

#### FOR

# **1st CYCLE OF ACCREDITATION**

# GURU GOBIND SINGH COLLEGE OF ENGINEERING AND RESEARCH CENTRE, NASHIK

GURU GOBIND SINGH COLLEGE OF ENGINEERING AND RESEARCH CENTRE, KHALSA EDUCATIONAL COMPLEX, GURU GOBIND SINGH MARG, WADALA-PATHARDI ROAD, INDIRA NAGAR ANNEXE, NASHIK 422009 www.engg.ggsf.edu.in

Submitted To

#### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

#### BANGALORE

#### January 2019

## **<u>1. EXECUTIVE SUMMARY</u>**

#### **1.1 INTRODUCTION**

Guru Gobind Singh College of Engineering and Research Centre, Nashik (GCOERC) is pleased to present the Self Study report (SSR) to the National Assessment and Accreditation Council, Bengaluru. GCOERC is governed by Guru Gobind Singh Foundation, Nashik (GGSF).

**Guru Gobind Singh** Foundation was set up in 1978 by the prominent and illustrious Shikh residents of Nasik with the primary objective of providing quality education to the students irrespective of their caste, creed & religion so as to promote morality, patriotism, self-respect and self-confidence.

Foundation runs following institutes

- 1. Guru Gobind Singh Public School (GGSPS) -1978
- 2. Guru Gobind Singh Polytechnic (GGSP) –2001
- 3. Guru Gobind Singh College of Engineering and Research Centre, Nashik (GCOERC) 2013
- 4. Guru Gobind Singh Jr. College 2017

After making a name for itself in a period of four decades through its first institute 'GGSPS, GGSF decided to establish a polytechnic to cater the need of the society. The polytechnic was established with engineering branches viz. Civil Engineering, Computer Engineering, Electronics Engineering, Mechanical Engineering. In continuation with education and social responsibilities members of the foundations were agreed to establish an engineering college and it was established in the year 2013 It is affiliated to Savitribai Phule Pune University, Pune and approved by AICTE, New Delhi. Over the years, the institute has blossomed into leading engineering educational institutes with 3 undergraduate programs. Two batches passed out in the year 2016-17 and 2017-18.

With a strong industrial and technical support from the management members the institute has consistently taken efforts to establish strong teaching learning process. It is progressing under the guidance of Honbl President of the Foundation S. Gurdev Singh Birdi and the leadership of Chief Executive Officer of the Foundation Permindur Singh. Leadership belives that education has to be experiential i.e. student's curiosity should lead to exploration and implementation of ideas. Apart from it the students should be train both on hard and soft skills so as to make them employable.

#### Vision

An institute striving for excellence in providing Transformative Academic Education and Stimulating environment for Research to enhance skills for Developing Intellectuals and to Inculcate quality education with Social and Technical knowledge which will benefit the Society and Industrial Challenges.

#### Mission

• To be a Technical Educational Institute in transforming aspiring engineers through rigorous course

work and technical skills .

- To benchmark with the best global standards of quality education
- To enhance commitment of the faculty, staff and students by inculcating the spirit of inquiry, team work and professionalism
- Establish a Centre of Excellence to enhance academia-industry partnership, work on collaborative projects, and develop new products, services and patents.
- To develop globally competent students by enhancing indigenous technologies and inculcate entrepreneurship in them.

#### **1.2 Strength, Weakness, Opportunity and Challenges(SWOC)**

#### **Institutional Strength**

- Only private Engineering College in Nashik city, with Center of Excellence for Institute Industry Partnership) GCOERC-BOSCH and GCOERC-SIEMENS
- ISO 9001:2015 certified QMS Implementation that ensures effective processes monitoring through audits
- Excellent results of graduated batches Attracts Stake Holder
- Qualified and experienced faculty
- Customized ERP system for implementation of e-governance in the areas of Planning and Development, Administration, Admissions and the Examination for effective administration, data analysis and for collecting feedback.
- Student centric functioning with the help of mentoring and student counseling through teacher guardian.
- Overall development of students through their participation in co-curricular & curricular activities
- Curriculum enrichment through value added courses.

#### Institutional Weakness

- Low placement in core companies
- Less number of students progressing for higher education
- Less research publications in peer reviewed International Journals having high impact factor / IPR / Patents
- Scope for improving consultancy activity
- Being only 2 batches passed out less involvement of alumni and contribution of the alumnus
- Lower % of admission because of more number of colleges near by the city.

#### **Institutional Opportunity**

- Explore alumni involvement
- Explore the opportunities for placement activities and career guidance
- Exploring the opportunities for diversification of number of programs at UG level
- Exploring an opportunity for PG Program and Research Centre Approval
- Exploring an opportunity for Vocational Education and Training Courses
- Exploring an Opportunity for NBA accreditation

- Attracting the faculties at higher cadre of Associate Professor and Professor
- Encouraging faculties for higher education such as Ph.D & Post doctorates

#### **Institutional Challenge**

- Rigidity of academic structure & curriculum as an affiliating institute
- More number of engineering colleges in the city and its peripheral
- Improving research and consultancy (Recognition as PG Centre)
- Diverse academic backgrounds of students
- Managing the Pace with rapidly changing technologies
- Active E.D.C. (Entrepreneur Development Cell)

#### **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

Institute has been established in the year 2013 and is affiliated to Savitribai Phule Pune University, Pune. Since the institute is affiliated its engagement with curricular aspects is mainly in their implementation while participation in curriculum development is peripheral. It operationalize the curriculum within the overall frame work provided by the affiliating University. However excellent infrastructure, academic facilities and qualified faculty make the teaching learning effective in line with the institutes Vision and Mission. In the last five years institute has gone through the change of syllabus and structure from 2012 to 2015 pattern with a shift from Percentage evaluation to Credit base. In the past five years nearly 103 number of courses were newly introduced in the curriculum.

Institute adopts P-D-C-A (Plan Do Check Act) approach for the curriculum implementation. Institute develops the Academic Calendar covering all essential requirements. Accordingly each department plans their time tables and delivers the courses. Elective courses are run for all three programs at the final year of the engineering. Institute practices to calculate the attainment of course learning outcome by Direct and Indirect method. Direct attainment is based on semester end examination (SEE) and cumulative internal examination (CIE) which directly measure the achievement of expected outcomes.

Besides the regular academic activities, institute practices and integrates significant issues, like Gender Equality, Environment and Sustainability, Human Values and Professional Ethics through co-curricular and extra-curricular activities. Also cares for the value added courses that imparts transferable and life skills. Nearly 23 Value Added courses were conducted in the past five years that covers courses like Audit Courses, Soft Skills, Human Values, and Employability Skill Development. Other than regular curriculum, institute also organizes the courses like GENOSIS and Mahindra NANDI that ensures the training on soft skills and personality development. All round development of the student is ensured through various field projects and internship.

Since the institute is affiliated to the university academic flexibility in terms of the structural feedback from the stake holders for the designing and development of the syllabus is not evident

#### **Teaching-learning and Evaluation**

Management of the foundation works on the principal providing education to all irrespective of cast and religion. Continuing with the value of the foundation, institute takes efforts to serve students of different cast, religion, back grounds and abilities, through effective teaching-learning experiences. Process of admitting the students to programmes is through DTE which is the well administered mechanism, complying with all the norms of the state and central government. Average enrollment in the past five years is 41.33% at first year and 100% with lateral entry at second year. Institute is still in the budding phase and have only two batches graduated till today. More number of engineering institutes in city and the peripheral of the city is one of the other facilities for education and it is providing learners centered education through appropriate methodologies such as participative, experimental and collaborative learning to facilitate effective learning. This has made it one of the best upcoming institute in the city

Institute ensures its process of teaching through various learning methods and aids. Institute encourages students for industry sponsored projects, internships and value added training. Innovative teaching practices such as audio video presentations, simulation tools in classroom, virtual experimentation, use of models and charts, etc., allow students to learn at their own pace. Course outcomes (CO) for each course are decided and these are monitored through the academic diary maintain by each faculty. Academic Diary also monitors the teaching plan, results of internal and external evaluation, CO, PO attainments, etc. Departments are provided with facility of well equipped seminar halls, LCD projectors, and the LAN network with all class rooms. Teachers use their intranet login credentials for web based ICT enabled educational tools such as NPTEL videos / lecture series, Swayam Prabha an online satellite education system, etc. Training to teachers is given through various workshops, seminars, FDP's etc. Interaction with eminent personalities from various organization, institution and industry through expert talk ensures the exposure to technological advancement and innovations.

#### **Research, Innovations and Extension**

Being just an UG institute it has emphasis on taking up practical problems as topic for mini project and for final year projects, for study and solution under the guidance of faculty. Therefore, promoting research, believing that research and education go hand in hand. Institute received a grant of Rs. 3.90 Lakh for the development of GOKART and ATV an Innovative Sports Vehicle. Several partner industries and research institute has already signed for Memorandum of understanding; Fifteen MoUs were active in the last five years. Institute has already established a MICO-BOSCH and SIEMENS training center as a part of center of excellence with an investment of Rs. 1.25 Cr. In continuation with research involvement few faculties did their research and come-up with few good publications. To promote research among faculties institute had conducted workshops and seminars. Faculties are motivated to complete their PhD. There are five number of faculty with Ph.D qualification and 7 are pursuing PhD. Institute provides financial support to faculties for attending various workshops / seminars and conferences. Recently institute has signed MoU with Stalwarts Space Pvt Ltd. to establish an Incubation Centre. Institute follows Industry-Academia Practices and for such efforts nearly 37 activities were completed in last five years. Though institute is not running any PG course and Research Centre recognized from the statutory bodies, faculties are involved in publication.

The staff and the students of the institute are always ready to extend services in the neighborhood community. They are sensitized towards social issues and holistic development. Activities includes

• Joining hands with Municipal Corporation, Police Department, Nearby Grampanchayat, Govt. institutes like MERI, Nashik Engineering Cluster and industries.

- Public in general
- Celebration of birth anniversaries of National heroes.
- Camps on Blood donation,
- Environment conservation
- Campus and its Cleaning under Swachha Bharat Abhiyan

Various activities are conducted for sensitizing students towards community issues through institute social responsibility committee, NSS, and a Astha Forum, a group of students involved in social activities. These activities add to overall development of the students and nurture value education.

#### **Infrastructure and Learning Resources**

Institute provides required infrastructure and learning resources that are needed as per requirements of statutory and regulatory authorities. Institute has total built-up area of 15648 m2 on a land of 4 acres. Institute has sufficient space for all academic, administrative, co-curricular and extracurricular activities. Class rooms of each department are provided with all major resources and ICT facility for technical educations. Most of the Class Rooms and all Seminar halls are provided with LAN, Wi-Fi and LCD facilities. Institute has central Computer Lab and other computer labs with student computer ratio 5:1 Internet facility is available in the institute that has a bandwidth of 50 MBPS. Seminar Halls are equipped with audio and video facility. Workshop is provided with major machineries that not only satisfy the academic requirements but also useful for all type of infrastructure maintenance activities. Institute takes care to maintain infrastructure and all facilities in good condition by carrying out regular maintenance for which the necessary budget provisions is made in the institutes' budget. Annual maintenance contract for maintenance of Lift, Generator, Water purifier, fire hydrant system etc. are in place. Institute ensures that infrastructure in is comfortable for physically challenged students. Institute provides facility of ramp, wheel chair, separate toilets, lifts and rest room for such students. Separate Common room facility is provided for boys and girls. Institute provides potable water for 24 hrs through a central RO water purification plant and water coolers. Central medical room and sports facility is also provided.

Library most lively place on the campus providing a safe, comfortable and friendly environment that enables learning and advancement of knowledge, and promotes innovation. All its operations are computerized using ANANOSOFT EMS 2010 ERP Computing facility. Library follows open access system that allows users a direct access to the library collection. Library provides reference books, text books, non-technical books, Journal and e-learning resources. Institute is member of the National Digital Library (NDL) and DELNET. Library has rare books in digital form to its collection. For last three years. Online Public Access Catalogue is available on intranet and accessible throughout the campus.

#### **Student Support and Progression**

There are about 1194 students in the current academic year belonging to various cast, religion and financial background. All those students who are eligible for scholarships provided by the Government are helped to guide to file an application for grant of the scholarship and benefits of various schemes of the Government. Institute also provides scholarship to the needy students. Facilitating mechanisms like placement cell, internal complaint cell for the grievances, Women grievance cell, Anti-ragging sc&ST committee, minority committee etc. are established at the institute to help the students.

Students are supported and guided in preparing for the competitive exams. Counseling of the students is carried by the guardian teacher. T&P cell provides training and motivates the students for research and higher studies. Averagely, 23% percentage of students are benefited by guidance for competitive examinations and career counseling offered by the institution during the last five years. 37% of students of last two graduating batches were placed. Skill Development Centre established by the institute under industry institute partnership excellence centre have provided value added trainings to the students and nearly 750 students are so far.

Remedial lectures are conducted for low performing students. The institute encourages the students to participate in various cultural and sports event and strives to interact with alumni for their academic support. Being just two batches graduated so far the alumni contribution interms of financial support to institute is yet to begin. Institute has recently registered an alumni association in the year 2017. Thus the alumni association started its functioning very recently. This is the reason that the alumnus contribution is significantly low; however the institute has a confident that an active alumni association will definitely be the major contributor for students progression in near future. Apart from regular academic activities institute always plan and organize co curricular and extracurricular activities for holistic development of the student. Activities and practices which takes care of values, social responsibilities, good citizenship, patriotism are adopted by the institute.

#### **Governance, Leadership and Management**

The vision & mission of the institute is well articulated. The departments, in turn, have formulated their vision and mission in inline with the institute. The Board of Governance (BOG) gives general guidelines for appropriate governance to realize the vision. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process. All members of the institute have adequate autonomy in academic and administrative decision making. College Development Committee (CDC) ensures the inputs to the Board of Governance (BOG) through various reports, suggestions for a continual improvement. BOG monitor and evaluate academic and administrative processes and ensure the quality in education. Institutes CDC and BOG ensures the perspective plan is develop and implemented effectively. BOG also takes a review through meetings. The Members of the CDC and IQAC in presence of the Foundations Chief Executive Officers takes a review of various processes through weekly Friday meetings. Top management provides the necessary leadership, financial and administrative support to realize these policies.

The institute also believes that faculty and staff are its backbone and that the success of the institute depends on the quality of human resources. Therefore, the objectives of human resource management are focused on maximizing employee performance. Priority is given for recruitment of suitable, competent faculty, training them to meet their teaching objectives, helping them realize their potential, and counseling low performing faculty based on their performance appraisal.

Quality enhancement strategies like participation in orientation programs, seminars, refresher courses, faculty development programs, paper presentations in conferences, encouraging research etc. are implemented for faculty development.

Financial provisions are made for taking care of the infrastructure required for teaching-learning in the budget of institute. Systems are in place for ensuring that purchases are in compliance with given norms and the utilization of budget is optimal and effective. All finance and accounts are duly audited every year.

#### **Institutional Values and Best Practices**

Energy conservation activities pursued by institute, is a mark of our commitment to nurture and sustain the environment. Institute has received a grant of Rs. 5 Lakh from the University for Installation of roof top PV cell power generation unit of the capacity 20 kW. 32100 kWh of energy is met through the renewable energy sources against the total power requirement of 86100 kWh. About 33% of annual lightning power is met through the LED. The institute has adopted several energy saving measures like use of energy saving gadgets (Ex. AC and coolers) switching off the lights, fans and electronic equipment when not in use, switching off the inverter of UPS system after office hours, Switching of the main power supply for the building areas which are not in use at the night hours, use LED bulbs etc.

Rainwater harvesting is implemented with a desire to conserve water. If any Hazardous waste and e-waste are observed then they are managed carefully. For careful e-waste management institute had establish an MoU with Expert Trading Corporation, Nashik. Institute has purchased Fully Automatic Composting Machine. This machine is used to convert waste food from the canteen into the composter. Beautiful campus with sufficient plantation reduces carbon emission and keeps campus green and pollution free. Various other innovative measures have been undertaken such as counseling, Yoga and Meditation for both staff and students.

Following best practices adopted by the institute have contributed to better administration and academic functioning such as

- Professional Trainings
- Quality Management System ISO:9001:2015
- Customized ERP system
- Internships: a step towards preparing industry-ready human resource,
- GCOERC-SIEMENS collaboration: a step towards preparing industry-ready human resource
- GCOERC-BOSCH collaboration: a step towards preparing industry-ready human resource
- Role of an Engineer in the Society: Awareness and Practice through National Service Scheme (NSS).
- Industry institute interaction through MOU's with industries and professional bodie's
- Soft skill development training to students
- Skill development center under Pradhan Mantri Kaushalya Vikas Yojna (PKVY) through AICTE, New Delhi.

# <u>2. PROFILE</u>

#### **2.1 BASIC INFORMATION**

| Name and Address of the College |   |  |  |  |  |  |
|---------------------------------|---|--|--|--|--|--|
| Name                            | GURU GOBIND SINGH COLLEGE OF<br>ENGINEERING AND RESEARCH CENTRE,<br>NASHIK  |  |  |  |  |  |
| Address                         | GURU GOBIND SINGH COLLEGE OF<br>ENGINEERING AND RESEARCH CENTRE,<br>KHALSA EDUCATIONAL COMPLEX, GURU<br>GOBIND SINGH MARG, WADALA-PATHARDI<br>ROAD, INDIRA NAGAR ANNEXE, NASHIK |  |  |  |  |  |
| City                            | NASHIK  |  |  |  |  |  |
| State                           | Maharashtra   |  |  |  |  |  |
| Pin                             | 422009  |  |  |  |  |  |
| Website                         | www.engg.ggsf.edu.in  |  |  |  |  |  |

| Contacts for Communication |                        |                            |            |     |                               |  |  |  |  |
|----------------------------|------------------------|----------------------------|------------|-----|-------------------------------|--|--|--|--|
| Designation                | Name                   | Telephone with<br>STD Code | Mobile     | Fax | Email                         |  |  |  |  |
| Principal                  | NEELKANT<br>H G. NIKAM | 0253-2372766               | 9689908274 | -   | gcoerc.nashik@ggs<br>f.edu.in |  |  |  |  |
| IQAC<br>Coordinator        | MILIND S.<br>PATIL     | 0253-2372666               | 9422239228 | -   | milind.patil@ggsf.<br>edu.in  |  |  |  |  |

| Status of the Institution |                            |
|---------------------------|----------------------------|
| Institution Status        | Self Financing and Private |

| Type of Institution |              |  |  |  |  |
|---------------------|--------------|--|--|--|--|
| By Gender           | Co-education |  |  |  |  |
| By Shift            | Regular      |  |  |  |  |

| Recognized Minority institution            |    |  |  |  |
|--|----|--|--|--|
| If it is a recognized minroity institution | No |  |  |  |

| stablishment D  | etails   |  |  |                              |                              |                    |  |
|---|--|--|--|------------------------------|------------------------------|--------------------|--|
| ate of establishr   | nent of the college  |  | 0  | 1-01-20                      | )13                          |                    |  |
| University to v<br>college)   | vhich the college is   | s affili                                 | ated/ or whic  | ch gove                      | erns the                     | college (if        | it is a constituent  |
| State   |  | University name                          |  |                              |                              | Docum              | ent  |
| Maharashtra   |  | Savitribai Phule Pune University         |  |                              | View D                       | <u>Document</u>    |  |
| Details of UG(  | Crecognition   |  |  |                              | 1                            |                    |  |
| Under Section   | r Section Date   |  |  | View Document                |                              |                    | ument  |
| 2f of UGC   |  |  |  | -                            |                              |                    |  |
| 12B of UGC  |  |  |  |                              |                              |                    |  |
| Details of reco<br>AICTE,NCTE<br>Statutory<br>Regulatory<br>Authority | gnition/approval k<br>,MCI,DCI,PCI,RO<br>Recognition/<br>roval details<br>itution/Depa | oy stat<br>CI etc<br>App<br>Inst<br>rtme | tionary/regul<br>(other than U<br>Day,Month<br>year(dd-mn<br>yyyy) | atory l<br>JGC)<br>and<br>n- | oodies li<br>Validi<br>month | ike<br>ty in<br>Is | Remarks  |
|   | nt programm  | ne                                       | 55557  |                              |                              |                    |  |
| AICTE   | View Docume  | <u>ent</u>                               | 04-04-2018   |                              | 12                           |                    | Extension of<br>approval for the<br>current academic<br>year |

| Details of autonomy  |    |
|--|----|
| Does the affiliating university Act provide for<br>conferment of autonomy (as recognized by the<br>UGC), on its affiliated colleges? | No |

