SELF STUDY REPORT

FOR 1st CYCLE OF ACCREDITATION

P. E. S. COLLEGE OF ENGINEERING, MANDYA

P. E. S. COLLEGE OF ENGINEERING, K. V. SHANKARAGOWDA ROAD, MANDYA - 571 401, KARNATAKA, INDIA.

571401

www.pescemandya.org

SSR SUBMITTED DATE: 11-01-2018

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

January 2018

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

P.E.S. College of Engineering, Mandya was started in the year 1962 by People's Education Society ®, Mandya under the leadership of late **Sri K.V.Shankaragowda**, former education minister of Government Karnataka. At present, the Institution is headed by SahakaraRatna Dr. H. D. Chowdaiah (Ex.MLC, Government of Karnataka) as Chairman PET(R) Mandya. The college is permanently affiliated to Visvesvaraya Technological University (VTU), Belagavi, and has obtained Autonomous status in the year 2008 by the University Grants Commission (UGC) New Delhi. It is recognized by **All I**ndia Council for Technical **E** ducation (AICTE), New Delhi and Accredited by **N**ational **B**oard of **A**ccreditation (NBA) New Delhi. The college is beneficiary of TEQIP-II grant under component 1.1.Further, is selected for TEQIP-III as mentor Institution.

Institute has established itself as a Premier Engineering Institution in Karnataka commonly known as PESCE, Mandya. It is engaged in imparting quality Professional Education in Engineering and Management programmes through well qualified teaching professionals, has well established Infrastructure so as to ignite the young minds for pursuing research activities. PESCE has committed to enhance capabilities and potential of our students with the objective of transforming them into leaders in their chosen area of interest. After obtaining Autonomous status, the Institute has redefined its vision and mission and is determined to improve the academic standards and campus environment to impart Quality Technical Education.

The institution aims to attain excellence in academics, research and consultancy. Institution has well equipped academic infrastructure and also supports co-curricular, sports, social and cultural activities.

Vision

"PESCE shall be a leading institution imparting quality engineering and management education developing creative and socially responsible professionals"

Mission

- 1. To provide state of the art infrastructure, motivating the faculty to be proficient in their field of specialization and adopt best teaching-learning practices.
- 2. To impart engineering and managerial skills through competent and committed faculty, using outcome based educational curriculum.
- 3. To inculcate professional ethics, leadership qualities and entrepreneurial skills to meet societal needs.
- 4. To promote research, product development and industry-institution interaction.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Page 2/111 11-01-2018 05:32:01

- 1. Top academic record since 1962. Pockets of academic excellence in selected areas.
- 2. Spread over 62 acres of land with scope for expansion.
- 3. Under Government grant in-aid scheme.
- 4. Obtained autonomous status under VTU.
- 5. UG programmes accredited by NBA.
- 6. Greater academic flexibility.
- 7. Financially stable.
- 8. Institute has 205 faculty members with 18 Professors (+2 visiting professors), 30 Associate Professors and 162 Assistant Professors. 58 faculties are having PhD degree and remaining are Masters Degree holders. The staff student ratio is about 15:1 which is within the AICTE norms.
- 9. High retention of the faculty. Average experience is about 13 years.
- 10. Faculty members: associated with other universities in various academic bodies, got patents and professional awards.
- 11. College Central Library has got good number of book collection and subscribed to National and International Journals as well as E-library facilities.
- 12. Faculty members are encouraged to go under QIP for higher studies and supports external research programmes.
- 13. Adequate conventional classrooms and good laboratory and infrastructural facilities.
- 14. Good number of Industrial collaboration for academic purpose.
- 15. Alumni of the institution are well placed and having good network around the world.
- 16. Membership with professional bodies.
- 17. Career planning, training, guidance and placement provided through Placement Cell.
- 18. Organized various faculty development programmes, national and International level conferences on advanced topics.
- 19. Good number of Research Grants received through many projects.
- 20. Excellent sports facilities.

Institutional Weakness

- 1. Institute brand projection is not aggressive.
- 2. Full potential of the autonomy is yet to be harnessed.
- 3. Located in rural area and lack of big industries in the vicinity.
- 4. Poor communication skills of students.
- 5. Industrial collaborations, research collaborations, winning consulting assignments, bidding for projects, are in premature state and restricted consultancy services.
- 6. Government policies in the administration hinder the academic and developmental activities.
- 7. Lack high speed LAN and internet connectivity for classroom and library.
- 8. E-Governance yet to be implemented.
- 9. QIP and other skill development programmes are not extended to technical, supporting and administrative staff.
- 10. High tech e-learning facilities are not yet provided for effective class room teaching.
- 11. Limited pedagogical training.
- 12. Strategic planning and Training programs are yet to be initiated at administrative level.
- 13. Limited activities of laboratory modernization due to resource crunch.
- 14. Modernization and Digitization of Library is not completed.
- 15. Multi-disciplinary academic activities yet to be initiated.
- 16. Performance of the academically weak and weaker section students need to be improved through extra

coaching.

- 17. Overloading of teaching has restricted the research activities of the faculty.
- 18. Limited schemes for motivating the staff members.
- 19. Limited placements.

Institutional Opportunity

- 1. College can attract high ranking students.
- 2. Establishing Industry incubation centre in the college.
- 3. Establishing research and product development centre.
- 4. Wider scope for imparting pedagogical and advanced technical training to faculty.
- 5. Enhance testing and consultancy services.
- 6. Scope to develop e-modules for effective teaching.
- 7. Scope for community training and product development for social cause.
- 8. Scope for establishing more advanced PG programmes.
- 9. Scope for technological transfer for modernized farming, rural development and community services.
- 10. Scope for innovations in agro based products processing and packaging technology.
- 11. Scope for technological transfer for agro based small scale industry.
- 12. Scope for technology transfer for rural health care.
- 13. Scope for starting learning and training centre for competitive level examinations for rural mass.
- 14. Collaboration of with foreign universities and reputed industries.

Institutional Challenge

- C1. Bureaucratic hurdles and fee restrictions.
- C2. Severe / stiff competition from nearby institutes.
- C3. Poor input in quality students as it is situated in rural place.
- C4. Large scatter in the ranking of students.
- C5. Difficult to establish Industry and Research collaborations due to less affinity towards rural based institutions by the industries.
- C6. Difficult to attract technically competent students.
- C7. Difficult to retain good quality human resources due to rural based area.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

As per the Washington Accord, the curriculum is revised to adopt Outcome Based Education (OBE) along with Choice Based Credit System (CBCS) from the year 2015-16. The college devises student-centric, innovative and creative methods for the delivery of the curricula using ICT. The Institution follows the curriculum and syllabi regularly updated by the Board of Studies (BoS) periodically in order to match the industry requirement and keep pace with the changing requirements of the students. The Institution provides academic orientation, soft skills and placement training to students for enhancing their employability. Individual counselling is provided to students for enhancing employment potential in various industries / organizations including self-employment, opportunity in defence services and scope of higher education within the country and abroad and apprenticeship scheme after their graduation. Virtual drives are conducted where all the students will be exposed to real-life-interview-scenario and they will be assessed by corporate personnel who are directly involved in the recruitment and talent acquisition process. The Institute also provides M.Sc. (Engineering by Research), and Ph.D under PET research foundation with Programmes affiliated to Visvesvaraya Technological University, University of Mysore, Mysore and Kuvempu University.

The Industry-Institute Interactions have been made compulsory to enhance the field experience in the students. In order to enhance creativity and innovation, students are encouraged to undertake Mini Projects and Major Project and Industrial visits/interaction are included in all undergraduate and postgraduate programs.

Teaching-learning and Evaluation

A student-centric learning process is followed since autonomous status is obtained. Students are encouraged to utilize e-learning facilities and e-journal using digital library.

After getting autonomy, since 2008, the course curriculum, scheme and syllabus has been rigorously reviewed and modified from conventional to OBE and CBCS for a better teaching and learning system along with necessary state of are infrastructure. Examination cell plays a key role in the evaluation process. At each and every stage in the evaluation process which includes Continuous Internal Evaluation (CIE), Semester End Examination (SEE) and Make-up Examinations (MUE), CoE along with Deputy Controller of Examinations (Dy. CoE) meticulously monitor the performance of students from time to time. A transparent process is adopted in conduction of CIE/SEE and the students are given an opportunity to verify the answer scripts before announcement. Further, during the verification of SEE answer scripts by the students, in case of any discrepancies, it will be addressed with the concurrence of the Department UG/PG Committee and CoE. Slow learners are identified through CIE and the students are continuously counselled and monitored to provide academic support to boost their performance in better way. Makeup/extra coaching classes are also conducted to improve the performance of slow learners and weaker section students. In order to enhance teaching-learning and to bring practical flair, the necessary facilities have been created which enable students to examine their innovative and creative ideas leading towards better learning. Mentoring and Counselling systems have been formulated to provide psycho-social guidance to students.

Research, Innovations and Extension

The Institution has provided significant contribution to facilitate the research among the student and faculty by providing state of the art infrastructure in various domains.

The Institute encourage the faculty members to acquire higher qualifications (M.Tech/Ph.D) by sponsoring them to premium institutes under Quality Improvement Programme (QIP). The faculty are provided monetary

incentives for publishing research articles in peer reviewed International journals and also participating in National &International conferences. Monetary assistance is provided to faculty members for attending workshops, symposiums and seminars related to advanced technical topics. The Institution has provided a platform for the academic departments to interact with the eminent researchers to discuss the contemporary issues related to the Academic programme through guest lectures, seminars, conferences, FDPs, and industrial visits.

The research centre has produced 75 Doctorates (Ph.Ds) in the field of Engineering, Science & Technology and 11 graduates in M.Sc., engineering by Research. The institute has received technically funded projects worth of INR 3.6823Crores. 453 research articles have been published in peered national and international journals and 548 research articles have been presented in international and national conferences since 2011. Presently 136 research scholars have registered under PET research centre and pursuing their research acquirePh.D and M.Sc engineering in different Domains.

The Institute has quite a few Centres of excellence, like, Medical Image processing Laboratory, Centre for Diagnostic Maintenance (CDM), Centre for Alternative Energy Resource (CAER), Very Large Scale Integration (VLSI) Design Laboratory, High voltage insulation laboratory and Internet of things laboratory funded by external agencies.

Infrastructure and Learning Resources

The Institute perhaps has the best campus and environment for academic pursuit surrounded by lavish greenery on 63 acres land. Along with training and placement cell and an a/c auditorium, each academic department has its own established infrastructure where in separate laboratories with latest equipments, seminar hall, departmental library, multimedia facilities, spacious class rooms with necessary in built teaching aids to encourage student to make academic progression to cater the practical needs of the students. The internet and intranet facility with Campus Wi-Fi networking encourage the student to be explorative. The facilities such as Library, Canteen, Dispensary, Boys and Girls hostels, Bank and Cooperative stores make the stay at PESCE very comfortable. The Institution has developed special infrastructure facilities for the physically challenged students such as Ramp facility

The PESCE library is well equipped with modern infrastructure for Reading, Circulation, Reference, Digital library, Magazines, Journals (includes printed and e-Journals to name few; ASME, ASCE, IEEE etc.) and back volume sections. It has a collection of over 1,02,041 volumes, 113 National Journals, 12 International Journals and 25 Periodicals. The digital library has 24 exclusive nodes connected to different servers hosting a lot of e-Resources. PESCE has access to e-Learning Material of VTU like e-Journals, e-Books, e-Vidya, e-Courses. The central library functions from 8.00 am to 8.00 pm for the better usage of the books, journals, magazines, reference section and e-library on all days. The college also hosts excellent infrastructure of sports for both indoor and outdoor games.

Student Support and Progression

In order to successfully accomplish the institutional vision, in addition to academic support and progression, Institute provides all the welfare measures such as scholarship, financial assistance and mentoring-counselling system (at various levels to help students in overcoming the difficulties experienced during their academic journey) to motivate students in successfully achieving their goals. Our Institution has well established support

systems to cater the needs of over 3200 students/year, that are essential to work hand in hand for focusing to students overall development and progression during four years of their graduation and for employment/advanced education.

The college has an independent Training and Placement Centre to develop various skills and competency to make them employable as per the industry requirements. The college associated with various units/organization involved in the personal enhancement and development of the students through Training and Placement Cell, such as Language Learning Centre (LLC), Entrepreneurship Development Activities cell (EDC), Industry-Institute Partnership Cell (IIPC) and Language Laboratory for better Placement opportunities.

The Training and Placement Cell specialize in Campus Recruitment Training, catering student's placement necessities in the areas of Aptitude ability, Verbal Proficiency, Technical Talent and Life skills by training, assessing, analyzing, mentoring and counselling them to place them in right path. Virtual drive are conducted at the conclusion of the training cycle during the end of 6th semester, where all the students will be exposed to real-life-interview-scenario and they will be assessed by corporate personnel who are directly involved in the recruitment and talent acquisition process.

Governance, Leadership and Management

The vision and mission are the beacons guiding every portion of the institution's academic procedure. The managerial structure is conducive for effective governance, internal co-ordination and monitoring. Visionary leadership, participative management and taking part of various academic committees ensure the implementation of institutional plans. The management team is actively involved in the administration of the institution. The management system is headed by the Principal comprising of Vice Principal, Financial Administrator, Dean's (Academic, Research), Departments Head's, Control of Examination (CoE), Placement Officer and Administrative Officer effectively plan and monitor the development for the continuous improvement of the institution.

To bring in a culture of excellence in academic activities, the Centre for Academic Excellence (CAE) was brought into existence to develop systems that will enable standardization of academic activity. This is essential for the sustained academic growth to conduct academic audits to ensure that the departments comply with the established academic standards. The college has put in place strategic plan covering aspects for individual development, holistic development of the department and the Institution.

The management takes all efforts to create a family atmosphere in the campus. Mutual cooperation and understanding is established by periodical informal get-together and meetings. The work culture of the institution is evident by the level of retention of the faculty found in the college. Immediate promotions, additional salary increments and responsibilities are some of the means for encouraging and retaining the eminent Faculty members.

Institutional Values and Best Practices

The Institution has taken an initiative for bringing about Higher Education, environmental and behavioural changes to improve the health of the society. Every year "Tree plantation", "Swachh Bharat Andolan" and "Blood donation camps" are some of the regular events conducted. The college is located around 63 acres of land with 1850 trees which comprises of coconut, ashoka, neem etc. The college uses renewable energy like

solar energy/photovoltaic system in hostels for hot water and outdoor lighting purpose. Interest in maintaining the campus highly eco - friendly and energy conservative are taken. Sprinklers are used in garden and Bio fuel is prepared in our college to save water and energy.

To cater current industry requirement, students are encouraged positively. From first semester to sixth semester training courses are conducted for the programs on communication skill, aptitude tests and soft skill development etc. through placement and training cell. All students must complete at least one mini project in fifth/sixth semester. The students are encouraged to take up inter disciplinary projects which would help them to understand the various aspects of designing and launching an entire product.

The institution has initiated several systems like Proctor System for the students, Value added programs for students, merit based scholarship for PG students under TEQIP. Faculty members and students' are also motivated to take up the several community oriented projects for the benefit of the society. The Institution has developed mechanism to track the student's involvement in various social movements/activities which promote citizenship roles.

