

FOR

2nd CYCLE OF ACCREDITATION

SVERI'S COLLEGE OF ENGINEERING

P. B. NO. 54, GOPALPUR-RANJANI ROAD, GOPALPUR, PANDHARPUR-413304 413304

www.coe.sveri.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

June 2021

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Shri Vithal Education & Research Institute, Pandharpur, a Charitable Trust, founded by a group of technocrats, embarked on its ambitious project and as its first venture established College of Engineering at Pandharpur, in the year 1998. Initially, the College was started with a small strength of 160 students and 8 faculty members. The college has strengthened its roots enough deeply to get recognition as one among the leading colleges in Maharashtra, with around 2500 current students and 160 faculty members. Institute is located in the rural region of Pandharpur, and it is affiliated to Punyashlok Ahilyadevi Holkar Solapur University, and has been approved by AICTE, New Delhi.

SVERI's College of Engineering, Pandharpur is one of the self-financed and pioneering institutes known for excellence in engineering and research activities. Institute offers 5 UG programs namely Mechanical Engineering, Electronics & Telecommunication Engineering, Computer Science & Engineering, Civil Engineering and Electrical Engineering, 5 PG programs namely M.Tech. (Design Engineering), M. Tech. (Structural Engineering), M.Tech. (Electronics & Telecommunication Engineering), M.Tech. (Computer Science & Engineering) and Master of Business Administration and 3 Ph.D. Programs namely Ph.D. in Mechanical Engineering, Ph.D. in Civil Engineering and Ph.D. in Electronics and Telecommunication Engineering. Institute strives to inculcate professionalism in youth of our nation with emphasis on rural India without compromising academic standards. The campus is ICT enabled and it is under the CCTV Surveillance. All the eligible UG programs have been accredited by NBA and Institute has also been accredited by NAAC. The institute has also been accredited by TCS and IEI Kolkata. The institute is certified with ISO 9001:2015. The college has signed MoUs with reputed organizations such as Bhabha Atomic Research Centre (BARC), Mumbai, Infosys Technologies, Bangalore and Sobus Insight Forum, Bangalore, etc.

With the motive to make the teaching-learning process effective and for overall development of the students from rural background, institute implements its indigenously developed 'Pandharpur Pattern in Professional Education' (PPPE). Institute always strives for holistic development of the students through Financial Support under 'Earn & Learn Scheme', 'Communication Improvement Program' (CIP) and Training Sessions, Mentoring & Counseling, and Pranayam Sessions.

Vision

The Vision statement of the Institute is as follows:

To be nationally recognized among the best institutes in India for excellence in technical education.

Mission

The Mission statement of the Institute is as follows:

To impart value added technical education through ambience of academic excellence, research and life skills by inculcating personal touch and respect in relationships amongst the stakeholders.

The elaboration of the key terms in the above mission statement is as follows:

- Emphasis on quality education through its well-defined and indigenously developed 'Pandharpur Pattern in Professional Education' (PPPE) and System Manual along with inculcation of values
- Inculcating research oriented culture in faculty and students
- Achieving excellence through personal touch to understand personal as well as educational problems/difficulties of the students and other stakeholders
- Earning respect by giving respect and through polite behavior and/interaction with stakeholders

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Policies and Culture:

- Visionary leadership and professional management
- System Manual for guiding various portfolios
- Teamwork through decentralization and delegation of authority and responsibility
- MoUs with reputed organizations such as BARC, Sobus Insight Forum, Atlas Copco, Pune, Infosys, etc.
- 'Best College Award' from P.A.H. Solapur University.
- Good admissions in this region.
- Gender diversity: More than 40 % of the students are girls.
- Safe and secured environment for girl students
- System based working culture
- Institute has been accredited by NAAC and NBA, and certified by ISO with certification ISO 9001:2015, TCS and IEI, Kolkatta.

Faculty:

- Total 27 faculty members have Ph.D. degrees and 30 faculty members are pursuing Ph.D. degrees.
- Faculty & Staff members are competent, trained and continuously upgrading their skills through FDPs and STTPs.
- Faculty representatives on Management Council, Academic Council, Faculty of Science and Technology, Board of Studies (BOS), and participation for curriculum design for affiliated university i.e. Punyashlok Ahilyadevi Holkar Solapur University.
- P.A.H. Solapur University awarded the Principal, Dr. B. P. Ronge with the Best Principal Award-2020.
- AICTE's Visvesvaraya Best Teacher Award-2020 and the Best Teacher Award from P.A.H. Solapur University 2019 to Dr. P. M. Pawar

Academics

- Implementation Outcome-based education
- Well-defined examination and evaluation processes
- Use of ICT enabled aids
- Feedback mechanism

Holistic Approach to Support the Students from Rural Background

- Pandharpur Pattern in Professional Education (PPPE)
- Student Centric System
- Culture based on respect and discipline
- Good Academic Performance

R & D Facility & Infrastructure:

- Good number of research publications by faculty, in peer reviewed journals
- Good amount of funds on R & D front
- Advanced R & D laboratories
- Encouraging R & D policies
- Regional Relevant Consultancy

Social Connect:

- Societal Connect through Rural Human Resource Development Facility (RHRDF) to solve regional relevant problems
- Earn and Learn Scheme for needy student

Infrastructure:

- Well-equipped classrooms and laboratories
- Spacious library facility
- Well-equipped Gymnasiums
- Playground and Indoor Sports Facility
- ICT enabled and Green Campus
- International Conference Hall
- 400 kW Grid Connected Solar Roof Top Power Plant
- Uninterrupted Electricity (11 KV Express Feeder)
- 320 KVA Generator Back-up

Institutional Weakness

Awards & Recognition

- Need to focus on awards and recognitions for the Institute
- Need to focus on NIRF

Faculty, Students and Alumni

- Require more focus on quality research publications
- Need to focus on patent filing and product development
- Need to enhance consultancy revenue
- Need to boost Industry-Institute Interaction and increase placements in core companies

Academics & Flexibility

- Restriction on academic flexibility as our institute is affiliated to university
- Need to apply for Autonomy

Institutional Opportunity

- To enrich extension activities
- To enhance consultancy
- To be recognised as an Autonomous Institution
- To fetch interdisciplinary and sponsored projects
- To fetch more research grants
- To enhance more networking with other institutes and research organizations
- To enter in to more MoUs for enhancing the industry-institute interaction
- To enhance training facility to encourage students for competitive examinations

Institutional Challenge

- Stringency with respect to curriculum
- Awareness of parents about quality technical education
- Enhancement in Industry-Institute Interaction
- Improving the Quality of Students to have placements in Core Companies
- Encouraging Students for Competitive Examinations and Higher Studies
- Competition due to increased number of Engineering Institutes
- Maintaining and increasing the inclination of students towards engineering

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

SVERI's College of Engineering, Pandharpur is affiliated with Punyashlok Ahilyadevi Holkar Solapur University, Solapur and follows the curriculum provided by the University. The review and revision of the curriculum is carried out once in four years and whenever the need for updating arises. Teachers of the Institution participate in various activities related to curriculum development and assessment of the affiliating University. Some of the departments of the institution have their representatives on Management Council, Academic Council, Faculty of Science & Technolgy, and Board of Studies of the University. During the revision and development, the curriculum is focused with the syllabi contents on options of employability/entrepreneurship/skill development. As per the requirements of industries, curriculum is developed in consultation with subject-experts and various stakeholders. Institute follows CBCS system in which students can opt for courses of their choice from the available options provided under professional and open elective courses. The institute has its well-defined indigenous pattern known as Pandharpur Pattern in Professional Education (PPPE) for effective implementation of the curriculum delivery. To enhance the skill development and employability of the students, Add-on and Certificate courses consisting new techniques and software related content are conducted. The curriculum enrichment is facilitated with the inclusions of cross cutting issues such as Gender Sensitivity, Environmental and Sustainability, Implications of the Human Values

and Professional Ethics. The institute promotes effective Industry-Institute Interaction through various experiential courses that include experiential learning through project work, field training, and internship. Institute has feedback system to review and develop the academics of the students. Feedbacks are taken from various stakeholders like students, teachers, alumni, and employers. Based on the analysis, the corrective measures are taken and implemented accordingly.

Teaching-learning and Evaluation

The enrollment of students in the Institution is based on regulations and guidelines of AICTE and Government of Maharashtra.

Every year, Induction Program is conducted for newly admitted students. The teachers play a vital role in this process. The Institute has well qualified and experienced faculty to enrich the process effectively through ICT tools, in addition to traditional pedagogical teaching. The faculty identifies slow and advanced learners to impart the knowledge.

To analyze strengths and areas for improvement, feedback is taken from the students, which helps to take necessary measures for strengthening the teaching-learning process. Industry sponsored projects from various industries are given to the students' groups. Field visits are arranged for students to give practical exposures. Collaborative and multidisciplinary projects are undertaken by students for experimental, participative learning. Students use different methods for solving the problems in such sponsored projects.

The Institute follows the Academic Calendar for conducting academic and other related activities. Under the Internal Continuous Assessment (ICA), Unit Tests (UT), In-Semester Evaluation (ISE), Open Book Test (OBT), Lab Tests (LT) are conducted as per the schedule. All these tests are conducted in a fair and transparent manner through support of ISE Coordinator, Invigilators, and Squad under the guidance of HODs. The students are informed about the syllabus, well in advance.

For all the courses, the course outcomes are linked with the program outcomes and further the evaluation tools are linked the course outcomes. The quality of the evaluation is maintained by applying the recommendations given by AICTE's Examination Reform Policy.

The institution provides various knowledge enhancing & self learning programs, such as e-learning, digital library, value added certificate courses, technical quiz, cultural and techno fest, national and international conferences enabling them to succeed in the competitive world.

Research, Innovations and Extension

Institution encourages the active involvement of teachers in research. All the research activities are carried out by the R & D Cell under the leadership of Dean R & D. Research activities are guided and monitored by the Research Advisory Council (RAC) consisting of outstanding scientists from eminent research organizations such as BARC and academicians. In the last 5 years, the Institute has fetched research grants from various funding agencies such as AICTE, BARC, DST, ARDB, RGSTC, DBT, UGC-DAE, P.A.H. Solapur University, etc. Institute has created an Ecosystem for Innovation by setting up SVERI's Sobus Center of Excellence (CoE) for transfer of knowledge. Institute has organized three International Conferences viz. Techno-Societal-2016, Techno-Societal-2018 and Techno-Societal-2020, respectively, which were partially sponsored by funding agencies such as DST, RUSA, etc. Further, proceedings of the conferences have been published in Springer publication.

The institute provides financial assistance to students and faculty members for attending conferences and publishing papers in the journals. The research carried out by the faculty members has resulted in publication of about 350 research papers during the last 5 years. Students are encouraged to work on research problems from Second Year itself. 14 faculty members have been awarded with various awards like Best Researcher's award, Young Scientist Award, Research Excellence Award, etc. Dr. P. M. Pawar, Dean, Academics, received AICTE's Best Teacher Award for his contribution in Research and Societal activities. Our faculty members and students have won Best Research Paper Awards in various international conferences. Total 12 patents have already been filed by faculty members. The Institute has MoU with 33 Organization/Industries/Institutes including BARC, Infosys, Atlas Copco etc. to establish the linkages/collaborations related to academic and research activities. For developing sensitivity towards community issues, gender issues, social inequity etc. and to inculcate values and commitment to society, our National Service Scheme (NSS) Unit promotes Extension activities such as Swachh Bharat, Distribution of RO-Water during Pandharpur Wari, Blood Donation Camp, Awareness programs on technology for school children, Tree Plantation, etc., in the neighboring community.

Infrastructure and Learning Resources

Institute has topmost infrastructure and learning resources. The departments have ICT enabled classrooms, smart classrooms, and modern laboratories. For the support of students, a well-equipped browsing centre and computer centers have been established. Other facilities include Language lab, Seminar halls, Open Air-Auditorium, International Conference Hall, Administrative wings, Canteen, Ladies Common Room, Play Ground, and Separate Gymnasiums for Boys and Girls. Institute has installed a 400 kW on Grid Solar Roof Top System. The institute has 24×7 uninterrupted electric supply through 11 KV Express Feeder. Institute has spent an average 17.08% of its budget allocation excluding salary for infrastructure augmentation during the last five years. In addition to this, from SVERI Trust 863.40 Lakh amount spent on Infrastructure augment. For the last Academic Year i.e.2019-20, the allocation was Rs 184.50 Lakh.

The Central Library of the college has a special place for higher learning and research. The library occupies a total carpet area of about 1522.48 Sq.mt. having spacious stack-rooms and reading halls with a seating capacity of 360 students at a time. The library has been partially automated; using ILMS software. Average annual expenditure for purchase of books and journals is around Rs. 25 Lakh of total budget allocation and the expenditure for the library in the last year was around Rs 27 Lakh. The average number of library visits per day by faculty members and students is 310 on working day.

Institute has a high end IT facility including Wi-Fi connectivity throughout the Campus. The institution has adequate licensed legal system softwares and application softwares including open source softwares. An uninterrupted internet connectivity leased line with Bandwidth of 1Gbps is available in the Campus.

There is a well-organized mechanism for purchase and maintenance of infrastructure. The purchases are made as per the decisions of the Purchase Committee. The committee ensures transparency and economy in respect of all the purchases. The Building Committee ensures the timely repair of the buildings and infrastructure. Lab equipments are being maintained by the respective departments. Adequate fire fighting facilities and parking space are also available.

Student Support and Progression

As per the norms of the Government, College supports to all eligible Students to apply for scholarships within stipulated period of time, freeships provided to the needful Students by the institutions. Since 2015, an average of 79.49% of students have availed scholarships and freeships from the government. The training for Soft skills, Language and Communication Skills, Life skills and ICT/Computing skills is given to the students for their overall development. 45.94 % of students are benefited by Competitive examinations and career related counseling by the college. Institute has a transparent mechanism for timely Redressal of students' grievances including sexual harassment and ragging. The menace of ragging is viewed very seriously and Anti-Ragging Cell takes all necessary measures to curb the ragging within the campus. The Placement Cell is proactive and has organized several skill development programs, career guidance and campus drives to facilitate the placement of the students. The average placement for last five years is 43%. Since last five years, students got qualified in state/national/ international level examinations. The representatives of students are the members of various administrative bodies and academic committees. The National Social Service scheme, College Magazine, Sports & Cultural activities at both the College and Inter collegiate levels are held annually. A total of 92 sports and culture events were organized in the last five years. Alumni have contributed to their Alma Mater financially and non-financially such as interacting with present students, arranging guest lectures, campus placements and industrial visits.

Governance, Leadership and Management

The vision and mission of the Institute are the cornerstones on which the governance of the institute takes place. It is reflected in the way decision-making takes place with the participation of teachers through various committees formed for the administration of activities of the institute.

For making the system person independent, decentralization and participative management are embedded into the overall operations of the institute. With the help of the guiding document i.e. 'System Manual', authorities and responsibilities of individuals have been clearly spelt out.

The progress of the institution is well-planned with the help of the Perspective Plan. Based on which, the aspect of infrastructure development has been emphasized upon in the last five years, apart from academics and research.

The Institute has a forward looking approach and it has been rigorously working on the implementation of ERP systems compatible with the requirements of accreditation of bodies like NBA and NAAC.

The Institution recognizes that its people are the essential pillars and hence provides a number of welfare measures for the teaching and non-teaching staff members, recognizing and rewarding their work and achievements. It provides financial support to its employees to attend academic development related activities like conferences, seminars etc. In addition, numbers of training activities are carried out from technical as well as non-technical domains for both the teaching and non-teaching staff members.

A number of programs have been conducted in the last five years. The growth and career enhancement is based on the performance appraisal of teaching and non-teaching staff. Financial transparency is ensured through statutory audits in the form of external and internal audits through certified Chartered Accountants. Budgeting through the bottom-up approach is the key to optimal utilization of the funds.

The IQAC plays the role of the central quality management watchdog and institutional academic, research and teaching-learning activities are carried out under its aegis, through the regular meetings of the IQAC cell. It has also paved the way for quality assurance activities like accreditations with industry, research and academic bodies, Participation in NIRF and collaborative activities with other institutions.

Institutional Values and Best Practices

Institute organizes various gender equity programs, national festivals, birth anniversaries and death anniversaries of the great Indian personalities, social reformers and freedom fighters, blood donation camps and national programs.

Institute has constituted various committees including Grievance Redressal Committee, Anti-ragging Committee and Internal Complaints Committee to safeguard safety and security of the stakeholder. Institute provides counselling and mentoring to the students.

The water conservation is ensured through rainwater harvesting and recycling of liquid waste. The use of renewable energy source is ensured by installing 400 kW Grid Connected Solar Roof Top Power Plant as a step towards the eco-social aspects. Green and Energy Audit of the campus is carried out by certified company. Institute was awarded by AICTE for significant contribution in the "One Student, One Tree" initiative by AICTE in December, 2019.

The ethical programs including anti-ragging sessions and orientation programs have been arranged for the students of First Year. General Meeting and Orientation Session have been arranged for all the employees in the Institute, every semester. Divyangjan friendly by providing all the necessary facilities. The institute has number of best practices for the Implementation of Continuous Quality. . Code of Conduct is well prepared by the Institute and there is committee to monitor the adherence of code of conduct for the smooth conduction of the overall system. Improvement for Various Activities of the Institute and Holistic Approach to Support Students from the Rural Background. Prior one ensures smooth functioning of various portfolios such as Academic, Research & Development, Financial Management, Administrative, Training & Placement, Individual Growth Plan and Departmental Growth plan. Later one ensures holistic development of the students coming from rural background. Institute provides holistic support to the students through earn and learn scheme, merit scholarships and nurture their physical and mental health through pranayama and counselling. Institute helps them in raising academic performance, making employable motivating for entrepreneurship and bringing awareness about societal aspects.