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

| Location and Area of Campus |                    |           |                         |                          |  |  |  |  |  |  |
|-----------------------------|--------------------|-----------|-------------------------|--------------------------|--|--|--|--|--|--|
| Campus Type                 | Address            | Location* | Campus Area<br>in Acres | Built up Area in sq.mts. |  |  |  |  |  |  |
| Main campus                 | GURU GOBIND SINGH  | Urban     | 4.099                   | 15648                    |  |  |  |  |  |  |
| area                        | COLLEGE OF         |           |                         |                          |  |  |  |  |  |  |
|                             | ENGINEERING AND    |           |                         |                          |  |  |  |  |  |  |
|                             | RESEARCH CENTRE,   |           |                         |                          |  |  |  |  |  |  |
|                             | KHALSA EDUCATIONAL |           |                         |                          |  |  |  |  |  |  |
|                             | COMPLEX, GURU      |           |                         |                          |  |  |  |  |  |  |
|                             | GOBIND SINGH MARG, |           |                         |                          |  |  |  |  |  |  |
|                             | WADALA-PATHARDI    |           | 1 No.                   |                          |  |  |  |  |  |  |
|                             | ROAD, INDIRA NAGAR |           |                         |                          |  |  |  |  |  |  |
|                             | ANNEXE, NASHIK     |           |                         |                          |  |  |  |  |  |  |
|                             |                    |           |                         |                          |  |  |  |  |  |  |

#### **2.2 ACADEMIC INFORMATION**

| Details of Programmes Offered by the College (Give Data for Current Academic year) |                                  |                       |  |                          |                        |                               |  |  |  |
|--|----------------------------------|-----------------------|--|--------------------------|------------------------|-------------------------------|--|--|--|
| Programme<br>Level   | Name of Pr<br>ogramme/C<br>ourse | Duration in<br>Months | Entry<br>Qualificatio<br>n   | Medium of<br>Instruction | Sanctioned<br>Strength | No.of<br>Students<br>Admitted |  |  |  |
| UG   | BE,Civil<br>Engineering          | 48                    | Passed HSC<br>or its<br>equivalent<br>examination<br>with Physics<br>and<br>Mathematics<br>as<br>Compulsory<br>Subjects and<br>obtained at<br>least Fifty<br>Percent<br>Marks and<br>Obtained<br>score in CET<br>conducted by<br>the<br>Competent<br>Authority | English                  | 120                    | 43                            |  |  |  |
| UG   | BE,Electrical                    | 48                    | Passed HSC   | English                  | 60                     | 34                            |  |  |  |

|    | Engineering                      |    | or its<br>equivalent<br>examination<br>with Physics<br>and<br>Mathematics<br>as<br>Compulsory<br>Subjects and<br>obtained at<br>least Fifty<br>Percent<br>Marks and<br>obtained<br>score in CET<br>conducted by<br>the<br>Competent<br>Authority               |         |     |    |
|----|----------------------------------|----|--|---------|-----|----|
| UG | BE,Mechani<br>cal<br>Engineering | 48 | Passed HSC<br>or its<br>equivalent<br>examination<br>with Physics<br>and<br>Mathematics<br>as<br>Compulsory<br>Subjects and<br>obtained at<br>least Fifty<br>Percent<br>Marks and<br>obtained<br>score in CET<br>conducted by<br>the<br>Competent<br>Authority | English | 120 | 66 |

Position Details of Faculty & Staff in the College

| Teaching Faculty   |       |        |        |       |                     |        |        |       |                     |        |        |       |
|--|-------|--------|--------|-------|---------------------|--------|--------|-------|---------------------|--------|--------|-------|
|  | Profe | essor  |        |       | Associate Professor |        |        |       | Assistant Professor |        |        |       |
|  | Male  | Female | Others | Total | Male                | Female | Others | Total | Male                | Female | Others | Total |
| Sanctioned by the<br>UGC /University<br>State<br>Government                  |       |        |        | 6     |                     |        |        | 13    |                     |        |        | 41    |
| Recruited  | 2     | 0      | 0      | 2     | 2                   | 0      | 0      | 2     | 29                  | 12     | 0      | 41    |
| Yet to Recruit   |       |        |        | 4     |                     |        |        | 11    | 1                   |        |        | 0     |
| Sanctioned by the<br>Management/Soci<br>ety or Other<br>Authorized<br>Bodies |       |        |        | 0     |                     |        |        | 0     | J                   |        |        | 15    |
| Recruited  | 0     | 0      | 0      | 0     | 0                   | 0      | 0      | 0     | 10                  | 5      | 0      | 15    |
| Yet to Recruit   |       |        |        | 0     |                     |        |        | 0     |                     |        |        | 0     |
|  |       |        |        |       |                     |        |        |       |                     |        |        |       |

| Non-Teaching Staff   |      |        |        |       |  |  |  |
|--|------|--------|--------|-------|--|--|--|
|  | Male | Female | Others | Total |  |  |  |
| Sanctioned by the<br>UGC /University State<br>Government                 |      | 2      |        | 0     |  |  |  |
| Recruited  | 0    | 0      | 0      | 0     |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |      |        |        | 20    |  |  |  |
| Recruited  | 14   | 6      | 0      | 20    |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |

| Technical Staff  |      |        |        |       |  |  |  |
|--|------|--------|--------|-------|--|--|--|
|  | Male | Female | Others | Total |  |  |  |
| Sanctioned by the<br>UGC /University State<br>Government                 |      |        |        | 0     |  |  |  |
| Recruited  | 0    | 0      | 0      | 0     |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |      |        | ~      | 10    |  |  |  |
| Recruited  | 9    | 1      | 0      | 10    |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |

#### **Qualification Details of the Teaching Staff**

|                              | Permanent Teachers |                     |        |                     |        |        |      |        |        |       |
|------------------------------|--------------------|---------------------|--------|---------------------|--------|--------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n |                    | Associate Professor |        | Assistant Professor |        |        |      |        |        |       |
|                              | Male               | Female              | Others | Male                | Female | Others | Male | Female | Others | Total |
| D.sc/D.Litt.                 | 0                  | 0                   | 0      | 0                   | 0      | 0      | 0    | 0      | 0      | 0     |
| Ph.D.                        | 2                  | 0                   | 0      | 2                   | 0      | 0      | 0    | 0      | 0      | 4     |
| M.Phil.                      | 0                  | 0                   | 0      | 0                   | 0      | 0      | 0    | 0      | 0      | 0     |
| PG                           | 0                  | 0                   | 0      | 0                   | 0      | 0      | 39   | 17     | 0      | 56    |

| <b>Temporary Teachers</b>    |           |        |                     |      |                     |        |      |        |        |       |
|------------------------------|-----------|--------|---------------------|------|---------------------|--------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n | Professor |        | Associate Professor |      | Assistant Professor |        |      |        |        |       |
|                              | Male      | Female | Others              | Male | Female              | Others | Male | Female | Others | Total |
| D.sc/D.Litt.                 | 0         | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| Ph.D.                        | 0         | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| M.Phil.                      | 0         | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| PG                           | 0         | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |

| Part Time Teachers           |                          |        |                     |      |                     |        |      |        |        |       |
|------------------------------|--------------------------|--------|---------------------|------|---------------------|--------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n | est Professor<br>ficatio |        | Associate Professor |      | Assistant Professor |        |      |        |        |       |
|                              | Male                     | Female | Others              | Male | Female              | Others | Male | Female | Others | Total |
| D.sc/D.Litt.                 | 0                        | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| Ph.D.                        | 0                        | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| M.Phil.                      | 0                        | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |
| PG                           | 0                        | 0      | 0                   | 0    | 0                   | 0      | 0    | 0      | 0      | 0     |

| Details of Visting/Guest Faculties |                       |   |   |   |  |
|------------------------------------|-----------------------|---|---|---|--|
| Number of Visiting/Guest Faculty   | MaleFemaleOthersTotal |   |   |   |  |
| engaged with the college?          | 0                     | 0 | 0 | 0 |  |

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

| Programme |        | From the State<br>Where College<br>is Located | From Other<br>States of India | NRI Students | Foreign<br>Students | Total |
|-----------|--------|---|-------------------------------|--------------|---------------------|-------|
| UG        | Male   | 876   | 7                             | 0            | 0                   | 883   |
|           | Female | 308   | 3                             | 0            | 0                   | 311   |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |

| Programme |        | Year 1 | Year 2 | Year 3 | Year 4 |
|-----------|--------|--------|--------|--------|--------|
| SC        | Male   | 87     | 58     | 65     | 26     |
|           | Female | 43     | 31     | 21     | 6      |
|           | Others | 0      | 0      | 0      | 0      |
| ST        | Male   | 30     | 16     | 18     | 7      |
|           | Female | 11     | 5      | 3      | 2      |
|           | Others | 0      | 0      | 0      | 0      |
| OBC       | Male   | 378    | 303    | 283    | 158    |
|           | Female | 119    | 89     | 71     | 18     |
|           | Others | 0      | 0      | 0      | 0      |
| General   | Male   | 233    | 218    | 212    | 148    |
|           | Female | 69     | 55     | 50     | 29     |
|           | Others | 0      | 0      | 0      | 0      |
| Others    | Male   | 100    | 84     | 65     | 36     |
|           | Female | 45     | 25     | 24     | 9      |
|           | Others | 0      | 0      | 0      | 0      |
| Total     |        | 1115   | 884    | 812    | 439    |

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

# 3. Extended Profile

#### 3.1 Program

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

| Response: 346 | File Description                        | Document      |
|---------------|---|---------------|
|               | Institutional Data in Prescribed Format | View Document |

#### Number of programs offered year-wise for last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 3       | 3       | 3       | 3       | 3       |

#### **3.2 Students**

#### Number of students year-wise during the last five years

| 2017-18                                 | 2016-17 | 2015-16 |               | 2014-15 | 2013-14 |  |
|---|---------|---------|---------------|---------|---------|--|
| 1115                                    | 884     | 812     |               | 439     | 170     |  |
| File Description                        |         |         | Docur         | nent    |         |  |
| Institutional Data in Prescribed Format |         |         | View Document |         |         |  |

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

| 2017-18                                 | 2016-17 | 2015-16 |               | 2014-15 | 2013-14 |
|---|---------|---------|---------------|---------|---------|
| 112                                     | 137     | 130     |               | 112     | 112     |
| File Description                        |         |         | Docur         | nent    |         |
| Institutional Data in Prescribed Format |         |         | View Document |         |         |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 206     | 176     | 1       | 1       | 1       |

| File Description                        | Document      |
|---|---------------|
| Institutional Data in Prescribed Format | View Document |

#### **3.3 Teachers**

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

| 2017-18                                 | 2016-17 | 2015-16  |          | 2014-15 | 2013-14 |
|---|---------|----------|----------|---------|---------|
| 80                                      | 80      | 60       |          | 40      | 20      |
| File Description                        |         | Document |          |         |         |
| Institutional Data in Prescribed Format |         | View     | Document |         |         |

#### Number of sanctioned posts year-wise during the last five years

| 2017-18                                 | 2016-17 | 2015-16 |          | 2014-15 | 2013-14 |  |
|---|---------|---------|----------|---------|---------|--|
| 80                                      | 80      | 60      |          | 40      | 20      |  |
| File Description                        |         | Docum   | nent     |         |         |  |
| Institutional Data in Prescribed Format |         | View    | Document |         |         |  |

#### **3.4 Institution**

#### Total number of classrooms and seminar halls

**Response: 26** 

Number of computers

Response: 250

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 235.44  | 299.32  | 255.28  | 173.61  | 108.48  |

### 4. Quality Indicator Framework(QIF)

#### **Criterion 1 - Curricular Aspects**

#### **1.1 Curricular Planning and Implementation**

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

#### **Response:**

The Institute is affiliated to Savitribai Phule Pune University, Pune (SPPU). The curriculum is designed by the SPPU. In the last five years institute has gone through the change of syllabus and structure from 2012 to 2015 pattern and Percentage evaluation change with Credit base. The examination scheme is specified by the university for theory, term work, oral and practical.

Institute practices to calculate the attainment of course learning outcome by Direct and Indirect method. Direct attainment is based on semester end examination (SEE) and cumulative internal examination (CIE) which directly measure the achievement of expected outcomes. The SEE is grounded on the university examination result and cognitive dimensions are considered for CIE assessment.

Apart from institute ensures effective curriculum delivery through following aspects:

#### Academic Calendar of Department

At the end of the semester affiliating university (SPPU) disseminates academic calendar for the forthcoming semester. Head of the Department prepares departmental academic calendars in line university academic calendar to achieve their program objectives. The departmental academic calendar forms the basis for the effective curriculum planning and implementation.

#### **Teaching Load Distribution (Subject choice and load distribution)**

At the end of the semester, teaching faculties are asked to submit the choice of the subjects along with preference for forthcoming semester. A subject distribution meeting of faculties is conducted by the HOD. Utmost care is taken about balance of subject choice and individual expertise. Accordingly time tables are prepared for smooth academic conduction.

#### **Course File and Teaching Plan of all faculties**

Every course teacher prepares his course file for the allotted course / courses. A course file in the form of Academic Diary includes Course Structure, Syllabus, Teaching Plan, Instruction and learning Material and other relevant documents.

#### Expert Talks and Industry visits organized by Department

To ensure practical applications and fundamental knowledge related to the course or to bridge the gap, industrial visits and expert lectures are arranged as per the academic calendar.

#### **Co-Curricular Activities Organized by the Department**

Department arranges various co-curricular and extracurricular activities based on leadership skill, event management, professional ethics, etc. Students Association organizes various annual activities like ANANT, CHECKMECH, and TECHNOVOLT. Department also encourages the student for outside participation.

#### **Examples of Academic Monitoring through ERP**

Institute practices e-governance system through ERP, which helps for the Planning and development of Academic, Accounts, Administration, Admissions etc. It maintains the data and generates reports as per requirements. The academic reports like attendance, students' feedback, syllabus status, lecture report, student absent report etc. are generated for strengthening the academic. It also facilitates to communicate the absenteeism intimation of student to the parents through SMS.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### **Response:** 0

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 00      | 00      | 00      | 00      | 00      |

| File Description                            | Document      |
|---|---------------|
| Details of the certificate/Diploma programs | View Document |

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

Response: 33.93

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10      | 07      | 02      | 00      | 00      |

| File Description                                       | Document      |
|--|---------------|
| Details of participation of teachers in various bodies | View Document |
| Any additional information                             | View Document |

#### **1.2 Academic Flexibility**

| <b>1.2.1 Percentage of new Courses introduced out offered during last five years</b> | of the total number of courses across all Programs                     |  |  |  |  |
|--|--|--|--|--|--|
| Response: 29.77  | Response: 29.77  |  |  |  |  |
| 1.2.1.1 How many new courses are introduced with                                     | 1.2.1.1 How many new courses are introduced within the last five years |  |  |  |  |
| Response: 103  |  |  |  |  |  |
| File Description   | Document   |  |  |  |  |
| Minutes of relevant Academic Council/BOS meetings.                                   | View Document  |  |  |  |  |
| Details of the new courses introduced  | View Document  |  |  |  |  |

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

Response: 100

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

Response: 3

| File Description                                   | Document      |
|--|---------------|
| Name of the programs in which CBCS is implemented  | View Document |
| Minutes of relevant Academic Council/BOS meetings. | View Document |

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

Response: 16.54

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-

wise during the last five years

|              | 2017-18   | 2016-17                                      | 2015-16     |                 | 2014-15          | 2013-14 |  |
|--------------|---|--|-------------|-----------------|------------------|---------|--|
|              | 778   | 84   | 15          |                 | 07               | 00      |  |
|              |   |  |             |                 |                  |         |  |
|              |   |  |             |                 |                  |         |  |
| F            | ile Description   |  |             | Docun           | nent             |         |  |
| F<br>C<br>to | ile Description<br>etails of the studer<br>certificate/Diplon | nts enrolled in Subjec<br>na/Add-on programs | ets related | Docun<br>View I | nent<br>Document |         |  |

#### **1.3 Curriculum Enrichment**

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

**Response:** 

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

Institute practice and integrate significant issues, like Gender Equality, Environment and Sustainability, Human Values and Professional Ethics through co-curricular and extra-curricular activities.

#### Gender Issues:

Women's Grievance Cell is established to sensitize the students and employees on gender issues and make them aware about various implications of gender discrimination.

Activities like seminars, expert lectures, etc. on gender sensitization are organized periodically to enable students to interface with real life situations. These activities create a congenial working environment. Institution abides to the gender wise admissions process of Directorate of Technical Education, Maharashtra and recruitment as per norm set by competent authority.

#### **Environment and Sustainability (E&S)**:

As a conscious effort and contribution towards green environment awareness, institute encourages students to adopt go green methods. Sustainability is achieved by reducing e-waste, implementing green technologies, adopting energy efficient and effective technologies.

The university curriculum provides necessary inputs about the basic components of environment and their application in various fields through course like Environmental Engineering, Energy Audit and Management. These deals with parameters such as pollution of water, air, thermal, noise, their treatment and abetment technologies, design of water supply scheme, energy sources and its conservation.

In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures, industrial visits and field excursions,Tree Plantation Programs, Gram Swachata Abhiyan (through NSS programs) are organized for students. The final year students are also encouraged to take projects which address environmental issues.

#### Human Values:

Students are imparted with human values, communication skills, professional ethics through courses introduced by the university like soft skill, employability skill development, etc. Specialized expert lectures, training courses are additional co-curricular activities conducted in the institute to practice and develop their personalities.

The institute takes additional efforts through extracurricular activities like blood donation camps, digital technology awareness for making students sensitive towards human values. To understand the role models of human values and social ethics institute regularly celebrates programs like Republic Day, Independence Day and Anniversaries of great personalities.

Institute focuses on various the cross cutting issues of gender equality, environment and sustainability and human values through university curriculum and is integrated with institutional practices. Institutional practices are carried out through the National Service Scheme (NSS), Training and Placement (T&P), Institutional Social Responsibilities (ISR), etc.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### **Response:** 28

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

Response: 28

| File Description  | Document      |
|---|---------------|
| Details of the value-added courses imparting transferable and life skills | View Document |
| Brochure or any other document relating to value added courses.           | View Document |
| Any additional information  | View Document |

#### **1.3.3** Percentage of students undertaking field projects / internships

| Response: 18.21                                       |                |
|---|----------------|
| 1.3.3.1 Number of students undertaking field projects | or internships |
| Response: 203   |                |
| File Description                                      | Document       |
| List of students enrolled                             | View Document  |
| Institutional data in prescribed format               | View Document  |
| Any additional information                            | View Document  |

#### **1.4 Feedback System**

| 1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and<br>5)Parents for design and review of syllabus-Semester wise/ year-wise<br>A.Any 4 of the above |               |  |
|--|---------------|--|
| B.Any 3 of the above   |               |  |
| C. Any 2 of the above  |               |  |
| D. Any 1 of the above  |               |  |
| <b>Response:</b> A.Any 4 of the above  |               |  |
| File Description   | Document      |  |
| URL for stakeholder feedback report  | View Document |  |

# 1.4.2 Feedback processes of the institution may be classified as follows: A. Feedback collected, analysed and action taken and feedback available on website B. Feedback collected, analysed and action has been taken C. Feedback collected and analysed D. Feedback collected Response: C. Feedback collected and analysed File Description Document URL for feedback report



#### **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

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

#### Response: 1.45

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 9       | 10      | 13      | 6       | 4       |

| File Description                              | Document      |
|---|---------------|
| List of students (other states and countries) | View Document |
| Institutional data in prescribed format       | View Document |
| Any additional information                    | View Document |

#### **2.1.2** Average Enrollment percentage (Average of last five years)

#### Response: 41.33

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 142     | 79      | 140     | 89      | 170     |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 300     | 300     | 300     | 300     | 300     |

| File Description                        | Document      |
|---|---------------|
| Institutional data in prescribed format | View Document |
| Any additional information              | View Document |

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

#### Response: 70.5

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 99      | 52      | 99      | 58      | 110     |

| File Description                        | Document      |
|---|---------------|
| Institutional data in prescribed format | View Document |
| Any additional information              | View Document |

#### **2.2 Catering to Student Diversity**

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

#### **Response:**

We have a streamlined mechanism for continuous monitoring and evaluation of the students. We are considering following factors for identifying the level of students. This system helps to identify slow learners & advance learners.

#### Students are identified based on:

1.10th Class %
 2.12th Class %
 3.12th PCM Score
 4.CET / JEE
 5.General Ability Test

#### **Rating**:

Average of all above is calculated based 10 point scale. Rating is then done on the basis of 10 point score

#### **Strategies for identifying learners:**

An Induction program is organized for newly admitted first year students and they are introduced to the engineering curriculum. The Principal, academic dean and HODs address the students and clarify their doubts regarding the engineering education. The staff members engage into positive interactions with the

students and get to know their family and educational background.

The students are categorized on the basis of their performance in 10th, 12th, CET/JEE & General Ability test. Students are divided in three categories viz. A (Fast Learners), B (Average Learners) and C (Slow Learners) Divisions are formed according to this strategy only. However sometimes we may used to form the division by mixing slow learners and fast learners.

The advanced learners are those students who have higher scores in 10th, 12th, CET/JEE & General Ability test while the students with average/less than average scores are categorized as slow learners.