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the College | | |
|---------------------------------|--|--|
| Name | P. E. S. College Of Engineering, Mandya | |
| Address | P. E. S. College of Engineering, K. V. Shankaragowda Road, Mandya - 571 401, Karnataka, India. | |
| City | Mandya | |
| State | Karnataka | |
| Pin | 571401 | |
| Website | www.pescemandya.org | |

| Contacts for Communication | | | | | |
|----------------------------|-------------------|-------------------------|------------|------------------|---------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Professor | H. V. Ravindra | 08232-238330 | 9986025372 | 08232-23840 7 | mailhovera@gmail .com |
| Principal | V. Sridhar | 08232-220043 | 9448333277 | 08232-22207 5 | principal@pesce.ac .in |

| Status of the Institution | |
|---------------------------|--------------|
| Institution Status | Grant-in-aid |

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

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

| Establishment Details | |
|--|------------|
| Date of Establishment, Prior to the Grant of | 01-01-1962 |

Page 9/111 11-01-2018 05:32:03

| 'Autonomy' | |
|---|------------|
| Date of grant of 'Autonomy' to the College by UGC | 01-08-2008 |

| University to which the college is affiliated | | | |
|---|--|---------------|--|
| State | University name | Document | |
| Karnataka | University of Mysore | View Document | |
| Karnataka | Visvesvaraya Technological University | View Document | |

| Details of UGC recognition | | |
|----------------------------|------------|--|
| Under Section | Date | |
| 2f of UGC | 31-12-2015 | |
| 12B of UGC | 31-12-2015 | |

| Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC) | | | | |
|---|---------------|------------|----|--|
| Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App pay,Month and year(dd-mm- yyyyy) Remarks months | | | | |
| AICTE | View Document | 30-03-2017 | 12 | |

| 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 in Acres | Built up Area in sq.mts. |
| Main campus area | P. E. S. College of Engineering, K. V. Shankaragowda Road, Mandya - 571 401, Karnataka, India. | Urban | 63 | 31454.76 |

2.2 ACADEMIC INFORMATION

| Details of Pa | rogrammes Off | ered by the Co | ollege (Give Da | ta for Current | Academic yea | r) |
|--------------------|---|-----------------------|----------------------------|--------------------------|------------------------|-------------------------------|
| Programme Level | Name of Pr ogramme/C ourse | Duration in Months | Entry Qualificatio n | Medium of Instruction | Sanctioned Strength | No.of Students Admitted |
| UG | BE,Automob ile Engineering | 48 | Class XII | English | 30 | 28 |
| UG | BE,Civil Engineering | 48 | Class XII | English | 120 | 120 |
| UG | BE,Compute r Science And Engineering | 48 | Class XII | English | 120 | 108 |
| UG | BE,Electroni cs And Com munication Engineering | 48 | Class XII | English | 120 | 119 |
| UG | BE,Electrical And Electronics Engineering | 48 | Class XII | English | 40 | 39 |
| UG | BE,Industrial And Production Engineering | 48 | Class XII | English | 40 | 35 |
| UG | BE,Informati on Science And Engineering | 48 | Class XII | English | 30 | 24 |
| UG | BE,Mechani cal Engineering | 48 | Class XII | English | 120 | 118 |
| PG | MSc,Civil Engineering | 24 | BE | English | 2 | 0 |
| PG | Mtech,Civil Engineering | 24 | BE | English | 18 | 15 |
| PG | MSc,Comput er Science And Engineering | 24 | ВЕ | English | 1 | 1 |

| PG | Mtech,Comp uter Science And Engineering | 24 | BE | English | 24 | 3 |
|-----------------|--|----|---------------------|---------|----|----|
| PG | Mtech,Comp uter Science And Engineering | 24 | ВЕ | English | 18 | 14 |
| PG | Mtech,Electr onics And C ommunicatio n Engineering | 24 | BE | English | 24 | 14 |
| PG | MSc,Electro nics And Co mmunication Engineering | 24 | BE | English | 1 | 1 |
| PG | MSc,Mechan ical Engineering | 24 | BE | English | 4 | 4 |
| PG | Mtech,Mech anical Engineering | 24 | BE | English | 24 | 14 |
| PG | Mtech,Mech anical Engineering | 24 | BE | English | 18 | 3 |
| PG | MBA,Master Of Business Administrati on | 24 | BACHELO R DEGREE | English | 60 | 60 |
| PG | MCA,Master Of Computer Applications | 36 | BACHELO R DEGREE | English | 60 | 9 |
| Doctoral (Ph.D) | PhD or DPhi l,Automobile Engineering | 36 | M. Tech. | English | 15 | 7 |
| Doctoral (Ph.D) | PhD or DPhil,Civil Engineering | 36 | M. Tech. | English | 40 | 26 |
| Doctoral | PhD or DPhi | 36 | M. Tech. | English | 30 | 14 |

| (Ph.D) | l,Computer Science And Engineering | | | | | |
|--------------------|--|----|-------------------|---------|----|----|
| Doctoral (Ph.D) | PhD or DPhi l,Electronics And Commu nication Engineering | 36 | M. Tech. | English | 24 | 23 |
| Doctoral (Ph.D) | PhD or DPhi l,Electrical And Electronics Engineering | 36 | M. Tech. | English | 20 | 14 |
| Doctoral (Ph.D) | PhD or DPhi l,Mechanical Engineering | 36 | M. Tech. | English | 50 | 42 |
| Doctoral (Ph.D) | PhD or DPhil,Master Of Business Administrati on | 36 | MASTERS DEGREE | English | 15 | 0 |
| Doctoral (Ph.D) | PhD or DPhil,Master Of Computer Applications | 36 | MASTERS DEGREE | English | 5 | 0 |
| Doctoral (Ph.D) | PhD or DPhil,Physic s | 36 | MASTERS DEGREE | English | 10 | 1 |
| Doctoral (Ph.D) | PhD or DPhi 1,Chemistry | 36 | MASTERS DEGREE | English | 15 | 1 |
| Doctoral (Ph.D) | PhD or DPhi 1,Mathematic s | 36 | MASTERS DEGREE | English | 15 | 11 |

Position Details of Faculty & Staff in the College

| | Teaching Faculty | | | | | | | | | | | |
|--|------------------|-----------|--------|-------|------|---------------------|--------|-------|-------|---------------------|--------|-------|
| | Profe | Professor | | | Asso | Associate Professor | | | Assis | Assistant Professor | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 12 | | | | 27 | | | | 64 |
| Recruited | 6 | 0 | 0 | 6 | 21 | 0 | 0 | 21 | 58 | 2 | 0 | 60 |
| Yet to Recruit | | | | 6 | | | | 6 | | | | 4 |
| Sanctioned by the Management/Soci ety or Other Authorized Bodies | | | | 12 | | | | 9 | J | | | 102 |
| Recruited | 7 | 5 | 0 | 12 | 7 | 2 | 0 | 9 | 56 | 46 | 0 | 102 |
| Yet to Recruit | | 1 | 1 | 0 | | | | 0 | | , | | 0 |

| | Non-Teaching Staff | | | | | | | |
|--|--------------------|--------|--------|-------|--|--|--|--|
| | Male | Female | Others | Total | | | | |
| Sanctioned by the UGC /University State Government | | 7, | | 59 | | | | |
| Recruited | 20 | 7 | 0 | 27 | | | | |
| Yet to Recruit | | | | 32 | | | | |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 18 | | | | |
| Recruited | 13 | 5 | 0 | 18 | | | | |
| Yet to Recruit | | | | 0 | | | | |

| | | Technical St | aff | |
|--|------|--------------|--------|-------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 93 |
| Recruited | 53 | 5 | 0 | 58 |
| Yet to Recruit | | | | 35 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 103 |
| Recruited | 75 | 28 | 0 | 103 |
| Yet to Recruit | | | | 0 |

Qualification Details of the Teaching Staff

| | Permanent Teachers | | | | | | | | | |
|------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest Qualificatio 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. | 27 | 5 | 0 | 14 | 0 | 0 | 5 | 0 | 0 | 51 |
| M.Phil. | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| PG | 0 | 0 | 0 | 21 | 4 | 0 | 80 | 45 | 0 | 150 |

| | Temporary Teachers | | | | | | | | | |
|------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest Qualificatio 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 Qualificatio 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 |

| Details of Visting/Guest Faculties | | | | | | |
|------------------------------------|------|--------|--------|-------|--|--|
| Number of Visiting/Guest Faculty | Male | Female | Others | Total | | |
| engaged with the college? | 2 | 0 | 0 | 2 | | |

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

| Programme | | From the State Where College is Located | From Other States of India | NRI Students | Foreign Students | Total |
|-----------------|--------|---|-------------------------------|--------------|---------------------|-------|
| PG | Male | 337 | 0 | 65 | 0 | 402 |
| | Female | 358 | 0 | 108 | 0 | 466 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| UG | Male | 1553 | 117 | 290 | 0 | 1960 |
| | Female | 816 | 31 | 143 | 0 | 990 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| Doctoral (Ph.D) | Male | 20 | 10 | 0 | 4 | 34 |
| | Female | 10 | 0 | 0 | 0 | 10 |
| | Others | 0 | 0 | 0 | 0 | 0 |

Provide the Following Details of Students admitted to the College During the last four Academic Years **Programme** Year 1 Year 2 Year 3 Year 4 SCMale Female Others STMale Female Others OBC Male Female Others General Male Female Others Others Male Female Others

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Total

| Department Name | Upload Report | | | | |
|---|----------------------|--|--|--|--|
| Automobile Engineering | <u>View Document</u> | | | | |
| Chemistry | View Document | | | | |
| Civil Engineering | View Document | | | | |
| Computer Science And Engineering | <u>View Document</u> | | | | |
| Electrical And Electronics Engineering | View Document | | | | |
| Electronics And Communication Engineering | View Document | | | | |
| Industrial And Production Engineering | <u>View Document</u> | | | | |
| Information Science And Engineering | View Document | | | | |
| Master Of Business Administration | View Document | | | | |
| Master Of Computer Applications | View Document | | | | |
| Mathematics | View Document | | | | |
| Mechanical Engineering | View Document | | | | |
| Physics | View Document | | | | |

3. Extended Profile

3.1 Programme

Number of programs offered year wise for last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 16 | 16 | 16 | 16 | 13 |

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

Response: 16

How many self-financed Programmes does the institution offer

Response: 10

Number of new programmes introduced during the last five years, if any

Response: 3

Number of UG programmes offered by the College, which are not covered under the Autonomous status of UGC

Response: 0

Number of PG programmes offered by the College, which are not covered under Autonomous status of UGC

Response: 0

Whether the College is offering professional programme

Response: Yes

3.2 Student

Number of students year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 3161 | 3228 | 3100 | 3141 | 2939 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 927 | 919 | 848 | 803 | 711 |

Total number of outgoing / final year students

Response: 845

Number of students appeared in the University examination year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 3356 | 3371 | 3310 | 3194 | 3013 |

Number of revaluation applications year wise during the last 5 years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 44 | 33 | 44 | 5 | 20 |

3.3 Academic

Number of courses in all programs year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 630 | 627 | 607 | 600 | 595 |

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

Response: 630

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 205 | 202 | 186 | 186 | 175 |

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

Response: 205

Number of teachers recognized as guides during the last five years

Response: 51

Number of sanctioned posts year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 226 | 223 | 223 | 220 | 215 |

Total number of publications during the last 5 years, which are included in online databases such as SCOPUS, web of science or PubMed/ Indian Citation Index

Response: 325

3.4 Institution

Number of eligible applications received for admissions to all the programs year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 773 | 754 | 829 | 841 | 867 |

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 91 | 114 | 110 | 94 | 89 |

Total number of classrooms and seminar halls

Response: 77

Total number of computers in the campus for academic purpose

Response: 1360

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|-----------|-----------|-----------|-----------|-----------|
| 262.14601 | 252.63595 | 193.81260 | 314.91202 | 251.96778 |

Annual lighting power requirement (in KWH)

Response : 184188

Annual power requirement of the institution (in KWH)

Response : 736752

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution

Response:

The institute has well established setup to ensure development of curriculum for effective implementation through well planned system. Curriculum Design and Development Process is as follows: Institute Vision & Mission along with Quality Policies? Department's Vision & Mission? Evolving departments Program Educational Objectives (PEOs) & Program Specific Outcomes (PSOs)? Design of Curriculum with COs (Department) & mapping to POs with the input of Academic Advisory Committee (AAC) & Feedback fromStakeholders? approval for Board of Studies (BoS)? Dean Academic Office (DAO)? Academic Council for approval? Governing Council for notice & implementation. Design of Curriculum: ? Dean Academics in-coordination with BoS chairman makes an outline for curriculum design. ? Credit distribution is taken as basis for curriculum development which is based on the guidelines of VTU/UGC/AICTE. The credits are distributed over various curriculum components as listed below • Basic Science ~15% • Basic Engineering ~ 20% • Language and Management ~ 5% • Core and Core Electives ~60% Program Curriculum Design: ? Design of Scheme: In each department, under chairmanship of Program coordinator (Chairman BoS) and course coordinators prepares the curriculum frame work (i.e. scheme of the program) for each semester as suggested by the Academic Advisory Committee (AAC). The Scheme is then presented to BoS for fine tuning and later placed in Academic Council for approval. ? Framing of syllabus: AAC analyzes the feedback from stakeholders. The findings of feedback are discussed along with the Program coordinators of department for designing/refinement of the curriculum. The department program Coordinator convene the meeting of the Curriculum committee and presents and discusses the outcome of the AAC meeting held regarding the curriculum design accordingly proposes the scheme for each semester. After approval of the scheme from the BoS and AAC, the course coordinators prepares syllabus specifically stating the course objectives and the outcomes. The courses are then mapped to the specified POs & PSOs of the program. In case of inclusion of new courses, suggestions from experts/stakeholders are considered while framing the syllabus. • In case of interdepartmental courses, courses are chosen by respective BoS in coordination with the departments involved. • Program coordinator discusses draft syllabus in faculty meeting for further fine tuning of the syllabus. • This draft scheme & syllabus is put forth and discussed in BoS for any specific comments, and then Program coordinator along with course coordinators incorporates the changes, if any. Then, final approval will be taken from the BoS. • Dean Academics will place final draft curriculum in ACM for discussion and approval. • Academic council members will deliberate discussion on curriculum and may suggest changes if required otherwise give approval for curriculum. Approved curriculum will be placed in the College GC for information and then for implementation. In case of any changes suggested by the AC, the draft copy of curriculum will be sent back to respective Program coordinator of the department for needful. After incorporating necessary changes at the department level, it will be sent to dean academic for approval after department BoS consent. • The teaching scheme and syllabus will be issued to students and also published in college web portal.

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

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Response: 100

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 16

| File Description | Document |
|--|----------------------|
| Details of program syllabus revision in last 5 years | <u>View Document</u> |
| Minutes of relevant Academic Council/BOS meeting | View Document |

${\bf 1.1.3}\ Average\ percentage\ of\ courses\ having\ focus\ on\ employability/\ entrepreneurship/\ skill\ development$

Response: 55.58

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 379 | 374 | 337 | 311 | 302 |

| File Description | Document |
|---|---------------|
| Average percentage of courses having focus on employability/ entrepreneurship | View Document |
| Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses | View Document |
| Program/ Curriculum/ Syllabus of the courses | View Document |
| MoU's with relevant organizations for these courses, if any | View Document |

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years

Response: 53.02

1.2.1.1 How many new courses are introduced within the last five years

Response: 334

| File Description | Document | |
|---|----------------------|--|
| Institutional data in prescribed format | <u>View Document</u> | |
| Minutes of relevant Academic Council/BOS meetings | View Document | |

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

Response: 51.61

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

Response: 16

| File Description | Document |
|---|---------------|
| Institutional data in prescribed format | View Document |
| Minutes of relevant Academic Council/BOS meetings | View 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:

The organisation has a history to address various issues relevant towards Gender, environment and sustainability, human values and professional ethics in the curriculum. The courses which address the above needs are listed in the below: 1 P15EV19/29 or P15EVDIP410 Environmental Studies: The course deals about Environment and Sustainability. Thus, the students learn about Environment, Natural Resources, Energy, Environment pollution and Their effects, Acid rain, Ozone layer depletion, Animal Husbandry etc., 2 P15HM19/29 or P15HMDIP310 Indian Constitution, Human Rights and Professional Ethics: The students learn about Gender equality, Indian constitution, Human rights, Professional ethics, 3 P15HU18 Effective Communication Development: The students Develop Effective Communication through this course. Major topics learnt are, verb agreement, Tenses, articles, vocabulary, writing skills,

Page 27/111 11-01-2018 05:32:15

SWOT, goal setting, Etiquettes, etc., 4 P15HU28 Professional Communication Development: The students Develop Professional Communication through this course. Major topics learnt are, Sentences, Prepositions, Vocabulary builder, How to talk about action with common phenomena and occurrences, a variety of personal characteristics. 5 P15HU39 Aptitude and Reasoning Development Beginner: The students build up Aptitude and Reasoning Development through these courses. These courses train the students at the level of Beginner, Intermediate, Advanced and Expert. Major topics learnt are Vedic mathematics, Percentage calculations and ratio comparison, Analytical Reasoning, Number system, Simple equations, Ratio Proportions and Variations, Building the fundamentals of logical reasoning, Time, Speed and Distance, Set theory and Venn diagram, Geometry and Mensuration, Co-ordinate geometry. 6 P15HU49 Aptitude and Reasoning Development Intermediate / P15XX511 Aptitude and Reasoning Development Advanced / P15XX611 Aptitude and Reasoning Development Expert / P15HM110/210 Language (Kannada): The students are able to learn about regional language of kannada through which they may introduce themselves, reading and writing skills through kannada, names of food and food grains, froots, action verbs and tenses, conversation, numerical etc., 7 P15XX79 & P15XX 85 Project Work: The project work carried out by students of various programmes, most of the times, addresses societal issues, Environment and Sustainability, Human Values and Professional Ethics irrespective of gender.

| File Description | Document |
|---|---------------|
| Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum | View Document |

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

Response: 38

1.3.2.1 How many new value-added courses are added within the last 5 years

Response: 38

File Description Document

List of value added courses View Document

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above

Response: 21.62

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 712 | 673 | 653 | 685 | 642 |

11-01-2018 05:32:15

| File Description | Document |
|---------------------------|---------------|
| List of students enrolled | View Document |

1.3.4 Percentage of students undertaking field projects / internships

Response: 16.01

1.3.4.1 Number of students undertaking field projects or internships

Response: 506

| File Description | Document |
|--|----------------------|
| List of programs and number of students undertaking field projects / internships | <u>View Document</u> |

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year wise

A. Any 4 of above

B. Any 3 of above

C. Any 2 of above

D. Any 1 of above

Response: A. Any 4 of above

| File Description | Document |
|---|---------------|
| Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management | 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: B. Feedback collected, analysed and action has been taken

| File Description | Document | |
|----------------------------|----------------------|--|
| Any additional information | <u>View Document</u> | |
| URL for feedback report | <u>View Document</u> | |

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrolment and Profile

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

Response: 1.79

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 46 | 42 | 55 | 76 | 59 |

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

2.1.2 Demand Ratio(Average of last five years)

Response: 1

2.1.2.1 Number of seats available year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 773 | 754 | 829 | 841 | 867 |

| File Description | Document |
|---|----------------------|
| Demand Ratio (Average of Last five years) | <u>View Document</u> |

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: 100

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 91 | 114 | 110 | 94 | 89 |

| File Description | Document |
|---|---------------|
| Average percentage of seats filled against seats reserved | 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:

Yes

The learning levels of the students are assessed through, Continuous Internal Evaluation – tests, Quiz, Assignments, seminar presentations, projects and Semester End Examinations.