As an Institutional Distinctiveness, the institution strives to improve the socio-economic condition of the region through societal connect through RHRDF, ICT enabled School Education, Gram Visits, Encouragement to students and Techno-Societal activities.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	SVERI'S COLLEGE OF ENGINEERING		
Address	P. B. No. 54, Gopalpur-Ranjani Road, Gopalpur, Pandharpur-413304		
City	Pandharpur		
State	Maharashtra		
Pin	413304		
Website	www.coe.sveri.ac.in		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	B. P. Ronge	02186-225083	9545193434	-	coe@sveri.ac.in
IQAC / CIQA coordinator	S. S. Wangikar	02186-216063	9657720923	-	sswangikar@coe.s veri.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

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 of the college	17-08-1998

University to which the college is affiliated/ or which governs the college (if it is a constituent college)			
State	University name	Document	
Maharashtra	Solapur University	View Document	

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	06-12-2016	View Document
12B of UGC	06-12-2016	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory AuthorityRecognition/App roval details Inst 					
AICTE	View Document	30-04-2020	12	EOA validity is for one year	

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

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	P. B. No. 54, Gopalpur- Ranjani Road, Gopalpur, Pandharpur-413304	Rural	10	21174

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)									
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BTech,Civil Engineering	48	HSC Science	English	120	58			
UG	BTech,Comp uter Science And Engineering	48	HSC Science	English	120	120			
UG	BTech,Electr onics And T elecommuni cations Engineering	48	HSC Science	English	120	118			
UG	BTech,Electr ical Engineering	48	HSC Science	English	60	39			
UG	BTech,Mech anical Engineering	48	HSC Science	English	120	71			
PG	Mtech,Civil Engineering	24	B.TECH in Civil Engineering	English	18	18			
PG	Mtech,Comp uter Science And Engineering	24	B.TECH in Computer Science and Engineering	English	18	6			
PG	Mtech,Electr onics And T	24	B.TECH in Electronics	English	18	2			

	elecommuni cations Engineering		and Telecom munications Engineering			
PG	Mtech,Mech anical Engineering	24	B.TECH in Mechanical Engineering	English	18	3
PG	MBA,Master Of Business Administrati on	24	Graduation	English	60	60
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	72	M.TECH in Civil Engineering	English	1	1
Doctoral (Ph.D)	PhD or DPhi l,Electronics And Teleco mmunication s Engineering	72	M.TECH in Electronics and Telecom munications Engineering	English	0	0
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	72	M.TECH in Mechanical Engineering	English	8	8

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Professor				Associate Professor			Assistant Professor				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				15				34				99
Recruited	4	1	0	5	7	2	0	9	71	28	0	99
Yet to Recruit				10				25				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				3				5				45
Recruited	2	1	0	3	4	1	0	5	25	20	0	45
Yet to Recruit				0				0		·		0

Non-Teaching Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies			C .	41					
Recruited	36	5	0	41					
Yet to Recruit				0					

Technical Staff									
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				15					
Recruited	14	1	0	15					
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/ LLD	0	0	0	0	0	0	0	0	0	0			
Ph.D.	4	1	0	5	2	0	6	1	0	19			
M.Phil.	0	0	0	0	0	0	1	1	0	2			
PG	0	0	0	2	0	0	64	26	0	92			

	Temporary Teachers												
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total			
D.sc/D.Litt/ LLD	0	0	0	0	0	0	0	0	0	0			
Ph.D.	2	1	0	4	1	0	0	0	0	8			
M.Phil.	0	0	0	0	0	0	0	0	0	0			
PG	0	0	0	0	0	0	25	20	0	45			

	Part Time Teachers												
Highest Qualificatio n	Professor 0		Associate Professor			Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total			
D.sc/D.Litt/ LLD	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?	23	1	0	24			

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
UG	Male	1297	14	0	0	1311
	Female	917	3	0	0	920
	Others	0	0	0	0	0
PG	Male	80	2	0	0	82
	Female	105	0	0	0	105
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	15	0	0	0	15
	Female	1	0	0	0	1
	Others	0	0	0	0	0

Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	46	41	39	36
	Female	40	31	30	23
	Others	0	0	0	0
ST	Male	1	0	1	0
	Female	0	1	0	1
	Others	0	0	0	0
OBC	Male	62	71	73	63
	Female	57	57	56	39
	Others	0	0	0	0
General	Male	159	172	234	130
	Female	148	160	185	109
	Others	0	0	0	0
Others	Male	72	63	71	148
	Female	53	44	55	89
	Others	0	0	0	0
Total		638	640	744	638

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

Extended Profile

1 Program

1.1

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

2019-20	2018-19	2017-18		2016-17	2015-16
307	296	290		290	282
File Description			Docum	nent	
Institutional data prescribed format			View	Document 	

1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
10	10	9	9	10

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18		2016-17	2015-16	
2437	2110	2009		1989	1921	
File Description		Docum	nent			
Institutional data in prescribed format		View	Document			

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
308	308	267	267	275

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2019-20	2018-19	2017-18		2016-17	2015-16	
570	561	552		577	579	
File Description		Docur	nent			
Institutional data in prescribed format		View	<u>Document</u>			

3 Teachers

3.1

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

2019-20	2018-19	2017-18		2016-17	2015-16	
114	102	132		132	135	
File Description		Docum	nent			
Institutional data in prescribed format		View	Document (

3.2

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18		2016-17	2015-16	
114	102	132		132	135	
File Description		Docum	nent			
Institutional data in prescribed format		View	Document			

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 35

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
607.35	590.43	560.95	1107.63	714.81

4.3

Number of Computers

Response: 626

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Objective:

Effective curriculum implementation with quality assurance mechanism is ensured by the Institute's Academic Mechanism policy document named as Pandharpur Pattern in Professional Education (PPPE). PPPE focuses mainly on maintaining high standards of Academics, Development of students on academic, employment and Research front and also on development of faculty members to ensure higher academic standards. Aligned with the document of PPPE, following processes help the Institute for effective implementation of curriculum.

Process:

- Prior to the start of every semester, General Meeting is conducted for orientation of academic planning and deciding the strategies for effective implementation of curriculum.
- The communication about policies for effective implementation of curriculum and formation of various Institute level committees is done in the Orientation program.
- Before the start of every academic year, the Academic Calendar is prepared. Upon approval of the College Development Committee, it is circulated amongst the students and staff members.
- According to the area of specialization, skills, experience and subject choices submitted by each faculty member, distribution of teaching load is done by HODs in consultation with Dean Academics.
- Class wise time tables and lab wise timetables are prepared and communicated accordingly.
- Aligned with the syllabus and guidelines given by the institute, all subject teachers prepare teaching/practical plan(s), course file of their respective subject(s).
- The working condition of required instruments and availability of the consumables is ensured before the start of each semester.
- A standardized faculty diary including timetables, roll list, teaching plan, attendance record, etc. is maintained by each faculty member. It is reviewed periodically.
- The policies for effective implementation of curriculum are ensured through the Class Coordinator.
- A group of around 20 students is allotted per proctor teacher. Proctor teacher acts as the mentor to the students of his/her proctor batch.
- Slow and advanced learners are identified on the basis of their test performance and overall progress. Remedial classes are conducted to support slow learners and backlog students. Challenging activities are given to advanced learners to keep them busy in creative activities.
- Subject teachers deliver the subject content through conventional methods as well as innovative teaching methods such as ICT based modes of teaching.
- The feedback session of Class Representative (CR) is conducted fortnightly for each subject and faculty members by each HOD. Dean Academics conducts feedback session of each class once in a

semester and communicates the observations to faculty member through respective HOD and corrective measures are taken accordingly.

File Description	Document
Upload Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

As per the guidelines given by affiliated University, a well planned academic calendar is prepared in consultation with Dean Academics and HODs, before the beginning of an Academic Year. After getting approval from the College Development Committee, it is given to all students and staff members. Such academic calendar has provisions and schedules for the following:

- A teaching period of effective 90 days is planned so that 100% coverage of syllabus can be ensured for both theory and practicals.
- Teaching plan of the respective subject is prepared in tune with the Academic Calendar by the faculty.
- Dates of conduction of ISEs, Unit tests, Lab tests and result declaration are also mentioned in the academic calendar.
- Industrial visits and other curricular activities including the R&D events, technical events, and professional chapter events are planned at the beginning of every academic year.
- By optimizing the teaching period, adequate preparatory leave is also provided to the students.
- Various committees are constituted for executing, monitoring and ensuring the teaching, learning and evaluation schedules and faculty members are appointed as Class Coordinators, Time-Table Incharge, Industrial Visit Coordinator, Departmental Grievance Redressal Committee, etc.
- Weekly departmental meetings are conducted to review the teaching, learning and evaluation schedules.
- Deans and HoDs meetings are conducted to review various academic and administrative activities for taking stock of the current status. During the meeting, the status regarding the syllabus completion, lecture/practical with respect to each subject and student feedback is reviewed. On the basis of the review, remedial actions in case of the lacunas are decided and communicated through HODs to the concerned subject teacher/(s) and implemented accordingly. The review of various activities under portfolios such as Dean Students, R & D, Training & Placement, Admissions, Publicity & Protocol is also taken during the meeting. The planning regarding execution of various activities under each portfolio is reviewed for smooth functioning of these activities. The committees as per the requirements are formed for particular events/activities of the students. During the meeting, brainstorming on various aspect of continuous quality improvement is also took place to formulate certain policies.

File Description	Document
Upload Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university

2. Setting of question papers for UG/PG programs

- 3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
- 4. Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Link for Additional information	View Document

1.2 Academic Flexibility

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

Response: 100

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

Response: 10

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional information	View Document

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 55

1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

2019-20	2018-19	2017-18		2016-17	2015-16
11	14	12		9	9
File Description		Document			
List of Add on /Certificate programs		View Document			
Brochure or any other document relating to Add on /Certificate programs		View I	Document	-	

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 46.69

1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
828	1285	1130	726	880

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

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

Response:

Various courses are introduced into the curriculum for integrating the cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics.

Gender:

Entrepreneurship Development related courses are included in the curriculum for different programmes. In these courses students learn the importance of women empowerment. India being a male dominated society, women face number of challenges on both personal and professional fronts. These courses make students aware of such challenges and enable them to deal with them headon. Such a courses will help to bring equity in the society. Along with the above curriculum, institute also take efforts to bring equity by ensuring that at least one woman member is included in various policy making committees. Institute regularly organizes various events on women empowerment. As a result, the Institute comprises about 40-45% female students and 35-40% female faculty members. The internal complaint committee has been constituted in the institute.

Environment and sustainability:

Various courses are included in the curriculum which helps to develop the culture of environment and sustainability viz, Environmental Engineering-I and II, Solid and Hazardous Waste Management, Air Pollution and Control, Energy Science & Engineering, Industrial Waste Treatment, Disaster Management, Planning for Sustainable Development, Building Planning & Design, Environmental Management,etc. Along with this, Environmental Science subject is added in the curriculum for all the programmes. The knowledge gained by students through such subjects will help them to change the view towards environment. Also, these courses demonstrates various aspects of environmental conservation and the sustainable development of society. Along with the above courses, institute is taking various initiatives to bring awareness among students and faculty members about the importance of the environment and its conservation for the sustainable development, such as constitution of 'Green Team', use of solar energy, constitution of 'Green and Environment Audit Committee', etc.

Human Values and Professional Ethics:

Professional Ethics & Human Values, Intellectual Property Rights for Technology Development and Management, Professional Communication, Democracy, Elections and Good Governance, Industrial and Quality Management, Principles of Management, Human Resource Management, Business Ethics, Corporate Planning and Strategic Management, Marketing Management, Software Engineering & cyber security such a courses are there in curriculum. These courses in the curriculum introduce various aspects of human values, professional ethics, professionalism, moral and ethical values. The courses are designed with objectives that enable to visualize meaning of values and select their goals by self-investigation based on personal values, value of truth, commitments, honesty, sacrifice, care, unity, teamwork and relationship. Apart from these curriculums, institute is taking continuous efforts to develop the culture of human values and professional ethics among students and faculty members by involving them in various societal activities such as NSS camp, blood donation camp, cultural events, tree plantation, gram visits, etc.

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

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 21.03

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
63	63	62	62	58

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	<u>View Document</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 53.3

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 1299

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni

Response: A. All of the 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 (Upload)	<u>View Document</u>
URL for stakeholder feedback report	View Document

1.4.2 Feedback process of the Institution may be classified as follows: Options:

1. Feedback collected, analysed and action taken and feedback available on website

- 2. Feedback collected, analysed and action has been taken
- **3.Feedback collected and analysed**
- 4. Feedback collected
- 5. Feedback not collected

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of la	ast five years)
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Response: 90.48

2.1.1.1 Number of students admitted year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
630	709	589	558	573

2.1.1.2 Number of sanctioned seats year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
726	726	636	636	654

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

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 61.48

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

2019-20	2018-19	2017-18	2016-17	2015-16
171	187	178	181	156

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 and organises special Programmes for advanced learners and slow learners

Response:

Process to identify and action plan for Advanced learners and Slow learners

Initially the class coordinator, subject teacher and proctor teacher come together to identify the advanced and slow learners in the respective class. This identification is carried out with reference to the performance/result of individual student in university theory as well as practical examinations and internal assessment. The process is called result analysis. Moreover routine/undocumented way to observe students' routine activities, performance, and participation also empower faculties to judge students' potential and area of improvement. On the basis of the inputs received from above process, segregation of the students is done in two categories. In the process it is ensured that slow learners should not feel targeted and isolated. It is also ensured that the slow learners are transferred to advanced learners' group with improvement in their performance.

Action plan for slow learners:

- Regular assignments for clearing their concepts
- About three hours are allotted to students in the evening for self-study in study hall facility.
- Practice sessions for difficult and backlog subjects
- In proctor session, such students are further counseled to address their common or peculiar issue to bring him/her in mainstream.
- Teachers provide simplified and focused study material
- University answer scripts of toppers are kept in library for the ready reference of model answers

Action plan for advanced learners:

- Merit cash prizes and Medals for encouragement
- Motivation for extra and co-curricular activities
- Guidance sessions for research orientation and competitive examinations
- Free book bank facility for toppers
- Felicitation in front of various stakeholders
- Media coverage of such students' achievements and sharing with their parents through social media
- Assignment questions are distributed as per level of difficulty
- Best Outgoing Student and Best Project Awards
- Involving students in Research. Product Development and Consultancy activities

File Description	Document
Past link for additional Information	View Document

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)		
Response: 21.38		
File Description Document		
Any additional information View Document		

2.3 Teaching- Learning Process

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

Response:

Outcome Based Education (OBE) is need of hour in which it is expected that students have to apply their knowledge and skills to solve industrial and societal problems. In professional technical education, prime focus is on knowledge, skill and approach. Knowledge is mainly gained through classroom teaching. Skills and approach are primarily gained from conduction of laboratory courses, industrial trainings, industrial visits, mini projects and other projects. In addition to these activities, various forum of students such as MESA, ELITE, CESA, ASHRAE, ICON, EESA, etc. plays a major role in providing opportunities to students for enhancing learning experience. Under such forums, students organize and participate in various activities.

For reducing the gap between students' level of learning and teachers' expectations, faculty members are using various teaching methodologies. Students' learning outcome depends on the instructional strategy used by the faculty member. Therefore, while planning for course delivery, teachers on the basis of predefined learning outcomes, develop the assessment methods and then select instructional strategies that engage students in multiple activities rather than just attending classes and noting down points. Thus, making the class more interactive which helps in attaining the identified learning outcome.

Following are some of the strategies employed by faculty members during their content delivery:

Experiential Learning:

Experiential learning is the process of learning through experience. Institute is inculcating self–learning and lifelong learning skills through:

- Mini projects
- Final Year Projects
- Industrial Visits
- Internships/Field training
- Use of Virtual Labs

- Workshops with hands on sessions
- Arranging technical symposium for various activities like paper presentation, programming competitions etc.
- Mock interviews
- Use of visualizations like animations, videos and simulator for parametric study
- Exposure to advanced experimentation on research oriented equipment
- Teaching in the classroom and laboratories with interaction of instruments, flowcharts, models and software
- Learning summary charts making exercise for First Year students
- Inviting Industry Experts and Researchers to deliver talks on Advanced Topics

Participative Learning:

- Students participate in various technical competitions like Smart India Hackathon (SIH), project competitions and IIC projects. Robot making competition helps them to learn from the external environment.
- Students participate in various paper presentation competitions and strive for publication in journals and conferences for improving their technical writing and communication skills.
- Student associations organize various extra and co-curricular activities such as Blood donation camp, cultural program- 'Beats' and sports activity- 'Glance', Debates shows like Mock Parliament and Mock Security Council, etc.
- Quiz solving on MOODLE, quizzes.com and group discussion

Problem Solving Methodologies:

Following techniques are employed to inculcate problem solving approach among students:

- Open book tests and Take home tests
- Real-time projects provided through Institute Innovation Council (IIC) and Industries
- Interdisciplinary project activities
- Different programming contests where students design and develop solutions to given problems
- Model development
- Design Projects

File Description	Document	
Link for additional information	View Document	

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

Response:

ICT tools are used for the following teaching learning activities

Knowledge Enhancement and Updating:

- To attend various online courses like SWAYAM, COURSERA, etc. for enhancing knowledge.
- To run Online FDP courses etc.
- To learn the contents available on various digital platforms to improve teaching concepts.
- To refer e-journals and other research oriented material.
- To write and read teaching learning related blogs and research material.