A revision of the basic principles of the subjects such as Physics, Chemistry, Mathematics is done by the respective faculty before teaching the engineering curriculum. The faculty interact informally with the students during the revision sessions so as to make them comfortable, thus creating a positive atmosphere for learning which is necessary specially for slow learners. The progress of the students is monitored by the faculty during the laboratory sessions as well. The learning level of students from higher classes is judged from the analysis of the results of the university examination. The top scorers are identified as advanced learners. They are encouraged to participate in technical competitions that are organized in-house as well as outside of the Institute. The slow learners write additional assignments given by the subject teachers so that they get adequate practice before the examination. Special attention is provided to slow learners when the students work on machines during machine shop practical's.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

| 2.2.2 Student - Full time teacher ratio                              |               |  |  |  |
|--|---------------|--|--|--|
| Response: 13.94  |               |  |  |  |
| 2.2.3 Percentage of differently abled students (Divyangjan) on rolls |               |  |  |  |
| Response: 0.18   |               |  |  |  |
| 2.2.3.1 Number of differently abled students on rolls                |               |  |  |  |
| Response: 2  |               |  |  |  |
| File Description   | Document      |  |  |  |
| List of students(differently abled)                                  | View Document |  |  |  |
| Institutional data in prescribed format                              | View Document |  |  |  |
| Any additional information   | View Document |  |  |  |

#### **2.3 Teaching- Learning Process**

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

#### **Response:**

As an engineering education institute we adopted an outcome based education (OBE) program with the vision of NBA accreditation in near future. Academic Dean and Heads reviews syllabus of the University and accordingly decides the students learning requirements. After studying the course objectives and the course outcome academic processes are designed and oriented towards student learning. It is the teacher's responsibility that he must have to explain and communicate the course objectives and course outcomes at the start of actual teaching of any subject / its practical to the students.

Teacher determines the attainment of course outcome (CO) directly or indirectly

Direct measurement of CO attainment is through

- 1. Measurement of CO attainment through evaluation of practical / assignments / tutorials
- 2. Measurement of CO attainment through class test if any
- 3. Measurement of CO attainment through University examination (all CO's combine measurement)
- 4. Student feedback

Based on this, teacher's fine tune their mode of delivery. Teachers are also encouraged and sponsored to attend training programs / workshops / seminars to improve teaching and technical skills organized by the institute and by other organizations.

Final year project is yet another platform available to students for collaborative, Participative and interactive learning. Institute supports department faculty to organize project competitions and student conferences / workshops / technical events so that students can demonstrate the outcome of their collaborative and interactive learning.

In addition, support is also extended to following activities to make learning student centric:

- Mock viva
- Group discussions
- Training for aptitude tests
- Seminars for independent learning
- Quiz
- Industry Visit
- Project Exhibition
- College magazine
- Art Gallery
- Annual social Gathering
- Various events organized by departments
- Students participation at various events at other institutes

All the above mentioned support structure i.e. laboratories and sponsorship help teachers to develop skills like interactive learning, collaborative learning and independent learning in the students. Teachers also use NPTEL videos, SWAYAM Channels etc. which are available in the institute for teaching and informed to

the students about these videos to promote independent learning. The institute extends financial and infrastructural support for all such activities.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### Response: 100

| -  |               |
|--|---------------|
| 2.3.2.1 Number of teachers using ICT   |               |
| Response: 80   |               |
| File Description   | Document      |
| List of teachers (using ICT for teaching)                                    | View Document |
| Provide link for webpage describing the "LMS/<br>Academic management system" | View Document |

| 2.3.3 Ratio of students to mentor for academic and stress related issues |               |  |  |
|--|---------------|--|--|
| Response: 14.11  |               |  |  |
| 2.3.3.1 Number of mentors  |               |  |  |
| Response: 79   |               |  |  |
| File Description   | Document      |  |  |
| Any additional information   | View Document |  |  |

#### 2.3.4 Innovation and creativity in teaching-learning

#### **Response:**

Institute constantly pursues innovative strategies in teaching and learning in its system with the help of different practices as elaborated below:

**1. Innovative development of laboratories:** Laboratories are designed and developed in line with academic and industrial requirements. Lab manuals are developed by the faculty members and are made available to the students for use.

2. Self-learning laboratory: Few Self-learning laboratory are used to explore transformational learning

environments, to understand concepts in-depth. Mini projects / Models / Charts are developed at few labs.

**3.** Using e-resources: e-Resources aids the faculty members to deal with abstract concepts in the classroom. The inherent characteristics of e-resource to use it anytime anywhere are taken advantage of which is aided by the high broadband Wi-Fi availability in the campus.

**4. Closed monitoring for effective system performance:** Academic monitoring ensures implementation of academic plan for achieving the same. The established mechanism provides opportunity to get information about the status of academic activities at any given moment thereby making it feasible to take corrective actions if required.

**5. Skill building through model competitions:** Technical skill building is promoted by organizing model making competitions. Annually Civil engineering department organizes ANANT as an annual technical event. The constraints like, economy, environment, time, energy and efforts are highlighted in the problem definition. Also, these competitions ensure contemporary skill building amongst Students as well as faculties.

Yes. Innovative teaching ensures students' participation, interaction and involvement and links learning with life. The following teaching and learning practices are used by the faculty to observe their impact upon the students.

- Basic Engineering Science Department (FE) conducts the special efforts for improving the communication skill of students by using the Software in Language Laboratory. The students are guided to listen to the Communicative English audio and video cassettes and CDs played in the classes.
- ICT enabled teaching is practiced by the faculty of all departments.
- Technical visits provide interactive session for understanding, fundamentals, actual engineering application and working of the system.
- Industry sponsored projects allows the student to work with actual field application and understanding the new practices
- Academic Dean collect and analyze the feedback on the performance of teachers from all the students in a structured questionnaire which includes components on the teaching practices adopted by the faculty. Teachers develop the presentations for various contents of the syllabus. This provides and interactive session of understanding the complex technological world
- Various charts are displayed in the laboratories as a teaching aid. These charts are used in practical teaching learning process provides better understanding
- Various technical events are organized by the departments that allows you to explore the fundamentals of engineering and use of the same
- Laboratory are used for the understanding of practical applications
- Teachers guide their students in the final year for design and development of project. This facilitates for creative thinking of all students

Teachers guide the students for a seminar. Topic of the seminars are selected to understand the advancement of new technologies and upgrade their presentation and communication skill.

#### 2.4 Teacher Profile and Quality

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

#### Response: 100

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

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

#### Response: 5.58

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 5       | 2       | 1       | 1       | 3       |

| File Description   | Document      |
|--|---------------|
| List of number of full time teachers with PhD and number of full time teachers for 5 years | View Document |
| Any additional information   | View Document |

#### **2.4.3** Teaching experience per full time teacher in number of years

# Response: 9.89 2.4.3.1 Total experience of full-time teachers Response: 791 File Description Document Any additional information View Document

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

Response: 5.36

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

|  |         |         |               |                 |         |         | _ |
|--|---------|---------|---------------|-----------------|---------|---------|---|
|  | 2017-18 | 2016-17 | 2015-16       |                 | 2014-15 | 2013-14 |   |
|  | 0       | 2       | 1             |                 | 0       | 0       |   |
|  |         |         |               |                 |         |         |   |
| File Description                                 |         |         |               | Docum           | nent    |         |   |
| Institutional data in prescribed format          |         |         | View Document |                 |         |         |   |
| e-copies of award letters (scanned or soft copy) |         | t copy) | View I        | <u>Document</u> |         |         |   |

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

#### Response: 4.75

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 4       | 3       | 3       | 2       | 1       |

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

#### **2.5 Evaluation Process and Reforms**

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

**Response:** 

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

Following ways are adopted by the institute

The institute has taken efforts to improve the performance of students by framing significant reforms in Continuous Internal evaluation at the institute level .The reforms are as follows:

- 1. Remedial measures are taken by conducting remedial lectures  $\$  extra lectures  $\$  tutorial classes to clarify doubts and re-explaining the critical topics.
- 2. Unit tests are conducted prior to end semester examinations.
- 3. Teacher prepares topic wise question banks and then provided to students. Students doubts can be cleared.
- 4. Students are encouraged to solve previous years University Exam question papers available at university web site / in the library / exam section.
- 5. Prior to University Exams Prelim exams are conducted on the topics that are not covered in Insemester or Online examination.
- 6. The institute regularly conducts, group discussions, seminars and guest lectures.
- 7.ERP messaging system / WhatsApp group for students wherein all the notices related to the examination and academics can be circulated and communicated to all students.

**Centralized Continuous Internal Evaluation System:** Assessment of performance is an integral part of teaching and learning process. As a part of sound educational strategy, the institution adopts Centralized Continuous Internal Evaluation (CIE) System to assess all aspects of a student's development on a continuous basis throughout the year.

**Orientation on Evaluation Process:** Students are made aware of the evaluation process through the following initiatives:-

- The orientation programme at the beginning of the semester is arranged at college level for newly joined students
- Academic Diary contains evaluation procedures
- Academic Calendar with Exam dates
- Display in the College and Department Notice Board

#### **Result Analysis & Review Meeting:**

Result Analysis is done after every examination results. Pass percentage of each course is calculated by dividing the total number of students appeared and passed in each course. The performance of the students is monitored by the Principal, Head and academic dean and the necessary feedback is given to the concerned faculty members. The Principal conducts Review Meetings department wise to give necessary feedback for the improvement of students' performance.

#### **Progress Reports & Parents Meetings:**

The institution is keen on monitoring the performance of the students and reports to the Parents. Progress Reports are sent by the department through class coordinators to the parents after each month. Parents/ Guardians are advised to note the performance of their wards and take remedial measure if needed. Whenever necessary, class coordinator requests a visit of the parent to the college for a discussion about the student performance.

#### Remedial Classes:

Remedial classes are conducted for the slow learners, absentees and the students who participate in Sports, NSS activities and Placement Interviews. This practice helps struggling learners to update their subject knowledge and helps them to catch up with their peers.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### **Response:**

Transparency in the assessment is an important aspect of education. The mechanism adopted for internal assessment ensures transparency by involving various stake holders as elaborated below:

- 1. Assessment of students through class test
- 2. Assessments of activities like seminars, projects, with industry expert/ field review brings transparency in the process.
- 3. In case of requirement, the photocopy and revaluation after the declaration of results brings in transparency.
- 4. The assessment of the activities based on outcome leaves little scope for judgmental assessment and thus highlights qualitative and quantitative perfection.
- 5. The assessment policies are verified by Principal, Academic Dean and Heads and declared to the students in advance. This brings transparency and

The robustness of mechanism reflects in consistently good final year results. The robustness of the mechanism consist of:

#### **University Level**

For smooth conduct of University exams, the institute has established separate examination section and a College Examination Officer is appointed for conducting all examinations of affiliating university. Online examinations, in-semester, end-semester examinations are conducted as per the norms and schedule given by the University. Institute ensures effective implementation of the evaluation reforms of the University by strictly following and implementing the ordinances, rules and regulations laid down by affiliating university at UG level

#### Institute level

Effective implementation of different types of an assessment evaluation initiated by the institute such as unit test, prelim exam, home assignment etc. are ensured by the heads of the respective departments by making faculty, staff and students aware of the same and monitoring its implementation rigorously

#### Assessment

Formative assessment approaches are used by teachers during the learning process, to modify teaching and learning activities for improving student learning.

#### **Formative Assessment:**

#### University level:

- Online examination for theory for first year and second year of UG Program
- In-semester examination for theory for third year and final year of UG Program
- Intermediate project evaluation through presentations
- Continuous assessment for lab work for all classes

#### Institute level:

- Institute prepares its students for University exams through practice sessions for theory (mid semester / prelims)
- Mock online examinations
- Assignments for practice and practice for practical sessions.

The evaluation through these approaches gives insights regarding student performance which helps to identify learning needs and take necessary steps for possible improvement

#### Summative assessment-

#### University level:

- End semester theory examination
- Project examination
- Oral, Practical examination

#### **Institute level:**

- Direct and Indirect tools. Project evaluation by industry experts and its impact The involvement of industry in evaluation of students' projects has resulted in the following positive impact:
- Introduction of industry rigor in the academic process and student learning
- Exposing faculty and students to practices and trends followed in industry
- Enhanced liasoning with industry

Internal Assessment is only for term work which is assessed throughout the semester. Assessment scheme is explained to the students to bring in transparency.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### **Response:**

The Institute Examinations section is constituted for conduction of university examinations and making
policy decisions in regard to organizing and holding examinations and to deal with examination related grievances from students.

The following are the common grievances which are normally addressed in the past by the committee.

- 1. Student may be marked absent by mistake for particular paper/subject, even after appearing for that paper.
- 2. Non receipt of mark sheet after declaration of result
- 3. Non declaration of result of student some time kept reserve by the university due to some reasons
- 4. Inability of submission of Examination form by student within time
- 5. Non issue of Hall ticket for Examination by the university
- 6. Name correction in mark sheet
- 7. Special Examination for students participated in University tournaments and other activities
- 8. Re-Evaluation Photocopy not received, Wrong Photocopy, Wrong total marks,
- 9. On line university payment problems of examination fees, revaluation fees etc.
- 10. Exam Forms Name correction, Login issues, subjects are not appearing, eligibility number is not available, College and University transfer issues,
- 11. In semester examination Carry forward and reappearance for in-semester and online examination issues
- 12. NSS/Sports Ordinance 163 Issues
- 13. Mark sheet errors
- 14. Online marks submission error
- 15. Students name in the examination summary

The working mechanism is as given below

- 1. Under all cases of grievances, the institute examination section is responsible to help students to solve their issue. College Examination Officer submits student's application along with the endorsement of principal and all necessary documents to university.
- 2. The examination section office representative takes the follow up from university
- 3.As per our past experience, the problems get resolved within a week time and corresponding student gets modified/corrected documents from university.
- 4. In exceptional cases, it takes two weeks time from the university. Thus, the mechanism to deal with examination related grievances is time bound and efficient.
- 5. Those students who get fewer marks than expectation or fails in the subject have to apply for photo copy of answer sheet.
- 6. Conventionally, the university has a process of providing a photo copy and revaluation to deal with such grievances.
- 7. As per university rules, the student has to apply on-line on university website through his login and provide the necessary details related to his complaint.
- 8. After submitting on-line form, a hard copy of application with necessary fees receipt paid online needs to be submitted to the university.
- 9. University provides soft copy of answer sheet on student's email ID within a month.
- 10. A printout of scan copy of answer sheet is also provided to student on his request by college office.
- 11. After going through the photocopy of answer sheet received, the student of required can further apply online through his login for revaluation
- 12. Student should then submit the hard copy of the application with respect of fees paid online to the university

| File Description                | Document      |
|---------------------------------|---------------|
| Any additional information      | View Document |
| Link for Additional Information | View Document |

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

### **Response:**

Guru Gobind Singh College of Engineering & Research Centre is affiliated to Savitribai Phule Pune University and follows its curriculum which is available on University website. Every year the University uploads the academic calendar at the commencement of the academic year. With this reference, academic dean along with Principal and HODs prepare the institute academic calendar. The departmental academic calendar is prepared accordingly. The academic calendar includes the plan of academic activities such as commencement and conclusion of semester, schedule of class test, prelim Exam, online examination, insemester examination, oral/practical examination, review of attendance, expert lecture, industrial visit, teacher-parent meet's, STTP's / FDP's, alumni meet, annual sports and cultural events etc.

Accordingly, the dates for the three Tests per semester are fixed in the academic calendar. The Internal Tests are conducted in a centralised manner. Before finalising the dates, it is made sure that there is sufficient time for syllabus coverage. The attendance in all the three Tests is compulsory. Parent Teacher meet is organized to show the progress report of their ward and are sent to the parents after each of these tests. Parents/Guardians are advised to note the performance of their wards and take remedial measures if needed. Following are the internal evaluation mechanisms-.

- 1. **Unit tests:** Regular unit wise class tests are planned and carried out for all the students. Retests are also conducted as scope for improvement if necessary. The Units I and II of the syllabus are completed for Unit Test I, Units III and IV for Unit Test II.
- 2. **Prelim examination:** Prelim Examinations are conducted to summarise and conclude the T-L-P of the entire semester. It helps the students as mock of end semester university examinations.
- 3. Assignments: Regular assignments after the completion of every unit are given to monitor the understanding of content delivery.
- 4. **Practice on-line examinations:** To enable the students with a realistic environment of university web based digital online examination, respective internal online mock examinations are planned and conducted.
- 5. Continuous assessment: The assessment of the academic progress of the students is on a continuous basis, the internal term work marks are allotted based on parameters like attendance, understanding and journal write up.

In order to adhere to the dates mentioned in the calendar, HODs meetings are conducted frequently by the Academic Dean &Principal to speed up the syllabus coverage. The HODs, in turn, convene departmental meetings and motivate the faculty members to complete the syllabus within the stipulated time.

The systematic planning of the lessons and the implementation of the planning are clearly indicated in the Teaching Plans. The staff members prepare lesson plans in the ERP before the commencement of every

semester with a view to syllabus coverage.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

### 2.6 Student Performance and Learning Outcomes

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

### **Response:**

For all three programs Civil, Electrical and Mechanical Engineering institute has stated Program Outcomes (POs, Program Specific Outcomes (PSOs) and Course Outcomes (CO) for all the programs. It is displayed on website for communication with all stake holders and communicated to teachers and students through display at respective departments. The mechanism of the communication of stated POs, PSOs and COs is as mentioned below.

The display of **Program outcomes, program specific outcomes and course outcomes** are displayed at following locations through the banners / display boards / charts for the knowledge of faculty and students.

- Departmental Entrance
- Office of the Head of the department
- Corridors.
- Course file of faculty

Students are encouraged to refer POs, PSOs, and COs and add them to their laboratory journals. Guardian Faculty Members conducts meeting with students and discuss POs, and PSOs. HOD meeting with faculty members is also an effective mechanism to communicate program outcomes, program specific outcomes and course outcomes. Every faculty member explains the learning outcomes to the students at the beginning of each course. Learning outcomes are explained to the parents during parent meetings. Teachers are involved in the formulation of COs and PSOs. Also they will get brief idea through meetings. For continuous improvement, staff training is arranged for achievement of corresponding Cos.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Link for Additional Information | View Document |  |

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

**Response:** 

Following description depicts strategy for assessment of attainment of program outcomes, program specific outcomes and course outcomes

Each Course Outcome (CO) is mapped with POs/PSOs. The course coordinator defines the strategy for attainment of each CO through tests, lab work and students activities to be performed by students. All questions of internal tests are mapped with COs. Being affiliated institute, 70% weightage is for semester end exam and 30% for insemester examination. Both these examinations are conducted by the university. The performance of students in projects, lab work and student's activities are mapped with COs by well designed rubric. Through direct tools like test, projects and student's portfolio, the attainment of COs is evaluated at end semester.

Through mapped COs, the attainment of POs/PSOs is evaluated.

The indirect tools like course end survey, exit survey are employed to get perception of self evaluation. For getting overall attainment of POs/PSOs, the weightage for attainment through CO is 50%, weightage for attainment through student's activity is 30% and feedback is 20%.

The assessment process resulting in attainments is evaluated by academic committee and is conveyed to students and parents. Based on the level of attainments, the action plan for improvement is suggested in next cycle.

| File Description                | Document      |  |  |
|---------------------------------|---------------|--|--|
| Link for Additional Information | View Document |  |  |

# 2.6.3 Average pass percentage of Students Response: 84.77 2.6.3.1 Total number of final year students who passed the examination conducted by Institution. Response: 206 2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution Response: 243 File Description Document Institutional data in prescribed format View Document Any additional information View Document

### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.52



### Criterion 3 - Research, Innovations and Extension

### **3.1 Resource Mobilization for Research**

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

### Response: 3.9

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 3.90    | 0       | 0       | 0       | 0       |

| File Description  | Document      |
|---|---------------|
| List of project and grant details   | View Document |
| e-copies of the grant award letters for research projects sponsored by non-government | View Document |

**3.1.2** Number of research projects per teacher funded, by government and non-government agencies, during the last five year

### Response: 0.01

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

### Response: 2

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

### Response: 153

| File Description                        | Document      |
|---|---------------|
| Supporting document from Funding Agency | View Document |

### **3.2 Innovation Ecosystem**

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

### **Response:**

### Eco system for innovations including Incubation centre

Guru Gobind Singh College of Engineering and Research Centre, Nashik is developing and nurturing the Research culture in the institute. The institute is doing various activities in this regard for the faculties as well as students.

The institute encourages the faculties for submitting research proposal to obtaining the research grants for carrying out research work on their innovative ideas. Faculties had submitted the research proposal to various funding agencies as BCUD of University, Pune, DST, Government of India etc.

Incubation centre is established in institute to give proper shape to budding innovative ideas of young engineering students and taking it further to incubate as start up. It is a platform for Students, Innovator, and entrepreneurs to develop their idea from commercial and business point of view. As part of incubation centre, institute has provided the "Maker Space". It has modern equipments such as Microcontrollers, Pneumatic circuits, 3D Printers, construction workshop etc. Technical entrepreneurship trainings and faculty development programs are planned for students and faculties through the incubation centre. After such trainings some technical project ideas will be called from students and few of them will be selected for Business Incubation and those ideas will be groomed and developed for building a successful business venture (Start-up).