Special programs are organized for advanced learners and slow learners to facilitate smooth transition to impart Engineering education, Communication Skills, Environment and Sustainability, Human Values, Professional Ethics, language and Placement training.

Bridge courses are conducted to focus on developing the competency of the students through intensive training in Additional Mathematics (Diploma students) soft skills, Aptitude test, problem solving, computer programming, basic knowledge of science etc,. Tutorial and remedial classes are conducted to weaker section and academically poor students as per the schedule. To address the learning hunger of the students, in addition to the Central library and Department library facility, Provision is also made to issue additional books for the students through book bank facility.

Following are the bridge/remedial/MLC courses offered

| Mandato | Mandatory Learning Courses (MLC) and one credit courses of BE Program (2015-16) | | |
|---------|---|---|--|
| SI. No. | Sem | Course Title | |
| 1 | I and II | Effective Communication Development. (ECD) | |
| 2 | I and II | Professional Communication Development (PCD) | |
| 3 | I and II | Language (Kan.) | |
| 4 | I and II | Environmental Studies | |
| 5 | I and II | Indian Constitution, Human Rights and Professional Ethics(ICHRPE) | |
| 6 | III | Aptitude and Reasoning Development - BEGINNER (ARDB) | |
| 7 | III | Additional Mathematics – I | |
| 8 | III | Comprehensive Communication Development (CCD) | |
| | | | |

| 9 | III | Indian Constitution, Human Rightsand Professional Ethics (ICHRPE) | |
|----|-----|---|--|
| 10 | IV | Aptitude and Reasoning Development – Intermediate (ARDI) | |
| 11 | IV | Additional Mathematics – II | |
| 12 | IV | Environmental Studies | |
| 13 | V | Industry Interaction | |
| 14 | V | Aptitude and Reasoning Development –Advanced. (ARDA) | |
| 15 | VI | Aptitude and Reasoning Development – Expert (ARDE) | |
| 16 | VI | Mini Project | |

The institution is supporting students for placement in reputed companies by organizing training through placement cell for UG and PG programme. Advanced learners are identified through CIE and SEE data, by interacting with them and they are encouraged to take up mini and major projects which were funded by TEQIP.

From PET® Krishik Sarvodaya Trust encouraging the students to take up various competitive exams like IAS, KAS,GRE,TOFEL, GATE etc.,

In order to encourage academically poor students/slow learners, each department provide remedial and tutorial classes for students.

Scientists, researchers, entrepreneurs and practitioners from the industry are invited to share their expertise and experience with students and faculty in the form of workshops, conferences, seminars etc.

Institution provides assistance and support required by the differently- abled students in many ways.

- Helper assistance provided to the differently abled according to their needs.
- Classes were held in buildings that have ramp facility.
- Scribe assistance is provided during examination, if needed
- Resident doctor also provides necessary medical support.
- Admission of differently abled students is also done as per the reservation by KEA.
- All care is taken to implement the government policies for the differently-abled students.
- Differently- abled students will be encouraged by honoring them during graduation day for their achievements.

| File Description | Document | |
|---------------------------------|----------------------|--|
| Any additional information | <u>View Document</u> | |
| link for additional information | View Document | |

2.2.2 Student - Full time teacher ratio

Response: 15.42

| File Description | Document |
|---|---------------|
| Institutional data in prescribed format | View Document |

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.09

2.2.3.1 Number of differently abled students on rolls

Response: 3

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |
| List of students(differently abled) | <u>View Document</u> |

2.3 Teaching-learning Process

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

Response:

Yes.

Academic calendar and syllabus for all UG and PG programs are uploaded on college website. The same is given to all students at the time of registration. HoDs discuss with faculty members to implement the lesson plan effectively. To ensure that, HoDs of all the departments are frequently verifies the coverage of lesson of each faculty.

All the courses including laboratory courses classroom interaction is always encouraged and practiced. Apart from this, the following are the other methods being effectively practiced in the institutions for the better learning.

- Quiz, Assignments, Group Discussion
- Tutorial classes, Remedial classes and Guest lectures.
- Seminars/Workshops/Conferences/ Paper presentations
- ICT Presentation: (i) Power Point and (ii) Lecture Presentations
- Demonstration, Alumni Interactions
- Internship training, Field visit and Survey Camps to enable experiential and participative learning
- Mini / Major projects
- Soft skills training classes
- Co-curricular activities-inter and intra-departmental

The organization encourages the faculties and students to invite distinguished speakers from around the globe. The institution has a stipulated pre determined budget for conducting these activities. The institution

provides Honorarium and travelling allowances to the distinguished experts, apart from this special care is taken to provide the accommodation around the campus vicinity. The institution has various professional bodies like ISTE, IEEE, III Cell, MEA so on and so forth. Under these banners individual department invites the experts in the relevant filed of specialization to deliver guest lectures / seminars which helps the students and faculties to enhance their existing knowledge to that of industry requirement. The institution also invites the distinguished alumnus to share their experience in their respective domain of expertise.

All the departments are well equipped with

- NPTEL on-line video lectures, e-books are provided to faculties and students.
- Cloud environment (Google Drive) is used to interact with students
- EDUSAT programme by VTU, Belagavi.
- Wi-Fi connectivity is available throughout the campus.
- Webinars materials are used by the faculty for effective teaching
- Faculty and Students can access journals and IEEE transactions, Science Direct, open access journals etc. from our central library facility
- Conduction of workshop and online test on free and open source software by IIT, Bombay

The institution provides mentoring to all the students of UG and PG programmes in their respective departments. In each department a group of 15-20 students are assigned for each mentor in UG and about 5 students are assigned for PG. Need based counselling is done with respect to academic, personal and other problems, if any. At times students are provided with moral support to overcome psycho-socio problems concerned and the same is bought to the notice of their parents.

In order to increase the Industry/Corporate readiness, many Soft Skills and Personality Development modules have been added to the existing curriculum of the academic year 2015-16. The Industry Interactions have been made compulsory to enhance the field experience. In order to enhance creativity and innovation Mini Project and Industrial visit and Interaction are included in all UG and PG programs.

| 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: 85.37

2.3.2.1 Number of teachers using ICT

Response: 175

Page 35/111

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

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 15.42

2.3.3.1 Number of mentors

Response: 205

| File Description | Document |
|--|---------------|
| Year wise list of number of students, full time teachers and mentor/mentee ratio | View Document |

2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

Response:

Academic calendar and syllabus of all Under Graduate and Post Graduate programs are uploaded in college website (i.e. http://www.pescemandya.org) and also shared prior to the commencement of academic semester so as to enable each student to be aware of this at the time of registration. The Academic calendar schedule is strictly followed starting from student registration, regular classes, internal and final examination schedule, Results and any other academic/ co-curricular activities for the whole semester/year.

Teaching Plans are well practiced. Subject allotment and Time Table for forthcoming semester are carried out before the commencement of each semester. Faculty members prepare their lesson plans as per the academic calendar for the respective subject(s). HoDs discuss with faculty members in the department meeting to implement the lesson plan effectively. The HoDs ensures the completion of lesson coverage of each subject/faculty well in time.

2.4 Teacher Profile and Quality

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

Response: 86.13

| File Description | Document |
|---|---------------|
| Year wise full time teachers and sanctioned posts for 5 years | View Document |

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

Response: 22.1

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 46 | 45 | 43 | 39 | 38 |

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

2.4.3 Teaching experience of full time teachers in number of years

Response: 12.96

2.4.3.1 Total experience of full-time teachers

Response: 2656

| File Description | Document |
|--|---------------|
| List of Teachers including their PAN, designation, dept and experience details | View Document |

2.4.4 Average 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: 4.35

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 8 | 12 | 9 | 10 | 3 |

| File Description | Document |
|--|---------------|
| Institutional data in prescribed format | View Document |
| e-copies of award letters (scanned or soft copy) | View Document |

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

Response: 0

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|---------------|
| List of full time teachers from other state and state from which qualifying degree was obtained | View Document |

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Response: 7

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 7 | 7 | 7 | 7 | 7 |

| File Description | Document |
|--|---------------|
| List of programs and date of last semester and date of declaration of result | View Document |

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.89

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 44 | 33 | 44 | 5 | 20 |

| File Description | Document |
|--|---------------|
| Number of complaints and total number of students appeared year wise | View Document |

2.5.3 Average percentage of applications for revaluation leading to change in marks

Response: 56

2.5.3.1 Number of applications for revaluation leading to change in marks year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 24 | 15 | 22 | 3 | 14 |

| File Description | Document |
|--|---------------|
| Year wise number of applications, students and revaluation cases | View Document |

2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

Response:

Examination procedures: Schedule for conduction of Continuous Internal Evaluation (CIE), Semester End Examination (SEE) and Make-up Examination of Theory, Practical (laboratory), Seminar, Project work (Mini & Major) is prepared by Controller of Examination (CoE). As per the schedules of Academic Calendar of events; Theory examinations (SEE) are carried out by setting question papers (Internal and External), scrutiny of question papers by respective BoE, question papers typing, proof reading and Printing, Conduction of Examination, Coding of Answer scripts, Valuation, Moderation (20-30% scripts) by the external examiners. Viewing of answer scripts by students. If any Discrepancies found by the students, will be Addressed by DUGC/DPGC in concurrence with CoE. Further, practical examinations (SEE) are carried out by Internal and External Examiners as per the Calendar and approved time table. The Board of Examination (BoE) chairman monitors the complete examination process of respective

departments. Finally, the results are announced at Central and department Notice Boards. The same will be announced at College Website. The institution moved from university system to autonomous system in the year 2008. The major reforms incorporated in the evaluation system are within the purview of AICTE/ UGC/University. The overall process from credit system (OBE with CBCS) till award of degree is briefed as below: Evaluation System: The academic performance evaluation of a student shall be according to a letter grading system based on CIE and SEE. The letter grades S A B C D E F indicate the level of academic achievement assessed on a 10 point scale. Letter Grades: S A B C D E F Grade Points: 10 9 8 7 5 4 0 Students appeared for Make-up Examination and subsequent Make-up / SEE examinations will be awarded one Grade lower than what they achieve except E and F Grades. Passing Standards • A student should secure minimum of 50% in CIE and also minimum of 40% in SEE. Altogether a student has to secure a minimum of 45% of marks to complete a course. • Practical courses are based on an appropriate CIE and SEE. 50 marks for CIE and 50 marks for SEE are assigned and SEE will be conducted by two examiners one internal and one external. Transitional Grades: • Grade-I is awarded to a student having satisfactory attendance and meeting the passing standards at CIE, but absent for SEE for the valid and convincing reasons acceptable to the college. • Grade -G is awarded to a student having satisfactory attendance and CIE, but absent for SEE. • Grade-W is awarded to a student having satisfactory attendance, but withdrawing from that course before the prescribed date in a Semester as per Faculty Advice. • Grade -N is awarded to a student not fulfilling either satisfactory attendance and / or CIE. Make-up Term: Students awarded with F, I and G grades in odd or even semester of the academic year should register for such courses conducted during Make-up Term. • Students are required to submit examination application form by furnishing true information and appear for SEE / Make-up examination or both. Results of a student will be forfeited in case he/she furnishes false information deviating from the autonomous regulations of PESCE with regard to CIE/attendance or both and, other requirements. Processes integrating IT; All examination processes are executed according to academic calendar through CoE office with the help of integrated software for the above said procedures. Integration with IT includes the following aspects; Registration of students, core courses/elective courses allocation of each student, attendance, CIE marks, eligibility for students to appear for SEE (Theory and practical) considering attendance & CIE marks, generation of admission tickets, SEE & final marks/grades (considering valuation and moderation), announcement of results, generation of grade cards, eligibility list of students for upward movement from lower to higher semester/year and rank list. Continuous internal assessment system; Academic performance of students is evaluated through CIE (comprising of test, Quiz and assignment/seminar) by the faculty according to the academic calendar schedule given by CoE. Students whose performance is not up to the mark, suitable guidance are given for improvement through make-up CIE. The evaluation is appended by tests, quizzes and assignments/seminars. The final CIE marks will be based on the average marks obtained through best of two CIE &/ Makeup-CIE. 50% of marks are earmarked for CIE. The mechanism strategized to ensure rigor of CIE for theory, laboratory, projects and seminars is given below. Theory Course: Each theory subject is assessed for 100 marks with equal weightage for CIE and SEE (50% each). Final and Average CIE for 50 marks comprising of two best tests (CIE1,2 &/ Make-up CIE). The three CIE test and quiz (1, 2 and a Make-up) are conducted according to academic calendar. 10 marks awarded based on assignments/seminars etc, as specified by the course instructor. The format of CIE may however be modified after obtaining feedback from the faculty and students. The modified format, if any, will be approved by the CoE, Dean (academic), Academic Council and BoG and further will be informed to students and faculty at the beginning of semester. Laboratory course: The CIE in laboratory course is carried out for 50 marks based on performance of laboratory exercises/experiments conducted along with submission of records/reports and internal test(s). Project work: The evaluation of CIE of the project work shall be based on progress of the student in the work assigned by the project supervisor, periodically evaluated with the departmental committee constituted for this purpose. The evaluation is based on predefined rubrics (generally 4-5 stages) that defines the extent of marks to be distributed starting from

topic feasibility seminar to the final presentation/demonstration. Seminar: The evaluation of CIE of the seminar is based on the performance of the student for the topic assigned/finalized by the mentor/faculty and evaluated in the departmental committee. The evaluation is based on predefined rubrics (generally 2-3 areas) that defines the extent of marks to be distributed starting from topic relevance up to the presentation.

