# **SELF-STUDY REPORT (SSR)**

# FOR ACCREDITATION OF



# SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR



**SUBMITTED TO** 



# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

P.O. Box No.1075, Nagarbhavi Bangalore - 560072

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### **PREFACE**

Whenever synergy of young, enthusiastic, sincere, qualified and experienced patriots is created, the institutions of monumental nature come into existence. Shri Vithal Education & Research Institute (SVERI), Pandharpur is an excellent example of this.

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, rural area of Maharastra, in the year 1998, with approval from All India Council for Technical Education (AICTE), New Delhi and Government of Maharashtra. College is affiliated to Solapur University, Solapur. Started in 1998, with a small student strength of 160 and faculty strength of 8, the college has strengthened its roots so deep as to be recognized as one among the leading colleges in Maharastra, now with around 2000 students and 140 faculty. Our efforts are directed towards inculcating professionalism in youth of our nation with stress on rural India without compromising academic standards.

Under the umbrella of SVERI the campus is spread over 27 acres and hosts four colleges viz. degree and diploma engineering and pharmacy consisting of around 300 faculty and 4000 students. Around 1200 boys and 1000 girls are living in the hostels in the campus itself.

College of Engineering, Pandharpur:

- Was accredited by 'National Board of Accreditation' (NBA)
- ➤ Is ISO 9001:2008 certified Institute
- > Is accredited by 'The Institution of Engineers (India)' Kolkata
- > Is accredited by TCS

### **Institute MoUs:**

To benchmark ourselves, we have made MoUs with various academic, research and industry organizations. To quote a few

- ➤ Bhabha Atomic Research Centre (BARC), Mumbai
- Raja Ramanna Institute of Advanced Technology (RRCAT), Indore.
- ➤ Konkuk University, Seoul, South Korea
- > Infosys Technologies, Bangalore
- ➤ Government College of Engineering, Pune

Since its inception in 1998 innovative experiments are made in education system of the college such as implementation of indigenously developed Pandharpur Pattern in Professional Education (PPPE) for making teaching-learning process effective and overall development of students, Communication Improvement Programme (CIP), Proctor Session System, Pranayam Session to quote a few.

### **EXECUTIVE SUMMARY**

#### **CRITERION I: CURRICULAR ASPECTS**

The curriculum is designed by the affiliating University, Solapur University, Solapur. The faculty of the college participates in curriculum setting workshops organized on behalf of the university. Also, some of the faculty members represent Boards of Studies, Engineering Faculty and Academic Council and inturn play a role in curriculum development and approval process. The college meticulously develops action plans for effective implementation of the curriculum by achieving the learning outcomes. Before the beginning of every semester, faculty meeting is conducted. Strategies for effective deployment of curriculum and for effective development of activities beyond the curriculum are evolved. Planning is done to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars, industrial visits, computer education apart from regular/traditional teaching methods. Academic calendar is evolved to incorporate all the curricular and cocurricular activities such as tests, industrial visits, guest lectures, etc.

Following are some of the ways with reference to academic flexibility through which students get help for skills development, academic mobility, progression to higher studies and improvement in employability potential:

- ➤ Range of Core / Elective options offered by the University and those offered by the college.
- > Students enhance their academic and employability skills through the following:
  - Additional lecture hours introduced for problem oriented and difficult subjects
  - o Guest lectures given by eminent persons in emerging areas from industry and from renowned Institutions
  - o Mini projects and industry based final year projects
  - o Seminars by students
  - o Industrial visits
  - o Teaching content beyond the syllabus in theory and practical courses.
- ➤ Institute provides newspaper to every room in the hostel with an aim to improve the communication skill. Students must write five new sentences every day from the newspapers are get them checked during proctor sessions
- ➤ GATE, GRE and TOEFL classes training programmes by professionals and also in-house for progression to higher studies.

To integrate the academic programmes and institution's goals, the initiatives are taken to supplement the curriculum. Following are few of them:

- Add-on topics are included and updated in the curriculum to bridge the gap in the university curriculum so that the employment potential of the concerned program is enhanced worldwide.
- ➤ Conferences/seminars/guest lecturers, etc. are organized and eminent persons from industries and reputed Institutions are called for updating the current happenings in the Industries to the students. This will ensure the fulfillment of our institutional goals and academic and employability objectives.

Additional laboratory experiments apart from curriculum requirement are provided in various laboratories.

The college has a formal mechanism to obtain feedback from students and all stakeholders viz.

- ➤ Alumni Feedback
- Industry Feedback
- Current Students Feedback
- Faculty Feedback
- > Employer feedback
- > Parents' feedback

### CRITERION II: TEACHING - LEARNING AND EVALUATION

Out of total intake capacity of the institute 80% seats are filled through online Centralized Admission Process (CAP) by Directorate of Technical Education (DTE), Govt. of Maharashtra. Whereas, remaining 20% seats are required to be filled at institute level. For institute level admissions, advertisement is published in minimum two newspapers inviting applications from eligible candidates. Merit list is prepared and admissions are made as per inter se merit. Admissions are processed on the basis of merit, giving equal weightage, based on the score in JEE and 12<sup>th</sup> Class Physics, Mathematics and Chemistry/Biology/Vocational subject. Strategies are designed and implemented based on students' profiles. For example teachers visit junior colleges for guiding the students. Inspite of severe competition, we are maintaining reasonably good position on admission front.

As per national and state policy in respect of reservation for socially and physically deprived categories 52% seats are reserved and also 30% seats are reserved for women. As admissions are processed by DTE, due care is taken to give justice in this respect.

Due care is taken to cater the requirements of differently abled students by constructing ramps, hand railings, toilets, etc. In addition, scribe and additional time limit are provided to such students during examinations. The institute arranges guiding sessions by experts, communication improvement sessions, practice sessions, etc. The college organizes various functions such as Savitribai Phule Jayanti, Women's Day, etc. and also constitutes and makes to function statutory committees such as committee to restrain sexual harassment to bring awareness amongst students and staff about gender inclusion. Due care is taken to cater to the educational/learning needs of advanced learners by conducting their meetings, providing them book sets and so on. Efforts are made to minimize drop out rate through counseling, financial support, remedial classes, etc.

The institute prepares Academic Calendar before the beginning of Academic Year specifying curricular activities including teaching, learning and evaluation schedules and institute becomes successful in completing the curriculum within planned time frame. Teachers are required to prepare subject wise teaching plan and maintain it up-to-date. To make learning student-centric due care is taken in respect of ensuring sincerity and regularity of the students, arranging practice sessions/study sessions, syllabus coverage, providing advanced teaching aids to faculty members, etc. The institute arranges visits of students to the facilities established under research

projects. Also, training is arranged for students through live projects from industry people. Extensive use of ICT-enabled services such as NPTEL videos, e-journals, MOODLE, LCD projectors, smart boards, etc. are made available to faculty, in addition to, charts, models, etc. for effective teaching. Students and faculty are extended financial assistance for attending conferences/workshops/seminars, etc. Also assistance is provided to students for industrial visits in addition to sessions by experts from industry, research organizations and academia. In addition to internal mechanism, professional counselor is appointed for giving psycho-social support to the students. Innovative teaching approaches such as ppt slides, seminars, practice sessions, etc. are used by the teachers. Central library of the college has collection of books, journals, e-journals, etc. and the facility is available for access round the clock for augementing teaching-learning process. Quality of teaching-learning is ensured through continous evaluation and feedback.

Institute has been making consicious efforts to upgrade the qualifications of faculty members and also arranging and supporting participation in FDPs/STTPs/Conferences/Workshops for knowledge and skills upgradation. The institute has policies to support faculty financially as well as academically for recharging the teachers. Evaluation of teachers is done by the students and this activity is also supported through peers.

Good amount of efforts are made to ensure that the stakeholders are aware of the evaluation process. Institute has adopted evaluation reforms from University side and also those initiated by the institute itself. There is feedback mechanism to ensure effective implementation of evaluation reforms. Institute has indigenously developed mechanism for ensuring transparency in internal assessment. Institute has grievance redressal mechanism at departmental level and University has such mechanism at its level.

College has defined outcomes and taken due care to bring awareness about the same amongst students and staff. PPPE and related circulars take due care to ensure achievement of learning outcomes. Entrepreneurship awareness camp, technical events, pre-palcement training, social events such as Mahatma Gandhi Jayanti, Dr. B. R. Ambedkar Jayanti, etc. are arranged to enhance social and economic relevance.

### CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

The institute has four recognized research centres of the affiliating university. All the research activities are carried out by R &D cell under the headship of Dean, R & D. Research activities are guided and monitored by Research Advisory Council/Academic Advisory Committee (RAC/AAC) consisting of outstanding scientists from eminent research organizations such as BARC and academicians. Recommendations of this committee are implemented to create, enhance and strengthen the research activities. Currently institute has research grants from various funding agencies such as AICTE, BARC, DST, ARDB, RGSTC, etc. of about Rs. 6 Cr. Effective implementation is ensured by giving complete autonomy to the principal investigator, making timely availability of funds, providing adequate infrastructure and human resources. Campus is enabled by Wi-Fi and all the technology and information needs are at the disposal of faculty. To nurture research culture and scientific temper

among the faculty and students, several research related workshops/ seminars are conducted. The institute extends financial assistance for attending conferences and publishing papers in the journals. The research carried out by the faculty has resulted in publication of about 320 papers during the last 4 years. Faculty are given sabbatical leaves for research activities. About 42% of the faculty have utilized sabbatical for up gradation of qualification and research activities in the industry. Institute also grants seed money to the faculty to work in areas of research interest. Students are encouraged to work on research problems from Second Year itself. MoUs are signed with recognized research organizations such as BARC and RRCAT. Students are encouraged to do research in such eminent organizations. Two patents have already been filed by faculty members. Institute publishes SVERIAN quarterly. Our faculties have won best paper awards in international conferences. Dr. P. M. Pawar, Dean, R &D, received DST Young Scientist Award. Institute meets the consultancy needs of the industry to some extent now.

The institute has MOU arrangements with various establishments mainly to establish the linkages / collaborations related to academic and research activities. Inviting Expertise from various divisions from other industries for delivering Guest Lectures, key note addresses in Conferences, invited speakers in workshops to share their knowledge and expertise.

### CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

Since its inception in 1998, the institute has been keeping pace with the changing needs and requirement to meet its academic growth. To keep the pace with the needs and requirements, additional infrastructure is being added from time to time.

Institute has the policy for creation and enhancement of infrastructure as per the norms of AICTE. Also, feedback from students and other stakeholders is given due weightage in framing such policy. Accordingly, to meet curricular and co-curricular requirements, institute has adequate class rooms, laboratories, work shop, seminar halls, etc. Also, open air theatre takes due care of co-curricular and extra-curricular activities. In addition, playground and gym facilities are available for extra-curricular activities. Schedule of activities is prepared and implementation is made through committees with representation from students. There are separate hostels in the campus for girls and boys. These hostels have internet facility, gym, constant supply of safe drinking water, medical facility, recreational facility, study room, security, etc.

Common facilities such as Training and placement cell, medical facility, auditorium counseling facility, safe drinking water, canteen, recreation facility, security etc. are available in the campus.

Library Advisory Committee takes due care to ensure that library facilities are updated and made available to the students. Digital Library facility is also provided through DELNET, e-journals, etc.

Bottom up approach is used in preparing the budget and allocation of funds accordingly for maintenance and upkeep of the facilities. Review meetings are taken for effective utilization of the funds.

### **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

The college gives special attention to overall development of students by creating a conducive learning atmosphere which actively supports their co-curricular and extracurricular activities and helps in the demonstration of their talents. College publishes prospectus containing the information about eligibility, infrastructure, admission process, programmes offered, etc. As admission process is through CAP, DTE also publishes brochure. The College helps the students to avail both central and state government scholarships based on category and also economical status. For category students special book bank facility is available in the library. In addition, institute has a budget of about Rs. 7 lakhs for merit prizes and that of about Rs. 20 lakhs for the students from economically weak families through earn and learn scheme. etc.

For physically disabled students infrastructural facilities such as ramps, hand railings, toilets, etc. are provided. Also, writer and additional time are provided as per the requirement. Students are provided health insurance and finacial assistance for participation in conferences, workshops, exhibitions, etc. Coaching classes are organised for competitive examinations like GATE, GRE, TOEFL, etc. Practice sessions, Remedial sessions, etc are conducted for slow learners. Institute publishes magazine by the name "EXPLORER" which caters to unleash the creative potential in the students.

Entrepreneurship Awareness Camps are conducted by the institution and participation of every student is ensured. Adaptive – Reverse Engineering Facility (AREF) is created. Industry people are involved in handling technical projects. The institute has amphi-theatre to cater the cultural needs of students whereby mega events such as BEATS, Mahatma Gandhi Jayanti, Shiv Jayanti, Dr. B. R. Ambedkar Jayanti, etc. are organized. On sports front students participate in university organized inter-collegiate sports events. In addition, inter-departmental sports events are organized under the banner 'GLANCE' and inter-lobby hostel sports events are organized under the banner 'KURUKSHETRA'.

Institution has a structured mechanism of training and placement under the Training and Placement Officer (TPO). Trainings for aptitude, soft skills, communications skills, etcare planned and organized systematically. All the statutory committees such as Anti-Ragging, Grievance Redressal mechanism, Committee to restrain sexual harassment, etc are fully functional in the institute. Institute has a registered Alumni Association. Institute holds Alumni Meet every year. Alumni conducts workshops/lectures, etc. for students.

# CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

Visionary leadership and participatory management are the strengths of the institute. The keywords in the mission "value based education" and "mutual respect" describe the distinctive characteristics. The vision and mission of the institution define the distinctive characteristics of the institute viz. value based education and mutual respect amongst the stakeholders. Due care is taken by Principal and facultyfor effective implementation of quality policy designed and approved by top management. Top leadership of the institute is responsible for framing the policies and ensuring to convert them into action plans. The institute has policy documents like System Manual, PPPE, etc. Authority delegation is made by incorporating Deans system in the administration structure for effective monitoring and evaluation of policies and plans.

Principal of the college, Dr. B. P. Ronge, Ph. D. in Mechanical Engineering, has around 30 years experience in technical education. He is a graduate from VJTI, Mumbai and M. Tech. from IIT Bombay. He has research funded projects to his credit and participated in technical conferences in India and abroad. This institute is his brain child and he is the Founder Secretary of the parent body Shri Vithal Education and Research Institute, Pandharpur (SVERI).

Decentralization is taken care of by authority delegation through the mechanism of Deans, HODs and related elements in the system. Board of Governors (BOG) resolutions, system manual, circulars, etc. describe the details in this respect. Participative management is promoted by constituting different committees with representations from students and staff and making these committees to function. The quality policy of the institution has been playing key role in development of the institute.

The college has Grievance Resdressal Committee, Anti-Ragging/High-Level Standing Committee and Committee to restrain sexual harassment to offer platform for redressal of grievances. Institute through effective mechanism for analysis of students' feedback implements the relevant suggestions.

For faculty empowerment, regular Faculty Development Programs (FDPs) on various subjects spanning from research to soft skills are conducted in the college. The College regularly conducts seminars and conferences at the state /national level. The institute provides financial aid to faculty members to attend conferences and workshops both in the country and abroad. The institute also gives financial awards to faculty members who publish their research papers in journals of repute. Faculty members are encouraged to upgrade and pursue higher education. Experts from the research organizations, industry and academia are called to address the students and faculty and staff members. The Institute also encourages and facilitates faculty member to become members of various professional bodies like Indian Society for Technical Education (ISTE), Institute of Electrical and Electronics Engineers (IEEE), IEI, etc.

For effective and efficient use of available financial resources in addition to internal and statutory audits continuous review is taken in the meetings of Deans and HODs conducted by Principal.

Institute is in the process of formation of Internal Quality Assurance Cell (IQAC). Institute has organized workshops for "establishment of IQAC" as the first step for the initiation of the formation of IQAC.

## CRITERION VII: INNOVATIONS AND BEST PRACTICES

The college is giving importance to eco-friendly environment and allocating funds in the annual budget for proper maintenance of campus. Campus Beautification Committee and the green team are taking care of making the campus clean & green and eco-friendly. Green audit is also conducted.

Innovative steps are taken to create positive impact on the functioning of the college. The institution takes all possible steps to make the campus eco-friendly. Faculty and staff are provided with email –ids and communication is moving towards being paperless. Deans system has been introduced in order to facilitate better functioning of the institute. Use of ICT is extensive in the campus. E-learning facilities are provided to students and faculty brining learning resources such as DELNET, E-library, E-journals at the click of their fingers.

The institution promotes many practices to improve the quality of education and teaching-learning process leaving no stone unturned to make the future of the students bright and excellent. Pandharpur Pattern in Professional Education (PPPE) and Communication Improvement Program (CIP) presently being followed at the institute are designed and developed, keeping in view, the rural background of students and faculty. Results indicative of implementation of these practices are improvement of quality and competency of teachers, academic success of the students, communication improvement and confidence building leading to overall development of the students.

# **SWOC ANALYSIS OF THE INSTITUTE**

#### **STRENGTHS:**

- Visionary leadership
- Professional Management
- > System based working (Person Independent)
- > Team work
- > Brand Value of SVERI
- > Culture based on respect and discipline
- ➤ Pandharpur Pattern in Professional Education (PPPE)
- > Placements
- > Academic Performance
- R & D environment

#### **WEAKNESS**

- Our location
- Attrition
- > Students Communication
- ➤ Inadequate industry presence

## **OPPORTUNITIES**

- > Student mobility
- > Industry Interaction
- Societal work
- > Autonomy
- Consultancy
- > Networking with other institutes and organizations
- Research Grants

#### **CHALLENGES**

- > Awareness of parents
- Competition
- Curbing attrition
- > Involvement of industry professionals
- > Improving the quality of admitting students
- Admissions

# PROFILE OF THE AFFILIATED / CONSTITUENT COLLEGE

# 1. Name and Address of the College:

Name:	Shri Vithal Education and Research Institute's,		
	College of Engineering, Pandharpur.		
Address:	P.B. No 54, Gopalpur-Ranjani Road, Gopalpur,		
	Pandharpur		
City:Pandharpur	PIN:413 304 State: Maharashtra		
Website:	www.sveri.ac.in		

# 2. For communication:

Designation	Name	Mobile	Email
Principal	Prof. Dr. B.P.	9545193434	principal@coe.sveri.ac.in
	Ronge		_
Steering	Dr. Sridevi		
Committee	Seshabhattar	9503103668	Sri.ncsu@gmail.com
Coordinator			

3. Status of the Institution: Affiliated College	✓
Constituent College	
Any other (specify)	
4. Type of Institution:	
a. By Gender i. For Men	
ii. For Women	
iii. Co-education	✓
b. By Shift	
i. Regular	✓
ii. Day	
iii. Evening	
5. It is a recognized minority institution?	
Yes	No 🗸
6. Source of funding:	
Government Grant-in-aid	Self-financing ✓

- 7. a. Date of establishment of the college: 17.08.1998
  - b. University to which the college is affiliated /or which governs the college (If it is a constituent college)

Solapur University, Solapur

c. Details of UGC recognition:

<b>Under Section</b>	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	(1.02 2.2.2.2 ) ) )	UGC recognition is under process through an
ii. 12 (B)		application bearing reference number COEPR/NAAC/2014- 15/461 Dated 30/08/2014

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/Approval details Institution/Department/ Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
AICTE	Electronics and Telecommunication Engineering. Computer science and Engineering. Mechanical Engineering. Information technology Civil Engineering  PG  M.B.A. M.E.(Mechanical Engineering-Design) M.E.(Mechanical Engineering-CAD/CAM) M.E.(Electronics and Telecommunication Engineering) M.E.(computer science) M.E.(Civil-Structure)	04/06/2014	2014-15	Approval to be renewed annually

Under Section/ clause	Recognition/Approval details Institution/Department/ Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
Solapur	Ph.D			
Univers ity,	Ph.D ( Mechanical Engineering)	28/05/2009	5 yrs. from 2009-10	Extension in process
Solapur	Ph.D (Computer science and Engineering)	30/12/2011	5 yrs. from 2011-12	
	Ph.D ( Electronics and Telecommunication Engineering)	30/08/2014	5 yrs. from 2014-15	
	Ph.D (Civil Engineering)	04/06/2012	5 yrs. from 2011-12	

	2011-12
(Recognition/approx	val letter enclosed)
8. Does the affiliating university A (as recognized by the UGC), on it	Act provide for conferment of autonomy ts affiliated colleges?
Yes	No 🗸
9. Is the college recognized? a. by UGC as a College wi	th Potential for Excellence (CPE)?
Yes	No
b. for its performance by	any other governmental agency?
Yes	No ✓
0. Location of the campus and a	rea in sq.mts:
Location *	Rural
Campus area in sq. mts.	10 acres (40468.73 sq.mts)
	22678 sq.mts

Facilities available on the campus (Tick the available facility and 11. Provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

√ Auditorium/seminar complex with infrastructural facilities: 1210 Sq. mt. area available with seating capacity of 3000

$\sqrt{\text{Play ground}}$	d
√ Gymnasiui	m
$\sqrt{\text{Hostel}}$	
Boys' hostels	s
iii.Facilities ( with all the Newspaper Solar Wate	f inmates: 963 (mention available facilities): Hostel rooms equipped e required infrastructure facilities, Wi-Fi Connection, er, Common room, Mess, Indoor games, Saloon, Laundry, er heater, RO (Reverse Osmosis) plant, Water Coolers, ng equipments, Library, Security, Gym.
Girls' hostels	l <b>s</b>
iii. Facilities ( with all the re Newspaper, C RO (Reverse	f inmates: 976 (mention available facilities): Hostel rooms equipped equired infrastructure facilities, Wi-Fi Connection, Common room, Mess, Indoor games, Solar Water heater, Osmosis) plant, beauty parlor, Water Coolers, Fire pments, Library, Security, Flyover bridge
Working wo	omen's hostel – Nil
$\sqrt{\text{Residential f}}$	facilities for teaching and non-teaching staff
(Give number	ers available cadre wise)
Principal's Ro	
Faculty: 12 Non-teaching √ Cafeteria	
Non-teaching	el: 4
Non-teaching √ <b>Cafeteria</b>	
Non-teaching √ Cafeteria  Boys' Hoste	d: 4
Non-teaching √ Cafeteria  Boys' Hoste  Girls' Hostel  College Cant	d: 4
Non-teaching √ Cafeteria  Boys' Hoste  Girls' Hostel  College Cant	el: 4 teen: 1
Non-teaching √ Cafeteria  Boys' Hoste  Girls' Hostel  College Cant  √ Health Cent	teen: 1  tre: First aid, Emergency care facility, Emergency,  Vehicle (24x7), Medical store
Non-teaching √ Cafeteria  Boys' Hoste  Girls' Hostel  College Cant	teen: 1  tre: First aid, Emergency care facility, Emergency,  Vehicle (24x7), Medical store

# Facilities like banking, post office, book shops.

- √ State Bank ATM.
- $\sqrt{\text{Post box}}$
- $\sqrt{\mbox{ Transport facilities to cater to the needs of students and Staff:}$
- 5 buses
- $\sqrt{\text{Biological waste disposal.}}$
- $\sqrt{\text{Generator}}$  or other facility for management/regulation of electricity and voltage.

# 12. Details of programmes offered by the college (Give data for Current academic year)

Sr.	Program	Name of the	Duration	Entry	Mediu	Sanction	No. of
No	me	Programme/		Qualification	m	ed	students
	Level	Course				Student	admitte
						Strength	d
		Electronics and	4 years	JEE and 12 <sup>th</sup> Class	English	120	78
		Telecommunicat		Physics, Mathematics			
1	Under –	ion Engineering.		and Chemistry/			
	graduate	Computer		Biology/ Vocational		120	49
		Science and		subject			
		Engineering.					
		Mechanical				120+(6	123
		Engineering.				TFWS)	
		Information				60+(3	08
		Technology				TFWS)	
		Civil				60+(3	63
		Engineering				TFWS)	
		M.B.A.	2 years	Graduate (min. 50%	English	60	19
				for open/min 45% for			
				backward classes).			
				Non Zero score in			
				MH-MBA			
				CET/CMAT			
		M.E.(Mechanica	2 years	BE/B.Tech Degree	English	18	18
		1 Engineering-		(Mechanical/			
		Design)		automobile/Productio			
	Post-			n) min. 55% for			
2	graduate			open/min 50% for			
				backward classes.			
		ME OF 1		Non Zero Gate Score.		1.0	1.1
		M.E.(Mechanica	2 years	BE/B.Tech Degree		18	11
		1 Engineering-		(Mechanical/			
		CAD/CAM)		automobile/Productio			
				n) min. 55% for			
				open/min 50% for backward classes.			
				Non Zero Gate Score.			
				INOII ZEIO Gate Score.			

Sr. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Mediu m	Sanction ed Student Strength	No. of students admitte d
		M.E.(Electronics and Telecommunicat ion Engineering)	2 years	BE/B.Tech Degree ( Electronics and Telecommunic ation Engg/ Electronics) min. 55% for open/min 50% for backward classes. Non Zero Gate Score.		18	15
	Post- graduate	M.E.(Computer Science and Engineering)	2 years	BE/B.Tech Degree (Computer Science and Engg.) min. 55% for open/min 50% for backward classes. Non Zero Gate Score.		18	18
		M.E.(Civil- Structure)	2 years	BE/B.Tech Degree (Civil Engg.) min. 55% for open/min 50% for backward classes. Non Zero Gate Score.		18	16
3	Ph. D.	Ph.D.(Mechanic al Engineering) Ph.D. (Electronics and Telecommunicat ion Engineering) Ph.D.(Computer Science and		PG Engineering degree	English		02 NIL NIL
		Engineering) Ph.D.(Civil Engineering)					02

13. Does the college offer self-financed Programmes?

Yes ✓ No	
----------	--

Ye	es	V	No		Numbe	er 8		
15. List the de ike Library, Placademic degree offering commergional languare	hysical ee awa on cor	Educated Educater I Ed	tion as deprogramme	partments, es. Similarl	unless y, do n	they a ot list	re als	o offering epartments
		Particu	ılars			UG	PG	Research
Science								
Commerce								
Any other not	covere	ed above	е					
Department of Engineering.	f Electi	ronics a	nd Teleco	mmunicati	ion	V		$\sqrt{}$
Department of					ıg.	√		V
Department of	f Mech	anical E	Engineerir	ıg.		$\sqrt{}$		
Department of	f Infori	nation t	echnolog	y		√		
Department of	f Civil	Engine	ering			$\sqrt{}$		V
Department of	f Mana	gement						
	_			,	ogram	me m	ieans	a degree
	A, BSc	, MA, a		,	ogram 04	me m	ieans	a degree
course like BA	A, BSc	, MA, a		,		me m	neans	a degree
course like BA a. ann	A, BSc nual sys	, MA, a stem system		,	04	me m	neans	a degree
a. ann b. sem c. trim	A, BSc nual sys nester s	stem system system	nd M.Co	,	04	me m	neans	a degree
a. ann b. sem c. trim	A, BSc mual sys mester s mester s	stem system system ramme	nd M.Co	m)	04	me m	neans	a degree
b. sem c. trim  17. Number of a.	A, BSc mual sys mester s mester s f Prog	system system ramme	nd M.Co s with Credit Sy	m)	04	me m	neans	a degree
a. ann b. sem c. trim 17. Number of a. b.	A, BSc nual sys nester s nester s f Prog Choice	stem system system ramme e Based Multidis	s with  Credit Sy	wstem	04	me m		a degree

19. Does the college offer UG or PG programme in Physical Education?
--

Yes	No	✓
		1

# 20. Number of teaching and non-teaching positions in the Institution

Positions		Te	eaching	g facu	lty		No teacl		Techi sta	
	Profe	essor	Asso Profe		Assis Profe		sta	0		
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the UGC / University / State Government Recruited	03	01	06	02	20	11	35	06	37	01
Yet to recruit	N]	L	N]	L	NI	L	Nl	L	NI	L
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>	00	00	01	00	67	38	NI	TL .	NI	L
Yet to recruit	NI	IL	N	IL	NI	IL	NI	IL	NI	L

<sup>\*</sup>M-Male \*F-Female

# 21. Qualifications of the teaching staff:

Highest Qualification	Prof	Professor		ciate essor	Assis Profe		Total
Quanneation	M	F	M	F	M	F	
Permanent teach	ers						
D.Sc./D.Litt.							
Ph.D.	04	01	03	01	05		14
M.Phil.							
PG				01	86	42	129
Temporary teach	ers				•		
Ph.D.							
M.Phil.							
PG							
Part-time teacher	S						
Ph.D.							
M.Phil.							
PG							01

22.	Number of	Visiting	<b>Faculty</b>	/Guest	<b>Faculty</b>	engaged	with	the
	College.							

50

# 23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	2010	)-11	2011	1-12	2012	2-13	2013-14	
	M	F	M	F	M	F	M	F
SC	27	15	32	04	34	13	21	18
ST	00	01	00	00	00	00	02	00
OBC	55	30	50	29	61	25	32	22
GENERAL	133	82	121	61	125	105	97	55
OTHERS	37	16	40	21	39	16	32	18

# 24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same	290	97	NIL	04	391
state where the college					
is located					
Students from other	07	NIL	NIL	NIL	07
states of India					
NRI students	NIL	NIL	NIL	NIL	NIL
Foreign students	NIL	NIL	NIL	NIL	NIL
Total	297	97	NIL	04	398

25.	<b>Dropout</b>	rate in	UG and	PG (	average	of the	last two	batches)
	2100000		0 0 111111	,	(	01 1110	20000 0110	~,

UG 0.46% PG 4.7%

## 26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component

Rs.77362.00 Rs.30948.00

(b) Excluding the salary component

27. Does the college offer any programme/s in distance education mode? (DEP)?

Yes No

28. Provide Teacher-student ratio for each of the programme/course Offered.

UG: Engineering & Technology : 1:15

PG: Engineering & Technology : 1:6

4	Re-Assessment:				
, •	lrefers to first accre	editation and	d Cycle 2, Cy	cle 3 and C	ycle 4 rej
31. Nur	nber of working da	ays during t	he last acad	emic year.	
		201	3-14		
	ODD		153		
	EVEN		152		
(	(Teaching days mea Excluding the exam ODD	ns days on vination days	which lecture ) 3-14 72	l <b>emic year</b> es were enga	nged
(	(Teaching days mea Excluding the exam	ns days on vination days	which lecture ) 3-14	•	aged
	(Teaching days mea Excluding the exam ODD	ins days on vination days	which lecture ) 3-14 72 73	es were enga	
33. Dat	(Teaching days mea Excluding the exam ODD EVEN	ins days on vination days	which lecture ) 3-14 72 73 Quality Ass	es were enga	
33. Dat	(Teaching days mean Excluding the exam.  ODD  EVEN  e of establishment	of Internal	which lecture ) 3-14 72 73 Quality Asseryyy)	urance Cell	I (IQAC)
33. Dat 34. Det	ODD EVEN  e of establishment  IQAC:  ails regarding subr	of Internal (dd/mm/y	which lecture ) 3-14 72 73 Quality Asseryyy)	urance Cell	I (IQAC)

### **CRITERION I: CURRICULAR ASPECTS**

## 1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

The following are the vision, mission and objectives of the institution:

#### VISION

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

### **MISSION**

To impart value based technical education by inculcating personal touch and respect in relationship amongst the stakeholders.

### **OBJECTIVES**

- To achieve a status of premier technological Institute.
- To achieve excellence on academic, administrative and personality development fronts through own channelized pattern of teaching learning process.
- To develop the state-of-the-art, research, development and consultancy cell
- To strengthen industry-institute interaction to provide practical industrial exposure to the students and up-gradation of faculty knowledge about advanced trends.

## **Communication to Stakeholders**

Vision, mission and objectives of the institution are communicated to the students, teachers, staff and other stakeholders in following manner:

**Table No. 1.1 Communication to Stakeholders** 

1.	Institute Website - ( <u>http://coe.sveri.ac.in</u> )
2.	ftp - ( <u>ftp://10.1.2.3/public</u> )
3.	Entrance of the Departments
4.	HOD Cabin
5.	Journal Books of the Students
6.	Assignment Books of the Students
7.	Roll Call Books of the Teachers
8.	Course Files of the Teachers
9.	Notebooks of the Students notebook
10.	Faculty diary
11.	Institute magazine-Explorer
12.	Parent's meet
13.	Alumni meet
14.	Student Council meeting
15.	Industry-Institute Partnership Cell Meeting

# 1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

The curriculum is designed by the affiliating University, Solapur University, Solapur.

Every department has defined its specific Vision and Mission in tune with the Vision and Mission of the institute. Each program of the department is elaborated in terms of Program Outcomes (POs) which are aligned with graduate attributes. Furthermore, Curriculum is defined in terms of Course Outcomes (COs) for every course taught for effective deployment of the curriculum.

The college meticulously develops action plans for effective implementation of the curriculum by achieving the learning outcomes. Before the beginning of every semester, faculty meeting is conducted. Strategies for effective deployment of curriculum and for effective development of activities beyond the curriculum are evolved. Planning is done to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars, industrial visits, computer education apart from regular/traditional teaching methods. Academic calendar is evolved to incorporate all the curricular and cocurricular activities such as tests, industrial visits, guest lectures, etc.

Teaching plans of teachers are prepared based on the Academic Calendar. Subject Files are prepared and maintained by each faculty which is reviewed on continuous basis by the Head of the Department during the weekly meetings and by Dean, Academics and Dean, Students at random. Any deviation from the Academic Calendar and in the teaching plan will be compensated at the earliest to ensure minimum variation. The laboratories and lab manual are made ready prior to the start of the semester. Lab manuals are reviewed periodically audited and modified as per the requirement.

Deployment of the curriculum is given utmost importance and given below is the policy and guidelines framed for the preparation of Subject File of teachers in order to ensure the same

#### **Guidelines and contents of the course file:**

- 1. Name of the subject in bold letters, subject teacher and teaching scheme on cover of the file.
- 2. Circular bearing the policy and guide lines for preparation of the course file.
- 3. Copy of academic calendar that is is prepared before the start of academic year in which each activity of the institute like Class tests, lab tests R & D activities and annual functions are planned for the effective use of time.
- 4. Copy of Time Table of class.
- 5. Individual Time Table.
- 6. Teaching Plan for covering each bit of the syllabus so that whole syllabus will be completed in stipulated period & attendance sheet.
- 7. Practical Plan & attendance sheet.
- 8. Tutorial Plan & attendance sheet.

- 9. Copy of Pandharpur Pattern in Professional Education (PPPE) and System Manual prepared for the institution in which the duties and role of Principal, Deans, and Heads of all department, Class Coordinators, Faculties and students are included for effective implementation of curriculum.
- 10. Six recent Question Papers of University examinations.
- 11. Description about title of the subject
- 12. Central Idea of the subject
- 13. Importance of the subject in the Programme
- 14. Course Objectives & Course Outcomes
- 15. Multiple Choice Questions (MCQs)
- 16. About title of the Chapter
- 17. Assignment Questions
- 18. Central Idea of the Chapter
- 19. Importance of the Chapter
- 20. Objectives & Outcomes of the Chapter
- 21. Bit by Bit notes of the chapter
- 22. Contents beyond syllabus for the chapter

# 1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?

**Support from University**: Curriculum is provided by the University. The curriculum prepared by Solapur University, Solapur is well structured, unitized and modeled giving the details like teaching and marking scheme. University organizes syllabus setting workshops whereby faculty members understand the depth and coverage of the curriculum along with nature of question paper.

## **Support from Institution:**

Staff members are given sponsorship from institution to attend National and International seminars /conferences and short term training programmes conducted in other institutions, in addition to the in-house training courses manned by experts and veterans from various teaching and research institutions so that faculties are enhanced with motivation, soft skills and management potentials through systematic orientation in specific subjects, techniques and methodologies.

Faculty Development Programs have been helping the faculty to:

- Acquire and improve the art of teaching to achieve goals of technical higher education.
- ➤ Keep abreast of the latest developments in their specific areas of engineering and basic sciences.
- Acquire skills in the use of software tools to step up their IT capability in order to create e-content assemblers and developers.
- > Train teachers as agents of socio-economic change and national development.

Departmental faculty meetings are conducted on weekly basis and review of status in respect of curriculum is taken and corrective steps are taken accordingly as per the requirement.

For promoting effective translation of curriculum the departments/classrooms/laboratories are equipped with resources such as

- ➤ Models and Charts
- ➤ Wi-Fi internet facility.
- ➤ Digital library & e-Journal downloading facility.
- ➤ Laptop/LCD projector.
- > PA system.
- ➤ OER's (Open Educational Resources).
- > SMART Boards.

Advanced labs are set up with latest equipments to strengthen the curriculum delivery. Ultra modern computer labs with latest available software packages are provided to meet growing challenges of the industry. Budget of the institute is on a need based policy. Financial requirements are sought in a bottom-up manner giving ample opportunity for the teachers to procure and set up the labs as per the curriculum requirement and beyond.

# 1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

- ➤ The institute has indigenously developed mechanism by the name Pandharpur Pattern in Professional Education (PPPE) for effective implementation of teaching-learning process. PPPE explicitly states the teaching approach to be followed. It includes all the aspects of the teaching —learning process such as teaching plan preparation, course file preparation, etc.
- ➤ Based on PPPE, the institute has come out with the circulars guiding the teachers for effective delivery and transaction of the curriculum.
- ➤ Course file/subject file of a teacher must contain circulars of these academic and administrative policies, vision and mission of the Institute and Department, copy of system manual, copy of PPPE, Timetable, Teaching plan, student list, syllabus and bit by bit notes, contents beyond syllabus of each chapter and previous six question papers along with model answers. Any deviation from the teaching plan is compensated at the earliest.
- Institute provides and maintains the best possible infrastructure, and all departments are equipped with resources such as Wi-Fi internet facility, Digital library & e-Journal downloading facility, Laptop/LCD projector, OER's (Open Educational Resources), SMART class rooms with modern facilities.
- Effectiveness of deploying the curriculum delivery is also measured by continuous evaluation of the students and also by seeking feedback from students. Corrective steps are taken accordingly.
- ➤ Industrial visits are arranged so that students can get practical exposure on the subjects of curriculum.
- > Suitable lab experiments are designed as per curriculum and conducted to make the students to understand the concepts more effectively.
- ➤ The learning materials [text books, solved question papers (question bank), lab manuals, etc.] are prepared by faculty and made available to the students.
- Remedial classes and tests are conducted to bring the slow learners on par with other students.

Review of syllabus completion and its effectiveness is taken in students' council meeting in addition to feedback.

# 1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

Institution has strong networking with industry, research bodies and the university and interacts with these beneficiaries in the following manner:

- Placement Officer (TPO) to promote, maintain and strengthen network with industries through signing of MoUs, their effective implementation and arranging placement by industries in the campus and off the campus. The Institute has constituted Industry Institute Partnership Cell (IIPC) consisting of members from faculty and industry. This cell facilitates networking with industry by helping the process of promoting MoUs and by arranging visits of faculty members to and their training in industries. Also it helps in getting sponsored projects, research assistance, consultancy and invited lectures from industry. Students are encouraged to execute industrial projects and they are taken for industrial visits. Special training modules for eligible students, like 'Infosys Campus Connect', Soft Skills are conducted in tandem with reputed Software organizations.
- Research Bodies: Research, Development and Consultancy Cell under the leadership of Dean, R &D. Research Advisory Council/Academic Advisory Committee (RAC/AAC) of the institute consist of members from eminent research bodies such as BARC. The institute has signed MoUs with eminent research organizations of National importance like BARC and RRCAT. The institute has been carrying out research projects funded by the agencies like RGSTC, ARDB, BARC, AICTE, DST, etc.
- ➤ University: The faculty members of the institution have represented BOS, Faculty and Academic Council of the University and have contributed in the development of curriculum. In addition, faculty members participate in subject wise syllabus setting workshops organized on behalf of the university.
- 1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members / departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.

The faculty members of the institution have represented BOS, Faculty and Academic Council of the University and have contributed in the development of curriculum. In addition, faculty members participate in subject wise syllabus setting workshops organized on behalf of the university. The details in this respect are given below:

TABLE No. 1.1.6 List of Faculty Members on BOS of Solapur University, Solapur

Sr. No.	Name of Faculty	Department	Representation on University Bodies/ Committees/Workshop
1	Dr. B. P. Ronge	Mechanical Engineering	<ul> <li>Former Dean of Faculty of         Engineering and Technology</li> <li>Chairman of Adhoc Board of         Studies in Mechanical         Engineering</li> <li>Member of Faculty of Engineering         and Technology, BUTR,         Academic Council</li> <li>Former member of Board of         Examinations</li> <li>Conducted and participated in         syllabi setting workshops</li> </ul>
2	Dr. S. M. Mukane	Electronics and Telecommunication Engineering	<ul> <li>Member of Adhoc Board of Studies in Electronics and Telecommunication Engineering</li> </ul>
3	Dr.P. M. Pawar Dr. V. S. Mathada Prof. S. S. Dharane /Prof.V. S. Kshirsagar	Civil Engineering	"Participated in syllabus setting workshops"
	Prof. A. R. Sarkar Dr. S. N. Kinni Prof. S. T. Nanaware Prof. Y.R. Kalshetti /Prof. P. A. Satarkar /Prof. V. D. Jadhav Prof. A. G. Korke Prof. S. M. Shinde Prof. G. S. Kulkarni Prof. A. R. Pawar	Computer Science and Engineering	
	/Dr. M. M. Patil /Prof. J. A. Kendule Prof. M. S. Mathpati Prof. S. C. Gurav /Prof. M. M. Pawar	Electronics and Telecommunication Engineering	
	Dr. P. S. Kachare Prof. B. D. Gaikwad Prof. L. B. Raut Prof. S. R. Gawali Dr. A. A. Utpat Prof. S. A. Sonawane Prof. S. S. Kulkarni Prof. R.T. Vyavhare Prof. S. D. Katekar	Mechanical Engineering	

Taking into consideration the suggestions of the students, faculty and other stakeholders through feedback the college makes its suggestions to the respective Board of Studies of the University for the Improvement and inclusion of additional topics in the curriculum.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

Yes. Institution has developed curriculum for add-on courses, other than those under the purview of the University. For instance, Institute is situated in the rural part of Maharashtra and the majority of the students are from a rural background. These students study in Marathi medium prior to admission to the institution. Lack of English communication and stage fright creates a sense of insecurity in the students. In the global era, communication plays a vital role in the employability of the graduates. Having understood this need, an indigenous Communication Improvement Programme (CIP) curriculum has been designed. Lesson plans and subject content have been developed. Deployment of the CIP curriculum is planned by conducting the sessions twice a week. Institute also developed module for Proctor system for the students. Lesson plan are prepared for these sessions.