Generation of Course Content:

- Power point presentations: Before delivering the lectures, faculty members are preparing power point presentations of the various points related to the each topic. Animations, graphs, tables, figures, videos etc. are inserted in the power point presentations wherever necessary.
- Video Lectures: Faculty members are recording the lectures of their respective subject. These lectures are uploaded on the YouTube channel of respective class. This content is made available to the students at any time.

ICT tools for course delivery:

- Use of Google classroom: Google classroom is used for the software subjects where students are submitting their assignments on drawing, programs etc.
- Visualization: Videos, Simulation, Animations etc. are applied for understanding of basic concepts related to the various topics.
- Use of Smart Boards and Tablets: Smart boards are used for the subjects where software such as AutoCAD, CATIA, etc. are used for creating drawings. Teachers use Tablets for online teaching of mathematical and drawing related courses.

Use of FTP Server:

• Server is made available for students and faculty members for keeping above said study material along with regular class notes, assignments, mcq, etc. Apart from this teachers also share Open Source Software, additional reading material, xls based calculators, listing of project ideas, company specific study material, competitive examination based study material etc.

ERP-based CO-PO Attainment:

• After completion of every internal assessment, results of the assessment are updated periodically which helps to identify the progress of student and to take corrective action individually.

Virtual laboratories:

• Virtual laboratories have facilitated various simulation studies for enabling the students to understand the technical concepts and to study effects of variables or parameters through experimentation.

Online Quiz:

• Google forms are used for conduction of test on multiple choice questions. Also,

https://quizizz.com is applied for conducting the quizzes.

Digital Library:

- A digital library is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers. It includes:
 - e-journals
 - $\circ~$ CD/DVD of book
 - Video lectures of faculty from IIT

File Description	Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

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

Response: 18.19

2.3.3.1 Number of mentors

Response: 134

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 13.04

2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
21	17	15	13	12

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

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

Response: 6.31

2.4.3.1 Total experience of full-time teachers

Response: 719

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

As per the University norms, 30% marks are given to In-Semester Evaluation (ISE) whereas 70% marks are given for End semester Examination (ESE). A transparent policy has been prepared for evaluation of ISE. These ISE marks are given based on three ISEs of 20 marks each, three open book tests of 20 marks each and three take home tests of 20 marks each.

Internal Continuous Assessment (ICA) marks are 25 or 50 as per University pattern. A transparent policy has been prepared for evaluation of ICA. The ICA marks are given based on Unit Test, Lab test, Assignments, Lab books, oral examination. The tools used for ICA vary based on the type of subject. The ICA marks of project based subjects like Mini-Project, Vocational training, Final year project, seminar, etc. are given based on the rubrics with respect to respective courses.

The distribution of syllabus for each evaluation tool is done and informed to students at the start of the course. The frequencies of these examinations, tentative schedule and display of results of these tools are also decided at the start of semester and informed to students accordingly.

The patterns of these evaluation tools are adopted from the AICTE Examination Reform policy. Based on this policy, the performance indicators with respect to the content of the syllabus are utilized to decide the questions. These questions are also linked with Course Outcomes and in turn to the Bloom's cognitive level.

The conduction and assessment process has been summarized as given below:

a. Question Paper Setting.

- Question papers are set based on course outcomes, performance indicators and Bloom's taxonomy.
- Individual faculty member sets the question papers based on the common guidelines given by the department.
- The papers are submitted to Department Working Committee (DWC) for quality audit.

b. Conduction

1. The Internal Assessment tests and Preliminary Examinations are conducted centrally at departmental level strictly as per university examination pattern. DWC is responsible for following activities:

- Preparing and displaying time table for all classes
- Planning of seating arrangement for all students
- Collection of final question papers from departments and making multiple sets as per requirement.
- Strict vigilance is maintained during examination.

2. The remaining internal evaluations are conducted at teacher's level as per course assessment plan.

c. Assessment

• Marking schemes/ Rubrics for assessment are prepared and followed during evaluations, which are

discussed with students.

- The evaluation is done as per the marking scheme/rubrics. This helps the students to understand the expected answers.
- Assessment is finished within four days from the last day of examinations.
- The evaluated answer papers are shown and discussed with the students for maintaining transparency.

d. Result Declaration.

The results are prepared and displayed within one week after the examination. The In-semester examination marks are also communicated with parents.

File Description	Document
Link for additional information	View Document

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

Response:

Grievances about In Semester Evaluation:

- At the beginning of the semester, faculty members inform the students about the various components in the In-Semester Examination process during the semester.
- In-Semester Examination schedule is prepared as per the academic calendar and communicated to the students well in advance.
- The assessed answer papers are shown to the students for the verification and any grievance is redressed immediately by teachers.
- The marks obtained by the students in Internal tests after their verification are displayed on the department notice boards and communicated with parents.
- Internal Continuous Assessment (ICA) marks are given based on various tools and its final distribution is displayed on the notice board. The time of one week is given to students to communicate their grievances to HOD. These grievances are addressed by the HOD based on the details of evaluation tool records.

Grievances about End Semester Examination:

- End Semester Examinations are conducted by Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
- Time table and question papers are sent by university. Assessment and moderation is done by approved examiners of university. Results are processed and declared by the university. Student can apply for photocopy of their answer books. If students found any part of answer is not assessed and counting mistakes, he/she can apply under grievance. If the student's claim is found to be valid,
examination section at university takes appropriate measures and if required, make amendment in the results accordingly and communicates it with the concerned student. In addition to these existing grievance mechanism, if any student is not happy about marks obtained in End Semester Examination, he/she can apply for revaluation as per the norms of University.

File Description	Document	
Link for additional information	View Document	

2.6 Student Performance and Learning Outcomes

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

Response:

Institute follows Outcome Based Education (OBE) system. The main crux of implementation of implementation of OBE is appropriate defining of Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs). The Process of defining of POs, PSOs and COs involves various stakeholders.

Programme Outcomes and Programme Specific Outcomes

POs are designed by taking into consideration the attributes required for Engineering graduates such as domain competency, environment and sustainability, ethics, team work, communication, project management and finance and lifelong learning. On the basis of the specialization of the field PSOs are framed by the department. While defining the POs and PSOs, it is ensured that these POs and PSOs are aligned with Vision and Mission statements of respective Departments and Institute. The defined POs and PSOs are put before various statutory committees. The approved POs, PSOs and COs are communicated back to the Teachers and Students through various sources as given below.

The approved POs and PSOs are published and disseminated by displaying/ printing/ noting as per the details given below:

- Institute Website
- ftp
- Entrance of the Department
- HOD Cabin
- Classrooms and Laboratories
- Course Files of Teachers

- Notebooks of students
- Lab books and Assignment Books of Students
- Faculty Diary

Course Outcomes:

Course Outcomes (COs) are the significant and essential learning that a leaner achieves on completion of the course. Course Expert defines Course Outcomes based on University Syllabus and Bloom's Taxonomy. The COs are aligned with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs).

Dissemination of Course Outcomes (COs):

The Course Outcomes of all the subjects are made available through various means as given below:

- Institute Website
- Laboratory Notice Board
- Course Files of Teachers
- Faculty Diary
- Notebooks of the students
- Assignment and Lab books of the students

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	View Document
Past link for Additional information	View Document

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

Response:

CO-PO mapping for direct PO attainment:

The CO-PO mapping is performed based on the competencies to be attained and performance indicators to attain these competencies. The CO-PO mapping index is utilized to obtain PO attainment from the values of CO attainments of the courses under the particular programme.

The CO-PO mapping is indexed as Not Applicable (NA), Low (1), Moderate (2) and High (3).

Attainment of CO:

The defined course Outcomes (COs) attainment is calculated by the respective subject teacher.

The levels of CO attainment are calculated on the basis of internal assessment conducted at institute level and external assessment conducted by the University.

The CO attainment tools depend on the type of course viz., theoretical, involving experiments, project type, etc. These tools are three ISEs, three open book tests, three take home test and three class tests, two lab tests, rubrics based assessment tools, etc. The levels of CO attainments are defined as given below:

- Level 0 if less than 60% students score marks above target level.
- Level 1 if 60 to 69% students score marks above target level.
- Level 2 if 70 to 79% students score marks above target level.
- Level 3 if more than 79% students score marks above target level.

The target level for the internal assessment tools is usually set as 60% of total marks whereas target level of external assessment tools is set as passing percentage marks.

The total CO attainment is calculated by giving 20% weightage for internal assessment tools whereas 80% weightage for external assessment tools.

Attainment of POs:

The overall attainment of POs is computed by adding direct attainment and indirect attainment values in the proportion of 80:20, respectively.

The direct attainment of POs is calculated through the attainment of COs. The PO attainment is weighted average of COs based on the weights as CO-PO mapping index.

The indirect attainment of POs is obtained based on the performance of course end survey, program exit survey, employer feedback, alumni feedback, etc.

The levels of indirect attainments of POs are das given below:

- Level 0 if less than 60% respondents give marks above target level.
- Level 1 if 60 to 69% respondents give marks above target level.
- Level 2 if 70 to 79% respondents give marks above target level.
- Level 3 if more than 79% respondents give marks above target level.

The target levels for the indirect assessment tools are usually set as 60% of total marks.

File Description	Document
Paste link for Additional information	View Document

2.6.3 Average pass percentage of Students during last five years

Response: 96.66

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
568	537	537	540	562

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
570	561	552	577	579

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document
Paste link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response: 3.66		
File Description Document		
Upload database of all currently enrolled students (Data Template)	View Document	

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 692.8

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
156.7	2.6	54.64	2	476.86

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 3.51

3.1.2.1 Number of teachers recognized as research guides

Response: 4

File Description	Document
Institutional data in prescribed format	View Document

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 51.85

3.1.3.1 Number of departments having Research projects funded by government and nongovernment agencies during the last five years

	2019-20	2018-19	2017-18		2016-17	2015-16
	4	3	3		2	2
_						
3.	1.3.2 Number of o	departments offerin	g academic	progran	nes	
	2019-20	2018-19	2017-18		2016-17	2015-16
	6	6	5		5	5
F	ile Description			Docun	ient	1
S	Supporting document from Funding Agency		ncy	View I	Document	
L	List of research projects and funding details		ails	View I	Document	

3.2 Innovation Ecosystem

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

Response:

Our Institute has research-oriented culture wherein students, research scholars and faculty members are encouraged to involve in research related activities through various R & D promoting policies.

Institution's Innovation Council has been established in the institute to strengthen the culture of innovation and promoting R & D related programs. Institute has good collaboration with various institutes and industries for R & D, consultancy and product development related activities. Through these collaborations, various renowned scientists and academicians guide periodically. Further, faculty members are also encouraged for industrial internship during academic vacations.

Institute organizes workshops, theme meetings and International Conferences wherein students and faculty members of various institutes in this region participate to share their research work and assimilation of the knowledge. The proceedings of International conferences are published in Springer publication. Journal Paper writing culture is inculcated amongst the students by encouraging them to publish papers at least in conferences. To promote this activity Institute also publishes 'SVERIAN Scientific' every year wherein students publish work based on their final year project. Students are encouraged for product development through 'Best Project Award' competition. Institute publishes by annual research newsletter to disseminate R & D activities during one semester.

Institute infrastructure is strengthened for research activities by purchasing research oriented software and equipment / facilities in laboratories beyond minimum requirements as per curriculum, purchase of research oriented books and journal subscriptions. To cater the research oriented computational

requirements, specialized servers and workstations are procured. Some of the laboratories are fully devoted for research and also contribute in consultancy and good quality publications. Project groups of students are formed at S.Y. B. Tech. level and encouraged to have sponsored projects. Students are also motivated to participate in project exhibitions, workshops, national and international conferences. Institute has been providing initial support to the faculty members by providing seed money. Faculty members and students are encouraged by providing financial assistance for publishing papers in peer reviewed journals and conferences. As an outcome, faculty members have published around 350 research papers in peer-reviewed journals. As a result of inculcation of the research culture, students have participated in National Conferences/International Conferences and published good number of papers. As an outcome, our students got first Prize as a Best Project Award at State Level Competition, Dipex 2020.

Laboratories in Civil Engineering, Computer Science & Engineering, Electronics-Telecommunication Engineering and Mechanical Engineering departments are modernized using funds under AICTE's MODROB grants.

Recently, High-Performance Computational Power Server, DELL Server, Loading Frame Capacity 2000 KN (Steel Fabricated Frame Structure) and NI Lab View Software have been added in laboratories with the help of grant under FIST-2018. Institute has recognized Ph.D. research centers in Civil Engineering, Electronics & Telecommunication Engineering and Mechanical Engineering.

File Description	Document
Paste link for additional information	View Document

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 66

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

2019-20	2018-19	2017-18	2016-17	2015-16
19	10	14	10	13

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

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teac	her during the last five years		
Response: 2.75			
3.3.1.1 How many Ph.Ds registered per eligible tea	acher within last five years		
Response: 11			
3.3.1.2 Number of teachers recognized as guides during the last five years			
Response: 4			
File Description	Document		
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document		
URL to the research page on HEI website	View Document		

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

Response: 2.46

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

2019-20	2018-19	2017-18	2016-17	2015-16
156	62	26	25	33

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

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

Response: 2.03

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

2019-20	2018-19	2017-18		2016-17	2015-16
103	74	7		57	9
File Description			Docun	nent	
List books and chapters edited volumes/ books published		View I	<u>Document</u>		

3.4 Extension Activities

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

Response:

Following are the details of extension activities:

1. ICT Enabled School Education: National Informatics Centre (NIC) wanted to make the National Knowledge Network (NKN) connectivity be utilized for the under-privileged. For this purpose, institute got high speed internet connectivity which was extended to five schools within 10-15km range. In this pilot project more than 1500 students are participated. A team of faculty members and students from institute visits randomly to these connected schools and conducts sessions on contents of E-learning like creating and using Gmail facility, learning MS-Office, searching information from website, etc. It demonstrates that our students are performing social responsibility to give exposure to the school students.

2. Agro-Challenge: Most of the technological project competitions for students are focused on robotics, Aerospace, Automobile related areas. Taking in to consideration the need of research and development in the field of agriculture and based on the suggestions from Padmavibhushan Dr. Anil Kakodkar, institute has conducted competitions for development of Agricultural devices. Good response is observed for this event from various organizations students. Such activities will help for the development of agricultural area.

3. Gram Visits: Institute has encouraged faculty members and students for gram visits. Under this task students and faculty members visits to different Gram panchayat and identifies their problems. During such visits faculty members and students interact with villagers and students from primary/secondary school about importance of education, empowerment of women, general cleanliness, solid waste management, rain water harvesting and water conservation and creating awareness of Government Schemes, etc.

4. Green Team Initiative:

In the month of July 2012, the prestigious project of planting trees in order to improve the green cover around the campus and further conserving the same has been initiated by Dr. Anil Kakodkar. A committee has been constituted students and faculty member of SVERI to plant trees every year. More than 600 Students voluntarily participated initially in plantation of more than 1500 trees on roadside for about 4.5 km between Gopalpur to Mundewadi in September 2012. AICTE also appreciated our Institute for

contribution in "One Student One Tree" initiative conducted on 3rd December, 2019. Through this activity, we expect to create an awareness amongst the students and people of surrounding areas about the importance of plants for environmental conservation.

5. NSS activity

Institute organizes various social activities through NSS cell viz. blood donation, gender related awareness programs, gram swachata abhiyan, tree plantation, interaction with school students, Importance of water management, etc. Along with above activities, NSS cell plays very important role during Pandharpur festival of Lord Vitthala by distributing clean water to pilgrimage and helping Policemen to maintain the discipline during festival. Contrubution of students in such events help them to built leadership quality.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 0

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

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

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 29

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

	2019-20	2018-19	2017-18		2016-17	2015-16
8	8	8	5		4	4
File Description			Docun	nent		
Reports of the event organized						
Re	ports of the event	t organized		View I	Document	

3.4.4 Average percentage of students participating in extension activities at **3.4.3**. above during last five years

Response: 52.45

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

2019-20	2018-19	2017-18	2016-17	2015-16
1911	1160	1000	600	940

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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 1017

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

2019-20	2018-19	2017-18	2016-17	2015-16
221	383	214	125	74

File Description	Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 125

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

2019-20	2018-19	2017-18	2016-17	2015-16
33	29	24	21	18

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	<u>View Document</u>

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

As per the norms of AICTE, Institute has state of art infrastructural facilities for effective teaching learning ambiance which includes classrooms, laboratories, computing equipments, Seminar halls, International Conference Hall, readings rooms, central library, meeting rooms.