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

- 2.5.5 Status of automation of Examination division along with approved Examination Manual A. 100% automation of entire division & implementation of Examination Management System (EMS)
- B. Only student registration, Hall ticket issue & Result Processing
- C. Only student registration and result processing
- D. Only result processing

Response: B. Only student registration, Hall ticket issue & Result Processing

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Current manual of examination automation system and Annual reports of examination including the present status of automation | 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:

Yes. The college defines its Vision, Mission, Core values and Quality policy The POs as defined by NBA are adopted for all programmes. • Each programme/department defines its Vision and Mission aligning with the institutions vision and mission. • Further, each programme/department defines its PEOs & PSOs. • Each programme clearly defines the COs for all courses. • The COs of all the courses of the respective programmes are clearly stated in the regulation book and syllabus book. • The faculty members are made aware of PEO's and PSO's, POs and COs in pedagogy trainings provided on OBE and CBCS. • Students are also made aware on the learning objectives, PEOs PSO's, POs and COs. • The Vision & Mission, PEOs PSO's and POs will be displayed at college website (www.pescemandya.org.), syllabus book and at prominent places in the respective department – staff rooms, HoD room, Class room, Laboratory etc. and

also shared among stake holders. • The COs is communicated to teachers and students through syllabus book. The following types of data are collected by the departments to analyze and overcome the barriers of learning. • Feedback from students regarding course outcomes are collected at the end of every semester for all courses (Course end Survey), reviewed and counseled by HODs of the respective departments. • CIE and SEE results analysis. • Interaction of students with mentors/supervisor and course instructor • Interaction during laboratory sessions and tutorials • Performance in technical events and projects • Student's feedback on teachers. • Result analysis is carried out as per NBA format, i.e., mapping of COs with POs and PSOs and further, it is reviewed to assess the student learning outcomes and attainment levels. This analysis helps in identifying the attainment of students learning outcomes and it helps in further improvement of teaching learning process through appropriate actions.

| 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:

Course Outcome(CO) Attainment CO attainment is assessed by Direct method and Indirect methods. CIE and SEE are the components contributing towards Direct method. Indirect method accumulates both Course End Survey and invited talks related to a course. Course end survey is obtained from the students after the completion of the course. The various types of assessment tools followed by a program, which describes the mode of assessment adopted to measure the students' performance at regular intervals are, a. Direct Assessment Tools [CIE(50%) + SEE(50%)] • Test and Quiz • Assignment/ Seminars/ Self-study • Laboratory Evaluation • Project work • Semester End Examination b. Indirect Assessment Tools • Course End Survey • Invited talk/ Industrial visit/Seminar/ Workshops Hence, CO attainment (a+b) - Direct Attainment 80%+Indirect Attainment 20% COs attainment is calculated for each course through Direct and Indirect method as detailed below: For Direct attainment, after the evaluation of answer scripts, the questions answered and the marks scored by each student is recorded in table along with the CO mapping for each course. A satisfaction level in terms of marks is fixed for each question based on the course /question / Bloom's level. Number of students scoring marks (60% marks) more than the satisfaction level and number of students answered that question is counted. A percentage ratio is calculated and taken as attainment of CO for that question. The attainment of all the questions is calculated in the same way. Then the attainment of individual COs is calculated for CIEs and SEE separately. Hence, Direct attainment of COs in the course is calculated giving a weightage of 50% for the CIE and SEE each. For Indirect attainment, Course end survey covering the entire COs is conducted at the end of the semester and the attainment for each COs is calculated as indirect Survey. Over all attainment of COs in the course is calculated giving a weightage of 80% for Direct attainment and 20% for indirect attainment. Once the attainment of COs is calculated for each course, the POs & PSOs are calculated by weighted average with the help of program articulation matrix and taking into account the correlation levels of COs to POs & PSOs in terms of 1(Low), 2(Medium) and 3(High). Attainment of Program Outcome (POs) and Program Specific Outcomes (PSOs) POs and PSOs attainment defines the performance and achievement of a student in the program. The measurement of attainment POs and PSOs is an important tool which provides a yardstick to visualize how far an institution has succeeded in delivering what it visualized. Attainment

POs and PSOs can be measured by direct and indirect tools. a. Direct Assessment Tools • Academic Performance (CIE and SEE in both theory and practical). • Performance in Seminars, Project works and co-curricular activities. b. Indirect Assessment Tools • Exit Survey by the student at end of completion of the UG/PG programme. • Alumni Feedback. • Employer's Feedback. • Parent's Feedback Hence, PO Attainment (a+b) - Direct Assessment 80%+Indirect Assessment 20%

2.6.3 Average pass percentage of Students

Response: 91.15

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

Response: 845

2.6.3.2 Total number of final year students who appeared for the examination

Response: 927

| File Description | Document |
|---|---------------|
| List of programs and number of students passed and appeared in the final year examination | View Document |
| Link for annual report | View Document |

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

| File Description | Document |
|---|----------------------|
| Database of all currently enrolled students | <u>View Document</u> |
| Any additional information | View Document |

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Response: Yes

| File Description | Document |
|---|---------------|
| Any additional information | View Document |
| URL of Policy document on promotion of research uploaded on website | View Document |

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 14.94

3.1.2.1 The amount of seed money provided by institution to its faculty year wise during the last five years(INR in lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|----------|----------|---------|---------|---------|
| 25.88035 | 29.83201 | 3.89553 | 5.35461 | 9.72929 |

| File Description | Document |
|--|---------------|
| Any additional information | View Document |
| List of teachers receiving grant and details of grant received | View Document |

3.1.3 Number of teachers awarded international fellowship for advanced studies/ research during the last five years

Response: 0

3.1.3.1 The number of teachers awarded international fellowship for advanced studies / research year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | |
|---------|---------|---------|---------|---------|--|
| 0 | 0 | 0 | 0 | 0 | |

| File Description | Document |
|---|---------------|
| List of teachers and their international fellowship details | View Document |

3.1.4 Institution has the following facilities

- 1. Central Instrumentation Centre
- 2. Animal House/Green House / Museum
- 3. Central Fabrication facility
- 4. Media laboratory/Business Lab/Studios
- 5. Research / Statistical Databases
- A. Any four facilities exist
- **B.** Three of the facilities exist
- C. Two of the facilities exist
- D. One of the facilities exist

Response: A. Any four facilities exist

| File Description | Document |
|--|---------------|
| Link to videos and photographs geotagged | View Document |

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years(INR in lakhs)

Response: 192.14

3.2.1.1 Total Grants for research projects sponsored by the government/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)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|----------|----------|----------|----------|----------|
| 50.99726 | 35.99726 | 61.94846 | 22.29726 | 20.89726 |

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

3.2.2 Number of research centres recognised by University and National/ International Bodies

Response: 9

3.2.2.1 Number of research centres recognised by University and National/International Bodies

Response: 9

| File Description | Document |
|---------------------------|---------------|
| Names of research centres | View Document |

3.2.3 Percentage of teachers recognised as research guides

Response: 24.88

3.2.3.1 Number of teachers recognised as research guides

Response: 51

| File Description | Document |
|--|---------------|
| Details of teachers recognized as research guide | View Document |

3.2.4 Average number of research projects per teacher funded by government and non-government agencies during the last five years

Response: 0.07

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

Response: 14

| File Description | Document | |
|---|----------------------|--|
| List of research projects and funding details | <u>View Document</u> | |
| link to funding agency website | View Document | |

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

Response:

The Institution has provided significant contribution to facilitate the research among the student and faculty by providing state of the art infrastructure in various domains for creation and transfer of knowledge in various Departments, such as.

1. VLSI Design Laboratory:

VLSI design laboratory established in 2010-12 funded by VGST, Govt of Karnataka. The facility is used to conduct regular training programs for UG, PG students, research scholars and faculty members from our institution and other academic institutions who want to improve their knowledge and practical skill in VLSI design and embedded system. These facilities are also used by the students of other colleges on request as a part of consultation.

2. Centre for Diagnostic Maintenance (CDM)

In recent times Condition-Based Maintenance (CBM) and Prognostics has emerged as a significant technology that is making an impact on industrial maintenance practices. CBM technology is characterized by the merging and strong coupling of interdisciplinary trends. All the diagnostic and prognostic technology elements, techniques and capabilities must be applied and implemented wisely to obtain maximum benefit impacts. These facilities are used by the UG, PG and Research students/Scholars of our and other Institutions for carrying out experimentation/ Project/Research work.

3. Medical Image Processing Laboratory:

The facilities/services available are High end work stations with high resolutions monitors (desktop computers), MATLAB software-version 15.B, Teaching Aid Interactive Panel, Network Accessories Router Cisco 1905. Work being carried in the areas; Diabetic Retinopathy, Retinopathy of Prematurity, MRI image segmentation algorithms and Medical Image Denoising. The activities such as, to study the various medical image modalities like XRAy, CT- Scan, MRI, memograms etc., and to compare their relative merits and demerits as well as applications.

4. High Voltage Insulation Laboratory

Facilities/ services available in the laboratory consists of shielded chamber based on Faraday Cage Principle, Vacuum system with high pressure chamber, High Frequency High Voltage Generator, Aplab 30MHz Dual Trace Oscilloscope, PD free High Voltage generation Unit. Electric Power Systems comprises a large number of power equipment's like generators, HV motors, transformers, cables which are quite expensive and form the significant portion of plant assets. However, the reliability of these equipments depends to a large extent on the healthy condition of their insulation. Failure of the insulation directly or indirectly will result in failure of power equipment which in turn results in forced outages, reduced reliability and increased maintenance and repair costs.

5. Centre for Alterative Energy Resource (CAER)

This facility caters for, awareness on Rain Water Harvesting and Bore well recharging techniques, Global Warming, Green Environment, Water Pollution, Demonstration of Solar Energy, Bio-Fuel and Bio Gas production using Kitchen waste. Encouraging various research activities in the entire Bio fuel chain involving universities and research organizations (UG students project program)

6. Internet of Things (IoT) Laboratory:

The laboratory is used for development boards compatible with Arduino platform, microchip chipkit platform and Zolertia boards, Rasberry PI boards for embedded and sensor networks and HP Intel core duo systems. Lab is dedicated for doing project and research oriented work.

| File Description | Document |
|---------------------------------|---------------|
| link for additional information | View Document |

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry

- Academia Innovative practices during the last five years

Response: 1

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 1 | 0 |

| File Description | Document |
|--|----------------------|
| List of workshops/seminars during the last 5 years | <u>View Document</u> |

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

Response: 44

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 9 | 12 | 10 | 10 | 3 |

| File Description | Document |
|--------------------------------------|---------------|
| List of innovation and award details | View Document |

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 1

3.3.4.1 Total number of start-ups incubated on campus year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|----------------------|
| List of startups details like name of startup, nature, year of commencement etc | View Document |
| Contact details of the promoters for information | <u>View Document</u> |

3.4 Research Publications and Awards

3.4.1 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 | <u>View Document</u> |

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

Response: Yes

| File Description | Document |
|------------------------------------|---------------|
| List of Awardees and Award details | View Document |

3.4.3 Number of Patents published/awarded during the last five years

Response: 1

3.4.3.1 Total number of Patents published/awarded year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 1 | 0 |

| File Description | Document |
|---|---------------|
| List of patents and year it was awarded | View Document |

3.4.4 Number of Ph.D.s awarded per teacher during the last five years

Response: 1.14

3.4.4.1 How many Ph.Ds are awarded within last 5 years

Response: 58

| File Description | Document |
|---|---------------|
| List of PhD scholars and their details like name of the guide, title of thesis, year of award etc | View Document |
| Any additional information | View Document |

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

Response: 0.42

3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 61 | 112 | 61 | 97 | 69 |

| File Description | Document |
|--|---------------|
| List of research papers by title, author, department, name and year of publication | View Document |

3.4.6 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: 0

3.4.6.1 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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 1 | 0 |

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

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Response: 2.5

3.4.7.1 Total number of citations received by publications in the last 5 years, which are included in online databases such as SCOPUS, web of science or PubMed/ Indian Citation Index

Response: 812

| File Description | Document |
|--|---------------|
| BiblioMetrics of the publications during the last five years | View Document |
| Any additional information | View Document |

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/Web of Science - hindex of the Institution

Response: 4.75

3.4.8.1 Number of citations received by individual research publications in the last 5 years

Response: 812

3.4.8.2 Number of publications receiving proportionately maximum number of citation in the last five years

Response: 171

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution | View Document |

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual

Response: Yes

| File Description | Document |
|--|---------------|
| Soft copy of the Consultancy Policy | View Document |
| URL of the consultancy policy document | View Document |

3.5.2 Revenue generated from consultancy during the last five years

Response: 66.68

3.5.2.1 Total amount generated from consultancy year wise during the last five years (INR in lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|----------|----------|----------|----------|----------|
| 11.09521 | 12.24007 | 15.94749 | 12.57502 | 14.81945 |

| File Description | n | Document |
|------------------|------------------------------------|----------------------|
| List of consulta | ants and revenue generated by them | <u>View Document</u> |

3.5.3 Revenue generated from corporate training by the institution during the last five years

Response: 115.17

3.5.3.1 Total amount generated from corporate training by the institution year wise during the last five years (INR in lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|----------|----------|---------|----------|
| 7.64645 | 29.74527 | 36.11042 | 6.06041 | 35.61241 |

| File Description | Document |
|---|---------------|
| List of teacher consultants and revenue generated by them | View Document |

3.6 Extension Activities

3.6.1 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:

For the holistic development of the students, the institution encourages various activities under different clubs set up in the institution. Few of the clubs / Chapters in the institution set up are as mentioned below:

- The **IEEE PESCE Chapter** is a blooming group of more than 190 active members participating and organizing a range of activities aimed at enhancing their academic, professional and career skills deploy in cutting edge technology through team meets and other events like seminars, workshops which are held regularly.
- **ISTE Chapter** (Established in 1986) main objective is to advance the cause of education in general and all its function which pertain to engineering and also to serve as common agency for simulating and guiding its members to formulate strategies for development of technical education and research.
- SAE India collegiate club: SAE India is India's leading resource for mobility technology formed in the year 2007 in association with automobile, Industrial & Production and Mechanical engineering departments. The club organises various technical events such as paper presentation, technical exhibition competitions and technical talks on diverse topics. Out students participate in the national level competitions like BAJA, SUPRA, development of two wheeled hybrid etc.
- **CSI club** is operated by The CS & Engg. department to provide scientific education towards the advancement of IT technology & applications and also to create opportunity for students to interact with industry professionals and to organize seminars/ workshops/ competitions etc.
- NEN Akshaya organises various activities related to entrepreneurship under placement cell.
- GLU/ Linux Group objective is to provide awareness among students about free software applications.
- Technology Barrier Reduction Program (TBRP) sponsored by Foundation for Advanced Education and Research (FAER) from last four years and its main objectives are to provide exposure on Computer, Communication skills, gadgets, internet awareness, sports, library, student's attitude and many more to rural background high school students as a part societal service.
- **Bio-fuel or alternative energy source centre** established in the year 2012 for the contribution to the **society** and Institution on Bio Gas production by using Kitchen waste, Bio-Fuel, Rain Water Harvesting, Bore well Recharging techniques and Solar Energy. Further, awareness program for students, teachers, farmers, professionals, self employers, sthree shakthi sanga, towards global warming, green environment, water pollution and also helping in preparing models for District & State level science exhibitions.
- **Krishik foundation** is a **societal** step taken forward by the PET, Mandya in order to encourage the rural youths to take up competitive examination conducted by the various commissions like KPSC,

- UPSC, SSC etc. through which they serve for **society** and nation.
- **Sports facility**: The institution has step up a state of art **sport complex** and auditorium, where District, State level, national and international level competitions are held at regular intervals which encourages our students and the **society** to grow competitively.
- Societal activities are also conducted through Lions Club, Red Cross and NSS wing in the college along with Blood donation camps.

3.6.2 Number of awards and recognitions received for extension activities from Government /recognised bodies during the last five years

Response: 15

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 5 | 3 | 3 | 3 |

| File Description | Document |
|---|---------------|
| Number of awards for extension activities in last 5 | View Document |
| years | |

3.6.3 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years

Response: 166

3.6.3.1 Number of extension and outreach programs conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/YRC etc., year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 15 | 32 | 33 | 36 | 50 |

| File Description | Document |
|--|---------------|
| Number of extension and outreach programs conducted with industry, community etc for the last five years | View Document |

3.6.4 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: 3.9

3.6.4.1 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. year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 35 | 120 | 272 | 80 | 99 |

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

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

Response: 0.4

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|----------------------|
| Copies of collaboration | <u>View Document</u> |
| Number of Collaborative activities for research, faculty etc. | View Document |

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years

Response: 45

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 10 | 11 | 10 | 6 | 8 |

| File Description | Document |
|---|---------------|
| Details of linkages with institutions/industries for internship | View Document |

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

Response: 15

3.7.3.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 0 | 4 | 7 | 2 |

| File Description | Document | | |
|--|---------------|--|--|
| Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years | View Document | | |
| e-copies of the MoUs with institution/ industry/ corporate house | View 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 college has adequate facilities with state of art towards teaching - learning environment for academic pursuit. In the campus, we have, Eight UG and Eight PG programmes.

- Each department has separate building with spacious class rooms well equipped laboratories, seminar hall, computer center, departmental library, power backup facility, drinking water facility, separate HoD and staff rooms, rest rooms etc..
- In the institution we have exclusively separate class rooms for First year students with ICT facilities in the administrative block
- PET research center for academic research,
- Placement and training center along with an auditorium, for soft skill training & placement activities.
- Campus is enabled with Wi-Fi with 120 Mbps and multimedia facilities with adequate computers as per AICTE norms to encourage students and faculties to make academic progression.
- Class rooms, smart classrooms and auditoriums are equipped with ICT facilities.
- This Golden Jubilee block has new classrooms, Science laboratories and exclusive autonomous examination section with valuation centers.
- Central library, Reference section: The Central library is the heart of the institution which consists of reference section, reading section, magazine section which is used widely by all the faculties and the students.
- Clean and green campus as a part of academic environment for curricular and extracurricular activities.

The Institution has developed special infrastructure facilities to encourage the physically challenged students such as:

- Ramp to have easy access to all the floors of the administrative block.
- Whenever it is necessary relocation of the class rooms and exam halls provided to physical challenged students.
- Special attention and counseling is done periodically.

Also the college has other infrastructure facilities like Reprographics facility in all departments, Hostel facilities for both boys and girls, Canteen, Dispensary, Purified soft Drinking water (RO) with cooler facilities are provided in all departments throughout the campus, Parking for two and four wheelers, Cooperative stores for staff and student benefit, State Bank of India as campus bank with ATM facility, Training and Placement Cell, amphi theater, auditorium with AC for 450 members and a guest house is under construction.

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

The institution has a sport complex of international standards. The institution encourage for physical activities of the students. These activities are taken care by physical education department. This department motivates the students within and outside the campus to encourage the sports talent. The department has a team of qualified sports instructors and a committee to facilitate sports activates. Further the facilities are provided to enrich the talents of the students and faculty. The well trained students are deputed to participate in different championship tournaments. They appeared in different events of International, National, University, State and District level competitions. The talented students have won many prizes and medals to the institution and bought many laurels to enrich the pride of the institution. The college organizes various International, National, State, District level, Inter college tournaments.