The institute had successfully organized the workshop on Research Methodology for motivating faculties and students of GCOERC. It was funded by SPP University sanctioned the workshop on Research Methodology to GCOERC. Faculties, students not only from our institute but from the other institute participated in this two-day workshop. It was a technical feast to all participants for research. Participants became aware about what is mean by research, how to initialize it, how to carry out modelling and experimentation and finally how to present research in terms of research papers. Similarly workshop on IPR and patent are planned and organized to support the activity of innovation and incubation centre.

To inculcate the research thinking in students, institute promotes the Industry sponsored projects. Students visit the various industries, discuss various problems with the industry person, work on that problem with faculties of institute and complete their projects as a partial fulfilment of their academic work.

Institute invites the various experts from industries, other institutes and from various organizations for interacting with students and faculties. The guest lectures are arranged for the students on different topics so the students become aware about the practical and application aspects, recent technologies used in the industries.

Institute encourages the research work by the students and faculties by arranging various lectures and workshops. At present six faculties are pursuing PhD at different universities.

To develop students in multi dimensions, institute encourage students' participation in various technical events like paper presentation, project competition, robo race etc. organized by other institutes. Such events are regularly organized by our institute to benefit maximum number of our students.

DELNET facility is available in the institute to benefit students and faculties for referring thousands of

research publications and reference books.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Any additional information      | View Document |  |
| Link for Additional Information | View Document |  |

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

### **Response:** 37

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 12      | 19      | 06      | 00      | 00      |

| File Description                                   | Document      |
|--|---------------|
| Report of the event                                | View Document |
| List of workshops/seminars during the last 5 years | View Document |

### **3.3 Research Publications and Awards**

| 3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research |               |  |
|--|---------------|--|
| Response: Yes  |               |  |
| File Description   | Document      |  |
| Institutional data in prescribed format  | View Document |  |
| Any additional information   | View Document |  |

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

Response: No

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

### Response: 0.01

| 3   | 3.3.3.1 Number of research papers in the Journals notified on UGC website during the last five years |         |         |          |         |         |  |
|---|--|---------|---------|----------|---------|---------|--|
|   | 2017-18  | 2016-17 | 2015-16 |          | 2014-15 | 2013-14 |  |
|   | 1  | 2       | 1       |          | 0       | 0       |  |
|   |  |         |         |          |         |         |  |
| File Description  |  |         | Docun   | nent     |         |         |  |
| List of research papers by title, author, department,<br>name and year of publication |  |         | View I  | Document | -       |         |  |

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

### Response: 1.04

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 04      | 43      | 06      | 04      | 01      |

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

### **3.4 Extension Activities**

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

### **Response:**

The staff and the students of the institute are always ready to extend services in the neighborhood community. They are sensitized towards social issues and holistic development. Activities includes

- Joining hands with Local government (Gram Panchayat), Municipal Corporation, Police
- Public in general
- Celebration of birth anniversaries of National heroes.

- Camps on Blood donation,
- Environment conservation
- Campus Cleaning

Various activities conducted for sensitizing students through GGSF Social Committee, NSS and Cultural Unit are as shown in Fig. 3.4.1. These activities add to overall development of the students and nurture value education.

Institute follows a mechanism for students' involvement in various social activities which promote citizenship roles. Institute receives an activity calendar from SPPU University for yearly activities on NSS platform. NSS Faculty representatives from the institute are deputed various trainings, which are responsible for smooth conduction and organization of various events. Students are enrolled to the NSS unit through departmental faculty representative. One of the faculties is appointed as "Student welfare officer for coordinating various activities planned by the affiliating university for execution at the institute level. Also one of the faculty designated as NSS Programm Officer. He is taking care of all activities of NSS as planned by the affiliating university during each year for implementation at the institute level.

Besides this, the institute organizes other activities also as per need and availability of time without affecting academics. The spirit of voluntary work through sustained community interaction and link between campus and community is enthralled amongst students, which reflects on the personality development of students through community service. Various activities conducted towards community services and appreciations received are also reported in the SSR. Such activity includes Womens safety, Ganpati and Nirmalya Visarjan, Visit to Orphange, Road Traffic, Independance Day, Republic Day, Gurupurab, Blood Donation, AIDS Awarness, Vilage Cleanliness, Beti Bachav, Medical and Health Care, Yoga, Marthon etc.

### Extension activities

The College has made its important contribution to the society and environment by making a participation to promote College-Neighborhood-Community network. College focuses on student involvement, service orientation and holistic development of students contributing to good citizenship. In association with University our institute has established a NSS unit along with team of faculty members. Through the various programs / camps students were engaged in the community development programmes. Rural India has been facing un-cleanliness, unhygienic, malnutrition conditions and the most important problem is open defaecation. Lack of awareness is noted among the villagers about such problems like health, cleanliness and diseases. Institutes NSS unit works for solving such social problems. Open defaecation problem may cause several communicable diseases among rural localities and pollute area. Due to such activities students also get aware about sanitization. For abatement with deforestation and pollution problem NSS unit focused on tree plantation among villagers during such camps. Institute's NSS volunteer actively participate in the rallies on AIDS awareness; also conduct expert talks on HIV and female foeticide issues for the students.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

### Response: 6

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 03      | 03      | 00      | 00      | 00      |

| File Description  | Document      |
|---|---------------|
| Number of awards for extension activities in last 5 years | View Document |
| e-copy of the award letters                               | View Document |

### 3.4.3 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 last five years

### **Response:** 16

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., year-wise during the last five years

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10      | 05      | 01      | 00      | 00      |

| File Description  | Document      |
|---|---------------|
| Reports of the event organized  | View Document |
| Number of extension and outreach programs<br>conducted with industry,community etc for the last<br>five years | View Document |

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

### Response: 9.26

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 390     | 100     | 00      | 00      | 00      |

| File Description  | Document      |
|---|---------------|
| Report of the event   | View Document |
| Average percentage of students participating in extension activities with Govt. or NGO etc. | View Document |

### **3.5** Collaboration

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

### Response: 184

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 96      | 64      | 23      | 00      | 01      |

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

# **3.5.2** Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

### **Response:** 15

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

|   | 2017-18   | 2016-17 | 2015-16              |               | 2014-15 | 2013-14 |
|---|---|---------|----------------------|---------------|---------|---------|
|   | 08  | 06      | 01                   |               | 00      | 00      |
|   |   |         |                      |               |         |         |
| F   | File Description  |         |                      | Document      |         |         |
| e<br>c  | e-copies of the MoUs with institution/ industry/<br>corporate house |         |                      | View Document |         |         |
| Details of functional MoUs with institutions of<br>national, international importance, other universities<br>etc during the last five years |   |         | <u>View Document</u> |               |         |         |
| Any additional information  |   |         | View I               | Document      |         |         |

### Criterion 4 - Infrastructure and Learning Resources

### **4.1 Physical Facilities**

**4.1.1** The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

### **Response:**

The policy of the institute is to provide the infrastructure as per the norms laid down by AICTE and upgrade as per the growth-expansion. In addition to the physical infrastructure which caters for cocurricular and extra-curricular activities, the policy is to provide educational infrastructure for students in terms of library resources, software and equipment in the laboratories prescribed in the curriculum. The institute has a policy to provide Wi-Fi facility to the students. Apart from adequate provision of class rooms with audio visual teaching aids and laboratory infrastructure for each department, the institute has a strategy to tie up with renowned research organizations and industries for in-plant trainings and various industry sponsored projects. As a result, few laboratories are developed through industry institute partnership.

### Facilities:

- The college campus has sufficient space for all academic, administrative, co-curricular and extracurricular activities
- Each department of the institute is well equipped with independent classrooms, laboratories, tutorial rooms, workshop and seminar hall etc.
- The institute was established in 2013. Since then the requirement of physical infrastructure was duly identified, planned and constructed to meet the needs. Each of the program, run by the institute, is provided with the required academic and administrative infrastructure as per AICTE norms in the form of class rooms, laboratories, tutorial rooms, seminar rooms and faculty rooms
- No Deficiency Report from AICTE is obtained every year which ensures that the availability of the infrastructure is in line with the academic growth
- Most of the class rooms are equipped with LCD Projectors and screens.
- Additionally there are central facilities like office, auditorium, conference hall central library, computer centre, examination control office, canteen and student recreational facilities, ladies common room facility, yoga room etc.
- The campus also provides appropriate parking facility for two wheeler and four wheeler vehicles

### **Existing Infrastructure**

| Sr. No | Particulars            | Total Area (Sq.m.) |
|--------|------------------------|--------------------|
| 01     | Instructional Area     | 6887               |
| 02     | Administrative Area    | 1595               |
| 03     | Amenities              | 1175               |
| 04     | Circulation and Others | 2390               |

### **Common Facilities available on the campus**

| Infrastructure Details | Area (Sq. m.) |
|------------------------|---------------|
|                        |               |

| Conference Hall                  | 134         |
|----------------------------------|-------------|
| College Auditorium               | 431         |
| T&P Office                       | 70          |
| Boys Common Room                 | 136         |
| Girls Common Room                | 108         |
| Medical Room                     | 17          |
| Canteen                          | 233         |
| CAD - Civil Lab                  | 68          |
| CAD & CAM Mechanical Lab         | 72          |
| Computer Centre                  | 166         |
| Language Lab                     | 135         |
| Digital Library                  | 15 no of PC |
| Computer Programming and PLC Lab | 66          |

**Specialized equipments/Software:** Institute has specialized software like ANSYS, CREO, DELCAM, AUTOCAD, STADPRO, MATLAB etc. Specialized equipments like Computerized Diesel Engine and Petrol Engine Test Rig, Boiler Turbine Power Plant with 1kW Capacity, Air Conditioner Test Rig, 100 Ton Universal Testing Machines, Wind Tunnel, Compression Test Rig, Power Quality Analyzers, DC Shunt Motors etc. are available to ensure an academic requirements

### **Electrical Infrastructure:**

- 315 KVA electrical Transformer Three Phase 50 Hz, 11 kV/415 Volt Delta-Delta transformer
- 160 KVA Generator 128 kW, POWERICA Make
- UPS at all appropriate locations to receive uninterrupted electrical supply
- Water pumps.
- Solar PV Cell (Rooftop) to generate 20 kVA electricity

| File Description                | Document      |
|---------------------------------|---------------|
| Any additional information      | View Document |
| Link for Additional Information | View Document |

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

**Response:** 

### Facilities of extra- curricular activities are given below:

To ensure all round development and physical fitness institute provides facilities for sports. Sports week is celebrated by the institute during the Annual Day function. Based on the results of this event and other allied events Sports Trophy is also circulated with the winning Department every year. Apart from Sports activity to identify the hidden talents of the institute, cultural programs are scheduled. All such programs

are either conducted at the College Auditorium Hall or in a separate dome installed temporarily. Institute has provided a separate hall for yoga.

### **Outdoor Games**

Institute has provided facilities for outdoor games like Kho-Kho, Handball, volleyball etc. within the campus.

| Sr. No. | Facility          | Description                               |
|---------|-------------------|---|
| 01      | Basket Ball Court | Common Facility Provided by Foundation    |
| 02      | Volley Ball Court | Common Facility Provided by Foundation    |
| 03      | Play Ground       | Common Facility Provided by<br>Foundation |
| 04      | Kho-Kho Ground    | Common Facility Provided by<br>Foundation |
| 05      | Kabaddi Ground    | Common Facility Provided by<br>Foundation |
| 06      | Cricket Turff     | Common Facility Provided by Foundation    |
| 07      | Yoga Centre       | Common Facility Provided by Foundation    |

### Indoor Games/ Facilities:

Indoor game facilities like table tennis, chess are provided by the institute the details of which are given below:

| Sr. No | Facility     | Description                      |
|--------|--------------|----------------------------------|
| 01     | Table Tennis | 4 number of serts are available  |
| 02     | Chess        | 10 number of serts are available |
| 03     | Carom        | 4 number of serts are available  |
| 04     | Gymnasium    | Equipments are available         |

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 26File DescriptionDocumentNumber of classrooms and seminar halls with ICT<br/>enabled facilitiesView DocumentLink for additional information which is optionalView Document

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

### Response: 65.55

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 129     | 229     | 228     | 170     | 10      |

| File Description   | Document      |
|--|---------------|
| Details of budget allocation, excluding salary during<br>the last five years | View Document |
| Audited utilization statements   | View Document |
| Any additional information   | View Document |

### 4.2 Library as a Learning Resource

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

### **Response:**

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

Central Library has an excellent infrastructure and located at 2nd floor. It is a most lively place on the campus providing a safe, comfortable and friendly environment that enables learning and advancement of knowledge, and promotes innovation. It has an excellent collection of books, journals, periodicals, newspapers, CDs, DVDs, e-books, audio books, databases etc. All its operations are computerized using ananosoft EMS 2010. Library follows open access system that allows users a direct access to the library collection. Library implemented barcode technology for circulation. It is well equipped with reference books of all discipline.

• Library Overview:

- Total area of the library: 480.37 sqm.
- Spacious Reading Hall: 200 seating capacity
- Reference books: Available over & above the requirements as per the curriculum of affiliating university
- Book- Bank Facility: 354 books.
- Digital Library: 10 PCs connected on LAN,100mbps leased line dedicated internet connection.
- Access to e-resources like online e-journals, magazines, conference proceedings and library online public access catalogue, DELNET, NDL,
- Online Book search System -Online Public Access Catalogue (OPAC)
- E- Vigilance system
- Audio-Video Section
- New Arrivals Facility
- Name of Library Software : Ananosoft EMS 2010 (College ERP)
- Nature of Automation : Fully automated
- Version : Server: Windows Server 2008 +
- Database: MS SQL 2008 R2 Express Edition
- Year of Automation 2013 right from establishment of Institute.

### **Integrated Library Management System**

The mission of the Central Library is to facilitate creation of new knowledge through acquisition, organization and dissemination of knowledge resources and providing value added services The purpose of ananosoft EMS 2010 Integrated library management software for library automation is to develop and implement the quality services to users.

Following operations are carried out by using ananosoft EMS 2010 software:

- Book /Periodical/Book Bank Transaction
- Issue
- Return
- Reservation
- Requisition (For Purchase, Maintenance, New Books etc.)
- Book Bank
- Periodicals
- Book Accession Register
- Book Barcode generation & Printing
- Online Public Access Catalogue
- Student Roll No. List
- All Required Report for Library Management System
- Identity Card Generation with Barcode

Ananosoft EMS 2010 is established to meet basic requirements of Library. This is a complete library management and automation solution that enables librarian & library staff to manage & disseminate information available in various kinds of resources.

It is helping a lot to the library staff, faculty & students due to following silent features.

### Salient Features of ananosoft EMS 2010

- Easy to Use
- Centralizes Automation with Paperless Working
- Integration with Barcode/RFID/Biometric/SMS/Email
- Advance Security Settings
- 100% Customizable Report
- Transparency & accountability in all processes
- OPAC Online Public Access catalogue feature of this software allow the user to search any book in the library using different criteria such as book name, author name, accession number, call number, publisher, book status etc.

The software is easy to handle, flexible in working, and gives the benefits of a Windows based environment along with adequate security especially for college library.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

### **Response:**

Title: Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment Data Requirement for last five years: Provide the description of library enrichment which includes

### Library Enrichment:

The institute library has collections of reference books as per the requirements of University and AICTE. Library also includes technical journals as specified by the AICTE. The library is equipped with the handbooks on the subjects such as mechanical engineering, civil engineering, electrical engineering, design data handbook, gear design handbook ,handbook on advance concrete technology, concrete mix design handbook, fluid power design handbook, machine tool design handbook, Jurans quality handbook renewable energy etc provide an important reference to the students and the faculty.

The institute has purchased standard references by considering the importance of the subject. The books on soft skills, personality development, interview techniques, quantitative aptitude, GATE preparation guide etc are available in the library.

The institute is member of the National Digital Library (NDL) and has access to its collection of books. The library has recently added rare books in digital form to its collection. The rare books include books on historical events and personalities, metallurgy, thermodynamics, chemistry, engineering economics, engineering etc.

The Library has signed MOU with DELNET – Developing Library Network for it gives access to various resources – e-books, Journals and databases.

The library has books on the subject Research methodology, Design of experiments for the benefit of students and the faculty interested in research. For improvement in English language, the library has books on English language skills, dictionaries of Oxford, Webster, Oxford English language references etc. Each department has departmental library with good collection of books which the students can issue in addition to the books of central library. Thus the institute tries to include knowledge resources for enrichment of the library.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

| 4.2.3 Does the institution have the following:                                       |               |  |
|--|---------------|--|
| 1.e-journals   |               |  |
| 2.e-ShodhSindhu  |               |  |
| 3.Shodhganga Membership  |               |  |
| 4.e-books  |               |  |
| 5.Databases  |               |  |
| A. Any 4 of the above  |               |  |
| B. Any 3 of the above  |               |  |
| C. Any 2 of the above  |               |  |
| D. Any 1 of the above  |               |  |
|  |               |  |
| <b>Response:</b> A. Any 4 of the above   |               |  |
| File Description   | Document      |  |
| Details of subscriptions like e-journals,e-<br>ShodhSindhu,Shodhganga Membership etc | View Document |  |
| Any additional information   | View Document |  |

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

### Response: 6.7

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

|                           | 2.16 7.29 5.46 5.93 12.65 | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------------------------|---------------------------|---------|---------|---------|---------|---------|
| 2.16 7.29 5.46 5.93 12.65 |                           | 2.16    | 7.29    | 5.46    | 5.93    | 12.65   |

| File Description   | Document      |
|--|---------------|
| Details of annual expenditure for purchase of books<br>and journals during the last five years | View Document |
| Audited statements of accounts   | View Document |
| Any additional information   | View Document |

# 4.2.5 Availability of remote access to e-resources of the library Response: Yes 4.2.6 Percentage per day usage of library by teachers and students Response: 6.28 4.2.6.1 Average number of teachers and students using library per day over last one year Response: 75

### 4.3 IT Infrastructure

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

### **Response:**

As per the need of the curriculum, the institution frequently reviews and upgrades its IT facilities and has required computing facilities which include hardware, software and networking. Revision in syllabus and up-gradation of existing software's demands up-gradations in the IT infrastructure. Also institute intends to purchase latest configurations/edition of IT equipments while fulfilling the requirement or while replacing the old one. Sometimes the competent authorities like AICTE also states about the specifications of the IT Infrastructure. Deployment of IT infrastructure is done through IT head.

All the academic and administrative IT infrastructure requirements are addressed by this team. The following are the strategies for deploying and upgrading IT infrastructure and associated facilities.

The up gradation of computer systems is taken up on a periodic basis as and when the necessity arises. For example, whenever the new technology or new processor based systems are introduced in the market, the systems are upgraded. Also, the system replacement is done with new systems whenever a particular system is found beyond repair. The old computers are used for hardware and networking courses being (if any).

Also updation in Wi-Fi routers takes place periodically. The IT infrastructure is also upgraded in terms of the software again due to frequent revisions and updations in the newer software released.

Up-gradation of the IT infrastructure and associated facilities

Following are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities:

Internet Bandwidth: - Currently the college is equipped with 40 Mbps leased-line 1:1. Institute is also planning to double the bandwidth capacity about 80 Mbps in due course of time to provide faster service.

Wi-Fi Facility: - The institute has purchased Cisco Wi-Fi routers with high capacity and is utilizing it for students so that they can have concurrent access with sufficient speed.

High Performance Servers: - Institute has purchased HPC Servers with 4 core and is planning to deploy it in order to tackle internet-scale problems efficiently with high-density, low energy, software defined servers that radically reduce energy use and footprint, while increasing performance. Also the plan includes that 2 core would be used as File Servers and other 2 core would be made available for research purpose.

LCD Projector:- Most of the classrooms and laboratories are equipped with LCD projectors and a PC with internet connectivity. Faculties use such facilities to make the teaching learning process in classroom and laboratory more effective. Latest versions of LCD's are fitted in auditorium, conference and seminar halls. There are total 17 LCD Projectors in the campus.

Institute plans to provide smart classroom facility in the campus from next academic year. This will have interactive board.

IT Section of the college takes care of maintenance of IT infrastructure in the campus. Provisions are also made in the budget for the maintenance of hardware. Software and hardware are regularly upgraded as per requirement either in syllabus or through need arising out of institute expansion.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Link for Additional Information | View Document |  |

| 4.3.2 Student - Computer ratio  |
|---|
| Response: 4.46  |
| 4.3.3 Available bandwidth of internet connection in the Institution (Lease line)<br>>=50 MBPS |
| 35-50 MBPS  |
| 20-35 MBPS  |
|   |

### 5-20 MBPS

### **Response:** >=50 MBPS

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

### Response: Yes

| File Description   | Document      |
|--|---------------|
| Facilities for e-content development such as Media<br>Centre, Recording facility,LCS | View Document |
| Any additional information   | View Document |
| Link to photographs  | View Document |

### 4.4 Maintenance of Campus Infrastructure

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

### Response: 3.85

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 7.0     | 13.02   | 18.45   | 7.77    | 0.245   |

| File Description   | Document      |
|--|---------------|
| Details about assigned budget and expenditure on physical facilities and academic facilities | View Document |
| Audited statements of accounts.  | View Document |
| Any additional information   | View Document |

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

**Response:** 

**Departmental Laboratory Maintenance** 

Maintenance activities are carried out by each department separately as and when required. Records of maintenance are maintained by individual department. Thus the department ensures the availability of equipment and its working condition for regular teaching and learning process.