Classrooms Facilities:

- Well equipped **35** Class rooms which are **ICT enabled** equipped with LCD projector
- ICT enabled Two seminar halls and one International Conference Hall
- All classrooms are well ventilated and spacious and good ambiance for effective teaching learning
- All classrooms are equipped with Dais, Desks, Platform, Fans, Tube lights, Green board, White boards, Podium and curtains
- Public Address System in all classrooms
- All classrooms are equipped with CCTV Cameras

Laboratories' Facilities:

- 47 well equipped laboratories with adequate instruments/ equipments to meet the curriculum as well as Program Outcomes
- Five Smart Boards in the laboratories to ensure effective interactive learning
- Recently, some labs have been modernized through **five MODROB** Grants received from AICTE and also Funds for improvement of Science and Technology (**FIST**) grant from DST
- In addition to this, some of the laboratories are devoted to research and consultancy activities. The research lab is equipped with modern engineering tools like LASER cutting machine, 3D printing Machine, Rapid-I Vision System, CNC Micro-Station, 3-D Photo-Chemical Machining, etc.
- The Central workshop is having automated machining tools like CNC and VMC

Computing Facilities:

- Total 626 computers (Intel Pentium Core i3 and Core i5 with minimum 4GB RAM)
- **11** Servers (powerful Intel Xeon processors), 08 Laptops, 71 Printing facilities along with one plotter, 10 scanners and HDDs
- To fulfil and support and solve the complex engineering problems, high end configuration computer workstations are available in Civil Engineering and Electronics and Telecommunication Department
- Adequate most frequently used Supporting Softwares in the laboratories
- Internet connectivity of 1Gbps (1024Mbps) speed and Wi-Fi connectivity is available throughout the entire campus
- All Engineering departments are equipped with 'Wacom Pen Tablet'
- The Institute has multimedia facilities providing audio-visual equipments. AVIEW software is used

to facilitate webinars, synchronous & asynchronous interaction

- The MOOCs, Virtual Lab, Spoken Tutorial, NPTEL Videos, Webinars etc. are also used to enrich teaching-learning process
- Institute is associated with IITB as recognized Remote center and AKASH Lab Center

Other Facilities:

- Central Library and Digital Library along with separate reading rooms for boys and girls
- Boys Hostel and Girls hostel for the boarding of students
- Canteen facility
- Training and Placement and Alumni Interaction Cells
- Separate Interview Rooms for placement activities
- Faculty members have separate/shared faculty rooms.
- In order to maintain uninterrupted power supply, Institute has its own express feeder of capacity 11KV with transformer of 500 KVA connected to MSEB power station directly. A Roof Top Solar Power Plant has been installed which is working with capacity of 400 kW.
- In addition to this, Generators having capacities of 320 KVA and 15 KVA respectively are available in the campus.

File Description	Document
Upload any additional information	View Document

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

Response:

Institute has adequate facilities for conducting the extracurricular activities like Sports, gymnasium, yoga center and cultural.

Sports Facilities:

- Playgrounds for games such as Basketball, Volleyball, Kho-Kho, Football for Boys and Girl students
- Play ground equipped with the facility of flood lights to play Day-Night matches
- Indoor sport complex with all facilities
- Separate Sports Room with adequate sports material for various sport games
- 'Glance' Sport Event: The institute organizes 'Glance' the intra-college level sport tournaments/events for students to enhance their sporting spirit and physical fitness. Various sport activities such as Football, Volleyball, Cricket, Carom, Badminton, Table-Tennis, Kho-Kho, etc. are part of it. Especially, Institute organizes SVERI Premier League (SPL), a Tournament whereby cricket matches are played day-night format under the flood light.
- Our students give good performance in sport games such as Cricket (Men), Chess (Men &

Women), Basketball, Volleyball (Men & Women), Kho-Kho (Men), Badminton (Men & Women), Archery (Men), Boxing (Men & Women), Athletics (Men), Table tennis (Men) in University as well as state level competitions.

Gymnasium Facility:

- Separate Gymnasium with 1200 sq. ft. area is made available for Boys and girl students.
- Gymnasium is well equipped with Leg Press Machine, Declined Bench, Standing Calf Machine, Forearms Machine, T Bar Machine, Cross Over Pulley, Treadmill Machine (Running Machine), Abdomen Bench, Swiss Ball, Dumbbell Set, Preacher Curl Machine, Cycling Machine

Yoga and Pranayama:

- The session for 'Pranayama' is made a part of daily timetable in which all the Students perform Pranayama every day (10.00 am to 10.030 am) to promote relaxation and mindfulness keep themselves mentally strong. The Pranayama session Includes Bhastrika, Kapalbhati, Anulom Violm, Bhramari, Meditation and clapping.
- Institute celebrates International Yoga Day on 21st June

Cultural Activities:

- Institute has an Open-Air Amphitheatre having capacity to accommodate around two thousand students at a time which is utilized for conducting the various cultural and other events.
- Institute organizes different events/functions such as BEATS (Annual Gathering), OLYMPUS (National Level Event), Teachers Day, Engineer's Day, Shiv-Jayanti, Dr. Ambedkar Jayanti, every year.
- Students organize events such as Mock Parliament/Mock Security Council and Street Play to create awareness about social issues and focus on some of them.
- Students also participate in Engineer's Youth Festival.

File Description	Document
Upload any additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (*Data for the latest completed academic year*)

Response: 8.57

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 3

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 20.51

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
184.5	97.00	97.95	218.25	132.75

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Response:

The Central library occupies a total carpet area of about 1522.48 Sq.m. having spacious stack-rooms and reading halls with a seating capacity of 360 students at a time. The central library holds the rich collection of 62405 volumes of comprising of 9163 titles. The library has more than 124 journals in hardcopies & 498 e-journals. The library has different sections like Boys reading room, Girls reading room, Digital library section, reference section, book issue/return section, and periodical section.

Automation using ILMS: The library is fully automated using **Rwork** software, which provides a single window search and OPAC helps user to search the required books title/author-wise and it can be issued to the user quickly. The barcode system is implemented for all books in the library. In Rwork, Library management section consists of 'Manage Books' and 'Issue/Return Book' module.

Sr. No.	Parameter	Details

1	Library Management System	Rwork
2.	Name of ILMS software	Rwork-OPAC
3.	Nature of automation	Fully automated
4.	Version	1.0
5.	Year of automation	2015

• *Manage Books Module:* The Manage Books module is categorized in Regular books, Book Bank, Social welfare & Competitive examination. Details for each book is available like Book type, Accession Number, Title of book, Author name, Edition, Volume, Name of publication etc.

• *Issue/Return Module:* In Book Issue/Return module, separate search engine is available to search student profile and his/her transactions from the data by using student name/ student code . Books are issued to users by scanning barcode. Rwork software auto-update the record of book/s issued to the student/faculty, issue date, expected return date and remarks (return/ renew/ lost) are available.

Other Digital Facilities: The Central library provides following facilities:

- The central library has separate Digital library section, equipped with adequate number of computers. User can access the various resources through digital library, like.
- 1.DELNET : http://delnet.in/
- 2. IEEE e-journals : https://www.ieee.org/
- 3. Elsevier e-journals : https://www.sciencedirect.com/
- 4.E-books : http://nptel.sveri.edu:8080/
- 5. NPTEL Video lectures : http://nptel.sveri.edu/localguru/
- 6. Online open source journals
- Remote access for Library facility is available to students through E-library tab available on college website, can be easily access through https://coe.sveri.ac.in/centralLibrary.php#
- More than 275 PG / Ph.D. thesis copies are available as a ready reference.
- Printing and reprography services are available in library for students at minimal cost
- Free of cost Book-bank facility is available for SC/ST students under Social Welfare Scheme. In addition to this, five topper students from each class are getting free Book-bank facility.
- Competitive examination, Personality development section: more than 6500 books are available for competitive exam preparation and personality development

File Description	Document
Upload any additional information	View Document

4.2.2 The institution has subscription for the following e-resources

1.e-journals

2.e-ShodhSindhu

- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 40.81

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
28.29	33.91	48.69	25.50	67.68

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

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

Response: 12.15

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

Response: 310

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:

The Institute has strong IT infrastructure and upgrades it regularly to cope up with the contemporary technical requirements.

IT Facilities:

- Institute has 35 ICT enabled classrooms, two Seminar Halls and one International Conference Hall with LCD projectors, LAN, Wi-Fi and well-equipped 47 laboratories, Five Smart Boards in the laboratories/classrooms to ensure effective interactive learning.
- The institute has high configured **11** Servers (powerful Intel Xeon processors), 08 Laptops, 71 Printing facilities along with one plotter, 10 scanners and 10 HDDs and total **626** computers (Intel Pentium Core i3 and Core i5 with minimum 4GB RAM) for students and staff members
- Institute has dedicated 1 Gbps Leased Line with NKN Connectivity
- In addition to high-speed LAN connection, wireless controllers are installed for dual band Wi-Fi system in entire campus
- Cisco ASR1002 Router is installed to connect 1 GBPS dedicated leased line internet connectivity
- On the note of green campus, all the course materials frequently uploaded on local website /ftp. This helps the students can access the course material anywhere at any time
- Campus is under full CCTV Surveillance with total 950 HD IP Cameras
- Biometric attendance system is employed for staff members

Network Management software:

- Sophos 750XG Firewall with Full guard Plus Subscription has been installed to protect all servers from outside attacks. For confidentiality and security issues, access to Internet is availed through separate login ID to each and individual who wants to use internet facility, separate IT policy is also implemented for the usage of Internet through wired or Wi-Fi connection
- Institute uses many open source softwares and also have adequate most frequently used Supporting Softwares in the laboratories for various processes and activities

Upgradation of IT Facilities:

- The Internet bandwidth is upgraded time to time as per requirement and the technology is also constantly updated
- The hardware routers and servers upgraded regularly to match higher data speed demand
- For periodic maintainanace of IT infrastructure, Annual Maintainance Contract is signed.

File Description	Document
Upload any additional information	View Document

4.3.2 Student - Computer ratio (Data for the latest completed academic year)Response: 3.89File DescriptionDocumentUpload any additional informationView DocumentStudent - computer ratioView Document

4.3.3 Bandwidth of internet connection in the Institution			
Response: A. ?50 MBPS			
File Description	Document		
Upload any additional Information	View Document		
Details of available bandwidth of internet connection in the Institution	View Document		

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 58.31

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

2019-20	2018-19	2017-18	2016-17	2015-16
439.14	401.77	394.29	373.71	337.21

File Description	Document		
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document		
Audited statements of accounts	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:

Maintenance of Library Facilities:

The books and journals are maintained against disfiguring. Book binding is carried out on a regular basis for damaged books to avoid further damage. Stock verification is done as a part of regular monitoring and control. Pest control is done on a regular basis for maintaining books safe from termites.

The Library Committee has been constituted for coordination in respect of learning resources.

- Procurement of new books & renew of journals and recommendation for additional books
- Updating and maintaining of all library records
- Addressing issues and grievances of users
- Update and upgrade the library contents, periodically as per updates in curriculum

Computers: The institute has an adequate number of computers with internet connections and utility softwares. Computer systems, UPS, Softwares and Servers are maintained by outsourced technicians, Lab Assistants and Lab-In Charges. IT infrastructure is maintained by the head, IT Coordinator along with departmental coordinator.

Classrooms, Conference Hall: Classrooms and InternationalConference hall are provided with enough seating capacity and LCD projectors. Cleanliness of class rooms and International Conference hall is maintained on a regular basis.Working condition of audio system, LCD projectors etc. is done on a regular basis.

Laboratory:

Laboratories are regularly maintained by the Laboratory attendant. Records of equipment are maintained in Dead-stock Register (DSR) as per the process.Equipments are maintained properly, calibrated and serviced periodically.Major breakdown maintenance if required, is carried out by external agencies.

Maintenance of other support systems:

Ø Housekeeping for regular cleanliness of corridors, washrooms, classrooms, laboratories and premises is done by external agencies. Sanitizing of washrooms is done on a regular basis.

Ø Greenery is maintained by the gardeners of external agencies.

 \emptyset Solar Panels and power backup facilities like Generators are maintained by the Internal Electrical maintenance department.

Ø Clean and hygienic drinking water is available in the Institute. Water coolers are maintained and cleaned on a regular basis. Overhead water tanks and water coolers are cleaned periodically. Quality of drinking water is checked by measures pH and Hardness.

 \emptyset Sports facilities are maintained by the sports committee and the menial staff.

The below mentioned points are inspected before the start of every semester.

1. Classroom facilities such as lights and fans, LCD projector and sound system, availability of internet connections are inspected before the start of every semester.

2. Working conditions of the computer, device, and equipment are ensured.

3. Working condition of machines in the workshop is ensured.

4. Stock checking activity is done prior to the start of the new semester.

5. House-keeping committee of the institute inspects the facilities like toilets, classrooms, corridors.

6. Food committee supervises the cleanliness and hygiene in the canteen and monitors the food quality.

7. Library committee collects specific needs of the students and staff.

8. Sports committee ensures the availability of sports equipment and monitors the usage of the ground, courts and indoor games facilities.

File Description	Document
Upload 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 last five years

Response: 77.39

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2019-20	2018-19	2017-18	2016-17	2015-16
1767	1753	1628	1557	1384

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

214 265 243 195 189	2019-20	2018-19	2017-18	2016-17	2015-16
	214	265	243	195	189

Response: 10.62

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

- 1.Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document

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

Response: 44.87

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

2019-20	2018-19	2017-18	2016-17	2015-16
896	1038	956	963	814

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances

including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- **3.** Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the aboveFile DescriptionDocumentUpload any additional informationView DocumentMinutes of the meetings of student redressal
committee, prevention of sexual harassment
committee and Anti Ragging committeeView DocumentDetails of student grievances including sexual
harassment and ragging casesView Document

5.2 Student Progression

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

Response: 41.66

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

2019-20	2018-19	2017-18	2016-17	2015-16
272	286	201	225	198

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 24.21

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 138

1	
File Description	Document
Details of student progression to higher education (Data Template)	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 34.15

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
5	9	10	7	5

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

2019-20	2018-19	2017-18	2016-17	2015-16
14	18	23	27	32

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural

activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 30

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

2019-20	2018-19	2017-18	2016-17	2015-16
10	05	03	03	09

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	View Document

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

Response:

SVERI's COE has active Students' Council and involves students in academic and administrative bodies with the objective of providing a platform for active participation of students in academic, administrative, co-curricular, and extracurricular activities. The Council also aims for enhancing interpersonal relations, leadership and managerial skills, individual and teamwork and in turn to achieve overall personality development of students.

The Students Council is constituted as per the relevant Maharashtra Universities Acts and gives representation for the students from every class, who has shown academic merit at the examination. The council also gives a representation of the students related to extracurricular activities as a Sports Corepresentative, N.S.S. representative, and Cultural representative. It gives an opportunity for students to develop leadership along with skills of good governance of the Students by electing the Secretary of Council through the elections of the Students' Council.

Besides the Students' Council in College different departmental Students' associations like MESA, ELITE, CESA, etc. also established to explore the talent of students in technical, sports, and cultural events. The departmental association involves student office bearers like, President, Vice President, Secretary, and Joint Secretary which enhances the decisive role of students in the planning and execution of the association activities like organizing seminars and workshops, conducting quizzes and project

exhibitions that would help bring out students' inherent talents.

Different Students' Chapters like ISTE, ASHRAE, SAE etc.in college are functioning to enhance research, technical knowledge of students.

The Institution believes in transparency in all its activities. It encourages the students' participation in administration, curricular co-curricular and extra-curricular activities, by involving them to be part of many of the committees such as

1. Anti-ragging Committee

2. Internal Complaint Committee

3. Grievance Redressal Committee

4. Sports' Committee

5. Cultural Committee

7. Internal Quality Assurance Cell (IQAC)

- 8. National Service Scheme (NSS) Committee
- 9. Food & Mess Committee.

A magazine is like a mirror which gives a clear picture of all sorts of activities undertaken by the College and in that process develops writing skills particularly among students. Our college facilitates the publishing of annual magazines and newsletters by each department. They are published at an interval of six months. Students' participation is work worthy in these publications.

The student representatives help Training & Placement Officer (TPO) to organize various placement

drives in assisting the various placement activities such as conduction of online aptitude tests . Students' social skills are also enhanced through community programs under YIN and National Social Service.

Thus, almost all the students of the Institution are given the opportunity to participate in various Administrative, Academic, Co-Curricular, and Extra-Curricular Activities of the Institution.

File Description	Document
Upload any additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 20.6

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2019-20	2018-19	2017-18	2	2016-17	2015-16
16	29	19	2	22	17
File Description	on		Docume	nt	
File Description Number of spo in which stude	on orts and cultural even nts of the Institution	nts/competitions participated	Documes View Do	nt ocument	1

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

SVERI's COE has a registered alumni association with the registration number F21873 Solapur dated 08/11/2008. The alumni association is having following office bearers.

Sr. No	Name	Designation
1	Mr. Mahesh Kamble	President
2	Mr. Onkar Mahajan	Vice-President
3	Mr. Avinash Anil Mote	Hon. Secretary
4	Mr. Shriniwas Darshane	Member
5	Mr. Guruprasad Telkar	Member
6	Mr. Swapnil Ghogardare	Member
7	Mr. Sachin Borde	Member
8	Dr. Babruvahan P. Ronge (Secretary, SVERI, Pandharpur)	Member
9	Principal, SVERI's College of Engineering, Pandharpur	Member

SVERI's COE has an alumni association with more than 3000 registered members so far. The alumni are members of academic planning to suggest various events to be scheduled for the academic year. They give feedback on various programs of the institute from time to time and suggestions are implemented for the academic and infrastructure development. They are invited for seminars and guest lecturers to share their expertise.

The alumni visit our institute to guide the students for numerous occasions and give suggestions for final year students' projects. The alumni interact with the students and share the knowledge about recent technological developments in the industries and guide them for higher studies and job opportunities. The alumni motivate the students to become entrepreneurs and guide them about the facilities to be availed from the Government to establish small scale industry.

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

File Description	Document
Upload any additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in lakhs)		
Response: A. ? 5 Lakhs		
File Description	Document	
Upload 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 and in tune with the vision and mission of the institution

Response:

The Vision –

To be nationally recognized among the best institutes in India for excellence in technical education

The Mission-

To impart value added technical education through ambience of academic excellence, research and life skills by inculcating personal touch and respect in relationship amongst the stakeholders

The important components of the Vision and Mission are:

1. **National Recognition-** The Institute has been recognized by eminent bodies like NBA, NAAC, ISO 9001:2015,etc.for its quality teaching-learning processes and systems and it further strives to maintain and achieve further heights. It has received the Best College award at university level. Dr. P.M.Pawar, Dean Academics has been bestowed with the Vishweshwarya Best Teachers award by AICTE in 2020.