The following are the sports and games facilities available in the campus

| | and Games facilities | | | |
|---------|------------------------------------|------------------|-----------------------|----------------|
| Sl. No. | Infrastructure | Area (sq. m.) | Year Establishment | ofUser rate in |
| | | | | % |
| 1. | Outdoor Games Facilities | | | |
| 1 | PET Cricket Stadium | 21600 | 2002 | 100 |
| 2 | PET Football / Hockey Stadium | 9600 | 2004 | 100 |
| 3 | Basket Ball Court | 894.25 | 2000 | 90 |
| 4 | Volley Ball Court | 4238 | 2000 | 90 |
| 5 | Tennis Court (clay court) | 639 | 2003 | 100 |
| 5 | Kho-Kho Court | 1398.7 | 2000 | 85 |
| 7 | PET Aquatic Center / Swimming Pool | 1824.7 | 1999 | 100 |
| 3 | Kabbaddi Court | 346.5 | 2000 | 90 |
| 9 | 3 Synthetic Tennis Courts | 2727 | 2005 | 100 |
| 10 | Cricket Practice Pitch | 450 | 2002 | 100 |
| 11 | Athletic stadium | 200 m | 2006 | 95 |
| 1. | Indoor Games Facilities | 1218.6 | | |
| 1 | Table Tennis Stadium | 150 | 2000 | 95 |
| 2 | Badminton Wooden Courts | 24x12 m | 1998 | 100 |
| 3 | Gym –Girl/Boy | Sufficient space | 1998 | 100 |
| 1 | Table Tennis | Sufficient space | 2000 | 95 |
| 5 | Weight Lifting | Sufficient space | 1998 | 100 |
| 5 | Chess and Carom | Sufficient space | | 90 |

Cultural Activities:

The institute also encourages the students to participate in cultural and extracurricular activities where the students are actively participate in competitions like art, creative games/puzzles, singing, essay writing, debate, quiz competition etc, within the campus as well as outside the campus through department associations and institution fest. To name, an example, in the year 2016-17 our student Mr. Dhanush Gowda won the third place in the signing competition conducted by Zee TV Kannada channel. In addition to that, every year, our institution conducts an annual mega cultural extravanza named as **Jnana Cauvery**, which is conducted for three days, where students participate in various cultural activities. The students belonging to inter college and intra college perform dancing, singing, drama, skits, fashion show, ethnic day, dirt track race etc.,.

| File Description | Document | | | |
|---------------------------------|----------------------|--|--|--|
| Any additional information | <u>View Document</u> | | | |
| 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: 84.42

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 65

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Number of classrooms and seminar halls with ICT enabled facilities | <u>View Document</u> |
| Link for additional information which is optional | View Document |

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

Response: 66.08

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 226.85 | 190 | 110 | 150 | 162 |

| File Description | Document |
|---|----------------------|
| Details of budget allocation, excluding salary during the last five years | View Document |
| Audited utilization statements | <u>View Document</u> |

4.2 Library as a Learning Resource

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

Response:

Library and Information Centre is the heart of our institution. It is located in the main building of our college in an area of 13,100 sq.ft. It is an index of quality and service of an academic institution. The PESCE library is well established with modern infrastructure: Reading, Circulation, Reference, book bank, Magazines, Journals and newspaper reading & Digital library sections (includes printed and e-Journals) and back volume sections. The library has a seating capacity for more than 150 students in the reference section.

It has a collection of over 102041 volumes, 105 National Journals, 10 International Journals and 20 Magazines. All stocks are bar coded. The library is fully automated and enables circulation and Online Public Access Catalogue (OPAC).

The digital library has 24 exclusive nodes connected to different servers hosting a lot of e-Resources. PESCE has access to e-Learning Material of VTU like e-Journals, e-Books, NPTEL videos and other learning courses. Institutional Repositories includes publications of faculty of PESCE, purchased e-Books and Question Papers, the same are hosted in local server. One can access the e-Resources through LAN without password throughout the campus.

- The library automation project was started in the year **2008** using **LIBSOFT** software. Later on, it was migrated to **Koha** in **2013**.
- Entire holdings of the library is barcoded and catalogued in Koha (version 17) and online catalogue (OPAC) is being consulted by patrons to locate the books.
- Presently circulation activity is carried out using **ECAP** software as substitutive software.
- Library also created an institutional repository for archiving scholarly materials like research articles, conference papers of faculty members and research scholars of PESCE using **Dspace** 5.6 version. The question papers of all programmes are also made available in the institutional repository.

Library webpage has been created as a subpage of college website and one can access the sites anytime uninterruptedly.

Presently in the library we have 120 Mbps Wi-Fi internet facility

| File Description | Document | | |
|---------------------------------|----------------------|--|--|
| Any additional information | <u>View Document</u> | | |
| link for additional information | View Document | | |

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

Response:

The PESCE library holds rare material collections of 4000 documents which includes Handbook, Indian Standard code books, magazines. Majority of these materials spans over 50 years. Details of most exceptional books are furnished in the below table.

| S1 . | Title | Author | Pı | ublishe |
|----------------|---|--|-----|-------------------|
| No | | | | |
| 1. | ISI Handbook For Structural Engineers | Indian Standards Institution | Ir | ndian S |
| 2. | Machine Design Data Handbook | Narayana Iyanger & Lingaiah | El | NGINE ocity, E |
| 3. | Cupola Handbook | American Foundrymen's Society | | merica |
| 3. 3. 4. | Mathematical Handbook Of Formulas And Tables | Spiegel Murray R | S | chaum' |
| 4. | Handbook Of Experimental Stress Analysis | Hetenyi M | | ohn Wi |
| 5. | Fluid Mechanics For Engineers | Albertson | P | rentice- |
| 6. | Hydroelectric Handbook | Creager William Pjustin Joel D | Jc | ohn Wi |
| 7. | Hand Book Of Fastening And Joining Of Meta Parts | alLaughner Vallory Hhargan Augustu Dhargan Augustus | asM | cgraw |
| 8. | Tool Engineers Handbook | Wilson Frank Wharvey Philip D | N | 1cgraw- |
| 9. | Handbook Of Engineering Mechanics | Flugge W | | 1cgraw |
| 10. | Standard Handbook Of Lubrication Engineering | O'connor James Jboyd Johnavallon Eugene A | | |
| 11. | New Oxford Illustrated Dictionary | OXFORD University | О | xford U |
| 12. | | dLevine Bwall N | | Van N |
| 13. | S A E Handbook : Parts And Components | Sae | S | ociety (|
| 14. | | dMcgraw HILL | | 1cgraw |
| 15. | Indian standard code of practice for structural safety of buildings masonry | yIsi | Is | i |

| 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

Any 4 of the above

Any 3 of the above

Any 2 of the above

Any 1 of the above

Response: Any 4 of the above

| File Description | Document |
|---|---------------|
| Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc. | View Document |

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

Response: 31.11

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|----------|----------|----------|----------|----------|
| 28.32298 | 33.70125 | 32.87835 | 27.24266 | 33.39964 |

| File Description | Document |
|---|---------------|
| Details of annual expenditure for purchase of books and journals during the last five years | View Document |
| Audited statements of accounts | View Document |

| 4.2.5 Availability of remote access to e-resources of the library | | |
|---|---------------|--|
| Response: Yes | | |
| File Description | Document | |
| Details of remote access to e-resources of the library | View Document | |

4.2.6 Percentage per day usage of library by teachers and students

Response: 9.09

4.2.6.1 Number of teachers and students using library per day over last one year

Response: 306

| File Description | Document | |
|---|---------------|--|
| Details of library usage by teachers and students | View Document | |

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Yes, The college has comprehensive IT policy addressing standards on IT service management, Information Security, Network Security, Risk Management and Software asset Management with a selected group of committee members. The College has IT service management team leading by department of Computer Science and Engineering (DCSE). The common servers, networking infrastructure and licensed software and hardware are maintained by the DCSE group. The system purchase and maintenance committee has been framed to enhance the efficiency and effectiveness in decision making. The committee activities are reference with academic and administrative needs.

Dedicated computing facility:

- 1. Computer Aided Engineering Drawing Laboratory, Diagnostic Maintenance Laboratory, CAD/CAM Laboratory, High Voltage Testing Laboratory, Computing Laboratories, Networking Laboratory, VLSI Laboratory, Metrology Laboratory, Tribology Laboratory, Metrology Laboratory, Wind Tunnel Laboratory, Language Laboratory, and Digital Library for e-Books, e-Papers, e-Journals and Curricular related facility and Online examination facility at Placement and Training Centre.
- 2. Internet facilities are provided to all the employees of the institution and Boys hostel and Girl's hostel to enrich learning skill and encourage to do research work.

Campus Internet facility: The internet facility in the institute is updated from time to time. The whole campus equipped with Wi-Fi facility with 80 Mbps speed in the year 2008-15, in 2015- 2017 had 100Mbps and currently from Dec 2017 - Till date 120Mbps with 1:1 lease circuit.

LAN facility: In the entire campus 1G backbone wired and wireless network is available for all the departments, administrative blocks, Examination Section, Placement and Training cell, hostels (both boys and girls).

Wi-Fi facility: All the departments, administrative blocks, Examination Section, Placement and Training cell, hostels (both boys and girls) with 100 Mbps. All Laptops, desktops and servers are purchased with Licensed Microsoft OS

Computers: The entire institution has over 1,360 computers, 70 printers, Projectors, CCTV Cameras and Four heavy duty printers for examination section. The computers are upgraded version with latest Intel 6th gen Core i3 6100, 4/3GB DDR4 ram. All Servers, systems and other related equipments are maintained by DCSE team. The systems & softwares and UPS deployed in the college are maintained by DCSE team.

The software purchased for various departments under TEQIP Cell are:

| Sl. No | Department | Name of the Software | No. |
|--------|------------|---------------------------------------|-----|
| 1 | Civil | Bentley Academic Design Software | 60 |
| | | 2. E-Tabs | |
| | | 3. E Surveying Solution Products | 60 |
| | | | 60 |
| 2 | CS & E | 1. MS-Office 2013 | 100 |
| | | 2. Windows server | |
| | | 3. SQL Server | 40 |
| | | 4. Visual Studio | |
| | | 5. Kaspersky Anti Virus | 40 |
| | | | 40 |
| | | | 100 |
| 3 | EC & E | Cadence VLSI Design Lab (CVDL) | Net |
| 4 | IP & E | 1. Solid Works – 2015 | 100 |
| | | 2. Master Cam CNC Package 2017 | |
| | | | 40 |
| 5 | Mechanical | 1. FEM-Software (ANSYS 2015) | 50 |
| | | 2. CAD/CAM (PLM) Software (CATIA V6) | |
| | | | 45 |
| 6 | IS & E | Qual Net – Network Simulator Software | Net |

Every year, for the deployment and up-gradation of IT infrastructures, a Separate provision is made through the DCSE team.

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

4.3.2 Student - Computer ratio

Response: 2.32

| File Description | Document | |
|--------------------------|----------------------|--|
| Student - Computer ratio | <u>View Document</u> | |

4.3.3 Available bandwidth of internet connection in the Institution (Lease line) <5 MBPS

5 MBPS - 20 MBPS

20 MBPS - 35 MBPS

35 MBPS - 50 MBPS

Response: ?50 MBPS

| File Description | Document |
|--|---------------|
| Details of available bandwidth of internet connection in the Institution | View Document |

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 Centre, Recording facility,LCS | 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: 60.33

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)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|-----------|-----------|-----------|-----------|-----------|
| 163.85770 | 175.71621 | 134.87208 | 165.92731 | 119.27245 |

| File Description | Document |
|--|---------------|
| Details about assigned budget and expenditure on physical facilities and academic facilities | 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:

Yes, the college has designated officers for overseeing to look after the development of campus facilities and its maintenance.

The estate officer takes care of entire campus. Under estate officer system administrator, library staffs, gardeners and physical education director take care of their jobs respectively.

Maintenance of Infrastructure:

- Building Division committee: This committee was established under civil engineering department through which most of the new buildings with modern amenities are constructed and repairs of buildings of the institute taken care. The building division will be taken care about construction of as per the requirement of the institute and also the maintenance of existing infrastructure.
- Laboratory and Workshops: All the engineering departments have their one laboratories. Each of the laboratories are equipped with sufficient tools and devices. All the tools and devices are will maintained by the instructors, lab technicians and mechanics with the help of the helpers. As and when there is a requirement of new equipment the equipment is purchase thorough the committee.
- Library: The library committee will take care of purchasing new volume of books, journals, e-journals, magazines, newspapers ect. and their maintenance regularly. In addition to this each department has got their own library and that is taken care by the HoD.
- Sports and Cultural: The sports complex has an exclusive committee which takes care of overall sports complex amenities and activities. The institute has a physical education director who takes care of overall sports activity. The director conducts various games in the campus to the extent of

national and regional level. The institute has a sport complex for indoor and outdoor games. The sports committee conducts various games in this complex regularly. The above said committee will take of the maintenance at regular intervals. The individual departments have got their own sports and cultural committee.

- Computers and networking: The institute has a system administrator and assistant system administrator to look after hardware and software of the computers. They also take care of networking, wi-fi, ICT facilities (classrooms, seminar halls, auditorium, etc) in the entire campus.
- Classrooms, Seminar halls, Auditoriums are utilized for regular teaching learning process, training and for carrying out examinations. Further, maintenance is being regularly monitored and maintained under the supervision of the estate officer.
- The electrical and electronics department takes care of overall electrical works and generators in the entire campus. The college has its own power generator as backup power supply for the departments, exam section and hostels.
- Exam section: The CoE takes care of the autonomous exam section, where the database of overall exam section is managed by the co-ordinator and database administrator
- The placement and training Cell: The placement and training officer provides the required amenities to carry out the placement activities smoothly.
- The garden department of the institute maintain the gardens to keep the campus green. Every year plants are planted. The garden department is also responsible to maintain the entire campus clean and tidy. The gardening department also takes up the indicative to plant new forms of plants in the campus. The classrooms are maintained by the individual HoDs of the department.

In addition to this computer, printers, generators, RO plants, photo copy machines etc are taken care by the AMC personals.

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

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: 32.02

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1312 | 1200 | 1206 | 824 | 479 |

| File Description | Document |
|--|---------------|
| Any additional information | View Document |
| Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years | 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: 1.76

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 55 | 60 | 60 | 55 | 45 |

| 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 development schemes –

- 1. Guidance 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

7 or more of the above

Any 6 of the above

Any 5 of the above

Any 4 of the above

Response: Any 6 of the above

| File Description | Document |
|---|----------------------|
| Details of capability enhancement and development schemes | <u>View Document</u> |
| Link to Institutional website | <u>View Document</u> |

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

Response: 11.79

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 397 | 364 | 413 | 300 | 360 |

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

5.1.5 Average percentage of students benefitted by Vocational Education and Training (VET) during

the last five years

Response: 11.79

5.1.5.1 Number of students attending VET year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 397 | 364 | 413 | 300 | 360 |

| File Description | Document |
|---|----------------------|
| Details of of students benefited by Vocational Education and Training (VET) | <u>View Document</u> |

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 |
|---|---------------|
| Details of student grievances including sexual harassment and ragging cases | View Document |
| Any additional information | View Document |

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 26.13

5.2.1.1 Number of outgoing students placed year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 311 | 323 | 295 | 85 | 118 |

| File Description | Document |
|---|---------------|
| Details of student placement during the last five | View Document |
| years | |

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

Response: 2.59

5.2.2.1 Number of outgoing students progressing to higher education

Response: 24

| File Description | Document |
|--|----------------------|
| Details of student progression to higher education | <u>View Document</u> |

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/TOFEL/Civil Services/State government examinations)

Response: 100

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 14 | 18 | 8 | 12 | 10 |

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOFEL/Civil Services/State government examinations) year wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 14 | 18 | 8 | 12 | 10 |

| File Description | Document |
|---|---------------|
| Number of students qualifying in state/ national/ international level examinations during the last five 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: 62

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 16 | 25 | 5 | 9 | 7 |

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years | View Document |

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

Response:

Students mentoring - In all the departments, mentors (Course instructors) are assigned to a small group (10-15 UG/PG) of students to mentor/counsel them. The faculties monitor the student's academic performance, counsel and address their professional/personal difficulties for better academic performance outcome. The students are motivated to interact with faculty and participate in sports and extracurricular activities to be better performers.

The students are included in various bodies with additional responsibilities at department and institution level as mentioned below.

- Participation in academic / curriculum review through course end survey
- Department associations Students administrative body for the conduction of curricular/ co curricular and cultural activities at the department level
- SAE PESCE Student Section (Collegiate club) Students administrative body for the conduction of technical activities at the department/institute level
- Gnana Cauvery Students administrative body for the conduction of curricular/ co curricular and cultural activities at the institute level
- Technical Association- students conduct workshops, seminar and guest lectures.
- Placement Committee Students with the assistance of placement officer conduct the placement activities every year during the campus placement.
- Sports & Cultural Committee Students form a committee under the sports committee, through

- which they conduct annual sports meet and also participate in various regional, national and international competition.
- Anti Ragging committee The students create awareness about the anti-ragging polices of the institution to the new comers. They keep monitoring for any untoward incidents which may lead to ragging in the campus
- IEEE Student Branch Conduct regular workshops, conferences, seminars and guest lectures.
- Hostel Committee The keep track of the hygiene aspects of the hostel. They also monitor the food which would be served in the hostel and reduction of wastage. They also take care of recycling of wastage food every day.