# 1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

Every department has defined its specific Vision and Mission in tune with the Vision and Mission of the institute. Each program of the department is elaborated in terms of Program Outcomes (POs) which are aligned with graduate attributes. Furthermore, Curriculum is defined in terms of Course Outcomes (COs) for every course taught for effective deployment of the curriculum.

The college meticulously develops action plans for effective implementation of the curriculum by achieving the learning outcomes. Before the beginning of every semester, faculty meeting is conducted. Strategies for effective deployment of curriculum and for effective development of activities beyond the curriculum are evolved. Planning is done to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars, industrial visits, computer education apart from regular/traditional teaching methods. Academic calendar is evolved to incorporate all the curricular and co- curricular activities such as tests, industrial visits, guest lectures, etc.

Teaching plans of teachers are prepared based on the Academic Calendar. Subject Files are prepared and maintained by each faculty which is reviewed on continuous basis by the Head of the Department during the weekly meetings and by Dean, Academics and Dean, Students at random. Any deviation from the Academic Calendar and in the teaching plan will be compensated at the earliest to ensure minimum variation. The laboratories and lab manual are made ready prior to the start of the semester. Lab manuals are reviewed periodically audited and modified as per the requirement.

Continuous evaluation of the students' performance in the chapter wise tests, unit tests, university examinations, etc is used to measure the achievement of the set objectives. Data on students taking admission to higher studies and the students placement data is also used to analyze the achievement of learning outcomes. Feedback is sought at regular intervals and at all levels and from all the stakeholders. Information from the feedback is analyzed and corrective steps are taken to ensure that the stated objectives of curriculum are achieved.

## 1.2 Academic Flexibility

# 1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution.

The primary goal of the Institute is to produce employable engineering graduates who understand and demonstrate the ability of lifelong learning. For accomplishing this goal, Institute has designed and developed various skill development courses. In addition, Institute has also entered in MoUs with various organizations. The following is the list of some of the courses presently conducted at the institute.

Table No.1.2.1 Details of the certificate/diploma/ skill development courses

Sr.	Name of the Skill	Objective	Goal
No.	Development		
	Programme/Course		
1.	Entrepreneurship Awareness Camp (EAC)	With the growing needs at state, national and global level in self-employment, Institute conducts EAC to bring awareness about the methods and ways to start business. Students are guided about the financial avenues at	Students must identify legal issues affecting development, ownership and operation of companies
		their disposal. Institute supports this course financially.	
2.	Communication Improvement Programme (CIP)	In the global era, communication plays a vital role in the employability of the graduates. Having understood this need, an indigenous Communication Improvement Programme (CIP) curriculum has been designed	100% students must participate in CIP. At the end of course, students must be proficient in the usage of grammar such as tenses, verbs, direct and indirect speech, passive and active voice, etc.
3.	Aptitude Training Programme	The objective of this programme to prepare the students for aptitude and logical reasoning tests of the companies	Students must show an ability to get qualified in the pre-placement aptitude tests
4.	ANSYS	The objective of the training is to enable the students to learn ANSYS software used for prediction and analysis of behavior of components/products in real life situation.	At the end of the course, students must demonstrate proficiency in using ANSYS software.

Sr. No.	Name of the Skill Development Programme/Course	Objective	Goal
5.	CATIA	The objective of this program is to familiarize the students with CATIA program. CATIA is used to model product and to do so in the context of product behavior	At the end of the course, students must demonstrate the ability to design products using CATIA software.
6.	AUTO CAD	The objective of this course is to impart the knowledge of AUTO CAD to students	Students must be able to use AUTO CAD for orthographic and isometric drawings.
7.	Total Station training	The total station is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point. The objective of training is to empower and enhance the knowledge of students on the field.	Students must be able to use Total Station for Surveying
8.	STAAD.Pro training	STAAD.Pro is a modeling and analysis software. allows structural engineers to analyze and design virtually any type of structure through its flexible modeling environment, advanced features and fluent data collaboration. The objective of this training is to impart the knowledge of this STAAD.Pro to students	At the end of the course, students must demonstrate the ability to use STAAD.Pro for analysis and design of structures.
9.	Soft skill development training	To impart the soft skills necessary for employability	At the end of the course, students must demonstrate an understanding of the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people.

Sr. No.	Name of the Skill Development Programme/Course	Objective	Goal
10.	Personality Development Programme	The objective of this program to increase the confidence and bring out best personality traits in the students resulting in better employability and aptitude for life-long learning. Books and other learning resources are provided by the institute.	Students must develop the ability for life-long learning and develop better personality traits resulting in better employability.
11.	REANU's Training programme for Under- Graduate Projects	The objective is for the students to learn to design electronic circuits for real life applications.	At the end of the training the students must demonstrate the ability to design electronic circuits for the projects allotted to them.
12.	Pre-Placement Training	Classes are conducted to improve their performance in the placement interview by empowering students with Pre-Placement skills to get better placed.	At the end of the training students must demonstrate skills and capabilities of succeeding in campus interviews.
13.	Nihilent's Students Skill Enhancement Programme	The objective of this training is to enhance the knowledge of the students for solutions on framework and tools for industry relevant problems.	At the end of the training, the students must demonstrate the knowledge of solutions to industry relevant problems.

# 1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? If 'yes', give details.

No, institute does not facilitate such programmes at present.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.

Following are some of the ways with reference to academic flexibility through which students get help for skills development, academic mobility, progression to higher studies and improvement in employability potential:

- Range of Core / Elective options offered by the University and those offered by the college.
- > Students enhance their academic and employability skills through the following:
  - Additional lecture hours introduced for problem oriented and difficult subjects
  - o Guest lectures given by eminent persons in emerging areas from industry and from renowned Institutions
  - o Mini projects and industry based final year projects
  - Seminars by students
  - Industrial visits
  - Teaching content beyond the syllabus in theory and practical courses.
- ➤ Skill enhancement and development Courses as mentioned in table 1.2.1 for improving employability potential. In addition to above provisions, Institute provides newspaper to every room in the hostel with an aim to improve the communication skill. Students must write five new sentences every day from the newspapers are get them checked during proctor sessions.
- ➤ GATE, GRE and TOEFL classes training programmes by professionals and also in-house for progression to higher studies.
- ➤ Provision for vocation training / in-plant training for academic mobility. Encouraging students or interdisciplinary projects.

This knowledge goes a long way and helps in the job selection process. This meets our aim to confer with global requirements.

1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

Yes. This is an exclusively self-financing professional institution for technical and management education. The college offers the following undergraduate and post graduate programs:

Table No.1.2.4 Details of the courses for UG, PG, Ph.D.

Sr.	Programme	Name of the Programme/	Duration
No.	Level	Course	
1	Under-	Electronics and Telecommunication Engineering	4 years
	Graduate	Computer Science and Engineering	
	(UG)	Mechanical Engineering	
		Civil Engineering	
2	Post-	M.B.A.	2 years
	Graduate (PG)	M.E.(Mechanical Engineering-Design)	
	(10)	M.E.(Mechanical Engineering-CAD/CAM)	
		M.E.(Electronics and Telecommunication Engineering)	
		M.E.(Computer Science and Engineering)	
		M.E.(Civil-Structure)	

Sr.	Programme	Name of the Programme/	Duration
No.	Level	Course	
3	Ph. D.	Ph.D.(Mechanical Engineering)	
		Ph.D.(Electronics and Telecommunication Engineering)	
		Ph.D.(Computer Science and Engineering)	
		Ph.D.(Civil Engineering)	

Table No. 1.2.3 Difference between our institute and others

C	1			
S. No.	Parameters	Our Institute	Other Colleges	
1.	Basis for Admission	IIT-JEE score, PCM score in 12 <sup>th</sup>	IIT-JEE score, PCM score in 12 <sup>th</sup> , Score in 12 <sup>th</sup> as the case may be	
2.	Admission Eligibility	As prescribed by Directorate of Technical Education (DTE), Govt. of Maharashtra	As prescribed by Directorate of Technical Education (DTE), Govt. of Maharashtra	
3.	Curriculum	As prescribed by Solapur University	As prescribed by Solapur University	
4.	Fee Structure	As prescribed by Shikshan Shulk Samithi	As prescribed by the State Government/ University/ Shikshan Shulk Samithi as the case may be	
5.	Teacher Qualification	As prescribed by the All India council for Technical Education (AICTE), New Delhi	As prescribed by UGC / AICTE as the case may be	
6.	Teacher Salaries	As prescribed by the All India Council for Technical Education (AICTE), New Delhi and Govt. of Maharashtra	As prescribed by UGC/ AICTE / Govt. of Maharashtra	

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Yes. The institution has identified a number of regional and global employability skills that would uphold better productivity and performance among students. Some of the programmes are as given below in table.

Table No.1.2.4 Details of the Programme and Beneficiaries

Sr. No.	Name of the Programme	Beneficiaries
1.	Entrepreneurship Awareness Camp	Students
2.	Communication Skills Lab	Students
3.	Communication Improvement Programme (CIP)	Students, Faculty
4.	Aptitude Training Programme	Students
5.	Auto CAD Training	Students, Faculty
6.	CATIA	Students, Faculty

Sr. No.	Name of the Programme	Beneficiaries
7.	ANSYS Training	Students, Faculty
8.	STAAD Pro	Students, Faculty
9.	Soft skill development programme	Students
10.	TCS Campus Commune Programme	Students
11.	Wipro Mission 10x	Faculty
12	Personality Development Programme	Students
13	Training programme for Under-Graduate Projects	Students
13	Nihilent Students Skill Enhancement Programme	Students

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?

The University does not provide this flexibility at present.

### 1.3 Curriculum Enrichment

# 1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

To integrate the academic programmes and institution's goals, the following initiatives are taken to supplement the University's curriculum:

- Add-on topics are included and updated in the curriculum to bridge the gap in the university curriculum so that the employment potential of the concerned program is enhanced worldwide.
- Conferences/seminars/guest lecturers, etc are organized and eminent persons from industries and reputed Institutions are called for updating the current happening in the Industries to the students. This will ensure the fulfillment of our institutional goals and academic and employability objectives.
- Additional laboratory experiments apart from curriculum requirement are provided in various laboratories.
- Assignments are given on all the subjects (covering topics beyond syllabus) in addition to arranging group discussions, written/oral tests, quizzes, term paper presentations etc.
- Advanced Language lab facilities are utilized to inculcate good communication skill among students.
- A library hour within the class time table is provided to encourage library usage by students.
- An internet browsing session in the time table so that the students can avail access to E-journals, downloading facilities in addition to books, journals, back volumes, e-books etc.

- Annual college technical fest (OLYMPUS) is being for all round development of the students.
- ➤ Educational tours are organized to develop interpersonal relationships and to create awareness about the rich tradition and Culture of our country.
- > Students are guided to take-up main/mini-projects in various industries so that employability objectives of the Institute can be achieved.

# 1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market

- ➤ The institution has made major efforts to enrich and organize the curriculum in such a way as to provide a total quality educational experience with a strong bend towards employability, flexibility and empirical learning.
- The institution has taken measures to cater to the global market needs based on the true assessment of strengths and services offered in the campus.
- To develop the required skills, brainstorming sessions are held for the faculty to design the tools in the areas of technology, use of computers and providing in-depth knowledge in the respective subjects.
- Training and placement cell interacts with reputed companies and industries so that add-on courses are conducted to make up the deficiencies in the student to make them employable.
- ➤ Career guidance programmes for students by eminent academicians and industrialists are organized.
- ➤ Industrial training and projects of students in well established companies/industries.
- ➤ In-house training programmes and professional programmes for communication skills.
- Organizing GATE training sessions.
- ➤ Modern computer labs with latest software packages. Distribution of AAKASH tablets to the students to assist in the use of ICT.
- To develop the required skills, brain storming sessions are held for the faculty to design the tools in the areas of humanities and sciences, use of computers and providing in-depth knowledge in the respective subjects. Various committees are looking after the needs of the students in the present scenario.
- ➤ Counseling Services include psychological, mental or emotional, Education and Career counseling. Student counseling cell in the institution helps for guiding and assisting students throughout their study at the institute, providing appropriate assistance at each stage of the student's development, growth and progress.
- ➤ This process often begins with a career counseling process designed to help students developing their self-knowledge and awareness of options needed to select an academic major or a cautious career direction.

## 1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

The cross cutting issues like Gender, Climate Change, Environment Education, Human Rights, ICT etc, find an ample space when it comes to applying them positively into the curriculum.

#### Gender

- o The college regularly organizes events on women empowerment
- o No discrimination of students in the campus
- o About 45% of the students and 40% of the faculty are women
- There is a committee for restraint of sexual harassment in the institute

### Environmental Education

- o Courses "Environmental Science" and "Environmental Engineering" are included as part of the curriculum.
- It is compulsory for all the students, irrespective of any stream, to clear the paper of environmental science.
- College has an in-house green team to educate the students about environmental protection and enhance the green cover of the campus.
- The institution being a green campus, is improving energy efficiency, conserving resources and enhancing environmental quality by educating for sustainability, natural resources management, climate change and creating healthy living and learning environment.
- The college also conducts workshops Environmental education where experts from the fields are invited to share and deliver their experiences and knowledge.

### ➤ Human Rights

- Subjects related to human rights are a part of the curriculum.
- As a part of NSS the college conducts various programs on Human Rights to provide awareness among students.
- Anti ragging awareness program, Communication Act Awareness program, Voters day program, blood donation program, Community Service, etc. are organized by the institute.

### > ICT

- Institute has 1Gbps internet facility in the campus through NKN.
- Staff rooms are facilitated with computers and Internet
- o NPTEL and videos are provided online. Internet browsing session and e-library facilities.
- o Entire campus has LAN and is enabled with Wi-Fi.
- Maintenance of data base of objective questions of all courses and used for conducting online examinations and from other sites such as indiabix.com Tests are conducted from these papers online. Development and deploying of events in college web site is done in-house and students are encouraged to develop websites for their respective departmental events.

## 1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

moral and ethical values employable and life skills better career options community orientation

#### **Moral and Ethical Values**

- Some courses related to moral and ethical values, professionalism and human values are included in the curriculum.
- > Students are trained in pranayam and perform everyday as a part of schedule to get balance between the apparent strengths and latent abilities, psychological, and spiritual growth.
- Social service activities are organized in association with NSS unit by students for surrounding areas and local people in a view to give awareness on various social, moral, and ethical principles.
- ➤ Invited talks on Professional ethics and also address by the principal are organized.
- Important component of the Institute's mission is to provide value based education. In line with the institute's mission values such as respect for other, ethics and morals are a part of proctor sessions and soft skills training programmes.
- Further, discipline and punctuality etc are inculcated in to their minds.

### **Employable Life Skills**

- As communication skill is necessary for employment, the institute takes extra care for the development of communication skill of the students through group discussion, debate, Essay writing competition etc. CIP lectures are included in regular time table and training is imparted by external professionals also.
- > Students are also allotted the different responsibilities in organizing various events and activities such as cultural programmes, competitions, seminars, workshops etc. In this way they improve their team building, leadership and organizational skills.
- ➤ Various skill development programmes as mentioned in Table No.1.2.1 are organized

### **Better career options**

- Add-on topics are included to bridge the gap in the university curriculum so that the employment potential of the concerned program is enhanced worldwide.
- Conferences/seminars/guest lecturers, etc are organized and eminent persons from industries and reputed Institutions are called for updating the current happening in the Industries to the students.
- Additional laboratory experiments apart from curriculum requirement are provided in various laboratories improving their hands-on experience.
- Advanced Language lab facilities are utilized to inculcate good communication skill among students.

- An internet browsing session in the time table so that the students can avail access to E-journals, downloading facilities in addition to books, journals, back volumes, e-books etc.
- Annual college technical fest (OLYMPUS) is being for all round development of the students.
- Educational tours are organized to develop interpersonal relationships and to create awareness about the rich tradition and Culture of our country.
- Students are guided to take-up main/mini-projects in various industries so that employability objectives of the Institute can be achieved.
- > Students participate in vocational training in the industries.

### **Community orientation**

- The college has an NSS unit which regularly visits surrounding areas and villages, where people are made aware on the various social, moral, ethical ways of life.
- NSS team of the college participates in community services/development activities like organizing blood donation camps periodically.
- > Students participate in the rural and regional relevant research taken up in the institute.

### 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

- ➤ Alumni Feedback: Every year institute organizes Alumni Meet in which feedback is collected and is gone through with a view to enhance the various aspects. Alumni feedback has been used to review and revise the learning outcomes. Add-on courses are introduced to achieve the same.
- ➤ Industry Feedback: Through the Industry Institute Partnership Cell (IIPC) feedback is sought from the industry. Such feedback is used to analyze the achievement of learning outcomes and creating add-on courses to enrich the curriculum. For Instance, IIPC has resulted in entering into MoU with Reanu Microelectronics Ltd., Pune. The activities under the MoU are aimed at improving the practical exposure of the students through vocational training; trainers from Reanu visit the campus and train the students on UG projects, etc.
- ➤ Current Students Feedback: Students feedback at least two times during every semester and once at the end of the course. Based on the continuous evaluation from the results of the students in tests and their feedback, bridge courses are added to the curriculum for enhancement of the same.
- Faculty Feedback: Faculty share their experience and give feedback at the faculty meetings in departmental level and also at the institute level general meeting. Such feedback is utilized greatly to enhance the curricular contents.
- Employer feedback: Employers have to ensure that the graduates they hire will be well prepared for the workplace so that they may not have to provide additional training. Feedback from the employers is also taken to assess the capability of our students to carry out the works in the industry and based on the opinion of industry; new programmes are introduced in the curriculum to suit the increasing demands of the industry.

## 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

- > Tools for assessment and evaluation of quality of the programmes are designed and developed.
- ➤ The training and placement cell conducts aptitude tests, group discussions on their training programmes to assess the effectiveness of training.
- Feedback is taken on all quality enrichment programmes at the end and suitable modifications and corrective actions are implemented wherever necessary.
- ➤ By monitoring or observing the qualitative changes in the attitude and behavior of the students by students counseling.
- ➤ The impact of quality enrichment programmes is assessed by analyzing the examination results and placement records.
- Feedback from stakeholders like parents, industries, university experts also used for evaluation.
- Employers, who are thoroughly satisfied with the performance of our alumni in their workplace, have been visiting our campus for hiring students every year recurrently. This is in a way an endorsement to our enrichment programs.
- Establishment of the Internal Quality Assurance Cell (IQAC) in the institution is in process to evaluate the quality of enrichment programmes in addition to curriculum.

### 1.4 Feedback System

### 1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

The faculty members of the institution have represented BOS, Faculty and Academic Council of the University and have contributed in the development of curriculum in various capacities viz. Dean, Faculty of Engineering and Technology, Former Dean of Faculty of Engineering and Technology, Chairman of Adhoc Board of Studies, Member of Faculty of Engineering and Technology, BUTR, Academic Council, Member of Board of Examinations and conducted and participated in syllabi setting workshops.

# 1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

- Yes, the college has a formal mechanism to obtain feedback from students and all stakeholders.
- ➤ Alumni Feedback: Every year institute organizes Alumni Meet in which feedback is collected and is gone through with a view to enhance the various aspects. Alumni feedback has been used to review and revise the learning outcomes.
- ➤ Industry Feedback: Through the Industry Institute Partnership Cell (IIPC) feedback is sought from the industry. Such feedback is used to analyze the achievement of learning outcomes and creating add-on courses to enrich the curriculum. For Instance, IIPC has resulted in entering into

- MoU with Reanu Microelectronics Ltd., Pune. The activities under the MoU are aimed at improving the practical exposure of the students through vocational training, trainers from Reanu visit the campus and train the students on UG projects, etc.
- ➤ Current Students Feedback: Students feedback atleast two times during every semester and once at the end of the course. Based on the continuous evaluation from the results of the students in tests and their feedback, bridge courses are added to the curriculum for enhancement of the same.
- Faculty Feedback: Faculty share their experience and give feedback at the faculty meetings in departmental level and also at the institute level general meeting. Such feedback is utilized greatly to enhance the curricular contents.
- ➤ Employer feedback: Employers have to ensure that the graduates they hire will be well prepared for the workplace so that they may not have to provide additional training. Feedback from the employers is also taken to assess the capability of our students to carry out the works in the industry and based on the opinion of industry; new programmes are introduced in the curriculum to suit the increasing demands of the industry.
- ➤ Parents' feedback: Parents' meet is conducted every year in the department and the feedback is sought from the parents. Further, during the parents'- teacher association meets also, feedback is sought from the parents and effectively utilized for the enrichment of the curriculum.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)

Any other relevant information regarding curricular aspects which the college would like to include.

In order to expand the horizon of offered courses in tune with the technological advancements, following are the list of new programmes/courses introduced by the institution during last four years:

Table No.1.4.1 Details of New Programmes/ Courses Introduced

Sr.No.	New Programmes/ Courses Introduced	Year of Introduction	Intake
1	M. E. Mechanical(CAD/CAM)	2011-12	18
2	M.E(E &TC)	2010-11	18
3	M.E.(Computer Science)	2011-12	18
4	M.E.(Civil-Structure)	2011-12	18
6	Ph.D (Mechanical Engineering.)	2010-11	18
7	Ph.D (E & TC)	2010-11	18
8	Ph.D (CSE)	2010-11	18

The new courses/programmes are introduced

- > To impart diversified knowledge to the society.
- > To develop the manpower in the specialized streams of engineering.
- To fulfill local & global industry and social needs.
- > To encourage research & development.
- To develop the center of excellence in related areas.

### **CRITERION II: TEACHING - LEARNING AND EVALUATION**

#### 2.1. Student Enrollment and Profile

## 2.1.1. How does the college ensure publicity and transparency in the admission process?

The college ensures publicity and transparency in the admission process in the following manner:

### **Publicity:**

- ➤ Directorate of Technical Education (DTE), Maharashtra State hosts the admission notification. Admission notification is published in all leading national and regional daily newspapers and television channels from time to time and the same is displayed on the notice board of the college.
- ➤ College publishes admission notification in all national and regional daily newspapers about admission intake to all the programmes, important dates for admission and admission procedures.
- ➤ College has an Admission Guidance Cell (AGC) and Application Receipt Centre (ARC). College publicizes the detail of Admission Guidance Cell (AGC) and Application Receipt Centre (ARC) in prominent places.
- College arranges for admission counseling of students by sending faculty members to various colleges and Joint Entrance Examination (JEE) examination centers.
- ➤ College information brochure gives all the academic, administrative and fee structure information related to admission process.
- ➤ College arranges workshops for parents regarding admission procedures, intake of different programme and important dates of admission process.

### **Transparency:**

- Transparency is maintained throughout the admission process. The admission process is controlled by Directorate of Technical Education (DTE), Maharashtra State.
- ➤ Schedule for Joint Entrance Examination (JEE) is declared by Directorate of Technical Education (DTE), Maharashtra. Entire admission process in controlled through online Centralized Admission Process (CAP) rounds.
- Admission criteria is based on Physics, Chemistry, Mathematics (PCM) marks of 12<sup>th</sup> class and result of Joint Entrance Examination (JEE) in case of first year admissions; and Diploma result in case of direct second year admission.
- > Students can fill both, the choice of branch and college name, by on-line counseling process followed by online registration.
- A state level, merit list is then prepared according to the intake capacity. The same is kept in the college office for public information.

- ➤ 80% of the seats are filled by Directorate of Technical Education (DTE), Maharashtra and 20% of the seats are filled by College Management and Government quota. College adheres to all the rules and regulations of the Directorate of Technical Education (DTE) state government.
- ➤ Since the entire process is controlled online and enough publicity is given through advertisement, information brochure, etc. transparency is ensured in the process.
- 2.1.2. Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

Criteria adopted and admission process followed is as per the guidelines given by Director of Technical Education (DTE), Maharashtra State:-

### A. Admission to First Year Engineering is based on

- 1. Merit list as per MHCET/JEE score
- 2. Merit list as per AIEEE score and
- 3. Candidates should fulfill following criteria given by Director of Technical Education (DTE), Maharashtra
  - 1.1. Should have passed 12<sup>th</sup> Class Physics, Mathematics and Chemistry/ Biology/ Vocational subject Should have secured 45% marks in the subjects Physics, Chemistry and Mathematics added together (40% for Backward Class Category candidates from Maharashtra).
- 4. The candidate must have passed (10+2) Examination with at least 45% marks (40% for Backward class from Maharashtra), on an average, Physics, Mathematics and Chemistry/ Biology/ Vocational subject.
- 5. Candidate must have passed Diploma in engineering securing minimum 50% marks.

### B. Direct Admission to Second Year Engineering

1. The candidate must have passed diploma in appropriate branch of engineering securing minimum 60% marks.

### C. Admission to First Year Masters in Engineering

### 1) M.E in Mechanical Engineering (M.E. CAD/CAM and M.E. Design):

- 6. BE/B.TECH degree(Mechanical/Automobile/Production) or equivalent from recognized University/Institute with minimum 55% marks for general category and 50% marks for reserve category. Candidate must have a non-zero GATE score.
- 7. Candidate appearing for final degree examination may also apply. Admission of such candidate will be subject to passing the qualifying examination.
- 8. Sponsored candidates must be serving in an academic Institute/Industry/R&D organization for minimum two years in

related area. The candidate should furnish the sponsorship letter from their parent organization.

### 2) M.E. in Computer Science and Engineering

- 1. BE/B.TECH degree (Computer Science and Engineering) or equivalent from recognized University/Institute with minimum 55% marks for general category and 50% marks for reserve category.
- 2. Candidate must have a non-zero GATE score. Candidate appearing for final degree examination may also apply. Admission of such candidate will be subject to passing the qualifying examination.
- 3. Sponsored candidates must be serving in an academic Institute/Industry/R&D organization for minimum two years in related area. The candidate should furnish the sponsorship letter from their parent organization.

### 3) M.E. in Electronics and Telecommunication Engineering

- 1. BE/B.TECH degree (Electronics and Telecommunication/Electronics) or equivalent from recognized University/Institute with minimum 55% marks for general category and 50% marks for reserve category. Candidate must have a non-zero GATE score.
- 2. Candidate appearing for final degree examination may also apply. Admission of such candidate will be subject to passing the qualifying examination.
- 3. Sponsored candidates must be serving in an academic Institute/Industry/R&D organization for minimum two years in related area. The candidate should furnish the sponsorship letter from their parent organization.

### 1. M.E. in Civil Structural Engineering

- 1. BE/B.TECH degree (Civil Engineering) or equivalent from recognized University/Institute with minimum 55% marks for general category and 50% marks for reserve category.
- 2. Candidate must have a non-zero GATE score.
- 3. Sponsored candidates must be serving in an academic institute / Industry / R&D organization candidate for minimum two years in related area.
- 4. The candidate should furnish the sponsorship letter from their parent organization.

### D. Admission to First Year Masters of Business Administration

- 1. Any graduate with a degree minimum three years duration in any discipline from recognized University with minimum of 50% marks in aggregate (45% in case of candidate of backward class categories belonging to Maharashtra state only).
- 2. The candidates should have scored non-zero in MH-MBA CET or CMAT and appeared for GD and PI arranged by the competent authorities.
- 3. Or Equivalent non-zero score or more in the all India CET (CAT / JMET / ATMA / XAT / MAT).

### E. Ph.D

- a. College has University Recognized Research Centres forMechanical Engineering, Computer Science and Engineering, Electronics and Telecommunication Engineering and Civil Engineering.
- b. For admission to the Ph. D. programme in a related subject of concerned faculty, the candidate shall fulfil the following conditions:
  - i. Minimum of 55 % marks (50% for SC/ST category) or with equivalent grade points at Post Graduate degree examination or its equivalent. OR
  - ii. University approved teachers who are already in service, within the state of Maharashtra. OR
  - iii. Master's degree by research, recognized by Solapur University or equivalent. OR
  - iv. A candidate appearing for the post graduate final year examination may appear for the entrance test. However, he/she shall have to submit the result of qualifying examination at the time of DRC interview, failure to which the candidate will become non eligible for Ph.D. Admission.
  - v. The candidate shall secure minimum 40% (35% for SC / ST) in entrance test, if applicable.
  - vi. Persons working in National Laboratories- Institutes / Government/Private organizations fulfilling the above conditions and nominated / sponsored by the respective employer, having marks/grade as mentioned in (i) With at least ten years of experience in relevant field such persons shall have to submit no objection certificate; from their employer.
  - vii. IInitially candidate will be provisionally registered for Ph.D. programme the admission to the Ph.D. programme will be confirm only after confirmation of eligibility of the candidate to the Ph.D. programme.
- viii. A Senior citizen of 62 years completed age and above, or eminent person with proven publications having Post Graduate Degree with 50% marks, in exceptional cases at the discretion of Hon. Vice- Chancellor on academic basis the candidates may be exempted from entrance test and interview.
- 2.1.3. Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the institute and provide a comparison with other institutes of the affiliating university within the city/district.

The minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the institute and a comparison with other institutes of the affiliating university within the city/district is as follows:

Table No.2.1 Percentage marks at entry level for each programme

Sr. No.	Academic Years	Program /Courses	SVERI's COE Pandharpur		Min Marks and Max Marks of
			Min CET Marks of admitted students	Max CET Marks of admitted students	students affiliated to college/ university within the city/district
1.	2011-12	CIVIL	09	78	The entry level
		CSE	14	112	admissions are
		ENTC	16	123	through CAP
		IT	06	85	only and
		MECH	39	113	managed by
2.	2012-13	CIVIL	22	123	Directorate of
		CSE	07	116	Technical
		ENTC	01	116	Examination
		IT	55	87	(DTE),
		MECH	43	112	Maharashtra. The
3.	2013-14	CIVIL	33	113	data for minimum
		CSE	23	109	and maximum marks is not
		ENTC	09	96	marks is not available.
		IT	37	76	avanabic.
		MECH	40	125	
4.	2014-15	CIVIL	12.39	80.26	
		CSE	22.39	89.99	
		ENTC	25.29	86.80	
		MECH	5.37	88.77	

# 2.1.4. Is there a mechanism in the institution to review the admission process and student profiles annually? If yes, what is the outcome of such an effort and how has it contributed to the improvement of the process.

Admission process is carried out completely through DTE's CAP rounds.

However, every year after the admission process, students' profiles are studied by the core team of the college. Accordingly, strategies are designed to improve admission position. For ex. improving the pass percentage of the students at first year level- majority of the students taking admission to the institution are from a rural background. It is difficult for these students to understand the concepts and to write answers to the questions asked in an examination. Through the review process many initiatives such as night study sessions, practice sessions, chapter wise tests, preliminary examinations, etc. are planned and conducted. With the result, the pass percentage at the first year level is at top position in the university for the past three years. Such initiatives have helped in bringing improvement of admitting students' profiles.

- 2.1.5. Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the dmission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion
  - \* SC/ST
  - \* OBC
  - \* Women
  - \* Differently- abled
  - \* Economically weaker sections
  - \* Minority community
  - \* Any other

As per national and state policy in respect of reservation for socially and physically deprived categories 52% seats are reserved and also 30% seats are reserved for women. As admissions are processed by DTE, due care is taken to give justice in this respect.

2.1.6. Provide the following details for various programmes offered by the institution during the last four years and comment on the trends, i.e. reasons for increase/decrease and actions initiated for improvement.

Following Table No.2.2 shows statistical admission data for last four years.

Table No.2.2 Statistical admission data for last four years

Sr.	Programmes	Year	Number of	Number of	Demand
No.			applications	students	Ratio
				admitted	
		UG			
1.	Civil Engineering	2010-2011	52	52	1
		2011-2012	50	50	1
		2012-2013	61	61	1
		2013-2014	63	63	1
2.	Computer Science	2010-2011	87	86	1.01
	and Engineering	2011-2012	78	78	1
		2012-2013	103	103	1
		2013-2014	49	49	1
3.	Electronics and	2010-2011	94	94	1
	Telecommunication	2011-2012	115	115	1
	Engineering	2012-2013	121	121	1
		2013-2014	80	78	1.03
4.	Information	2010-2011	42	42	1
	Technology	2011-2012	18	18	1
		2012-2013	8	8	1
		2013-2014	8	8	1
5.	Mechanical	2010-2011	121	121	1
	Engineering	2011-2012	121	120	1.01
		2012-2013	125	124	1.01
		2013-2014	124	123	1.01

Sr.	Programmes	Year	Number of	Number of	Demand		
No.			applications	students	Ratio		
				admitted			
PG							
1.	Civil Engineering	2010-2011			-		
	(Structure)	2011-2012	19	17	1.12		
		2012-2013	18	18	1		
		2013-2014	19	16	1.19		
2.	Computer Science	2010-2011			-		
	and Engineering	2011-2012	18	17	1.06		
		2012-2013	19	18	1.06		
		2013-2014	18	18	1		
3.	Electronics and	2010-2011	18	18	1		
	Telecommunication	2011-2012	18	18	1		
	Engineering	2012-2013	16	16	1		
		2013-2014	15	15	1		
4.	Mechanical	2010-2011			-		
	Engineering	2011-2012	11	11	1		
	(CAD/CAM)	2012-2013	16	15	1.07		
		2013-2014	12	11	1.10		
5.	Mechanical	2010-2011	18	18	1		
	Engineering –	2011-2012	18	18	1		
	(Design)	2012-2013	17	17	1		
		2013-2014	19	18	1.06		
6.	Master of Business	2010-2011	35	31	1.13		
	Administration	2011-2012	12	12	1		
		2012-2013	36	34	1.06		
		2013-2014	20	19	1.05		
		PhD					
1.	Civil Engineering	2010-2011	-	-	-		
		2011-2012	-	-	-		
		2012-2013	-	-	-		
		2013-2014	2	2	1		
2.	Computer Science	2010-2011	-	-	-		
	and Engineering	2011-2012	-	-	-		
		2012-2013	-	-	-		
		2013-2014	-	-	-		
3.	Electronics and	2010-2011	2	2	1		
	Telecommunication	2011-2012	2	2	1		
	Engineering	2012-2013	-	-	-		
		2013-2014	-	-	-		
4.	Mechanical	2010-2011	-	-	-		
	Engineering	2011-2012	4	4	1		
		2012-2013	-	-	-		
		2013-2014	2	2	1		

### 2.2. Catering to Student Diversity

# 2.2.1. How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

In addition to ensuring adherence to government policies in respect of admission to the programme, institute has the following facilities to cater to the needs of differently abled students:

- > Seats are reserved in the college buses for students who are differently abled.
- Facilities for ease of mobility such as ramps, hand railings, etc. are provided. Institute is in the process of installing elevator facility for the same
- ➤ In the classrooms the seating arrangement is made in order to provide ample legroom and comfort.
- ➤ Wherever required, scribe is provided to the students to assist in writing examination.
- Extension in time is given to students for completion of the written exams by 30 min in case of 3 hours exam and 45 min in case of 4 hours exam.
- The amenities such as toilets are constructed for ease of access to those students.
- > Braille keyboards are provided for the visually challenged students.

# 2.2.2. Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If yes, give details on the process.

Yes, the institute assesses the needs of knowledge and skills of students before commencement of the program as under:

- ➤ Welcome address by Principal along with concerned HODs and Training and Placement officer is arranged to make the students aware about skills and knowledge requirement of the programme.
- At the beginning of the program faculty members engage orientation classes to ascertain the students' needs in terms of knowledge base needs and skills.

# 2.2.3. What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge / Remedial / Add-on / Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

Based on the identification of the needs of the students in terms of knowledge and skills, efforts are made by the Institution in the following manner to bridge the knowledge gap:

- ➤ Practice sessions are taken after the college hours and one to one attention is given to such students.
- ➤ Counseling facility is made available to students to motivate them by bringing a change in their attitude towards learning.
- ➤ Chapter wise tests, Unit tests and preliminary tests are used as a tool for continuous evaluation of the students and corrective measures are employed based on their performance in such tests.

- Faculty members are available in the night study sessions and also make hostel visits during the semester and during the preparatory leave period, to clear the doubts of the students.
- ➤ Parents of such students are also counseled to ensure support to the student.
- For the students who underperform in the final examinations, special remedial classes are conducted for improving their performance.

## 2.2.4. How does the institute sensitize its staff and students on issues such as gender inclusion, environment etc.?

### **Gender Inclusion:**

- ➤ Currently in the Institute, about 45% of the students and about 40% of the faculty are women. Through regulations from government and by taking progressive initiatives from the Institute side, gender equality and inclusion are ensured. Institute organizes functions such as Savitribai Phule Jayanti, Birth Anniversary of Jijabai, Women's Day, etc. to bring due awareness on gender inclusion.
- In addition to above, institute sensitizes its faculty and staff about laws of women protection through invited lectures. Statutory committees such as Grievance Redressal and Committee for restraint of sexual harassment are constituted.

#### **Environment:**

To sensitise staff and students about environment, following initiatives are taken up by the institute:

- Institute has display boards at all prominent places to turn off electric devices like computers, fans, lights, air conditioner etc. before leaving the rooms.
- ➤ Renewable sources of energy such as solar water heaters are used in the hostels and students are made aware of this provision.
- ➤ Rain water harvesting is also done in the campus by providing suitable catchment areas.
- ➤ Green team is constituted in the Institute, with faculty members and students. In addition to plantation, Institute also provides for watering these plants.

## 2.2.5. How does the institution identify and respond to special educational/learning needs of advanced learners?

Institute evaluates the performance of students continually through class tests, assignments, unit tests, project, etc. Based on their performance, advanced learners are identified and special measures are taken to cater to their learning needs and their skills.

- Institute provides free book bank facility and additional two books for technical and other competitive examinations. Institute conducts meeting to seek feedback of such students and decisions are taken based on their suggestions. Some of the decision taken by the institute to respond to students' needs are as follows
  - o GATE entrance books are issued from Second Year itself.
  - o GATE classes in the campus from third year itself.
  - o Library and laboratory hours are extended.
  - o UG project groups are formed in Second Year itself.

- The institute library subscribes to journals and eBooks and access is provided to the students.
- o Various competitions, National level technical events are organized by the institute.
- Students are motivated to take part in summer training programme / workshops at various leading research institutes and laboratories, as well as industries.
- Financial support is extended to students who present/publish papers in conferences and journals.
- Resource persons from industries and academic institution are invited to deliver guest lectures on the advanced topics for the benefit of the students.
- In addition to above, meritorious prizes are given to students based on performance in the examinations to further encourage the students.
- 2.2.6. How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?
  - Institute evaluates the performance of students continually through class tests, assignments, unit tests, project, etc. Based on their performance, students at risk of drop out are identified and special measures are taken to cater to their learning needs and their skills.
  - ➤ If a student does not attend classes regularly, class teacher makes phone calls to the parents of such students and understand the problem(s)/ reason(s) and further letters are also sent to the parents. Parents of such students are also counseled to ensure support to the student. Currently very negligible percentages of students have dropped out of college.
  - ➤ Practice sessions are taken after the college hours and one to one attention is given to such students.
  - ➤ Counseling facility is made available to students to motivate them by bringing a change in their attitude towards learning.
  - Faculty members are available in the night study sessions and also make hostel visits during the semester and during the preparatory leave period, to clear the doubts of the students.
  - For the students who underperform in the final examinations, special remedial classes are conducted for improving their performance.
  - ➤ Support is extended to students coming from economically weaker sections through Earn and Learn facility initiated by the institute. Hostel accommodation expenses and food bills are borne by the Institute and the student will have to do some generic work of about 2-3 hours per week in return.
  - ➤ In addition to ensuring adherence to government policies in respect of admission to the programme, support is extended by the institute to cater to the needs of differently abled students in the following manner:

- Seats are reserved in the college buses for students who are differently abled. Facilities for ease of mobility such as ramps, hand railings, etc. are provided.
- o Institute is in the process of installing elevator facility for the same. In the classrooms the seating arrangement is made in order to provide ample legroom and comfort.
- Wherever required, scribe is provided to the students to assist in writing examination.
- Extension in time is given to students for completion of the written exams by 30 min in case of 3 hours exam and 45 min in case of 4 hours exam.
- The amenities such as toilets are constructed for ease of access to those students. Braille keyboards are provided for the visually challenged students.

### 2.3. Teaching Learning Process

## 2.3.1. How does the college plan and organise the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

Before the beginning of Academic Year, well planned academic calendar is prepared by taking inputs from students, other stake holders, faculty and administration. Such prepared 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 subjects is prepared in tune with the Academic Calendar by the faculty.
- ➤ Dates of conduction of Unit tests, Lab tests and result declaration are also a part of 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 the 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 coordinators are appointed for viz. Class Coordinators, Time-Table In-charge, Industrial Visit Coordinator, Departmental Grievance Redressal Committee, etc.
- ➤ Weekly departmental meetings are taken to review the teaching, learning and evaluation schedules.

## 2.3.2. How does IQAC contribute to improve the teaching –learning process?

Institute is in the process of establishment of functional Internal Quality Assurance Cell (IQAC) at SVERI. Since quality enhancement is a continuous process and Institute is very keen towards quality in education, the IQAC will become a part of the systems in institute and work towards realization of the goals of quality enhancement and develop a system for conscious, consistent and catalytic action to

improve the overall performance of the institution and to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices. Institute has organized workshops on the establishment of IQAC.