2. Academic Excellence- The institute taking in to account its experiences down the years has designed its own customized teaching-learning process called the 'Pandharpur Pattern in Professional Education' (PPPE) suitable to the background of students it receives. This pattern has ensured excellent results, University rankers and placements in reputed industries.

3. **Research-** The culture of research has been inculcated by the Institute among both the faculty and students. The management has taken up number of initiatives to encourage both teachers and students to participate in research activities in the form of awards and incentives. The number of MoUs signed and the Research grants that have been received from prominent organizations are a testimony to it.

4. **Personal Touch and Respect-** Interpersonal respect has been entrenched in the culture of the institute with the motto of 'Give respect and take respect'. Personal touch is maintained with all the stakeholders through regular proctor sessions of students where one to one interaction with mentor is possible, telephonic conversations with parents of absent students every day, and meetings.

Governance

The institute was established in the year 1998 by a group of technocrats under the trust Shri Vithal Education and Research Institute. These technocrats lead by the vision of the Founder Secretary Prof.Dr.B.P.Ronge who aims at making technical education available to the students in rural areas of Maharashtra. The Institute is managed by a Board of Governors comprising of the management members and eminent academicians, industry personnel and researchers. They are responsible for shaping the Vision and Mission of the Institute.

Perspective Plan

The perspective plan is prepared to meet the vision and mission of the institute.

Participation of the Teachers in the Decision Making Bodies

• At the start of every semester in every academic year, a General meeting of all staff members is conducted, where various decisions and policies pertaining to the Institute are framed.

 \cdot The active participation of teachers is also observed in various statutory committees of the institute, where various strategic decisions are taken.

File Description	Document
Upload any additional information	View Document

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

Response:

• The Institute firmly believes and adheres to the maxim of decentralization and participative management. The systems and processes adopted by the institute provide credence to this belief.

• Decentralization in the Institute has been properly designed and implemented through the document "System Manual". In this manual the role, responsibility and delegation of authority of each and every personnel of the Institute has been clearly spelled out.

• In the general meeting conducted at the start of every semester in every academic year, through rigorous brainstorming various decisions pertaining to the institute are taken and policies are framed with the active participation of faculty and management.

 \cdot In these meetings various cross-functional committees of staff members are formed for the effective functioning of the institute. The team leader termed as committee coordinator is given the authority to take decisions pertinent to their committees in consultation with the committee members and implement them with the due permission of the head of the institution.

• The active participation of teachers is observed in various statutory committees like Planning and monitoring committee, Academic Advisory committee, Anti-ragging committee etc.

• All policies and practices are framed through brainstorming sessions in the various bodies, committees constituted, in which management, Principal, Deans, faculty and students are involved. Through thorough discussions in all these forums decisions are taken unanimously.

• Through various committees, and meetings with all the stakeholders like Students' council, Parents' meet, General meeting etc., participative management is encouraged and carried out.

Case Study

Every year on Engineer's day i.e. 15th September a national level intercollegiate event called as "Olympus" is organized in the institute. In this event students from colleges across state participate in various academic and extra-curricular enrichment competitions like Paperfest, Debugging, TechnoGuru, WebDesign, Autocad, CATIA race, Machinist etc.

The event is organized by the Professional chapters ISTE along with Departmental Student Associations for Mechanical Engineering, Computer Science and Engineering, Civil Engineering and Electronics and Telecommunication engineering.

The organization, implementation and execution of the entire event is carried out with the active participation of faculty, students and management.

The management provides funds for the event which is approved through budget. The students also collect sponsorships for the event.

Committees comprising of staff members are formed at the central level for the organization of the event. These committees take care of various arrangements of the event like registration, food, accommodation, transportation, discipline, prize etc. These committees are supported by student volunteers.

On the individual activity level, committees of students are formed headed by a staff that conducts the individual events at departmental levels.

The president, secretary, joint secretary and treasurer for the event are students who are selected across departments for the posts.

In this way the event is organized based on principles of participative management and decentralization.

File Description	Document
Upload any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

.

Activity of Human Resource Development based on Strategic Plan

• The institute consistently deliberates to strategize upon and monitor the development of the human resources of the institute. The institute strives to upgrade the staff in terms of knowledge and skills, enabling and empowering them to match with the dynamic shifts in the educational sphere and to meet the needs and wants of the 21st century.

The institute strives to take care of the academic, research and overall development and well being of the staff members through various activities and initiatives.

The institute motivates and encourages the faculty members to:

Ø Attend faculty development programs.

- Ø Participate in workshops and conferences in India and abroad.
- Ø Attend certificate courses and online programs.
- Ø Publish papers in journals and conferences.
- Ø File patents
- Ø Apply for research grants
- Ø Engage in consultancy activities

• To facilitate the faculty members to take up these activities the institute has started giving awards, monetary rewards and assistance as follows:

1. The institute provides reimbursement of expenses towards registration, travel by train/air and accommodation for attending various Faculty Development Programs, Conferences in India and abroad.

2. Part of Faculty Skill Certification and Patent fees are fully borne by the Institutio.

3. For faculty engaged in consultancy work proportional monetary compensation is given based on the contractual value of work

4. To promote research aptitude the institute gives awards and incentives for publications in reputed journals and books.

As a result of these initiatives in the last five years:

Ø 590 faculty members have attended professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course.

Ø 297 faculty members have received financial assistance to attend conferences/workshops and towards

membership fee of professional bodies.

 \emptyset 96 professional development /administrative training programs have been organized by the institution for teaching and non teaching staff.

Ø 543 papers have been published in journals and conferences.

Ø 12 patents filed by staff members

Ø Rs.692.1 lacs received as research grants .

File Description	Document	
strategic Plan and deployment documents on the website	View Document	

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

Response:

Set up of the Trust-

The trust 'Shri Vithal Education and Research Institute' was established by 15 technocrats, in the year 1994-1995 with the motto of bringing technical education to rural areas.

Administrative set up

- The Board of Governors is the governing body of the institute. It has been constituted with 21 members who are eminent academicians, industry personnel and researchers. Decision making on academic and administrative activities, Budget approval, taking decisions about recruitment, Purchase, and infrastructure are some of the major functions of this body.
- Other statutory committees along with the BOG are College Development committee, Standing Committee, Research Advisory Committee, Academic Advisory Committee, Anti-ragging/ high level standing committee and Students' Council which take care of the academic as well as administrative decisions, issues and progress of the institute.

- The Principal is the head of the Institute and In charge of all the academic and administrative setup. The Vice- Principal supports the Principal in the management of the institution.
- The Dean Administration, Dean Students, Dean Training-Placement and Industry Interaction, Dean Academics and Dean Research & Development take care of the administration of their respective functional areas.
- They are supported by the Heads of different departments and staff members along with various Institute and department level committees.
- The Registrar heads the administrative office and takes care of staff, students, scholarship related activities and financial transactions of the institute.
- Other important areas like library and hostel are headed by the Chief Librarian and the Chief Rector.

Appointment and Service Rules

The requirement of staff is calculated on the basis of roaster prepared by the institute as per the norms of AICTE and affiliating university. Advertisement is given in the leading newspapers and candidates are interviewed. The interviewing committee consists of subject expert appointed by affiliating university, Principal, Management representative and HoD. Candidates are selected on the basis of demonstration and merit. Apart from this, every year as per the AICTE guidelines, to maintain sufficient Student Faculty Ratio, Institute level appointment procedure is carried out.

The service rules are based on the rules and regulations of the regulatory bodies, as per the statutes of the affiliating university. It is also compiled in the form of a Human Resource Manual.

Grievance Redressal

The institute has constituted a Grievance Redressal Committee comprising of 05 members including Principal, Dean Students, Dean Administration and Dean Academics and students' representative. The committee handles the grievances of students and the teaching as well as non-teaching staff, parents and other interested party etc. of the institute.Punyashlok Ahilyadevi Solapur University, Solapur also has a Grievance Redressal Cell where colleges can put up their griviances to be addressed.

File Description	Document
Upload any 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.Administration

- 2. Finance and Accounts
- **3. Student Admission and Support**
- 4. Examination

Response: A. All of the above
File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document

6.3 Faculty Empowerment Strategies

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

Response:

Welfare Measures for Teaching Staff:

A) General:

- 1. The institute provides the Provident Fund facility for the eligible staff members
- 2. The institute has a Group Medical Insurance facility for all its staff members
- 3. The institute gives Gratuity to its eligible staff members
- 4. As the institute has several well developed fully equipped hall and premises, it makes them available to its staff for family functions.
- 5. The institute also provides Maternity leave.
- 6.Duty leave for attending conferences, seminars, symposium and other academic activities offcampus are granted to the staff members.
- 7. In case of illnesses and disease for treatment and recuperation Medical leave is given to eligible faculty members.
- 8. The institute provides Free hostel facility for the faculty members.
- 9. Technical and non-technical Training programs are organized by the institution to upgrade and update the skills and knowledge of faculty members.
- B) Awards / Incentives:

1. The institute provides reimbursement of expenses towards registration, travel by train/air and accommodation for attending various Faculty Development Programs, Conferences in India and abroad.

2. Part of Faculty Skill Certification and Patent fees are fully borne by the Institution.

3. For faculty engaged in consultancy work Proportional monetary compensation is given based on the contractual value of work.

4. To promote research aptitude the institute gives awards and incentives for publications in reputed journals and books.

5. The institute reimburses the purchase of academic books to the tune of Rs.1000/- or 50% of cost of books whichever is minimum.

Welfare Measures for Non-Teaching Staff:	
 The facility of Provident Fund for the eligible Residential facility in the campus. Group Medical Insurance facility to staff mem Maternity leave facility to eligible staff memb Availability of Institution premises for family Free uniforms. 	staff members. bers. ers. function.
File Description	Document
Upload any 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: 48.47

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

2019-20	2018-19	2017-18	2016-17	2015-16
107	25	23	124	17

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, 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: 20.8

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

2019-20	2018-19	2017-18	2016-17	2015-16
22	24	14	22	22

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 98.26

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

2019-20	2018-19	2017-18	2016-17	2015-16
138	101	118	109	134

File Description	Document
Upload any additional information	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

Response:

The Performance Appraisal System adopted by the institution is multi-pronged and carried out at various touch points as illustrated below:

- Students' feedback is taken by the Dean Academics during each semester, with a component designed to assess particular staff member's lecture, content delivery, syllabus completion status, and general behavior etc.
- HODs also assess the performance of staff members based on competency matrices.
- A well defined Performance Appraisal System is implemented in the institute. A system of Self

Appraisal is followed in which a well designed appraisal form is filled by the respective staff member, which contains various components for appraisal like:

- 1. **Performance in Engaging Lectures / Practicals-** covers the planned lectures, actual lectures conducted and the percentage of syllabus coverage for the subject taught. Performance is judged as: Excellent-1.0(100-91), Good 0.7(90-81), Average-0.5 (Below 81).
- 2. **Performance in Attendance of Students-** It is calculated by considering the number of present students, number of conducted lectures and average attendance. Performance is judged as: Excellent-1.0 (100-91), Good -0.7(90-81), Average -0.5(60-41), Poor 0.2 (40-00).
- 3. **Performance in Results-** It is calculated by considering Average result of the subject in the last three years, percentage of students securing above last three years average in the particular subject. Performance is judged as: Excellent-1.0 (100-91), Good 0.7(90-81), Average -0.5(60-41), Poor 0.2 (40-00).
- 4. Other Performance Indicators:
- Class Room Planning and Control
- Evaluation of Laboratory Work/ Assignments
- Curriculum / Learning Resources Development
- Seminars/ Training: Co curricular Activities
- Administrative Functions

Appraisal System/Policy for Non-teaching Staff:

The performance of Non-teaching staff is assessed in every academic year on the basis of a performance appraisal form akin to teaching. It consists of following appraisal components-

1. **Professional Competence** – It covers factors like Knowledge of rules, regulation and procedure; Ability to organize work and carry it out; Ability and willingness to take up additional load in times of emergency ; Creativity and innovation; Ability to learn new skills

2. **Performance**- It covers factors like Maintenance of Files/Records; Accuracy & Speed of work; Neatness & tidiness of work; Completion of work on schedule; Diligence and sense of responsibility

3. **Personal Characteristics**- It covers factors like Attendance; Punctuality; Discipline; Interaction with colleagues; Integrity and behavior

• Each of these factors are judged on degrees and corresponding marks viz. Outstanding(10), Excellent(9), Very Good(8), Good(6), Satisfactory(5), Marginal(4), Poor(2), totaling 150 marks.

File Description	Document
Upload any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The accounts of the Institute are audited regularly as per the rules of Government. It takes place on two levels:

Internal audit-

• In the internal audit, the internal auditor appointed by the institute audits the institute's accounts every six months. The internal auditor checks fee receipts and payments with vouchers and necessary supporting documents. The auditor also ensures that all payments are duly authorized. After the audit, the report is sent to the management for review.

External Audit-

- The institution has appointed a qualified practicing Charted Accountant's firm as external auditors who audit the accounts of the Institute. The name of the C.A. appointed is Mr. A.P.Kaulwar. The external auditor conducts statutory audit at the end of the financial year.
- There have been no audit related objections in the last five years.

File Description	Document
Upload any 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: 0

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during

the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

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

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

Response:

Mobilisation of Funds:

- The Institute is private as well as unaided and it solely depends upon students' fees majorly, for its requirements.
- Admissions take place through the Centralised Admission Process of Maharashtra Government and Directorate of Technical Education.
- Amount of fees to be charged from the students is fixed by the *Shikshan Shulk Samiti* (The Fee Regulating Body of Government)
- The fee amount is deposited in Public sector banks as short term deposits.
- The fees and the interest earned from the deposits are utilized for the development of the college and towards recurring expenses like salaries, electricity maintenance, and vehicle fuel, infrastructural maintenance etc.
- Various types of Government Scholarships received from the *Samaj Kalyan Office* (Social Welfare Office) of the Government are similarly utilised.
- Term Loans and Hire Purchase Loans from Public sector Bank at a minimum rate of interest are availed and this amount is utilized for the development of infrastructural facilities.
- Grants from AICTE, DST, and other organizations under MODROBS, FIST schemes are availed to purchase the latest equipments for laboratories, updated versions of the software etc, regularly.
- Grants and sponsorships from various organizations including Professional Bodies to conduct various Symposiums, Seminars, National and International Conferences and other similar activities are also obtained.
- Consultancy revenue generated by various departments is another source of revenue.

Optimal Utilization of Resources:

- The effective and efficient use of available financial resources is monitored through the budget.
- The Lab In charge of each and every department prepares his/her detailed month wise/ yearly

budget requirements and forwards it to Head of the Department. The HOD then in consultation with faculty and Lab In charges finalizes his/her month wise/ yearly budget including both heads of recurring and non-recurring.

- Such department wise budgets are put forth in the meeting of the Principal, Deans and HODs where those budgets are studied in details and discussed upon to the satisfaction of everyone.
- Taking into consideration all the department wise budgets, a college level budget is prepared. This budget is further put in front of the Planning and Monitoring Committee. On its approval, it is put forth for the final approval to the Board of Governors.
- Once approved, the process of purchasing begins, for items above Rupees fifty thousand in cost, tender is released. Upon receiving bids and quotations, a comparative is prepared. All the related documents are put in front of the Purchase Committee. Negotiations between the vendors and buyers happen in the presence of the members of this committee. Further, Purchase Order/s is/are placed to the selected party/parties. This process ensures that right equipment is purchased at the most competitive price.
- Monthly budget utilization is submitted by each of the departments. This keeps a further check on them to ensure funds are utilized effectively.
- Any additional requirements that arise due to unforeseen expenditure are discussed in the HODs' meeting and the same is requested to the management for approval.

File Description	Document
Upload any 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:

Case Study-I- Developing Higher and advanced learning skills:

More than 90% of students admitted to institute are from rural areas. Hence, these students lag in the new age must skills such as communication, personality development, aptitude technical and logical building skills.

To overcome these lacunas, the institute started following initiatives to bring the students at par with their metropolitan counterparts:

- Orientation Sessions for First Year Students
- Aptitude Training (3 Lectures/week)
- Industry Expert Sessions (every Sunday)
- Proctor Sessions (Daily 45 Minutes)
- GD & MOODLE sessions (2hrs/week)
- Advanced Technical Training
- Software Training (CAD/CAM/CATIA/STAAD PRO etc)

- Mock Video Interviews and their recording
- Campus Recruitment Training including Aptitude and English (80 hrs)
- Programming Language Training (C/Java/Python)
- Campus drive Specific Trainings
- Mock Interviews by experts
- Expert Sessions by Industry HR Professionals
- GATE training by Professionals
- Competitive examinations training
- Entrepreneurship Development Programme of 3 days for Third Year students every year by DIC.
- Continuous efforts as mentioned above have resulted in many notable outcomes.

The institute ranks amongst the top institutes under Solapur and Shivaji University, in terms of placement of students.

More than 250 national and international companies like Atlas Copco, Bharat Forge, TCS, Persistent Systems, Capgemini, Infosys, Cognizant, Atos Syntel, WIPRO etc, and PSU's like EIL ONGC etc. have visited for campus drives, and more than 1300 offers have been given by these companies in the last five years.

Number of offers has increased from 232 in 2015-16 to 370 in 2019-20 as a result of the initiatives.

Students have received admissions in IITs, NITs and reputed MBA colleges based on training programs provided by institute.