Each lab in-charge on observing the breakdown of his lab equipment or machinery informs the details to the HOD. HOD and the lab in-charge then reviews warranty status of the equipment. If the equipment is under warranty condition the supplier will be called for the maintenance and the record of break down maintenance will be maintained properly. If the equipment is not in warranty then the maintenance service provider is identified by the HOD and Lab in-charge. They discuss the problem with service provider and if the service provider is having experience in similar kind of maintenance HOD will call for the quotation. Quotations are discussed with Principal and Final approval for the maintenance is obtained from the Chief Executive Officer of the Foundation.

### Diesel Generator Set, Air conditioners, Electric Lift, Maintenance

Estate Manager or In-charge prepares a proposal for annual maintenance after discussing all the requirements with various service providers. After receiving the quotations all the details are discussed with Chief Executive Officer of the Foundation who finally approves the party for annual maintenance contract and thus the annual maintenance contract is executed throughout the year.

### **College Vehicle Maintenance**

Vehicle in-charge reviews the requirements of preventive and breakdown maintenance and forwards the requirements of the Chief Executive Officer of the Foundation who finally approves the supplier form maintenance

### **Civil and Electrical Maintenance**

Respective department reviews the requirements and accordingly conducts the maintenance

### **IT Services Maintenance**

Maintenance section prepares preventive maintenance schedule for computers and other peripherals and does maintenance according to the schedule. Records of preventive maintenance are maintained properly. Thus the department ensures the availability of computers and its working condition for regular teaching and learning process.

On observing the any software or hardware issues concern person of the institute informs the details to the section head. Section head then deputes the person for the computer maintenance (In house).

### **Class Room Maintenance**

Housekeeping committee is established at the institute level. Frequently this committee reviews the status of housekeeping on all floors and the building including toilets, common rooms, class rooms as well as a laboratory. If any discrepancies are observed they inform the same to Housekeeping Contractor and they carry out the maintenance. The work of maintenance of benches, window curtains and teaching boards is carried by respective department through work shop section for inhouse maintenance. Also at the start of Examination and Before the start of academic session work shop staff ensures the proper condition of

classroom furniture by inspecting all class rooms and carrying out the required repair.



### Criterion 5 - Student Support and Progression

### 5.1 Student Support

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

### Response: 71.78

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 947     | 712     | 621     | 299     | 83      |

| File Description   | Document      |
|--|---------------|
| Upload self attested letter with the list of students sanctioned scholarships  | View Document |
| Average percentage of students benefited by<br>scholarships and freeships provided by the<br>Government during the last five years | View Document |
| Any additional information   | View Document |

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

### Response: 0.46

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10      | 08      | 02      | 01      | 00      |

| File Description  | Document      |
|---|---------------|
| Number of students benefited by scholarships and freeships besides government schemes in last 5 years | View Document |
| Any additional information  | View Document |

| 5.1.3 Number of capability enhancement and dev            | elopment schemes – |
|---|--------------------|
| 1. For competitive examinations                           |                    |
| 2. Career counselling                                     |                    |
| 3. Soft skill development                                 |                    |
| 4. Remedial coaching                                      |                    |
| 5.Language lab  |                    |
| 6.Bridge courses  |                    |
| 7. Yoga and meditation                                    |                    |
| 8. Personal Counselling                                   |                    |
| A. 7 or more of the above                                 |                    |
| B. Any 6 of the above                                     |                    |
| C. Any 5 of the above                                     |                    |
| D. Any 4 of the above                                     |                    |
|   |                    |
| <b>Response:</b> A. 7 or more of the above                |                    |
| File Description  | Document           |
| Details of capability enhancement and development schemes | View Document      |
| Link to Institutional website                             | View Document      |

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

Response: 22.99

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 834     | 355     | 00      | 00      | 00      |

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

### 5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years Response: 13.72 5.1.5.1 Number of students attending VET year-wise during the last five years 2017-18 2016-17 2014-15 2015-16 2013-14 765 00 00 00 00 **File Description Document** Details of the students benifitted by VET View Document

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

### **Response:** Yes

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

### **5.2 Student Progression**

| 5 | 5.2.1 Average percentage of placement of outgoing students during the last five years |         |         |         |         |  |
|---|---|---------|---------|---------|---------|--|
| F | Response: 15.34   |         |         |         |         |  |
| 5 | 5.2.1.1 Number of outgoing students placed year-wise during the last five years       |         |         |         |         |  |
|   | 2017-18   | 2016-17 | 2015-16 | 2014-15 | 2013-14 |  |
|   | 62 82 0 0 0   |         |         |         |         |  |
|   |   |         |         |         |         |  |

| File Description  | Document      |
|---|---------------|
| Self attested list of students placed                   | View Document |
| Details of student placement during the last five years | View Document |
| Any additional information                              | View Document |

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

### Response: 5.83

5.2.2.1 Number of outgoing students progressing to higher education

Response: 12

| File Description                                   | Document      |
|--|---------------|
| Details of student progression to higher education | View Document |

# 5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

### Response: 1.59

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 03      | 03      | 00      | 00      | 00      |

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 99      | 61      | 00      | 00      | 00      |

| File Description  | Document      |
|---|---------------|
| Upload supporting data for the same   | View Document |
| Number of students qualifying in state/ national/<br>international level examinations during the last five<br>years | View Document |

### **5.3 Student Participation and Activities**

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

### **Response:** 2

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 01      | 01      | 00      | 00      | 00      |

| File Description   | Document      |
|--|---------------|
| Number of awards/medals for outstanding<br>performance in sports/cultural activities at<br>national/international level during the last five years | View Document |
| e-copies of award letters and certificates   | View Document |

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

### **Response:**

University has provided the guidelines for the formation of student's council. Under the provisions of chapter IX (99)(3) of the Maharashtra Public Universities Act, 2016, Students' Council is constituted in our college. The objective of the student council is to look after the welfare of the students and to promote and coordinate the extracurricular activities in the institute. The student council has mainly following representations

- Principal Chairman
- Student Welfare Officer
- One Lecturer, nominated by the Principal
- Teacher in-charge of National Cadet Corps

- National Service Scheme Programme Officer
- One student from each class as representative
- Director of Sports and Physical Education, if any
- One student from each of the following activities, who has shown outstanding performance, nominated by the Principal, namely:-
  - 1. Sports
  - 2. National Service Scheme and Adult Education
  - 3. National Cadet Corps
  - 4. Cultural Activities
  - 5. Two Girls student members nominated by the Principal/Director

Frequent meetings of student council are called by the Principal with agenda points such as planning for organization of extracurricular activities, sports and cultural event, annual function or any such major program in the institute.

The members of the students' council who are the representatives of all the students on the roll of the institute are free to put any point as they wish to discuss during the meeting.

Most of the time Principal for the feedback from the members of the council about the overall administration, teaching and learning processes in the institute. It is a right platform for all the members to give such feedback for further improvements of the system

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

Response: 17.8

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

| 24 20 21 13 11 | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|----------------|---------|---------|---------|---------|---------|
|                | 24      | 20      | 21      | 13      | 11      |

| File Description   | Document      |
|--|---------------|
| Report of the event  | View Document |
| Number of sports and cultural activities / competitions organised per year | View Document |
| Any additional information   | View Document |

### **5.4 Alumni Engagement**

# **5.4.1** The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

### **Response:**

Guru Gobind Singh Foundation's Alumni Association has been registered with the great Aim and Objective such as extend every possible help to the college authorities for overall progress of the institution by remaining united.

Alumni were at one time students, and therefore have a deep and strong connection to their alma mater, its success and future. Alumni always aim to give consistently given back to the institute. The institution has registered alumni associations. It is motivating the newly registered alumni for major contributions for institutional, academic and infrastructure development in future. The mission of "Guru Gobind Singh Foundation's Alumni Association" is to create and maintain a lifelong connection between the institute and its alumni. As stakeholders of the institution, students and alumni share in the social identity of the institute such as visit to the college, some interactive session arranged by department to the students which tends to create a familial culture.

The students are requested to fill the alumni registration form and application form as lifetime registration for alumni association before they receive their Leaving Certificate. The data is collected and processed by the alumni association coordinator. Alumni of our first batch graduated in July 2017 were called in the institute on the occasion of the first convocation and the first alumni meet on 03/03/2018

The alumni are actively engaged with institute and meet at least once a year. The alumni engagement mechanism of the institute achieves this by inviting alumni as members of the executive body of alumni association. A basic concept in alumni relations is to "treat them as ambassador of the institute. The alumni meet aims to foster a sense of community among alumni, while supporting a sense of connectedness back to the institution feeling. Alumni meet will help new professionals or visit with people they have met before, to establish or renew friendships and acquaintances. The alumni meet was conducted on 03rd March 2018.For Online Registration Google form was prepared and Offline registration of alumni was done on the day of the event, record is maintained in the Register. Total 123 Alumni were present for the first meet.

Our Alumni interacted with faculty and their juniors on alumni meet to share various experiences from corporate field with. They shared their views, experiences about college. They commented on infrastructure quality, growth of the department & institution, academics, education and its necessity before entering in to the corporate world.

We have maintained the visit register for our alumni who have frequently visited to our institute which help us to give better for current students. Alumni Association is one of the easiest ways to reconnect to give back to the institute and to serve as a springboard for further involvement.

| File Description                | Document      |
|---------------------------------|---------------|
| Any additional information      | View Document |
| Link for Additional Information | View Document |

| 5.4.2 Alumni contribution during the last five years(INR in Lakhs)<br>? 5 Lakhs |               |  |  |
|---|---------------|--|--|
| 4 Lakhs - 5 Lakhs   |               |  |  |
| 3 Lakhs - 4 Lakhs   |               |  |  |
| 1 Lakh - 3 Lakhs  |               |  |  |
|   |               |  |  |
| Response: <1 Lakh   |               |  |  |
| File Description  | Document      |  |  |
| Alumni association audited statements   | View Document |  |  |

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

### **Response:** 1

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

| 2                 | 2017-18       | 2016-17                                    | 2015-16      |                  | 2014-15          | 2013-14 |  |
|-------------------|---------------|--|--------------|------------------|------------------|---------|--|
| C                 | )1            | 00   | 00           |                  | 00               | 00      |  |
|                   |               |  |              |                  |                  |         |  |
|                   |               |  |              |                  |                  |         |  |
| Fil               | e Description |  |              | Docun            | nent             |         |  |
| File<br>Nu<br>cor | e Description | Association / Chapte<br>e last five years. | ers meetings | Docum     View I | nent<br>Document |         |  |

### **Criterion 6 - Governance, Leadership and Management**

### 6.1 Institutional Vision and Leadership

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

### **Response:**

### Vision

An institute striving for excellence in providing Transformative Engineering Education and Stimulating environment for Research to enhance skills for Developing Intellectuals and to Inculcate quality education with Social and Technical knowledge which will benefit the Society and Industrial Challenges.

### Mission

- 1. To be a Technical Educational Institute in transforming aspiring engineers through rigorous course work and skills.
- 2. To benchmark with the best global standards of quality education
- 3. To enhance commitment of the faculty, staff and students by inculcating the spirit of inquirer, team work and professionalism.
- 4. Establish a Centre of Excellence to enhance academia-industry partnership, work on collaborative projects, develop new products, services and patents.
- 5. To develop globally competent students, enhancing indigenous technological skills and inculcate entrepreneurship in them.

GCOERC aims to impart technical education by bridging the gap between industry and academics so as to produce technical graduates with such quality and skill/competency necessary to make them more employable and an asset to the society through their holistic development.

A well-developed system have been developed to achieve this vision through a multi layered team involving, top management members and Board of Governance, CEO, Principal, Vice Principal, Dean Academic, HOD's, and faculty. The Board of Governance consisting of management members, experts drawn from academia, industry, research and life skill promoters, formulate guidelines for effective implementation of vision and mission and dissemination of Engineering education.

A perspective plan exists for the overall development of institution, faculty and students. Emphasis is paid on employing qualified and experienced faculty, providing state of art facility of infrastructure and laboratory, in plant training, specialized in house training through Industry- Institution Partnership excellence centre of SIMENS and BOSCH, Construction Technology laboratory, Entrepreneur development programme and soft skill trainings. These actions aids in bridging the gap between industry and institution their by preparing skilled technical professionals with excellent employability and entrepreneur skills.

Faculties are the vital constituent for effective implementation of vision and mission of the institute. Faculties are involved in academics and administrative activities through their inputs and are instrumental in successful implementation of various activities like Academics, Examination, extracurricular and co

curricular activities and Procurement. They are also a part Board of Governance, various college developmental bodies/ committee like IQAC, ICC, Women grievances, Anti Ragging committees.

Faculty are continuously encouraged to upgrade and acquire higher qualification, skills in teaching and learning process, develop and introduce innovation in teaching and learning process. Faculty and students are encouraged to attend, present and publish their research and technical works. This policy helps in dynamic learning, share knowledge in the recent trends in science &technology, thus augments knowledge base of faculty and students.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

### 6.1.2 The institution practices decentralization and participative management

### **Response:**

### **Participative Management:**

Participatory management and decentralization is practiced at various levels which involves making decisions and executing various activities concerning academic and administration.

The management committee is the apex body responsible for developing, polices and strategies for current and future development plan of the institution. These decisions are conveyed to Principal through the CEO. Every week CEO, holds a meeting of Principal, Vice Principal, HOD's, and Coordinators of various committees to discuss problems concerning various issues, and provide necessary solution. Approval to ongoing and planned curricular, co curricular and extra-curricular activities is accorded at these meetings.

Board of Governance and college development committee are constituted at institution level as per the guidelines of AICTE &SPPU respectively. These comprises of representation of Management, field experts & faculty. Policy decision, budgets, faculty recruitment, teaching-learning processes are commonly discussed and appropriate decisions are taken by these bodies.

Principal has the academic, non-academic and administrative responsibility which is successfully accomplished with a team of Vice Principal, Dean Academic, Registrar, Head of Department, and Accountant. Registrar and Accountant along with their office staff provide necessary administrative support for smooth functioning of the institution.

### Departmental Level

The Head of Department oversee all the curricular, co-curricular and extra-curricular activities of the respective department. Faculty members are assigned different functional responsibility and participate in all major decisions making concerning welfare of student. Faculty members, staff and student representatives are members of various welfare and grievances committees.

Students association exists in each of the department where students representative take active role in

organizing various student centric programme. Students are also invited to suggest course specific software and hardware training programme. Also various sports &cultural activities are planned and conducted by students.

### **Case Study Example of Technical festival**

Annual Technical event ANANT, CHECKMAK & TECHVOLT is conducted by Student Association of Civil Engineering, Mechanical Engineering and Electrical Engineering Department. These events depict the collective participation of management, Principal, HOD, faculty, and the students.

A coordinating committee comprising of senior faculty, faculty coordinator and student co coordinator are formed. A road map of various activities and budget to meet expenses is forwarded to CEO through Principal by HOD

The expenses are approved by CEO and approval for further action is given. Frequent meetings of each of the committee were made to assess the progress in the preparation for the event.

Students from Engineering and polytechnic colleges across Maharashtra paticipate in various technical events in these technical fests.

The CEO, Principal and Vice Principal felicitate those who had put in exhaustive efforts and acknowledge the efforts taken by the faculty, staff & students to make these events successful.

The successful outcome of these activities is reflective of the student's capability to work in team, inculcate time management and managerial skills. Such events are indicative of the healthy working environment in the institute, and results in better faculty –student relationship.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Any additional information      | View Document |  |
| Link for Additional Information | View Document |  |

### **6.2 Strategy Development and Deployment**

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

**Response:** 

### **Strategy Development and Deployment**

-Yes, the institute has a formally developed quality policy articulated as follows:

The institute is committed to equip the students with value added engineering skills, in conformation with the current and future needs of the industry, along with values that define professional conduct
The Institute has developed perspective plan for all round development of the institute the periods 2013-14 to 2017-18 and 2018-19- 2022-23,

#### Case study of BOSCH & SIEMENS Industry- Institute Partnership Center of Excellence:

In tune with the Perspective/Strategic planning to bridge the technological gap in the curriculum and to develop various technical competencies in the students to be more employable, in house Skill Development training Centre in collaboration with reputed industries was debated in the Managing committee meeting held on 20th March 2016.

Various options for establishing MOU for skill development training centre with reputed industries like BOSCH Bangalore, NEC & TAACT Satpur was discussed in subsequent meetings. A resolution to establish MOU with SIMEN-BOSCH Company, Mumbai was accepted and approved by the committee members at the meeting held on 23rd July 2016 at the Engineering College building. Finally GGSF signed MOU with BOSCH & SIEMENS on 10th August 2016 and 1st January 2017 respectively.

The main objectives of establishing Industry- Institute Partnership Center of Excellence are

1. Prepare students for industry oriented learning through tailor made training programs.

2. Knowledge sharing on Bosch and Siemens advanced automotive systems.

3. Provide advanced training modules for students in Bosch and Siemens Training Center.

4. Help setting up the Automotive Service Solutions Lab.

5. Train the trainer for lab technicians.

According to the MOU'S signed the training of the Bosch has been given to the trainers proposed by institute at Bosch training centre Bangalore. The training of the Siemens has been given to the trainers proposed by institute at GGSF campus by Siemen's trainers.

The modules decided as per the MOU with Bosch and Siemens are as follows:

| Sr. No | BOSCH Modules  | SIEMENS Modules                             |
|--------|--|---|
| 01     | Auto Electrical Systems                              | Training program on low voltage switch gear |
| 02     | Vehicle dignostics basics and system dignostics      | Training program on basic SCADA             |
| 03     | Basic Course on Diesel Fuel<br>Injection System      | Training Program on Basic AC/DC Drive       |
| 04     | Vehicle Air-Conditioning<br>Systems and<br>Functions | Training Programme on Basic<br>Automation   |

| File Description                                       | Document      |
|--|---------------|
| Link for Additional Information                        | View Document |
| Strategic Plan and deployment documents on the website | View Document |

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

#### **Response:**

The Management Council and Board of Governors provide effective governance through policy decision for development of institution. The execution of these policies is affected through the CEO and Principal. Institutional level committees like IQAC Cell, Anti-ragging Cell, Women Grievances Cell etc which are required as per the norm of AICTE, University/ Government are included in the organizational set up to address problems of student, staff and faculty.

#### **Top Management and CEO:**

- The top management and CEO is the decision making authority and are responsible for all academic, administrative and physical development of the institution.
- Institutional objectives, rules & regulations in concurrence with the vision, mission & quality policies for effective governance, transparent administration and participatory decision making for collective responsibility are framed and promulgated for maintaining quality standards in education.
- Provide necessary financial provision to make available the current state of art infrastructure to satisfy the academic, research and consultancy needs.
- Recruit/employ well qualified proficient, dedicated teaching and non teaching members to implement teaching-learning process effectively so as to realize the vision and mission of the institute.
- CEO conducts weekly meetings of Principal, Dean Academic, Head of Department and reviews the progress in academics, administration and infra structure. Necessary suggestion and guidelines are issued for all developmental activities.
- Creates an atmosphere that is fair, transparent, motivating and conducive to faculty and staff to realize their potential

#### **Principal:**

• Principal is the academic and administrative head of the institution. The vision, mission, quality policies and decisions taken by the management in the periodic/ weekly meetings are conveyed by CEO to Principal for effective implementation.

- Complies with statutory requirement of various bodies like AICTE, DTE Maharashtra, SPPU, Pune.
- Responsible for effective implementation of top management's vision, mission and quality policy. Motivates faculty in their professional development through participation in faculty development programme, seminar, conference, workshop, research and development.
- Instrumental in building up a competent work force consisting of faculty, staff and supporting staff so that all academic and administrative functions are smoothly carried out.
- Effective implementation of Training and Placement, Entrepreneurship activity so as to provide maximum placement to the students.

#### Vice Principal and Dean Academics

• Vice Principal is supportive to the administrative activities and also oversees the academic activities. He is responsible for the development of academic calendar of the institution and completes the academic activities as per the academic calender and University requirements

**T&P Officer** has the responsibility to provide necessary trainings to students to improve their employability. He is supported by departmental T&P coordinators. T&P Officer & his team establish MOU's, with industries, organization and firms to coordinate and organize on-campus placement activities.