# 2.3.3. How learning is made more students centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

- Learning is made more students centric by following outcome based education. Keeping in line with the above, Programme Educational Objectives (PEOs), Program Outcomes (POs) and Course Outcomes (COs) are defined for the courses.
- Industrial visits and guest lectures by industrial persons are also arranged to make the students aware of the contemporary issues of the industry.
- Every initiative/ activity planned in the Institute is ensured to either create a new learning avenue to students or enhance the existing. Modern technical infrastructure such as video conferencing facilities, modes of teaching such as the LCD projectors, etc ensure interactive teaching methodology. Students are encouraged to be participative in the classes to enhance the interaction.
- > Students are encouraged to organize technical, co-curricular and extra-curricular activities.
- ➤ Project works, Group Discussions, Industrial visits, etc. ensure the collaborative participation of students.
- ➤ There are multiple avenues available in the system to the teachers for ensuring independent learning of the students.
  - Library hours round the clock, with about 45,000 volumes of text and reference books, personality development books, ejournals, magazines, etc give ample opportunity to a student for independent learning.
  - In addition to above classes are organized in the campus for competitive examinations such as GATE.
  - Students spend about 15 days time in the industry for vocational training resulting in independent learning.
  - o Students are provided AAKASH tablets and the entire campus is connected through Wi-Fi.
  - With the result, students get an opportunity for independent learning. Further, students' independent learning is ensured through project and self learning courses encouraging the students towards lifelong learning.

# 2.3.4. How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators?

The institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators in the following manner:

➤ It is almost mandatory for engineers to think critically on industrial problems. The curriculum of the course ensures critical thinking of

- the students. In addition to the curriculum, institute has created a multitude of opportunities to the students. One such event is Agro-Challenge. Students were motivated to solve real life problems of the farmers. Students had to design, develop and demonstrate equipment to solve the day to day problems of the farmers specific to this region.
- Institute has signed MoUs with enterprises such as REANU Micro Electronics Pvt. Ltd., Pune and Collab Air for exposing the students to problems of real clients. When the problems cease to be hypothetical and problems are real, students are motivated to push their boundaries of critical thinking. There are student chapters of professional bodies such as ISTE to further align the students towards critical thinking.
- ➤ Creativity is nurtured through the co-curricular and extra-curricular activities. Technical, non —technical and literary events are a part of the Academic Calendar and are implemented meticulously. Students who organize and participate in such events will get enormous opportunity to exhibit and improve their creativity.
- Scientific temper is instilled in the students from the beginning of the course. Currently the institute has funds of about Six Crore rupees from various funding agencies such as, RGSTC, BARC, ARDB, AICTE, etc. Scientists from eminent research organizations are a part of some of the critical committees of the institute including the Research Advisory Council.
- > Students are given opportunity to work on sponsored projects.
- ➤ MoUs have been signed with eminent research organizations such as BARC and RRCAT. Lectures and interaction sessions are arranged from the from time to time.
- Financial assistance is provided for the project work for nurturing the scientific temper of the students.
- 2.3.5. What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, elearning resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

The institute makes comprehensive use of cutting-edge technologies in the teaching learning process and provides such facilities for the benefit of the students. Following are the technologies and facilities used by the faculty for effective teaching:

- ➤ Institute has in its premises the NKN node as a part of DAE-Outreach Centre and the project. This node hosts the best of video conferencing facilities and is made use of for webinar sessions of students.
- The entire campus is connected with hi speed Wi-Fi facility (1Gbps)
- ➤ Departments are provided with smart class rooms with Laptops, LCD projectors, Smart Boards and Wi-Fi connectivity.
- ➤ MOODLE server is established for Learning Management System (LMS)

- > NPTEL Videos/PDFs and open e-learning resources like MIT, etc are available for the students to learn the subjects off the class room are hosted on the college web portal named "sveri tube"
- ➤ Virtual laboratories are available for several courses
- ➤ Communication Lab is equipped with LCD projectors, DVD players, computers and interactive CDs that are used for the screening of documentaries and information visuals setup with an aim of equipping the learners of English with a good command of the language for communication purposes.
- ➤ AAKASH tablets have been provided to students to enhance the interactive learning.
- ➤ In addition to above, college has subscribed to e-journals and e-resources such as e-foundry.

## 2.3.6. How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

Exposure of students and faculty to advanced level of knowledge and skills is systemic at the Institute.

- As per policy each department must have at least one advanced guest lecture every week from a resource person from industry/academia. Institute has well evolved
- Training and Placement Cell that identifies need based training modules for the students.
- > Students are encouraged with financial support to attend workshops and seminars conducted at the institute and other colleges.
- ➤ During the planning for the academic year, provision is made for one Faculty Development Programme (FDP) per month of duration of at least two days during teaching period and of duration of at least one week during the non –teaching part of the semester.
- ➤ In addition to the above, each department must plan and organize at least one STTP per semester.
- Faculty members are supported financially for attending conferences and workshops at both national and international level.
- Expert guest lectures for students and faculty are also conducted as a part of several MoUs by the Institute with organizations of higher learning, industry and research organizations.

# 2.3.7. Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional councelling/monitoring/academic advise) provided to the students?

All the students of the college benefit from academic, personal and psycho-social support and guidance services in the following manner:

### **Proctor Teacher:**

- A group of 20 students are allotted to one proctor teacher
- > Proctor teacher is a mentor to the students of his/her proctor batch
- Each day the students of the batch spend about one hour with the proctor teacher who guides the students on all fronts and makes the students get involved in activities for their development.

➤ Due to everyday interaction and the small size of the proctor batch, students who need personal or psycho-socio assistance easily approach the proctor teacher.

### **Class Coordinators:**

- Each class has a Class Coordinator (CC)
- CC will act as a friend, philosopher and guide to the students
- > CC will keep track of the ac academic performance of the students and send the progress report of the students to the parents for all internal assessments and also end semester assessment.
- > CC will also monitor the attendance of the students in their class. If any student lags or shows deviation in his/her academic and attendance, the students will be counseled and appropriate actions are initiated
- > Students who require any personal guidance approach the CC for assistance to overcome their difficulties.

### **Head of the Department (HOD)**

➤ Head of the Department conducts meetings with the students to motivate them at least once in each semester by visiting their classes.

### Dean, Students

➤ Dean, Students acts as a proctor and student liaison for the entire Institute. Students with severe problems that cannot be dealt at departmental level are recommended to Dean, Students. One to one counseling of the students will help to serve the students better

### **Counselor** (External)

➤ In addition, Institute has hired external counseling services of Dr. Sangeeta S. Patil, Psychological counselor for providing required help to the students with acute psychological problems.

Table No.2.3.7 Mentoring system to help at individual level

Mentoring by	Type of mentoring	Number of students	Frequency of meeting
Dean, Students	Personal, General and Psychological	One at a time	As per the need
Head of Department	General, spiritual and academic awareness	Approximately 70 at a time	Twice in a semester
Class coordinator	About discipline and general behavior	Approximately 70	At least four times in a semester
Proctor Teacher	Personal, technical difficulties, general problems ,etc	20	Daily
Psychologist	Sevier Psychological problems such depression, stress, etc.	One at a time	As per need

2.3.8. Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faulty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Modern and contemporary approaches and pedagogical tools, given our rural setting are adopted to enable the students get the best. Institute made considerable efforts in this direction by providing the required support and systems to the faculty to adopt new and innovative approaches of teaching. The impact is immense with appreciable rise in learning quotient. Increased performance of the students in oral and university exams is observed as a result such initiatives. Following, Table No.2.4 provides a list of some of the innovative practices of teaching-learning adopted by the faculty:

Table No.2.3.8 Innovative practices of teaching-learning

Approach	Description
E-Session /	Students are given designated two hours per week for browsing the
Internet Session	internet. Faculty provides the students with Websites that help the
	students to be updated with recent developments. Students also browse
	various websites related to their academic interest and courses taught to
1.0 T. 1.1.1	them.
ICT enabled	Most teachers prepare slides and deliver power point presentations in
learning	the classes for explaining the concepts. At least 2 classes for each subject are especially taught on contents beyond syllabus and are
	handled through PPT slides by every faculty. NPTEL videos of several
	subjects are also available on college web portal called 'sveritube'.
	Students can also access the virtual lab facilities hosted on the college
	website.
Seminars	Weekly seminars are held and students are instructed to take seminars
	using PPT slides in classes and to interact with faculty on familiar
	topics. Institution provides LCD monitor and computer systems for the
	preparation and presentations. By preparing seminar papers students
	themselves developed their knowledge and skills and become familiar in
C1	the subject.
Group learning activity	Group Learning, Pear group learning among teachers and the same among the students is practiced so that there is sharing of knowledge
activity	laterally. Lateral summation of knowledge is more effective and
	effulgent than self-learnt knowledge. Further several groups based on
	natural bonding emerge out making learning an endearing experiment.
MOODLE	Question papers on various technical, behavioral, aptitude and other
	related areas are hosted on MOODLE. Students spend one hour every
	week practicing the answers to these questions. Faculty evaluates these
	tests and the answers of these are discussed in the next session of
	MOODLE. Faculty also upload tutorials, notes and study material for
Looming	the students on MOODLE
Learning through	Institute provides AAKASH tablets to students to enhance their creative
AAKASH	learning and self learning abilities. Faculties assign projects to the students that can be solved by effective use of the tablets.
AAIXASII	students that can be solved by effective use of the lablets.

Approach	Description
Practice	Students attend practice sessions every day. These sessions are revising
Sessions	the concepts taught in the class and practicing problems related to such
	concept. Faculty clears the doubts of students during these sessions.
Experiential	Each Department organizes Industrial visits. Faculty explains the
Learning	students prior to the visit about the necessary elements to be observed during the visit. Faculty accompanies the students and explains the various processes which they have learnt in the classroom and adopted in the industry. Students must submit a report on the industrial visit and their learning.

## 2.3.9. How are library resources used to augment the teaching-learning process?

- Library is the learning inspiration. The centralized library of the college has an enviable collection of more than 48,000 most useful and acclaimed books. The College has subscribed for more than 130 Indian Journals in hard copies and 452 Online Journals. The Investment in books and journals has crossed the figure of Rs. 3 Cr. Library sessions are part of the time-table to ensure students use the facility effectively.
- The Library has a separate section for personality development as well as competitive examinations preparation related books with around 4,300 volumes. Each student must take a personality development book during vacation. On the first day of start of the following semester, students must present a seminar on the book and in addition, must also learn new words appearing in the book and their meanings.
- ➤ There are large number of books on GATE, GRE, TOEFL and various competitive examinations. Digital Library facility is also provided through DELNET.
- The Library offers Book Bank Scheme for all the students. All students are provided required text books through book bank.
- ➤ It provides services Round-the clock. And there is open access facility.
- Reprographics as well as printing facility is also available in the. E-library access is provided to the students to access the pdf copies of reference books. E-journals access is provided to students and faculty. Students are given assignments for collection and report writing on e-journals from the second year itself. Each department also has a departmental library. This facility is used by the students and faculty.

# 2.3.10. Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

Institute takes adequate care while planning and designing the Academic Calendar. Teachers make their teaching plan in tune with the same. Measures are taken that deviations from the teaching plan and academic calendar, if any, are compensated within the same week. Weekly review by the Head of Department (HOD) and monthly review by Principal are taken to keep track of the curricular activities as per plan.

## 2.3.11. How does the institute monitor and evaluate the quality of teaching learning?

- The institute's quality of teaching learning is monitored and evaluated by the members by Local Managing Committee (LMC), Planning and Monitoring Committee (PMC) and the Academic Advisory Committee (AAC). These committees evaluate both the academic and administrative aspects of all the departments and suggest remedial measures for improvement to boost the work culture of the department and thereby improving the quality of teaching and learning.
- ➤ Feed back is sought from the students by Dean, Academics. Necessary corrective measures are taken through feedback review meetings in the presence of student representative, concerned subject teachers, class coordinator, HOD and Dean, Students. The Heads of the department conduct class committee meeting to know the quality and progress of teaching and collects feedbacks on each subject.
- Dean, Academics and Dean, Students check the subject file and teaching plan of the teachers to make sure there are no lacunae in the same. Students' note books are also verified. Review meetings related to quality of teaching-learning including 100% syllabus coverage up to the satisfaction of the students are taken in Student Council meetings.
- Quality of teaching is also assessed by the Principal at random during their lectures. Quality of teaching is evaluated through the University exam results of the students and stringent measures are taken in order to improve the performance.

### 2.4 Teacher Quality

2.4.1. Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

**Table No.2.4.1 Qualified Teachers** 

Highest	Prof	essor		ciate	Assis		Total
Qualification			Prof	essor	Profe	essor	
	M	F	M	F	M	F	
Permanent teach	ers						
D.Sc./D.Litt.							
Ph.D.	04	01	03	01	05		14
M.Phil.							
PG				01	86	42	129
Temporary teach	ers						
Ph.D.							
M.Phil.							
PG							
Part-time teachers							
Ph.D.	01						01
M.Phil.							
PG							

### **Recruitment strategies**

Institute has a Human Resource Development Committee (HRDC) that analyzes the requirement of the faculty based on the workload. The college recruits the teachers who are well experienced and experts in their respective field of study. The college recruits new faculty members through the reference from other teachers and experts in the area. Recruitment Policy and procedure guided by the affiliating university and Board of Governors (BoG) is followed for recruiting the faculty.

### **Retention strategies**

Retention of able teachers is achieved by providing financial and fringe benefits, on-campus accommodation, time bound and performance based promotion policy. Institute deputes/sponsors faculty for higher studies as well as conferences, workshops etc. Institute gives opportunity to faculty members to upgrade knowledge and skills through one month industrial training after every semester end. Institute gives financial support in the form of Seed Money Grant for carrying out research work. Faculty members with psychosocial problems are counseled to overcome their problems.

2.4.2. How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

- For improving teaching/learning resources teaching skills and to face the growing dearth of experienced teachers, faculty members are encouraged to undertake refresher courses/orientation programs for respective subjects.
- Capacity building programs and faculty improvement programs are also organized by our institution to improve teaching skills and to keep abreast of knowledge in latest developments for diverse subject. We have comfortable range of senior faculty for teaching.
- Members of the faculty are encouraged to participate in National/International Conference/Seminars and in-service training to improve and enrich the capacity.
- For modern and emerging areas of study in Nanotechnology and Information Technology, resource persons from reputed institutions and also from foreign Universities (USA) are invited to give guest lecturers to improve the knowledge and skills of faculty members.
- Retired Professors from reputed universities, Scientists from Research Organizations are inducted as adjunct and distinguished professors for expert guidance.

- 2.4.3. Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.
- a) Nomination to staff development programmes

Table No.2.4.3 a) Nomination to staff development programmes

<b>Academic Staff Development Programmes</b>	Number of faculty nominated
Refresher courses	-
HRD programmes	142
Orientation programmes	140
Staff training conducted by the university	30
Staff training conducted by other institutions	50
Summer / winter schools, workshops, etc.	140

- b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning
  - > Teaching learning methods/approaches
  - > Handling new curriculum
  - > Content/knowledge management
  - > Selection, development and use of enrichment materials
  - Assessment
  - > Cross cutting issues
  - > Audio Visual Aids/multimedia
  - > OER's
  - > Teaching learning material development, selection and use

Details of the faculty training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching learning are as mentioned below:

Table No.2.4.3 b) Faculty Training Programmes

Sr.	Date	Topic	Trainer
No			
		2014-15	
1.	17/01/2015	Three Days Workshop on "	Dr. Ramesh Kasetwar.
	to	Establishment of Effective and	Founder Trustee, Quality Plus.
	19/01/2015	Functional Internal Quality	
		Assurance Cell at SVERI	
		Pandharpur''	
2.	30/12/2014	Two days FDP on "Establishment	Dr. Ramesh Kasetwar.
	to	of IQAC At SVERI Pandharpur".	Founder Trustee, Quality Plus.
	31/12/2014		

Sr. No	Date	Торіс	Trainer
3.	16/12/2014 to 20/12/2014	One week faculty development program on "Open House on Research Activities in SVERI Pandharpur"	Dr. S. M. Mukane, Dr. P. M. Pawar, Prof. N. D. Misal Prof. V. S. Kshirsagar, Prof. Chavan,
4.	03/12/2014	A session on "Regional Relevant Research".	Prof. Antosh Dyade Dr. V. K. Suri. Former Head Precision Engineering Division, CLE-V, Bhabha Atomic Research Centre, Mumbai.
5.	22/11/2014	One Day workshop on "Education today and challenges Ahead".	Mr. Manik Gutte, Deputy Secretary Revenue and forest development, Government of Maharashtra.
6.	07/11/2014	One Day Workshop On "Beyond Academics".	Mr. Shrikant Bacchav Mrs. Savita Dadhe. Softedge, Sharpening soft skills, Nashik.
7.	01/11/2014	One Day Faculty Development Program on "Teaching Methodology to Prepare students for the Industry"	Mr. Sacchidanand Kulkarni, Vice President HR and Culture, Webonized Lab, Pune.
8.	27/09/2014	One Day Workshop On "Interaction with BARC scientists"	Mr. A. S. Patil Mr. A. K. Verma BARC, Mumbai.
9.	18/09/2014	One Day Workshop On "Cloud Technology and Applications for SVERI" "Stress Management"	Mr. Sunil Pandkar MD, Flowian Technologies. Mr. Prakash Vasekar
10.	27/08/2014	One Day Workshop on "Quality in Higher Education."	Dr. Ramesh Kasetwar. Founder Trustee, Quality Plus.
		2013-14	
	03/06/2014 to 07/06/2014 03/05/2014	One Week FDP On "Deep Dive Faculty Enablement Program On Soft Skills."  One Day Workshop On "Leadership And Entrepreneurship."	Mr. Manas Tyagi In Association With Infosys Pvt. Ltd Under Campus Connect. Mr. Tulsi Tawri & Mr. Ramesh Jakati, Ultratech Panacea
	27/04/2014 to 01/05/2014	One Week FDP On "Self Awareness Key To Excellence."	Innovations Ltd. Mr. Ramesh Sood, NLP Master Practitioner, Pune.
	24/04/2014 to 26/04/2014	Three Days Faculty Orientation Program On Research With Eminent Academicians And Researchers.	Dr. Rajanna Dr. Ramesh singh, Dr. Sakshi Dhanekar, Dr. D. Ravishankaran, Dr. Yogesh Parte, Dr. Armin Huck, Dr. Sudhir Chandra.

Sr.	Date	Торіс	Trainer
No			
	14/04/2014	One Day Workshop On "Use Of	Dr. Prashant Pawar,
		ICT For Improving Performance	Dean R&D, SVERI's College
		Of Faculty Members."	Of Engg. Pandharpur
	11/04/2014	One Day Workshop On	Mr. Anand Mahurkar,
		"Intellectual Property	Patent Consultant, Pune.
		Management (IPM) And Patent	
		Lifecycle Management (PLM)."	
	23/02/2014	One Week FDP On "Classroom	Mr. Bharat Chaugule
	to	Management And Personality	Founder Real Success,
	27/02 2014	Development."	Namakkal, Tamil Nadu.
	26/12/2013	One Day Workshop On "Team	Prof. Vivek Phadke
		Building And Team Management."	HOD HR, VIM, Pune.
	25/06/2013	One Day Workshop on "Time	Dr. C. Vijay Raghavacharayulu.
		Management."	

### c) Percentage of faculty

- invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies
- participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies
- presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies

Table No. 2.4.3 c) Faculty contribution to the outside world

	Invited as Resource Person in Workshops / seminar / conferences			Participated in Workshops/ seminar / conferences				Presented paper in Workshops / seminar / Conferences				
Year	2011-	2012	2013 -14	2014 -15	2011 -12	2012 -13	2013 -14	2014 -15	2011 -12	2012 -13	2013 -14	2014 -15
%	1%	3.5%	1%	2%	24%	64%	75%	63%	9%	12%	20%	15%

# 2.4.4. What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

The following are some of the salient points of the policies/systems to recharge the teachers:

- ➤ Research grants: The Institution provides seed money grants are provided to faculty members to pursue research in their interested area.
- > **Study leave**: The Institution grants study leave for those who pursue higher studies both in India and Abroad.
- ➤ Deputation to National/International Conference / Seminars: The Institution provides travel grant and contribution in registration fee to the faculty.

- Research and academic publications: College has subscription to ejournals and the access is provided to the faculty. Faculty members are encouraged to publish research articles and are given incentives for the publications in referred Journals.
- The Institution in collaboration with industries such as Wipro Technologies offers specialized programmes like MISSION 10x programme for faculty.
- 2.4.5. Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Nil

2.4.6. Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes.

- The institution has a feedback system to evaluate the teachers by students. Feedback is sought from the students during the semester through the visits of Dean, Academics to all the classes. Feedback review meeting is then conducted in the presence of Student representative, subject teachers, CC, HOD, Deans and Principal. Necessary corrective steps are promptly taken up.
- At the end of each semester, the feedback from students is obtained by issuing printed questionnaires relating to all subjects. In this feedback, questions regarding performance of the teachers are sought. Their feedback is analyzed. Based on assessment of performance, necessary directions are given for the improvement in the teaching methods.
- > Principal also monitors the feedback system and takes appropriate corrective actions.
- All the faculty members are required to submit self appraisal report every semester in the prescribed format.

### 2.5 Evaluation Process and Reforms

- 2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?
  - The stakeholders of the institution i.e. students and faculty members and even the parents of the students are informed about evaluation process during parents' meet, faculty meet, etc.
  - ➤ College has specially developed PPPE for overall progress of students as well as faculty. As per 5+2 point formula internal term work is allotted which is very transparent methodology.
  - The regulations, curriculum, exam and marking scheme are available in the institute's and the affiliated university websites.

- The faculty members read the instructions at the start of the semester in the classrooms and copy of the same circular is displayed on the student's notice-board.
- > Students are clearly made aware of the eligibility conditions (like minimum attendance requirement, submission etc) to appear in the final examination.
- They are informed the criterion of the internal assessment. Academic calendars are provided to students at the beginning of semester which includes all important dates and schedules.
- The college maintains transparency in the evaluation process to the stakeholders through displaying the chapter test marks, unit test marks, assignment marks, model examination marks, internal mark determination criteria, university marks in the departmental notice board.
- The University publishes the semester examination marks and internal marks in the University website. The department communicates results of all tests of students through letters and phone calls to the parents.

## 2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

As an affiliated College, our Principal, Deans, BOS attends and participate in all the meetings conducted by the university. The evaluation reforms are adopted and followed by the institute as per university norms. The major evaluation reforms of the university that the institution has adopted are given as below:

### **University Reforms:**

- ➤ The university has started "Digital Exam Paper Delivery System (DEPDS)" from this academic year 2014-15 where all question papers are received online at all exam centres before one hour of the commencement of exam. The answer scripts have OMR coding and the evaluation of Multiple Choice Questions (MCQs) is done by computer recognition.
- From the academic year 2014-15 University has developed software for filling internal marks online because of which paper work is reduced as well as accuracy is maintained in results.
- From the academic year 2014-15 university has started implementing credit and grading system which has ISE-ESE exams (30-70 pattern). In this 30 marks are allotted for In Semester Examination (ISE) which is conducted at institute level; however 70 marks are allotted for End semester exam which is conducted by university. Student's marks in ESE will not be considered unless he/she passes in ISE.

### **Institution Reforms:**

### **Internal Marking Scheme:**

➤ Term work marks: are allotted as per the 5+2 points formula. After completion of every two chapter class test is conducted this is having 20 marks of each. Two Unit tests of 50 marks are conducted in every semester to evaluate the performance of the students. Student has to write PPPE for every subject daily and check duly for the practical/tutorial session of respective subject. The internal marks to the students are given on the basis of class test performance, unit test performance, laboratory performance, PPPE assessment, internal oral, over all behaviour of the student and attendance.

## 2.5.3. How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

The evaluation reforms of the University are followed by the institution in an effective manner. New reforms such as the online examination conduction, credit system, etc are complied by the Institute in a timely manner. Guidelines given by the University for In Semester Examinations (ISE) is immediately adopted by the Institute. Institute's indigenous internal assessment is transparent through the 5+2 points formula with due formative and summative evaluation as mentioned above in 2.5.1. Queries in the evaluation method can be addressed to Grievance Redressal Mechanism at both Institute and Department level consisting of representatives of students, faculty and administration.

## 2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.

To measure student achievement both the formative and summative evaluation approaches are adopted by the institution. By conducting verbal tests, group discussions, seminars, students' achievements are evaluated. This type of formative approach gives lot of information about student achievement after teaching a particular unit. The performance of the student gives opportunity to the teacher to know about her ability and skills in the concerned subject. So the teacher can take necessary steps to improve the performance of the particular student. Quizzes, group discussions, verbal tests, assignments, surprise are followed by all the faculty members to measure students' achievements and performance by formative approach.

The summative evaluation is done during internal test and model examination. If the students performance is below average re-tests are conducted to improve their performance. For summative approach two internal tests and three preliminary examinations are conducted in the College.

The above approach of formative and summative evaluation adopted in the institution has positively impacted upon the performance of the students. The students are pre-trained in taking the University examination without any fear. Students have also improved their internal exam score. Teachers understand areas in which student performance is lacking and efforts needed to fill the void. Post-test, paper-wise question-answer discussion by the respective faculty members benefits the students getting inputs on expected answers.

# 2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.

To ensure rigor and transparency in the internal assessment for students institute has come up with well defined 3+2 point formula in which lateral modifications are made by considering scope for continuous improvement as 5+2 point formula. Contents of the formula and its marking methodology are tabulated below.

### Point 1: Effect of Unit Test and Chapter Wise Tests on Term Work Marks

Table No.2.5.5 Distribution of marks of Unit Test and Chapter Wise Tests on Term Work

on term work									
Sr. No.	U.T.	U.T. II	Total of UT-I & UT-II	Total Marks out of 7	S. No.	U.T. I	U.T. II	Total of UT-I & UT-II	Total Marks out of 7
1.	Pass	Pass	50 & Above	7	7.	Fail	Pass	Less than 50 [Not appeared for Retest]	7-4=3
2.	Pass	Pass	45-49	7-1=6	8.	Fail	Fail	Any Marks	7-5=2
3.	Pass	Pass	40-44	7-2=5	9.	ABS	Pass	20 & Above	4-1=3
4.	Pass	Fail	50 & Above [Not appeared for Retest]	7-3=4	10.	Pass	ABS	20 & Above	4-1=3
5.	Fail	Pass	50 & Above [Not appeared for Retest]	7-3=4	11.	ABS	Fail	Less than 20	2-1=1
6.	Pass	Fail	Less than 50 [Not appeared for Retest]	7-4=3	12.	Fail	ABS	Less than 20	2-1=1
Note: For every Retest, 1 Mark will be reduced out of final marks.				13.	ABS	ABS	0	0	

### For Chapter Tests – Max. Marks (3)

- Minimum 03 Chapter Tests will be conducted.
- One Chapter Test per two chapters.
- Passing marks are 10 for a Chapter Test of 20 Marks.
- For passing in Chapter Test, 1 mark will be added.

Table No.2.5.5.1 Distribution of Term Work Marks according to five point formula

Point	Marks Assigned for	Marks
1.	UT And CT	10
2.	Assignment	03
3.	Journal	05
4.	PPPE	03
5.	Oral	04
	Total Marks	25

Point (5+1): Effect of Attendance on Term Work Marks

Table No.2.5.5.2 Effect of Attendance on Term Work Marks

Sr.	% Attendance	Variation in Final Marks
No.		
1	100	+3
2	95-99	+1
3	90-94	No effect i.e. 0
4	85-89	-2
5	80-84	-3

**Point (5+2):** Total marks obtained by a student will be further smoothened / modified based on general behavior and participation of the student.

2.5.6 What are the graduates attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

### Graduates attributes specified by the college:

As PO's are in line with graduate attributes, attainment of PO's indirectly indicates the achievement of graduate attributes. The graduate attributes in-line with PO's are as follows,

**Engineering Knowledge**: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.(a,e)

**Problem Analysis**: Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences (a,e).

**Design/Development of Solutions**: Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations (b,c).

Conduct investigations of complex problems using research-based knowledge and research methods including design of experiments, analysis, and interpretation of data and synthesis of information to provide valid conclusions (b).

**Modern Tool Usage**: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations (k).

The Engineer and Society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice (f,h).

**Environment and Sustainability**: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development (h,j).

**Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice (f).

**Individual and Team Work**: Function effectively as an individual, and as a member or leader in diverse teams and in multi disciplinary settings (d,f).

**Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions (g).

**Life-long Learning**: Recognize the need for and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change (a,d,g).

**Project Management and Finance**: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team to manage projects and in multidisciplinary environments (a,d,g).

### **Attainment of Graduate Attributes:**

Each department has well defined course objectives, course outcomes, Program education objectives, and Program outcomes and those are in accordance with graduate attributes.

Innovative teaching methods and student centric teaching – learning approach is adopted to achieve course outcomes. Course objectives and course outcomes are mapped with Program outcomes and Program outcomes are mapped with graduate attributes. Institute has university defined curriculum which fulfills the graduate attributes attainment. Through these co-curriculum activities like Communication Improvement Program (CIP), proctor, and GD, institute is paying attention for meeting the graduate attributes. Communication Improvement Program (CIP) which is very helpful to improve student's verbal and non verbal communication and develop soft skill among them. In proctor session extra efforts are taken for overcome by stage fear, communication improvement through GD and vocabulary increasing through writing five sentences. Institute encourages the independent learning which includes paper presentation by students, project, innovative mini project, publishing the articles in news paper and gives proper weightage to these.

### 2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

Institute's indigenous internal assessment is transparent through the 5+2 points formula with due formative and summative evaluation as mentioned above in 2.5.1. Queries in the evaluation method can be addressed to Grievance Redressal Mechanism at both Institute and Department level consisting of representatives of students, faculty and administration.

University has its own grievance redressal cell and the applications of the aggrieved can be sent directly to the same.

### 2.6 Student performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, the institute has clearly stated learning outcomes. With the paradigm shift in the teaching-learning process which makes it more student centric and outcome based, emphasis lies on the learning outcomes. With the help of a committee consisting of the representatives of the stake holders' viz. students, faculty, alumni, faculty, management, industry, society, etc. the institute has defined the learning outcomes for the programmes offered at department level. In addition, each of the courses has well defined course objectives. The students are made aware of it by making them note down the same in their notebooks. Faculty explains the outcomes of each course and at the end of the course, a course end survey is taken to evaluate if the set outcomes have been achieved. The institute at central level while finalizing the learning outcomes considers remarks of representative of all stakeholders which includes staff and students. Given in the following Table No.2.12 are the learning outcomes of the UG programme of Electronics and Telecommunication Engineering (ENTC).

Table No.2.6.1 Programme Outcomes (POs) of Dept. of Electronics and Telecommunication Engineering

Sr. No.	Programme Outcomes							
	Students graduating from Electronics & Telecommunication Engineering							
will								
demons								
a.	an ability to apply knowledge of mathematics, basic science and engineering.							
b.	an ability to design and conduct experiments, as well as to analyze and interpret data, in the areas of Digital Design, Microprocessor, Microcontroller, VLSI, Communication System and Digital Signal Processing							
c.	an ability to design electronic circuits and VLSI components to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety.							
d.	an ability to function on multidisciplinary teams.							
e.	an ability to identify, formulate, and solve engineering problems.							
f.	an ability to understand the professional and ethical responsibility.							
g.	an ability to communicate effectively.							
h.	an ability to understand the impact of engineering solutions in a global, economic, environmental, and societal context.							
i.	an ability to recognize the need for, and engage in life-long learning.							
j.	an ability to solve contemporary issues.							
k.	an ability to use the techniques, skills, and modern engineering tools necessary for Electronics and Telecommunication Engineering.							

Program Outcomes (POs) are made aware to the faculty and staff at the department and institute level meeting. They are brought to the notice of the students and other stake holders by publishing and disseminating by displaying / printing / noting as per the details given below.

1.	Institute Website-(http://coe.sveri.ac.in/entcdept.php)
2.	FTP-( <u>ftp://10.1.2.3/public/ENTC</u> %20Dept)
3.	Display board at the entrance of the Department
4.	HOD Cabin
5.	Course Files of the Teachers
6.	Note Books of the Students
7.	College Magazine
8.	College Diary
9.	Assignment Books
10.	Journal Books

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

### Monitoring and communicating the progress and performance of students:

- ➤ The progress and performance of the students during four years of programme duration is done by Chapter tests, Unit tests, PPPE subject write-up, Assignments, Orals etc. Remedial classes are conducted or students with poor performance. Slow learners are identified with the continuous monitoring and evaluation system and corrective steps are taken.
- ➤ Test papers are given back to students after evaluation. Results are also displayed on notice boards.
- ➤ University examinations results are available on the university website and are also displayed on the department notice boards.
- ➤ Proctor System. It is one of the most effective methods of monitoring and mentoring the institution has experienced. Each proctor teacher keeps a history sheet of the students' performance at various stages of assessment. This is intimated to the parents in parents' meets.
- ➤ Hard copies of the unit test and university examinations results are sent to parents by post.

Given below in the Table No.2.14 are the results of various departments for the last four years:

Table No.2.6.2 Result analysis

S. No.	Name of the Department	2013-14	2013-14   2012-13		2010-11
1.	Mechanical Engineering	93.43	97.65	97.16	99.38
2.	Electronics and Telecommunication Engineering	100	98.97	100	96.29
3.	Computer Science and Engineering	100	98.11	100	95.08
4.	Civil Engineering	100	98.18	100	
5.	First Year Engineering	80.74	70.62	55.91	57.92

As can be seen from the above Table No.2.14, majority of the programmes have been consistent in their results because of the efforts taken at the Institute level. After the new students enroll into the institute, analysis is made about the strengths and weakness of the students. Further analysis is made through the continuous evaluation system of chapter wise tests, unit tests, etc. Thus in the case of First Year Engineering, many new reforms were brought in by the institute such as practice sessions, night study sessions, etc. and the as can be seen from above Table. No.2.14, there is a steep increase in the pass percentage of students.

# 2.6.3. How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

- Each Teacher Prepares a Teaching Plan which is a complete preplanned work schedule for the semester. This includes the Portions to be covered class, the Assignments, Seminars, Test Papers, and any other academic activity the teachers would like to incorporate individually. The Head of the Department is to monitor the same in the Department Meeting which is held every week.
- ➤ PPPE has made provisions for strategizing the leaning of the students. Students must revise the concepts taught in the class on the same day by writing down PPPE subject write up.
- For difficult and problems oriented subjects, practice session arrangement is made.
- ➤ Night study sessions are arranged.
- Library and laboratory facilities are kept open beyond the working hours
- ➤ Campus and hostels are enabled by Wi-Fi. E-Library and journal access is available to students 24 X 7.
- AAKASH tablets are provided as learning tools.
- The learning outcome is assessed at different levels on a continuous basis through the 5+2 points formula.

# 2.6.4. What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude, developed among students etc.) of the courses offered?

- ➤ University curriculum caters to courses of social and economic relevance such as Industrial Engineering, Software Engineering Project Management, General Proficiency, etc.
- Institute organizes soft skill and aptitude training, the institution also provides technical skill development programs to the students. The training of the software like AUTOCAD, CATIA, ANYSIS, C, C++, JAVA etc from the experts is provided to the students to improve their employability.
- Institute arranges all the relevant training programs for aptitude, soft skills, technical training, etc. for placements of the students. Currently Institute is in second position in the university with respect to placements.
- Institute has signed MoUs with companies such as Nihilent, Reanu Microelectronics, etc. for "Producing employable engineers".

- Every student undergoes Entrepreneurship Awareness Camp organized by the institute and resource persons are from Maharashtra Entrepreneurship Development Corporation (MEDC).
- Institute has established Adaptive Reverse Engineering Facility (AREF) where the students learn to repair, maintain and produce the industrial components for import substitution.
- > Students are encouraged to innovate. Their creativity is nurtured through various technical events at institute and national level. Institute organizes ''Agro-Challenge'' competition. Student's design and exhibit products made by them for agricultural industry. Such events give opportunity to nurture the innovation and develop an attitude for research.
- > Students are involved in the research activities from SE level itself. Students are selected as research coordinators and encouraged to share their ideas in the research meetings. Further, project groups are allotted at SE level. Students select the topic for research by working with their project guides and start reading journal papers. Students decide on the topic of their research, budget, etc and begin to start working well before their final year.
- ➤ Institute has signed MoUs with companies for providing sponsored live project research to the students.
- Institute has MoUs with many reputed research organization such as BARC, RRCAT, etc. Eminent scientists from such organizations, scientists from India and abroad visit the institute and guide the students for research.

## 2.6.5. How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning.

Given in the following Table 2.15 are the learning outcomes of the UG programme of Electronics and Telecommunication Engineering (ENTC).

Table No.2.6.5 Programme Outcomes (POs) of Dept. of Electronics and Telecommunication Engineering

Sr. No.	Programme Outcomes						
St	Students graduating from Electronics & Telecommunication Engineering will						
	demonstrate:						
a.	an ability to apply knowledge of mathematics, basic science and engineering.						
b.	an ability to design and conduct experiments, as well as to analyze and interpret data, in the areas of Digital Design, Microprocessor, Microcontroller, VLSI, Communication System and Digital Signal Processing						
c.	an ability to design electronic circuits and VLSI components to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety.						
d.	an ability to function on multidisciplinary teams.						
e.	e. an ability to identify, formulate, and solve engineering problems.						
f.	f. an ability to understand the professional and ethical responsibility.						
g.	an ability to communicate effectively.						

Sr. No.	Programme Outcomes			
h.	an ability to understand the impact of engineering solutions in a global, economic,			
11.	environmental, and societal context.			
i.	an ability to recognize the need for, and engage in life-long learning.			
j.	an ability to solve contemporary issues.			
an ability to use the techniques, skills, and modern engineering tools necess				
K.	an ability to use the techniques, skills, and modern engineering tools necessary for Electronics and Telecommunication Engineering.			

Let us analyze the monitoring of the achievement of the learning outcome 'e'-an ability to identify, formulate, and solve engineering problems. Firstly, the tools required for assessing the outcome are defined. They are broadly divided into two categories, viz. direct and indirect tools. The following Table 2.16 summarizes the tools used for learning outcome 'e', description of the assessment process, frequency of assessment and the set goal.

Table No.2.6.5.1 Assessment tools, learning outcomes

Sr.	A ccoccmont Lool		Description of the	Assessment	Assessed	Reviewed
No.	Assessin	1001	assessment process	Frequency	By	By
1	Exams	1.Chapter wise Tests	Chapter wise tests are conducted for assessing the students about the knowledge gained in respective subject on continuous basis.	After Completion of two chapters	Subject Teachers	Subject Teacher/ HOD
		2.Unit Tests	Subject wise tests are conducted and assessment is done about the knowledge gained in respective subject.	In every semester two Unit Tests	Subject Teachers	Subject Teacher/ HOD
		3.Re-Tests	Re-tests are conducted for the students who have weak performance during unit test to strengthen their knowledge.	After Unit test assessment	Subject Teachers	Subject Teacher/ HOD
		4.Lab Test	Lab tests are conducted batch wise to assess the practical knowledge gained by the students in respective subjects.	In every semester two lab Tests	Practical Teachers	Practical Teacher/ HOD
		5.Term Work (3+2 Point Formula)	Continuous evaluation of each student throughout the semesters is done using self-innovative criteria (3+2 point formula).	Once in Semester	Subject Teacher	Term Work Coordinato r/HOD
		6.Practical Oral Examination s	Assessment of theory and practical knowledge of students is achieved through practical oral examinations.	For every semester one POE	External Examiner and Internal Examiner	External Examiner and Internal

Sr. No.	Assessment 1001		process		Assessed By	Reviewed By
		7.Semeste r Examinati ons	University exams are conducted at the end of every semester to assess knowledge gained by students in subjects.	Once in Semester	Universit y	University
2	Assignme	1.Chapter Wise Objective (MCQs) Assignme nts	University exams are conducted at the end of every semester to assess knowledge gained by students in subjects.	Once in Semester	Universit y	University
2	nts	2.Chapter Wise Descriptiv e Assignme nts	To get detail knowledge of all the bits in that particular chapter.	For every chapters	Subject Teachers	Subject Teachers
3	Laboratory/ Practicals	Journals	The purpose of the laboratory to gained knowledge by looking at reality and make reality confirm to preconceptions, to be observant and to really see what happens. Practical knowledge of the students is analyzed through the practicals conducted.	Once in a week	Practical Teacher	Practical Teacher
4	Tutorials	Tutorial files	It is a method of transferring knowledge and may be used as a part of learning process.  More interactive and specific then a book or lecture.	Once in a week	Subject Teachers	Subject Teachers
5	Academic Seminars	Seminars report	The idea behind academic seminar is to familiarize students more extensively with the methodology of their chosen subjects and also to allow them to interact with examples of practical problems.	Once in a year	Subject Teachers	Subject Teachers
6	Mini Project / Project Work	Project Report	It is a collaborative enterprise, involving research or design that is carefully planned to achieve a particular aim. It is permanent social system or work system that are consulted by teams.	Once in a Graduation	External Examiner /Internal Guide	External Examiner/I nternal Guide
7	Vocational Training	Vocationa l training report	It provides industrial/field exposure to develop their career in the high-tech industrial requirements	Once/ twice in a programme	External /Internal examiner	External /Internal examiner

With respect to the tools mentioned above, collected data is analyzed achievement of each of the learning outcomes is assessed as given below in Table No.2.17. Corrective measures are taken where the achievement of the Learning Outcomes is not up to the expected goal.

Table No.2.6.5.2 Achievements of learning outcomes

Sr.	Assessment	Assessment	Associated	Goal	Achievement
No.	Method	Tool	Pos		
	Method	1		(%)	(%)
1.		Semester Examinations	a, b, c, e	70-80	78
2.		Practical Oral Exam.	a, b, c, e, k	85-95	90
3.		Term Work (3+2 Point Formula)	a, b, c, e	80-90	80
4.		Unit Test and retest	a, b, c, e	80-90	85
5.	D: 4	Lab Test	a, b, c, j, k	80-90	90
6.	Direct	Chapter wise Test	a, b, c, e	80-90	85
7.		Assignments	a, b, c, e	80-85	80
8.		Journals	a, b, c, e, k	90-95	90
9.		Laboratory/Practical	a, b, c, e, k	80-85	90
10.		Tutorial	a, b, c, e, k	90-95	90
11.		Seminar	a, b, c, e, g	80-85	90
12.		Proctor	f, g, h	90-95	90
13.		Project	a, b, c, d, e, h, i, j, k	90-95	90
14.	Indirect	CIP	g	60-70	70
15.	Tools	PPPE	a, b,c ,e	100	100
16.		Group Discussion	d, f, g, h, i, j	85-90	80
17.		Personality Development	d, f, g, h, i, j	90-95	95

## 2.6.6. How does the institution monitor and ensure the achievement of learning outcomes?

The institution has a well defined, set mechanism to monitor the learning outcomes.