Role of Student Representatives

The role of student representatives in improving the activities of various clubs in curricular and extracurricular aspects of the institution in the right direction. They play vital role in-

- Feedback, Suggestion to Associate committee.
- Disseminate the information from the college administration to all students
- Organize technical, non-technical and social events.

Conduct Quiz Competitions on current affairs.

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

Response: 65.4

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 66 | 66 | 66 | 65 | 64 |

| File Description | Document |
|--|----------------------|
| Report of the event | <u>View Document</u> |
| 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:

The following are the objectives of alumni association-

PESCE alumni have started various chat groups/clubs at different parts of the globe. Some of the active groups which are in touch with alma mater in one or the other way - PESCE Alumni Bangalore chapter, Telugu Club & USA club

The following activities are conducted by the alumni association formed under the leadership of our Principal;

- Membership drive
- Alumni meet
- Academic
- Infrastructure support /Scholarships/Endowments
- Social
- Felicitations

Membership: The institute is 50 plus years old, keeping tracking of alumni has happened systematically. During revamping of the association in 2009 many steps were initiated to enrol and enhance membership. The alumni were contacted through:

- Peer drive
- Tell a friend
- Ledger data
- Face Book call
- LinkedIn Call
- Departmental data
- Exclusive website (maintained by M/s Fourth Ambit)

At present we have approximately 7000 contacts out off around 25,000. A campaigning to enhance the numbers is made in Chapter meets, departmental alumni meet and General body.

Academic:

The academic activities involve:

- Mentoring students for academic excellence and career selection During First year orientation programme.
- Curriculum design –Through BoS of each department
- Invited talks/workshops from Alumni –through Placement cell to deliver expert talks and conduct workshops for students

- Acting as catalyst in Industry-Institute and Institute-Institute partnerships through placement training activity, Conducting Mock campus selection process
- Project mentoring Faculty members connect alumni and present students for project work and career mentoring.
- Guest to College events Alumni were invited as guests to college level and department level events to get motivated/inspired by their achievements

Infrastructure support:

- Provide financial support to infrastructure development –
- Alumni association and placement cell has contributed Rs 40 lakhs for construction of existing Placement auditorium.
- Civil alumni have built a building for "Center of Excellence in Civil Engineering"
- Alumni have contributed to department fest and college festivals
- Endowment scholarships are provided by a Alumni for top rankers

Social

- Alumni visit alma mater with family on weekends and go around the campus
- Alumni visit departments frequently to have informal chats with faculties and non teaching staff.
- Alumni share their important events of their life with faculties and invite faculties are social gathering
- Faculties are invited by alumni for personal social gatherings.

Felicitations

- Three principals Sri B L Srinivas Murthy, Dr Ramalingaiah and Dr B Chandrashekhar were felicitated during annual get together
- Dr Suresh, Padmabhushan awardee, of Indian Space Research center was felicitated
- Distinguished Alumni were felicitated in Golden Jubilee inaugural and valedictory events.
- 1984 EC & EE batch felicitated their teachers on the 25th anniversary of their graduation
- Girish Bharadwaj, Padmashree awardee, was felicitated for his contribution to the society by building hanging bridges.

4. Plans

- To come up with one memorable facility, an auditorium, in the campus which will be useful to all stakeholders.
- To start a Scholarship fund in a big way helping poor and meritorious students

More involvement of Alumni in enhancing brand of PESCE

5.4.2 Alumni contribution during the last five years (Amount in rupees) <2 Lakhs

\2 Lakin

2 Lakhs - 5 Lakhs

5 Lakhs - 10 Lakhs

10Lakhs - 15 Lakhs

Response: 2 Lakhs - 5 Lakhs

| File Description | Document |
|---------------------------------------|----------------------|
| Alumni association audited statements | <u>View Document</u> |

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

Response: 44

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 10 | 9 | 10 | 7 | 8 |

| File Description | Document |
|--|----------------------|
| Report of the event | <u>View Document</u> |
| Number of Alumni Association / Chapters meetings conducted during the last five years. | View Document |
| Any additional information | View 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:

To become a Technical University of highest Standards through consistent development, the Vision, Mission, Quality policy and Core values of the institution is in tune with the objectives of technically sounded higher education in India.

Vision

"PESCE shall be a leading institution imparting quality engineering and management education developing creative and socially responsible professionals."

Mission

- Provide state of the art infrastructure, motivate the faculty to be proficient in their field of specialization and adopt best teaching-learning practices.
- Impart engineering and managerial skills through competent and committed faculty using outcome based educational curriculum.
- Inculcate professional ethics, leadership qualities and entrepreneurial skills to meet the societal needs.
- Promote research, product development and industry-institution interaction.

The phrase, "Professionally Excellent, Socially Committed Engineers" is worth using as a punch line to designate the team of PESCE including the students, who contribute for the institutional development. The core values of PESCE are professionalism, Efficiency, Synergy, Commitment and Ethics.

Governance - The institution has Board of Governors [BOG], to monitor and mentor the activities of the overall development of the institution. The BoG has the Chairman, members, AICTE Nominee, GoK Nominee, VTU Nominee, UGC Nominee, Staff representative, Principal of the institute as the Member Secretary. The member secretary shall, with the approval of the Chairman convene the meeting of the BoG atleast twice a year. The member secretary shall, with the approval of the Chairman prepare the agenda for the meeting and execute as per the decisions made by the members of the BoG.

The management along with the top leadership meet and brainstorm on stake holder's expectations. The Board meet as and when the time insists quite often, and arrive at on vision, mission, quality policy and core values. Environment scanning was done keeping vision in mind.

Institutional strategic goals formed main theme for arriving at strategies to achieve them and also substrategies towards implementation plan. Each goal will be accomplished through strategies and each strategy is accomplished by sub strategies. The Implementation plan comprises of all details such as resources needed, leader responsible to implement along with the head of the institution.

Page 77/111 11-01-2018 05:32:35

Departments play pivotal role in the development of the institution. Hence each department formulated their vision, mission, short, mid and long term goals. The implementation plan for the departments reflected all details of resources needed, leader responsible with Head of the Departments.

The above statements of vision, mission and quality policy and core values were deliberated, reframed and approved by BoG.

The perspective plan document is an important component of institution's strategy development and deployment process.

Teachers are participated in various decision making bodies of the Institution, such as;

- Governing Body
- Finance Committee
- Purchase Committee
- Building Works and Campus Maintenance Committee
- Transport Committee
- Institute Web Site Design and maintenance
- Research and Development Committee
- Placement & Training Centre
- Sports and Extra Curricular Activities Committee
- Academic Council
- Board of Studies
- Departmental Under Graduate Committee (DUGC)
- Departmental Academic Appeals Board (DAAB)
- Alumni Committee
- SC / ST Cell
- Hostel Committee etc.,

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

6.1.2 The institution practices decentralization and participative management

Response:

Yes. A high level of transparency is facilitated through delegation of powers to various committees/bodies who execute the academic and the extra-curricular activities. They are involved in various levels of managerial decision making.

Function of Controller of Examination (CoE):

The institution has an exclusive wing which conducts the examination for both, UG and PG students

headed by Controller of Examination assisted by Dy. Controller along with supporting staff for the smooth conduction of SEE and Make up examinations, valuations, announcement of results.

The major activities of CoE office are:

- Overall conduction of examination (CIE,SEE and MUP) process, includes announcement of calendar of events, scheduling of the examination dates, setting of question papers from both internal and external examiners, printing of the question papers (CIE I&II), SEE and MUP for all semesters.
- Announcement of the examination and other fees related to examination.
- To provide proper notification to departments related to examination process and conducting the examination time to time.
- Getting CIE marks from the department from time to time also monitoring CIE process and inform any irregularities to the principal.
- Conduction of valuation, processing the results, announcement of results, issuing the grade cards and PDC.
- Moderation of valued answer papers, provision for viewing of answer scripts for the students.
- The DUGC and DPGC formed in each department to solve the discrepancies raised by the students.
- Maintenance of confidentiality of the examination system.
- Conduction of malpractice committee meeting and issuing all notification related malpractice.
- Strictly adhere to the university instruction regarding Autonomous Examinations.
- Coordinating with the Dean (Academic) to implement the autonomous discipline as pet the UGC and VTU guidelines.

Function of Dean (Academic)

In the institution Academic cell has been formed to supervise the academic affairs headed by the Dean, Principal, Placement officer and HoD's of different departments. The cell regularly collect the information related to academic needs of stakeholders, syllabus formation, academic scheduling and time table etc. The main profile of the cell is to interact with university, examination cell as well as local governing bodies involved in academic proceedings.

The important activities of the academic cell are:

- Preparing the academic calendar of UG and PG programmes in consultation with CoE office.
- Responsibility to frame the syllabus, constitute the BoS of all the departments, Academic senate, look into the anomalies if any.
- Fixing the credits of various courses of UG and PG programmes in consultation with CoE.
- To initiate the necessary formalities to introduce any new course required on par with industry by the departments.
- Interact with the CoE to solve any problem related to credit system.
- To supervise the academic standards and quality of the curriculum.
- To interact with the DUGC and DPGC, if necessary regarding academic issues.

Getting approval for confer degree to the students from the affiliated university and the certificates are issued at the time of convocation.

| File Description |] | Document | |
|---------------------------------|-----------|--------------|--|
| Link for Additional Information | <u>Vi</u> | iew Document | |

6.2 Strategy Development and Deployment

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

Response:

The institution has an action plan which comprises of short term and long term plan of strategies for designing the future of the institution.

The strategic development plan (SDP) would act as guiding document. It focuses on improving the institution towards delivering high quality technical education and earning a recognition among its peers as the best technical institution of repute. SDP defines high level goals for the institute and departmental short, mid and long term goals. The core focus is towards providing competent faculty, good infrastructure and best in class teaching-learning solutions.

It is highly exhilarating to note that most of the inputs are drawn from stake holders which are the testimony to the team participation process. The SDP will enhance the capability of the PES College of Engineering in delivering successful results. The institution will no doubt grow and be a torch bearer in providing technical education for many decades to come, thereby leading to accomplish its stated mission and vision

1. Teaching and learning:

The college has taken steps in the following areas:

- Laboratory up-gradation study and action plan
- Development of laboratories with industry collaboration
- Interaction with Institution within the state, out the state and out of India
- The college has put in place strategic plan coverings aspects for individual development, holistic development of the department and the Institution. The various aspects considered in development of policy and strategies are indicated in the plan.

1. Research and development:

The interaction with various academic Institutions, research establishments and industry on academic research, sponsored research and/or consultancy helps in identifying relevant new technologies and widening the knowledge base. Such interaction becomes an integral part of the innovation process where both the academic Institution and the innovators are benefited. At the Institutional level, it helps in infrastructure development through resource generation and at the professional level, faculty establish contacts through participation in conferences, workshops, seminars and meetings of professional bodies.

i. Academic Research Programs by faculty: For newly recruited faculty there will be a wait period of two years to complete probation before registering for Ph.D programs. Incentives for registered scholars

are provided as detailed in HR Policy. Faculty can register for course work for Ph.D with PES autonomous programs

ii. Publications : Faculty in the cadre of Assistant, Associate Professor have publish atleast one paper (Conference / Journal) in one academic year, either as first author or as co-author. Each Faculty publication in reputed journals that are indexed in SCI with impact factor is appreciated. For attending conferences to present papers, registration fees and travel will be supported by the college as per HR Policy.

iii. Sponsored/ Funded research from external agencies

• The faculty members are encouraged to apply for grants from various funding agencies such as AICTE, UGC, TEQUIP, DST etc., and based on their grant, the reward points will be given in Performance appraisal developments systems (PADS).

Based on funding agency and HR norms, travel and workload reduction will be considered.

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Strategic Plan and deployment documents on the website | View Document |
| Link for Additional Information | 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 institute has good organisational structure with well defined functions and responsibilities. All the members of the committees including governing body, administrative setup are functioning effectively for the growth of the institution. The functions of various bodies are as mentioned below

Management and Governing body: The Top brass, who head and steer the organization shall be responsible to delegate the principal and vice principal to work in line with the policies made at the Governing Body Meeting.

Further, the principal will assign the responsibilities to the administrative and faculty team members to deliver the assigned work. Assistant administrative officer and Public relation officer – assists and take care of all administrative support to the institute, students and employees. Specific duties of various team leaders as per organisational chart are:

- Dean-Academic-takes care of overall academical activities like curriculum design, modification & implementation of syllabus for each programmes of the institution.
- CoE plays a vital role in conduction of CIE and SEE, valuation and announcement of results

process, according to the schedule.

- Dean-R&D takes care of overall research activities, project proposal, and conduction of workshop on research oriented topics.
- Dean Training & Placement conducts the soft skills and various training programmes for all the students along with campus placement activities.
- Dean Industry Institute Interaction promotes interaction activities pertaining to industry and Institute.
- Dean Admission takes care of admission activities related to UG and PG Programmes.
- HoDs take responsible for smooth conduction of regular activities for overall development of the students pertaining their programme.
- Dean Student Welfare takes care as monitor, Counsellor and guide to inculcate and maintain the professional disciple among the students. Further, organise extra-curricular activities and mega cultural event to encourage the students to excel in extracurricular and academics activities.
- Hostel Warden responsible for maintaining and providing proper hygiene facility in food and shelter along with other facilities for their academic stay.
- Library and information provides the knowledge support to the academic need of the students and faculty in several forms.

All other committee and special officers are involved in overall development of the institution to achieve excellence.

Further, service rules and procedures are guided by the KCSR rule, UGC, AICTE and Management.

The recruitments are done for both teaching and non teaching staff as and when the vacancy exists by the direction of DTE, Govt. of Karnataka and management as per AICTE norms for aided posts. Similarly for the unaided posts the vacancies are filled by the management according to AICTE norms.

In case of promotions, the eligible candidates are been notified and processed from the institution to DTE office. In case of unaided branches the management as the discretion to promote the eligible candidates from time to time according to AICTE norms.

In order to overcome the grievance of any teaching and non teaching staff, the institution has a staff representative to address the grievances of the individuals and take suitable decision in consultation with the principal and management.

| File Description | Document |
|---|----------------------|
| Any additional information | <u>View Document</u> |
| Link for Additional Information | View Document |
| Link to Organogram of the Institution webpage | 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

All 5 of the above

Any 4 of the above

Any 3 of the above

Any 2 of the above

Response: Any 4 of the above

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

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The various committees formed by the institutions are effectively functioning and discharging their duties and responsibilities for the upliftment of the institution. The institution forms various committees like Board of Governors, College Council, Board of Studies, Board of Examiners, Academic Council etc.,

In each committee number of meetings are conducted in which the agendas are discussed thoroughly, decisions are made, resolutions are formed and actions are implemented systematically.

For Example: Action taken Report on resolutions passed in ACM-IX held on 20.08.2016

The Chairman welcomed honourable members for **ACM-IX** and placed the Agenda (1-8) of the meeting for the discussion. The discussion took place at length and the following resolutions were made:

(i) Agenda 1 - Action taken report of ACM 08

Action taken report was brought to the notice of all the members of Academic council. The Suggestions given by the members were recorded.

Approved

(ii) Agenda 2 - Approval & consideration of OBE Scheme of Study and Syllabus for the revised UG

Programs of VII & VIII Semester B.E.(All branches) (2013-17, P13 Scheme)

- a) Scheme of Study: The syllabus content is confined to 5 units in each course.
- b) Scheme of Exams: There shall be two questions from each unit with internal choice across individual units only. Paper setters will set 10 questions per course. Students shall have to answer, five full questions, selecting, only one full question from each unit.

OBE Scheme of Study and Syllabus for the revised UG Programs of VII & VIII Semester B.E. of all branches (2013-17 Scheme) were discussed and Suggestions were recorded.

Approved

Agenda 3 - Approval & consideration of **CBCS with OBE** Scheme of Study, Syllabus and Scheme of Examinations for the revised UG Programs (2015-16, P15 Scheme)

a) Modified Syllabus (Electronic Devices and Communication P15EC15/25) of I and II Semester BE

(Common to All Branches)

- b) Syllabus of III and IV Semester BE (All Branches)
- c) Scheme of Study and Scheme of Exams: Same as (ii)(a) & (b)

CBCS with OBE Scheme of Study, Syllabus and Scheme of Examinations for the revised UG Programs (2015-16 scheme) were discussed and Suggestions were recorded.

