues.
- To protect environment and to preserve our ecosystem institute routinely organize activities like fort conservation, tree plantation, riverside cleaning and traffic management. These activities protect our cultural heritage and make our students active citizen of Swachh Bharat Mission.
- Donating bloodis a great way of giving back to our community because there is a constant need for blood in blood banks. The institute organizes blood donation camps in every semester to motivate students and staff members to donate bloodvoluntarily.
- Student Development Organization (SDO) of college looks after the protection of rightsand supervises the development activities of the students. Board of Student Development (BSD) promotes and co-ordinates the different

students' activities for better corporate life. BSD tries to nurture students' mental, physical, cultural growth with various activities to improve their overall personality and to make them civilized Indian citizens to compete in the globalized world. The activities like Personality Development, Nirbhay Kanya Workshop, Disaster Management Workshop, Special Guidance Scheme, Earn and Learn Scheme etc. are carried out every year under SDO.

| File Description   | Documents        |
|--|------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | <u>View File</u> |
| Any other relevant information   | <u>View File</u> |

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

Institute has taken initiative to sensitize and inculcate values, rights, duties and responsibilities of citizens through activities mainly organized by National Service Scheme (NSS), Student Development/Welfare Organization (SDO/SWO), Internal Complaints Committee (ICC), Staff/Student Grievance committee, SC/ST/OBC Reservation Committee, Committee for students with disabilities, Anti-ragging committee, Discipline Committee and department.

Institute takes consistent effort to inculcate values among students. Institute always put best towards overall development of the students by organizing expert lecture on "Universal Human Values" in early days of their engineering education. Apart from technical subjects, students are asked to enroll for MOOCs courses which promote human values and ethics in them. FE students are engaged in the course "Ethics in Engineering Practices" which helps in the holistic development of the students. Throughout the year, NSS ensures to conduct activities such as visits to historical places, tree plantation, pollution awareness camps etc. in order to preserve national, social, environmental and historical values.

Institute creates awareness about human Rights as per constitution obligation. The preamble of constitution obligation

10-05-2022 08:25:23

is displayed in college corridor. The Board of Students' Development (BSD) looks after the protection of rights and supervises the Development activities of the students. Internal Complaints Committee (ICC) sensitizes about women rights and gender equity through various activities like "Abhivyakti". NSS and SDO/SWO units take remarkable efforts to celebrate Constitutional day. Voting awareness program is conducted to make students aware about voting rights and also help them to enroll their names in the voters' list.

Students and employees are sensitized about constitutional obligations related to duties and responsibilities through the activities like tree plantation, Swachh Bharat Abhiyan, computer literacy sessions, street plays on social issues, yoga and physical exercises, fort conservation, cloth donation, and volunteering during pilgrimage programs etc. NSS unit regularly organizes various activities and annual residential camp to sensitize students about social responsibility. It also extends support through Unnat Bharat Abhiyan in which students carry out the survey of socio economic problems of the rural areas. NSS and SDO/SWO units take remarkable efforts to celebrate Independence Day, Republic Day, Yoga day, Environment day, Teacher's day, and birth anniversaries of great national heroes etc. to revive the national spirit, duties and rights defined by the constitution.

All the departments actively organize social and techno-social visits. The objectives behind such activities are to make students aware of responsibilities towards environment, persons with disability, senior citizens and poor students by organizing social visits to old age homes, schools for blind, orphanages, etc.

| File Description   | Documents  |
|--|--|
| Details of activities that inculcate values; necessary to render students in to responsible citizens | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%207/7.1.9.pdf |
| Any other relevant information   | Nil  |

7.1.10 - The Institution has a prescribed code | A. All of the above of conduct for students, teachers, administrators and other staff and conducts

periodic programmes in this regard. The
Code of Conduct is displayed on the website
There is a committee to monitor adherence
to the Code of Conduct Institution organizes
professional ethics programmes for
students, teachers, administrators
and other staff 4. Annual awareness
programmes on Code of Conduct are
organized

| File Description   | Documents        |
|--|------------------|
| Code of ethics policy document   | <u>View File</u> |
| Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims | <u>View File</u> |
| Any other relevant information   | <u>View File</u> |

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

Institute celebrates/organizes various national and international commemorative days, events and festivals along with birth anniversaries of the great Indian personalities which are as follows:

Republic Day and Independence Day

Every year Institute celebrates Republic Day and Independence Day with great enthusiasm where all staff and students gather at one campus along with the office bearers. The program starts with flag hoisting by the chief guest; usually a personality from defense background is invited as a chief guest; followed by National Anthem and cultural programs.

Mahatma Gandhi birth anniversary

Institute celebrates Mahatma Gandhi Jayanti by paying tribute. The NSS unit organizes mass pledge in institute in accordance with the Prime Minister's urge for 'Swaachh Bharat Abhiyaan'.