- Feedback meetings of respective subject teacher are conducted with principal for monitoring the progress of students. If students are lagging somewhere steps are taken to minimize that gap by conducting remedial classes.
- > Through weekly departmental meeting academic performance is monitored by taking review of chapter test, unit test, and lab test.
- Academic performance is monitored through university result analysis, and practice sessions are conducted for tough subject after college hour.
- Research Advisory Council / Academic Advisory Committee (RAC/AAC) at institute level helps in continuous monitoring of the progress of students, gaps in teaching learning processes indicated are analyzed and remedial steps are taken to ensure learning outcomes are fulfilled

2.6.7 Does the institution and individual teacher use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.

Yes, The institute and all individual faculty members uses assessment/ evolution outcomes as an indicator for evaluating student's performance, achievement of learning objectives and planning. Institute has strong methodology for continuous evaluation/assessment that is 5+2 point formula which is explained in Table No.2.9, Table No.2.10 and Table No.2.11. As soon as university result is declared subject/class wise result analysis is done, through which learning objectives are mapped.

On the basis of class test, unit test and university result analysis, practice sessions/remedial classes are planned for slow learners.

#### CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

#### 3.1 Promotion of Research

## 3.1.1 Does the institution have recognized research centre/s of the affiliating University or any other agency/organization?

Our Institute has following four recognized research centres:

**Table No.3.1 Research Centre** 

Sr. No.	Sr. No. Name of the Research Centre			
1	Computer Science & Engineering			
2	Electronics & Telecommunication Engineering			
3	Mechanical Engineering			
4	Civil Engineering			

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Institute has Research Advisory council or Academic Advisory Committee and the composition of Council is as follows:

**Table No.3.1.2 Composition Of Council** 

Sr. No.	Name	Position	Organization
1	Dr. V. K. Suri	Chairman	BARC Scientist
2	Dr. Balsubramanium	Member	BARC Scientist
3	Dr. V. J. Kulkarni	Member	Academician
4	Prof. A. R. Yardi	Member	Retired Director and
			Academician
5	Dr. P. J. Kulkarni	Member	Deputy Director, WCE
			Sangali
6	Mr. S. H. Kulkarni	Member	Industrialist
7	Dr. P. M. Pawar	Member	Dean R&D
8	Dr. Sridevi Dileep	Member	Dean, Academics
9	Dr. S. M. Mukane	Invitee	Dean, Administration

### Recommendations made by the committee for implementation are as follows:

- 1. Taking up sponsored research projects from external funding agencies.
- 2. Emphasis be given to interdisciplinary Research Activities
- 3. UG, PG, and Research scholar students be motivated to involve in sponsored research projects and get additional credits.
- 4. Staff/Students be encouraged publishing their work in National/International Conferences/Journals.
- 5. Faculty be encouraged to go for higher studies.
- 6. To develop innovative products, leading to patents.
- 7. Micro-Nano services be take-up in rural areas to bring together the Engineering institutes in Maharashtra through cluster formation for similar research domains

### **Impact**

- Improvement in getting research grants through funding agencies to Institute. Such as BARC, RRCAT, RGSTC, etc.
- Overall around 320 papers were published in National/International Conferences/Journals.
- Sabbatical leave is provided for the faculty members to upgrade their education and number of faculty have been encouraged for P.G./Ph. D. in the last 3 years.
- Faculties are encouraged for research interactive through technical talks or workshops on various research topics are being organized.
- Seed money and Departmental R& D grants provided to faculty members to do their research work.

## 3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

- 1. Autonomy to the principal investigator: The grants received by the Institute account for projects are strictly utilized with the advice of Principal Investigators. The Principal Investigator is given complete freedom to utilize the grant as per the heads approved under the grant. The Principal Investigator is advised to utilize grant as per accounting norms of institute and funding agency.
- **2. Timely availability or release of resources:** The project grants are kept in separate bank account and are made available as per the requirement sent by Principal Investigator. Usually as per the institute ISO norms, all the files are cleared within four days.
- **3.** Adequate infrastructure and human resources: As per the requirement from the Principal Investigator, institute has made available space and other resources for speedy completion of project activities. Principal Investigator will appoint human resources as per the norms and also utilize institute human resources as per the requirement. All the infrastructures such as workshop facility, server facility, computers, printers, etc. are made available to Principal Investigator and project staff as per the requirement.
- **4.** Time-off, reduced teaching load, special leave etc. to teachers: In most of the cases, the teaching load of Principal Investigator is adjusted in 3 or 4 days so as to focus on projects on other days. All the faculty members are provided with duty leaves to attend project related activities. Also, travel grant, etc. is provided from institute if grant is not available with projects.
- 5. Support in terms of technology and information needs: Other than Principal Investigator, other expert faculty members are also allowed to provide technical or information support on the project. For example, computer science faculty members help other department project to develop software, etc.
- 6. Facilitate timely auditing and submission of utilization certificate to the funding authorities: Under the coordination of Dean R&D, project related central information database is maintained and Dean R & D takes follow up from Principal Investigators about timely auditing and submitting utilization. Until now, auditing and submission of utilization certificate to funding authorities are submitted timely.
- 7. Any Other: A separate R&D budget head is provided for each department under the coordination of Dean R&D. Apart from funded

project, institute also invest in R&D activities as per the demand and requirements given by faculty members for strengthening of R&D at departmental level.

## 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

- In the first year of engineering itself, R & D orientation program is arranged where students are introduced with various R & D projects and facilities available with Institute.
- ➤ Institute forms the Project groups of students and allocates projects to them from Second year itself.
- ➤ Several Expert talks from R& D organizations, Industry and reputed faculty members are arranged to give them introduction to current R & D activities.
- Extra training courses of R& D specific software and hardware are arranged to make them competent to take up R& D activities.
- Institute provides financial support to students for publish their research work in conferences, journals, etc.
- ➤ Institute arranges the Industrial Visits to give response to Industry/ Latest R & D.
- ➤ Institute organizes the National level activity Olympus every year, which provides the platform for students to present their research activities.
- ➤ Institute quarterly magazine SVERIAN provides inspirational articles on current R& D and also introduces various R & D activities. All the departments also publish their quarterly magazine to introduce various R&D events.
- During coursework, as a part of content beyond syllabus, some faculty members cover the recent utilization of the information studied in that unit for research work.

## 3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.)

Faculty members are involved in various research activities in the form of guiding the students in their project work as well as engaged themselves in department level focused project areas.

### **Faculty Members Guiding Student Research**

Table No.3.1.5.1 Faculty List of Electronic and Telecommunication Engineering (EnTC) Department

Sr. No.	Faculty Name	No. of Scholar Guided			
		UG (Groups)	PG	Ph. D	
1.	Dr. S. M. Mukane	21	18	-	
2.	Dr. Mrs. M. M. Patil	19	19	-	
3.	Mrs. M. M. Pawar	19	19	-	
4.	Mr. M. S. Mathpati	10	10	-	
5.	Mr. S. C. Gurav	11	-	-	
6.	Mr. S. K. Badopatla	12	2	-	

Sr. No.	Faculty Name	No. of Scholar Guided			
		UG (Groups)	PG	Ph. D	
7.	Mrs. J. A. Kendule	12	4	-	
8.	Mr. S. S. Sathe	09	-	-	
9.	Mrs. D. A. Tamboli	12	-	-	
10.	Mr. A. B. Chounde	10	-		
11.	Mr. S. D. Sirsat	2	-		

**Table No.3.1.5.2 Faculty List of Civil Engineering Department** 

Sr. No.	Faculty Name	No. of Scholars Guided		
51. 110.		UG(Groups)	PG	Ph.d
1	Prof. M. M. Pawar	4	1	-
2	Dr. P.M. Pawar	30	21	8
3	Dr. Vageesha S. Mathada	60	6	-
4	Ms. V.S. Kshirsagar	3	-	-
5	Mr. S. S. Jadhav	18	-	-
6	Ms. Shruthi Hiremath	8	-	-
7	Mr. S. D. Jagdale	16	-	-
8	Mr. S. K. Patil	12	-	_
9	Mr. S. D. Jagdale	16	-	-
10	Mr. S. K. Patil	12	-	-

Table No.3.1.5.3 Faculty List of Computer and Science Engineering (CSE) /Information Technology(IT) Department

Sr. No.	Faculty Name	No. of Scholars Guided		
S1. No.	Faculty Name	UG (Groups)	PG	PhD
1.	Dr. S. N. Kini	60	18	3
2.	Mr. S. T. Nanaware	20	-	-
3.	Mr. Y. R. Kalshetty	20	20	-
4.	Ms. V. D. Jadhav	18	5	-
5.	Ms. P. A. Satarkar	17	5	-
6.	Ms. K. A. Deshmane	15	5	-
7.	Mr. A. G. Korke	15	5	-
8.	Mr. S. M. Shinde	18	-	-
9.	Ms. P. S. Doshi	12	-	-
10.	Ms. S. P. Pawar	12	-	-
11.	Mr. A. R. Pawar	8	-	-
12.	Mr.S.M.Kumbhar	10	-	-
13.	Mr. S. L. Utpat	10	-	-
14.	Ms. M. A. Dyade	14	-	-
15.	Mr. G. S. Kulkarni	15	-	-
16.	Mr.V. N. Yadav	13	-	-
17.	Ms. S. S. Kadam	2	-	-
18.	Mr. G. G. Patil	6	-	-
19.	Mr. M. R. More	6	-	-
20.	Mr. A. A. Tripathi	6	-	-
21.	Ms. R. G. Sache	7	-	-
22.	Mr. P. G. Gaikwad	3	-	-
23.	Mr. R. G. Sonkamble	3	-	-
24.	Mr. S. V. Darshane	2	-	-

Table No.3.1.5.4 Faculty List of Mechanical Engineering Department

Sr.	Faculty Name	No. of Scholars Guided		
Nr.		UG(Groups)	PG	Ph.d
1.	Dr. P.S.Kachare	7	11	-
2.	Dr. B. P. Ronge	5	10	-
3.	Prof. B.D. Gaikwad	8	12	-
4.	Prof. S.V. Jadhav	9	3	-
5.	Prof. S.R. Gavali	6	4	-
6.	Prof. N. D. Misal	8	17	-
7.	Prof. L.B. Raut	5	14	-
8.	Prof. R.R. Gidde	8	7	-
	Prof. S.B. Bhosale	4	5	-
10	Prof. Y.M. Khedkar	6	-	-
11.	Prof. A.B. Shinde	2	-	-
12.	Prof. P.K. Parse`	1	-	-
13.	Prof. R.R. Narkar	7	-	-
14.	Prof. V. C. Honnutagi	2	-	-
15.	Prof. D. S. Ghodake	1	-	-
16	Prof. S. B. Salunkhe	2	-	-
	Prof. S. S. Wangikar	3	-	-
	Prof. S.S.Gaikwad	1	-	-
19	Prof. J.P. Pawar	2	-	-
	Prof.O.L. Mahajan	4	_	-
21	Prof. D.D. Lawate	2	-	-
22	Prof.S. B.Fand	1	-	-

Individual research activities of faculty members:

Table No.3.1.5.5 Individual research activity of faculty members of Electronic and Telecommunication Engineering (EnTC) Department

Sr.	Name of Faculty	Qualificati	Topic of dissertation	Specialization
No		on		
1.	Mr.M.S.Mathpati	M.E.	Design and development of	Electronic and
			Magnetic field sensor to	Telecommunicati
			characterize an	on Engineering
			electromagnetic pulse	
2.	Dr.S.M.Mukane	Ph.D.	A Novel approach towards	Electronics
			scale and rotation invariant	Engineering.
			content based texture image	
			retrieval	
3.	Dr.Mrs. M M Patil	Ph.D.	Artificial neural network Electronics	
			based diagnosis of neuro Engineering.	
			degenerative diseases	
4.	Mrs.M.M.Pawar	M.E.	FPGA implementation of Electronics	
			FIRfilter Engineering.	
5.	Mrs.J A Kendule	M.E.	Novel flowers classification	Electronic and
			using neural based image Telecommunicati	
			processing	on Engineering

Sr. No	Name of Faculty	Qualificati on	Topic of dissertation	Specialization
6.	Mr.S.C.Gurav	M.Tech	Quick Routing INMANET for multimedia application using zone routing protocol	Digital Comm. Engineering.
7.	Mrs.D.A.Tamboli	Ph.D. (pursuing)	Some studies on multiple model based adaptive control strategies for complex system	Electrical Engineering.
8.	Mr.S.A.Inamdar	M.E. (pursuing)	Offline Touch less fingerprint recognition system using noval algorithm.	Electronic and Telecommunicat ion Engineering
9.	Ms.N.P.Kulkarni	M.E.	Advanced technique for image resolution enhancement with combination of DWT and SWT	Electronic and Telecommunicat ion Engineering
10.	Mr. S. S. Sathe	M.Tech	Optimum cooperative spectrum sensing using hard decision logic for cognitive radio network	Digital System
11.	Mr.Sampathkumar	M.Tech	Optimal placement of distributed generation in power system for loss reduction	J
12.	Ms.D.R.Awate	M.E. (pursuing)	RGB Images Steganography Based on Pixel Indicator with Modulus Function and PVD	Electronic and Telecommunicat ion Engineering
13.	Mr.M.M.Zade	M.E. (pursuing)	Image enhancement by using switching median filter.	Electronic and Telecommunicat ion Engineering
14.	Mr.A.P.Narwadkar	M.E. (pursuing)	Human computer Interaction	Digital Systems
15.	Ms.S.S.Kadam	M.E. (pursuing)	Design & Analysis of Hexagonal fractal antenna array for M.A	Electronic and Telecommunicat ion Engineering
16.	Ms.Papiya Biswas	M.E.	Reduction of password guessing attack using click point.	Electronic and Telecommunicat ion Engineering
17.	Ms.Mohua Biswaws	M.E.	Improve in the performance of network connectivity and power consumption using cooperative AD HOC Networks	Electronic and Telecommunicat ion Engineering
18.	Mr.A.K.Rathod	M.E. (pursuing)	Design, Fabrication and Performance Analysis of Multilayer Micro strip Antenna for Wireless Applications	Electronic and Telecommunicat ion Engineering
19.	Ms.R.R.Mhetre	M.E. (pursuing)	Development of Methodology for Transforming CT Images Indicating Location and Size of Lung Cancer Nodule	Electronic and Telecommunicat ion Engineering
20.	Ms.S.M.Borate	M.E. (pursuing)	Extraction of Information about microcalcifications using mammogram images	Electronic and Telecommunicat ion Engineering

Sr. No	Name of Faculty	Qualificati on	Topic of dissertation	Specialization
21.	Mr.A.R.Bellure	M.Tech (Pursuing)	Centre speed control of Induction motor using MRAF theory	Power Electronics
22.	Mr.P.P.Ghodwade	M.Tech	Scalable Packets classification on FPGA	VLSI Design & Embedded System
23.	Mr.A.A.Jadhav	M.E	Cell phone controlled ground combat vehicle.	Electronic and Telecommunicat ion Engineering
24.	Ms.Neeta Changyya	M.E.(pursu ing)	Development of an efficient algorithm for segmentation and classification of mammogram masses	Electronic and Telecommunicat ion Engineering
25.	Mr.Ashok M.H	M.Tech	Mitigating performance degradation in wireless sensor networking	Digital Comm. and Network
26.	Mr.S.G.Kashid	M.Tech	Automatic water utility billing system using wireless meter	Digital System
27.	Mr.S.R.Badigar	M.Tech	Performance analysis of image segment using optimized adaptive median filter	Digital Electronics
28.	Mr.V.H.Bonge	M.E.	Design and development of novel junction less Transitor for nano scale integrated circuits	Digital System
29.	Mr.P.M.Deshmuk h	M.E.(pursu ing)	Segmentation of Retinal images for Glaucoma accessment	Electronic and Telecommunicat ion Engineering
30.	Mr.S.D.Sirsat	M.Tech	Wavelet Based Brain Tumor Detection Using Mutual Information	Electronic and Telecommunicat ion Engineering
31.	Ms.P.P.Kawatheka r	M.E.(pursu ing)	Severity analysis of osteoarthritis of knee joint from X-ray images.	Electronics Engineering
32.	Ms.A.D.Shinde	M.Tech	Voice operated Wheel Chair using DSP	Electronics
33.	Mr.A.B.Yadav	PhD (Submitted )	Fabrication and characterization of ZnO Thin film and PDZnO Schottky contact for electronics and gas sensing applications	Ceramic Engineering
34.	Ms.S.A.Barbole	M.E(Pursui ng)	Efficient pipelined FPGA Implementation of steerable Gaussian smoothing filter	VLSI
35.	Mr.A.B.Chaunde	M.E	Development of Pulsed power DC supply for micro EDM	Electronic and Telecommunicat ion Engineering
36.	Mr.Gaddam Nagaraju	M.Tech	Power quality improvement in ELC	Power Electronics

Table No. 3.1.5.6 Individual research activity of faculty members of Computer and Science Engineering/Information Technology Department

Department				
Sr. No.	Faculty Name	Qualificati on	Topic of dissertation	Specialization
1.	Dr. S. N. Kini	Ph.D.	Information Discovery, Distributed computing system	Computer Science & Engineering.
2.	Mr. Y. R. Kalshetty	Ph.D. (Pursuing)	Different Solution for flexible job-shop scheduling	Algorithm
3.	Ms. V. D. Jadhav	M.Tech	Separable reversible data hiding in an encrypted image	Network security
4.	Ms. P. A. Satarkar	M.Tech	Online modelling for question fraud diction	Computer Science & Engineering
5.	Ms. K. A. Deshmane	M.Tech	Cloud computing for agent based urban transportation system	Computer science and enginnering
6.	Ms. P. S. Doshi	M.Tech	Fuzzy search in XML data	Computer Science & Engineering
7.	Ms. S. P. Pawar	M.E.	Development of cost effective image based grading process for grape raisin	Computer Science & Engineering
8.	Mr.A.R.Pawar	M.E.	QOS Provisioning in rural wireless mesh networks	Computer network
9.	Mr. S. L. Utpat	M.E. (Pursuing)	Optimized approach for storing and retrieving small files from HQFS	Computer Science & Engineering
10.	Ms. M. A. Dyade	M.Tech	Image steganography using LSBM alg.	Image security
11.	Mr. G. S. Kulkarni	M.Tech	Exploring Application level semantics for data compression	Software Engineering.
12.	Mr.V. N. Yadav	M.Tech	Querying Encrypted character data in database as service architecture model.	Computer Science & Engineering
13.	Ms. S. S. Kadam	M.E. (Pursuing)	Fourier Approximation based grain kernel separation	Computer Science & Engineering
14.	Mr. G. G. Patil	M.E.	Selecting encryption algorithm for wireless ad-hoc networks	Network security, IT
15.	Mr. M. R. More	M.E.	Profile based document specific clouding	Computer Science & Engineering
16.	Mr. A. A.Tripathi	M.Tech	Multi objective path finder in using optimization technique.	Software Engg
17.	Ms. S. N. Karande	M.Tech (Pursuing)	TCP-congestion control algo- Westwood New	Computer Networking

Sr. No.	Faculty Name	Qualificati on	Topic of dissertation	Specialization
18.	Ms. B. T. Pandhare	M.E. (Pursuing)	Seminar:-particle swarm optimization for data clustering	Data Mining & Artificial intelligence
19.	Mr. S. V. Darshane	M.Tech	M.Tech Efficient audit service system for data integrity in cloud	
20.	Mr. S. M. Shinde	M.Tech	Robust face name graph matching for movie character identification	Computer Science & Engineering
21.	Mr. A. G. Korke	M.Tech	An effective approach for person Identification using phase based image matching	Computer science & Engineering.
22.	Ms. R. G. Sache	M.E. (Pursuing)	Job shop scheduling using neural networking	Computer science & Engineering.
23.	Mr. P. G. Gaikwad	M.Tech	Hybrid particle swarm optimization for data clustering	Computer science & Engineering.
24.	Miss. V. J. Jadhav	M.Tech (Pursuing)  Reducing feature to improceed change bug prediction costriage		Computer science & Engineering.
25.	Mr. K. M. Shirkande	M.E. Insider Data Theft prevention system		Computer network& Network Security
27.	Mr. S. M. Kumbhar	M.Tech	Mobility Management Approaches for Mobile IP networks	Networking
28.	Mr. J. D. Bokephode	M.E. (Pursuing)	Secure Cloud Storage system using RBF scheme	Computer science & Engineering.
29.	Ms. S. S. Unnibhavi	M.Tech	Identification of ultrasound kidney in medical us images	Image processing
30.	Mr. G. R. Shaikh	M.E.	Twitter topic Summarization with speech Act	Data Mining
31.	Mr. R.G. Sonkamble	M.Tech	Information centric network: future internet	Computer Network
32.	Ms. M. M. Chaitanya	M.E. (Pursuing)	Mobility Management in wireless sensor network	Networking NS2
33.	Ms. P. M. Sapate	M.E. (Pursuing)	Randomized Visual cryptography scheme for color images	Network Security
34.	Ms. S. A. Hajare	M.E. (Pursuing)	Development of automatic crop advisory system based on crop age & weather input data	Computer Science & Engineering.

Table No. 3.1.5.7 Individual research activity of faculty members of Civil Department

Sr. No	<b>Faculty Name</b>	Qualification	Topic of Dissertation	Specialisation
1.	Dr. P.M. Pawar	Ph. D.	Structural health monitoring of composite helicopter rotor blades	Environmental Engineering
2.	Prof. M.M. Pawar	M. E. (Civil - Environment)	Performance Analysis of WET Scruber	Environmental Engineering
3.	Dr. V. S. Mathada	Ph.D.	Fuzzy, fuzzy Random and Hybrid analysis of earth slopes &RBD of earth walls.	Helicopter Structure
4.	Mr. S.S. Dharane	M.E. (Structure)	Behaviour of ferro cement slabunder gradual and cyclic loading.	Geo-Technical Engineering.
5.	Dr. V.S. Kshirsagar	Ph.D. (pursuing)	Preparation of renewable Energy from food waste(mess) by using AD	Structure Engineering
6.	Mr. S. D. Jagdale	M.Tech.	Study of in filtration rates of different soils under different soil conditions and comparision of field data with in filtration models.	Environmental Engineering
7.	Mr. S. S. Jadhav	M.E.	Development of methodology foe seismic analysis of bridges.	Hydraulic Engineering
8.	Mr. R. S. Sathe	M.E.	Experimental& analytical evalutim of flat of folded seltcompaeting fero cement roof panels.	Structure Engineering
9.	Mr. S. K. Patil	M.E	Development of fabrication materials for low cost housing using agricultural waste.	Structure Engineering
10.	Mr. A. B. Kokare	M.E.	Vibration analysis of pipes conveying fluid.	Structure Engineering
11.	Ms. S. P. Patil	M.E. (Pursuing)	Prediction of shear strength of steel fiber reinforced concrete beams without web reinforcement.	Structure Engineering
12.	Ms. Shruthi Hiremath	M.E.	Effect of Alkalis and sodium salts on Geo-Technical properties of BCS-FA mixture tired with lime .	Structure Engineering
13.	Prof. V. S. Bhumkar	M.E.	Experimental simulation of steel section erased in R.C.C. column.	Geo-Technical Engineering.
14.	Prof. A. H. Parande	M.E	Performance of R.C. Building considering SSI during earth quick.	Structure Engineering
15.	Mr. R. B. Gavhane	M-Tech	Removal of florid from under by adscription using modified calcinedbouxite.	Structure Engineering
16.	Mr. S. S. Gaikwad	M.Tech	Design Development of alternative roofing system: ferro cement channel	Water Management

Table No. 3.1.5.8 Individual research activity of faculty members of Mechanical Engineering Department:

~	Mechanical Engineering Department:					
Sr No	Faculty Name	Qualificati on	Topic of Dissertation	Specialisati on		
1.	Dr. B. P. Ronge	Ph. D.	Theoretical and Experimental Analysis of Magneto-Rheological Fluid Dampers	Vibration Engineering		
2.	Dr. P. S. Kachare	Ph. D.	Analysis of particle vibration damper for controlling the amplitude of vibration	Vibration Engineering		
3.	Dr. Sridevi Dileep	Ph. D.	Synthesis of Vertically Aligned Carbon Nano Fibres by dewetting of alloy thinfilm	Material Science & Engineering		
4.	Mr. R. R. Gidde	Ph. D. (Pursuing)	Design, Fabrication and Fluid Flow Analysis of Mechanical Micro- Components for Micro-Fluidics Applications	Mechanical Engineering		
5.	Mr. S. V. Jadhav	Ph. D. (Pursuing)	Geometrical and Surface Modifications for Enhancing Heat transfer In Micro Channels	Micro Heat Transfer		
6.	Mr. S.S.Wangikar	Ph. D. (Pursuing)	Design & Development of micro channel for effective mixing of multi fluids	Photochemi cal Machining & Micro fluidics		
7.	Mr. A. B. Shinde	Ph. D. (Pursuing)	Hydrodynamic analysis of journal bearing for different configurations under various operating conditions	Mechanical Engineering		
8.	Dr. S. A. Lendave	Ph. D.	Mercury Cadmium Sulphide based Electrochemical Detector System	Thin Film		
9.	Mr. S. R Gavali	M.E.	Ejector (Steam jet refrigeration)	Heat Power		
10.	Mr. S. M. Khomane	M.E. (pursuing)	Experimental Investigation of Automobile Propeller Shaft by Using Composite Epoxy Carbon Material	Design Engineering		
11.	Mr. A. A. Mote	M.Tech.	SiC/SiC fiber matrix composites	Material science & technology		
12.	Mr. V. C. Honnutagi	M.Tech.	Static and Modal of Engine Cover for Different Thermoplastic Materials-A FE Study	Mechanical engineering		
13.	/Ms. M. G. Palkar	M.Tech.	Design and testing of geopolymer using fly ash in concrete	Energy		
14.	Mr. A. D. Landge	M.Tech.	Experimental study of iodine removal efficiency for self priming venturi scrubber	Thermal		
15.	Mr. L. B. Raut	M.E.	Design and performance testing of HC900 controller based speed control system for DC Motor	Automatic Contro		

Sr. No.	Faculty Name	Qualificati on	<b>Topic of Dissertation</b>	Specialisati on
16.	Mr. S. S. Gaikwad	M.E.	Enhancement of Usable Life of a Compression Spring for a Two-Wheeler Horn Using Fatigue Analysis along with Design of the Housing	Mechanical Engg.
17.	Mr. J. P. Pawar	M.E.	Design and development of particle damping method by inserting particles in a cavity of Vibrating structure	Vibration
18.	Mr. O. L. Mahajan	M.E.	Study of influence of greace contaminants on vibration response of ball bearings	Design Engineering
19.	Mr. S.B. Fand	M.S.	Evaluation of Low-Fidelity CFD codes for use in Variable-Fidelity Modeling	Mechanical Engineering
20.	Mr.Y.M. Khedkar	M.E.	Modification of classical hydraulic damper into semi active damper using magneto rheological approach	Mechanical Engineering
21.	Mr. P. K. Parse	M.E. (pursuing)	Weight Reduction of 12"-150 class plug valve casting body by Finite Element Analysis and Experimental Method	Mechanical Engineering
22.	Mr. D. S. Ghodake	M.E. (pursuing)	Effects of wall roughness on heat transfer in micro-channel	Heat Power
23.	Mr. A. I. Deokar	M.E. (pursuing)	Vibration Analysis of cracked beam with V notch	Design Engineering
24.	Mr. B. N. Dupade	M.E. (pursuing)	Vibration Analysis of Ball Bearing with defects	Design Engineering
25.	Mr. S. P Jagtap	M.E. (pursuing)	Vibration analysis of unbalanced rotor by numerical & experimental method.	Design Engineering
26.	Mr. D. N. Lawate	M.E. (pursuing)	Design optimisation of cone carrier roller conveyer chain (150 mm) Pitch & 40 tonne Capacity	Design Engineering
27.	Mr. S. J. Shinde	M.E. (pursuing)	Design, development and improvement of gating system for lord Vitthal idol.	Design Engineering
28.	Mr. T. S. Jagtap	M.E. (pursuing)	Development evaluation of a micro/meso scale machine tool	CAD/CAM
29.	Mr. S.S. Shinde	M.E. (pursuing)	Experimental investyigation and modelling of the particulate composite plate under bending as wll as tensile loading	Design Engineering
30.	Mr. Kashid Digambar	M.E. (pursuing)	Thermo Electric Power Generation by using waste heat energy from IC Engine	Heat Power
31.	Mr. Mane P. A.	M.E. (pursuing)	Analysis of Automobile Propeller shaft using composite epoxy-non ferrous material by- experimental and FEA approach	Design Engineering

3.1.6 Give details of workshops/ training programmes/sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

With the focus on capability building in terms of research and imbibing research culture various programs are organized department wise and common to all. Following is the workshops/ training programmes/sensitization programmes conducted/organized by Entrepreneurship Development Cell:

Table No.3.1.6 Detail of workshop/training program

Sr.	Title Workshop/ Training/ Programme		Duration
		Coordinator	Duration
No.	Organized	- 01-11-1	(0.0 /- 0.1 /
1.	One day workshop on "Quality in Higher	Prof. M.M.Bhore	27 /08/2014
	Education"		
2	One day workshop on "Cloud Technology and		18/09/2014
	application for SVERI"		
3	One day workshop on "Interaction with BARC		27/09/2014
	scientist"		
4	One day workshop on "Beyond Academics"		07/11/2014
5	One day workshop on "Education today and		22/11/2014
	challenges ahead"		
6	A session on "Regional Relevant research"		03/12/2014
7	One week FDP on" Open house on Research		16/12/2014-20/12
	Activities in SVERI"		/2014
8	Two day FDP on "Establishment of IQAC at		30/12/2014-
	SVERI Pandharpur"		31/12/2014
9	Three days workshop "Establishment and		17/01/2015-
	Effective functional of IQAC at SVERI		19/01/2015
	pandharpur''		
10	One day workshop on "Intellectual Property		11/04/2014
	Management (IPM) and Patent Life Cycle		
	Management(PLM)"		
11	One day workshop on "Use of ICT for		14/04/2014
	improving performance of faculty member"		
12	Three days Faculty Orientation program on		24/04/2014-
	"Research with Eminent Academicians and		26/04/2014
	researcher"		
	1 Court office		

Table No.3.1.6.1 workshops/ training programmes/sensitization programmes conducted/ organized by Computer Science and Engineering (CSE) \ Information Technology (IT) Department

	(CSZ) (Information Technology (II) Department					
Sr.	Title Workshop/ Training/ Programme	Coordinator	Duration			
No.	Organized					
1	Two Week ISTE Main Workshop on	Prof. A.R.Pawar	Two Week			
	Computer Programming					
2	Two Week ISTE Main Workshop on	Prof. S.M.Shinde	Two Week			
	Computer Networking					
3	STTP on Latest Trends in Data Mining and	Prof. G.R.Shaikh	One Week			
	Machine Learning					

Sr.	Title Workshop/ Training/ Programme	Coordinator	Duration
No.	Organized		
4	One Week workshop on CollabCAD and	Prof. A.A. Tripathi	One Week
	CollabDDS	_	
5	One day Workshop on Spoken Tutorial	Prof.	One day
		K.M.Shrikhande	
6	One day workshop on Aakash	Prof. A.M. Dyade	One day
7	One Week workshop on DBMS	Prof.M.S. Sawane	One week

Table No.3.1.6.2 Details of Workshop/Training/Programme Organized by faculty members of Mechanical Engineering Department

C	Tide Wardshan / Training / Drague ware	0 1	1
Sr.	Title Workshop/ Training/ Programme	Coordinator	Duration
No.	Organized		
1.	2-week ISTE Workshop on Engineering	Prof. S. R. Gavali	Two week
	Thermodynamics		
2.	"E-Foundry: Casting Design and Simulation"	Prof. S. B. Bhosale	One day
3.	"Recent Advances in Precision	Prof. Dr. M. L.	One week
	Manufacturing"	Kulkarni	
4.	"Micro- Nano Mission for Rural India"	Prof. S. M.	Two days
		Huddedar	
5.	"Fluid Mechanics"	Prof. S. R. Gawali	Two week
6.	"Methods of reducing odd effects of	Prof. A. B. Shinde	Two days
	Mechanical Vibration and Noise"		

Table No. 3.1.6.3 Details of Workshop/Training/Programme Organized by faculty members of Electronic and Telecommunication Engineering (EnTC) Department

Sr.	Title Workshop/ Training/ Programme	Coordinator	Duration
No.	Organized		
1.	MATLAB for Signal Processing	Dr. S. M. Mukane	One week
2.	Advance rf & microwave device design technology	Prof. S. C. Gurav	One week
3.	Two week ISTE workshop on Analog Electronics from IIT Kharagpur	Prof. H. Bhaldar	10 days
4.	Attended one Week workshop at IIT, Kharagpur on signals& systems.	Prof. M. S. Mathpati	One week
5.	Two week ISTE workshop on Signals and systems from IIT Kharagpur	Prof. M. S. Mathapati	10 days
6.	One week workshop on collabcab and collabdds	Prof. M. S. Mathapati	One week
7.	One day work shop on PSOC technology organized by BVD University, COE, Pune	Prof. S.C.Gurav, Prof.M.S.Mathpathi,	One day
8.	One day work shop on PSOC technology	Prof. S. S. Sathe	One day
9.	One Week Faculty Enablement Program on Mobile Apps Development organized by Ramdeo Baba COE, and Management ,Nagpur and Infosys ,Pune	Prof. M.M.Zade and Prof P.G.Ghodwade	One week
10.	One week ISTE workshop on Control Systems organized by IIT Kharagpur	Prof. Sampatkumar	One week

Table No. 3.1.6.4 Details of Workshop/Training/Programme Organized by Civil Engineering department

Sr.	Title Workshop/ Training/ Programme	Coordinator	Duration
No	Organized		
1	One week STTP on "Recent advances in	Dr. P.M.Pawar	One week
	Earthquake Engineering" at SVERI's, COE,		
	Pandharpur		
2	One week STTP on "Case Studies on Civil	Dr. P.M.Pawar	One week
	Engineering" at SVERI's, COE, Pandharpur		
3	Two week ISTE-IITB workshop on "Engg.	Dr. V.S.Mathada	Two week
	Mechanics" at SVERI's, COE, Pandharpur		
4	"Soft Computing Methods for Engineering"	Dr. P.M.Pawar	Four days
			-
5	One Day Workshop on "Time Management."	Prof./P. A.Machchha	One day

### 3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

Many departments have research Centre facility and the faculty members of this institution also actively involved in research. Based on the collective focus of group of faculty members following areas of research are prioritized. There groups have also given attention to develop required research facilities for them.

#### **Department of Mechanical Engineering:**

Micro-Machining and its applications: This lab is developed Under the Guidance of BARC, Mumbai and RRCAT, Indore Scientists. Most of the facilities in the lab are installed through the grant received from BARC, Mumbai under the BARC-RRCAT-SVERI tri party MOU titled "STUDY, DESIGN AND PROTOTYPE FABRICATION OF HIGH ASPECT RATIO STRUCTURES IN POLYMERS AND THEIR MOULDING IN NICKEL BY ELECTROFORMIMG, PHASE-1". This lab is equipped with Photo-chemical Machining, PDMS based fabrication, Hard X-ray lithography at RRCAT, Indore. This lab is also equipped with micro-fluidic testing and micro-measurement facility. This lab is utilized by various faculty members and five M. E. Students have completed their M. E. Projects and two three PhD scholars are working for degree.

Experts: Prof. N. D. Misal, Prof. R. R. Gidde, Prof. S. V. Jadhav, Prof. S. D. Bhosale,

- ➤ Vibration analysis: This lab is equipped with Vibration Exciter, FFTAnalyzer and Test Rig. Two PhD scholars have Completed their work and several PG sand UG Students have conducted experiments in this lab.
- Experts: Dr. P. S. Kachare, Prof. L. B. Raul, Prof. O. L. Mahajan, Prof. S. S. Gaikwad
- ➤ Rotor blade Analysis: Composite rotor blades are Important component for Various rotating devices which include helicopter rotor, turbines etc. In this field Dr. Prashant Pawar has received three grants until now. Through this Simulation and experimental facilities are developed. As a result of these activities few good publications are also resulted apart from UG, PG anddoctorate projects. Recently, a setup for testing of composite rotor blade has beeninstalled.

Experts: Dr. P. M. Pawar, Prof. S. M. Khomane, Prof. S. P. Jagtap

➤ Roller chain Improvement and Testing: With the industrial experience of more than 12 Yearsin roller chain industry Prof. B. D. Gaikwad joined Academics and continued this rare activity. He received research grant from Government of Maharashtra for life improvement of roller chain. He has achieved considerable results for chain Industry Apart from UG and PG projects. Also published patent and few publications. The lab is equipped with roller chain testing facility for sugar Industry.

Experts: Prof. B. D. Gaikwad, Prof. S. B. Bhosale, Prof. A.A. Mote

➤ Rheology and Tribology: Dr. B. P. Ronge started development of magneto-rheological (MR) fluid based dampers and Elastomers. He received research grant from A.I.C.T. E. under research promotion scheme to further development of lab. One doctorate Student and few PG Students are working in this field. Recently, this activity is extended to develop advanced tribology study in collaboration with BARC scientists. It is expected to get grant to develop advanced experimental facility for tribological testing of bearings.

Experts: Dr. B. P. Ronge, Dr. P. S. Kachare, Prof. A. B. Shinde, Prof. Y. M. Khedkar

➤ Utilization of Solar and Wind Energy: With the help of faculty members Prof. JaywantPawar and Prof R. R. Narkar, Solar drying based activities are initiated. This includes foldable solar dryers and raisin dryers using solar and vacuum drying approach. Another source of renewable energy is wind. Efforts are going on to develop low cost vertical axis wind turbines which can be fabricated through rural fabricators.

Experts: Prof. S. R. Gawali, Prof. R. R. Narkar, Prof. M. G. Palakar, Prof. D. S. Ghodake

#### **Department of Civil Engineering:**

- Advanced Analysis of Earthquake Forces: With the help of faculty members Dr. PrashantPawar and Prof. SantoshJadhav, in collaboration with C-DAC Pune detailed seismic analysis activities are going on.
  - Experts: Dr. P.M. Pawar, Prof. S.S Jadhav
- ➤ Development of Low cost housing Materials from Agricultural Waste: Large amount of agricultural waste is generated Which needs to utilized for developing low cost housing Material. The efforts in this direction are initiated by Prof. S. K. Patil and Prof. SonaliPatil under the guidance of Chemical Engineering Expert Dr. Sridevi.
  - Experts: Dr. Sridevi, Prof. S. K. Patil, Prof. S.P.Patil
- ➤ Improvement in Bio-gas Plant Performance: A One tone Nisargaruna biogas plant is installed in the Campus under the Guidance of BARC Scientists Padmasn. Dr. Sharad Kale by Institute faculty Members Prof. M. M. Pawar and Prof. V. Kshirsagar. Advanced research in the field includes CFD Simulation, development of low cost Scrubbers, prepackaged Small capacity plants etc.

Experts: Prof. M.M. Pawar, Prof. V.S. Kshirsagar.

Deployment of Rural- Agricultural Technologies: Department also participate in deployment of Rural and Agricultural technologies with the help of Pharmacy faculty members. These technologies are soil testing kit, low cost water filters, tissue culture, Seed bank etc. Department is also working development Systematic approach for Water Conservation.

Experts: Shruti Hiremath

## Department of Science and Engineering (CSE)\Information Technology (IT):

➤ Computer Vision and Human Computer Interaction Group:-The department has a dedicated Computer Graphics Lab with high end servers and latest gadgets to facilitate image processing and Computer Vision based applications. A dedicated team as given below is working in this upcoming Area.

Experts:- Prof.S.M.Shinde, /Prof.P.V.Gavali , Prof.M.R.More, Prof.A.G.Korake and /Prof.P.A.Satarkar, Prof. P. G. Gaikwad

Distributed Computing system Group: We have a NKN networks leased line of 1Gbps and also dedicated servers which host multiple applications. Research in frontier technologies including but not limited to the areas falling under cloud computing, Big data, Mobile computing etc. This year we are planning to get Mac-Server and Android labs with various dialects of Android operating system are planned in a separate lab.

Experts:-Prof.Dr.S.N.Kini, Prof.A.M.Dyade, Prof.S.L.Utpat and Prof.S.M.Kumbhar

Advance Database/ Data mining research Group: We have a sophisticated database lab equipped with Software like My SQL to Oracle are database including relational areas small tools and object oriented database to main memory database technologies for data mining are the focus of this group.

Experts:- Prof. Y.R.Kalashetti , /Prof.M.A.Dyade, / Prof. V. D. Jadhav, / Prof. K. A. Deshmane, Prof. V. N. Yadav

Computer Network Group:Is responsible to make one campus wide network to work. Beyond that they have been successful in identifying 5 schools and connecting them for collaborative educational initiatives. Storage area networks, WAN, Wifi all fall under this group.

Experts:- Prof. G.G.Patil, /Prof.M.A.Dyade, / Prof. M. M. Chaitanya, Prof. Kunal Shrikhande.

Software Engineering Group: Is responsible for doing research and improving the SPLC using innovative and state of the art technology. This group also works on Software Patterns/ Software Architecture Agile architectures open source model development.

Experts:-Prof. A R. Pawar, Prof. G. S. Kulkarni, Prof. G. R. Shaikh

All groups collectively are more than 250 computers at their disposal along with associated hardware's like, Routers, Access points, UPS & state of the art Servers for various applications.