Approved

Agenda 4 - Approval & consideration of **OBE** Scheme, Syllabus and Scheme of Examinations for **MCA** (II & III year) Programs. Scheme of Study and Scheme of Exams:

Same as (ii)(a) & (b)

OBE Scheme, Syllabus and Scheme of Examinations for **MCA** (II & III year) Programs were discussed and Suggestions were recorded.

Approved

Agenda 5 - Results of the Academic Year 2015-16

Approved

Agenda 6 - Toppers, Rank Holders, Eligible Candidates for the Award of Degree

Approved

Agenda 7 - Conduction of seventh Graduation Day on 3rd September 2016

Brought to all the ACM members notice and invited for 7th Graduation Day celebrations.

| File Description | Document |
|---------------------------------|----------------------|
| Any additional information | <u>View Document</u> |
| Link for Additional Information | <u>View Document</u> |

6.3 Faculty Empowerment Strategies

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

Response:

Streamlined HR policies are vital for employee motivation and work satisfaction. The management of the institution has a framework of systems in place for employee enrichment. The institution takes utmost care in recruitment and promotion of employees.

The institution gives priority for continuous enhancement of professional skills of its employees. Programmes are organized at various levels to enhance the competency of its faculty and non-teaching staff.

The institution has a welfare mechanism in place, for teaching and non-teaching staff. Under welfare measures the institution provides P.T Exemption and one additional increment for both teaching and non-teaching faculty according to KCSR norms. In case of two children one increment is provided for both aided and unaided faculty.

The other facilities provided for both teaching and non-teaching faculty are as follows:

1. Teaching Faculty:

- The institute has implemented the AICTE pay scale for all aided and unaided teaching faculty with respect to post and their qualification.
- The faculty members are encouraged to attend the conferences, workshops, seminars and symposia and On-Duty leave is sanctioned.
- Under Quality Improving Programme (QIP), Faculty are deputed for higher studies (PG/Ph.D) with salary and study leave.
- Special permission for faculty to serve as the resource person in various forums BoS of other institutions and Universities, to be a member of Doctoral Committee for research scholars and to act as examiner for Ph.D viva- voce examinations.
- Encouragement to conduct in-house FDP and workshops nurturing inter departmental activities and professional development.
- Motivation and support to participate in industry-institute-interaction and professional development Training to teachers for teir excellence.

- College provides financial aid to encourage for presenting their research papers and participating in conferences and seminars.
- Faculty are encouraged to conduct/Participate in technical competency enhancement programmes

2. Non – teaching staff:

• The institute implemented the pay scale for all aided and unaided non-teaching faculty as per the state government norms with respect to post and their qualification.

The following training sessions were imparted for non-teaching staff:

- Autonomy Perspectives for Office Administration
- Training on maintenance of office equipment
- Training for examination office staff, Library staff and non teaching staffs
- Organizational effectiveness
- Usage of MIS effectively.
- Communication skills and professionalism
- Permitted for higher studies.
- Encouragement to attend workshops and seminars.
- Encouraged to Participate in technical competency enhancement programmes

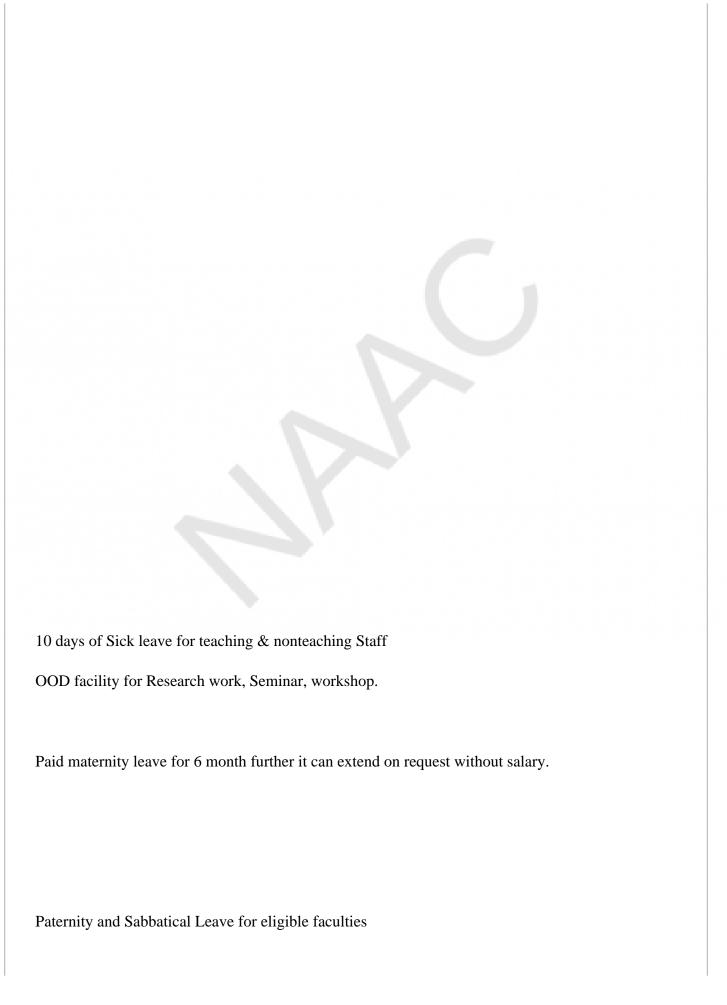
1. The various welfare schemes are

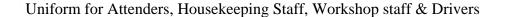
ESI & PF are given as per the statutory norms.

Gratuity provided to the employees

Vacations of 15days for Teaching Staff

EL facilities for both teaching and non-teaching Staff





A welfare association, House building & teachers credit co-operative societies, teaching staff and non-teaching staff associations are functioning to take care of necessary financial welfare of the employees.

| File Description | Document |
|---------------------------------|----------------------|
| Any additional information | <u>View Document</u> |
| 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: 29.67

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 38 | 73 | 50 | 69 | 52 |

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years | 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: 10

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 11 | 8 | 13 | 17 | 1 |

| File Description | Document |
|---|---------------|
| Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff | View Document |

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

Response: 30.32

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 38 | 75 | 50 | 70 | 55 |

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

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

Response:

Every year the institute evaluate the performance of both teaching and non teaching faculty.

Teaching Faculty: Every year the institute constitute a high level committee to evaluate the performance of every faculty on the basis of their progress and feedback from the students. This committee comprised of both management and external academic experts along with the principal and HoD's. At the beginning of academic year in the month of August all the teaching faculty prepare their self appraisal report on their performance, ability, behaviour, working nature, academic progress, research activities, funds generation, involvement in curriculum and extra curriculum activities etc., for the progression of the college in a prescribed form given by the principal and submit the same to the principal through their respective HoD's along with their feedback. All the reports are scrutinized by the principal and are submitted in front of the high level committee. After through interaction with each faculty regarding their previous year performance, current year progress and achievement the committee will give the suggestions for their better upliftment. The suggestions provided by the committee are communicated to the faculty by the directions of the principal in the due course.

Non-Teaching Faculty: For every non-teaching faculty/staff, before 20-30 days due for their annual increment, principal ask the confidential report from the respective head of the department/section in a prescribed form on their performance, ability, nature of work, behaviour, progression, involvement etc. The head of the department/section prepare the confidential report along with the self appraisal on the respective faculty/staff and the same has been send to the principal along with his recommendation in a sealed cover. After scrutinised the report, the principal recommended for the suitable action.

Consultation with the management the principal initiated to take the necessary actions as per the recommendations.

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Yes, the institution, regular intervals, carryout both internal and external audits by certified chartered accountant appointed by the management.

The institution has a pre-defined mechanism for internal and external audit.

- Internal audit is conducted by the internal auditor of the Institute once in a year.
- External audit is conducted by the chartered accountant once in a year.

The income and expenditures details of the institution under various heads are regularly maintained using Tally and a day book is separately maintained showing the statement of accounts.

Internal audit of our institution account is conducted by a chartered accountant appointed by the management every year at the end of financial year. Mr. S. Subramanya - The Chartered Accountant has been conducting the audit of our institution. The auditors check and verify the financial accounts every month and at the end of the academic years overall financial for the complete year is conducted.

Since our institution is aided by Govt. of Karnataka, apart from the internal audit, the Auditors from Govt. AG office conduct the external audit every year.

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

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

Response: 4.82

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0.97600 | 0.97000 | 0.92900 | 0.98900 | 0.95200 |

| File Description | Document |
|--|---------------|
| Details of Funds / Grants received from non- government bodies during the last five years | View Document |

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

Response:

The funds for the institution is mobilised mainly from the fee collections of the students.

The main source of financial resource for the institution is through Students fee collection. This fee is collected as per the standard norms of Karnataka Government policy (CET, COMEDK and NRI quota). Further, The teaching and non-teaching faculty who comes under Grant-in-aid system they get 85 % of salary component from the Government of Karnataka grants. Some of the faculty of the six engineering and three basic science departments, namely Automobile, Civil, Electronics and Communication, Electrical and Electronics, Industrial and Production and Mechanical Engineering and basic science departments like Physics, Chemistry and mathematics, and other office and non teaching staffs are getting this benefit.

The institution strictly follows the fee structure prescribed as per the state Government norms for all the programmes. Apart from this, few departments offer consultancy to generate revenue for the institute. Also the faculties are encouraged to submit project proposals to various funding agencies which will help the institution in research and also the infrastructure development. The institution is also getting the funds for various designated activities under Technical Education Quality Improvement Program (TEQIP) since 2004 till 2017. Now we have been identified as the mentor institute under phase-III of TEQIP. The financial resources are utilised for overall development of the institution in various aspects and it is monitored by Board of Governors assisted by the Management.

| File Description | Document | |
|---------------------------------|----------------------|--|
| Any additional information | <u>View Document</u> | |
| Link for Additional Information | View Document | |

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:

The National Assessment and Accreditation Council advocated the establishment of Internal Quality Assurance Cell (IQAC) by all the accredited institutions as a post accreditation quality sustenance activity. The primary aim of the IQAC is to develop a system for continuous improvement in the academic and administrative performance of the institution. Dr. Shivalinge Gowda, professor (CAS) was appointed as coordinator of IQAC of our institution from 2016 - 2017. The institutional IQAC consists of a coordinator,

Page 92/111 11-01-2018 05:32:39

and member coordinators from each department, library, sports, hostel and placement officer.

In this academic year the IQAC played a significant role in preparing Self Study Report of our institution to be submitted for the NAAC for accreditation. The PESCE-IQAC has initiated to collect the required data from the respective departments to prepare the SSR of our institution. Each department has got its own member coordinator to communicate and collect the information and submit the same to the NAAC coordinator for development of SSR.

Academic Audit of the institution through three different level committees for quality assurance. The first level to start with Department level Academic audit/ Advisory committee which includes external expert

Member drawn from peer institutions, industry and alumni base. The second level is institutional level Academic audit/Advisory committee which includes internal expert member drawn from within institution and includes representation from management. The third level is external Academic audit/Advisory committee which includes external expert member drawn from institutions of higher learning and university nominee. The Academic audit manual is prepared in line with NBA-tier I format ie. Outcome Based Education.

Quality pursuit becomes a natural phenomenon rather than an enforced work culture. In this context the Internal Quality Assurance Cell (IQAC) assumes importance as an endogenous system defining the quality culture of an institution. All the stakeholders of an institution should promote and encourage the activities of the IQAC in order to make the institution a Centre of Excellence.

Internal Quality Assurance Cell has contributed significantly to institutionalizing quality assurance strategies and processes.

Yes. At the end of every semester the senior faculty members from the various departments are appointed as internal auditors by the College council (CC) Coordinator for verifying internal assessment records of the students and course file of each faculty. Current end semester question paper with answer key to evaluate the activities, functioning and documentation is undertaken by the departments. It is an important quality initiative of the institution.

Based on the academic audit findings,

The academic gaps are communicated by the College council to the Head of the Department (HOD). Teaching, learning and evaluation gaps are discussed with the faculty members by the HOD. The faculty members are advised to improve such weaknesses in the forthcoming academic work in the subsequent semester.

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

The primary aim of the PESCE - IQAC is to develop the system for continuous improvement in the academic and administrative performance of the institution. Since the institution is going for the NAAC accreditation for the first cycle, yet the need for implementation of IQAC review does not exist. Considering the importance of the review processes, the institution would be meticulously implement the teaching learning process, structures & methodologies of operations and learning outcomes periodically for over all development of the institution.

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

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

Response: 2.2

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 6 | 0 | 2 | 2 |

| File Description | Document |
|--|----------------------|
| Any additional information | <u>View Document</u> |
| Number of quality initiatives by IQAC per year for promoting quality culture | 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
- 2. Academic Administrative Audit (AAA) and initiation of follow up action
- 3. Participation in NIRF
- 4. ISO Certification
- 5.NBA or any other quality audit

Any 4 of the above

Any 3 of the above

Any 2 of the above

Any 1 of the above

Response: Any 4 of the above

| File Description | Document |
|---|---------------|
| Details of Quality assurance initiatives of the institution | View Document |
| e-copies of the accreditations and certifications | View Document |

6.5.5 Incremental improvements made during the preceding five years (in case of first cycle) Post accreditation quality initiatives (second and subsequent cycles)

Response:

PESCE has got the autonomous status in the year 2008, after obtaining autonomy some of the major milestones of the institution for its incremental improvements preceding five years are:

- Designed own curriculum as per the industrial requirement and global norms.
- Once in two years, the curriculum is revised to meet the current requirement.
- We are adopting Outcome Based Education System in framing the curriculum; later Choice Based Credit System was introduced.
- We have refurbished the classrooms, library, laboratories, seminar halls and auditorium with latest equipments and modern amenities
- Organised good number of pedagogical and technical quality enhancement training to the entire teaching faculty.
- Orgainised good number of administrative and managerial quality enhancement training to all the administrative and non teaching staff.
- Development of Feed Back forms and systems in the institution for review.
- Adopting enhanced ICT in teaching and learning Process.
- Digitization of examination cell for maintaining of student records and performance evaluation process.
- Exclusive credit courses for Communication skills and soft skills as a part of placement and training from I semester to VI semester.
- Introduction of Mini/minor/major projects for higher semesters in the form of internships.
- Academic recognition for internship and training in industries awarding credits
- Flexibility in framing syllabus and introduction of new concepts.
- Allowing participation of students in curriculum design as student member in the Board of Studies (BoS).
- Timely announcement of calendar of events, time table, schedule of examination and

announcement of results.

- Reintroduction of Engineering Graphics through manual drafting
- Encouragement for Best projects across the departments
- Handbooks with recent information given to all the students
- Gold medals for branch toppers
- Adopting Good Governance practices
- Involvement of Alumni in designing curriculum, instituting scholarship/awards and mentoring projects for students.
- National and international level MoUs are undertaken with Umanathsingh Institute of Science and Technology, Janpur, Varanasi, India and Binghamton University, USA
- Involvement of Industry experts in conducting academic activates like workshops, seminars, conferences, syllabus etc.
- Examination process reforms: The CoE office conducts CIE and SEE every semester for all the Programmes in the institution. Once the SEE is finished the valuation and moderation is done for both UG and PG courses. Before announcing the results the students are allowed to view the valued answer scripts for any discrepancy. If the discrepancies are found then they are addressed in DUGC and DPGC committee. Finally the results are announced next day.

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: 2

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1 | 0 | 0 | 0 | 1 |

| File Description | Document |
|---|---------------|
| List of gender equity promotion programs organized by the institution | View Document |

7.1.2 Institution shows gender sensitivity in providing facilities such as

- a) Safety and Security
- b) Counselling
- c) Common Room

Response:

- a. As for as safety and security issue are concerned, the following measures are employed for students and faculties:
 - The college has been secured by pre defined bounded area with huge compound walls with wire fencing. Security personnel from outsourced agency have been deployed 24 x 7 in the campus at various strategic locations including the main entrance. These people will ensure the security and safety of the students / staff along with the institute property. The entry and exit is strictly monitored for employees, students and visitors through single entrance and exit gates.
 - Campus is under CCTV surveillance have been deployed at various locations in the institute and ensures safety in the campus which is personally monitored by the Principal.
 - The institute has proper lighting and road facility with direction board for hassle free commutation.
 - The institute has a strict adherence anti ragging committee to take care of day scholars and boarding students.
 - Each department has allocated with mentors and mentee to address the routine problems if any the students may face.
- b. The institute has the student welfare committee, where the students who have any grievance can reach out to the welfare officer and discusses his/her grievance if any. Counselling is functioning in the institute

under a trained / experienced faculty, by allocating them to respective mentors. In extreme cases the issue is bought to the notice of student's guardian/parents and the problem is discussed and then the students are referred to the Professional counselors outside the institution if required.

c.The institute provides common amenities for both boys and girls. Separate ladies rooms are provided to girls at common areas and in each department.

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 7.91

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Response: 58250

| File Description | Document |
|--|---------------|
| Details of power requirement of the Institution met by renewable energy sources | View Document |
| Any additional information | View Document |

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 10

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 18418

| 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:

• In the institution and the hostel blocks the disposed wastage is segregated and sent to composting as a regular practice. Hostel food waste is given for farmers for hog feeding. Paper waste is collected

and disposed-off for recycling. The plastic and other waste is given to the vendors at the market rate. The metal waste generated in the workshops is disposed by selling the same to the highest quote for the purchase of the same.