Shahu Maharaj Jayanti

Chhatrapati Shahu Maharaj Jayanti program is organized every year by All India Shri Shivaji Memorial Society(AISSMS) in campus on 26th June. All the institutes under the ambit of AISSMS gather for the program wherein staff and students are felicitated for their remarkable achievements in academics and various activities.

#### Shivaji Maharaj Jayanti

Institute celebrates Chhatrapati Shivaji Maharaj Jayanti every year on 19th February. On this occasion rallies and tableaus are organized to commemorate our respect towards him. Students perform traditional "Dhol Vaadan" on this occasion.

#### Teachers' Day

Institute celebrates Teachers' Day every year on 05th September in remembrance of Dr. Sarvepalli Radhakhrishnan. Felicitation and awards are given to the teachers for excellent performance.

#### Engineers' Day

Every year, 15th September is celebrated as Engineers' Day in the honour of Bharat Ratna Mokshagundam Visvesvaraya. Institute organizes technical projects and poster competition related to the social issues and technical advancement.

#### National Science Day

Institute celebrates National Science Day every year on 28th February to mark the discovery of the Raman Effect by Indian physicist Sir C. V. Raman. Visit to Inter-University Centre for Astronomy and Astrophysics (IUCAA) and Science Park are organized. Guest speakers from industry and science laboratories are invited for their valuable knowledge and recent inventions.

#### International Yoga Day Celebration:

Institute celebrates International Yoga Day every year on 21st June. On this day students and staff members are motivated to perform yoga and other physical exercises. Expert talks are organized to create awareness of yoga.

#### Dr. Babasaheb Ambedkar Jayanti

Institute celebrates Dr. B.R. Ambedkar jayanti every year on 14th

April. A tribute is given to Dr. Ambedkar by conducting a cordial ceremony in his memory.

#### Hindi Bhasha Divas

Institute celebrates "Hindi Bhasha Divas" every year on 14th September. Various activities like essay writing competition, poetry recitation, idioms writing competitions etc. are conducted.

#### Marathi Bhasha Divas

Institute celebrates "Marathi Bhasha Divas" every year on 27th February to mark the birth anniversary of eminent Marathi Poet Kusumagraj aka V. V. Shirwadkar. A book exhibition on Marathi literature is organized in the library. Through different competitions Marathi language is promoted.

#### Akshay Urja Divas

Institute celebrates "Akshay Urja Divas" every year on 20th August to create awareness about development of renewable energy in India. Energy forms such as solar, wind, and hydropower are a few examples of renewable energy.

| File Description  | Documents        |
|---|------------------|
| Annual report of the celebrations and commemorative events for the last (During the year) | <u>View File</u> |
| Geo tagged photographs of some of the events  | <u>View File</u> |
| Any other relevant information  | No File Uploaded |

#### 7.2 - Best Practices

7.2.1 - Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

#### 1. Title: Virtual Lab

#### Objectives:

• To provide remote-access to Labs in various disciplines of Engineering.

- To enthuse students to perform experiments by arousing their curiosity.
- To make available a complete Learning Management System around the Virtual Labs.
- To share state of the art equipment and resources.

#### The context:

Physical distances and the lack of resources make us unable to perform experiments, especially when they involve sophisticated instruments. Also, good teachers are always a scarce resource. Web-based and video-based courses address the issue of teaching to some extent. Conducting joint experiments by two participating institutions and also sharing costly resources has always been a challenge. With the present day internet and computer technologies the above limitations can no more hamper students and researchers in enhancing their skills and knowledge. Also, in a country such as ours, costly instruments and equipment need to be shared with fellow researchers to the extent possible. Web enabled experiments can be designed for remote operation and viewing so as to enthuse the curiosity and innovation into students. This would help in learning basic and advanced concepts through remote experimentation. Today most equipment has a computer interface for control and data storage. It is possible to design good experiments around some of this equipment which would enhance the learning of a student. Internet-based experimentation further permits use of resources, knowledge, software, and data available on the web, apart from encouraging skillful experiments being simultaneously performed at points separated in space (and possibly, time).

#### This helps to

- practice more experiments for slow learners
- perform experiments beyond syllabus for advanced learners
- self-learning

#### The practice:

- Teacher uploads the semester planner at the beginning of the semester.
- Teacher informs students about the date and time as per schedule in the planner.
- Teacher explains the procedure of using Vlab. for his/her subject.
- Students perform experiment and fills the in-house

#### feedback.

#### Problem encountered and resource required:

- Students sometimes do not have enough IT resources at hand.
- High bandwidth internet connection is required.

#### Evidences of Success:

- Improvement in students' understanding of experiments.
- Improvement in practical and oral examination performance.
- This has helped students in learning basic and advanced concepts through remote experimentation.
- Joyful learning.