#### Department of Electronics & Telecommunication Engineering

Image Processing: A Novel approach towards scale and rotation invariant content based texture image retrieval is invented by Prof. Dr. S. M. Mukane and it is reported though several international journals and conferences. Artificial neural network based diagnosis of neuro degenerative diseases was developed by Dr. M. M. Patil and it is also reported though several international journals and conferences. FPGA Implementation of FIR Filter is done by Mrs. M. M. Pawar, Mrs. J A Kendule worked on Novel flowers classification using neural based

image processing under guidance of Prof. Dr. S M Mukane. Ms. N. P. Kulkarni worked on Advanced technique for image resolution enhancement with combination of DWT and SWT under guidance of Mrs. M M Pawar. Mr. M M. Zade is working on Image enhancement by us ing switching median filter by taking RGB image and converting it in to black and white then adding some noise Filter is applied to obtain results under guidance of Prof. Dr. S M Mukane. Development of Methodology for Transforming CT Images indicating Location and Size of Lung Cancer Nodule is done by Ms. R. R. Mhetre. She proposed method for transforming CT images indicating location and size of lung cancer nodule under guidance of Dr. M M Patil. Ms. Shraddha Barbole is working on Efficient Pipelined FPGA Implementation of Steerable Gaussian Smoothing Filter. In this; steerable Gaussian smoothing filters are implemented on an FPGA platform using Virtex-V ML506 evaluation board. The output is displayed on VGA display. Mr. S A Inamdar is working on offline touch less figure print recognition system. In this system, database of figure print is being used to training and testing using the Novel algorithm under guidance of Dr. M M Patil. Segmentation of retinal images for glaucoma assessment is done by Mr. Padmasinh Deshmukh in which he done segmentation of optical disk and optic cup through a various segmentation techniques which intern helpful for glaucoma detection. Mr.Sushil Shirsat worked on Wavelet Based Brain Tumor Detection Using Mutual Information

Experts: Prof. Dr. S M Mukane, Dr. M M Patil, Mrs. M M Pawar Ms. J A Kendule, Ms. N P Kulkarni, Mr.S G Kashid, Mr.Sushil Shirsat.

Micro Electronics: Fabrication and characterization of ZnO Thin film and PDZnOSchottky contact for electronics and gas sensing applications is reported by Prof. A B Yadav and Mr. Vijaysinh Bhonge worked on Design and development of novel junction less Transistor for nano scale integrated circuit.

Experts: Mr. A. B. Yadav, Mr. Vijaysinh Bhonge.

➤ Wireless Communication: Quick Routing INMANET for multimedia application using zone routing protocol is done by Mr. S C Gurav and Wireless control for unmanned combat vehicle is established by Mr. Ashish Jadhav.

Experts: Mr. S C Gurav, Mr. Ashish Jadhav.

➤ VLSI Design: Implementation of adaptive median filter on VLSI Platform and analyzing the resource utilized between MATLAB and Xilinx is done by Mr.Sadashiv Badiger. He reported that this project describes about implementation of image processing applications on VLSI through one of the IEEE conference and Scalable Packets classification on FPGA demonstrated by Mr. Prashant Ghodwade.

Experts: Mr. Prashant Ghodwade, Mr. Sadashiv Badiger.

Microwave Antenna Design: Facilities of Microwave lab are used to Design and development of Magnetic field sensor to characterize an electromagnetic pulse by Prof. M S Mathpati. Ms. S S Kadam and Mr. A K Rathod are working on design and analysis of hexagonal fractural antenna array for multiband application under guidance of Prof. M S Mathpati.

Experts: Prof. M S Mathpati.

N/W Security: Ms. Papiya Biswas worked on Reduction of password guessing attack using click point under guidance of Dr. M M Patil and Ms. Mohua Biswas worked on Improve in the performance of network connectivity and power consumption using cooperative AD HOC Networks under guidance of Prof. M S Mathpati.

Experts: Dr. M MPatil, Prof. M S Mathpati, Ms. Papiya Biswas, Ms. Mohua Biswas.

➤ Digital Signal Processing: Ms. A D Shinde is working on Voice Operated Wheelchair Using DSP. The proposed idea is to implement voice operated wheelchair for physically disabled people.

Experts: Mrs. M M Pawar, Ms. A D Shinde.

- ➤ Digital Electronics: Optimum cooperative spectrum sensing using hard decision logic for cognitive radio network is reported by Mr. S Sathe. Experts: Mr. S .S.Sathe.
- Control Systems: Design and simulation of three phase shunt active power filter for harmonic mitigation in distribution system and An Advanced Current Controller Technique Based Active Power Filter For Power Quality Improvement are proposed by Mrs. D A Tamboli.

Experts: Mrs. D A Tamboli.

## 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

- 1. Institute encourages faculty members to visit reputed research organizations, academic Institutes and Industry to develop contacts with the eminent researchers. During these interactions these researchers are invited to Institute.
- 2. Eminent researchers are appointed on various bodies of Institute such as Board of Governors, Research Academic Council, etc.
- 3. Institute invites the expert speakers in the field of both academia and industries for conducting various technical programs and also to get good exposure to latest technologies.
- 4. MOUs with prominent research agency like RRCAT, BARC, Walchand College of Engineering, Sangali, College of Engineering, Pune etc.
- 5. Workshops, functions, training programs are conducted to motivate the students as well as to teachers towards research activity.
- 6. This impact shown by listing the number of scientist who visited to institute in question of 3.7.4.

## 3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

➤ Institute provides sabbatical for faculty members for joining higher education PG and doctorate degree for quality improvement. This has resulted in developing cross-culture research areas and new prioritized research areas are emerged. 42% of the faculty have availed sabbatical leave.

- As a result, based on the research area of certain faculty members research labs have been set up in the institute. Student can avail use of such labs to broaden their research horizon.
- Institute has also made provision to allow two faculty members each semester to stay with Industry to understand Industry research culture. These interactions have helped faculty members in getting real exposure of industry and learn about new research avenues.

## 3.1.10 Provide details of the initiatives taken up by the institution increasing awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students' and community (lab to land).

- ➤ Development of Rural Human And Resource Development facility: Various technologies developed by BARC, Mumbai which are useful for rural applications are deployed through Various AKRUTI centres in Villages.
- ➤ ICT NKN facility- 1000 Mbps Wi-Fi connectivity provided to schools within the range of 15-20 km for e-learning which covers most of rural region from Pandharpur city.
- ➤ GARUDA GRID FACILITY: CDAC, Bangalore has provided a GARUDA GRID computational facility with 70 Teraflop speed. Currently it is being utilised by post graduate and doctorate students for their high performance computational work.
- ➤ Photochemical Machining is modified to develop metal artwork to generate rural employment by utilizing it to make metal artwork.
- Agricultural Waste to Product: Agricultural waste from wheat and Jawar is utilized to develop products such as temporary utilized food plates. Further, efforts are being made to develop low cost housing materials.
- Development of roller chain test facility. As chains operate under various forces, failure of chain assembly is the major problem. Causes of these failures are improper material selection, uncertainties in manufacturing, faulty manufacturing processes. Prof.B.D. Gaikwad has introduced modification in design of chain as per conveying capacity of roller conveyor by using theory of shape optimization and failure analysis technique. Existing breaking load of the chain has been increased by 10Tonnes, at the same time weight/5feet has been reduced upto 2kg.This is useful for reduction of power in conveyor utilizing industries and estimation of conveyors life for particular capacity.

#### 3.2 Resource Mobilization for Research

## 3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

As mentioned below, good percentage of total department budget is earmarked for research. The tables given below furnish the major heads of expenditure and actual utilization with specific allocation to equipments, Consumable, Travel and other Expenses.

Table No. 3.2.1 Major Heads in Capital R & D Budget (Rupees in Lacs)

Year	Non-Red	curring	Recurring					
	Allocated	Utilized	Salary	Consumable	Travel	other	Total recurring Allocated	Utilized
2011-12	8	8	3.36	2.05	0.64	0.53	6.58	6.58
2012-13	17.46	16.76	3.11	7.37	1.86	1.04	13.38	13.38
2013-14	1.71	1.71	11.87	1.52	1.46	0.3	15.15	15.15
2014-15	50.96	13.4	57.61	5.15	4.06	12.2	79.02	50.95

**Table No. 3.2.1.1 Department Budget (Rupees in Lacs)** 

Academic Year	Non- Recurring R&D Budget		Library Journal Subscription Budget		
	Equipment	Consumable	Travel	Miscellaneous	3
2011-12	43.05	1.55	2.25	0.61	12.72
2012-13	5.86	1.23	6.25	2.26	18.53
2013-14	109.03	3.29	3.74	6.80	10.98
2014-15	71.48	8.25	7.17	15.23	10.53

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes, the institute has a special provision to provide seed money to the faculty members for research. About 40% of the faculty has been availed such facility in last four years.

Table No.3.2.2 Detail of seed money

Sr.	Department	Title	Amount
No.			(Lacs)
1.	Civil	Strengthening of structure analysis competencies	12.05
	Engineering	Strengthening advanced survey related competencies	4.20
		Development of earth quake engineering	15
2	Electronics	To setup advanced communication engineering lab	2.5
	&	Development of advanced embedded system lab	3
	Telecommun	Strengthening of microwave related activity in PG	7
	ication	lab	
	Engineering	To setup of Robotics Lab	5.1

Sr. No.	Department	Title	Amount (Lacs)
3	Mechanical Engineering	Establishment of Adaptive – Reverse Engineering Facility	3.0
		Development of advanced vibration analysis setup	12.15
		Development of semi-active device development lab	12.24
		Development of rotating blade/beam analysis setup	3
		Setting up of Computerized I. C. Engine test rig	6.15
		Development of advanced manufacturing set up	3.6
		Development of advanced metrology setup	3.65
		Setting up of advanced CAD/CAM Laboratory	7.65
		Setting up of advanced CAE Analysis Laboratory	17.65
4	Computer Science and	To setup high performance computing facility to cattier institute infrastructure	10.30
	Engineering	To setup Android applications development lab	11.16
		To setup MAC applications development lab	20
	Inter- Disciplinary	Setup of wireless network infrastructure & improving related competencies	11
		To strengthen microwave fabrications and micro- electronics related lab	13

## 3.2.3 What are the financial provisions made available to support student research projects by students?

Institute provides Rs/- 1000 per student for the final year project. In that case, student should submit proposals, with due sign of respective guide and student in prescribed format giving the outline of the project to be carried out along with the budget required to the HOD, HOD will take all such a proposals to the Principal and get the approval.

Financial assistance be provided for the following:

- 1. Raw material.
- 2. Labour charges for processing if such a process does not take place in our Institute.
- 3. Testing charges if testing facility is not available in our Institute.

## 3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The various departments/units/staff of the institute interact with those departments with which their inter-disciplinary interests match in undertaking inter-disciplinary research. As a result, many new ideas arise such as follows:

- 1. Central administrative position of Dean R&D is created to coordinate Institute R &D activities. Dean R&D arrange meetings of all the department coordinators and Heads where the new R &D activities are discussed and initiated.
- 2. The planned interdepartmental activities are carried out under coordination of designated faculty members.
- 3. Open house R & D training sessions are organised where all the faculty members are introduced with various R & D activities in the Institute inspite of their departments. This activity encourages faculty members to start thinking about multi-disciplinary projects.
- 4. The common trainings are organised for software and equipments which are used by more than two departments. For example, Strain-

Gauage data measurement system related training was organised where Mechanical and Civil Engineering faculty members were invited from user point of view whereas EnTC and CSE invited from system installation and data management point of view. Another example includes training of multiphysics software COMSOL where faculty members from Mechanical and Civil Engineering department and also Pharmacy College are involved. As result of this training, a group of more than 15 users is formed and they interact frequently inspite of their departments for solving the problems of mico-componts to megha structures viz. 1 tone biogas plant.

- 5. Various talks from outside experts are organised to imbibe multi-disciplinary culture resulting formation various theme-oriented multi-department groups. For example, a two days theme meeting was organised with the help of BARC, Mumbai. The theme of the meeting was "Micro-Nano in Service of Rural India". This theme meeting was guided by more 20 experts from IISc, IITs, BARC, PSG, BITS and Industry. This theme meeting was also guided by representatives of R & D agencies. The idea of the theme meeting was that faculty members from various engineering colleges come together and form clusters and write proposal related to the theme. Seven such proposals are developed as a result of theme meeting under the mentorship of experts from reputed organisations.
- 6. Institute also forms theme specific groups which involves faculty members from various departments. Two such groups are formed which viz. Micro-Fluidic Device Development Group and Robotics Design & Development group. Detailed description one group is explained below:

Micro-Fluidic Device Development Group: With theme of development of micro-fluidic devices following tasks are decided and faculty coordinators are allotted to these tasks.

- i. Product Design and Marketing: This group involves experts from all the engineering departments and Management. The role of Management department is to collect the requirements and also identify existing similar products. Based on this requirements the product design group will develop preliminary design based on the inputs from all the engineering experts. Based on the preliminary designs detailed simulations will be carried out to decide final specifications to provide input to development groups. Management experts will help in product development from marketing point of view by providing the inputs about cost, social issues and local issues etc. They will also help in developing product marketing strategies and identifying proper business model.
- ii. Micro-Manufacturing: Based on the specifications about the mechanical component, appropriate manufacturing strategies will be decided based on the setup available with Institute and Collaborative Institutes. Development of components and its characterisation. Helping in assembling it with sensors and controllers.
- iii. Sensor and Controller: Design and development of appropriate sensors and controllers for examples selection of thin film sensors and data analysis etc. Development of appropriate controller software etc.

iv. Bio-Chemical Analysis: This groups mainly represents the users of these products and explains about various chemical and biological phenomenon. The group also helps in converting the existing biological and chemical processes into lab-on-a-chip processes.

Examples of multi-disciplinary groups are given below:

- 1. Rural Human and Resource development facility: Based on the technology document provided by BARC, Mumbai technologies are deployed with the help of faculty members of Various disciplines, Viz. Mechanical Engineering, Civil engineering, Chemical engineering, Agricultural Engineering, etc. They work in collaboration for deplying the technologies through the training centre developed in the Institute.
- 2. ICT Enabled School Education: The EnTC and CSE departments from Institute and Educational expert group of Maharashtra Knowledge Foundation (MKF), Pune are working together to impart ICT enabled school education. Institute departments help in setting up of wireless network to connect the 1 GBPs internet lease line to five school within the distance of 15KMs.
- 3. Weather based Crop-Advisory Expert System: Department of Civil and CSE along with agricultural experts and weather experts from C-DAC are working on developing automatic weather based individual crop specific advisory development expert system.
- 4. Biogas Energy: Department of mechanical and Civil Engineering are working various issues related improving the performance of biogas energy. This includes CFD analysis, Scrubber development etc.
- 5. Agricultural Waste to Product Development: Civil and Mechanical department faculty members are working together on the area of agricultural waster to product development. Civil department is working on material and process development whereas mechanical department is working on development of required devices.
- 6. Microelectronics and Microfabrication: Mechanical and ENTC departments are working together on setting up of microelectrincs and microfabrication lab for development various thin and thick film sensors

## 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- All equipments existing in the labs are calibrated and made available both to faculty members and students.
- ➤ Workshop is conducted by focusing the application of different types of equipments to be engaged by the faculty members. Training and demonstration also carried out using these instruments during workshop for the participants.
- For routine practical experiments all available equipments are well accessible to students for their practical purpose.
- ➤ In our college, the lab and other research facilities is left open for both students and faculty members beyond official working time and also during vacation period.
- ➤ Our campus is connected with full fledged LAN facility with numerous workstations in every department and also installed with required latest system and application software packages.
- Our central library has access to 82382 volumes and not less than 25000 titles, 127 Indian journals, 452 international journals with

central computational facility fitted with 1 Gbps internet connectivity which is left open to students including Wednesday.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

Yes. Our college has received grants from many organizations for creating research facility mainly to upgrade our facilities and also to purchase latest capital intensive equipments and the details about such major prestigious assignments are as follows:

1. Rajiv Gandhi Science and Technology Commission has provided financial support to the project entitled "Design Analysis for Improvement of Manufacturing process for Minimizing the Failures Modes of Chain Assembly".

Table No.3.2.6 Project detail

		J
1.	Title of the Project	Design Analysis for Improvement of
		Manufacturing Process for Minimizing the
		Failures Modes of Chain Assembly
2.	Name of the organization /Institute	SVERI's College of Engineering, Pandharpur
3.	Principal Investigator	Prof. B. D. Gaikwad
4.	Rajiv Gandhi Science and	No. RGSTC/File-10/DPP-066/08 dated on 30 <sup>th</sup>
	Technology Commission, Mumbai	November 2013.
	Sanction Order No. and Date of	
	Sanctioning the project	
5.	Period of Project	Oct 2011-Oct 2014 (36 months)
6.	Total amount that was available for	Rs.3,40,403/-
	the expenditure from 1.4.2014 to	
	20.10.2014	
7.	Total expenditure from 1.4.2014 to	Rs. 3,40,893/-
	20.10.2014.	
8.	Balance amount available at the end	Nil
	of the third year.	

2. SVERI has expressed keenness to interact with BARC and RRCAT. SVERI, RRCAT and BARC have agreed to collaborate to carry out study, design and prototype fabrication of high aspect ratio structures in polymers and their moulding in nickel by electro forming in a phased manner.

The fund detail provided by BARC to SVERI as follow:

Table No.3.2.6.1 Project detail

Sr.	Detailed break-up of cost	Cost in
No.		Lac of Rs.
1.	Up gradation of PCM Lab.	
	- High resolution art generator (Camera, Printer, etc)	
	- Measurement instrument	11.00
	Establishing Electroforming and PDMS/SU-8/PMMA	
	processing Lab.	
	- Equipments	
	- Heating system (To be identified and listed with app.	
	Cost)	

Sr.	Detailed break-up of cost	Cost in Lac
No.		of Rs.
2.	Consumable for making masks, structures, hard moulds,	8.00
	polymer structure, etchants, etc.	
3.	Salary of project associate(s).	3.00
	- Research Associate (Rs. 18,000 p.m.)	
	- Research Assistant (Rs. 10,000 p.m.)	
	- Technical Assistant (Rs. 6,000 p.m.)	
4	To conduct workshops/seminars in the super finishing	1.00
	area and develop knowledge base	
5	Travel and contingency	2.00
	Total	24.00

- **3.** Eduvance, Mumbai has given the 10 PSoC kits to the Electronic and Telecommunication department which cost is near to 1 Lac. This help student to do the research activity.
- 3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of on-going and completed projects and grants received during the last four years.

Support provided to the faculty by institute as follows:

- 1. We provide seed money for the completion of project work.
- 2. We develop focused lab as per the requirement of research area.
- 3. We organized funding agency related group meetings.
- 4. Some contribution from Institute if R &D agency demands.

Table No.3.2.7 On-going and completed Research projects and grants received to Institute

Sr.	Title of the project	Total	Agency	Period of
No.		cost		Project
		(Lacs)		
1	Active Twist Control of a	7.88	Aeronautics R& D Board, Govt.	Completed
	Composite Helicopter Rotor		Of India, New Delhi	successfully
	Blade			
2.	Development and analysis of a	8.05	All India Council For Technical	Jan 2012 to
	smart system with combined		Education	Jan2014
	use of Magneto-Rheological			
	based dampers and Elastomers			
3	Study, design and prototype	24.00	Bhabha Atomic Research	Feb 2012 to
	fabrication of high aspect ratio		Centre, Mumbai	Feb 2014
	structures in polymers and their			
	moulding in nickel by			
	electroforming.			
4	Design Analysis for	15.14	Rajiv Gandhi Science and	Oct 2011
	Improvement of Manufacturing		Technology Commission, Govt.	to Oct.
	Process for Minimizing the		of Maharashtra, Mumbai	2014
	Failures Modes of Chain			
	Assembly.			

Sr. No.	Title of the project	Total cost (Lacs)	Agency	Period of Project
5	Estimation and Reduction of Helicopter Hub Vibratory Forces due to Blade-to-Blade Dissimilarity in Composite Rotor System	8.16	Dept. of Science and Technology, Govt. of India	Jan 2013 to Jan 2015
6	Setting up Rural Human Resource Development Facility (RHRDF) with the technical guidance and consultancy from BARC-DAE	317.89	Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai	March 2013 to March 2016
.7	ICT-Enabled School Education in Rural Areas around 15-20 Kms from NKN Node	137.20	Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai	March 2013 to March 2016
8	Structural Health Monitoring of Composite Rotor Blades under Uncertainties	10.00	Aeronautics R& D Board, Govt. Of India, New Delhi	Approved

#### 3.3 Research Facilities

## 3.3.1 What are the research facilities available to the students and research scholars within the campus?

- The Institute has both undergraduate and post graduate courses in varied discipline and to meet the set of courses including the research requirement the management has developed state of art facilities for the benefit of both students and faculty members.
- ➤ High speed internet connectivity up to 1gbps and good number of desktop / laptop PCs has also been provided to all departments to enable the faculty and students to pursue their academic as well as their research activities.
- ➤ Grid Garuda Facility: Computational server is available for the students to do their research work. By using this facility complex programmes can be executed at high speed.
- Also the central library contain the large numbers of national international journals and various title books.
- For the research scholars institute provide laboratory with well mannered equipments to carry out their research work effectively. Ex. Photo Chemical Machining Lab, Vibration Lab, Rural Human Research Development Facility.
- The lists of major equipments available in the various departments are given in Institute provides research facilities to student and research scholars with the help of following:

List of Laboratory Equipment of Electronic and Telecommunication Engineering (EnTC) Department are as bellow:

- 1. Electronic Design & Project Lab: Linear Cum Digital IC Tester. Model, Spectrum Analyzer HAMEG Make, model
- 2. Computer Aided Electronics Design I ,II & III Lab: MATLAB Software, ORCAD-Capture Software, ISDN central office emulator Set

3. Microwave Engineering Lab: Microwave Test Bench with Klystron power supply and Gunn power supply, Antenna trainer with 20 antenna and plotting software

List of Laboratory Equipment of Mechanical Engineering Department are as bellow:

- 1. CAD/CAM: CNC Milling Machine Model, XL TURN CNC, Unigraphics NX3 software, UGS- Nastran software, Ansys software, Pro-E Software, Catia V5 software, Autocad 2011 Computer Software,
- 2. Workshop: 1.715 Horizontal Milling M/C with Vice
- 3. Experimental Stress Analysis: 12" Diffuse Light Research Poloriscope with all accessories
- 4. FMFP Lab: Francis Turbine Test Rig. With 1.5 kw Motor and Pump
- 5. Internal Combustion Engine/Automobile Engineering Lab: Multi Cylinder Petrol Engine Test Rig with Hydraulic Dynamometer (Morse Test), Computer Controlled 5 HP Single Cylinder Diesel Engine with Hydraulic dynamometer, 10 HP, Twin Cylinder Diesel Engine Test Rig with Hydraulic dynamometer.
- 6. ME CAD/CAM Lab: DELCAM software
- 7. ME Vibration Lab: OR 34-4 Channel Integrated Portable Mobile Analyser with accessories & Software, OR NV-OCT-8, PCB Piezotrovics ORAC-1ACC-P04, PCB Maget model 080A27, GRAS Microphone model 40 AE, GRAS preamplifier model 26CA
- 8. Metrology and Quality Control (MQC) Lab: Profile Projector, Surface Roughness TesterMake

List of Laboratory Equipments Of Civil Engineering Department are as follows:

- 1. Structural Machine Lab: Compression Testing Machine, STADD Pro software
- 2. Transportation Lab: Loss Angles Abrasion Testing Machine and Ductility Testing Machine
- 3. Concrete Testing Lab: Beam moulds

## 3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- ➤ Institute has a Research Advisory Committee which helps in planning the upgradation and creation of infrastructural facilities to meet the needs of researchers.
- ➤ Every Year during budget allocation, through discussion is carried out based on the inputs from the researchers for allocation of R & D budget for upgradation of creation of facilities.
- Institute faculty members are encouraged to start the research in new and emerging areas of research where potential areas where R & D funding can be attracted. These faculty members are also provided with seed money to start their research in these areas.
- Institute also focuses on the upgradation of existing facilities for the research areas where more faculty members and students have started using that facility.

# 3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments / facilities created during the last four years

The instruments purchased through MoU grants and Research project grants are listed below:

- 1. Eduvance, Mumbai has given the 10 PSoC kits to the Electronic and Telecommunication department which cost is near to 1 Lac. This helps student to do the research activity. The laboratory is developed in which these kits are available for student to perform the research.
- 2. Micro fluidics and Micro-Nano reactors will be carried out by SVERI with the help of experts from BARC and RRCAT. The identified structures will be fabricated after systematic experimental studies at RRCAT by faculties and students of SVERI. The measurement facilities available at BARC and RRCAT will be used for the measurement and characterization. SVERI will upgrade its existing PCM facility and establish an electroforming facility for mask making and hard mould fabrication for micro-nano products. So, For this BARC had provided 24 Lac in the form of grants.
- 3. NKN provided 1 GBPS connectivity to Institute to utilize it for rural and agricultural connectivity. The Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai provided 137.20 Lac research grant for this project. In the first phase of this drive, it is decided to provide point-to-point WIFI connectivity to five schools within 10-15km range.
- 4. Setting up Rural Human Resource Development Facility (RHRDF) with the technical guidance and consultancy from BARC-DAE. The Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai provided 137.89 Lac research grant for this.
- 5. Estimation and Reduction of Helicopter Hub Vibratory Forces due to Blade-to-Blade Dissimilarity in Composite Rotor System. The Dept. of Science and Technology, Govt. of India provided 8.16 Lac for implementing this.
- 6. To develop the Active Twist Control of a Composite Helicopter Rotor Blade. The Aeronautics R& D Board, Govt. Of India, New Delhi provided the 7.88 Lac.

## 3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

- Faculty members registered for PG and Ph.D program are allowed to avail the BARC research facilities.
- RRCAT also provide the supervisors are permitted to carry out collaborative research work for the students beneficial.
- ➤ Costly equipments available at Industry and Research Institutes are made available to our staff members by entering suitable MOU arrangement for mutual benefit.

### 3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?

Our central library is fully computerized by automating the issue of books with bar code reader. The library has 1367 titles covering all major fields of Science and Engineering. Total area of the library (in sq. Mtrs.) 870 Sqw. Mtrs. Total seating capacity have 250 students in the library.

### ➤ Journals/ Magazines:

Table No.3.3.5 Library Journals/ Magazines

Sr. No.	Туре	No. of Journals
1	National	127
2	International /Online/ E- Journals	452
	Total:	579

<sup>➤</sup> Discipline Wise No. Of Journals / Magazines:-

Table No.3.3.5.1 Library Journals/ Magazines

	Discipline	No. of		E-Journals		Total	
Sr.	Journals/Magazines						
No.		National	Amount of	No's.	Amount	No. of	Amount
			Subscription		in lacs	Journals	in lacs
			in lacs				
1	Mechanical	24	0.33	ASME - 26	1.58	160	3.74
	Engineering			Elsevier-110	1.84		
2	Electronics &	12	0.32	IEEE - 76	1.85	144	3.11
	Telecommuni			Elsevier- 56	0.94		
	cation Engg.						
3	Computer Sci.	11	0.18	IEEE- 75	1.85	156	3.20
	& Engg.& IT			Elsevier -70	1.17		
4	Civil Engg.	21	0.27	Elsevier- 39	0.65	60	0.92
5	MBA	30	0.57			30	0.57
6	General Engg.	11	0.27			11	0.27
7	General	18	0.27			18	0.27
	Magazines						
Total:		127	2.19	452	9.88	579	12.07

## 3.3.6 What are the collaborative research facilities developed/created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

- ➤ Grid Garuda Facility: Computational server is available for the students to do their research work. By using this facility complex programmes can be executed at high speed.
- ➤ It is proposed to have a close interaction between the agencies BARC, RRCAT and SVERI involved to monitor / enhance the progress of the project. A Systematic Approach is developed based on Photo-Chemical Machining for making PCM based artwork for Rural Artisans. One Entrepreneur Mr. Akash Gavade is developed to sell the products developed using this process.
- > RHRDF: This centre is equipped with following technologies:
  - 1. Nisargaruna-Biogas Plant
  - 2. Seed Bank
  - 3. Water Filters
  - 4. Foldable Solar Dryers
  - 5. Vibro-Thermal Disinfector
  - 6. Solar and Vacuum based Grape Drying Process
  - 7. Soil Testing

- 8. Tissue Culture
- 9. Low and Medium range Weather forecasting
- 10. Radioimmunoassay
- 11. Laser Land Leveler

#### 3.4 Research Publications and Awards

### 3.4.1 Highlight the major research achievements of the staff and students in terms of

### \* Patents obtained and filed (process and product)

- 1. Patent filed by Mr. B. D. Gaikwad, Prof of –Mechanical Engineering department, for "Apparatus for measuring elongation of conveyor chains and life estimation thereof" with Indian patent, ref. no. P6046IN00.
- 2. Patent filed by Mr. N. D. Misal, Prof of –Mechanical Engineering department, for "MULTI NUT REMOVER FOR AUTOMOBILES". It is one of the break through research our faculty member involved and expected to achieve good success in getting the required patent.

### \*Original research contributing to product improvement

- 1. Chain Testing Facility
- 2. Raising Drying Facility: Combined use of Solar and Vacuum based drying process is customized for raisin making for 100 kg plant. The minimization of energy consumption and up-gradation of plant to 1 Tone is under progress. This facility is provided to nearby farmers.
- 3. Agri-watse to Product: Agricultural waste from wheat and Jawar is utilized to develop products such as temporary utilized food plates. Further, efforts are being made to develop low cost housing materials.
- 4. PCM product for Artwork development: A Systematic Approach is developed based on Photo-Chemical Machining for making PCM based artwork for Rural Artisans.
- 5. Shellac Bangle Hazard minimization devices

### \* Research studies or surveys benefiting the community or improving the services

- ➤ PCM :A Systematic Approach is developed based on Photo-Chemical Machining for making PCM based artwork for Rural Artisans.
- Solar and Vacuum based Raisin Making Process: Combined use of Solar and Vacuum based drying process is customized for raisin making for 100 kg plant. The minimization of energy consumption and upgradation of plant to 1 Tone is under progress.
- Agri-watse to Product: Agricultural waste from wheat and Jawar is utilized to develop products such as temporary utilized food plates. Further, efforts are being made to develop low cost housing materials.
- > Shellac Bangle Hazard minimization devices.

### \* Research inputs contributing to new initiatives and social development

- ➤ ICT School:NKN provided 1 GBP Sconnectivity to Institute to utilize it for rural and agricultural connectivity. The Government of Maharashtra provided research grant for this project. In the first phase of this drive, it is decided to provide point-to-point WIFI connectivity to five schools within 10-15km range.
- Soil testing: This technology is useful for predicting the local weather and is useful for weather sensitive crops like pomegranate, grape etc. This technology will be installed second which will help in getting information of local weather which is useful for crop planning.

- Weather forecasting: This technology is useful for predicting the local weather and is useful for weather sensitive crops like pomegranate, grape etc. This technology will be installed second which will help in getting information of local weather which is useful for crop planning.
- 3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

Yes. The institute publish SVERI-Scientific quarterly of academic year to aware the students new trends in research area and related available facilities in the institute.

- 3.4.3 Give details of publications by the faculty and students:
- \* Publication per faculty:

Table No.3.4.3 List of Publication per faculty from CSE department:

Sr.No.	Name of faculty	Number of papers published by faculty	Number of publications	Chapter in Books	Books Edited
1.	Dr. S. N. Kini	11	1	0	0
2.	Mr. Y. R. Kalshetty	5	-	-	-
3.	Ms. V. D. Jadhav	5	-	-	-
4.	Ms. P. A. Satarkar	3	-	-	-
5.	Ms. K. A. Deshmane	1	-	-	-
6.	Ms. P. S. Doshi	3	-	-	-
7.	Ms. S. P. Pawar	1	-	-	-
8.	Mr.A.R.Pawar	1	-	-	-
9.	Mr. S. L. Utpat	1	-	-	-
10.	Mr. G. S. Kulkarni	2	-	-	-
11.	Mr.V. N. Yadav	1	-	-	-
12.	Ms. S. S. Kadam	2	-	-	-
13.	Mr. G. G. Patil	1	-	-	-
14.	Mr. M. R. More	1	-	-	-
15.	Mr. A. A. Tripathi	1	-	-	-
16.	Ms. S. N. Karande	1	-	-	1
17.	Ms. B. T. Pandhare	1	-	-	ı
18.	Mr. S. V. Darshane	1	-	-	1
19.	Mr. S. M. Shinde	2	-	-	-
20.	Mr. A. G. Korke	2	-	-	1
21.	Ms. R. G. Sache	3	-	-	-
22.	Mr. P. G. Gaikwad	3	-	-	-
23.	Miss. V. J. Jadhav	3	-	-	-
24.	Mr. S. M. Kumbhar	1	-	-	-
25.	Ms. S. S. Unnibhavi	1	-	-	-
26.	Mr. G. R. Shaikh	1	-	-	-
27.	Mr. R.G. Sonkamble	1	-	-	-
28.	Ms. M. M. Chaitanya	2	-	-	-

Table No.3.4.3.1 List of Publication per faculty from EnTC department:

Sr.No.	Name of faculty	Number of papers	Number of	Chapter in	Books
		published by faculty	publications	Books	Edited
1.	Mr. M.S.Mathpati	1	-	_	-
2.	Dr. S.M. Mukane	18	-	_	-
3.	Dr. Mrs.M.M. Patil	17	-	-	-
4.	Mrs.M.M. Pawar	15	-	_	-
5.	Ms.D.A. Tamboli	5	-	-	-
6.	MrS.C. Gurav	1	-	-	-
7.	Ms. J. A. Kendule	2	-	-	-
8.	Ms.N.P.Kulkarni	1	-	-	-
9.	Mr. M.M. Zade	1	-	-	-
10.	Mr.A.A.Jadhav	8	6	0	0
11.	Mr.A.P. Narwadkar	2	-	-	-
12.	Ms.Mohua Biswas	2	-	-	-
13.	Ms. Papiya Biswas	1	-	-	-
14.	Mr.A.B.Yadav	4	-	-	-
15.	Mr.A.B. Chounde	1	-	-	-
16.	Mr.S.G. Kashid	3	-	-	-
17.	Mr.S.D. Sirsat	2	-	_	-
18.	Ms.S.A.Barbole	3	-	-	-

Table No. 3.4.3.2 List of Publication per faculty from civil department:

1 66 %	Tuble 1 (0. 0. 11.0.2 Elist of 1 ubilication per faculty from civil department.							
Sr.No.	Name of faculty	Number of papers	Number of	Chapter in	Books			
		published by faculty	publications	Books	Edited			
1.	Dr. P. M. Pawar	21	2	0	0			
2.	Mr. S. S. Dharane	25	-	-	-			
3.	Mr. S.S. Jadhav	1	-	-	-			
4.	Mr. A. V. Zambare	5	-	-	-			
5.	Ms. V. S. shirsagar	1	-	-	-			
6.	Mr. S.D. Jagdale	1	-	-	-			
7.	Mr. S.K. Patil	1	-	-	-			
8.	Mr. S. S. Gaikwad	2	-	-	-			

Table No. 3.4.3.3 List of Publication per faculty from Mechanical department:

Sr.	Name of faculty	Number of papers	Number of	Chapter in	Books
No.		published by faculty	<b>Publications</b>	Books	Edited
1.	Dr. B. P. Ronge	9	-	-	-
2.	Dr. P. S. Kachare	4	-	-	-
	Dr. Sridevi Dileep	11	-	-	-
3.	Mr. N.D. Misal	20	-	-	-
4.	Mr. B.D. Gaikwad	8	-	-	-
5.	Mr. R. R. Gidde	2	-	-	-
6.	Mr. S.S. Wangikar	5	-	-	-
7.	Mr. A. B. Shinde	3	-	-	-
8.	Dr. S. A. Lendave	20	-	-	-
9.	Mr. S. R Gavali	2	-	-	-
10.	J.P. Pawar	1	-	-	-

Sr. No.	Name of faculty	Number of papers published by faculty	Number of <b>Publications</b>	Chapter in Books	Books Edited
11.	Mr. L. B. Raut	12	-	-	-
12.	Mr. S. S. Gaikwad	2	-	-	-
13.	Mr. J. P. Pawar	1	-	-	-
14.	Mr. O. L. Mahajan	3	-	-	-
15.	Mr. Y. M. Khedkar	1	-	-	-
16.	Mr. P. K. Parse	2	-	-	-
17.	Mr. D. N. Lawate	1	-	-	-
18.	Mr. S.B. Bhosale	8	-	-	-
19.	Mr, S, K. Patil	3	-	-	-
20.	Mr. S.B. Salunkhe	2	-	-	-
21.	Mr. S.D. Bhosale	2	-	-	-
22.	Mr. A. D. Landge	1	-	-	-

The following table gives the author wise number of publications, average citation index, SNIP, SJR, Impact Factor and H-Index for their publications.

Table No. 3.4.3.4 Publication listed in international database

Sr.	Name of the	Dept	No of	Av.Citation	SNIP	SJR	I	Н
No	Faculty		<b>Publications</b>	Index			F	Index
1	Dr. P.M. Pawar	Civil	21	396	-	-	-	10

#### 3.4.4 Provide details (if any) of

#### \*Research awards received by the faculty

- 1. Dr. P.M. Pawar has received DST Young's Scientist award.
- 2. Dr.Mrs.M.M.Patil Received Best Paper award For Differential Diagnosis of Dementia using Slantlet Transform', presented at IRNET (Interscience Research Network) Conference ICMAET (International Conference on MATLAB Applications in Engineering and Technology) Bangalore, 1 Jan 2012, <a href="https://www.interscience.ac.in/award2012.html">www.interscience.ac.in/award2012.html</a>, ISBN:978-93-81693-12-4.
- \* recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

Good number of faculty members in each departments are recognized as Supervisors for guiding Ph.D Scholars under Solapur University.

## \* incentives given to faculty for receiving state, national and international recognitions for research contributions.

- Institute awards the faculty members who published their research work in national and inter-national conference/journal. And also institute provide the travelling allowance.
- ➤ Institute also provides seed money for initiating the research work.

#### 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

- ➤ The college has the Training and Placement cell which arrange training for students to improve their soft skills, IQ.
- ➤ This cell also organizes the EDP program
- For the students Career Development sessions are conducted.
- This cell organizes the training from different industry such as Nihilent, Infosys.
- ➤ The institute arranges GATE classes.

- ➤ The college has good alumni base who are currently working with many reputed companies. This group certainly helps us in campus placements.
- ➤ College has the MOUs with the different institute industry.

## 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

- 1. Visiting the potential consultancy service requirement groups: For example, For Civil Engineering Related consultancy, the potential groups which require these consultancies are Public Work Department, Irrigation Department, Municipal Corporations, Builders and Contractors in the regions are communicated regularly about our services and expertise available.
- 2. Advertisements in the News papers
- 3. Communicating in the parents meet about available services:
- 4. Details about available expertise and consultancy areas are displayed on the Institute website.
- 5. Display boards in the departments about consultancy areas are displayed

## 3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

- 1. The consultancy is exclusively based on the expertise of faculty members without using any resources of Institute, 60% of consultancy income will be provided to expert faculty member whereas 40 % of consultancy income will be provided to Institute account.
- 2. Faculty members are always encouraged by reducing the academic and administrative work load while executing consultancy works with the available equipments.
- 3. The department encourages faculty members to visit industries by providing sabbatical Leave.
- 4. Through personal visits to industries in order to obtain consultancy work.
- 5. Always the labs are made available to industry members by extending the working hours of laboratories.

### 3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

The following are the major areas which does indicate our expertise in providing the leading edge consultancy services:

- Material Testing.
- > Design & Validation of Material Compositions.
- ➤ Water Testing.
- ➤ Soil Testing.
- ➤ Design of Testing of Transportation Engineering related material & components of construction material.
- > Structural Safety Testing.
- > To check threaded Component parameters
- > Photo Manufacturing by photochemical Machining
- Vibration Analysis and conditioning Monitoring

The revenue generated from consultancy works over the last four years is as following:

Table No.3.5.4 Detail of consultancy

Sr.No	Year	Consultancy	Amount in lacs
1.	2011	Diferent Testing	0.73
2.	2012	Diferent Testing	5.92
3.	2013	Diferent Testing	5.66
4.	2014	Diferent Testing	1.50
5.	2014	CNC Machine	0.03
6.	2014	Photo Manufacturing by	0.04
		photochemical Machining	

## 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

- 1. If the consultancy is exclusively based on the expertise of faculty members without using any resources of Institute, 60% of consultancy income will be provided to expert faculty member whereas 40 % of consultancy income will be provided to Institute account.
- 2. For consultancy using institute resources The sharing is as given below:
  - a. Institute 50 %
  - b. Principal 2.0 %
  - c. Head of Department 2.0 %
  - d. Office staff 2.5 %
  - e. Consultancy team(which include expert faculty members and assisting department staff. The internal distribution is decided by Principal based on suggestion from H.O.D. department according to nature of work) 43.5 %

#### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

## 3.6.1 How does the institution promote institution-neighborhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The institute promotes institute-neighborhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of students through following ways:

- ➤ ICT: NKN provided 1 GBPS connectivity to Institute to utilize it for rural and agricultural connectivity. The Government of Maharashtra provided research grant for this project. In the first phase of this drive, it is decided to provide point-to-point WIFI connectivity to five schools within 10-15km range.
- ➤ Green Team: GREEN Team is established in 2012 with faculty members and students to create awareness and interest among the students and faculties for developing green environment every year. This activity was initiated in Aug. 2012 between Gopalpur to Mundewadi junction on either side of roadways. In this regard the institute provided resources such as vehicle to carry plants from forest office / university, excavator and vehicle for pouring of water frequently.

➤ NSS: NSS unit conducts Blood Donation Drive, tree plantation programmes, water distribution camp during the Aashadhi ekadashi at Pandharpur, Aid Awareness Programmes, and Prohibition of Female Foeticide.