Case Study-II- Promotion of Research Culture amongst the Students:

- Research has now become the backbone of education. The institute not only promotes research aptitude among its faculty members but also among the students.
- A separate Dean for Research and Development is the part of the administrative setup of the institute, dedicated to take up the research activities of the institute.
- To encourage students to take up research activities and publish or present research papers the institute hands out awards and prizes.
- IQAC monitors students' participation in State/National level Symposiums/Conferences through Paper presentation, and the related issue has been raised in the IQAC meeting dated 27/04/2019 and 21/11/2019.
- Students are motivated for publishing their research work related to Mini-project/Projects in National/International conferences and Journals and take part in Project exhibitions at University/State/National level.
- Students are motivated for filing patents based on their research work.
- The outcome Inculcation of Research Culture amongst the Students is highlighted below:

Particulars	AY 2018-2019	AY 2019-2020
Number of students participated in	65	71
National & International		
Conferences		

Number of papers published in peer reviewed journals by students	6	6	86
Number of students participated in Project Exhibition		3	40
Achievement/Award		3	3
File Description		Document	
Upload any 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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Case Study-I : ICT Usage Mechanism:

- In order to ensure improved learning of students and better methods of teaching, the institute has started encouraging the use of Information & Communication Technology in the teaching-learning process and it is being adopted by the teachers.
- As a result of this initiative, teachers prepare video lectures of their respective subjects and upload them on YouTube and the Institute's ftp. As the campus is equipped with extensive Wi-Fi coverage, students can access the content anytime and from anywhere in the campus.
- Digital library has been installed in the Institute with repositories of study materials, journals and magazines.
- The classrooms are equipped with overhead LCD projectors and smart boards to enhance the teaching-learning process and increase simplicity of understanding. Teachers make use of PowerPoint presentations with animations for their respective subjects.
- The use of Moodle software is made to conduct sessions for aptitude practice of the students and provision for it is made in the time table.
- The institute has purchased the GATETUTOR software to make the students prepare for the GATE examinations.
- The institute has created the facility of Virtual Lab in coordination with IIT Bombay, wherein simulations of the experiments performed are easily accessible to the students and staff members.
- Google classroom is used by a section of the teachers. It is a handy tool to share study material, give assignments and grade them as well.
- The institute has hosted SVNET, wherein respective subject teachers post their syllabus pertaining subject material. This material is accessed by the students as and when necessary.

Case study- II: Implementation of Outcome Based Education (OBE):

Institute implements Outcome Based Education (OBE). It is the approach towards teaching & learning in which activities about the curriculum are driven by the outcomes which the students should demonstrate at the end of the course. In the OBE based teaching-learning process, the product defines the process. OBE is more systematic in its own ways as the teaching and assessment are product oriented i.e what students get to learn and what abilities they develop matters much in this type of education. It is a students' performance based approach which emerged from the multinational agreement through Washington Accord. The taxonomy of Bloom provides the base for planning the objectives and outcomes of the courses. Being one of the countries signing on the Washington Accord, 'National Board of Accreditation (NBA)' the Indian accreditation agency has made it compulsory for engineering institutions to adopt and implement OBE framework for the curriculum design, content delivery and final assessment. In the OBE, the educational outcomes of a program/course are clearly and unambiguously specified. It helps to determine the content of curriculum and its set up, the methods of teaching, further strategies and the process of assessment. All eligible programs in the institute i.e. Mechanical Engineering, Civil Engineering, Computer Science and Engineering and Electronics and Telecommunication Engineering have been accredited by NBA, up to 30 June, 2023.

Transparent Internal Continuous Assessment Policy:

The institute has designed a policy document for Internal Continuous Assessment (ICA) and giving marks to the students through various internal tools of assessment such as ISE (In Semester Evaluation), Assignments, Unit Tests, Orals etc. The policy document has been designed through the resolution in Students' Council Meeting. Through this document, the students are made aware in advance about the ways in which the marks are allotted to students under different pointers of evaluation. Through this policy, the students also become alert and don't miss the things that are expected from them on time to time basis.

Internal tools	External Tools	
1. ISE-1 -1	1. ESE	
1. OBT	1. External Oral/ practical Examination	
1. THT-1	1. Employer feedback	
1. ISE-2	1. Parent feedback	
1. OBT-2	1. Alumina Feedback	
1. THT-2		
1. ISE-3		
1. OBT-3		
1. THT-3		
1. UT-1		
1. UT-2		
1. UT-3		
1. ASSIGNMENT		
1. TUTORIAL		
1. PPPE		

Implementation of Examination Reforms Policy of AICTE:

The All India Council for Technical Education (AICTE) has come up with Examination Reform Policy in November 2018. This policy is being implemented by the institute. This policy is in line with the OBE (Outcome Based Education). So, it becomes very effective on the part of the institute to implement that policy as the institute is already implementing OBE and it has been twice accredited by NBA. This policy aims at evaluating the knowledge, skills and abilities of the students with reference to the Graduate Attributes (GA), Program Outcomes, Course Objectives and Course outcomes. With the help of this new policy, the teaching-learning process as well as the evaluation process becomes more pointed and useful. This policy helps to check if the set objectives of a program or a course are achieved. It further helps in the objective evaluation of a student's strengths and weaknesses too. Due to the implementation of this policy the institute has been achieving remarkable results in the examinations of affiliating university.

File Description	Document
Upload any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2. Collaborative quality intitiatives with other institution(s)
- **3.**Participation in NIRF
- 4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

Response: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

Initiatives

As our society is male dominated, women face number of challenges on both personal and professional fronts. Institute is taking key efforts to bring the gender equity through various curricular and co-curricular activities viz. celebration of women's day, celebration of Savitribai Phule Jayanti, conduction of Mission Sahasi program, health awareness sessions for women and such awareness programs.

Institute has established Internal Complaint Committee. This committee ensures that, the occurrence of sexual harassment in the workplace, any reference to sexism, gender stereotyping or gender-based discrimination and need for healthy, safe environment for all stakeholders.

Institute also take efforts to bring equity by ensuring that at least one-woman member is included in various policy making committees. Institute is also taking care of participation of female faculty members and girl students in the various implementation committees too.

Parents from rural background generally hesitate to take admission for their girl child for professional education, due to safety and security issues. Institute has built culture to bring equity among the students by taking following efforts:

- College dress code is compulsory for all students and staff.
- Secured girls hostel with 24*7 female wardens.
- Separate committee has constituted named as "Wing Warden". The committee members visit hostel premise randomly.
- Equal opportunities for participation in various events viz. sports, cultural, NSS, extension activities, technical events, social activities, etc.
- Experts are invited to guide our students during various workshops and sessions related to woman safety viz., self-defense, cyber-crime and health & nutrition.
- Posters of "Damini Pathak" and Gramin Police Station, Pandharpur along with helpline number is displayed at all the prominent places in the Campus.

Outcome

- Institute comprises about 40-45% female students and 35-40% female faculty members.
- Female faculty members represent higher positions in the institute like Deans, Head of Department, Section In charges, Heads/members of various committees, etc.
- Female faculty members are also representing various positions in University level committees.

Apart from the above efforts Institute is taking care of safe and secured environment in the campus through the following initiatives:

Safety and security:

Campus Safety Measures and Emergency Handling:

- Institute has provided trained security personnel who are highly committed.
- A laboratory manual has been prepared for each laboratory course to describe Do's and Don'ts to students as well as teachers.
- Wearing a college identity (ID) card is mandatory for all the staff and students.
- CCTV surveillance
- Fire Extinguishers, Fire Hydrants and First-Aid kits
- College vehicle is available in the campus for medical emergency
- For medical assistance, the Doctor is also available in the Institute premises

Anti-Ragging Activities:

- Anti-Ragging Cell conducts awareness programs and drives.
- Undertaking is taken from the old students in the campus at the start of every academic year. This undertaking includes the ill effects of ragging and related acts.
- Anti-ragging posters are displayed at all prominent places.
- Anti-Ragging squad is formed to visit hostel premises randomly.

File Description	Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	<u>View Document</u>
Link for annual gender sensitization action plan	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

Solar energy
 Biogas plant
 Wheeling to the Grid
 Sensor-based energy conservation
 Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

The Institute is committed to creating an eco-friendly campus. The campus is kept clean & tidy with full of greenery. It has taken a number of positive steps to reduce its environmental impact. The Institute ensures a green environment by a team of gardeners and sweepers to care of lawns and planting maintenance.

Solid waste management:

- Solid waste is collected separately as dry and wet waste at the source.
- The dustbins are kept at the earmarked places for an effective collection of solid waste and to maintain a good hygienic environment in the campus.
- Biodegradable wastes are collected and organically treated to convert them into composts, which are used for campus greeneries.
- Non-biodegradable wastes generated in the campus are collected and safely disposed of through Municipal Corporation.
- The recyclable wastes i.e., the examination papers are collected and periodically supplied to the local recycling vendors to avoid wastage dumping.

Liquid waste management:

- Institute has a systematic sewage network throughout.
- Institute has installed Sewage Treatment Plant in the campus. Sewage Treatment Plant includes screening, filtering, sludge settling tank. The treated water is utilized for campus greeneries.
- Chemical wastes are neutralized and disposed of.

E-waste management:

- Institute has a systematic protocol to manage the e-waste.
- At the end of useful life, the computer peripherals are collected from different locations of the campus. In addition, CDs, handsets, batteries, chargers, USB cables, electronics components and

earphones are collected in separate bins as e-waste and disposed of through e-waste collectors.

Waste recycling system:

- Institute has installed Biogas Generation Plant with a capacity of one tone in order to dispose solid waste like canteen food, mess food, green waste, etc.
- Through Biogas Generation Plant, Methane is generated and it is used for the mess. Dry waste is collected regularly and managed accordingly.
- Wastewater is reused for gardening in the institute campus.

Chemicals waste management:

- The Sanitary Landfill method is used for the disposal of the waste chemical.
- The base is prepared of a protective lining, which serves as a barrier between wastes and groundwater and it prevents the separation of toxic chemicals into the water zone.
- Waste layers are subjected to compaction and subsequently coated with an earth layer.
- Soil that is non-porous is preferred to mitigate the vulnerability of accidental leakage of toxic chemicals.

File Description	Document
Any other relevant information	View Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Link for Geotagged photographs of the facilities	View Document

7.1.4 Water conservation facilities available in the Institution:

- **1. Rain water harvesting**
- 2. Borewell /Open well recharge
- **3.** Construction of tanks and bunds
- 4. Waste water recycling
- **5.** Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.5 Green campus initiatives include:

- **1. Restricted entry of automobiles**
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- **5.**landscaping with trees and plants

Response: Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- **3.Environment audit**
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certificates of the awards received	View Document
Link for any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

- **1. Built environment with ramps/lifts for easy access to classrooms.**
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- **5.**Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The institution as "SVERI family" shows immense pleasure and responsibility in the aspect of tolerance and harmony in the fields of culture, linguistic, communal socio-economic and other diversities. With the precise inputs from the Management and Principal, Institute takes initiative within and outside the campus to achieve an inclusive environment for all the students and staff members. Institute always focuses on a peaceful, healthy and comfortable campus for all the students.

Respect and Care are the core values of the Institute. The Institute has a well-established cultural team to maintain harmony among all the cultural, regional and linguistic activities by organizing various events. Our students are on a mission towards a better India by breaking the boundaries of religion and caste. The institute practices a pluralist approach towards all religious functions and encourages the students and employees to showcase the same.

Institute also takes initiative to find out hidden artistic talent amongst the students by organizing a huge Annual Day Celebration known as 'Beats'. Themes with various regional, linguistic, social activities are always part of Beats. Students or groups of students with the best theme and performance get appreciation from the Institute. During Beats, Traditional Day is also celebrated in which students are in various costumes of different traditions in India to give the message of 'Unity in Diversity.

Institute publishes Annual Magazine entitled as 'Explorer' wherein one section is exclusively devoted for literature in different languages other than Hindi & English. It is to promote the students from other states with their mother tongues other than Marathi to explore their talent.

Institute celebrates the birth ceremonies of all the leaders and iconic persons. Institute celebrates Birth Anniversaries of Great King Chhatrapati Shivaji Maharaj, Dr. Ambedkar, Mahatma Gandhiji, Sardar Vallabhbhai Patel, Lalabahadur Shastri, and Dr, APJ Abdul Kalam.

Pandharpur is a well-known pilgrimage of South India. On the occasion of Ashadhi Wari in Pandharpur, Institute participates and contributes to 'Nirmal Wari Nisarg Wari

File Description		Document	
Link for any other relevant information	V	iew Document	
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	V	iew Document	

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

The Institution organizes various activities for sensitization of the students and employees for inculcating values, rights, duties and responsibilities for being responsible citizens of India.

Rashtriya Ekta Diwas, also known as National Unity Day is celebrated in the institute on 31st October earmarking the birth anniversary of Sardar Vallabhbhai Patel, who worked hard in keeping India united. Institute celebrates the birth anniversary of Dr. B. R. Ambedkar to recollect the contributions made by him, father of our Indian constitution. Institute celebrates the birth anniversary of great Indian king Chatrapati Shivaji Maharaj, to recollect his scarification & dedication towards our nation. Institute also celebrates the birth anniversary of great leaders like Savitribai Phule, Mahatma Gandhi, Lal Bahadur Shastri and Dr. A. P. J. Abdul Kalam to make the students aware of their contribution to shaping the country. Eminent speakers are invited to speak on these occasions.

Institute celebrates Lokshahi Pandharavdha, Voter's Day, MOCK Parliament to create awareness among students about different human rights and responsibilities of Indian citizen and national integration to protect fundamental rights, which will create an opportunity to live together in peace and prosperity. The constitutional values that are reflected in the entire Constitution of India, its preamble, which embodies the fundamental values and the philosophy on which the Constitution is based are sovereignty, socialism, secularism, democracy, republic character, justice, liberty, equality, fraternity, human dignity, unity and integrity of the Nation are discussed and spoken during the constitution day celebrations at the Institution.

Institute organizes "Swacchata Hich Seva" to create awareness about cleanliness in and around the Campus. Institute organizes "Nirmal Wari Abhiyan" to maintain the cleanliness and hygiene around the Pandharpur, as a huge number of devotees visit this holy place every year.

In addition, the institute also organizes blood donation camps to encourage students to contribute to public health. Institute celebrates Independence Day and Republic Day, every year. These events begin with the hoisting of the national flag by the Principal, Staff members and Students. On this day, essay writing competitions about freedom fighters are organized for the students.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- **3.** Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

Institute celebrates National and International commemorative days, events and festivals with a view to promoting patriotism, concern for the community, human values, inclusiveness and a spirit of camaraderie. Our students are on a mission towards a better India by breaking the boundaries of religion and caste. Celebrations on commemorative days such as Dr. B. R. Ambedkar Jayanthi, Independence Day, Republic Day, Marathi Bhasha Divas, Sadbhavana Diwas, Rashtriya Ekta Diwas etc. are being observed to nurture the spirit of nationalism, oneness, national integration, respect for diversity. In addition to this, these programs/festivals help in the holistic development of our students. Thoughts of great Indian personalities are sowed into the young minds through the various exhibitions and programs organized on these days.

Raksha Bandhan is a popular, traditionally Hindu annual rite, or ceremony. Institute celebrates it in a different way by helping society.

Institute celebrates Teachers' Day on 5th September every year. Special appreciation awards with cash

prizes are given to the teachers for their academic achievements and research contributions.

Institute celebrates Engineers' Day on 15th September every year as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya. On this occasion, the national-level technical symposium 'Olympus' is organized for the students to showcase their talents.

Gandhi Jayanti and Lalbahadur Shastri Jayanti are celebrated on the 2nd October of every year to remember their sacrifice towards the nation.

For empowering women, Institute celebrates the birth anniversary of Savitribai Phule every year on 3rd January. Special guidance sessions are arranged for girls about their rights, health awareness etc.

Shiv Jayanti is celebrated on 19th February every year. On this day, Institute organizes blood donation camps & various exhibitions for showcasing students' artistic talents.

On 8th March Every year, International Women's Day is celebrated for women's achievements in the social, economic, cultural, and political spheres. Prizes of around 25 Lakhs are distributed to the meritorious students.

Holi, the festival of colors is also celebrated in the premises of hostels.

Yoga is an invaluable gift of India's ancient tradition. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature; a holistic approach to health and wellbeing. International Yoga Day is celebrated on 21st June, every year.

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for any other relevant information	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Best Practice-1

1. Title of the Practice

Implementation of Continuous Quality Improvement (CQI) for Various Activities of the Institute

2. Objectives of the Practice

- To implement a protocol for continuous quality improvement of various activities of the Institute viz., Academic, Research & Development, Financial Management, Administrative, Training & Placement, Individual Growth Plan and Departmental Growth plan.
- To inculcate the culture of CQI amongst various stakeholders of the Institute.
- To take a periodic review of CQI during various meetings of the institute: Supporting Documents from the BOG, Academic Advisory Council and Research Advisory Committee.

3. The Context

As per the philosophy of management, the CQI is useful in reducing waste, increasing efficiency, increasing the satisfaction level of internal (meaning, employees) and external (meaning, students and parents) satisfaction. It is an ongoing process used for evaluating the working process of an organization and improving the processes based on feedback. The implementation of CQI methodologies comes in the form of a method called Plan, Do, Check, and Act, or PDCA. PDCA steps are utilized on a loop, repeatedly, ever hoping to make its process better.

In order to ensure excellence in performance with respect to various sectors viz., Academics, R&D, Finance, Administration and Individual & Departmental Growth Plan, well-defined policies are needed. By keeping this objective in mind, our Institute has set well-defined mechanisms to have proper implementation.

4. The Practice

The CQI methodology is implemented in various activities of the institute and the responsibility of implementation is assigned to the respective administrative head of the activity. The sector-wise implementation of CQI processes is given below:

Academics

Plan: Before the start of the semester, each course instructor sets Course Outcome (CO) targets. Based on the CO targets and CO-PO linking, HoDs set the targets for the Program outcomes (PO).