- The underground drainage system is well in place in and around the campus. This system is regularly maintained and checked by the Estate officer.
- The E waste is generally disposed on by buy-back policy of vendors for electronic goods such as storage batteries and unserviceable computer systems, printers etc., are always exchanged with new batteries while purchasing from the vendors.

The green campus aids in soil quality protection, watershed, stabilise erosion, and windbreaks. Such plantations are established to foster native species and promote forest regeneration on degraded lands for environmental restoration. Every year, through various socially concerned associations, new plantations are carried out in the campus to enhance greenery and a healthy atmosphere in the campus.

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

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Borewell Recharge Structure by Using Rain Water In Our Campus. It is proposed that, in near future for the upcoming infrastructural buildings, rain water harvesting to be incorporated. Further, it is also thought of adopting the rain water harvesting not only for academic infrastructure but also for the upcoming hostel facilities. As our campus is with lush green, it also given a thought to incorporate rain water holding by properly structuring the green area so that the rain water shall not drain out as waste water.

| File Description | Document |
|----------------------------|---------------|
| Any 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:

Green practices in the campus are:

- Students and staff using
- 1. **Bicycles:** Many students and few staffs are using bicycles to the campus.
- 2. **Public Transport:** The college buses commute regularly for staff and students to commute regularly. Every 10 to 15 minutes from 7AM to 6PM the college buses move from college campus to city center to pick and drop the students/staff.
- 3. **Pedestrian friendly roads:** The campus is designed well to have proper infrasture facility for the purpose of commutation.
- **Plastic free campus:** Periodical campus cleaning with the involvement of faculty/staff and students is being done and it is made mandatory to make our campus plastic free.
- **Paperless office:** Efforts have been made to do paperless office, by minimizing the usage of sending official communications by sending the same information through various sources like college & personal email id, intercoms and social groups like watsapp and Facebook.

Green landscaping with trees and plants: Solar facility is provided in hostel – for hot water, lighting etc. Afforestation program is conducted within the campus by planting tree samplings by planting more than 1000 trees. Exclusive gardener is appointed to keep the campus clean and green, around 50 workers work to keep the campus clean and green.

| File Description | Document | |
|----------------------------|---------------|--|
| Any 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: 0.23

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0.45540 | 0.28338 | 0.72835 | 0.22291 | 1.04720 |

| File Description | Document |
|---|---------------|
| Details of expenditure on green initiatives and waste management during the last five years | View Document |

7.1.9 Differently abled (Divyangjan) Friendlines 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: C. At least 4 of the above

| File Description | Document |
|---|---------------|
| Any additional information | View Document |
| Resources available in the institution for Divyangjan | View Document |

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

Response: 8

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 3 | 1 | 2 | 1 | 1 |

| File Description | Document |
|---|---------------|
| Any additional information | View 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: 8

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 3 | 1 | 2 | 1 | 1 |

| File Description | Document |
|--|---------------|
| Any additional information | View Document |
| Details of initiatives taken to engage with local community during the last five years | 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 | |
|----------------------------|----------------------|--|
| Any additional information | <u>View Document</u> | |

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 consciousness about national identities and symbols | 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 |
|---|---------------|
| 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: 22

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

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 5 | 7 | 4 | 2 |

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

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

Response:

Institution offers courses of Human Values and Professional Ethics.

The national festivals viz., Independence day and republic day are celebrated in the institution in befitting manner. During the event, The Principal / the Chairman addresses the faculty and staff. Also, the freedom fighters of the locality are indentified and honored for their service to the nation. The faculty / staff who will be superannuating during the period between these two days are also honored for their service in the institution.

Engineer's day is celebrated to respect the greatest Engineer of the country Sir M. Visvesvaraya every year during the Graduation day celebration of the institute.

The institution and Management encourages and supports celebration of Sri.K V Shankaragowda Jayanti, Ambedkar Jayanti, Holi and any other regional/national celebrations.

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

Response:

Institution offers courses on Human Values and Professional Ethics. – To create the awareness about human values and professional ethics among students we have introduces a course on Indian Constitution, Human Rights and Professional ethics. The course objectives and aims are to create responsible citizenship with awareness on human rights and latest development. The course throws light on protection of human rights and protection of human rights related to rights to women, children and disabled, tribal's, aged and minorities. The course on professional ethics aims on work ethics and the advantages with national and international scenarios.

The course on Indian constitution focus on the fundamental rights, directive principles of state policy and the fundamental duties of the citizen, the union executive, union legislature and the union judiciary, the state executive, state legislature and the high court in the states, special provision for scheduled caste and scheduled tribes, Election commission, its function, emergency provisions and amendment of the constitution.

We are conduction seminars and related invited talks on human values and professional ethics to create the awareness about the same.

7.2 Best Practices

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

Response:

After getting autonomy, the curriculum has been revised at regular intervals from conventional format to OBE and OBE with CBCS, that shall cater the academic needs of the students joining engineering and management courses. The examination system has been modified to make it more transparent both in Continuous Internal Evaluation System as well as Semester End Examination System. We are providing viewing of answer scripts in both CIE and SEE before the announcement of the results of UG and PG programmes. In case of any discrepancies found by the students are addressed at DUGC and DPGC meetings held in the respective departments and same have been send to the CoE office for approval. Finally the results will be announced within a week after the final examination of the respective programme.

The institute has an independent training and placement cell, which exclusively train our students to acquire variety of skills and also placements. These courses are mandatory credit courses. Rigorous training and courses are conducted by outsourced resource persons from first to sixth semester BE programmes so as enable the students to develop various skills to get placed in reputed companies.

Best Practice 1:

1. Title of the Practice: Proctor system for the students

2. Goal

The goal of the proctor system is to implement a system that helps in the overall development of the student during his/her stay in the college. The system also aims to keep the parents/guardians informed about the academic progress of their children on a regular basis helping them to guide their wards in the right direction.

3. The Context

The proctor system requires continuous interaction of the student and the proctor. The proctor and student should meet at the beginning of the semester to discuss the goals for the semester and also analyze the previous year performance. The meeting between the proctor and the student should happen before and after every internal test to discuss his/her performance and any other issue he/she might be having in the semester. Though these meetings are meant to be beneficial to the students, they take time to come up and speak to the proctors freely without any hindrance. The proctors are also encouraged to help students to enhance their skills in extracurricular activities which will help in their overall developments.

4. The Practice

A faculty member is assigned as a proctor to every student as soon as he/she enters the campus. The proctor's rule is to act as a guide, a mentor, a role model and a counselor for the student during his/her stay in the campus.

The proctor will be the first point of contact for the student for any issues within the college that he/she needs guidance of support in.

Many of the students come to the college from various parts of the country and are forced to stay away from their homes. The proctor can help such student in settling down in the campus by acting as a counselor and guiding them in the right direction. The parents who too are anxious at the beginning regarding their children being away from home can interact with the proctors to find out about the performance and well being of their children.

Once the student settles in the college he/she will have numerous decisions to take, like choosing the right elective, choosing the correct company for the placements, attending various extra curricular activities, during the course for all of which the proctor can act as a guide.

5. Evidence of Success

The proctors are meant to guide students in the college, the feedback from the parents and the students have clearly shown that the guidance obtained by the students by the proctor system has helped them in completing the course successfully.

The parents also have provided positive feedback on receiving regular updates about the performance of their children.

The faculties are also satisfied that their efforts have helped the students of the college to become a better graduate which is visible in the improvement of the academic performance of the students.

6. Problems Encountered and Resources Required

It requires continuous updates of the activities of the students, their marks, attendance etc. Though these can be easily obtained, the students themselves sometimes refuse to communicate with the proctor. It sometimes takes a lot of effort from the proctor to encourage such students to open up and communicate to be able to guide them. Still with all the efforts there are cases when the proctor system fails in its objectives and students either drop out of the college or fail to pass in the examination. This clearly indicates the system on the whole can be improved further to achieve greater results.

Best Practice-2:

1. Title of the Practice

Value added programs for students apart from regular curriculum.

2. Goal

- To provide quality education to the students of the country as a whole and State of Karnataka in particular.
- To produce competent Engineering graduates with intellectual capability and scientific skills.
- To train the students and encourage the graduates for achieving personal and professional success with awareness and commitment to their ethical and social responsibilities both as individuals and as team members.

- To make students understand the importance of student's involvement in various professional bodies, which helps them to build the technology gap between Industry- academia, enrich knowledge and skill in latest industry trends.
- To conduct events to streamline the career options and motivate graduates to explore new career opportunities.
- To constantly innovate, acquire new knowledge and skills & provide solutions to the challenges faced by power sector.

3. The Context

The syllabus needs to be updated to meet the challenges of the Industry. The college is affiliated to VTU and the students have to follow the syllabus framed by the university. The Institution is not having the flexibility to change the syllabus as per the industry needs. The skills and knowledge acquired by the students/graduates is not sufficient due to the restricted syllabus/curriculum.

The Value added training programmes, invited technical talks will enable the students to understand the **importance of student's involvement in various professional bo**dies, which helps them to build the technology gap between Industry- academia, enrich knowledge and skill in latest industry trends. Placement and entrepreneur programmes motivate the students to strengthen their skills and will provide a platform to streamline the career options and pave ways for recent graduates to explore new career opportunities.

4. The Practice

The faculty members are encouraged to attend various FDP/conference/ workshops/ seminars/training programmes etc., so that they can transform the knowledge acquired to the students. Further, the department regularly organizes FDP/ conferences/ seminars/ workshops/ hands - on training programmes for faculty members to enhance their knowledge and skills. Value added training programmes, industrial visits, invited technical talks by eminent speakers from industries/research institutions are organised regularly so that the students can understand the importance of their involvement in various professional bodies, which helps them to build the technology gap between Industry- academia. Placement and entrepreneur programmes are conducted for the students to enhance their skills and opportunities in placements.

5. Evidence of Success

• The placement percentage is improve

The number of in-house projects carried out by students has increased

- The quality of the projects carried out by the students has improved
- The students are able to get internships in various industries/ organizations.
- The faculty are engaged in research work and are pursuing Ph.D.
- Percentage of students appearing and qualifying for GATE/other competitive exam has improved.

6. Problems Encountered and Resources Required

The industry experts are busy with their own assignments and work, so getting them into the campus is

Page 107/111 11-01-2018 05:32:44

difficult task. Managing the time required for regular curriculum and the tests are tedious and to be balanced between the value added courses and regular curriculum. The infrastructure/resources allotment for various programmes is a challenging task. Arranging computing facilities for the entire batch is difficult and needs to be addressed. Motivating and making the students to attend value added courses will be difficult task and needs special attention & care.

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

The vision and mission are the beacons guiding every portion of the institution's academic procedure. The management team is actively involved in the administration of the institution. The management system is headed by the Principal comprising of Vice Principal, Financial Administrator, Dean's (Academic, Research), Departments Head's, Control of Examination (CoE), Placement Officer and Administrative Officer effectively plan and monitor the development for the continuous improvement of the institution.

To bring in a culture of excellence in academic activities, the Centre for Academic Excellence (CAE) was brought into existence. This is essential for the sustained academic growth to conduct academic audits to ensure that the departments comply with the established academic standards. The institution follows Outcome Based Education (OBE) by the way of becoming a permanent member of Washington Accord. From the academic year 2015-16, the Institution has adopted Choice Based Credit System (CBCS) in line with OBE.

The management takes all efforts to create a family atmosphere in the campus. Mutual cooperation and understanding is established by periodical informal get-together and meetings. The work culture of the institution is evident by the level of retention of the faculty found in the college. Immediate promotions, additional salary increments and responsibilities are some of the means for encouraging and retaining the eminent faculty members.

The Institute perhaps has the best campus with state of art teaching facilities and environment for academic pursuit surrounded by lavish greenery on 63 acres land. The student strength of the college is around 3,200. The college working hours is 7.30 am to 5.30 pm. It nurtures 8 departments for UG along with 3 basic science departments and 8 PG departments (6 M.Tech, an MBA and MCA). The internet and intranet facility with Campus Wi-Fi networking encourage the student to be explorative. The facilities such as Library, Canteen, Dispensary, Boys and Girls hostels, Bank and Cooperative stores make the stay at PESCE very comfortable. The Institution has Ramp facility for the physically challenged students wherever necessary.

The PESCE library is well equipped with modern infrastructure for Reading, Circulation, Reference, Digital library, Magazines, Journals (includes printed and e-Journals to name few; ASME, ASCE, IEEE etc.) and back volume sections. It has a collection of over 1,02,041 volumes, 113 National Journals, 12 International Journals and 25 Periodicals. The library is fully automated and enables circulation and Online Public Access Catalogue. The digital library has 24 nodes connected to different servers hosting a lot of e-Resources of VTU like e-Journals, e-Books, e-Vidya, e-Courses and others.

The college has excellent sports facility for both indoor and outdoor like Cricket Stadium, Aquatic Center, Football Stadium, Multipurpose Stadium, Indoor Stadium and Multi Gym Centre (Men and Women). Additionally courts for Kho-Kho, Basket Ball, Volley Ball, Throw Ball, Kabaddi, Ball Badminton and Tennis (both Synthetic & Clay) for students and public. The college has organized International, National, State and Inter college level tournaments. Government of Karnataka approaches PESCE periodically for providing centre facilities for conducting public exams like KPSC, KPTCL, NET/SLET/COMDE-K/CET and other competitive examinations.

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

5. CONCLUSION

Additional Information:

Today as India plays a major role in the rapid change of technology, the development in various fields of technology are due to the contribution of both industry and academia of the country. It is a fact that when industry and institution go hand in hand and cooperate with each other more innovations can happen. Both industry and institution play a vital role in the development of the nation. Institution has continuously connected to industries\ companies\ organizations through MoU's like Coreel Technologies, Bengaluru, Meritor Heavy Vehicle Systems (HVS) India Ltd., Mysuru, Here Solutions India Pvt. Ltd., Gurgaon, IEEE, New York, USA, Tata ELEXI, Intel, Bengaluru to name a few. As of now, institution is considering 27 MoU's amongst which 18 have been already signed and 09 are under process.

The institution has tie-up with Binghamton University USA and Portland State University, USA is under progress in order to explore avenues for cooperation in Student and Faculty Exchange, certificate/online courses, joint research and workshops, exchange and sharing of research and teaching ideas, Ph.D co-advising and other academic exchanges.

PESCE has been accredited by **NBA** for UG Programmes since 2003 till date. The recent accreditation being Electrical & Electronic Engineering is accredited from the academic year 2017 - 2023 (i.e. 6 years), Electronic & Communication Engineering, Civil Engineering and Mechanical Engineering have received provisional accreditation from the academic year 2017- 2020 (i.e. 3 years), whereas Automobile Engineering, Information Science & Engineering and Industrial & Production Engineering are waiting for accreditation report.

Concluding Remarks:

PESCE believes in passionate about the work inspired by the impact on the society. As a team, institute believes in achieving goals by developing through challenges and meaningful experiences. Its vision is to provide excellent engineering and management education for the students to be globally competitive, so that they continuously contribute to global technological revolution. PESCE has a niche for itself among the best engineering Institution and is a dream institute for many budding engineers. The distinguished alumni have occupied coveted positions which is a rare source of pride and inspiration to the Institute. To name a few:

Dr. B N Suresh, Padma Shri (2002), PadamBhushan (2013) - 1967: ME, Aerospace engineer.

Dr.Rangaraj M.Rangayyan - 1971: ECE, Professor, University of Calgary, Canada.

Mr.GirishBharadwaj, Padma Shri - Batch 1973: ME, constructed 127 hanging bridges.

Mr.KanumuruSatyanarayana Raju - 1973: ME, Chairman, Nagarjuna Group, Andhra Pradesh.

Dr. S Guruprasad - 1983: ME, DRDO, Karnataka.

Mrs. SheelaPrabhakar - 1984: ECE, VP, Ittiam Systems, Bangalore.

Mr.Ducont Ivan Fernandes - 1985: ECE, ECOM, Dubai,

Page 110/111 11-01-2018 05:32:45

Dr. BR Ravikanthe Gowda IPS - 1989: ME, Superintendent of police, Karnataka.

Mr. Mohan R Iyengar - 1990: AE, Market Support Services, Volvo Trucks, Karnataka.

Mr. Gopala Krishna - 1992: AE, General Manager, Mico Bosch ltd, Karnataka.

Dr. Manpreet Singh Manna, Best Citizens of India Award (2014), Shreshth Aacharya Award (2011) – 1993: EEE, Director, AICTE, New Delhi.

Mrs. Manjula Sridhar – 1996: ECE, Founder of ArgByte Technologies Inc., Chicago, USA.

Sri. S M Vijay Kumar, IAS - 2007: ME, IAS-Sub-Registrar, Karnataka.