## 3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?

Through faculty advisors, the student involvement in various social movement activities such as College events, Proctor, NSS, and Green Team is observed and also motivated. Faculty advisors are the one to give the required permission to students for participating in such activities and continuously to monitor their progress in such extension activities.

### 3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

- Feed back is collected from the students to judge their perception on the overall performance of the teachers, teaching methodology etc.
- > The institute organized "Parents meet" during each semester
- > Student progress and attendance report sent to their parents after each unit test.
- Institute arranges alumni meet yearly in which alumni interacts with students and shares the new research trends with students.

# 3.6.4 How does the institution plan and organize its extension and outreach programmes? Provide the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

NSS unit of college provides extension services to the community. Following table shows the number of students participated in the services and amount spent:

Year	No. of Student	Amount spent in lacs
2011-2012	80	0.33
2012-2013	83	0.33
2013-2014	195	0.49
2014-2015	190	0.47

Table No.3.6.4 Detail NSS budget

The institute is conscious of its role in campus community connection, wellbeing of its neighborhood and has initiated a number of community development activities. These activities does include

- Organizing various camps under NSS
- > By involving students in Blood Donation Camps
- > By involving students in Tree plantation Camps
- Water distribution camp on the occasion of AAshadhi Ekadashi at Pandharpur
- ➤ By involving students to create awareness in farmer about RHRDF activities during Aashadhi Ekadashi at Pandharpur
- ➤ Institute organizes various project and product exhibition events like Agro-Challenge and TradeExpo

## 3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

The institute has an active NSS Unit. NSS Unit organizes various activities for students and community people. The main aim is to create awareness among students about social problems and help to develop their personality through community service. Every year, institute conduct orientation programme for NSS Volunteers and inform them about NSS Activities. Duty leaves are allowed for the students who are associated with any social activity or NSS activities.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

#### 1. Rural Human and Resource Development Facility (RHRDF):

Institute had carried out survey in the villages in the region about their current agricultural status and requirements. Based on these requirements, Institute wanted to help rural and agricultural community with the help of technology. To obtain the technologies required to solve these problems and get further scientific support, Institute signed a MoU for "Setting up of Rural Human and Resource Development Facility (RHRDF)" with Bhabha Atomic Research Centre, Mumbai on 15th September 2011. Based on the technology transfer and research grant from Government of Maharashtra various technology Demo-Cum-Training facility is installed at Institute. As part of outreach of this centre, AKRUTI subcentres are started in villages and technology deployment in villages is started. In the process five centres are started and few more centres will be started soon. In the process of Installation and deployment of technology more 30 BARC scientists visited Institutes and these villages, Institute faculty members are involved to get the expertise in the technology also more than 200 villagers are involved. Several training and development programs and activities The application of getting the approval for getting training centre for training retiring Jawans and also national skill development program.

Currently, this centre is equipped with following technologies:

- 1. Nisargaruna-Biogas Plant
- 2. Seed Bank
- 3. Water Filters
- 4. Foldable Solar Dryers
- 5. Vibro-Thermal Disinfector
- 6. Solar and Vacuum based Grape Drying Process
- 7. Soil Testing
- 8. Tissue Culture
- 9. Low and Medium range Weather forecasting
- 10. Radioimmunoassay
- 11. Laser Land Leveller

#### 2. ICT Enabled School Education:

National Informatics Centre (NIC) wanted to make National Knowledge Network (NKN) connectivity be utilized for under-privileged. NKN provided 1 GBPS connectivity to Institute to utilize it for rural and agricultural connectivity. The Government of Maharashtra provided research grant for this project. In the first phase of this drive, it is decided to provide point-to-point WIFI connectivity to five schools within 10-15km range. Through survey of schools in the vicinity five schools of different direction and different range are selected. Maharashtra Knowledge Foundation (MKF) helped in this project in delivering contents in Marathi whereas Indian Institute of Technology (IIT), Bombay provided AKASH tablet to make this project successful. In this process more than 1500 students participated in pilot project. Through this project, confidence building in students and teachers from villages was achieved.

#### 3. Agro-Challenge:

Most of the technological project companions for students' are focused on robotics, Aerospace, Automobile related areas, and based on the suggestion from Padmavibhushan Dr. Anil Kakodkara competition for development of Agricultural devices was organized. More than 50 entries was received In the first time event. Out of all these entrees five devices were selected to take them to professional level. This event has resulted in generating the quest amongst Engineering Students of developing something for last man in the society.

#### 4. Artwork tor employment Generation:

Photo-Chemical Machining technology, which was utilized for Micro-machining was simplified to utilize metal artwork. Two workshops for rural artists were conducted. After these workshops this technology was utilized by two entrepreneurs developed artwork to develop metal foil based photo frames. Further, to help Local artists who produce Shellac bangles in Pandharpur, Machine development activity has been initiated for improving the safety at their work. Efforts are being made to develop Semiautomatic devices for Value addition of their products.

#### 5. Agricultural waste to product for self-help groups:

Agricultural waste from wheat and Jawar is utilized to develop products such as temporary utilized food plates. Further, efforts are being made to develop low cost housing materials.

#### 6. Outreach of activities during Pandharpur Festival:

Ashadhiwari is one of the main festivals where about 7-10 lac warkari (pilgrims) come to Pandharpur. Rural Human and Resource Development Facility (RHRDF) and NKN project activities were demonstrated. This event was alos kept live on YOUTUBE using NKN connectivity. This stall had awareness posters about the technologies from both the projects. Few technologies were also made available for demo which includes soil testing kits, water filters, foldable solar dryers, solar pump, seeds, BAIF products, small biogas plat etc. Few project staff from both the projects along with faculty members and NSS volunteers were also involved in giving information about these projects. Information pamphlets along with contact details were published for distributing it during this wari.

#### 7. Green Team Initiative:

More than 600 Students voluntarily participated initially in plantation of more than 1500 trees on roadside for about 4.5 km between Gopalpur to Mandewadi in September 2012. More than 70 percent trees are Survived and growing nicely. After that several camps are organized and plantation is done at several locations.

#### 8. Organizing of Social Awareness events:

Four social awareness events are organized Viz. Chatrapati Shivaji Maharaj Jayanti (19th February), Dr. Babasaheb Ambedkar Jayanti (14th April), Teachers' Day (5th September) and Engineers Day (15th September). During these events inspirational speakers are invited.

## 1. NSS Table No.3.6.6 Under the NSS programme following activities has organized:

Sr. No	Undertaken extension work by NSS	Year
1.	Water distribution camp on the occasion of AAshadhi Ekadashi at Pandharpur	
2.	Blood donation camp on the occasion of Shiv Jayanti at SVERI Blood Bank- Dr. Hegagewar, Solapur	19 <sup>th</sup> Feb. 2012
3.	/Megha H. Deshmukh and Yogesh S. Lamkane attended state level 7 days NSS Camp at Shivaji University, Kolhapur	10-16 Aug. 2012
4.	On the occasion Engineers Day, NSS organized "blood donation camp" at SVERI	15 <sup>th</sup> Sep. 2012
5.	Water distribution camp on the occasion of AAshadhi Ekadashi at Pandharpur	29-30 June 2012
6.	Blood donation camp at SVERI Blood Bank- Sau. Sarjobai Bajaj Blood Bank, Pandharpur	15 <sup>th</sup> Sep. 2012
7.	Suraj N. Mahske attended HIV AIDs sensitization workshop at Shankararao Mohite Mahavidhyalaya, Akluj	4 <sup>th</sup> Dec. 2012
8.	NSS Special Camp on "500 yards Solapur University" Solapur	25 <sup>th</sup> -31 <sup>th</sup> Dec. 2012
9.	Participated in a raily on account of 150 <sup>th</sup> Birth Annuarsary of "Swami Vevekananda"	12 <sup>th</sup> Jan. 2013
10.	Blood donation camp on the occasion of Shiv Jayanti at SVERI Blood Banks- Sidheshwar Blood Bank Solapur, Ashwini Blood Bank, Kumbhari,	19 <sup>th</sup> Feb. 2013
11.	"Sadbhavana Day" organized by NSS at SVERI	20 <sup>th</sup> Aug. 2013
12.	Tree plantation Programme from Gopalpur to Chalepati	26 <sup>th</sup> Aug. 2013
13.	Blood donation camp on the occasion of Shiv Jayanti at SVERI Blood Banks- Sidheshwar Blood Bank Solapur, Ashwini Blood Bank Kumbhari,	15 <sup>th</sup> Sep. 2013
14.	Special camp by NSS at Tisangi, Tal: Pandharpur	25 <sup>th</sup> -31 <sup>th</sup> Dec. 2013
15.	National Integration Camp attended by Basavraj Indi at Vishveshwarreya University, Belgaon	9 <sup>th</sup> -15 <sup>th</sup> Jan. 2014
16.	Poster exhibition on "to save girl child" and Blood donation camp on the occasion of Shiv Jayanti at SVERI Blood Banks- Ashwini Blood Bank Kumbhari,	19 <sup>th</sup> Feb. 2014
17.	Poster exhibition on "Ill effects of Tobbaco, Gutkha, and Alkoholic Drinks" on the occasion of Dr. BabasahebAmbedkarJayanti	14 <sup>th</sup> April 2014
18.	NSS also help to create awerance among the rulareople RHRDF programme	6 <sup>th</sup> -13 <sup>th</sup> July 2014

Sr. No	Undertaken extension work by NSS	Year
19.	Blood donation camp on the occasion of Shiv Jayanti at SVERI Blood Banks- Sidheshwar Blood Bank Solapur, Ashwini Blood Bank Kumbhari, and Akshay Blood Bank, Solapur Arranged Poster Exhibition on "Clean India Mission" at SVERI	-
	Topics: 1. Sanitation, 2. Public Hygiene, 3. Waste Management	
21.	NSS Special Camp at Wadi-Kuroli, Tal: Pandharpur	21 <sup>th</sup> -27 <sup>th</sup> Dec. 2014

# 3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

The extension activities designed and conducted by the college aims at the overall development of the participating students. Academic learning as per the prescribed curriculum expects the learners to become knowledgeable, and perform towards organizational objectives. The extension activities which include Rural Camp etc. bring about the necessary qualities amongst the learners such that they perform better in their respective fields. Our students participate in rural camps and work at the grass root level. It helps them to understand and empathies with the problems of rural people. These activities not only enable them to reinforce of what they learn in their curriculum with respect to team building, leadership and better citizenship. Besides they acquire the most important qualities of empathy, acceptance and understanding complete situation. Students are encouraged to take up activities close to environmental protection and ecological conservation. These activities help in making them understand the importance of protecting the natural resources and saving them from deterioration due to pollution.

# 3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

#### 1. Rural Human and Resource Development Facility (RHRDF)

Rajeev Gandhi Science and Technology Commission has established Rural Human and Resource Development Facility (RHRDF) where the efforts are made from engineering and technology point of view to deploy the know-how technologies available with BARC in the form of products through rural entrepreneurs. Furthermore, this facility is proposed to develop advanced products to solve the rural problems to continued sustainability of the facility. With the help of Bhabha Atomic Research Centre (BARC), Mumbai, a advanced facility will be developed to solve the rural problems related to water, food and secondary agricultural products. Under the RHRDF project, the institute had organized "AKRUTI PROGRAMME".

The objectives of the AKRUTI PROGRAMME are listed follows:

- To develop an incubation centre for high-tech product for rural and agriculture sector.
- To encourage technological workforce to get involved in local problems.
- To develop science and technology culture in rural sector

**Key Activities:** In the first year of the projects AKRUTI centers are installed in four villages AMBE, MUNDEWADI, ANWALI and BANDISHEGAV and 15 other villages are involved in various activities and more 200 farmers got actively involved with some or other technologies. These 15 villages will also be installed with AKRUTI centers subsequently. Around 50 programs are conducted to make awareness and train about these technologies. BARC scientists from various backgrounds are involved in deployment of these activities.

Apart from AKRUTI PROGRAMME, various programs like Laser based Land Leveler, Medium Range Weather Forecasting Facility, NisargarunaBioGas Plant, etc. also a part of institute.

- ➤ Laser based Land Leveler: This will be installed second year for leveling the big agricultural land.
- ➤ Medium Range Weather Forecasting Facility: This technology is useful for predicting the local weather and is useful for weather sensitive crops like pomegranate, grape etc. This technology will be installed second which will help in getting information of local weather which is useful for crop planning.
- NisargarunaBioGas Plant: 1 Tone biogas plant is installed in SVERI campus, which is running with feed from SVERI campus and cow dung from the farmers in vicinity. The NISARGARUN (Organic Manure) generated through this plant is utilized by the farmers and records of soil improvement are maintained. Small biogas plant is also made available for demo for usage of these plants.
- ➤ Soil Organic Carbon Testing kit: A portable soil organic carbon testing kit fabricated by SVERI is distributed to farmers to use in their farm to check soil organic carbon in their farms. About 10 training camps for usage of this kit are organized to promote usage of these kits. Soil organic carbon of soil from nearby villages is being tested at SVERI and on field also.

#### 2. ICT

ICT-Enabled School Education in Rural Areas around 15-20 Kms from NKN Node

Main objectives as follows:

- ➤ To make available the learning resources at NKN centre and to conduct the programs for schools through this connectivity.
- > To participate in school content development program and provide feedback of users to content development agency/organization.
- To develop a methodology for effective usage of this facility for knowledge enhancement of rural students

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

#### ➤ Micro-Nano cluster:

The long term objective of this programme is to bring together the engineering institute in Maharashtra through cluster formation for similar research domains.

#### **Wipro mission 10x:**

This program is oriented towards building continuous professional development of faculty members from engineering education. It is primarily designed to shift the paradigm from teaching to learning and transform the learning cultures in the institutions of engineering education.

#### > AKRUTI Centre

With the help of BARC, Mumbai, a advanced facility that is AKRUTI centres are developed to solve the rural problems related to water, food and secondary agricultural products. AKRUTI centres are installed in four villages AMBE, MUNDEWADI, ANWALI and BANDISHEGAV and 15 other villages are involved in various activities and more 200 farmers got actively involved with some or other technologies. These 15 villages will also be installed with AKRUTI centres subsequently. Around 50 programs are conducted to make awareness and train about these technologies. BARC scientists from various backgrounds are involved in deployment of these activities.

#### > School Connectivity

The Government of Maharashtra provided research grant for this project. In the first phase of this drive, it is decided to provide point-to-point WIFI connectivity to **five schools** within 10-15km range. WIFI Network Installation work in all the schools is completed and network is reasonably stable. IIT Bombay has provided 300 Tablet PC which is distributed to the 9th standard students and content delivery is started using NKN.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

Dr. P.M. Pawar has received DST Young's Scientist award.

#### 3.7 Collaboration:

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives – collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

Through interactive sessions with industry experts by way of periodic meetings

- ➤ In plant training and industrial visits for students
- > Guest lectures by industry experts
- Permission to make use of software and hardware by research candidates of other institution
- Faculty sent on sabbatical leave to other institutes of higher learning through faculty exchange Programme.

- Institute interacts with the State, National and International organizations for executing various research activities.
- 3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.
- 1. MOU with TCS ltd., Pune under TCS campus commune programme.
  - ➤ This helps student in various curricular activities by providing study materials of respective subject matter.
  - > TCS also organized online programming events like campus commune to develop and test the student skills.
  - ➤ MOU with Infosys technologies ltd., Banglore under Infosys campus connect programme.
  - This helps student in various curricular activities by providing study materials of respective subject matter.
  - ➤ Infosys ltd. Also organized online programming events like campus connect to develop and test the student skills.
  - > Soft skill programs are conducted by Infosys ltd.
  - ➤ The Infosys ltd. creates awareness about latest concepts introduced in the respected field areas among the faculty members through Faculty development Programs.

The list of MoUs with Institute is given as below:

Table No.3.7.2 List of MOU with Training and Placement cell of Institute:

Sr. No.	Organization / Institute with which MOU is signed	MOU Duration	Date of MOU
1.	1. Konkuk University, Seoul, South Korea		23/2/2009
2.	Infosys Technologies, Bangalore	7 years	4/3/2014
3.	Vishwakarma Institute of Technology, Pune	onwards	15/9/2006
4.	Ramkrishana IT Systems, Pune	onwards	2009

Table No.3.7.2.1 List of MOUs signed with Electronic and Telecommunication Engineering (EnTC) Department

Sr. No.	Subject	Organization / Institute with which MOU is signed	Their Contribution for Department	MOU Duration	
1	To set up Rural Human And Resource Development Facility	BARC, Mumbai	To enhance the research activity for faculties and student	3 Years	15/09/2011
2	To set up strategic partnership towards technology enhancement, facilitation and lab equipments donation	Eduvance, the educational arm of Vanmat technologies Pvt. Ltd. Mumbai	Conduction of faculty development per year, Provide knowledge sharing on latest technology.	3 Years	27/05/2014

Sr. No.	Subject	Organization / Institute with which MOU is signed	Their Contribution for Department	MOU Duration	Date of MOU
3	To enrich the technical education process and enhance the quality of education to faculty and students	REANU Microelectronics Pvt. Ltd. Pune	REANU is conduct training and gives the guidance to build project.	3 Years	02/09/2014
4	Nurturing industry – institute interaction for rural applications	Tanmay Agro Automation and Power Controls Bramhpuri	This help to student in design, manufacture, instrumentation and process control.	5 Years	3 /11/2014

## Table No. 3.7.2.2 List of MOUs signed with Mechanical Engineering Department

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Sr. No.	Subject	Organizatio n/Institute with which MOU is signed	Their Contribution for department	MOU Duration	Date of MOU	
1.	Rural Human and Resource Development Facility At SVERI Campus, Gopalpur, Pandharpur	BARC, Mumbai	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	15/09/2011	
2.	Study, design and prototype fabrication of high aspect ratio structures in polymers and their moulding in nickel by electroforming, Phase-1	RRCAT, Indore	Enhancement in Research, Education and Training in the area of Mechanical Engineering.		17/02/2012	
3.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Ramakrishna IT Systems, Pune	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	19/03/2009	

Sr. No.	Subject	Organizatio n/Institute with which MOU is signed	Their Contribution for department	MOU Duration	Date of MOU
4.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Vijay Engineering Work, Solapur	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	05/06/2007
5.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Laxmi Oil Pumps & Systems Pvt. Ltd., Solapur	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	05/06/2007
6.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Top Gear Transmission s Pvt. Ltd., Satara	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	11/06/2007
7.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Versatile Equipment Pvt. Ltd., Kolhapur	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	11/06/2007

Sr. No.	Subject	Organizatio n/Institute with which MOU is signed	Their Contribution for department	MOU Duration	Date of MOU
8.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties.  Faculty consultation.	Shree Refrigeration Pvt. Ltd., Karad	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	11/06/2007
9.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits.  Training to students and Faculties. Faculty consultation.	Dattachhaya Chains Pvt. Ltd., Kolhapur	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	12/06/2007
10.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits.  Training to students and Faculties. Faculty consultation.	Mesh Forge Pvt. Ltd., Kolhapur	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	12/06/2007

Sr. No.	Subject	Organizatio n/Institute with which MOU is signed	Their Contribution for department	MOU Duration	Date of MOU
11.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	InfoSavant Technologies Limited, Sangli	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	22/02/2007
12.	Exchange of Technical knowhow. Conduct joint research in the areas of mutual interest. Organize academic meetings, symposia, workshops, seminars and expert lectures. Sponsorship of student's projects and research projects. Industrial visits. Training to students and Faculties. Faculty consultation.	Kanaad Services & Training, Sangali	Enhancement in Research, Education and Training in the area of Mechanical Engineering.	Unlimited	31/12/2006

Table No. 3.7.2.3 List of MOUs signed with Civil Engineering Department

Sr. No.	Subject	Organization/ Institute with which MOU is signed	Their Contribution for department	MOU Duration	Date of MOU
1	Design Analysis for Improvement of Manufacturing Process for Minimizing the Failures Modes of Chain Assembly.	BARC	Establishing Rural Human and Resource Development Facility (RHRDF) for development and modifications of BARC technologies through Entrepreneurs developed in the process.	7 years	15/09/2011

Table No.3.7.3.4 List of MOUs signed with Computer and Science (CSE)Engineering Department

Sr. No.	Subject	Organization/ Institute with which MOU is signed	Contribution	MOU Duration	Date of MOU
1	Campus Connect Program	Infosys Limited, Bangalore	To enhance teaching and learning approach through various FEP and campus connect programme	Two years	20/03/14
2	Conducting Technical Training and Workshops	Geekslab Technologies Pvt. Ltd. New Delhi	Conducting android workshop, in house training programs for faculty as well as students	Three Years	19/02/14
3	Training the student for various role in IT services industry	NIIT	Support education delivery through regular technical support	Unlimited	17/12/14
4	To Enhance Research, Education and Training	Cache Technologies Pvt. Ltd. Pune	Industry exposure to student	Unlimited	19/03/12

Sr. No.	Subject	Organization/ Institute with which MOU is signed	Contribution	MOU Duration	Date of MOU
5	About starting Technology Competency Centre	Ramkrushna IT Systems, Pune	Offering professional technical courses	Unlimited	23/03/09
6	To Enhance Research, Education and Training	Infosavant Technologies Ltd., Sangali	Industry exposure to student	Unlimited	22/02/07

- 3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.
  - 1. Multi National Companies has regular recruitment drives .
  - 2. The college has established a lab in collaboration with the Institute of RRCAT and BARC.
  - 3. Suggestions for lab improvements through EDP and other bodies such as BoG
  - 4. Allowing faculty members for Industrials one month training.
  - 5. Allowing Students for Industrial Visit.
  - 6. Nihilent, Infosys has offer Technical expertises for the student progress.
  - 7. MOU with Infosys technologies ltd., Banglore under Infosys campus connect programme.
- 3.7.4 Highlight the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

All events were organized at the National and international level by the various departments and some of the eminent personalities who participated in these events are:

Table No.3.7.4 eminent scientists/participants who contributed to the Institute events

Sr.	Name of visited	Organization	
No.	Researcher		
1	Dr Anil Kakodkar	BARC	
2	Dr S G Markandeya	BARC	
3	Dr V K Suri	BARC	
4	Dr R Balasubramanium	BARC	
5	Dr A M Patankar	BARC	
6	Dr. Madhavi Savant	BARC	

Sr.	Name of visited	Organization
No.	Researcher	
7	Dr. Pramod Kale	RGSTC
8	Dr. Sharad Kale	BARC
9	Dr. MilindKulkarni	DST
10	Dr. R Mankar	Dr. BabasahebAmbedkar Technological
		University, Lonere
11	Prof. Sudhir Chandra	IIT, Delhi
12	Prof. K. Rajanna	IISc, Bangalore
13	Dr. Santosh Kumar	IIT BHU
14	Dr. Ramesh Singh	IIT Bombay
15	Dr. D. Ravi Shankaran,	PSG, Coimbatore
16	Dr. SaakshiDhanekar,	IIT Delhi
17	Dr. Armin Huck	Indo-German Consults, Coimbatore
18	Prof. Sunil Bhand	BITS Goa
19	Prof. K. G.	MGM, Mumbai
	Narayankhedakar	
20	Dr. Yogesh PARTE	YP Consulting Services, Mumbai
21	Dr. AjitBorundia	L & T, Mumbai
22	Dr. Sahastrabuddhe	COEP, Pune
23	Dr. Ganguli	IISC, Bangalore
24	Dr. P J Guru	IIT, Bombay
25	Dr. Dasaka Murty	IIT, Bombay

Table No.3.7.4.1 List of invited eminent researcher/ chief guest for workshop of Mechanical Engineering Department

Sr	Name of	Name of the guest	Belonging	Date
No	workshop/conference		Organization	
1.	"Recent Advances in	Dr. Shrinkhla	BARC	27 <sup>th</sup> Nov.,
	Precision Manufacturing"	Ghildiyal and Mr.		13
		Shivam Mishra		
2.	" Micro- Nano Mission for	Prof. Shiv G.	University of	4 <sup>th</sup> and 5 <sup>th</sup>
	Rural India"	Kapoor	Illinois,	January
			U.S.A.	2014
3.	"Methods of reducing odd	Prof. Sahasrabudhe	COEP,Pune	28 <sup>th</sup> Nov.,
	effects of Mechanical			2014
	Vibration and Noise"			

Table No.3.7.4.2 List of invited eminent researcher/ chief guest for workshop of Civil Engineering Department

Sr. No.	Name of workshop/ conference	Name of the guest	Belonging Organization	Date
1	"Case Studies in	Mr. Ramgude	P.W.D	22/12/2014
	Civil Engineering"	Mrs. Gauri Kadam	C-DAC Pune	22/12/2014
		Dr. B. N. Devekar	Ferrocement Society	23/12/2014
		Mr. Pramod Joshi	Structural Consultant	24/12/2014
		Mr. Konda	Architecture	24/12/2014
		Dr. G.R. Munavali	WCE, Sangli	25/12/2014
		Dr. P.G. Sonavane	WCE, Sangli	25/12/2014

Sr. No.	Name of workshop/ conference	Name of the guest	Belonging Organization	Date
2	"Recent Trends in	Dr. Dasaka Murthy	IIT Bombay	23/06/2014
	Earthquake Engineering"	Dr. P. M. Pawar	SVERI'S COE, Pandharpur	24/06/2014
		Dr. G. R. Reddy		25/06/2014
		Dr. Vageesha Mathada	SVERI'S COE, Pandharpur	26/06/2014
		Dr. Sachin Kadam	WCE, Sangli	27/06/2014
3	"Engineering Mechanics"	Dr. V.S.Mathada	SVERI'S COE, Pandharpur	2013-2014
4	"Soft Computing Methods for	Dr. K.M. Singh	SVERI's COE, Pandharpur	19/12/2012
	Engineering"	Prof. S.M. Mukane	SVERI's COE, Pandharpur	19/12/2012
		Dr. Ranjan Ganguli	IISc Banglore	20/12/2012
		Dr. Sachin R. Gengaje	WIT,Solapur	21/12/2012
		Dr. P. M. Pawar	SVERI's COE, Pandharpur	21/12/2012
		Dr. Dileep V.	SVERI's COE, Pandharpur	22/12/2012
		Prof. Akash Pandey	Birla Institute of Technology	22/12/2012
		Dr. Vivek Sathe	Dr. Babasaheb Ambedkar Technical University, Lonere	23/12/2012
		Dr. P.J. Kulkarni	WCE, Sangli	23/12/2012

Table No.3.7.4.3 List of invited eminent researcher/ chief guest for workshop of Computer Science and Engineering Department

Sr	Name of	Name of the	Belonging	Date
No	workshop/conference	guest	Organization	
1.	Workshop on "Latest	Prof. L.M.R. J	WIT Solapur	20/11/2014
	Trends in Data Mining	Lobo Mishra		
	and Machine	Dr. P.J.	WCE Sangli	21/11/2014
	Learning"	Kulkarni		
		Prof	VPCoE	22/11/2014
		.D.M.Padulkar	Baramati	to
				23/11/2014
		Prof. S.S.Patil	RIT Sakhrale	22/11/2014
		Dr.Ravindra	Solapur	24/11/2014
		Hegadi	University	
2.	Collab CAD and	Prof. S. Shankar	Delhi	14/05/2014
	Collab DDS			to
				16/05/2014

Table No.3.7.4.4 List of invited eminent researcher/ chief guest for workshop of Electronics and Telecommunication Engineering Department

	Department					
Sr	Name of	Name of the	Belonging	Date		
No	workshop/conference	guest	Organization			
1.	Workshop on	Dr.S.R. Gengaje	WIT Solapur	26/11/2012		
	"MATLAB for signal	Prof.R.J. Shelke	WIT Solapur	26/11/2012		
	processing"	Dr .Y.V. Joshi	WCE Sangli	28/11/2012		
		Dr . S.P. Narote	Sinhagad	29/11/2012		
			college of			
			Engineering			
			Pune			
		Prof.S.N. Narke	Solapur	30/11/2012		
			University			
2.	National conference	Dr. U.V. Kulkarni	SGGS IET	20/12/2013		
	on "Emerging Trends		Nanded			
	in Electronic	Dr.	BARC	20/12/2013		
	&Telecommunication	Balasubramanyam	Mumbai			
	Engineering"	Dr. Swati	DYP COE	21/12/2013		
		Sankapal	Kolapur			
3.	Workshop on "VLSI"	Dr.Dipankar	IIT, Delhi	30-		
		Nagechoudary		31/08/2013		
4.	Workshop on	Dr.N.V.S. Sarma	NIT, Waragal	10/11/2014		
	"Advance RF &	Dr.Mohan	Govt. Poly.	11/11/2014		
	Microwave device	Lohokare	Usmanbad			
	design technology"	Dr. B.B.Godbole	KBP,	12/11/2014		
			Engineering			
		Dr.Mohammad	Guru Nanak	13/11/2014		
		Bakhar	Dev			
			Engineering			
			College			
			,Bidar			
		Dr. B. Suryakant	BKIT	14/11/2014		
			Bhalki,			
			Karnataka			

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated

- ➤ Institute has signed an MOU with Bhabha Atomic research Center (BARC) on 15th September 2011 for setting up Rural Human Resource Development Facility in our college.
- ➤ Signed a Tri-Party MOU among our institute, Bhabha Atomic research Center (BARC), Mumbai and Raja Ramanna Center for Advance Technology (RRCAT, Govt. of India Unit), Indore.
- > Two PhD students and one PG students are worked in R&D projects under the guidance of BARC scientist as follows:
  - i. Mr. R. R. Gidde: Lab-on-a-Chip
  - ii. Mr. S. V. Jadhav: Mocro-Heat Exchangers
  - iii. Miss Sarika B Chothe: Simulation of Nano Finishing

## 3.7.6 Detail on the systematic efforts of the institution in planning, establishing and implementing the initiatives of the linkages / collaborations.

The institute has MOU arrangements with various establishments mainly to establish the linkages / collaborations related to academic and research activities.

- ➤ Inviting Expertise from various divisions from other industries for delivering Guest Lectures, key note address in Conferences, invited speaker in workshops to express their views.
- ➤ The institute has planned and established linkages/collaborations related to academic and research activities with various industries and research institutes to implement training programs for students and faculty members in various specializations.

#### CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

#### **4.1 Physical Facilities**

## 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

Taking into consideration the suggestions, guidelines, norms and rules from other stakeholders, management plays vital role in deciding the policies and strategies to make the effective teaching and learning.

The policies of the Institutions for creation and enhancement of infrastructure that facilitate effective teaching and learning are:

- ➤ The Management committee meets quarterly to plan academic and administrative activities of the college.
- ➤ Every year as per the physical infrastructure requirements of the next academic year an annual plan for construction of additional buildings and infrastructure is prepared and executed.
- ➤ Budget for the enhancement of infrastructure, learning resources and other activities is prepared at department level for each academic year and approved through the Governing Body meeting.
- ➤ Funds are obtained from various funding agencies like, UGC, AICTE, BARC, RGSTC, ARDB etc. and utilized for expansion of research infrastructure.
- ➤ Planning and Monitoring Committee makes suggestions / recommendations for evolving polices in infrastructure development for current and upcoming teaching learning process.
- Research Advisory Council/ Academic Advisory Committee helps in the process of research and academic planning and coordination.
- ➤ Building committee acts as a platform to provide planning and coordination for the building construction and maintenance of the institute.
- ➤ Human Resource Development committee acts as a platform for training needs identification for staff.
- ➤ Local Managing Committee helps in the process of monitoring academic performance, preparation of budget, etc.
- ➤ Board of Governors, the apex decision making body at Institute level, meets, reviews the activities and polices and resolves on all matters pertaining to the Institute.

#### 4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

Table No.4.1.2 a)Details of Curricular and Co-curricular activities

Sr.No.	Facility Available	Details of the facility available
1	Class Rooms	The college has adequate class rooms as per AICTE norms. They are well equipped with Dais, Desks, Platform, Fans, Tube lights, Green board, P A System and storage box, LCD Projector, Podium, curtains.
2	Tutorial Rooms	All departments have provision for tutorial rooms with Desks, Green board, Fans, Tube lights, Table, chairs.
3	Technology enabled learning spaces	To encourage the students to utilize the various softwares available with the departments, the laboratories are equipped with high end Personal Computers. In addition to this all laboratories are connected to central server through LAN which provides internet facility of 1 Gbps (1024Mbps) speed. The college campus also has Wi-fi connectivity including the hostels.  In addition to writing and drawing with pens, SMART Board interactive white board is touch sensitive and turns computer into a powerful teaching, presenting, and interactive tool.
4	Seminar Hall	Seminar Hall equipped with Dais, Chairs, White board, Table, Podium, P.A. system, Fans, AC, light, LCD Projectors etc.
5	Laboratories	All labs are equipped with adequate instruments/equipments to meet the curriculum as well as Program Outcomes. Also these laboratories are used for UG and PG level research work. The college also has research laboratories for research related work.
6	Faculty Rooms	As per the AICTE requirement individual/shared faculty rooms are provided. Faculty rooms also have been equipped with the required facilities such as PC, LAN connection, furniture etc.
7	Meeting Room	Every department has separate meeting room to take a review with Chairs, table, white board.
8	Electricity and Power Backup	The college has wide spread arrangements for power connections with a central substation, Control panel and Power room. Breakers are available at substations, control panels in power room. Panels and Distributions boxes are available at Individual Departments. Generator 100 KVA capacity and power backup 15 KVA is available in college campus for lack of state electricity supply.
9	Telecom facility	The college has created facilities for smooth and fast communication involving mobile phone in tune with the requirements. Group calling facility is made available to the staff by the institute.

Sr.No.	Facility Available	Details of the facility available	
10	Central Library and	Text books, reference books, e-books, magazines,	
	Departmental Libraries	journals, e-journals, projects and seminar reports,	
		video lectures by the experts, university question	
		papers and answer sheets of subject toppers help	
		students to acquire knowledge and gain technical	
		expertise to interpret, analyze and solve technical	
		problems.	
		Journals, e-journals, project reports and seminar	
		reports motivate the students to tune them for lifelong	
		learning. Central Library and Departmental Libraries	
		have been equipped with the required facilities such	
11	Entrepreneurship initiatives,	as PC, LAN connection, furniture etc.  The institutes have signed MOU with BARC, Mumbai	
11	product designs and	for establishing Rural Human and Resource	
	innovations and	Development Facility (RHRDF) for development and	
	iiiio vations	modifications of BARC technologies through	
		Entrepreneurs developed in the process.	
		The various technologies are as given below:	
		• Design Analysis for Improvement of	
		Manufacturing Process for Minimizing the	
		Failures Modes of Chain Assembly.	
		Setting up RURAL HUMAN AND RESOURCE	
		DEVELOPMENT FACILITY (RHRDF) with the	
		technical guidance and consultancy from BARC-	
		DAE.	
		• Structural Health Monitoring Of Composite Rotor	
		Blade under Uncertainties.	
		Nisargruna-Biogas plant.	
		• Vibro Thermal Disinfector /Foldable solar Dryer.	
		Water technology.	
		Soil organic carbon testing.	
		Seed Bank.	
		RIA test lab for cattle breeding	
		Laser Land Leveling & Application.	
		Medium range weather forecasting facility.	
		Weather forecasting.	
12	Drinking water	The college has water purifying units with Reverse	
		Osmosis process at three locations. The college has an	
		organized supply mechanism for the entire campus	
		and hostels. The college has a water cooler facility at	
12	Periodical Session	each department.	
13		Separate periodical session	
15	Girls' Reading Room	24 hours reading room facility	
16	Boys' Reading Room Canteen	24 hours reading room facility About 3 Canteens are available for staff and students.	
17		The college has hired the services of a reputable	
1 /	Security	security agency which has provided security personal	
		who take care of security measures. The entire	
		institute is under CC TV camera surveillance.	
	<u> </u>	motitute is under CC 1 v camera surveillance.	

Sr.No.	Facility Available	Details of the facility available	
18	Washrooms	Gents and Ladies washrooms are available in	
		department at proper locations.	
19	Transportation Facility	The college has 05 buses to ply students to and fro	
		from the city to the college.	
20	ATM Facility	24 hours ATM facility of State Bank of India is	
		available for students and staff members in the	
		campus.	
21	Counseling Services	The college made agreement with the counselor to	
		render services in the campus for students as well as	
		staff also.	
22	Xerox Machine	Xerox facility is available for students and staff in the	
		college central library	

b) Extra- curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Table No.4.1.2 b) Details of Extra Curricular activities

Sr.No.	Facility Available	Details of the facility available
1	Sports Ground	Institute playground sports arena of 21000 sq.m. with following facilities along with flood light for night matches:
2	Gymnasium	<ul> <li>Kho-kho facility</li> <li>The institute has a well-equipped gym facility. The various equipments available are listed below: <ul> <li>Twelve Station Multi-gym</li> <li>Seven Station Multi-gym</li> <li>T - Bar</li> <li>Calf Machine</li> <li>Abdominal Machine</li> <li>Incline Bench</li> <li>Incline Decline Bench</li> <li>Treadmill Machine</li> <li>Cycling Machine</li> <li>Dumb bells</li> <li>Weight Lifting &amp; Curling Bars</li> <li>Weight Plates</li> </ul> </li> </ul>
3	Outdoor Games	Cricket, Khokho, Basketball, Football,
4	Indoor Games	Tables Tennis, Chess, Carom
5	Auditorium	Open Air Theater with capacity of 3000 students

Sr.No.	Facility Available	Details of the facility available
6	NSS	National Service Scheme (NSS) is a strong unit through which Social welfare activities like blood donation, NSS Special Camps, are organized throughout the year.
7	Cultural Activities	Every year, a cultural programme named "BEATS" is held to encourage students to participate in performing arts. This program is very useful to bring out hidden talent of students.
8	Public Speaking	Central Public Addressing system is available in the campus.
9	Communication Skills Development	To make students competent in English grammar, reading, writing and to increase vocabulary, Communication Improvement Programme (CIP) is introduced and developed Language Laboratory for the same.  Institute signed MOU's with professional trainer like Bachhav Associates, Nashik.
10	Yoga	Pranayama session is a part of time table where students perform pranayama for 30min/day.
11	Health and hygiene	Two full time physicians with emergency vehicle. In every department first-aid boxes are available. Sufficient numbers of dustbins at proper locations are made available in department to maintain cleanliness and hygiene.  Institute hired contract labors for housekeeping.
12	Fire Extinguishers	For safety against fire accidents adequate numbers of water points, sand buckets and fire extinguisher are available in the campus.
13	Newspapers at hostels	Every room in hostel is provided with English newspaper to develop communication skills.
14	AAKASH tablets	Students are provided with AAKASH tablets for helping them in their project work and increasing exposure to e-learning.
15	MOODLE	MOODLE (Modular Object-Oriented Dynamic Learning Environment) is a free open-source that helps in content development and easy retrieval for e-learning. It can be used to build a stand-alone course or to supplement classroom work.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/campus and indicate the existing physical infrastructure and the future planned expansions if any).

Since its inception in 1998, the institute has been keeping pace with the changing needs and requirement to meet its academic growth. To keep the pace with the needs and requirements, additional infrastructure is being added from time to time. In the last four years, additional facilities have been

developed by the Institute. The details of the amount spent on the facilities are as under:

**Table No.4.1.3 Details of Amount Spend (Amount in Lacs)** 

Sr. No.	Addition in Infrastructure	2010-11	2011-12	2012-13	2013-14
	facilities				
1.	Furniture and Fittings	20.85	35.43	16.29	8.31
2.	Equipment, Plant and	54.11	37.16	54.71	29.32
	Machinery				
3.	Vehicles	12.00	6.60		
4.	Computer Equipment	18.91	24.90	24.79	1.09
5.	Building	68.51			

## 4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

- > Seats are reserved in the college buses for students with physical disabilities.
- Facilities for ease of mobility such as ramps, hand railings, etc. are provided. Institute is in the process of installing elevator facility for the same
- ➤ In the classrooms the seating arrangement is made in order to provide ample legroom and comfort.
- > The amenities such as toilets are constructed for ease of access to those students.
- > Braille keyboards are provided for the visually challenged students.

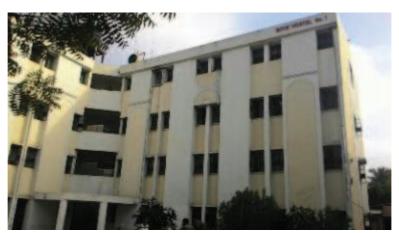
### 4.1.5 Give details on the residential facilities and various provisions available within them:

Table No.4.1.5 Details of residential facilities and various provisions

Sr.No.	Available Residential Facilities	Various Provision Available within them	
1	Hostel Facility – Accommodation	Boys' Hostel 1 and 2 and Girls' Hostel 1 and 2 -	
	available	Well equipped, excellent cyber campus facilities	
		(Wi-fi enabled), hygienic drinking water	
		processed through Reverse Osmosis Plants,	
		uninterrupted power supply, reading room, indoor	
		games, mess	
2	Recreational facilities,	Indoor games, well equipped gymnasium and	
	gymnasium, yoga center, etc.	regular yoga classes	
3	Computer facility including access	Campus wide networking, round-the-clock	
	to internet in hostel	internet facility of 12 mbps and cyber hostels	
4	Facilities for medical emergencies	One full time physicians with emergency vehicle	
5	Library facility in the hostels	Library facility is not available in the hostel	
		however central library is open for 24 hours	
		which near to the hostels.	
6	Internet and Wi-Fi facility	Connected to central server through LAN which	
		provides internet facility of 100 mbps speed. Also	
		our college campus is having facility of Wi-fi	
		connectivity.	
7	Recreational facility - common	Yes, available recreational facility - common	
	room with audio – visual	room with audio – visual equipments	
	equipments		

Sr.No.	Available Residential Facilities	Various Provision Available within them
8	Available residential facilities for the staff and occupancy constant	Residential facilities for the staff available in the campus and constant supply of hygienic drinking
9	supply of safe drinking water Security	water processed through Reverse Osmosis Plants.  There are Watchmen who work on shifts The college hired the services of a reputable security agency. The area of the institute is under CC TV cameras
10	Medical Store	Medical store is available in the campus nearby hostel for the students.
11	General Store	General store is available for the students.
12	Fly Over Bridge	For the safe crossing of the students across college campus to the hostels.
13	Beauty Parlor	The college hostel also hosts the facility of beauty parlor for the convenience of the female students.
14	Firefighting Equipment	For safety against fire accidents adequate numbers of water points, sand buckets and fire extinguisher are available campus all the Academic blocks, Library, Auditorium, Administrative Block, Seminar Halls and Hostels.
15	Water Coolers	The college has a water cooler facility at each department.