Do: Course instructors teach the course based on the COs and perform the internal evaluations using the tools viz. Unit tests, In-Semester Exams, Lab Tests, Open book tests and Take-home tests. Each of these tools is linked with CO and the questions are based on Bloom's Levels and Performance Indicators. After each tool evaluation, CO attainment is calculated.

Check: Course Instructors, Class Coordinators and HoDs review the CO attainments after each of the tools with respect to the set targets.

Act: Periodically actions are taken for improvement on CO targets. This involves improvement in teaching approach, taking additional practice, individual counseling of students for improving the performance, etc.

Research & Development

Plan: At the start of the semester based on the strength of the department, department targets are set as per the key performance indicators such as Research Publications (SCI, Scopus/Web of Science/Conference), Funding Proposals, Consultancy, Patents, STTP/ FDP, Product Development, Books, etc.

Do: With respect to the set targets, faculty members are encouraged and supported to attain the R& D related targets of the Department.

Check: HoDs take monthly reviews in the departmental meetings and quarterly review is taken in the statutory body meetings viz., IQAC, CDC, AAC/RAC, and BOG meetings.

Act: HoDs do the micromanagement for attaining the targets with the help of Dean R & D and Institute helps in suggesting on improving the targets in the quarterly meetings.

Financial Management

Plan: In the month of February, the budget is prepared with the bottom to top approach based on the suggestions from the individual faculty members, HoDs, Deans and Section In-charges. In the preparation of the budget, the financial requirements of the individual, department and Institutional growth plans are also considered. The letters are issued to the department about the sanction of the budget, which becomes the financial plan of the respective department/section.

Do: Institute Budget Coordinator takes monthly reviews from the departmental budget coordinators about the utilization of the budgets and Quarterly review is taken in the IQAC, CDC, and BOG meetings.

Check: The month-wise utilization of the sanctioned budget is collected from the departmental budget coordinators and section in-charges to monitor the utilization.

Act: In case of underutilization of the sanctioned budget, the institute budget coordinator advises the departmental budget coordinators to utilize the sanctioned budget.

Training & Placement

Plan: The database of the students in respect of eligible, not eligible, interested, not interested, and interested for higher studies is prepared. Accordingly, a plan related to the training programs and orientation sessions/programs is prepared.

Do: The plan is executed as per the well-defined schedule. The activities viz., Group Discussion, Demo &Mock Interviews and Demo Tests are conducted to evaluate students.

Check: The feedbacks from the Industry persons are taken into consideration in order to receive suggestions for students' development. The students are also assessed through performance in tests, campus drives, and interviews.

Act: Individual counseling is done by the Training and Placement Officer. Special sessions from the industry persons are conducted to improve upon the students' overall performance with respect to the industry needs.

Individual Growth Plan

Plan: At the start of every semester, individual growth plans containing targets with respect to academics, societal and research activities (journal papers/conference papers/book/patents), and STTP/Workshops are collected from faculty members.

Do: The faculty members are motivated for societal activities, upgrading qualifications, attending conferences, filing patents, etc., by providing financial assistance.

Check: The review of individual growth plans is taken during the departmental meeting to track the status of the targets.

Act: Faculty members are appreciated for achieving targets during the departmental meeting.

Departmental Growth Plan

Plan: Growth plans in respect of R & D activities, consultancy, orientation courses, training and FDPs are collected every academic year, from the departments.

Do: In accordance with the Growth plans, targets are assigned to a particular faculty or a group as applicable, for its attainment.

Check: These growth plans are reviewed at the department level, during departmental meetings and tracked during the general meetings of all staff.

Act: After reviewing the growth plans and progress related to it, the progress is appreciated.

Administration

Plan: In order to conduct all activities under various portfolios smoothly, committees consisting of faculty representatives are constituted at the start of each semester.

Do: Committees work as per the guidelines/policies of their respective portfolios.

Check: Dean Administration reviews committee reports about activities for each semester.

Act: After reviewing the reports, Dean Administration instructs certain coordinators, in the case of lacunas.

For the smooth implementation of the CQI, periodic training of the processes is given to the respective stakeholders. At the start of the semester, a Faculty Orientation Program of two days is conducted where these processes are explained. In addition, at the department level, micro-level training is given by the HoDs to faculty members. The HoDs also give orientation lectures to all the departmental students about the CQI process implemented in the department and its importance.

5. Evidence of Success

On the academic front, Institute has an excellent performance in University Results. Faculty members have published papers in reputed SCI/Scopus indexed journals and performance is incremental. Due to the proper financial management, the budget utilization is improved and underutilization of the sanctioned budget is reduced. Faculty members have upgraded their qualifications. Institute has good placement

records. Departmental growth plans help in setting the targets and achieving them. As targets are assigned, faculty members/groups are motivated and have healthy competition amongst them. Because of the periodic review of the activities of sections under various portfolios, smooth implementation is ensured.

6. Problems Encountered and Resources Required

Problems Encountered: At present the Academic, Financial and up to some extent, Administrative and Individual CQI processes are implemented through computerized processes.

Resources Required: Computerized process to maintain track and review CQI processes.

7. Notes

The computerized implementation of CQI in academics is in practice.

Best Practice-2

1. Title of the Practice

Holistic Approach to Support Students from the Rural Background

2. Objectives of the Practice

- To implement a holistic approach for development of the students coming from rural backgrounds.
- To train the respective coordinators for the implementation of various aspects of a holistic approach.
- To perform periodic reviews about implementation and improvement of the processes in the holistic development of students.

3. The Context

Being an institute located in a rural areas, our role is to build a society free from discrimination and deprivation by providing holistic support to students from rural backgrounds. In order to nurture youth with skills, institute provides holistic support to the students through 'Earn and Learn' scheme, Merit Scholarships and nurture their physical and mental health through Pranayama and counseling. In addition to this, institute helps them in raising academic performance through additional classes, making them employable motivating for entrepreneurship through Entrepreneurship Development Programs and bringing awareness about societal aspects through Pilgrimage Management, Unnat Bharat Abhiyan (UBA) and Unnat Maharashtra Abhiyan (UMA), Gram Visit Program, Swachh Bharat Program, Green Team, Mock Parliament, etc.

4. The Practice

Apart from the focus on the implementation of curriculum, the institute has devised an approach of holistic development of students by supporting them on various fronts viz. Financial, Stress Management, Academics, Societal Connect, Entrepreneurship etc. A brief write-up about various activities related to

these aspects has been given below:

Financial Support

- Earn and Learn: To support students from underprivileged sections of society, the institute has Earn and Learn Scheme. Institute has a provision of Rs. 35 Lakhs for helping needy, brilliant, and talented students.
- Merit Prizes: To motivate students, the Institute gives Merit Scholarships and Prizes of about Rs. 15 Lacks to meritorious students.
- Financial Encouragement: Institute provides financial assistance to the students for industrial visits, projects, R& D related work, product development, etc.

Stress Management

To promote relaxation as well as mindfulness and for enhancing the cognitive performance of the students, Institute conducts a Pranayama Session of 30 minutes every working day, regularly and organizes International Yoga Day on 21st June, every year.

Academics

- Slow and advanced learners: The slow learners and advanced learners are identified based on their performance in ISE examinations. Accordingly, additional classes are conducted to improve the performance of the slow learners. Backlog classes are also conducted for the students with backlog subjects. Whereas, for advanced learners, sessions on internship, publishing research at the national/international level, sponsored projects, etc. are conducted.
- Advanced Technical Training: Right from the second year and onwards, the training programs based on Industry requirements are arranged to enhance students' skills other than the regular curriculum. Advanced Technical Training is conducted for the domain-specific core subjects for the students. In addition to this, training programs such as Training of English and Soft Skills, C-Language, JAVA Language, C & C++, etc. are conducted to enhance students' knowledge.

Social Connect

Under this program, students work with faculty members to participate in societal activities related to government projects like Rural Water Supply Schemes, Water Conservation Projects, etc. Students visit one of the villages in the region, carry out surveys and bring awareness to gram panchayat about the planning of water conservation. Swachh Bharat Abhiyan is also carried out.

Entrepreneurship

Entrepreneurship awareness camps of three days through District Industries Centre (DIC) Solapur for students of third year are conducted. During the camp, they are made aware of various schemes under District Industries Centre (DIC) through sessions delivered by DIC experts.

5. Evidence of Success

Financial Support

- Earn and Learn: Institute spends Rs. 35 Lakh (60 Lakh) for the students under this scheme every year. Around 200 students take benefit from this scheme.
- Merit Prizes: Institute distributes Rs. 15 Lakh for the promising students.
- **Financial Encouragement:** For encouraging the students of the final year, Institute provides an amount of Rs. 1000/- per student. The institute gives the best project award every year.

Stress Management

The creativity and productivity of our students are increased and their academics is improved.

Academics

Because of more focused teaching with respect to slow learners through Remedial classes, Institute has the highest results in the University examinations. For instance, in the University Examination conducted in Dec.2019-2020, 100% of students of F.Y. B. Tech. are 'clear pass'. Out of 356 students, 34 students have 10/10 CGPA and 337 students have distinction.

Social Connect

Around 300 students participate in Blood Donation Camp for donating blood every year.

Entrepreneurship

The Institute has spent the amount of around Rs. 1, 77,000/-during A.Y. 2019-2020.

6. Problems Encountered and Resources Required

Financial Support

• Earn and Learn:

Problems Encountered: The process of selection of the students is quite difficult as the number of applicants for the scheme is more and incremental. Sometimes students are not able to give justice to their assigned work due to their study.

- **Required:** Financial provision in Institute budget
- Merit Prizes:

Problems Encountered: Sometimes two or more students have equal CGPA scores. As a result, prize money needs to be divided among the students.

Resources Required: Financial provision in institute budget

• Financial Encouragement

Problems Encountered: Though encouragement is given in the form of financial support to the projects, very few projects are converted into products.

Resources Required: Financial provision in institute budget

Stress Management

Problems Encountered: Initially, Institute faces resistance in the proper implementation of the Pranayama. Later through counseling of the students by creating awareness about the benefits of the Pranayama, the problem was solved.

Resources Required: Awareness sessions/programs on stress management

Academics

Problems Encountered: The initial problem faced was with respect to convincing some slow learners about additional classes to improve their academic performance. This problem was addressed by counseling the students.

Resources Required: Additional teachers for engaging additional classes

Social Connect

Problems Encountered: The problem faced by UBA and UMA is related to less response from villagers and non-availability of villagers during the daytime.

Resources Required: UBA and UMA Workshops to create awareness amongst the students about these missions.

Entrepreneurship

Problems Encountered: Few students are not willing to register for the session due to financial issues. Initially, more efforts are required to be taken to create awareness about the Entrepreneurship Development Programs and its advantages to become a good entrepreneur/self-employed.

Resources Required: Quality resource persons from the Industry and DIC to motivate the students

7. Notes

Institutes in this region have started adopting our processes to learn the implementation of these processes. Accordingly, three institutes namely, Don Bosco Institute of Technology, Kurla, Mumbai; Padmabhushan Vasantraodada Patil Institute of Technology, Sangli (Budhgaon), and Dr. J. J. Magdum College of Engineering, Jaysingpur has visited SVERI Campus to see various activities related to administration, academics, training, and placements, etc. Dr. Sanjeev Kumar, Head, National Centre of Compositional Characterization of Materials (NCCCM), Hyderabad has also visited our Institute to see RHRDF.

File Description	Document
Link for Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Societal Connect Through Technology

SVERI's College of Engineering, Pandharpur is committed to social welfare and understands its responsibility towards the development of society. The institute is located in the vicinity of rural areas and it strives to improve the socio-economic condition of the region. Looking towards these aspects, the institute has built societal connect through various societal activities as follows:

1. Rural Human and Resource Development Facility (RHRDF)

The Institute strives to create a growing sense of responsibility to solve society's challenges, especially through technology. As a step towards this, the Institute has DAE-Out Reach Centre (DAE-ORC) called Rural Human & Resource Development Facility which has been established for societal applications. Efforts are made to deploy the know-how technologies available with BARC in the form of products through rural entrepreneurs. There is good knowledge connectivity and a database development facility to equip the rural people with the required knowledge.

CILLAGE

The concept of CILLAGE has evolved intending to promote an up-to-date knowledge paradigm for capacity building and technology-enabled economic growth in rural areas. The concept of CILLAGE is a knowledge-based ecosystem for integrated education, research, technology development and deployment, and capacity building in rural areas. CILLAGE activities also include a comprehensive engagement with people in the neighborhood for demonstration and deployment of relevant technologies through several Advanced Knowledge-based Rural Technology Initiative (AKRUTI) centers located in the neighborhood. CILLAGE has become a Centre of innovation in rural areas to solve the problems of the region and disseminate the developed technologies in the region through AKRUTI centers.

Exhibition of Technology Developed by BARC and SVERI

Ashadhi-Wari is one of the main festivals during which around 7-10 lakh devotees (Pilgrims) visit Pandharpur. To make use of this opportunity and to bring awareness about various activities of societal project, a stall is installed every year at Gopalpur.

ICT Enabled School Education

In addition to this, institute strives to bridge the gap between urban and rural areas by strengthening and empowering the villages through education & ICT by linking them with RHRDF at SVERI campus. Institute has well-established connectivity with rural schools through NKN Centre by making the learning resources at NKN Centre and to conduct the programs for schools through this connectivity. Institute provides ICT-Enabled School Education in the villages that are around 15-20 km from NKN node.

Institute has installed an Audio-Visual Facility for schools in rural areas through RHRDF. This has helped in giving advanced exposure to students in rural schools for getting access to online content.

2. Gram Visit Program

Under the extension activity, students visit villages to implement village related projects like Water Supply System Design, Sewerage System Design, Water Conservation Projects, etc.

Unnat Maharashtra and Unnat Bharat Abhiyan

Under the guidance of the experts from the UBA and UNA, the Civil Engineering department organizes various societal activities of government projects like Rural Water Supply Schemes, Water Conservation Projects, etc.

Water Conservation Activities

Institute organizes the activity of creating awareness about water conservation whereby students of the Civil Engineering Department visit one of the villages in the region and carry out a survey.

Holistic Management of Temple Catering to Floating Population

Institute organizes the activity of Holistic Management of Temple. During this activity, students and staff work under the guidance of experts for managing the facilities at temples.

Technical Consultancy Support

Institute does Structural Audit of buildings of Zilla Parishad Schools as per the requirement and helps the government in ensuring the safety of students and teachers. Institute does Third Party audits of various projects of the Nagar-Parishad. Institute also helps Gram Panchayat of different villages in establishing the Waste Water Treatment Plant by providing Detailed Project Report (DPR). Institute provides a material testing facility for testing materials under Zilla Parishad (ZP), Public Works Department (PWD), and Maharashtra Jivan Pradhikaran (MJP) projects.

3. Encouragement to Rural Students

Institute organizes following activities to encourage rural students for technical education.

Kimaya Abhiyantriki Tantradnyanachi (KAT)

This is one of the activities that are held at the institute. It is called 'Kimaya Abhiyantriki Tantradnyanachi' (Wonders of Engineering Technology). Under this activity, exhibitions of technical projects are arranged at each department and the students from various junior colleges are brought to visit the campus/departments. Through such activity, students get to know about different trends in Science and Technology as well as different branches of engineering.

Science Orientation Programme

This activity is arranged for the Principals and faculty members of different junior colleges. Under this

program, the Principals of various junior colleges and the faculty members are brought together to have detailed discussions/ guidance about the recent trends in science and technology.

Technical Education Exposure Sessions

To make the students aware of different aspects of Science and Technology, Technical Education Exposure Sessions are arranged at various junior colleges. Through such sessions, students are informed about different career opportunities for them after 12th Science as well as after Diploma in Engineering. For such sessions, expert faculty members from all departments visit various junior colleges in the vicinity.

Agro Challenge

As advised by Padmavibhushan Dr. Anil Kakodkar, a competition for the development of agricultural devices was organized in 2017, 2018, and 2019. This event has generated the quest amongst Engineering Students to develop something useful for the last man in society.

4. Techno-Societal Activities

Techno-Societal Conference

Institute also organizes the International Conference every alternate year to have collaborative research and product development to explore the use of advanced technology in the service of rural India wherein, the International community is being involved to exchange ideas for societal problems through technology.

File Description	Document
Link for appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information :

Memorandum of Understanding:

The institute has MoUs with more than 30 reputed research organizations/institutes/industries including Bhabha Atomic Research Centre (BARC), Mumbai; Sobus Insight Forum, Bangalore; Infosys, Bangalore; Atlas Copco (India), Pune; etc.

Societal Connect:

Institute has established Rural Human Resource Development Facility (RHRDF) in collaboration with BARC, Mumbai and Rajiv Gandhi Science and Technology Centre (RGSTC), Government of Maharashtra. This is the first Institute in the state to establish such facility. Institute is also connected to schools around 15-20 kms in rural areas of the Pandharpur through National Knowledge Network (NKN) connectivity.

Accreditation and Certification:

NBA Accreditation:

Institute has been accredited by NBA three times and accreditation has extended upto 30/06/2023.

NAAC Accreditation:

Institute has been accredited by NAAC also. Currently, Institute has applied for 2nd Cycle of NAAC Accreditation.

TCS Accreditation:

College has been accredited by TCS in 2010.

IEI Accreditation and Membership:

College has also been accredited by IEI, Kolkata in 2009. Institute has also got life institutional membership of IEI, Kolkata in 2018.

ISO Certification:

Currently, the college has ISO 9001:2015 certification.

Research & Development and Consultancy:

The institute has received Rs. 6.92 Crore as grant from Governmental & Non-governmental funding agencies during last five years.

College has three recognized Ph.D. Research Centers of P.A.H. S. U. Solapur. Currently, around 15 research

scholars are pursuing Ph.D. degree at our research centers.