Registrar, is the functional head of the establishment section and works as support system to Principal in managing administrative affairs of the institution. The institution budget and cash flow is maintained by the Accountant and manages all financial affairs of the institution.

| File Description                | Document      |
|---------------------------------|---------------|
| Any additional information      | View Document |
| Link for Additional Information | View Document |

#### **6.2.3 Implementation of e-governance in areas of operation**

- **1. Planning and Development**
- 2. Administration
- **3. Finance and Accounts**
- 4. Student Admission and Support
- 5. Examination
- A. All 5 of the above
- **B.** Any 4 of the above
- C. Any 3 of the above

#### **D.** Any 2 of the above

#### **Response:** A. All 5 of the above

| File Description  | Document      |
|---|---------------|
| Screen shots of user interfaces   | View Document |
| ERP Document  | View Document |
| Details of implementation of e-governance in areas<br>of operation Planning and<br>Development,Administration etc | View Document |

| Date       | Time                 | Class             |             |
|------------|----------------------|-------------------|-------------|
| 31/08/2017 | 10:45 am to 12:45 am | SE,TE&BE          | Mechanical  |
|            |                      | Engineering       |             |
|            | 1.25 pm-3.15pm       |                   |             |
|            |                      | SE,TE&BE Civil    | Engineering |
| 31/08/2017 | 10:45 am to 12:45 am | SE,TE&BE          | Electrical  |
|            |                      | Engineering       |             |
|            | 1.25 pm-3.15pm       |                   |             |
|            |                      | First Year Engine | eering      |

However as per the Government directives the online scholarship form was withdrawn and was directed to submit offline forms. In this connection students were suitably guided about scholarship form filling through seminar as scheduled below,

| Date      | Time            | Class                                |  |
|-----------|-----------------|--------------------------------------|--|
| 16/2/2018 | 10.45am-11.45pm | First Year Engineering               |  |
|           | 11 45am-12 45nm | & SE,TE&BE Electrical<br>Engineering |  |
|           | 1.25 pm-2.25pm  | SE, TE&BE Civil Engineering          |  |
|           |                 | SE,TE&BE Mechanical                  |  |
|           |                 | Engineering                          |  |

The students were further helped in the process of filling up the scholarship and freeship form.80 students participated and got useful guidance.

**Outcome**: 124 students successfully filled up required scholarship form and all 124 students were granted scholarship by Samaj Kalyan Department, Government of Maharashtra.

In the second meeting of the SC/ST Cell, members proposed to bring awareness in the SC/ST students of the institute regarding

1. Various scholarship scheme

2.Hostel Maintenance scheme (Dr Babashaeb AmbedkarSwadhar Yogana, for SC Student &Deen Dayal Upadhaya Swyam Yogana for ST student)

In this context seminar was conducted as pet the following schedule

| Date       | Time            | Class                       |  |
|------------|-----------------|-----------------------------|--|
| 10/10/2018 | 3.15pm -5.00pm  | All branches of Engineering |  |
| 12/10/2018 | 11.30am-12.30pm | First Year Engineering      |  |

Eligibility of the students to suit Government of India norms was scrutinized. 10 SC and 02 ST students were found eligible to apply for the Hostel Maintenance scheme.

These eligible students were guided to correctly fill the requisite application form and was submitted to Samaj Kalyan Vibhag and Adivasi Bhavan, Nashik.

The process of scrutiny and final award of Hostel Maintenance scheme to deserving student is pending from the Government Department.

**Outcome**: The successfully approved students by the Government Department will receive financial support of Rs 56,000/- from government. This amount will be deposited to each of the student's bank account in four installments.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

#### **6.3 Faculty Empowerment Strategies**

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

#### **Response:**

The institution believes in coordinated growth and has introduced several welfare measures for the teaching and non-teaching staff. The following list depicts the existing Welfare Measures;

- Women Empowerment program
- Employee Provident Fund
- Gratuity
- Accidental Insurance for Employees
- Maternity leave.
- Staff Loan Facility from the Institute's Cooperative Credit Society
- Financial support for up gradation of knowledge through QIP/ conferences/ Workshops Financial support for up gradation of Qualification
- Tie up with hospitals (Shayadhri Hospital providing discount on Medical treatment bills)
- Recognition and appreciation of faculty/staff considering their overall performance.

Welfare schemes available for teaching and non-teaching staff are as follows:

Staff Credit Society

A credit co-operative society on campus is formed and run by the teaching and nonteaching staff members for meeting the necessary financial needs. The details of members who have availed financial assistance over the last four years is given below.

| Financial Year | GCOERC<br>Teaching | GCOERC Non<br>Teaching | Members<br>Availing | Members<br>Availing   | Total Amount<br>Disbursed |
|----------------|--------------------|------------------------|---------------------|-----------------------|---------------------------|
|                | Members            | Members                | Benefit-            | <b>Benefits</b> - Non |                           |
|                |                    |                        | Teaching            | Teaching              |                           |
| 2013-14        | 17                 | 19                     | 05                  | 07                    | 06,80,800/-               |
| 2014-15        | 21                 | 17                     | 08                  | 07                    | 08,15,000/-               |
| 2015-16        | 46                 | 24                     | 11                  | 09                    | 13,03,000/-               |
| 2016-17        | 39                 | 24                     | 11                  | 12                    | 10,16,000/-               |
| 2017-18        | 27                 | 23                     | 10                  | 12                    | 12,45,000/-               |

#### **Group Accident Policy**

Applicable from 2015-16 and all faculty with more than 1 year experience are provided Group

| Year    | Teaching | Non Teaching | Total | Numbers<br>Benifitted    |
|---------|----------|--------------|-------|--------------------------|
|         |          |              |       | with Insurance<br>Scheme |
| 2013-14 | 20       | 18           | 38    | NIL                      |
| 2014-15 | 40       | 16           | 56    | NIL                      |
| 2015-16 | 60       | 25           | 85    | 32                       |
| 2016-17 | 80       | 28           | 108   | 51                       |
| 2017-18 | 67       | 32           | 99    | 63                       |
| 2018-19 | 56       | 30           | 86    | 78                       |
| Total   | 323      | 149          | 472   | 224                      |

In addition to above various leaves available to teaching and non-teaching staff are vacation leave, casual leave, Earned Leaves, medical leave.

The Institute provides college uniform to teaching and non-teaching staff (Security Personal and peons).

Special study leaves for faculties pursuing Ph.D They are permitted for attending coursework of Ph.D part time programme.

Special celebrations like Engineers Day; Teacher's Day

**Special Appreciation and Awards on Teachers Day** 

Flexibility in working hours (short leave facility & gate pass for 2 hours) is permitted to all faculty and non teaching staff to attend personal issues. Professional Development Programs/ Faculty Development programme are organized and financially supported(24 Karat) by institution to upgrade and update the professional skills of faculty and non teaching staff.

#### Institute practices unique activities:

Accident Benefit Scheme.

Monthly celebration of the birthday of its faculty and non teaching staff. Accordingly at the end of each month the birthday of all its faculty and non teaching staff falling during the month is celebrated by coming together in the auditorium of the institute.

Excursion/ Get- together Programme of faculty, non teaching staff and members of managing committee is organized.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Link for Additional Information | View Document |  |

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

#### **Response:** 5

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 07      | 09      | 00      | 02      | 00      |

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

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

#### Response: 1.6

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 03      | 02      | 01      | 01      | 01      |

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

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

#### Response: 13.67

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 26      | 14      | 02      | 02      | 02      |

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

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

#### **Response:**

**Yes,** Institute has regular practice to carry out performance appraisal annually and is evaluated at different level viz, HOD, Dean Academic, Principal, CEO and Management.

Performance of teaching, non-teaching staff is collected through a well structured appraisal form. Appraisal forms are designed separately for each cadre of teaching and non teaching staff addressing contributions appropriate for their cadre and comprises of following stages:

#### Stage 1&2:Attendance and Teaching Load

Each faculty fills data of teaching load, attendance record, and respective result analysis in the appraisal form at the end of semester. This also includes the details of curricular, co-curricular, extra-curricular activities undertaken during semester.

#### Stage 3: Academics

Academic aspect of faculty is evaluated in this stage by concerned HOD. Evaluation comprises of twelve fields representing different attributes necessary for effective dissemination of teaching and learning process of the subject.

This evaluation will result into a score signifying the teacher's competency in teaching and learning in particular subject.

#### **Stage 4: Participation in Departmental Activities**

This aspect comprises of eight activities which are necessary for professional development of individual

faculty, also includes contribution to department and institutional development. Rating obtained in this aspect represents the individual effort taken for overall development.

HOD counsel the faculty whose performance requires improvements by discussing his strength, weakness and areas of improvement.

#### Stage 5: Students Feedback

Students evaluate the subject teacher with respect to outcomes of teaching and learning process on a rating scale of 1 to 5.Feedback is obtained by a well-structured online &offline form in each semester. Students also recommend the strength, weakness and areas of improvement of each subject teacher.

#### Stage 6: Faculty Evolution by Dean & Principal

Appraisals so obtained are further analyzed and evaluated by Dean Academic and Principal. This is evaluated based on ten curricular and co-curricular criterias. Based on this evaluation and HOD's consultation, weakness, strength and training needed for overall development of faculty is recommended.

#### Stage 7: Rating By CEO

Based on above recommendations, the CEO develops a rating which is averaged out to get the final rating and forwarded to management.

#### Stage 8: Management

The management reviews the performance appraisal. Suitable decision like regularizing the staff after probation period, deciding the regular increments and promotions are taken.

**Outcome:** This system has a positive advantage for both individual faculty and management. Faculty have scope for improvement by overcoming the area of weakness. On the other hand management gets an unbiased analysis of each faculty and those deserving are suitably rewarded.

#### Non-Teaching staff:

Each staff fills a self- rating appraisal form which consists of personal details, professional competence, performance, personal characteristics, achievements, up gradation in skill and responsibilities held. This form is rated by competent authority, Vice Principal and Principal.

Based on this evaluation and competent authority's consultation weakness, strength and training needed for overall development are recommended. The CEO develops a rating which is averaged out to get the final rating and submitted to management for further action.

| File Description           | Document      |
|----------------------------|---------------|
| Any additional information | View Document |

#### 6.4 Financial Management and Resource Mobilization

#### 6.4.1 Institution conducts internal and external financial audits regularly

#### **Response:**

The board of trustees of Guru Gobind Singh Foundation appoint internal auditors for internal audit of its institutes . The Chief Executive Officer & Accounts officer take care of doing compliance of the objections raised ,if any.

The External auditor is appointed by the Guru Gobind Singh Foundation. The institute having qualified practicing Chartered Accountants as an auditor who audits the accounts annually. After the audit, the report is sent to the management for review. The Chief Executive Officer & Accounts officer take care of doing compliance of the objections raised , if any.

| File Description           | Document      |
|----------------------------|---------------|
| Any additional information | View Document |

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

Response: 1

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 1.0     | 00      | 00      | 00      | 00      |

| File Description   | Document      |
|--|---------------|
| Details of Funds / Grants received from non-<br>government bodies during the last five years | View Document |
| Any additional information   | View Document |

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

**Response:** 

**Resource Mobilization Policy and Procedures** 

The mobilization of funds are through collection of fees from students of institute, for capital expenditure of land and building the donations and loans from banks is taken by parent body.

The loan from parent body and fees collected from students are the main source of funds. The fixation of fees is done by Fee Regulatory authority. The mobilized funds are spent on salaries and operating expenses and on equipment required for institute, the utilization of funds are optimize.

#### 6.5 Internal Quality Assurance System

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

#### **Response:**

Institutes vision and mission is a driving force for the quality initiatives to be taken up. The Institute is committed in the provision and continuous improvement of quality teaching and learning process. Various training programs, industrial visits, expert lectures, technical events, other co-curricular and extracurricular activities focuses on overall development of students. IQAC has mechanisms for academic auditing as a part of QMS ISO 9001:2015 audits all academic and administrative aspects.

The best practices institutionalized as a result of IQAC initiatives are elaborated below:

#### **1.Laboratory Enhancement:**

IQAC audits from quality perspective conducted have suggested various improvements for enhancement of Laboratory teaching learning process. Following are some listed practices that are developed

- 1. Development of Laboratory manual for the subjects
- 2. Development of various displays for better understanding of the related subject
- 3. Development of Mini projects of the related areas.
- 4. Development of Laboratory Maintenance System

These activities ensure the quality enhancement of the practical conducted, correct functioning of all the instruments and accessories, development of a standard for presenting results of the experiments, availability of required setup as per curriculum.

IQAC has recently suggested to develop Standard Operating Procedures (SOP's) and recommended to ensure that these SOP's are available with Lab I/C. The operating procedure ensures the opportunity to the students to conduct the experiments independently but under supervision of faculty. This practice has boosted students' confidence to undertake new practical's, miniproject or final year project. This also ensures objective of making the student a life-long learner by self-learning approach and the process also focuses more on the student centric learning.

**2. Feedback system:** The Institute deploys feedback system to ensure and improve the quality of teaching learning process. Feedback is collected from students regarding teaching learning process. Results of the same are reviewed by the Principal, HOD and Academic Dean. Necessary corrective and Preventive

actions are then decided to eliminate the cause of non-conformances.

Parent Teachers meetings are conducted to inform academic performance, to provide constructive suggestions, to enhance student abilities and the overall performance.

IQAC in association with T&P conduct HR meeting. HR Managers from the various industry/organizations attend such meetings where the discussion on needs and expectations of the industries are discussed and accordingly suggestions and improvements needed are identified. This ensures students centric learning practices.

#### 3. Implementation Quality Management System:

Institute had established QMS Section in 2015 when the institute obtained ISO certification for the first time. It has played an instrumental role in designing, framing, implementing and reviewing the processes of the college. IQAC was established on 20/11/2017 to ensure quality in teaching learning process, specifically for implementing Outcome based Education(Academic Dairy), a philosophy adopted for various accreditation.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### **Response:**

Institute has a good academic practices for student development. Academic Dean has developed an Academic Diary that takes care of entire teaching learning process, its structure & methodologies of operations. Academic Members and the staff continually reviews teaching learning process in the institute.

Before commencement of the term, academic calendar is prepared. Faculty prepares lecture plan for the entire semester and all the coordinators ensure that the activities are conducted as per schedule. All faculty members conduct their classes and practicals as per their time table and reports them through the records of academic diary. This academic diary is checked by the department head and the Dean. At the end of the semester the academic diary is submitted to the head for the final review. Course teacher ensures that the Course Outcome are explained to the students at the start of the semester and also explain the monitoring requirements.

The summary of steps taken by the institute to review teaching learning process is as follows:

- 1. Preparation of Academic and Activity Calendar.
- 2. Time table preparation as per work load assigned to faculty.
- 3. Preparation and implementation of teaching plan (Theory and practical).
- 4. Periodic review of syllabus covered through academic diary.
- 5. Remedial lectures and make-up lectures are conducted as per requirement.

6. Assessment and review of academic performance of students by the faculty as a part of CIE

7. Submission and scrutiny of performance appraisal of faculty and staff at the end of each seminar.

8. Letter of appreciation to best performing faculty.

Yes. The institute believes that audits are to be conducted periodically to ensure effective implementation of academic and sustaining the quality. The Principal communicates in this regard during the meetings or during the interaction with the staff. The Head of the Department also review the various academic activities during the department meetings and guide the staff members accordingly. Submission of self-appraisal reports and annual activity reports is mandatory for each and every staff member of the institute.

The institute conducts internal audit as per ISO procedure. External audit is conducted by statutory DNV GL (for ISO Certification). These audits have helped in improving institutes academic and administrative processes (with regard to teachers' appraisal, student activities, addition of equipment, books and journals, infrastructure etc.). The most important ones are- (i) preparing the college for ISO audits, motivating the teachers to participate in all the processes to be followed in ISO and (ii) preparing the faculty and staff for NAAC accreditation where the parameter for accreditation was outcome based teaching and learning. This has brought about a paradigm shift in the perspectives of the faculty towards the teaching-learning process.

| File Description                | Document      |
|---------------------------------|---------------|
| Any additional information      | View Document |
| Link for Additional Information | View Document |

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

**Response:** 4.4

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 12      | 06      | 04      | 00      | 00      |

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

#### 6.5.4 Quality assurance initiatives of the institution include:

**1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for** 

| improvements<br>2. Academic Administrative Audit (AAA) a<br>3. Participation in NIRF<br>4. ISO Certification<br>5. NBA or any other quality audit | and initiation of follow up action |
|---|------------------------------------|
| A. Any 4 of the above   |                                    |
| B. Any 3 of the above   |                                    |
| C. Any 2 of the above   |                                    |
| D. Any 1 of the above   |                                    |
| <b>Response:</b> C. Any 2 of the above  |                                    |
| File Description  | Document                           |
| e-copies of the accreditations and certifications   | View Document                      |
| Details of Quality assurance initiatives of the institution   | View Document                      |
| Any additional information  | View Document                      |
| Annual reports of institution   | View Document                      |

| Particulars     | 2013-14       | 2014-15      | 2015-16                           | 2016-17           | 2017-18                   |
|-----------------|---------------|--------------|-----------------------------------|-------------------|---------------------------|
|                 | Establishment |              |                                   |                   |                           |
| Teaching,       | Traditional   | Traditional  | Student Centric                   | Adaptation of     | Introduction of           |
| Curricular and  | Teaching and  | Teaching and | Approach                          | OBE system        | New Academic              |
| Extracurricular | Learning      | Learning     |                                   |                   | Diary with OBE            |
|                 |               |              | Industrial Visits                 | Use of LCD        | System                    |
|                 |               |              |                                   | Projectors        |                           |
|                 |               |              | State Level                       |                   | Student Centric           |
|                 |               |              | Conference                        | Industrial Visits | Approach                  |
|                 |               |              | Annual Sports<br>and Cultural Day | Expert Lectures   | Focus on Self<br>Learning |
|                 |               |              | Celebration                       | T&P               | 6                         |
|                 |               |              |                                   |                   | Use of NPTEL              |

|                                 |   |   | PRERNA 2015                                      | MOU with   | Video Lectures  |
|---------------------------------|---|---|--|--|---|
|                                 |   |   | Exhibition)                                      | industries   | Use of Digital teaching   |
|                                 |   |   | Development of<br>Student Council                | Starting of<br>PMKVY Skill<br>Development                  | Swayamprabha  |
|                                 |   |   | Development of Students                          | Centre   | Industrial Visits   |
|                                 |   |   | Association<br>(MESA, CESA,                      | University<br>sponsored FDP                                | Expert Lectures   |
|                                 |   |   | EESA)  | Start of NSS   | International<br>Conference<br>PRERNA 2017                                    |
|                                 |   |   |  | Appointment of<br>Academic Dean<br>for monitoring          | (Science<br>Exhibition)   |
|                                 |   |   |  | the academic<br>processes                                  | MOU with<br>various<br>industries   |
|                                 |   |   |  |  | 1st Convocation   |
|                                 |   | $\smallsetminus V$                      |  |  | 1st Alumni<br>Meet  |
|                                 |   |   |  |  | T&P Drives  |
| Infrastructural<br>Improvements | Provision of<br>Basic<br>Infrastructure | Provision of<br>Basic<br>Infrastructure | Development of<br>a Conference<br>Hall (A/c with | Development of<br>Laboratories                             | Renovation of<br>Offices for HoD<br>Faculty                                   |
|                                 |   | Development of<br>Laboratories          | 50 Capacity)<br>Development of<br>Laboratories   | Development of<br>Auditorium<br>(A/C with 200<br>capacity) | Renovation of<br>Administrative<br>Office                                     |
|                                 |   |   | 30 MBPS Lease<br>Line                            | Renovation of<br>Principal and                             | 100 MBPS<br>Lease Line  |
|                                 |   |   | Development of<br>Cafeteria                      | 60 MBPS Lease  | Solar PV Cell –<br>20 kW power  |
|                                 |   |   |  |  | LED Fitments  |
|                                 |   |   |  |  | Establishments<br>of Industry<br>Institute<br>Partnership Cell<br>(MICO-BOSCH |

|                  |                |                |   |                                   | & SIEMENS)  |
|------------------|----------------|----------------|---|-----------------------------------|---|
|                  |                |                |   |                                   | New Computer<br>Centre with 100<br>Computer<br>Capacity                                     |
|                  |                |                |   |                                   | Purchase of new computers   |
|                  |                |                |   |                                   | New Computer<br>server  |
| Administrative   | Basic          | Basic          | Appointment of  | ISO 9001:2015                     | New   |
| Improvements     | Administration | Administration | Experienced<br>Faculties  | Certification                     | Performance<br>Appraisal  |
|                  |                | Leadership     |   | Establishment                     | System  |
|                  |                | of Honb'l CEO  | Best Emerging   | of active                         |   |
|                  |                | S              | College Award<br>Inclusion of<br>Performance<br>Appraisal<br>System<br>Establishment<br>of Active<br>Examination<br>Section | Student<br>Scholarship<br>section | Formation of<br>various internal<br>committees for<br>various<br>administrative<br>function |
|                  |                |                |   |                                   |   |
| rile Description | 1              |                | Document  |                                   |   |
| Any additional i | nformation     |                | View Docume   | e <u>nt</u>                       |   |

#### **Criterion 7 - Institutional Values and Best Practices**

#### 7.1 Institutional Values and Social Responsibilities

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

#### Response: 11

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 04      | 04      | 01      | 01      | 01      |

| File Description   | Document      |
|--|---------------|
| Report of the event  | View Document |
| List of gender equity promotion programs organized<br>by the institution | View Document |

#### 7.1.2

# 1. Institution shows gender sensitivity in providing facilities such as: 1. Safety and Security 2. Counselling

#### 3. Common Room

#### **Response:**

Following are the measures taken at our institute:

#### Safety and Security

#### 1. Security fencing

One of the first line of college security measures is the application of fencing system to control ingress and egress from the college grounds. The college ground is very well fenced with the walls.