#### **Boys' Hostels**



**Photo:** Boys' Hostel 1



Photo.: Boys' Hostel 2

**Boys' Hostel Room** 

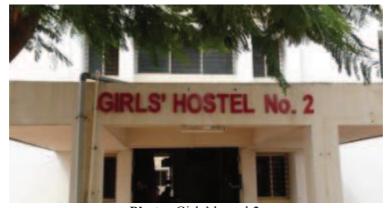


Photo: Boys' Hostel Room

Girls' Hostels



**Photo:** Girls' hostel 1



**Photo:** Girls' hostel 2

Girls' Hostel Room



Photo.: Girls' Hostel Room



Photo: Reverse Osmosis Process Unit at Girls' Hostel.



**Photo:** Reverse Osmosis Process Unit at Boys' Hostel.



**Photo:** Fire Extinguishers Cylinder



**Photo:** Emergency Vehicle

## 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

- ➤ Our institute made contract agreement with Dr. Sangeeta S Patil for counseling services. She is visiting the campus on every Monday 2:00 pm onwards for counseling.
- ➤ Our institute made contract agreement for emergency medical care with Dr. Rakhi M Maniyar, B.A.M.S with registration no. I56832A, the doctor will be available at the institute daily morning 7.30 am to 9.00 am and evening at 4.30 pm to 7.00pm.
- The provision made available to students and staff in terms of health care off the campus with Memorandum of understanding between College and Shri Ganpati Hospital and Netralaya, Pandharpur.

# 4.1.7 Give details of the Common Facilities available on the campus - spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facilities, auditorium, etc.

Sr.No.	Common Facilities	Availability
1	IQAC	In the process of
		establishment
2	Grievance Redressal unit	Available
3	Women's Cell	Available
4	Counselling and Career Guidance	Available
5	Placement Unit	Available
6	Health Centre	Available
7	Canteen	Available
8	Recreational spaces for staff and students	Available
9	Safe drinking water facilities	Available
10	Auditorium	Available
11	Security	Available

#### **CCTV** camera:



**Photo:** CCTV Camera Footage

#### **Security guard:**



**Photo:** Security Guard



**Photo:** Reverse Osmosis Process Unit at College of Engineering

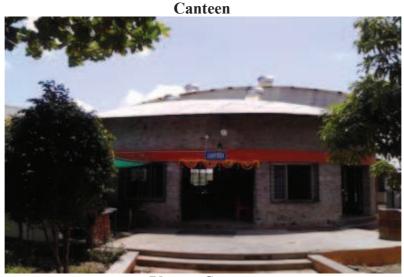


Photo: Canteen

#### 4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes. The library has an Advisory Committee.

Composition of such committee is as follows:

Name of the committee member	Designation
Mr. S.A. Inamdar	Coordinator
Mr.S.M.Bagal	Member Secretary
Mr.P.K. Parase	Member from Mechanical Department
Mr.S.T.Nanaware	Member from Computer Science and
	Department
Miss. S.A. Jagtap	Member from Master of Business
	Administration Department
Mr.V.S.Bhoomkar	Member from Civil Department
Mr.P.D.Bansode	Member from FE Department

The following significant initiatives have been implemented by the committee to render the library, Student/user friendly:

- ➤ The committee is intended to plan and coordinate the execution of the requisite procedures for the functioning of the library.
- ➤ Prepare Vision and Mission statements of the Library.
- ➤ Collecting requirement of books, journals, magazines etc. from all departments for every academic year and recommend to the management through the Principal for necessary procurement.
- ➤ Recommendation for update of the available/required books with new editions.
- ➤ Prepare time table as well as schedule for working hours.

- > Created awareness among the faculty members and students about the use of the reference books and other useful books in the library through the notice
- ➤ Created awareness among the faculty members and students about the use of digital library and library facilities etc through notices and circulars.
- > Prepare library rules.
- Ensure the up gradation of the library to keep pace with the technological developments.
- It also looks after that other infrastructure of the library is proper for smooth functioning and students' requirements are met.
- > The departmental libraries are provided for necessary assistance by the library committee.

#### 4.2.2 Provide details of the following:

- ➤ Total area of the library (in Sq. Mts.) 870 Sq. Mts.
- ➤ Total seating capacity 250 students
- ➤ Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

On all working days, on holidays, before and during examination day:

Issue Section & Journal Section Timing : 7.30 AM to 9.00 PM Reference Section Timing : 7.30 AM to 11.00 PM

Reading Section : 24 Hours

**During Vacation:** 

Issue Section & Journal Section Timing : 7.30 AM to 9.00 PM
Reference Section Timing : 7.30 AM to 11.00 PM

Reading Section : 24 Hours

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT Zone for accessing e-resources)

#### **Boys' Reading Section**



**Girls' Reading Section** 



**News Papers Reading Section** 



**Periodicals Section** 



#### **Digital Library**



4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Over and above the requirements of AICTE, departments raise the indent of books and journals as per the requirements of the respective programmes and courses. These are placed for discussion in the library committee who review the requirement and recommend the same to the Principal for adoption. The Principal to take necessary action for procurement taking into account the budgetary and other provisions.

The college library follows the Open Access system. Books are classified according to Dewey Decimal Classification, and are placed on the stacks. The availability of a particular book can be confirmed by searching the Library software database. Reference books are also available in the library along with newspapers. Separate periodical session is available for faculty member and student.

The amount spent on procuring new books, journals and e-resources during the last four years is as given below:

Table No.4.2.3 Details of residential facilities and various provisions Amount in Lacs

Library holdings	Year-1 (2013-2014)		Year-2 (2012-2013)		Year-3 (2011-2012)		Year-4 (2010-2011)	
	Number	Total cost						
Text Books	2,533	11.65	2,543	11.17	3,644	15.20	7,400	26.64
Reference Books	050	0.25	040	0.20	050	0.25	067	0.34
Journals/ Periodicals	127	2.38	130	2.40	193	2.67	193	3.08

Library holdings	Year- (2013-2		Year- (2012-2		Year- (2011-20		Year- (2010-20	
g	Number	Total	Number	Total	Number	Total	Number	Total
		cost		cost		cost		cost
E-resources	IEEE-145	3.71	IEEE-145	3.13	IEEE-145	2.66	Elsevier Science Direct 276	4.40
	Elsevier- S.D. 275	4.59	Elsevier S.D 275	3.82	Elsevier S.D 275	3.48		
	ASME-26	1.58	ASME-26	1.34	ASME-26	1.15		
			ASCE- 34	1.56	ASCE- 34	1.35		
			Springer- 149	1.71	Springer- 149	1.46		
			McGraw Hill's	1.19	McGraw Hill's	1.05		
			Access Engg.		Access Engg.			
			J-Gate Engg6400	0.67	J-Gate Engg 6400	0.66		
			J-Gate Mgt.	0.67	J-Gate Mgt.	0.66		
			ASTM Digital Library 47000 Articles & 1400 e-	0.61	ASTM Digital Library 47000 Articles & 1400 e-	0.59		
			books		books			
			EBSCO- Mgt.	1.93	EBSCO- Mgt.	1.82		

## 4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection? OPAC

Online Public Access Catalogue (OPAC) it provide the maximum access to the library collection searching by-

- > Subject name
- > Author name
- > Title of the book
- > ISBN No.
- > Year of publication
- Accession No.
- Record No.
- ➤ Place of Publication
- > Publisher name etc.

#### **Electronic Resource Management package for e-journals:**

Institute library has subscribed the following Electronic Resource Management package for e-journals:

- ➤ IEEE (Institute of Electronics and Electrical Engineers) 146 e-journals.
- ➤ ASME (American Society for Mechanical Engineers) 26 e-journals.
- ➤ Elsevier- Science Direct- 275 e-journals.

#### Federated searching tools to search articles in multiple databases.

Institute library has available the DELPLUS Software purchased from the DELNET (Developing the Library Network), New Delhi. This software provides searching tools to search articles in multiple databases.

#### Library web site:

The Library web site work is in progress.

#### In house/remote access to e-publications

Both Faculty and students can access to e-Publications like E-journals, E-books through LAN or Wi-Fi connectivity.

#### **Library automation:**

Library automation made partially. Accession of books, Bar code generation, OPAC, Circulation of books, various reports etc. made automated.

#### **Total No. of computers for public access:**

There are 20 computers are available for public access.

#### **Total No. of Printers for public access:**

02 numbers of Printers are made available for public access.

**Internet Band width/speed:** Internet speed 100 Mbps.

**Institutional Repository:** Yes

#### Content management systems for e-learning

**MOODLE** 

#### Participation in Resource sharing networks/consortia (like Inflibnet)

Library has the Institutional membership of DELNET. We participate in resource sharing networks of DELNET. Through this network, we procure the books and other reading materials for our faculty members and students on Inter Library Loan basis. Even we can search database of this body to meet our readers' requirement.

#### 4.2.5 Provide details of the following items:

Average number of walk-ins
 ∴ Average number of books issued/returned
 ∴ Ratio of library books to students enrolled
 ∴ 1:10

Average number of books added during last three years:

Table No. 4.2.5 detail of books added during last three years

Academic year	No. of Titles	No. of Books	Total Amount in	Average
			Lacs	
2011-2012	328	3,694	15.45	
2012-2013	206	2,583	11.37	<b>2,953</b> per year
2013-2014	262	2,583	11.90	
Total:	796	8,860	38.72	

Average number of login to OPAC
 ∴ 50 per day
 ∴ Average number of login to e-resources
 ∴ 100 per day
 ∴ Average number of e-resources downloaded/ Printed
 ∴ 200 per day

Number of information literacy trainings organized

Details of "weeding out" of books and other materials : 261 number of books till date.

#### 4.2.6 Give details of the specialized services provided by the library

Manuscript : NoReference : YesReprography : Yes

➤ Library has the 03 Reprography machines.

> ILL (Inter Library Loan service) : Yes

As per the requirement from faculties the ILL services are provided.

#### Information deployment and notification

All the library information, instructions and notifications are brought to the notice of the faculty members and students time to time like: Issue and returned of books, journals and periodicals, Submission of requirement for books and journals from the departments, to use of e-resources, use of digital library and to refer the reference books on large scale in the library etc. in this respect.

#### **Download**

The library makes the help to faculty members and students to download the articles and research papers from the e-journals subscribed. Also provide the printing facilities to faculty members and students in this respect.

#### **Printing**

High speed printers are provided on site in library and made available to faculty and students.

#### Reading list/ Bibliography compilation

The list of library books and journals etc. are being provided to the users. Even the syllabus copies are also provided to the users as per their requirement.

#### In house/remote access to e-publications

Both Faculty and students can access to e-Publications like E-journals, E-books through LAN or Wi-Fi connectivity.

#### **User Orientation and awareness**

The library always gives the information to the faculty members and students about the newly arrived books and total library holdings by displaying the information on boards in the library and circulating notices in this respect.

#### **Assistance in searching Databases**

Library staff makes help to faculty members and students for searching the various library databases subscribed by the library. It includes DELNET Databases of books and journals, e-journals databases, e-books etc. in digital library.

#### **INFLIBNET/IUC facilities:**

Library facilities are being provided by using Delplus Software developed by DELNET.

### 4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

The support provided by the Library staff to the students and teachers of the college is as follows:

- ➤ Information about the books located in the library
- ➤ Guidance regarding searching of OPAC
- ➤ Provide Information about the subject related books and other related books on the subject.
- ➤ Guidance regarding search the e-journals articles and research papers.
- ➤ Reprographic facility is available in library
- Downloading and preserving the hard copy of study material.
- Facilitate the staff and students about the new arrivals through displaying the books and journals on the proper display boards and circulating notices in this respect.
- ➤ Book bank facility is available to the students

### 4.2.8 What are the special facilities offered by the library to the visually/ physically challenged persons? Give details

Though currently Institute does not have visually/physically challenged persons so far, however the system is in-place to meet with arrangement available.

**For visually impaired,** the basic software like adobe acrobat reader in which option is available for any person to hear the content clearly. (Library staff would help aid the visually impaired to listen the documents through available head phones at their own pace.

**Physically challenged** students would be encouraged to look at the web pages of OPAC college site and contact in e-mail & request for any book or journal, which may be delivered as per same existing rules of Library.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?

- ➤ The feedback is being taken semester wise on Institute level by the authority from all the students. Whatever lacunae/ discrepancies are brought to the notice of the concerned feedback authority by the students, they sent it to the library. Suggestions are taken cognizance of through Library advisory committee.
- A suggestion box is kept in the library. The suggestions are collected and analyzed by the Library Committee. During committee meetings every semester, students and faculty suggestions are analyzed and considered for improving the library services.
- Also, there is a Library Guest Register, as and when any distinguished guests visit Library suggestions or feedbacks as advices are requested to improve the facilities or services.

#### 4.3 IT Infrastructure

4.3.1 Give details on the computing facility available (Hardware and software) at the institution.

Number of computers with Configuration (provide actual number with exact configuration of each available system)

Number of Computer Systems : 683 with following configuration details.

**Table No. 4.3.1 Number of Computer Systems** 

Sr. No.	System Configuration						
1.	Desktop : Acer Veriton Make	<b>Qty.</b> 166					
	Intel®Core <sup>TM</sup> i3/i5 (2nd/4th Generation E2100 3.1Ghz, 3MB ,						
	L2Cache,1333 FSB MHz,)						
	2GB (1 X 2GB ) DDR3 @1333 MHz SDRAM ,						
	500GB SATA@72k RPM ,						
	Intel®H61 Express Chip Mother Board, Graphics - Intel DVMT 5.0						
	Support Enhanced 3D & Intel Clear Video Technology, PCI Express 2.0						
	x16 graphics card support,						
	Gigabit Ethernet, Wake-on-LAN ready,						
	USB Entry Keyboard, Optical USB Mouse with Mouse pad,						
	18.5"Widescreen Flat panel LED Monitor,						
	DOS Factory Installed (English),						
	6 USB 2.0, 1 Ethernet (RJ45), 1 serial, 1 parallel, 1 VGA out,1 stereo						
	line-in, 1 microphone-in, 1 Speakers/line-out, 1 headphone, Embedded						
	High-Definition Audio, Internal speaker,						
	Desktop Chassis + 250W SMPS,						
	Warranty: 3Years Onsite comprehensive.						
2.	Desktops Make Dell Optiplex:	273					
	Intel®Core <sup>TM</sup> 2 Duo E7500(2.93 Ghz,3MB L2Cache,1066 FSB MHz,)						
	2GB (1 X2GB ) DDR3 @1333 MHz SDRAM ,						
	500GB SATA@72k RPM						
	Intel®G41 Express Chip Mother Board,						
	Intel Graphics Media X4500						
	Integrated Broadcom® BCM57780 Gigabit Lan,						
	USB Entry Keyboard, Optical USB Mouse with Mouse Pad,						
	18.5"Widescreen Flat panel LED Monitor,						
	Desktop Chassis +280W SMPS,						
3.	IBM Lenovo Make System with following configuration:	154					
	Intel premium Dual core E2200(2.2GHz) Processor,						
	Intel(R)G31 Express Chipset Motherboard Integrated Graphics Media						
	Accelerator *3100,10 100 1000 GB LAN Card ,8 USB 2.0,1 Ethernet,						
	1GB DDR2 RAM,						
	160 GB SATA HDD,						
	15" Wide Flat panel LCD monitor,						
	Keyboard,						
	Optical Scroll Mouse,						
	Convertible Cabinet +128 W SMPS						

Sr. No.	System Configuration	<b>Qty.</b> 85					
4.	HP Make System with following configuration:						
	Intel PIV 3.0 GHz with HT Technology Processor,						
	Intel 915 GV chipset Motherboard with EM64T (Extended Memory 64						
	bit Technology) with inbuilt network card of 10/100/1000 mbps,						
	Integrated Audio and Intel Graphics Media and Accelerator GMA 900,						
	256 MB DDR RAM (533MHz),						
	80 GB SATA HDD 7200 RPM,						
	1.44MB FDD,						
	52x CD Writer,						
	15" XGA TFT Color Monitor with inbuilt speakers,						
	121 keys multimedia Keyboard,						
	Two Button Optical Scroll Mouse,						
	Black Cabinet with SMPS, Whole system in Black color.						
5.	IBM Make Server X3650M4, Intel Xeon E52620 (6Core), 2.00GHZ,	02					
٥.	300GB,HDD, 8GB ECC DDR RAM	02					
	4X146GB 3.5-inch 15K RPM SAS Hard Drive,						
	2x Power Cable (IEC C13-C14 Pass-through for UPS/PDU Connection),						
	User's Guide and Installation & Troubleshooting Guide						
6.	AS-PE2950 - Dell(TM) Power Edge(TM) 2950 Rack	01					
	Mount Server :						
	Power Edge(TM) 2950, Quad-Core Intel(R) Xeon(R) E5345(1.86GHz),						
	2x4MB Cache 2 <sup>nd</sup> Quad Core Xeon E5345 (1.86GHz) Processor,						
	ATI EX1000 Motherboard,						
	2x4MB Cache Integrated Dual Broadcom Gigabit Network Card with						
	TOE hardware enabled Mod Specs Info (India),						
	4X146GB 3.5-inch 15K RPM SAS Hard Drive,						
	CDRW/DVD Combo Drive with 24x Max Speed,						
	USB Keyboard,						
	USB Mouse,						
	Dell(TM) Remote Management Card 01(DRAC5i)						
	Rapid/Versa Rails(TM) for Power Edge(TM) 2950						
	USB to PS/2 dongle cable,						
	2x Power Cable (IEC C13-C14 Pass-through for UPS/PDU Connection),						
	User's Guide and Installation & Troubleshooting Guide for PE2950						
	(English),						
7.	HP Make ProLiant ML350GS (5U Rack Moutable model with 5U	01					
1.	Chasis),	V1					
	//						
	Dual Core Intel Xeon Processor 5050 (3HGz, 667FSB), 2X2 MB Level2						
	Cache, Intel 5000z chipset motherboard'						
	4 GB DDR2 RAM,						
	Embedded dual core NC373i multifunction Gigabit NICS,						
	Smart array E200i SAS controller with 64MB Cache + E200i RAID5						
	upgrade + BBWC (RAID 0/1/5),						
	48X CD ROM Drive,						
	Hot plug redundant power supply + redundant fan,						
	USB/PS2 K/B, Optical scroll mouse.						

Sr. No.	System Configuration	Qty.			
8.	PCS SERVER CONFIG (DUAL XEON CPU capable):	01			
	Intel XEON 2.8 GHz 512KB cache SINGLE CPU Support for DUAL				
	XEON CPU(for future upgrade) Procesor,				
	Intel E7501 chipset Motherboard Onboard Dual U320 SCSI Controller,				
	Onboard DUAL GIGABIT LAN Onboard display,				
	1 GB DDR RAM with ECC with support upto 12 GB ECC memory, 2*				
	73GB U320 SCSI Hard disk 10K RPM (Seagate),				
	Onboard Dual U320 SCSI Controller, Onboard DUAL GIGABIT LAN				
	Onboard display,				
	1.44MB floppy disk drive 16X DVD Drive,				
	PS/2 keyboard (Logitech),				
	PS/2 scroll mouse (Logitech),				
	Intel server Management Software, ISO 9001 & 14001 certification.				
	Certification from Microsoft/SCO/Novell 12/24 GB DDS (DAT) Drive				
	for backup.				

➤ Computer Student ratio : 1. UG = 1:4

2. PG = 1:2

➤ Stand alone facility : 20-Computers

LAN Facility
 Wi-fi facility
 Available with 100 mbps Speed
 Available throughout the campus

> Licensed Software :

#### **Table No.4.3.1.1 List of Licensed Software**

Sr. No.	Name of Software	No. of Licenses
1.	Visual Basic 6.0(AE)	01
2.	Turbo C++ 3.0	01
3.	Ms Office 2000 Professional	01
4.	MS –SQL Server	01
5.	Swift Gate Software 1.0`	10
6.	IBM Rational Enterprises Suite	20
7.	Antivirus Quick Heal server + client	250
8.	All pdf convertor	01
9.	Oracle 10G Standard1 per 5 users(Perpetual License)	05
10.	Oracle 10G Standard1 Media	01
11.	Crystal Report 2008	01
12.	Microsoft visual studio .net 2010	20
13.	AUTO CAD 2014	125
14.	ANSYS 11	30
15.	DEL CAM	6 modules and 6 licenses
		for each module
16.	CATIA R-23	30
17.	NASTRAN	150
18.	MATLAB 6.1 & 7	10
19.	Xilinx 9.2i	03
20.	C-51 Ver 7.0, Keil PK51	04
21.	Proteus VSM-R 7.0	10
22.	Multi Sim	10
23.	SGS 2.2	15
24.	STAAD PRO	15
25.	AUTO CAD 2014	25

Sr. No.	Name of Software	No. of Licenses
26.	SAP 2000	10
27.	ETABS	10
28.	COMSOL	1
29.	Windows 98 paper license	10
30.	Windows NT 4.0 Worksattion Full Pack	01
31.	Windows NT 4.0 Servers & clients	10
32.	Linux 8.0(Mandark)	01
33.	Windows 2000 server	01
34.	Windows 2000 professional	20
35.	Windows 2000 server paper license	15
36.	Microsoft windows 2003 server	01
37.	Windows Vista-KMS, Operating Systems Prof,x64	92
	Ed, Operating System Professional	92
38.	One Time License for WinSL 8.1 SNGL OLPNL	
	Academic Legalization GetGenuine (Prefectural	50
	License)	

• Number of nodes / Computer with Internet facility: 683

### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

The institute has separate computer centre with internet browsing facility looked after by System Administrator.

Sr.No.	Service provider	Bandwidth	Contention Ratio	Circuit Type
1	RailTel	1 Gbps	1:1	Leased Line NKN
2	BSNL	2 Mbps	1:1	Leased Line

- ➤ Internet service is available for both students and faculty in the campus.
- > Each department has their own computing facility for their faculty and students.
- ➤ College campus connected to central server through LAN which provides internet facility of 100 mbps speed.
- ➤ Through wi-fi round-the-clock internet facility of 12 mbps broad band leased line in and around the campus (cyber Hostels) is provided.
- > Students and Staff can also browse e-Journals through digital library.
- Laptops are provided to Principal and all departments.
- > Resources for conducting online examinations exist in the institute.
- > AAKASH tables are provided for students.

### 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- ➤ Computer systems are upgraded with latest configuration.
- ➤ Individual up gradation of the computers is taken up as per the need and requirements of the various departments.
- ➤ Enough provision is made available in the annual budgets for the procurement of the computer systems.
- ➤ Once new systems are procured, they replace with the existing systems as per the requirements of the departments.

- ➤ All the computer systems in the campus are regularly monitored by the system administrator and maintenance staff.
- ➤ All the UPS and Computer Systems are in AMC with respective service providers and are maintained regularly.
- The trouble/problems experienced by the computers in the various laboratories are entered by the lab programmers/technicians in the complaint register which is kept in the central office.
- The maintenance staff will then goes to the respective labs for identification of the problems and resolves the same at the respective places.
- ➤ In case of major problems i.e. replacement of component/part during warranty they are sent to the respective service centers and got replaced at the earliest.
- ➤ All the servers are in AMC with respective service providers and are maintained regularly.

# 4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (year wise for last four years).

Amount spent for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution during last four years:

**Table No.4.3.4 Computer Budget Amount in Lacs** 

Item	Budgeted 2013-14	Actual Expenses in 2013- 14	Budgeted 2012-	Actual Expens es in 2012-13	Budge- ted 2011- 12	Actual Expenses in 2011- 12	Budge- ted 2010-11	Actual Expenses in 2010-11
Compu ters	48.45	45.84	30.46	27.68	29.88	26.85	10.12	8.58

## 4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?

- ➤ The Institution has adequate computer facility for its faculty. Faculty members are provided with computers with internet facility for preparation of teaching/learning materials in their respective departments.
- Each department has its own computing facility based on the curriculum demand.
- Number of computer laboratories and number of computers in each laboratory vary from department to department.
- ➤ The faculty and students can access e resources available in the library through wi-fi facility and also through computing facilities available with each department.
- Lectures recorded to video, audio or both then uploaded and made viewable on a designated site online especially useful for students' self-learning.
- ➤ Digital library with 500 e-books and e-journals from IEEE, ASME, Science Direct, EBSEO and J-GATE.
- Adequate Multimedia projectors, OHPs are available within the college for the faculty use.

- ➤ Each department in the institute has individual seminar halls provided with LCD projector, PA system and internet facility.
- ➤ Developed Language laboratory for the students with interactive software.
- ➤ The Institute has conducted one day Workshop for creating awareness about AAKASH Tablet for faculty members.
- Students are provided with AAKASH tablets for helping them in their project work and increasing exposure to e-learning.
- MOODLE is a software tool that enables to store information such as question papers, reading material, aptitude questions and tests, etc. for access of the students through intranet.
- ➤ In addition to availing this facility by students at their free time, every week one hour is allotted in time table for MOODLE session whereby students solve aptitude questions.
- > Internet sessions have been added in time-table.
- ➤ Arranged Faculty Development Programme On "USE of ICT for improving performance of Faculty Members".
- 4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.
  - The institute understands that the teachers have to be reoriented from time to time. The institution encourages the staff and technical assistants to undergo training on the computer-aided teaching and training and conducts departmental seminars and workshops for training on computer applications (viz. Power Point, Ms Word, Ms Excel, Ms Access and other necessary skills).
  - ➤ The Department of Computer Science and Information Technology also organizes training sessions on the use of Internet for learning resources, conducting seminars and workshops in various fields related to use of computer hardware and software.
  - ➤ NPTEL video lectures arranged for faculty members.
  - > Through ICT Institute have video conferencing facility.
  - ➤ Institute conducting the usage based training on the available learning resources and usage of audio-visual facility.
- 4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

Yes, the Institution avails of the National Knowledge Network connectivity directly.

College campus connected to National Knowledge Network through Leased Line which provides internet facility of 1 Gbps speed.

#### **4.4** Maintenance of Campus Facilities

4.4.1. How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

Bottom up approach is uses in preparing the budget and allocation of funds accordingly for maintenance and upkeep of the facilitities. Review meetings are taken for effective utilization of the funds.

**Table No.4.4.1 Maintenance of Campus Facilities Amount in Lacs** 

Sr.	Facilities 2013-2014		2012	2-2013 2011-2012		2010	2010-2011		
No.		Budget	Expenses	Budget	Expenses	Budget	Expenses	Budget	Expenses
1	Building	29.00	28.33	10.00	8.96	45.00	39.77	12.00	11.26
2	Furniture	0.80	0.74	6.50	5.94	20.00	17.10	6.00	5.54
3	Equipment	3.50	3.16	3.50	3.17	0.85	0.766	5.50	5.02
4	Computers	0.12	0.11	0.03	0.03	-	-	-	-
5	Vehicles	1.20	1.11	0.70	0.65	-	-	-	-
6	Any other	1.20	1.05	6.00	5.52	2.60	2.45	1.00	0.92
	Total:	35.82	34.50	26.73	24.27	68.45	60.08	24.50	22.75

### 4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

Infrastructure and Facility	Maintenance Description
Land Built up Area Exclusive for	Cleanliness is maintained by the outsourced
the Institution	people organized by the institute level in charge.
Land: 10 acres	
Build-up floor space: 22678 sq.m.	
Class Rooms	Well-furnished class rooms are cleaned by out
	sourced sweepers every day.
Seminar Halls	Seminar hall of the department is maintained by
	departmental in charge faculty & Technician at
	regular intervals
Tutorial Rooms	Tutorial rooms are cleaned every day and
	maintained by faculty in charge.
Laboratories	A faculty in charge and a laboratory technician
	looks after the maintenance of each laboratory.
	They put together propose the budget for the
	required consumables, new equipment, repairs and
	calibration if required
Equipment	Technicians maintain the log book for equipment
	of the laboratory. They prepare the preventive
	maintenance schedules under the guidance of
	faculty-in-charge and carry out regular
	maintenance as per the schedules.

Infrastructure and Facility	Maintenance Description
Computers	A team of programmer/ Technician from AMC and a faculty incharge of each computer laboratory are responsible for maintenance of systems and software. Programmer carryout maintenance of each computer at regular intervals and record in the log book. Faculty in charge prepares necessary budget and submit to HOD.
Main Library	All the books are accessioned accordingly by the serial number of accession number and classified subject wise and shelved in the rack according to call numbers regularly.
Dept. Library	Faculty members of departments can borrow books from Dept. Library, and students in their free time can make use of the books available in the Dept. Library. One Faculty member is made incharge of the Dept. Library.
Internet /Intranet	Internet related matters are maintained by a team of faculty, systems administrator and programmers in computer science department. They maintain the daily band width, usage, band width allocation, sharing etc.
Electricity	Maintenance Engineer, Technicians and Attender look after the maintenance of electricity.
Water	Sufficient water available to meet requirements of garden and toilets .It caters needs of Staff & Students ,Buildings etc.
Civil Maintenance	Maintenance committee will look after the civil structure at regular intervals and do the need full work whenever required.
Security	There are Watchmen who work on shifts The college hired the services of a reputable security agency. The area of the institute is under CC TV cameras.

### 4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Laboratory in-charge should ensure that the equipment/ instrument in respect of his/her laboratory are in working condition. In case of break down, the departments take the initiative to calibrate the precision instruments for their optimum and assured performance, once in semester. Calibration is done annually through AMC.

### 4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The college has wide spread arrangements for power connections with a central substation, Control panel and Power room. Breakers are available at substations control panels are available at power room. Panels and Distributions boxes are available at Individual Departments.

#### **Transformer specifications:**

Name of manufacturer	Shri swami Samarth electrical industries
KVA	500
Voltage	High Value – 11000
	Low Value – 433
Ampere	High Value – 26.26
	Low value- 666.6
%Impendence	5%
Frequency	50hz
Vector Group	DYN11
Oil	550 Ltrs
Type Of Winding	Copper
Type Of Cooling	ONAN
Total Mass	2100 Kg



Photo: Transformer

#### **Generator specifications**

Name Of Manufacturer	Powerica Limited
Genset Model	Pl-C100d5 P
Year Of Manufacturing	07-2005
Rated Bhp	124
Rated Kv	30
Rated Kva	100
Full Load Current (0.8pf)-Amps	139
Rated Voltage	115 V
Frequency	50 Hz
Rated Rpm	1500
Battery Voltage Dc	12 V



**Photo:** Power Supply Unit with Generator

#### **Drinking water:**

The college has water purifying units with Reverse Osmosis process at three locations.

Sr.No.	Each Unit processes ltrs/hour	Quantity
1	10,000	2
2	1,200	1
3	500	3

- The college has an organized supply mechanism to different departments.
- The college has a water cooler facility at each department



**Photo:** Reverse Osmosis Process Unit at College of Engineering



**Photo:** Reverse Osmosis Process Unit at Girls' Hostel.



**Photo:** Reverse Osmosis Process Unit at Boys' Hostel.

#### **CRITERION 5: STUDENT SUPPORT AND PROGRESSION**

#### **5.1: Student Mentoring and Support**

5.1.1. Does the institution publish its updated prospectus/handbook annually? IF 'Yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, every year institution publishes updated prospectus which contains:

- ➤ Vision, mission, objectives and quality policy of the institution.
- ➤ Information about the UG, PG and Ph. D. Programmes
- Facilities in departments such as laboratories, etc.
- Facilities of the college such as central library, etc.
- > Facilities in the Hostel
- R & D facilities in the Institute
- MoUs signed by the Institute
- > Latest placements data
- > University Results of the current academic year
- Meritorious prizes data
- > Information about Ill effects of ragging
- > Rules and procedures for admission
- > Fees Details

Institute ensures its Commitment and accountability through regular interaction with students, faculty meetings, student Council meeting, feedback, and parents' meet, review of results, placement and academic calendar and by implementing the rules and regulations as published in the prospectus.

5.1.2 Specify the type, number and amount of institutional scholarships/ free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

#### A. Scholarship given by Government of India

The students belonging to SC/ST/OBC avail the Scholarship / free ship as provided by the Government of India.

Table No. 5.1.2 Details of Scholarship given by Govt. of India based on students' parental Annual income

Academic Year 2010-11				
Category	Financial assistance from Government	Total No. of students	Total Amount in Lacs	
SC/ST	Free ship/ Scholarship			
Minority	-			
NT, OBC,SBC	Free ship/ Scholarship&	1106	452	
& EBC	state Government			
PH	Nil			

Category	Financial assistance from Government	Total No. of students	Total Amount in Lacs
	Academic Year 201	1-12	
SC/ST	Free ship/ Scholarship		
Minority	-		
NT, OBC,SBC	Free ship/ Scholarship&	1241	549
& EBC	state Government		
PH	Nil		
	Academic Year 201	2-13	
SC/ST	Free ship/ Scholarship		
Minority	-		
NT, OBC,SBC	Free ship/ Scholarship&	1294	608
& EBC	state Government		
PH	Nil		
	Academic Year 201	3-14	
SC/ST	Free ship/ Scholarship		
Minority	-		
NT, OBC,SBC	Free ship/ Scholarship&	707	289
& EBC	state Government		
PH	Nil		

#### **B.** Merit Scholarships

The institute offers schemes of meritorious scholarship apart from government scholarships .The following table gives details of merit Scholarship amount disbursed depending upon Scores of Students.

Table No. 5.1.2.1 Details of Merit Scholarship

Admission to	% Marks	Prize amount in lacs
F.E.	PCM ≥ 95	0.20
F.E.	$90 \le PCM < 95$	0.15
F.E.	$85 \le PCM < 90$	0.10
F.E.	$80 \le PCM < 85$	0.07
S.E.	$FE \ge 70$	0.10
T.E.	$SE \ge 70$	0.10
B.E.	TE ≥70	0.10

#### **Prizes for University Rankers**

**The** institute also honours the students who seek ranks in University. Details of prize amount are given in table below.

Table No. 5.1.2.2 Details of Prize amount given to University rankers

Class	Ranks	Prize Amount in
		Lacs
B.E.	1 <sup>st</sup> in all branches	0.31
B.E.	1 <sup>st</sup> in respective branch	0.21
B.E.	2 <sup>nd</sup> in respective branch	0.15
B.E.	3 <sup>rd</sup> in respective branch	0.10
F.E.	1 <sup>st</sup> in all branches	0.21

#### **Management Merit Scholarships:**

The institute also offers management merit scholarships to students.

Table No. 5.1.2.3 Details of Scholarship amount given to students in last four academic years

Sr.no	Academic Year	Financial aid available	No. of students	Amount in Lacs
1	2010-11	Yes	70	6.46
2	2011-12	Yes	68	6.76
3	2012-13	Yes	66	6.76
4	2013-14	Yes	66	6.30

#### Earn and Learn facility:

The institute Supports students coming from economically weaker sections through Earn and Learn facility. Hostel accommodation expenses and food bills are borne by the Institute and the student will have to do some generic work of about 2-3 hours per week in return.

The amount disbursed through 'Earn and Learn' Scheme from Academic year 2011-12 till date is given below.

Table No.5.1.2.4 Amount spent on Earn and Learn Scheme for four Academic years

Academic Year	<b>Amount spent in Lacs</b>
2011-12	19.10
2012-13	19.57
2013-14	18.15
2014-15	17.34 (till date)

5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?

> A.Y 2013-14, A.Y 2012-13, 2011-12, 2010-2011

Table No. 5.1.3 Details of financial assistance received by students in last four academic years

	III IUSt Ioui		****			
	Academic Year 2010-11					
Category	Financial assistance from Government	Total No. of students	No. of students received financial assistance	Percentage of students		
SC/ST	Free ship/ Scholarship					
Minority	-					
NT, OBC,SBC &	Free ship/ Scholarship&	1701	1106	65.02		
EBC	state Government					
PH	Nil					

Academic Year 2010-11				
Category	Financial assistance from Government	Total No. of students	No. of students received financial assistance	Percentage of students
	Academic Yea	r 2011-12		
SC/ST	Free ship/ Scholarship			
Minority	-			
NT, OBC,SBC &	Free ship/ Scholarship&	1856	1241	66.86
EBC	state Government			
PH	Nil			
	Academic Yea	ar 2012-13		_
SC/ST	Free ship/ Scholarship			
Minority				
NT, OBC,SBC &	Free ship/ Scholarship&	1885	1294	68.64
EBC	state Government			
PH	Nil			
	Academic Yea	ar 2013-14		_
SC/ST	Free ship/ Scholarship			
Minority				
NT, OBC,SBC &	Free ship/ Scholarship&	1851	707	38.19
EBC	state Government			
PH	Nil			

#### 5.1.4 What are the specific support services/facilities available for?

#### Students from SC/ST, OBC and economically weaker sections

- ➤ The students belonging to SC/ST/OBC avail the Scholarship / free ship as provided by the Government.
- Institute has book bank facility for the SC/ST students for free of cost. Under this scheme, library issues additional books/references to students
- Institute offers prizes/ scholarships to meritorious students.
- ➤ Institute is running "Earn and Learn Scheme". Under this scheme around one hundred economically weaker students get the benefit and approximately 25 lacs rupees invested for the same scheme.

#### Students with physical disabilities

- ➤ Seats are reserved in the college buses for students who are differently abled.
- Facilities for ease of mobility such as ramps, hand railings, etc. are provided. Institute is in the process of installing elevator facility for the same
- ➤ In the classrooms the seating arrangement is made in such a way to provide ample legroom and comfort.
- ➤ Wherever required, scribe is provided to the students to assist in writing examination.
- Extension in time is given to students for completion of the written exams by 30 min in case of 3 hours exam and 45 min in case of 4 hours exam.
- ➤ The amenities such as toilets are constructed for ease of access to differently abled students.
- ➤ Braille keyboards are provided for the visually challenged students.

#### **Overseas students**

Presently there are no overseas students in the institute.

### Students to participate in various competitions National and International

- ➤ Institute organizes various technical and non-technical events to develop critical thinking, creativity among students, by organizing "OLYMPUS" a national level symposium of various technical activities.
- Institute motivates and provides financial support to students to participate in national and international level workshops, project competitions, conferences, training courses etc.

#### Medical assistance to students: health centre, health insurance etc.

- The institute has signed MoU with a full time doctor to provide medical assistance to students. The campus is also availed with dispensary.
- The emergency vehicle is available 24x7 in campus.
- ➤ Every department is availed with first-aid kits for providing emergency care or treatment.
- > Students are provided health insurance

#### Organizing coaching classes for competitive exams

The Training and Placement cell identifies the need and provides the training through internal and external agencies to the students. Mock Personal Interview & Technical interview sessions are run through in house faculty. The institute also organizes guidance sessions to students for higher education through expert talks. MoUs have been signed with professional GATE training institutes for training students from third year Engineering itself. Training is provided for preparation of competitive exams such GRE, TOFEL, etc..

#### Skill development (spoken English, computer literacy, etc.)

Following are the skill development programmes conducted at the institute presently:

Table No. 5.1.4 Details of Skill development programmes

Sr. No.	Name of the Skill Development	Objective	Goal
110.	Programme/Course		
1.	Entrepreneurship Awareness Camp (EAC)	With the growing needs at state, national and global level in self-employment, Institute conducts EAC to bring awareness about the methods and ways to start business. Students are guided about the financial avenues at their disposal. Institute supports this course financially.	Students must identify legal issues affecting development, ownership and operation of companies

Sr. No.	Name of the Skill Development	Objective	Goal
	Programme/Course		
2.	Communication Improvement Programme (CIP)	In the global era, communication plays a vital role in the employability of the graduates. Having understood this need, an indigenous Communication Improvement Programme (CIP) curriculum has been designed	100% students must participate in CIP. At the end of course, students must be proficient in the usage of grammar such as tenses, verbs, direct and indirect speech, passive and active voice, etc.
3.	Aptitude Training Programme	The objective of this programme to prepare the students for aptitude and logical reasoning tests of the companies	Students must show an ability to get qualified in the pre-placement aptitude tests
4.	ANSYS	The objective of the training is to enable the students to learn ANSYS software used for prediction and analysis of behavior of components/products in real life situation.	At the end of the course, students must demonstrate proficiency in using ANSYS software.
5.	CATIA	The objective of this program is to familiarize the students with CATIA program. CATIA is used to model product and to do so in the context of product behavior	At the end of the course, students must demonstrate the ability to design products using CATIA software.
6.	AUTO CAD	The objective of this course is to impart the knowledge of AUTO CAD to students	Students must be able to use AUTO CAD for orthographic and isometric drawings.
7.	Total Station training	The <b>total station</b> is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point. The objective of training is to empower and enhance the knowledge of students on the field.	Students must be able to use Total Station for Surveying
8.	STAAD.Protraining	STAAD.Pro is a modeling and analysis software. allows structural engineers to analyze and design virtually any type of structure through its flexible modeling environment, advanced features and fluent data collaboration. The objective of this training is to impart the knowledge of this STAAD.Pro to students	At the end of the course, students must demonstrate the ability to use STAAD.Pro for analysis and design of structures.

Sr. No.	Name of the Skill Development Programme/Course	Objective	Goal
9.	Soft skill development training	To impart the soft skills necessary for employability	At the end of the course, students must demonstrate an understanding of the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people.
10.	Personality Development Programme	The objective of this program to increase the confidence and bring out best personality traits in the students resulting in better employability and aptitude for life-long learning.  Books and other learning resources are provided by the institute.	Students must develop the ability for life-long learning and develop better personality traits resulting in better employability.
11.	REANU's Training programme for Under-Graduate Projects	The objective is for the students to learn to design electronic circuits for real life applications.	At the end of the training the students must demonstrate the ability to design electronic circuits for the projects allotted to them.
12.	Pre-Placement Training	Classes are conducted to improve their performance in the placement interview byempowering students with Pre-Placement skills to get better placed.	At the end of the training students must demonstrate skills and capabilities of succeeding in campus interviews.
13.	Nihilent's Students Skill Enhancement Programme	The objective of this training is to enhance the knowledge of the students for solutions on framework and tools for industry relevant problems.	At the end of the training, the students must demonstrate the knowledge of solutions to industry relevant problems.