Institute has more than 300 research publications in peer reviewed journals and filed 12 patents in last five years.

Institute's Eco System:

Institute ensures pollution free environment by maintaining greenery in entire campus.

As a step towards the eco-social aspects, Institute ensures use of renewable energy sources by generating required electricity using 400 KW Roof Top Solar Power Plant installed with an investment of Rs.2.45 Crore.

LED tube lights and bulbs have been used in the campus to reduce the power consumption.

Institute ensures uninterrupted electricity through 11 KV Express Feeder and standby power backup facility of 320 KVA.

In house RO plants are in place to provide the purified drinking water in the Campus.

Institute strives to maintain plastic free campus.

Concluding Remarks :

Institute has all statutory committees such as Board of Governance (BOG), College Development Committee, Research Advisory Committee (RAC) / Academic Advisory Council (AAC), Finance Committee, Purchase Committee, etc., and various institute level committees to take care of policy decisions in respect of the academic and other administrative activities and to implement the same. Institute has well defined perspective plan in line with its vision and mission.

IQAC plays a significant role in sustaining and enhancing the quality on all fronts. The employees are governed by the service rules and code of conduct of the institute. The institute emphasizes on the Outcome-Based Education (OBE) as per the AICTE's Examination Reform Policy.

Teachers have been using ICT tools for the delivery of the course and teaching by following the Bloom's Taxonomy. The preparation of question papers is also done on the basis of Bloom's Taxonomy and Course Outcomes. The internal and external tools have been used to calculate CO and PO attainment.

R&D cell encourages faculty for enhancing number of research publications in reputed journals, product development, project proposals and patents. Institute encourages faculty to participate in Workshops, STTPs, FDPs and Conferences. The institute has established Institute Innovation Cell (IIC) to convert the innovative ideas of the students into products. Institute encourages students to participate in national and international conferences.

The institute has indigenous Pandharpur Pattern in Professional Education (PPPE) and the Proctor System to take care of the academics and overall development of the students. Training & Placement Cell provides necessary training to the students and facilitates in procuring placements.



6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification						
1.1.3	Teachers of the Institution participate in following activities related to curriculum						
	development and assessment of the affiliating University and/are represented on the following						
	academic bodies during the last five years						
	1. Academic council/BoS of Affiliating university						
	2	. Setting of	question p	apers for C	JG/PG pro	grams For Add on/	aartifiaata/Dinlama Courses
			nt /evaluati	inent of Ct	of the affil	liating Univ	versity
		. 11550551110	nt / c / andati	ion process	or the arm	liuting on t	crony
		Answer bef	fore DVV V	erification	: A. All of t	he above	
		Answer Aft	ter DVV Ve	rification: I	B. Any 3 of	the above	
	Re	mark : Obse	ervation acc	epted			
1.0.0							
1.2.3	Avera	ige percent	age of stud	ents enroll(the lest five	ed in Certil	licate/ Add	on programs as against the total
	nunno	er of stude	ins uur ing	the last no	e years		
	1.2	.3.1. Numb	er of stude	nts enrolle	d in subjec	t related Co	ertificate or Add-on programs year
	wise d	luring last	five years				
		Answer bef	fore DVV V	erification:			
		2019-20	2018-19	2017-18	2016-17	2015-16	
		828	1214	1130	726	880	
	Answer After DVV Verification :						
		2019-20	2018-19	2017-18	2016-17	2015-16	
		828	1285	1130	726	880	
2.1.2	Avera	ige percent	age of seats	filled agai	nst reserve	ed categorie	es (SC, ST, OBC, Divyangjan, etc.
	as per	applicable	e reservatio	n policy) c	luring the	last five yea	ars (exclusive of supernumerary
	seats)						
	2.1	2.1 Numb	er of actual	students ad	mitted from	the reserve	d categories year-wise during the last
	five years						
	Answer before DVV Verification:						
		2019-20	2018-19	2017-18	2016-17	2015-16	
		384	327	284	290	271	
		Answer Aft	ter DVV Ve	rification :	1	,	1
		2019-20	2018-19	2017-18	2016-17	2015-16	
		171	187	178	181	156	

	Remark : Observation accepted					
3.1.1	Grants received f endowments, Cha	rom Gove airs in the	ernment an institution	d non-gove during the	ernmental a last five ye	igencies for research projects, ears (INR in Lakhs)
	3.1.1.1. Total (projects, endown Answer befo	G rants fro nents, Ch a ore DVV V	m Govern airs in the i	nent and n nstitution o	on-governi luring the]	nental agencies for research last five years (INR in Lakhs)
	2019-20	2018-19	2017-18	2016-17	2015-16	
	156	2.6	54.64	2	476.86	
	Answer Afte	er DVV V	erification :			
	2019-20	2018-19	2017-18	2016-17	2015-16	
	156.7	2.6	54.64	2	476.86	
222	Number of works	hong/gom	inong gondi	usted on D	agaanah Ma	thedelegy Intellectual Droparty
3.2.2	Rights (IPR) and	entreprer	nars condu neurship du	iring the la	st five year	'thodology, intellectual Property
	3.2.2.1. Total r	number of	workshops	s/seminars	conducted	on Research Methodology,
	Intellectual Prope Answer befo	erty Right ore DVV V	s (IPR) and /erification:	l entreprer	eurship ye	ar-wise during last five years
	2019-20	2018-19	2017-18	2016-17	2015-16	
	19	10	13	10	13	
	Answer Afte	er DVV V	erification ·			•
	2019-20	2018-19	2017-18	2016-17	2015-16]
	19	10	14	10	13	-
	Remark : Input	edited as j	per data pro	vided by H	EI	1
3.3.1	Number of Ph.Ds	registere	d per eligib	le teacher	during the	last five years
	3.3.1.1. How many Ph.Ds registered per eligible teacher within last five years Answer before DVV Verification : 14					
	Answer afte 3.3.1.2. Numb	er DVV Ve er of teac	rification: 1 hers recogn	ized as gui	des during	the last five years
3.3.3	Answer before Number of books	ore DVV V and chap	Verification ters in edit	:4 ed volumes	s/books put	olished and papers published in
	national/ internat	tional con	ference pro	ceedings p	er teacher	during last five years
	3.3.3.1. Total r in national/ inter	number of national c	books and onference p	chapters in proceedings	n edited vo s year-wise	lumes/books published and papers during last five years

Answer befo	ore DVV	Verification:
-------------	---------	---------------

2019-20	2018-19	2017-18	2016-17	2015-16
123	76	7	58	10

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
103	74	7	57	9

Remark : Input edited as per data provided by HEI

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
10	6	4	3	3

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Observation accepted

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

3.4.3.1. Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
14	12	7	6	8

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16							
8	8	5	4	4							
	Average perce five years	entage of stud	lents partio	cipating in	extension a	tivities at 3.4.3. above dur	ing last				
-------	---	---	---	---	--	--	--------------------	--	--	--	--
	3.4.4.1. Total number of Students participating in extension activities conducted in										
	collaboration Bharat. AIDs	with industry awareness. (y, commun Fender issu	ity and Noi e etc. vear-	1- Governm wise during	ent Organizations such as last five years	Swachł				
	Answer	before DVV	Verification	:							
	2019-2) 2018-19	2017-18	2016-17	2015-16						
	1957	1929	1650	1250	1610						
	Answer	After DVV V	erification :								
	2019-2) 2018-19	2017-18	2016-17	2015-16						
	1911	1160	1000	600	940						
	Remark : O	bservation ac	cented _								
	4.1.3.1. Nu	nber of classr	rooms and s	eminar halls	s with ICT f	ıcilities					
4.1.4	4.1.3.1. Nu Answer Answer	mber of classr before DVV V after DVV Ve	rooms and s Verification erification: 3	eminar halls : 35 3 xcluding sa	s with ICT f	cilities	during				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years	nber of classr before DVV V after DVV Ve entage of exp (INR in Lakh	rooms and s Verification erification: 3 enditure, enditure, enditu	eminar halls : 35 3 xcluding sa	s with ICT f	cilities	during				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exp	mber of classr before DVV V after DVV Ve entage of exp (INR in Lakk benditure for	rooms and s Verification erification: (enditure, enditure, enditu	eminar halls : 35 xcluding sa	with ICT f ary for inf	cilities castructure augmentation of luding salary year-wise du	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exp five years (IN Answer	nber of classr before DVV Ve after DVV Ve entage of exp (INR in Lakh benditure for R in lakhs) before DVV V	verification: 3 enditure, enditure,	eminar halls : 35 xcluding sa ture augme	with ICT f	cilities castructure augmentation of luding salary year-wise du	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exj five years (IN Answer 2019-20	nber of classr before DVV Ve after DVV Ve entage of exp (INR in Lakh benditure for R in lakhs) before DVV V) 2018-19	verification enditure, enditure, end	<pre>a academic eminar halls : 35 a xcluding sa ture augmo : 2016-17</pre>	with ICT f any for inf entation, exe 2015-16	rastructure augmentation of the salary year-wise du	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exj five years (IN Answer 2019-24 181.74	nber of classr before DVV Ve after DVV Ve entage of exp (INR in Lakh benditure for R in lakhs) before DVV V) 2018-19 94.17	verification: 3 enditure, enditure,	<pre>a academic eminar halls : 35 a xcluding sa ture augme : 2016-17 213.91</pre>	<pre>swith ICT f lary for inf entation, ex 2015-16 130.79</pre>	rastructure augmentation of the salary year-wise du	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exp five years (IN Answer 2019-20 181.74 Answer	nber of classr before DVV Ve after DVV Ve entage of exp (INR in Lakh benditure for R in lakhs) before DVV V) 2018-19 94.17	cooms and s Verification erification: 3 enditure, e s) infrastruc Verification 2017-18 95.30	<pre>a academic eminar halls : 35 a xcluding sa ture augmo : 2016-17 213.91</pre>	with ICT f s with ICT f lary for inf entation, ex 2015-16 130.79	rastructure augmentation of the second secon	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exj five years (IN Answer 2019-2 181.74 Answer 2019-2	nber of classr before DVV V after DVV Ve entage of exp (INR in Lakh penditure for R in lakhs) before DVV V) 2018-19 94.17 After DVV V) 2018-19	verification: 3 enditure, enditure,	a actuation eminar halls : 35 xcluding sa ture augme : 2016-17 213.91	year) s with ICT f lary for inf entation, ex 2015-16 130.79	rastructure augmentation of the salary year-wise du	during 1ring la				
4.1.4	4.1.3.1. Nur Answer Answer Average perce last five years 4.1.4.1. Exp five years (IN Answer 2019-2 181.74 Answer 2019-2 184.5	nber of classr before DVV V after DVV Ve mtage of exp (INR in Lakh penditure for R in lakhs) before DVV V) 2018-19 94.17 After DVV V) 2018-19 97.00	coms and s Verification erification: 3 enditure, enditure, enditure, enditure, enditure, enditure, enditure, endited infrastruc Verification 2017-18 95.30 erification : 2017-18 97.95	a actuatemic eminar halls : 35 a xcluding sa ture augme : 2016-17 213.91 2016-17 218.25	year) s with ICT f lary for inf entation, ex 2015-16 130.79 2015-16 132.75	rastructure augmentation of the salary year-wise du	during 1ring la				

4.2.3.1. Annual expenditure of purchase of books/e-books and subscription to journals/ejournals year wise during last five years (INR in Lakhs)

		Answer be	fore DVV V	erification:	1	'n	
		2019-20	2018-19	2017-18	2016-17	2015-16	
		22.69	27.53	23.21	25.50	29.54	
		Answer Af	ter DVV Ve	erification :			
		2019-20	2018-19	2017-18	2016-17	2015-16	
		28.29	33.91	48.69	25.50	67.68	
	Re	emark : Inpu	t edited as I	per data pro	vided by Hl	EI	
4.4.1	Avera acade Lakh 4.2 acade (INR	age percent emic suppo (s) 4.1.1. Exper emic suppo in lakhs)	age of expe rt facilities) nditure incu rt facilities)	enditure ind excluding urred on m excluding	curred on r salary com aintenance salary com	naintenanc ponent dur of infrastr ponent yea	e of infrastructure (physical and ring the last five years(INR in ucture (physical facilities and ar-wise during the last five years
		Answer be	fore DVV V	erification:			
		2019-20	2018-19	2017-18	2016-17	2015-16	
		439.14	401.77	394.29	372.23	337.21	
		Answer Af	ter DVV Ve	erification :			
		2019-20	2018-19	2017-18	2016-17	2015-16	
		439.14	401.77	394.29	373.71	337.21	
	Re	emark : Inpu	it edited as j	per data pro	vided by Hl	EI	
5.3.3	Aver: partie	age number cipated dur	r of sports a ing last five	and cultura e years (org	al events/co ganised by	mpetitions the institut	in which students of the Institution on/other institutions)
	5.3 Instit	3.3.1. Numb aution parti	oer of sport cipated yea	s and cultu r-wise dur	ral events/ ing last five	competition e years	is in which students of the
		Answer be	fore DVV V	verification:		-	
		2019-20	2018-19	2017-18	2016-17	2015-16	
		16	29	18	20	19	
		Answer Af	ter DVV Ve	erification :			
		2019-20	2018-19	2017-18	2016-17	2015-16	

Self Study Report of SVERI'S COLLEGE OF ENGINEERING

		6	29	19	22	17	
6.3.2	Average confere years	e percenta nces/worl	age of teacl kshop s and	hers provid towards n	led with fin 1embership	ancial sup) fee of pro	port to attend fessional bodies during the last five
	6.3.2 conferent the last	.1. Numb nces/worl five years nswer bef	er of teach kshops and s ore DVV V	ers provide towards n erification:	ed with fina 1embership	ancial supp o fee of prof	ort to attend fessional bodies year wise during
	2	2019-20	2018-19	2017-18	2016-17	2015-16	
	1	07	25	23	124	18	
	A	nswer Aft	er DVV Ve	erification :			1
	2	2019-20	2018-19	2017-18	2016-17	2015-16	
	1	07	25	23	124	17	
6.3.3	Average the insti 6.3.3 organiz years A 2 2	e number itution for .1. Total n ed by the nswer bef 2019-20 26	of profession r teaching a number of institution fore DVV V 2018-19 23	ional devel and non tea profession for teachin erification: 2017-18 14	opment /ad aching staf al developm ng and non 2016-17 22	Iministrativ f during the nent /admin teaching st 2015-16 22	ve training programs organized by e last five years nistrative training Programmes taff year-wise during the last five
	A	nswer Aft	er DVV Ve	rification :	2016-17	2015-16	20-63-00-63-02-63-63-00-63-00-63-0
		22	24	14	22	2013 10	
6.3.4	Average Program Orienta 6.3.4 Orienta the last A:	e percenta mmes (FD ation / Ind .1. Total a ation / Ind five years nswer bef 2019-20	age of teach DP)during (luction Pro number of luction Pro s fore DVV V 2018-19	hers under the last five grammes, teachers at gramme, F erification: 2017-18	going onlin e years (Pro Refresher (ttending pr Refresher C 2016-17	e/ face-to-f ofessional D Course, Sho ofessional o Course, Sho 2015-16	ace Faculty Development Development Programmes, Fort Term Course). Hevelopment Programmes viz., rt Term Course year-wise during
		39	101	112	112	133	

2.Extended Profile Deviations

ID	Extended (Questions				
1.1	Number o	f courses of	fered by the	e Institution	across all p	rograms during the last five years
	A marrian ha		anifi anti anti			
	Answer be	1000000000000000000000000000000000000	2017 18	2016 17	2015 16	1 1
	2019-20	2010-19	2017-10	2010-17	2013-10	
	307	296	290	281	281	
	Answer Af	ter DVV Ve	rification:			
	2019-20	2018-19	2017-18	2016-17	2015-16	
	307	296	290	290	282	
	L					
2.1	Number o	f students y	ear-wise du	ring last fiv	e years	
	Answer be	fore DVV-V	erification.			
	2019-20	2018-19	2017-18	2016-17	2015-16	7
	2129	2110	2009	1989	1921	
	Answer Af	ter DVV Ve	erification:			
	2019-20	2018-19	2017-18	2016-17	2015-16	
	2437	2110	2009	1989	1921	
2.2	Number o	f seats earm	narked for r	eserved cat	egory as bei	· GOI/State Govt rule vear-wise during
	last five ye	ars			-81 F	,
	Answer be	fore DVV V	erification:			7
	2019-20	2018-19	2017-18	2016-17	2015-16	
	444	336	276	276	285	
	Answer Af	ter DVV Ve	erification:			
	2019-20	2018-19	2017-18	2016-17	2015-16	
	308	308	267	267	275	
		.	6t 1			1 / 0 ⁴
2.3	Number o	f outgoing /	final year s	tudents yea	r-wise durii	ng last five years

2019-20	2018-19	2017-18	2016-17	2015-16	
574	533	537	548	558	
Answer Af	fter DVV Ve	erification:			2
2019-20	2018-19	2017-18	2016-17	2015-16	
570	561	552	577	579	
Number o	f full time t	eachers yea	r-wise durir	ng the last fiv	e years
2019-20	2018-19	2017-18	2016-17	2015-16	
136	119	134	136	140	
Answer Af	fter DVV Ve	erification:			
2019-20	2018-19	2017-18	2016-17	2015-16	
114	102	132	132	135	
Answer be	fore DVV V	cluding sala	ry year-wis	e during last	five years (
2019-20	2018-19	2017-18	2016-17	2015-16	
718.70	688.85	688.18	1252.81	843.04	
Answer Af	fter DVV Ve	erification:			-
2019-20	2018-19	2017-18	2016-17	2015-16	