#### 2. Title: Multidimensional personality development Program

#### Objectives:

- To enhance the technical and verbal communication skills
- To make the students function effectively as an individual and as a member of team
- To make the students comprehend and demonstrate knowledge and understanding of engineering principles
- To appreciate and reward the participation of students
- To instill life long learning skills and realize the responsibility towards society.

#### The context

Along with academics, it required to groom the overall personality of the students .Taking this into consideration, the department has the Multidimensional Personality development program for the all round development of students. The program aims to enhance the different skills of the student such as communication skills , presentation skills , life long learning skills etc .The students are given exposure to various activities wherein they can participate and improve their skills .

#### The Practice:

• 50:10 Module: During a 60 minute lecture , 50 minutes are for teaching by the faculty member and 10 minutes are given to students to summarize the contents . This helps to improve the communication skills and confidence of the

#### students

- ELECTROFUNDA: Every year the contest named ELECTOFUNDA is organized wherein the students are asked to working team and demonstrate nay one principle of Electrical engineering. This improves the ability of student to work as group member. It also improves their presentation and communication skills.
- Energy Conservation Drive: The renewable energy club of the department organizes the Energy Conservation Drive ever year. The students visit the residential premises. schools, Ganpati pandals etc give information about the importance of energy conservation and use of renewable sources. By doing this drive they understand their responsibility as an engineer towards the society.
- Reward System: Anything Done good needs appreciation. The students are rewarded not only for their academic performance but for participation in various activities too. This boosts the overall moral of the students and they look forward for various activities
- Year Book Publication: Every year the department publishes the Year Book which has the records of all the activities of the organized by the department in the academic year. It also has all the details of the achievements of the faculty members as well the students

#### Problems Encountered

 A lot of motivation is required to be given to the students to participate in the activities,

#### Evidence of Success

- Significant improvement in the placement .
- Students are able to communicate effectively during seminar , project oral and practical examinations

| File Description                            | Documents   |
|---|---|
| Best practices in the Institutional website | https://naac2021cycle2.aissmsioit.org/AQAR<br>%202020-21/Criterion%207/Best%20Practices-<br>2020-21.pdf |
| Any other relevant information              | Nil   |

#### 7.3 - Institutional Distinctiveness

- 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words
- 1. The saga of Royal Heritage- All India Shri Shivaji Memorial Society, established in 1917, is a premier educational institution in Pune. It is founded by visionary Shri Shrimant Chattrapati Shahu Maharaj of Kolhapur to promote the noble cause of education. The foundation stone of AISSM Society was laid by the auspicious hands of his Royal Highness, the Prince of Wales on 19th November, 1921 in Pune. It was established with the welldefined objective to bring about holistic development of students and to create technically skilled manpower in various fields. It is a result-oriented Society dedicated to the noble cause of Military, General, Technical, and Management Education in India. It functions beyond race, caste, creed, religion political spirit. The Society Management is very pragmatic progressive. Since its inception in 1917, it has been the Society's endeavor to continuously improve its initiatives. Today the Society has made a huge foray into the noble field of education, meeting the all-around requirements on various fronts including emerging areas. For it is to succeed, we have preserved our royal heritage and also provided the most modern infrastructure to our institute. With its distinctive mission a history that has made it a leader in the field of education. Education today, not only focuses on imparting knowledge skills but also on the overall development of the students. With state-of-the-art infrastructure and dynamic faculty, ASSMS is marching ahead on all avenues of education right from primary schooling to specialized technical institutes. With this legacy of over 100 years we have enriched the educational scenario in the city by offering a rich heritage, quality education and a dynamic incubation cell for the young minds to perform experiment .
- 2. Location Privilege- Our institute is centrally located in the heart of the Pune city. The institute is just a few steps away from Pune Railway station and at a walking distance from the Bus Terminus. The Pune international airport is just 6 Km away. As it share close proximity with city center, it has an added advantage of location so it provides best connectivity in terms of all types of transport and easy access to students living in various parts of city. Apart from this it is convenient and time saving for all professional and experts from various industries to commute to institute for various activities like seminars,

10-05-2022 08:25:24

workshops and placement drives. The neighborhood of institute is surrounded by many industries and commercial buildings still it has green lavish campus with plenty of space for all cultural and sports activities. Our institute is also considered as first choice and most preferred location for organizing various pool campus and various competitive examinations. The institute has the vision to uplift common masses by rendering value added education. To achieve this institute is continuously working towards creating engineers receptive to the changing demands of the global market.

| File Description                             | Documents        |
|--|------------------|
| Appropriate web in the Institutional website | <u>View File</u> |
| Any other relevant information               | No File Uploaded |

#### 7.3.2 - Plan of action for the next academic year

#### Strategic Plan

- Curriculum enhancement in Autonomy status as per NEP 2020
- Enhancing Research, Testing and Consultancy
- Strengthening Foreign Collaborations
- Boosting of entrepreneurship and incubation