#### 2. Security Surveillance

24x7 Security is provided in the campus with the mission of providing a safe and secure environment for all those on our campus, and leading by example, through education and enforcement. Our team of security patrols the campus. The security in charge answers emergency and routine phone calls, monitor security cameras and campus safety.

#### 3. Digital Surveillance:

Digital surveillance technology monitoring students, staff and visitors is very well employed within the campus. Closed circuit television (CCTV) the most common type of video monitoring system has been adopted. This helps to prevent violence, theft, illegal activities. In the new wave of technology, cyber-security has also become a concern as the college try to balance advancement in students' technological skills with the possibilities of misuse of the digital devises and breeches servers. A due care has been taken to achieve cyber-security within the campus through CYBERROM.

4. Identification Cards and Uniforms

Students and faculty ID cards are the ways for college security measures. They allow college authorities to immediately identify that the people wearing ID and uniform belongs to the college. Institute made it compulsory for the students as well as the faculties to wear ID and uniform in order to get entry within the college campus. The visitors are also being noted and tracked by the security guards. They are allowed to enter the campus with a gate pass.

5. Women's grievance cell

College has established a women's grievance cell for purely safeguarding the rights of female students and staff members. This cell provides a platform for listening to complaints and providing possible solutions. Grievance cell conducts regular meetings, reviews the issues and decipher.

The cell also tries to incorporate hygiene, habits and ensure a healthy atmosphere in and around the college by conducting various programmes, expert lectures/ seminars, etc.

#### Counseling

1. Gender Equity Initiatives

Various programmes are arranged in association with police authorities of Nashik for gender equality sensitization and safety instructions at work place as well as on road safety. Every teacher guardian helps to council and solves the student's problem regularly.

2. Mentor-Mentee Scheme

Mentorship: Regular parents and students meetings are conducted department wise and if a student is irregular the root cause of the problem is deciphered.

The students are also counseled for promoting the importance of discipline in the college premises as well as to build a cultural harmony.

#### Common Room

The girls' common room has been provided for girl students and ladies staff. A separate suggestion box is kept in college premises as well as in girl's common room that is checked once in a month. There are female attendants who ensure safety of girls and also maintain cleanliness in the girls' common room.

| 7.1.3 Alternate Energy initiatives such as:  |  |
|--|--|
| 1.Percentage of annual power requirement sources                                   | of the Institution met by the renewable energy |
| Response: 37.29  |  |
| 7.1.3.1 Annual power requirement met by the renew                                  | vable energy sources (in KWH)                  |
| Response: 32104  |  |
| 7.1.3.2 Total annual power requirement (in KWH)                                    |  |
| Response: 86100  |  |
| File Description   | Document                                       |
| Details of power requirement of the Institution met<br>by renewable energy sources | View Document                                  |
| Any additional information   | View Document                                  |
| Link for Additional Information  | View Document                                  |

| 7.1.4 Percentage of annual lighting power requirements met through LED bulbs |                       |  |
|--|-----------------------|--|
| Response: 50.9   |                       |  |
| 7.1.4.1 Annual lighting power requirement met throug                         | gh LED bulbs (in KWH) |  |
| Response: 26599.56   |                       |  |
| 7.1.4.2 Annual lighting power requirement (in KWH)                           |                       |  |
| Response: 52256.64   |                       |  |
| File Description   | Document              |  |
| Details of lighting power requirements met through LED bulbs                 | View Document         |  |
| Any additional information   | View Document         |  |

#### 7.1.5 Waste Management steps including:

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

**Response:** 

#### Solid and liquid waste Management:

Waste management is one of the greatest challenges to achieve campus sustainability. Conducting a waste characterization is the first critical step in successful waste management. We at our institute have a simple solid waste management system. It involves everything from collection to disposal. Paper and paper products, pens, disposable drink containers, waste food in canteen and compostable organic material etc are the waste products in college campus. We separately collect these wastes at different locations in bins according to the properties like disposable and non disposable waste material as well as solid and liquid waste. The municipal waste collection vehicle collects the generated & segregated waste at daily basis. On the other hand, the wet waste collected from the canteens is daily sent to Organic Waste Converter i.e. Composter. The compost generated is then used as a soil conditioner for gardening. In the composter.

#### **E-waste management:**

- Unrepaired electronic instruments, burned electronic components, battery cells and broken wires are kept in enclosed boxes.
- Electronic goods are put to optimum use; the minor repairs are set right by the staff and the Laboratory assistants; and the major repairs, by the professional technicians, and are reused.
- UPS Batteries are recharged / repaired / exchanged by the suppliers. The Institute also takes benefit of the various buy back offers from the suppliers.

| File Description                | Document      |  |
|---------------------------------|---------------|--|
| Any additional information      | View Document |  |
| Link for Additional Information | View Document |  |

#### 7.1.6 Rain water harvesting structures and utilization in the campus

#### **Response:**

#### **Rain Water Harvesting**

The institute has implemented rain-water harvesting, which significantly contributed to increasing ground water table and reduce water expenses. This system is also useful for well recharging through percolation. The campus landscape is watered by collected water through rain water harvesting. The housekeeping staff regularly checks the rain water pipe line and reports to the in charge supervisor if maintenance is needed. Area for rain water harvesting is 2454 sq meter which is separated to collect the water through three outlets. These three outlets are connected to the rain water harvesting tank of capacity 125000 Lit.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

#### 7.1.7 Green Practices

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

#### **Response:**

Institute follows following green practices:

Students, staff using

#### Bicycles

The student and staff are encouraged to use bicycle.there are few bicycleusers in the campus.

#### **Public Transport:**

Although college has provided bus facility for students, few of our students avail public bus facility provided by Nasik Municipal Corporation

#### Pedestrian friendly roads

Pedestrian friendly roads are available in college campus to provide pleasant walking environment in the campus. These are easy to clean and maintain. Dustbins are placed along these pedestrian friendly roads to keep the campus clean.

#### **Plastic-free campus**

The institute authorities as well as faculty members always encourage for avoiding use of plastic in the campus. Use of plastic bags is prohibited within the campus.

#### Paperless office

Use of minimum paper in office. The institute has well established channel of ERP system which is used to plan the lecture schedule, maintain student attendance record, for leave application, to give requisition, to generate leaving certificates letters etc allas soft copies. Communications with students and parent and staff is through ERP messaging system. Admission process, filling up examination forms, scholarship forms are done online. Communication within and outside the institute is digital.

#### Green landscaping with trees and plants

The college is well land scape with trees and plants

Tree plantation an important responsibility is handled with due care by planting good number of trees by Staff members and NSS students every year at and off the campus. By organizing these tree plantation institute contributes to the "Vanam Mohtsava Drive" of state government. Staff is appointed for taking care of trees and gardens. Institute follows regular practice for the felicitation of invited guest by presenting saplings and books instead of bouquet.

#### **Tree Plantation**

As per the circular of Government of Maharashtra about plantation of 2 crore trees, We Guru Gobind Singh College of Engineering and Research Centre, Nasik is organized Tree Plantation Day program in collaboration with Shree Bharat Co-Op Group Housing Society Ltd, Nasik. We have planted various types of trees in college campus & nearby college campus some of them being Gulmohar, Nilmohar, Chafa, Raktchandan, Mango, Shankasur etc. For tree plantation total 190 all department students, staff members are participated

#### **Energy Conservation:**

The institute has taken due care for less energy consumptions including electronic ballast tube lights, electronic regulators for fans, and the proper aeration leads to little use of Air Conditioners.

All computers are LCD monitor based instead of olden CRT based monitor.

Minimum requirement of tube lights and fans because of sufficient natural lights in class rooms, laboratories and staff cabins.

Students and staff are motivated to use good practices such as to switch off electronic instruments, fans and tubes etc whenever not required.

#### Use of renewable energy:

Institute has installed solar panel to partially meet lighting requirement by solar energy

Solar street lights are installed at parking areas.

#### Water harvesting:

The institute has implemented rain-water harvesting, which significantlycontributed to increasing ground water table and reduce water expenses.

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

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

#### Response: 1.58

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 10.602  | 3.362   | 2.018   | 2.427   | 0.096   |

| File Description   | Document      |
|--|---------------|
| Details of expenditure on green initiatives and waste<br>management during the last five years | View Document |
| Any additional information   | View Document |

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

- **1.Physical facilities**
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities
- 5. Rest Rooms
- 6. Scribes for examination
- 7. Special skill development for differently abled students
- 8. Any other similar facility (Specify)
- A. 7 and more of the above

#### **B.** At least 6 of the above

- C. At least 4 of the above
- **D.** At least 2 of the above

**Response:** B. At least 6 of the above

| File Description  | Document      |
|---|---------------|
| Resources available in the institution for Divyangjan     | View Document |
| link to photos and videos of facilities for<br>Divyangjan | View Document |

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

#### **Response:** 6

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 3       | 3       | 0       | 00      | 0       |

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

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

**Response:** 13

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 08      | 04      | 01      | 0       | 0       |

| File Description    | Document      |
|---------------------|---------------|
| Report of the event | View Document |

#### 7.1.12

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

| Response: Yes  |               |  |
|--|---------------|--|
| File Description   | Document      |  |
| URL to Handbook on code of conduct for<br>students and teachers , manuals and brochures on<br>human values and professional ethics | View Document |  |

# 7.1.13 Display of core values in the institution and on its website Response: Yes File Description Document Provide URL of website that displays core values View Document

## 7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

**Response:** Yes

| File Description   | Document      |
|--|---------------|
| Details of activities organized to increase<br>consciousness about national identities and symbols | View Document |
| Any additional information   | View Document |

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

| Response: Yes  |               |
|--|---------------|
| File Description   | Document      |
| Any additional information   | View Document |
| Provide link to Courses on Human Values and professional ethics on Institutional website | View Document |

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

**Response:** Yes

| File Description  | Document      |
|---|---------------|
| Any additional information  | View Document |
| Provide URL of supporting documents to prove institution functions as per professional code | View Document |

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

#### **Response:** 24

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

| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---------|---------|---------|---------|---------|
| 07      | 05      | 05      | 04      | 03      |

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

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

#### **Response:**

National integration is one of the core values is fully respected by our institute serving humanity irrespective of cast, religion, poverty is the motto of the Guru Gobind Singh Foundation .In line with these our institute commemorates all religion functions and support the faculty and students to showcase the same

The institute organizes various activities, lecture series and programmes in which it strives to drives human values at home such as compassion, faith, honesty, patriotism, brotherhood, justice, kindness, love, openness to heart, peace, respect, responsibility, self-respect, spirituality, trustworthiness, integrity and wisdom. They are a set of values which define humanity. Institute tries to inculcate them in all strengths to make them social aware.

Besides, the college organizes national festivals and birth/death anniversary of the great Indian

personalities throughout the academic year. On that date, a programme is organized to celebrate and memorize their actions and words. All teachers, members of non-teaching staff, student's representatives and volunteers of NSS along with the principal come together. Then the *pujan* (i.e. worship) of the image is made by all of them. Various activities are conducted at that time.

#### Celebration of the birth anniversary of great personalities

Shri Swami Vivekanand is an ideal personality. College celebrates his birth anniversary 12th Jan. as "Yuva Din". On this day or week various activities and programmes emphasizing the significance of human values are organized with the participation of the Students. National programme at science centre Delhi in presence of Priminister Narendra Modi on this occasion was lively shown to the students and a staff of our institute in auditorium hall.

The institute organizes the flag hoisting ceremony on the "Independence Day" and the Republic day every year. It is combinly celebrated by all institutes under the GGSF. Patriotic songs, skits and dances are performed by the students from all institutions.

The students & Institute celebrate the "Teacher's day" in the memory of Dr Radhakrishnan by greeting to their teachers. The management of GGSF appreciates and recognizes the best performing faculty and members of non teaching staff on this occasion.

The "Engineer's day" is celebrated at the departmental level by organizing various events like expert lectures.

The institute celebrated "Librarian's Day" on 12th Aug in the memory of Dr. S.R. Ranganathan, the father of library Science.

The institute celebrated "Reading Inspiration Day" on 15th Oct. in the memory of Dr. A.P.J.Abdul Kalam.

The institute celebrated "Marathi Bhasa Divas" on 27th Feb. in the memory of Vishnu Vaman Shisrwadkar / Kusumagraj. The famous Marathi poet in Indian literature.

"Guruparb" a grand celebration of birth anniversary of Guru Gobind Singh Ji is one on the major activates in our campus.

Such celebrations of National Festivals, birth anniversaries of national leaders and remembering them on their death anniversaries make a feel of patriotism & integrity in the mind of the staff and students.

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

#### **Response:**

The institute follows complete transparency in its financial, academic, administrative and other auxiliary functions, while dealing with its all stake holders. In every academic year, budget is planned and prepared as per the requirements and discussed in various BOG meetings for necessary action and approval.

Purchasing is done through a well set procedure. Purchase initiation is through resource requisition and its approval. Purchase decisions are based on at least three quotations from the suppliers. After that the PO are generated through ERP and expedited.

We have a transparent fees collection policy followed by accounts department and monitored by the principal of the institution and CEO of the Guru Gobind Singh foundation. Academic policy includes academic calendar, load distribution, time table, portfolio allotment, continuous assessment scheme, academic monitoring committee. Every year academic annual report is maintained and discussed in Board of Governance Meetings for various suggestions and improvements.

For transparency in administration, a document like staff handbook is available. Faculty recruitment is done as per the procedure laid down by the affiliating university by calling applications through an advertisement. Daily attendance of the recruited faculties is recorded through biometric system. Leave and salary are administered through ERP.

Student admissions are done as per the procedure of competent authority i.e. "Admission Regulatory Authority" and fees are charged as fixed by the "Fees Regulatory Authority" of the state government. Entire teaching, learning and assessment procedure is governed by the affiliating university with transparency.

Lastly, for auxiliary functions required for student assistance like Canteen, reprography and Stationary centers are available at institute campus, higher authority instructs canteen management as well as reprography center owner to display recent rate card for clear and transparent transactions.

#### 7.2 Best Practices

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

**Response:** 

**Institutes Best Practice – 1** 

#### 1. Title of the Practice- Professional skill Trainings

#### **2.** Objectives of the practice:

- 1. Prepare students for industry oriented learning through tailor made training programs
- 2. Impart training that teaches skills relevant to work in their profession
- 3. Train the trainer
- 4. Train student's with soft skills to make them more employable.

**3.** The context: Past few decades witnessed exponential growth in Engineers graduating across the country. Employability and Industry readiness survey of engineering graduates by certain agencies showed that majority of engineering graduates are unemployable. Lack of soft skills, hands on hard skills and knowledge of new techniques for placement in industry are cited as the main reason for high unemployability across country.

Technology has advanced at a fast pace leading to research, innovation and development resulting in newer design and product development. Their exist gap in the technology being developed and the curriculum offered at various universities. Technological advancement is required to be incorporated into academics and hence it becomes imperative for the education institutes to prepare readily employable graduates through professional development training.

**4.** The practice: Institute integrates professional training with academics. Two aspects of better employability are imparted through the professional development training,

1. Industry oriented training (SIEMENS and BOSCH industry institute partnership centre)

2. Inculacte soft skills to make confident personality. (Soft Skills & Personality Development)

SIEMENS and BOSCH industry institute partnership centre provides the required professional training to Electrical and Mechanical Engineering students. The state of art, laboratory consists of sophisticated automated trainer kits, and provides training, in line with actual industry based equipment and machinery.

The Electrical Engineering module (SIEMENS Module) for 36 hours comprises of 12 hours of theory& hands on training related to Low Voltage Switchgear, Basics of AC/DC Drives, Basic Automation, Basic SCADA

The Mechanical Engineering module (BOSCH Module): This module varies between 8-20 hours comprising of theory & hands on training related Auto Electrical Systems (Starter, Alternator and Batteries), Vehicle Diagnostics Basics and System Diagnostics, Basic Course on Diesel Fuel Injection System, Vehicle Air-Conditioning Systems and Functions.

**Soft skill and Personality development training course**: The institute organize soft skill development training course in collaboration with 1. GENOSOIS & 2. Mahindra NANDI.

The course is of 40 hours duration and the training module consists of

- 1. Communication skill.
- 2. Personal Skill
- 3. Public Speaking
- 4. Teamwork
- 5. Time Management:
- 6. Leadership
- 7. Group Discussion
- 8. Interview Skill

Construction Technology laboratory: Students of Civil Engineering perform the various construction activities like making construction bonds, understanding plastering, formwork.

#### 1.Evidence of success:

A good response from the students was received. 771 students from Mechanical Engineering and Electrical Engineering were trained during 2017-18 on different modules of SIEMENS and BOSCH. All Final year students in the academic years 2016-17, 2017-18 and 2018-19 were trained on Soft skills. It has

substantially improved student's confidence and overall skills. This was revealed by their success in on campus and off campus interviews, as good numbers of students thrived in group discussion and personal interview.

#### 6. Problems encountered and resources required:

1. Academic schedule do not permit elaborate training period due to academic commitment involving online, in semester and end semester examination scheme.

2. Duration between end of semester and subsequent commencement of next semester is very less and hence cannot accommodate satisfactory training at end of semester.

#### 7. Resource required

Trained trainers, Lab set up as per industry requirement, appropriate Trainer kit, computers,

LCD projector, spacious facility for conducting group discussion, various games etc.

#### **Institutes Best Practice – 2**

Title: Implementation of Quality Management System as per International Standard ISO 9001:2015

#### **Objective of the Practice:**

- 1. Develop and Implement Quality Management System (QMS)
- 2. To prepare the institute to conduct its affairs to achieve the desired quality
- 3. To serve as a document for the institute own staff / work force for understanding quality policy and quality objectives

#### **Context:**

The student of current generation is multidimensional and undergoing heavy academics along with social and financial concerns. Since the institute was newly established in the year 2013 Following were the challenging issues

- Understanding the stake holders requirements
- Improving the educational practices
- Understanding the Students and Parents requirements
- Understanding the needs and expectations of the industry
- Understanding the Internal and External Context
- Understanding the sequence and interaction of the various process
- Describing, understanding and communicating the processes of the institute
- Improving the consistency of the processes
- Achieving the International Recognition

These challenges were the driving force for Implementing the Quality Management System as per

International Standard ISO 9001:2015. In this context Management, CEO and Principal decided to implement the QMS. Wheels were starting from the December 2015 and in the month of September 2016 Institute were certified as an ISO 9001:2015 institute.

Institute implements many best practices for up-gradation of its day to day working and the teaching learning process. Practices like Implementation of QMS as per ISO, Use of ERP (e-governance), Library automation with e-resources, Academic Audit, Faculty Appraisal, Uniform and code of conduct to student and staff etc. are effectively implemented by the institute. Two of these best practices are elaborated as QMS-ISO 9001:2015 Implementation and Academic Monitoring

#### The Practice:

ISO 9000 or "quality management principles" are a set of fundamental beliefs, norms, rules and values that are accepted as true and can be used as a basis for quality management (ISO 9001:2015). It is a framework to guide their organizations towards improved performance. Recently, new version of quality management principles was published as ISO 9000:2015 that has seven principles only such as: 1) Customer focus; 2) Leadership; 3) Engagement of people; 4) Process approach; 5) Improvement; 6) Evidence-based decision making, and; 7) Relationship management.

Our Institute has established, implemented, maintained and continually improve a quality management system, including the processes needed and their interactions, in accordance with the requirements of ISO 9001:2015 standard. Institute determines the processes needed for the quality management system and their application throughout the organization. Institute has adopted a process approach for its management system. By identifying the Management Processes, Core Processes and Support Processes (see Annexure A) within the institute, and then managing each of these discretely, this reduces the potential for nonconforming services discovered during final processes or after delivery. Instead, nonconformities and risks are identified in real time, by actions taken within each of the top-level processes.

QMS is established to meet basic requirements of ISO 9001: 2015 and documented through QMS Process Manual and Apex manual. In Process Manual, at the start of each process, inputs for that process are defined followed by sequence of the process along with owner and output in the form of document and / or record. At each stages of the process Stage output is defined. Thus in whole QMS a process approach is established to enhance Customer Satisfaction by meeting its requirements.

Chief Executive Officer of GGSF, Principal and Vice Principal through their leadership and commitment monitors the system and continually for improving its effectiveness.

#### **Evidence of Success**

In the month of Dec 2015 management had decided to start the activity of ISO 9001 certification. With the continuous efforts of all the HoD's, Faculties and Staff under the leadership of the Principal and Chief Executive Officer of the foundation, institute was **Certified as an "ISO 9001:2015 Institute"**, in the month of Sept 2016. In the year Aug 2017 and Oct 2018 we successfully **completed the certification Surveillance Audit** with 1 and 2 minor findings only. Findings are verified by the Certification agency and agreed for the closure of these minor findings.

Following were the results of such practice at the institute

- Increased community awareness and appreciation of education provided by the college
- Improved efficiency / work through **standardize activities** like successful implementation of Academic Diary, ERP implementation, Availability of various reports, Various Student Activities, etc.
- Better documentation of methods and responsibilities resulting in more consistent processes
- Fact based performance review through weekly meeting chaired by the Chief Executive Officer and Principal
- Involvement by the entire organization and a commitment to **continual improvement**
- More open lines of communication
- Development of quality mindset among the faculties

#### 6. Problems encountered and resource required

#### **Present Constraints for Implementation of QMS:**

- 1. Time constraint
- 2. Frequent up-dations of the syllabus by university and parallel running of number of patterns of examination
- 3. Limited number of Internal Auditors as per ISO 9001:2015

#### Planning's in the AY 2018-2019 to overcome present constraints

1.One or two faculties will be train to handle the various activities of ISO9001:2015

During this year combined pattern of examination is at TE and BE, To strictly follow this summary from all examination form will be prepared and used for examination this will ensure zero or less errors

| File Description                | Document      |
|---------------------------------|---------------|
| Link for Additional Information | View Document |

#### **7.3 Institutional Distinctiveness**

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

#### **Response:**

Collaborating with industry for the development of faculty and students is the aim of GGSF's management. Taking this initiative, it is proposed that a "**Centre of Excellence**" should be established in GGSF Campus. The motto behind this Centre of excellence is to bridge the gap between industry and academic sector.

With this initiative GGSF made the MOU with BOSCH & SIEMENS on 10th August 2016 and 1st

January 2017 respectively to fulfil the following objectives:

1. Prepare students for industry oriented learning through tailor made training programs.

2. Knowledge sharing on Bosch and Siemens advanced automotive systems.

3. Advanced training modules for students in Bosch and Siemens Training Centres.

4. Help setting up the Automotive Service Solutions Lab.

5. Train the trainer for lab technicians.

The modules decided as per the MOU with Bosch and Siemens are as follows:

| Sr. No | BOSCH Module                      | SIEMENS Module                  |
|--------|-----------------------------------|---------------------------------|
| 1      | Auto Electrical Systems (Starter, | Training Program on Low         |
|        | Alternator and                    | Voltage Switchgear              |
|        | Batteries)                        |                                 |
| 2      | Vehicle Diagnostics Basics and    | Training Programme on Basic     |
|        | System                            | SCADA                           |
|        | Diagnostics.                      |                                 |
| 3      | Basic Course on Diesel Fuel       | Training Programme on Basics of |
|        | Injection System                  | AC/DC Drives                    |
| 4      | Vehicle Air-Conditioning          | Training Programme on Basic     |
|        | Systems and                       | Automatio                       |
|        | Functions.                        |                                 |

This Centre of Excellence in Collaboration with Bosch and Siemens have been established by GGSF as per the concept designed by Bosch and Siemens. It will act as a bridge to address the technological gap and focus on various technical training program for Bosch and Siemens network. Training of the Bosch has been given to the trainers proposed by institutes at Bosch training centre Bangalore. The training of the Siemens has been given to the trainers proposed by institute at GGSF campus by Siemen's trainers. After completion of training to trainers institute has inaugurated centre of excellence on 20th December 2017. There after institute conducts various training program for the students. This training is beneficial for all students of three branches (Mechanical, Civil, Electrical ) due to its useful syllabus content as discussed below:

#### **Bosch Training Content**

| Sr. No | Title of the Training       | Training Content   |
|--------|-----------------------------|--|
| 1      | Basic Course on Diesel Fuel | Diesel Engine Basics, Theory                                 |
|        | Injection System            |  |
|        |                             | Fuel Injection : Basic Theory                                |
|        |                             | Pumps, Disassembly/Assembly practice Inline and Rotary Pumps |
|        |                             | Inline pump Calibration                                      |

|   |                                   | Rotary pump Calibration  |
|---|-----------------------------------|--|
|   |                                   | Injector Working Principles, theory  |
|   |                                   | Injectors Disassembly/Assembly practice  |
|   |                                   | Injector Testing   |
| 2 | Auto Electrical Systems (Starter, | Basics of Auto Electrical Systems  |
|   | Alternator and Batteries)         | Working principal of starter,<br>Alternator, Battery                           |
|   |                                   | Removal and fitment of<br>Alternator , starter motor on<br>vehicle             |
|   |                                   | Removal, Charging procedure and fitment of battery                             |
|   |                                   | Disassembly/Assembly practice of starter motor                                 |
|   |                                   | Disassembly/Assembly practice of Alternator                                    |
|   |                                   | Visual inspection and testing of starter motor components                      |
|   |                                   | Visual inspection and testing of Alternator components                         |
| 2 | Valiala Discussión Decise en l    | Testing and inspection of starter<br>,Alternator on Test Bench                 |
| 3 | System Diagnostics.               | Basics of Gasoline Engines   |
|   |                                   | Basics of Electronics control system sensors, actuators.                       |
|   |                                   | Familiarizations of sensors,<br>postions of sensors on vehicles,<br>principles |
|   |                                   | Diagnostics basics, malfunction indications                                    |
|   |                                   | Practice on vehicles   |

| 4 | Vehicle Air-Conditioning<br>Systems and Functions | Basic working principle of car<br>AC                              |
|---|---|---|
|   |   | Different refrigerant in use familiarization                      |
|   |   | Trouble shooting of AC systems, leak detection                    |
|   |   | AC gas recharging cycle and user training on AC recycling machine |

#### **Siemens Training Content**

| Sr. No | Title of the Training | Training Content                  |
|--------|-----------------------|-----------------------------------|
| 01     | TRAINING PROGRAMME ON | 1.SIMATIC WinCC                   |
|        | BASIC SCADA           | 2.Creating a project              |
|        |                       | 3.SIMATIC S7                      |
|        |                       | 4. Graphics Designer and graphics |
|        |                       | displays                          |
|        |                       | 5.Alarm logging for message       |
|        |                       | 6.Tag logging for curve           |
| 5      |                       | representation                    |
|        |                       | 7.Data archiving with the User    |
|        |                       | Archives option (introduction)    |
|        |                       | 8.Report logging (introduction)   |
|        |                       | 9. Background processing          |
|        |                       | (introduction of Global Scripts)  |
|        |                       | Practical                         |
| 02     | TRAINING PROGRAMME ON | 1. Basic constituents of PLC:     |
|        | BASIC AUTOMATION      | Signal modules, CPU, Power        |
|        |                       | Supply, MMC.                      |
|        |                       | 2. How PLC works?                 |
|        |                       | 5. Installation guidelines,       |
|        |                       | with addressing                   |
|        |                       | with addressing                   |
|        |                       | 4. Programming:                   |
|        |                       | a. Programming language STL,      |
|        |                       | FBD and LAD                       |
|        |                       | b. Hardware Configuration and     |
|        |                       | Properties                        |
|        |                       | c. Programming: AND, OR,          |
|        |                       | AND-before-OR, OR-before-         |
|        |                       | AND, NO                           |
|        |                       | 5. Overview of SIMATIC S7 -       |
|    |  | <ul> <li>PLC:</li> <li>a. Programming Units</li> <li>b. Hardware Configuration and<br/>setting object Properties</li> <li>c. Step 7 Instructions and<br/>programming:</li> <li>d. Timers / Counters List etc</li> <li>6. Using Symbol Table and VAT.</li> <li>7. STEP 7 blocks and structured<br/>programming</li> <li>8. Using Data Blocks.</li> <li>9. Use of Organisation Blocks.</li> <li>10. Analog signal processing.</li> <li>11. Introduction to HMI.</li> </ul>   |
|----|--|--|
| 03 | TRAINING PROGRAMME ON<br>LOW VOLTAGE<br>SWITCHGEAR | <ul> <li>Basics of power distribution –<br/>fault level calculation, definitions<br/>Industry.</li> <li>Power products Range<br/>overview</li> <li>Low Voltage offerings in<br/>Power Distribution in Industry<br/>today</li> <li>Air Circuit Breakers.</li> <li>Moulded case circuit breakers</li> <li>Switch disconnector fuse &amp;<br/>Load break switches</li> <li>DIN Fuse – Importance of<br/>fuses</li> <li>Control products with latest<br/>Indian &amp; International Standards<br/>an overview</li> <li>Basic Control Products used in<br/>Industry today.</li> <li>New technology,<br/>Compactness DOL, RDOL &amp; S-D</li> <li>Overload Relay,<br/>Microprocessor Relay</li> <li>Motor protection circuit<br/>breaker- why MPCB needs to be<br/>used?</li> <li>Soft starter- overview on use<br/>of soft starter</li> </ul> |
| 04 | TRAINING PROGRAMME ON<br>BASICS OF AC/DC DRIVES    | 1.DC Motor Basics<br>2.DC Drives Basics  |

3. Selections, Calculations & applications of typical DC drives. 4. Siemens DC Drives (6RA80) -Ratings, Specs, features, options & 5.AC Motor Basics (construction, principle of operation, T-N Characteristic 6. AC Drives Basics (Block diagram, 1Q-4Q principle of operation, 7. Selections. Calculations & applications of typical AC drives. 8. AC Drives (Sinamics S & G)-Ratings, Specs, features, options 9. MEDIUM VOLTAGE (MV Drives & Motors): MV Motor a) types & Fundamentals (including starting methods, options/b) MV Motor offers from Germany (separately for Induction & Synchronous c) MV Converter Basics & types (Voltage, Current Source & Cyclo-d) Siemens MV Converters (Sinamics GM. Simovert-S and Perfect e) Selection, configuration & Applications of MV Drive systems 10. Short briefing on MV Transformers along with their options & protections This training helping the students to get the knowledge of highly automated equipments currently used in the industries, which is consequently useful them in campus interviews to grab the job opportunities. Document **File Description** 

**View Document** 

Link for Additional Information

# 5. CONCLUSION

## **Additional Information :**

Guru Gobind Singh College of Engineering and Research Centre, Nashik is run by the prestigious Guru Gobind Singh Foundation, Nashik, which is founded in 1978 by the prominent and illustrious Shikh residents of Nashik. It is committed to provide excellent education catering to need of all section of people in our country. Institute follows principle of foundation, imparting high quality education, together with cultural, sport and co-curricular activities along with providing moral ethos to students.

Vision of institute guides all faculties and staff members to strive for excellence in providing transformative education. In line with this, institute strives to appoint qualified and experienced faculty and have provided infrastructure and other learning resources by adhering to the norms of AICTE, State Government and affiliating university.

In line with the agenda of the central government of overcoming severe shortage of well-trained, skilled employable engineers, Foundation, has established **"Industry Institute Partnership Excellence Centre"** partnering with country's top most industries Siemens India and Bosch. Siemens India is a pioneer service provider in infrastructure, energy solutions, automation software etc. Bosch is a leading supplier of technology and services in areas of mobility solutions, industrial technology, consumer goods, etc. Objective of this centre of excellence is to train undergraduate students to acquire necessary skills to be more employable by the end of their programme.

Besides teaching learning process institute focuses on the professional trainings to faculties by allowing them to attend various Conferences/Workshop/Seminars/FDP's etc. Institute encourages its faculties for higher studies. Institute extends its services to society through various activities by NSS unit. Even a group of students under an ASTHA Forum under takes social activities. Institute celebrates National days and inculcates patriotism among all staff members and students. Self appraisal of faculty is done every year and best performing teachers are appreciated and recognized by Management on the eve of Teacher's day. Institute has adopted a unique practice of celebrating birthdays of staff at the end of every month. Arranging a family get together of the staff is also a regular practice adopted by institute to develop a social connects among the staff.

## **Concluding Remarks :**

Institute is established by Guru Gobind Singh Foundation, Nashik in academic year 2013-14. Quality conscious management of the institute is taking it for accreditation by the NAAC just after the fifth year of its inception. Nature friendly pollution free campus adds on to the existing state of the art infrastructures and learning recourses. Institute practices green initiatives like electrical power generation through roof top PV cells, use of food waste digester, roof top rain water harvesting, use of LED tube lights and bulbs for lightning, measures to avoid wasteful use of electricity and water, etc.

In support, organization of events from diversified fields leading to development of student as well as teaching fraternity is encouraged such as state and international conferences, short term training programmes, workshops, seminars, FDP's etc. Skilled base training to faculty as well as students and industry interaction makes teaching learning process more participative, self learning and effective. Institute has also established SWAYAM-NPTEL Local Chapter and faculty is taking an advantage through various courses. Social

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responsibilities are taken care through various activities. Women's safety at work place is also ensured through a Women's Grievance cell and students and staff grievances are taken care by the Internal Complaint Committee.

CEO of the foundation regularly takes a review of day to working of the institute and issues if any through weekly meeting of Principal, Vice Principal, all Head of Departments, and coordinators of various committees scheduled on every working Friday. Required decisions and approvals are accorded by the CEO on the behalf of the Management in these meetings in consultation with all heads and accordingly such meetings have set an example of participative managements. Such close monitoring ensures the continual improvement in organization at its various processes. As a result in the year 2015 institute received an award "Engineering Education Excellence College" from the Indo Global Chamber of Commerce, Industries and Agriculture. In the year 2016 Institute has successfully implemented the Quality Management System as per ISO 9001:2015 International Standard and Certified by DNV-GL (Norway) an accreditation body approved by International Accreditation Forum (IAF).

# 6.ANNEXURE

#### **1.Metrics Level Deviations** Metric ID Sub Questions and Answers before and after DVV Verification Percentage of full time teachers who received awards, recognition, fellowships at State, National, 2.4.4 International level from Government, recognised bodies during the last five years 2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification: 2017-18 2016-17 2015-16 2014-15 2013-14 1 3 1 1 0 Answer After DVV Verification : 2017-18 2016-17 2015-16 2014-15 2013-14 2 0 0 1 0 3.3.3 Number of research papers per teacher in the Journals notified on UGC website during the last five years 3.3.3.1. Number of research papers in the Journals notified on UGC website during the last five years Answer before DVV Verification: 2017-18 2016-17 2015-16 2014-15 2013-14 07 05 64 07 02 Answer After DVV Verification : 2017-18 2013-14 2016-17 2015-16 2014-15 1 2 1 0 0 Remark : Revised as per clarification of HEI 3.4.3 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 last five years 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., yearwise during the last five years Answer before DVV Verification: 2016-17 2017-18 2015-16 2014-15 2013-14

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|       |   | 10                                       | 05                                       | 00   | 00                            | 00                           |  |
|-------|---|--|--|--|-------------------------------|------------------------------|--|
|       |   | Answer Af                                | ter DVV V                                | erification ·                              | 1                             | 1                            |  |
|       |   | 2017-18                                  | 2016-17                                  | 2015-16                                    | 2014-15                       | 2013-14                      |  |
|       |   | 10                                       | 05                                       | 01   | 00                            | 00                           |  |
|       | Re  | emark : Revi                             | ised as clari                            | fied by HEI                                | [                             | 1                            |  |
| 5.1.2 | Avera   | age percenta<br>es governme              | ge of studer<br>ent schemes              | nts benefited<br>during the                | d by scholar<br>last five yea | rships, frees<br>ars         |  |
|       | 5.1<br>institu  | 1.2.1. Total attion beside<br>Answer bet | number of s<br>s governmen<br>fore DVV V | tudents ben<br>nt schemes<br>/erification: | efited by sc<br>year-wise d   | holarships,<br>luring the la |  |
|       |   | 2017-18                                  | 2016-17                                  | 2015-16                                    | 2014-15                       | 2013-14                      |  |
|       |   | 17                                       | 07                                       | 02   | 01                            | 00                           |  |
|       |   | Answer Af                                | ter DVV Ve                               | erification :                              |                               |                              |  |
|       |   | 2017-18                                  | 2016-17                                  | 2015-16                                    | 2014-15                       | 2013-14                      |  |
|       |   | 10                                       | 08                                       | 02   | 01                            | 00                           |  |
| 2.2   | Perce   | ntage of stu                             | dent progres                             | ssion to hig                               | her educatio                  | on (previou                  |  |
| .2.2  | 5.2   | 2.2.1 Numb                               | per of outgoi                            | ing students                               | ner education                 | g to higher                  |  |
|       | 0.2   | Answer bei<br>Answer aft                 | fore DVV V<br>er DVV Ver                 | <sup>7</sup> erification<br>rification: 1  | : 4<br>.2                     | 5 to ingher (                |  |
| .3.1  | Numl  | per of award                             | ls/medals fo                             | r outstandir                               | ng performa                   | ince in sport                |  |
|       | intern  | ational leve                             | 1 (award for                             | a team eve                                 | nt should be                  | e counted a                  |  |
|       | 5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years |  |  |  |                               |                              |  |
|       |   | 2017-18                                  | 2016-17                                  | 2015-16                                    | 2014-15                       | 2013-14                      |  |
|       |   | 02                                       | 01                                       | 00   | 00                            | 00                           |  |
|       |   | A  |  |  |                               |                              |  |
|       |   | 2017-18                                  | 2016-17                                  | 2015-16                                    | 2014-15                       | 2013-14                      |  |
|       |   | 01                                       | 01                                       | 00   | 00                            | 00                           |  |
|       |   |  |  |  |                               |                              |  |

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| 5.3.3 | Avera<br>year   | Average number of sports and cultural activities/ competitions organised at the institution level per year     |                                    |                           |                           |                             |   |  |  |  |
|-------|---|--|------------------------------------|---------------------------|---------------------------|-----------------------------|---|--|--|--|
|       | 5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years<br>Answer before DVV Verification:   |  |                                    |                           |                           |                             |   |  |  |  |
|       |   | 2017-18  | 2016-17                            | 2015-16                   | 2014-15                   | 2013-14                     |   |  |  |  |
|       |   | 24   | 09                                 | 07                        | 09                        | 07                          |   |  |  |  |
|       | Answer After DVV Verification :   |  |                                    |                           |                           |                             |   |  |  |  |
|       |   | 2017-18  | 2016-17                            | 2015-16                   | 2014-15                   | 2013-14                     |   |  |  |  |
|       |   | 24   | 20                                 | 21                        | 13                        | 11                          |   |  |  |  |
| 6.3.3 | Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years<br>6.3.3.1. Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years<br>Answer before DVV Verification: |  |                                    |                           |                           |                             |   |  |  |  |
|       |   | 2017-18  | 2016-17                            | 2015-16                   | 2014-15                   | 2013-14                     |   |  |  |  |
|       |   | 01   | 04                                 | 01                        | 01                        | 01                          |   |  |  |  |
|       | Answer After DVV Verification :   |  |                                    |                           |                           |                             |   |  |  |  |
|       |   | 2017-18  | 2016-17                            | 2015-16                   | 2014-15                   | 2013-14                     |   |  |  |  |
|       |   | 03   | 02                                 | 01                        | 01                        | 01                          |   |  |  |  |
| 6.5.4 | Quali   | ty assurance   | e initiatives                      | of the instit             | ution includ              | le:                         |   |  |  |  |
|       |   | l. Regular n<br>Quality A<br>improven  | neeting of In<br>Assurance Roments | nternal Qua<br>eport (AQA | lity Assurar<br>R) to NAA | ice Cell (IQ<br>C; Feedback | AC); timely submission of Annual collected, analysed and used for |  |  |  |
|       |   | 2. Academic Administrative Audit (AAA) and initiation of follow up action                                      |                                    |                           |                           |                             |   |  |  |  |
|       |   |  |                                    |                           |                           |                             |   |  |  |  |
|       | 2   | 4. ISO Certi   |                                    |                           |                           |                             |   |  |  |  |
|       | 5. NBA or any other quality audit   |  |                                    |                           |                           |                             |   |  |  |  |
|       |   | Answer before DVV Verification : A. Any 4 of the above<br>Answer After DVV Verification: C. Any 2 of the above |                                    |                           |                           |                             |   |  |  |  |

| 7.1.9  | Differently abled (Divyangjan) Friendliness Resources available in the institution:   |         |         |         |         |         |  |
|--------|---|---------|---------|---------|---------|---------|--|
|        | <ul> <li>1. Physical facilities</li> <li>2. Provision for lift</li> <li>3. Ramp / Rails</li> <li>4. Braille Software/facilities</li> <li>5. Rest Rooms</li> <li>6. Scribes for examination</li> <li>7. Special skill development for differently abled students</li> <li>8. Any other similar facility (Specify)</li> <li>Answer before DVV Verification : A. 7 and more of the above</li> <li>Answer After DVV Verification: B. At least 6 of the above</li> <li>Remark : Only five facilities are considered, namely ramp, provision for lift, physical facility</li> </ul> |         |         |         |         |         |  |
| 7.1.10 | Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years   |         |         |         |         |         |  |
|        |   | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |  |
|        |   | 94      | 52      | 21      | 00      | 01      |  |
|        | Answer After DVV Verification :   |         |         |         |         |         |  |
|        |   | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |  |
|        |   | 3       | 3       | 0       | 00      | 0       |  |
| 7.1.11 | <ul> <li>Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)</li> <li>7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wis during the last five years         Answer before DVV Verification:     </li> </ul>  |         |         |         |         |         |  |
|        |   | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |  |
|        |   | 07      | 04      | 01      | 0       | 0       |  |
|        | Answer After DVV Verification :   |         |         |         |         |         |  |
|        |   | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |  |
|        |   | 08      | 04      | 01      | 0       | 0       |  |
|        | Remark : Corrected as per revised excel lsit attached   |         |         |         |         |         |  |

## 2. Extended Profile Deviations

**Extended Profile Deviations** 

No Deviations