#### **Support for "slow learners"**

- ➤ The slow learners have been given additional inputs like practices of basics of mathematics, extra classes for difficult subjects before or after college hours.
- Many motivational lectures are organized for the students. Individual counselling by heads of the departments, class teachers and subject teachers is carried out.
- ➤ Institute is having well defined mentoring system. A batch of 15-20 students is allocated to each proctor teacher. Mentor counsels them every day.

### Exposures of students to other institution of higher learning/ corporate / business house etc.

- The students are encouraged to attend national and international seminars, workshops and symposium, conducted at various colleges & universities
- ➤ Guest lectures by eminent speakers are organized to help the students to keep pace with the recent developments in their subjects.
- ➤ Industrial visits are also helping them keep in touch with the latest developments.
- Organizing coaching classes for competitive exams
- > GATE exam preparation and guidance.
- MOUs with various institutes and industries.

#### **Publication of student magazines**

- > Students are encouraged to contribute to the College Magazine (Explorer)
- > SVERIAN
- Departmental News letter

### 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

Institute has EDC (Entrepreneurship Development Cell) which has been established since last **two** years. Entrepreneurship awareness program is conducted to the interested students through the MCED (Maharashtra State Cell for Entrepreneurship Development). Students get every detail about entrepreneurship through the experts from necessary field like finance, marketing research and others. The students get exposure from guest lecture about entrepreneurship. In order to see actual industry, to get practical exposure industrial visit are organized.

### > The Impact of the these efforts: Professionalism has been instilled in students

- 5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, quiz competitions, debates and discussions, cultural activities etc.
  - ➤ The institution is providing financial support for transportation, entry fee payment to participate in the sports competitions. The students are given permission to practice for the competitions.
  - ➤ The institution has supportive environment to encourage students to participate in activities of their interest.
  - ➤ The cultural and sports committees give opportunities to students to display their talents. The institution also promotes the participation of the students in intercollegiate competitions.
  - > Entry fee for competitions and conveyance allowance is borne by the institution

- ➤ The student who has performed in annual gathering 'GLANCE' and annual sport "KURUKSHETRA" is also honored by certificate and memento.
- ➤ In Annual sport "General Championship" is given to any one department as per performance and participation in various sport games.
- > Exemption from the internal tests and attending classes during the tournaments.
  - Retest is carried out for respective students
- Remedial and Make-up classes are conducted.

#### **Sports**

- > Sport kits are provided.
- ➤ Sports material for Cricket, Hockey, Volley Ball, and Football etc. is provided.

#### **Cultural Activity**

- The college also organize an annual cultural event called "BEATS". It is an inter-collegiate cultural festival, which is a platform for students to show their cultural talents. Traditional days, fun fairs.
- ➤ Institute has started Mock parliament Mock Security Council for every department, students participates in this activity & demonstrates their communication skills, leadership skills.

#### **Debates and discussions**

- ➤ GD sessions in regular Time Table: In order to develop students' general awareness, increase their reading & analytical thinking ability, college organizes Group Discussions in time table.
- 5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT /GRE /TOFEL / GMAT / central / state services, defense, civil services etc.
  - Institution has a key focus in motivating students for higher studies or research career. Many students from this institution have gone for higher studies in various IITs & NIITs'.
  - ➤ The institution also arranges special coaching for preparation of GATE, from professional trainers. Institute also arranges coaching classes for GRE, CAT, and TOFEL for interested students.
  - The Indian Army and Indian Navy SSB prescreening interview preparation sessions are being organized time to time. Institute organizes regular Aptitude classes are arranged so students get benefit from classes. The institute has Competitive Exam Section where students get books for the preparation for competitive exams.

Table No. 5.1.7 Details of students shortlisted in Indian Army

Academic Year	2010-11	2011-12	2013-14	2014-15
No. of Students Appeared	66	150	87	
No. of Students Shortlisted	42	15	07	

Table No. 5.1.7.1 Details of students shortlisted in Indian Navy

Academic Year	2010-11	2011-12	2013-14	2014-15
No. of Students Appeared			58	87
No. of Students Shortlisted			16	35

5.1.8 .What type of counselling services are made available to the students (academic, personal, career, psycho-social etc?) give details?

All the students of the college benefit from academic, personal and psychosocial support and guidance services in the following manner:

#### **Proctor Teacher:**

- A group of 20 students are allotted to one proctor teacher
- > Proctor teacher is a mentor to the students of his/her proctor batch
- Each day the students of the batch spend about one hour with the proctor teacher who guides the students on all fronts and makes the students get involved in activities for their development.
- ➤ Due to everyday interaction and the small size of the proctor batch, students who need personal or psycho-socio assistance easily approach the proctor teacher.

#### **Class Coordinators:**

- Each class has a Class Coordinator (CC)
- CC will act as a friend, philosopher and guide to the students
- CC will keep track of the ac academic performance of the students and send the progress report of the students to the parents for all internal assessments and also end semester assessment.
- > CC will also monitor the attendance of the students in their class. If any student lags or shows deviation in his/her academic and attendance, the students will be counseled and appropriate actions are initiated
- > Students who require any personal guidance approach the CC for assistance to overcome their difficulties.

#### **Head of the Department (HOD)**

➤ Head of the Department conducts meetings with the students to motivate them at least once in each semester by visiting their classes.

#### Dean, Students

➤ Dean, Students acts as a proctor and student liaison for the entire Institute. Students with severe problems that cannot be dealt at departmental level are recommended to Dean, Students. One to one counseling of the students will help to serve the students better

#### **Counselor (External)**

In addition, Institute has hired external counseling services of Dr. Sangeeta S. Patil, Psychological counselor for providing required help to the students with acute psychological problems.

Table No. 5.1.8 Counseling system to help at individual level

Mentoring by	Type of counseling	Number of students	Frequency of meeting
Dean, Students	Personal, General and Psychological	One at a time	As per the need
Head of	General, spiritual and	Approximately 70	Twice in a
Department	academic awareness	at a time	semester
Class coordinator	About discipline and general behavior	Approximately 70	At least four times in a semester
Proctor Teacher	Personal, technical difficulties, general problems ,etc	20	Daily
Psychologist	Sevier Psychological problems such depression, stress, etc.	One at a time	As per need

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If yes, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and programmes).

Yes, Institute has the structured mechanism for career guidance and placement for its students under the leadership of Training and Placement Officer. The training and placement cell has two representatives as coordinators from each branch. The cell indentifies the need and provides the training through internal and external agencies to the students in subjects like.

- > Training and placement cell trains the students from FE to BE / MBA students.
- ➤ Language lab/ CIP sessions.
- > Aptitude session
- > Personality development sessions
- ➤ GD sessions
- > Technical sessions
- ➤ Moodle sessions
- ➤ Interview sessions

#### **Training and Placement facility**

- ➤ A dedicated Training and Placement cell is working round the year to provide efficient, effective training and employment opportunities for all students.
- ➤ The T& P Cell is equipped with state of art instruments and database is secured & maintained properly.
- ➤ Regular Aptitude, Verbal, Behavioral, Communication skills tests conducted and evaluated regularly.
- ➤ Technical Competency is increased through technical sessions from the professionals.
- ➤ Language laboratory sessions are conducted to increase language skills.

### 5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes, the institute has a grievance redressal mechanism for the complaints from the students. The following list describes the nature of complaints received and redressed during the last four years.

- ➤ Complaints of students about misbehavior (fighting from their classmates or other students)
- > Complaints about disturbance in classes by students
- > Complaints about misbehavior of students in classes by the teacher
- > Complaints of students about teachers' rudeness
- > Complaints of students about mess

Issues of the above nature were taken up in the meetings of grievance redressal committee meeting which is called as per need. Issues are redressed after thorough discussion and unanimously solutions were sought to the problems and punishments were given as the case may be.

### 5.1.11. What are the institutional provisions for resolving issues pertaining to sexual harassment?

#### **Restrain of Sexual Harassments Committee**

ShriVithalEducation and Research Institute's College of Engineering, Pandharpur has adopted the guidelines in Compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 ("Sexual Harassment Act") and guidelines laid down by the Supreme Court of India in its 13 August 1997 and constituted a committee for restraint of sexual harassment.

#### The objectives of the Committee are:

- ➤ To Prevent discrimination and sexual harassment against women, by promoting gender harmony among students and employees;
- > To Deal with cases of discrimination and sexual harassment against women, in a time
- bound manner, aiming at ensuring support to the victimized and termination of the
- harassment
- ➤ To Recommend appropriate disciplinary action against the guilty party to the Principal/Management

The Committee seeks to achieve these goals through: Dissemination of Information: Through production, distribution and circulation of printed materials, posters and hand-outs.

The institute organizes awareness Workshops about on women empowerment and laws for the same for faculty, non-teaching staff and students. The aim is to develop nonthreatening and non-intimidating atmosphere of mutual learning.

So far, no incidences of such nature have occurred in the institute.

Table No. 5.1.11 Committee to Restrain of Sexual Harassment for the Academic Year 2014-15

C		ear 2014-15			
Sr. No.	Name and Address of the Member	Phone Number	Designation	Gender	Status
1.	Mrs. S. V. Yadgiri 'Yadgiri' Bungalow, Station Road, Pandharpur-413304, Dist-Solapur.	9890643599	President	Female	Social Worker
2.	Mrs. D. K. Ghadge 'Tulajayi', ITI Road, Pandharpur-413304, Dist-Solapur.	9422025958	Member	Female	Advocate
3.	Adv. Sou. R. A. Jadhav ArvindDham, Manisha Nagar, Pandharpur. Dist-Solapur	9423591849	Member (NGO)	Female	Secretary, Indian National Human Development Integrative Association, Pandharpur
4.	Dr. Mrs. M. M. Patil Vishnu Priya, HariPooja Residency, Wakhari Road, Pandharpur - 413304, Dist- Solapur.	9545553654	Member	Female	Associate Professor (ENTC Department)
5.	Dr.S.M.Mukane Plot No.23, S.No.61/1, Isbavi, Near Shahanai Garden and New Water Tank, Karad Road, Pandharpur-413304.	9545552899	Member	Male	Dean, Administration
6.	Prof.P.D.Bansode A/P. Khandali, Near Ram Mandir, Tal. Malshiras, Dist. Solapur.	9545553889	Member	Male	Assistant Professor (FE Department)
7.	Miss. Supriya U. Sawant Girls' Hostel, Engineering College Campus, Gopalpur- Ranjani Road, Gopalpur, Pandharpur-413304 Dist-Solapur.	-	Student Member	Female	T.E. (ENTC-A)
8.	Mr. Amar B. Chinchkhede Boys' Hostel, Engineering College Campus, Gopalpur- Ranjani Road, Gopalpur, Pandharpur-413304 Dist-Solapur.	-	Student Member	Male	B.E. (Mech.)
9.	Dr.B.P.Ronge Plot No. 16, Gat No. 58, Golden Colony, GendVasti, Karad Road, Pandharpur-413304, Dist-Solapur.	9545193434	Member Secretary	Male	Principal

## 5.1.12 Is there an anti-ragging committee? How many instances (if any) hav been reported during the last four years and what action has been taken on these?

Yes, the institution has an anti-ragging committee. The committee comprises faculty members, students and societal members to make ragging free campus. The Principal/ Dean students conduct anti- ragging sessions for all the students where ill effects of ragging are read out & all students are advised to keep themselves away from such disease. In spite of this strict monitoring are there in each corner of this institution to protect first year students from ragging. The students have to fill up an affidavit at the time of admission declaring that they shall never participate in ragging.

#### Not acase of ragging has been reported/detected during last four years.

#### **Anti-Ragging Committee:**

The basic aim of the committee is to make a ragging free environment. The members of the committee keeps vigilance throughout the campus and hostels to prevent any ragging activities of the students. If any ragging case is observed, the committee examines and recommends appropriate punishment to the candidate who is involved with ragging. Anti- ragging campaign is made through display of banners at all important places in and around the campus.

Table No. 5.1.12 Anti-Ragging / High Level Standing Committee

Sr.No.	Name	Designation	Status
1.	Dr.B.P.Ronge, Secretary of	Principal, College of	Chairman,
	the Trust	Engineering	Ex-officio
2.	Mr. GajananGurav	Tahsildar, Pandharpur - Civil	Member
		Administration Representative	
3.	Mr. DilipJadhavSaheb	Senior Police Inspector- Police	Member
		Administration Representative	
4.	Mr.AbhirajUbale	Representative of Media	Member
5.	Mr.S.S.Lendave	Vice-President, Nehru	Member
		YuvaSangharshSamiti-	
		Representative of NGO working	
		for Youth	
6.	Mr.N.P.Joshi	Parents' Representative	Member
7.	Dr.Ms.M.M.Patil	Dean, Students	Member Ex-officio
8.	Dr.P.M.Pawar	Dean, R & D	Member Ex-officio
9.	Dr.S.M.Mukane	Dean, Administration	Member Ex-officio
10.	Dr. SrideviDileep	Dean, Academics	Member Ex-officio
11.	Prof.P.S.Kachare	HOD, Mechanical Engineering	Member Ex-officio
12.	Prof.M.S.Mathpati	HOD, Electronics and	Member Ex-officio
		Telecommunication Engineering	
13.	Prof.A.R.Pawar	HOD, Computer Science	Member Ex-officio
		Engineering & Information	
		Technology	
14.	Prof.M.M.Pawar	HOD, Civil Engineering	Member Ex-officio
		& Chief Rector	
15.	Dr.S.A.Lendave	HOD, First Year Engineering	Member Ex-officio
16.	Prof.C.C.Patange	HOD, MBA	Member Ex-officio

Sr.No.	Name	Designation	Status
17.	Mr.R.G.Zarkar	Registrar	Member
18.	Miss. Ujwala A. Sale	B.E. (ENTC) DivA	Student Member
19.	Mr. Sourabh S. Nikam	B.E. (Mech.) DivA	Student Member
20.	Mr. Ajit S. Parade	S.E. (ENTC) DivA	Student Member
21.	Mr. Vijay B. Dhage	B.E. (ENTC) DivB	Student Member
22.	Mr. Pavan V. Pawar	B.E. (Mech.) DivA	Student Member
23.	Mr. Desai S. Jaysing	B.E. (Mech.)	Student Member

### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

- Earn and Learn scheme for the economically weaker students
- ➤ Provision of giving scholarships/ fee waiver schemes by the management.
- ➤ Book Bank scheme at nominal charge.
- > Cash award for semester toppers
- > Best outgoing student award
- ➤ Placement assistance for existing and passed out students

## 5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

Yes

Institution has a registered Alumni Association. Institute interacts with Alumni through the alumni cell time to time. The Alumni cell comprises faculty in charge from each department. Every year institute updates Alumni information. The alumni members share their opinions and technical skills with the current students. They provide references for placements. Alumni share their ideas for projects. The Institute organizes "Alumni Meet" (Runanubandh) programs to reunite the pass out students every year.

Table 5.1.14 Alumni Association Meetings in the last four years

Sr.no	Name of the Association	Duration & Year	No. of students participated
1	Alumni Association of	One Day	136
	College of Engineering,	2013-14.	
	Pandharpur		
2	Alumni Association of	One Day	90
	College of Engineering,	2012-13	
	Pandharpur		
3	Alumni Association of	One Day	83
	College of Engineering,	2011-12	
	Pandharpur		
4	Alumni Association of	One Day	88
	College of Engineering,	2010-11	
	Pandharpur		

- ➤ The Alumni meet was held in 2013-2014
- ➤ The Alumni meet was held in 2012-2013
- ➤ The Alumni meet was held in 2011-2012
- The Alumni meet was held in 2010-2011

- The alumni identified areas where they could contribute to the development of the institution. Contribution of alumni to the growth/development of the institution:-
- ➤ The alumni of the college are roped in to lend their professional expertise. Alumni who are now professional hold workshops, expert talk and training programs for the students.
- > The alumni also give their valuable inputs regarding improvement in the infrastructure and administration.

Table No. 5.1.14.1 List of workshops, expert talk and training programs by Alumni in the last two years

Sr. No.	Date	Name of Alumni	Topic
1.	14.01.2015	Ms. Ankita Singh	Importance of GATE
2.	28.09.2014	Ms. SumedhaPatil	Career Guidance
3.	28.08.2014	Mr. Akshay Sane	Career Development
4.	24.03.2013	Mr. PrabhuDayal	Career Development
5.	24.03.2013	Mr. AvinashKamble	Career Development
6	24.03.2013	Mr. RohitPatil	Career Development
7.	08.01.2013	Mr. VirunJakka	Career Opportunities

#### **5.2 Student Progression**

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.

Table No. 5.2.1 Percentage of students progressing to higher education and employment

Student Dueguessien	Branch	Year			
Student Progression	Dranch	2010-11	2011-12	2012-13	2013-14
	MECH	18	21	7	21
Highan Studios	EXTC	9	20	8	5
Higher Studies	CSE	14	20	44	5
	CIVIL	NA	28	30	16
	MECH	83	78	70	80
Employment	EXTC	78	80	86	50
<ul><li>Campus Selection</li><li>Other than campus</li></ul>	CSE	72	77	81	82
recruitment	CIVIL	68	60	26	57
	IT	NA	69	70	63

5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

Table No. 5.2.2 Details of programme wise pass percentage of UG students.

Sr.no	Year	Course	No. of students Admitted	No. of students pass of final year	Percentage of pass students (%)
1.	2009-2010		158	119	75.31
	2010-2011	Mechanical	158	119	75.31
	2011-2012	Engineering	156	108	69.23
	2012-2013		169	109	64.5
2.	2009-2010	Electronics & Telecommunication Engineering	71	32	45.02
	2010-2011		96	36	37.5
	2011-2012		123	55	44.71
	2012-2013		126	45	35.71
3.	2009-2010		104	32	78.86
	2010-2011	Computer Science and Engineering	138	86	62.31
	2011-2012		149	79	53.2
	2012-2013		136	78	56.52
4.	2011-2012	Information	68	47	69.11
	2012-2013	Technology	36	29	80.55
5.	2011-2012	Civil Engineering	114	60	52
	2012-2013		83	40	48

Table No. 5.2.2.1 Details of pass percentage of PG students

Course	Year	No. of	No. of students	Percentage of
		Students	pass (Final Year)	pass Students
		Admitted	1 ( )	(%)
	May 2010-11	18	09	50
Mechanical	May 2011-12	18	04	22.2
Engineering-	May 2012-13	17	01	5.8
Design	May 2013-14	17	00	00
Mechanical	May 2010-11	-	-	-
Engineering-	May 2011-12	11	03	27.2
CAD/CAM	May 2012-13	14	05	35.7
	May 2013-14	09	00	00
Electronics &	May 2010-11	17	09	52.9
Telecommunicat	May 2011-12	18	09	50
ion Engineering	May 2012-13	18	02	11.1
	May 2013-14	15	-	-
Computer	May 2010-11	-	-	-
Science &	May 2011-12	17	07	41.1
Engineering	May 2012-13	17	03	17.6
	May 2013-14	17	-	-
Civil Structure	May 2010-11	-	-	-
	May 2011-12	17	02	11.7
	May 2012-13	18	00	00
	May 2013-14	16	00	00
Master In	2009-2010	53	52	98
Business	2010-2011	27	20	74
Administration	2011-2012	11	10	91
	2012-2013	23	09	39

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The Institution is constantly engaged in encouraging the students towards successful completion of their courses and progression to higher level of education and employability. In pursuance of this aim, the college takes the following skill development and other training programmes are conducted by the institute.

Table No. 5.2.3 Details of Skill development programmes conducted by the institute

S. No.	Name of the Skill	Objective	Goal
	Development		
	Programme/Course		
1.	GATE training	In order to train the students to get admissions to institutes of higher learning and also to improve employability	Students must possess and demonstrate technical ability and become eligible for higher education and / or jobs.
2.	Entrepreneurship Awareness Camp (EAC)	With the growing needs at state, national and global level in self-employment, Institute conducts EAC to bring awareness about the methods and ways to start business. Students are guided about the financial avenues at their disposal. Institute supports this course financially.	Students must identify legal issues affecting development, ownership and operation of companies
3.	Communication Improvement Programme (CIP)	In the global era, communication plays a vital role in the employability of the graduates. Having understood this need, an indigenous Communication Improvement Programme (CIP) curriculum has been designed	100% students must participate in CIP. At the end of course, students must be proficient in the usage of grammar such as tenses, verbs, direct and indirect speech, passive and active voice, etc.
4.	Aptitude Training Programme	The objective of this programme to prepare the students for aptitude and logical reasoning tests of the companies	Students must show an ability to get qualified in the pre- placement aptitude tests
5.	ANSYS	The objective of the training is to enable the students to learn ANSYS software used for prediction and analysis of behavior of components/products in real life situation.	At the end of the course, students must demonstrate proficiency in using ANSYS software.

S. No.	Name of the Skill	Objective	Goal
	Development Programmo/Course		
6.	Programme/Course CATIA	The objective of this program is to familiarize the students with CATIA program. CATIA is used to model product and to do so in the context of product behavior	At the end of the course, students must demonstrate the ability to design products using CATIA software.
7.	AUTO CAD	The objective of this course is to impart the knowledge of AUTO CAD to students	Students must be able to use AUTO CAD for orthographic and isometric drawings.
8.	Total Station training	The <b>total station</b> is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point. The objective of training is to empower and enhance the knowledge of students on the field.	Students must be able to use Total Station for Surveying
9.	STAAD.Protraining	STAAD.Pro is a modeling and analysis software. allows structural engineers to analyze and design virtually any type of structure through its flexible modeling environment, advanced features and fluent data collaboration. The objective of this training is to impart the knowledge of this STAAD.Pro to students	At the end of the course, students must demonstrate the ability to use STAAD.Pro for analysis and design of structures.
10.	Soft skill development training	To impart the soft skills necessary for employability	At the end of the course, students must demonstrate an understanding of the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people.
11.	Personality Development Programme	The objective of this program to increase the confidence and bring out best personality traits in the students resulting in better employability and aptitude for lifelong learning.  Books and other learning resources are provided by the institute.	Students must develop the ability for life- long learning and develop better personality traits resulting in better employability.

S. No.	Name of the Skill Development Programme/Course	Objective	Goal
12.	REANU's Training programme for Under-Graduate Projects	The objective is for the students to learn to design electronic circuits for real life applications.	At the end of the training the students must demonstrate the ability to design electronic circuits for the projects allotted to them.
13.	Pre-Placement Training	Classes are conducted to improve their performance in the placement interview byempowering students with Pre-Placement skills to get better placed.	At the end of the training students must demonstrate skills and capabilities of succeeding in campus interviews.
14.	Nihilent's Students Skill Enhancement Programme	The objective of this training is to enhance the knowledge of the students for solutions on framework and tools for industry relevant problems.	At the end of the training, the students must demonstrate the knowledge of solutions to industry relevant problems.

## 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out

Faculty members of various departments identify the academically weaker students (through class test, mid-term test and university results) during the course or program and provide mentoring to them.

- Special remedial classes and coaching classes are conducted for the Institute evaluates the performance of students continually through class tests, assignments, unit tests, project, etc. Based on their performance, students at risk of drop out are identified and special measures are taken to cater to their learning needs and their skills.
- If a student does not attendclasses regularly, class teacher makes phone calls to the parents of such students and understand the problem(s)/reason(s) and further letters are also sent to the parents. Parents of such students are also counseled to ensure support to the student. Currently very negligible percentages of students have dropped out of college.
- Practice sessions are taken after the college hours and one to one attention is given to such students.
- Counseling facility is made available to students to motivate them by bringing a change in their attitude towards learning.
- Faculty members are available in the night study sessions and also make hostel visits during the semester and during the preparatory leave period, to clear the doubts of the students.
- For the students who underperform in the final examinations, special remedial classes are conducted for improving their performance.
- Support is extended to students coming from economically weaker sections through Earn and Learn facility initiated by the institute. Hostel accommodation expenses and food bills are borne by the Institute and the student will have to do some generic work of about 2-3 hours per week in return.
- Drop-out rate from the programme is very negligible.

#### 5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

Institute is providing platform to student community for participating in sport activities. Institute facilitates coordination of sport events and activities through organization, selection and participation. Institute organizes activities like "Glance", It is an institute level interclass sports event consisting of day/evening /night matches of various sports such as cricket, basketball, badminton, kho- kho, Kabbadi, volley ball, etc.

Table No. 5.3.1 Sport facilities

Sr. No.	Facility	Dates in the last three years
1 2	GLANCE 2K12, 2K13, 2K14 Cricket Ground and accessories Basketball court and accessories	23/1/2012 To 24/1/2012
3 4 5	Volleyball court and accessories Football ground and accessories Kho-Kho ground and accessories	25/1/2013 To 26/1/2013
6 7 8 9	Badminton court and accessories Kabaddi ground and accessories Chess accessories Carom board and accessories	25/1/2014 To 26/1/2014

#### **Details of the accessories provided:**

- Accessories of cricket includes Bats, Ball, Kit, Gloves, Shoes, Pads, caps, helmets and guards.
- Accessories of Basketball includes Basketball Hoops&Basketballs
- Accessories of Volleyball includes Volleyballs, Volleyball Knee Pads
- Accessories of Football includes Footballs, Football Gloves
- ➤ Accessories of Badminton includes Badminton rackets, shuttle bats, shuttlecock, grips, nets
- > Accessories of Chess includes Chess Sets
- > Accessories of carom includes like carom board stand, carom coins, carom
  - striker, carom board cover, carom powder

#### Co-curricular and Extracurricular Activities

Given below is the list of co-curricular and extra-curricular events organized in the institute.

Table No. 5.3.1.1 List of Co-curricular and extra-curricular activities

Sr. No.	Event	
1	"Olympus" – A National Level Technical Symposium	
2	"KSHITIJ" – A State Level Project Competition	
3.	"ELITE" - A department level activity	
4.	"MESA" - A department level activity	
5.	"CESA" - A department level activity	
6.	"ICON" - A department level activity	
7.	"ACENT" - A department level activity	

#### 1) NSS ACTIVITIES CONDUCTED:

Table No. 5.3.1.2 Details of NSS activities conducted Academic Year 2014-15

Sr. No.	Activity	Date
1	Water Distribution Camp in ASHADI WARI	9/7/2014 and 10/7/2014
2	Tree Plantation	04/08/2014
3	Blood Donation Camp on the Occasion of Engineer's Day.	15/09/2014

#### Table No. 5.3.1.3 Details of NSS activities conducted Academic Year 2013-14

Sr. No.	Activity	Date
1	Water Distribution Camp in AshadiWari	10/07/2013 and 11/07/2013
2	Sadbhavana Divas	20/08/2013
3	Tree Plantation	26/08/2013
4	Blood Donation Camp on the occasion of Engineer's Day.	15/09/2013
5	Rally on the occasion of Swami Vivekananda Jayanti.	12/01/2014
6	Blood Donation Camp on the occasion of Shiv Jayanti and Janjagruti on "To Save Girl Child"	19/02/2014
7	Poster presentation on Social Issues and Exhibition on Ill effects of tobacco, guthaka, alcoholic drinks	14/04/2014

### Table No. 5.3.1.4 Details of NSS activities conducted Academic Year 2012-

Sr. No.	Activity	Date
1	Water Distribution Camp in AshadiWari	29/06/12 to 30/06/2012
2	Blood Donation Camp on the occasion of Engineer's Day.	15/09/2012
3	NSS Camp organized at Solapur University, Solapur	25/12/2012 to 31/12/2012
4	Rally on the occasion of Swami Vivekananda Jayanti.	12/01/2013
5	Blood Donation Camp on the occasion of Shiv Jayanti.	19/02/2013

#### Table No. 5.3.1.5 Details of NSS activities conducted Academic Year 2011-12

Sr. No.	Activity	Date
1	Water Distribution Camp in AshadiWari	10/07/2011 and 11/07/2011
2	Blood Donation Camp on the occasion of Engineer's Day.	15/08/2011
3	Blood Donation Camp on the occasion of Shiv Jayanti	19/02/2012
4	Cleaning of Chandrabhaga River Surrounding	20/07/2012

#### 2) CULTURAL ACTIVITIES CONDUCTED:

Table No. 5.3.1.6 Details of cultural activities conducted Academic Year 2014-15

2011.10			
Sr. No.	Activity	Date	
1.	Independence Day	15/08/2014	
2.	Foundation Day	17/08/2014	
3.	Teachers' Day	05/09/2014	
4.	Engineers' Day	15/09/2014	

Table No. 5.3.1.7 Details of cultural activities conductedAcademic Year 2013-14

Sr. No.	Activity	Date
1	A session on Superstition by Sham Manav	08/01/2014
2	Republic Day	26/01/2014
3	BEATS 2K14	25/01/2014and 26/01/2014
4	Birth Anniversary of Dr. BabasahebAmbedkar& Prize Distribution Ceremony.	14/04/2014
5	Birth Anniversary of Swami Vivekananda	15/01/2014
6	Birth Anniversary of Mahatma Gandhi	2/10/2013
7	Foundation Day	17/08/2013
8	Independence Day	15/08/2013
9	Engineers' Day	15/09/2013
10	Teachers' Day	05/09/2013

Table No. 5.3.1.8 Details of cultural activities conducted Academic Year 2012-13

Sr. No.	Activity	Date
1	Republic Day	26/01/2013
2	BEATS 2K13	25/1/2013and 26/01/2013
3	Birth Anniversary of Dr. BabasahebAmbedekar	14/04/2013
4	Birth Anniversary of Swami Vivekananda	15/01/2013
5	Birth Anniversary of Mahatma Gandhi	2/10/2012
6	Foundation Day	17/08/2012
7	Independence Day	15/08/2012
8	Engineers' Day	15/09/2012
9	Teachers' Day	05/09/2012

Table No. 5.3.1.9 Details of cultural activities conducted Academic Year 2011-12

Sr. No.	Activity	Date
1	Republic Day	26/01/2012
2	BEATS 2K12	23/01/2012 and 24/01/2012
3	Birth Anniversary of Dr. BabasahebAmbedkar and Prize Distribution Ceremony	14/04/2012
4	Birth Anniversary of Swami Vivekananda	15/01/2012
5	Birth Anniversary of Mahatma Gandhi	2/10/2011
6	Foundation Day	17/08/2011
7	Independence Day	15/08/2011
8	Engineers' Day	15/09/2011
9	Teachers' Day	05/09/2011

5.3.2 Furnish the details of major student achievements in co curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Table No. 5.3.2 Details of Major achievements at University level

Sr.No	Year	Name of Student	Class	Event	Position/Rank
1	2011-12	1.Ms.Apharin Pathan	TE-IT	High jump	1
		2. Ms.Apharin Pathan	TEIT	Discs Throw	2
		3.Boy's (team)		Chess	Runner up
2.	2012-13	1. Ms.Apharin Pathan	BE IT	Discs Throw	Gold Medal
		2.Ms.Apharin Pathan	BE IT	High jump	Silver Medal
		3.Ms. Durga Gosavi	BE	Kho-Kho	Selected in solapur
			CSE		university Kho-Kho
					team
3.	2013-14	1. a.Mr.LondheDigamber	SE	Mallkhamb	Winner
		b .Mr.PawarNilesh	MECH		
		c.Mr.JadhavAbhijit			
		d.Mr.Tavaskar Nikhil			_
		2.Women Kho-Kho team		Kho-Kho	Runner up
		3.Mr.Bhakare Vikas		Lawn Tennis	Runner up
				(men)	
4	2014-15	1.Mr.Mahadev Fulari	BE	Best	Winner
		2)( G 1: D 1 1	MECH	Physique	D
		2.Ms.Sayali Bobade	SE MECH	Boxing (42-	Runner up
		2 Ma Canali Diadana a da	MBA	45 kg)	W.:
		3.Ms.Sonali Bhatungade	MBA	Boxing (45-	Winner
		4.Mr.Nagesh Tomakhe	BE	48kg) Boxing (69-	Winner
		4.MI.Nagesii Tomakiie	CIVIL	75kg)	W IIIIIei
		5.a.Mr.Londe Digamber	TE	Mallakhamb	Winner
		3.a.ivii .Londe Digamoei	MECH	ivianaknamo	VV IIIIICI
		b.PawarNilesh	TE	Mallakhamb	Winner
			MECH		
		c.JadhavAbhijit	TE	Mallakhamb	Winner
			MECH		
		d.Tawaskar Nikhil	TE	Mallakhamb	Winner
			MECH		

- 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?
  - An exit feedback is taken every year from the outgoing students. Their opinion on coaching and approach of lecturers, infrastructural amenities, library facilities, computing facilities, sports and games facilities, training facilities, support to placement activities, etc. are taken through this exit feedback. The feedback from the students are then compiled and analysed, and their suggestions are considered for the improvement and development of college.
  - ➤ College also collects feedback from Employees. Alumni who are working in different professional organizations give their feedback about the effectiveness of the academic training they underwent in the institution and orientation for career development they achieved from the institution. The alumni feedback is also taken. Similarly, employers who interact with the Placement cell give valuable inputs on student capabilities and competence.
- 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

The institute has publications like 'EXPLORER'; 'SVERIAN' to create a platform for the students' creative thinking. They focus on the socio cultural and academic issues. It encourages the students to sharpen their imagination. All the articles in the college magazine are written by students. Given below are some samples from each year for the past four years.

Table No.5.3.4 Sample Publications in 'EXPLORER' during 2013-14

Sr.	Student Name	Class and	Material/ Publcation
No.		Department	
1.	Mr. SudarshanSonavane	TE-CSE	Article on 'Rising From The Ashes'
2.	Mr. SagarKhare	SE-MECH	Article on 'The Bitter Taste Of Sugar'
3.	Ms. PallaviBhande	BE-IT	Article on 'What is a Life''
4.	Mr. Amar Lomte	SE-ENTC	Article on 'The First Paramvir Chakra'
5	Mr. AmitBhorpe	SE-Civil	Article on 'Creativity'

Table No. 5.3.4.1 Publications in 'EXPLORER' during 2012-13

Sr.	Student Name	Class and	Material/ Publcation
No.		Department	
1.	Mr. MangeshLinge	TE-MECH	Article on 'Effect of force frequency Increase
			On Depth of Cut'
2.	Mr. DileepNaik	TE-CSE	Article on 'Android Operating System'
3.	Mr. SomnathShirgire	TE-ENTC	Article on 'Google Glass''
4.	Mr. Vinod Kumar	TE-Civil	Literature on 'A Dream With a Dream'
5	Ms. ShaliniThorat	TE-CSE	Article on 'Graphical Password Authentication'

Table No. 5.3.4.2 Publications in 'EXPLORER' during 2011-12

Sr.	Student Name	Class and	Material/ Publcation
No.		Department	
1.	Mr. SumitMegdum	SE-CSE	Article on 'Photography'
2.	Mr. Mohan Biswas	BE-ENTC	Article on 'Life'
3.	Ms. SheteVrushali	TE-MECH	Article on 'Inspirations From Nature'
4.	Ms. Sanchali Paul	TE-IT	Literature on 'The Reason I Know'
5	Ms. PrajaktaKuchekar	SE-MECH	Article on 'Best Things In Life'

Table No. 5.3.4.3 Publications in 'EXPLORER' during 2010-11

Sr.	Student Name	Class and	Material/ Publcation	
No.		Department		
1.	Ms. RasikaThombare	SE-MECH	Article on 'Women Empowerment'	
2.	Ms. PramilaPawar	TE-CSE	Article on '8 Lies of Mother'	
3.	Ms. Pooja Singh	SE-ENTC	Article on 'Experience the Miracle of Life'	
4.	Mr. Tai Taigh	SE-Civil	Literature on 'Beginning of My Life'	
5	Ms. ArchanaShinde	SE-ENTC	Article on 'India 2020'	

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes, the college has a student Council.

#### **Constitution:**

Formation of Students' Council of our institution is conducted under section 40 of the Maharashtra Universities Act, 1994. Students' council is to be established every year during the first term.

The Students' Council for the institution is consist of the following members

- 1. Principal Chairman
- 2. One Lecturer nominated by the Principal;
- 3. National Service Scheme Programme Officer;
- 4. One student from each class, who has shown academic merit at the examination held in the preceding year and who is engaged in full time studies in the college nominated by the Principal;
- 5. Sports Co-coordinator
- 6. One student from each of the following activities, who has shown outstanding performance, nominated by the Principal namely:
  - i. Sports;
  - ii. National Service Scheme and Adult Education;
  - iii. Cultural Activities
- 7. Two Lady Students nominated by the Principal, Provided that, two of the students from the categories VI and VII shall be those belonging to the Scheduled caste or scheduled Tribes or Denotified Tribes (VimuktaJatis) or nomadic Tribes or other Backward Classes.

#### **Selection of Secretary of the Students' Council:**

The students' members of the above Council shall elect from amongst themselves, the Secretary of the Students' Council. It gives an opportunity for students to develop skills of good governance. As per the Maharashtra University Act (M. U.) 1994 clause 40 (3) and statue S.449, the election of the Secretary of the Students' Council is carried out ,according to the system of Proportional representation of single transferable vote at election meeting. The date of the election is fixed by the Vice Chancellor of Solapur University, Solapur every year. The detail Procedure and instructions for the election are provided by the Director of Students Welfare of Solapur University, Solapur through the relevant circulars time to time.

The elected name of the Secretary of the Students' Council is to be intimated to the Director of Students Welfare of SolapurUniversity, Solapur. The Secretary of the college Students' Council may be selected in University Students' Council of SolapurUniversity, Solapur.

#### **Activities of Students' Council:**

A Student Council is a representative structure for students only, through which they can be involved in the affairs of the institute, working in partnership with its management, staff and parents for the benefit of the institute and its students. The members' Students' Council (SC) is meant for the representation of the student community in the college. They are the interface between the students and the administration and work together to identify and address concerns that affect the students directly and indirectly. It represents the interests of the students and participates in discussions and decisions that affect the student community.

- 1) To conduct the election Secretary of the College Students' Council.
- 2) To conduct the meetings which involves students issuses that can contribute to improve the institute
- 3) To contribute in the planning of the academic activities throughout the year.
- 4) To develop the leadership skills of the Students
- 5) Planning of Cultural events like BEATS, Sport event like GLANCE etc.
- 6) To form the financial policies related to students issuses like industrial visits, projects, etc.
- 7) Planning and forming the policies for the national level paper presentation student event like Olympus.
- 8) To take the review about the syllabus completion of every class at the end of each semester through students members.

#### **Funding:**

Many activities of students' council and events related to students' development are funded by institute itself. Few activities like NSS or students university level programs may funded by Solapur University, Solapur.

### 5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The institution creates a platform for the involvement of the students in various academic, administrative and other activities. This empowers students to gain qualities of leadership and governance.

Table No. 5.3.6 List of Committees

S. No.	Name of the Committee
1	Student Council
2	Anti-Ragging/ High Level Standing Committee
3	Grievance Redressal Committee
4	Departmental Grievance Redressal Committee

S. No.	Name of the Committee
5	Committee to Restrain Sexual Harassment
6	ISTE Committee
7	Departmental Suggestion Box Committee
8	NSS Committee
9	MESA Committee
10	SAE Committee
11	Magazine Committee
12	Cultural Committee
13	Sports Committee
14	Green Team
15	Industrial Visit Coordination Committee
16	Discipline Committee
17	Department News Letter Committee
18	SVERIAN Committee
19	Earn and Learn Committee
20	Mess and Food Quality MaintenanceCommittee
21	Planning and Monitoring Committee
22	Human Resource Development Committee
23	Local Managing Committee

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and Progression which the college would like to include.

- > Training & Placement Cell has Alumni Cell which organizes Alumni meet every year.
- > Training & Placement Cell organizes guest lecture of alumni for students.
- ➤ Departments organize various workshops/ Seminars & training program by calling alumni as resource person for the same.
- ➤ Interaction with formers faculty member is done through inviting them as resource person for seminars and workshops
- ➤ Inviting them as external examiners

#### CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

#### **6.1 Institutional Vision and Leadership**

**6.1.1** State the vision and mission of the institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

#### **Vision of the Institute:**

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

#### **Mission of the Institute:**

To impart value based technical education by inculcating personal touch and respect in relationships amongst the stakeholders.

- Education without values is body without soul and not sufficient to build a healthy society. Hence the college emphasizes on quality education along with inculcation of values. As the students are tomorrow's builders of the nation.
- ➤ To achieve excellence the Institute believes that it's necessary to understand personal as well as educational problems/difficulties of the students and other stakeholders. This is possible only through establishing personal touch with every stakeholder. Earning respect by giving respect and through polite behavior and /interaction with stakeholders in order to achieve excellence in technical education is our mantra.
- The Institute strongly believes that with the abovementioned points as our harbor light it is possible to be recognized as one of the best institutes for excellence in technical education in India.

### **6.1.2** What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

#### Top Management-

The top management enshoulders the responsibility of:

- > Envisioning the Vision of the organization and action plans for its implementation.
- ➤ Developing various policies with regards to Quality in Administration, Academics and activities.
- ➤ Continuous interaction with stakeholders viz. students, parents, alumni, Industry for incorporating their inputs in to the development of the policies and strategies for improvement in the quality of the teaching-learning process..
- ➤ Providing infrastructure and financial support for ensuring quality in academics and overall development of students and staff.
- ➤ Board of Governors, Planning and Monitoring committee, Academic Advisory committee, Human Resource Development, Local management committees meetings ensure proper design, implementation and review of the quality policies.

#### Principal-

The Principal looks after:

The day to day implementation of the quality policies and plans pertaining to academics and administration.

- Formation of Quality circles to brainstorm department level activities to find out means for enhancing the teaching learning process.
- Regular periodic review of the systems and processes through student feedback mechanism; interaction with Deans, HODs and faculty through meetings; interaction with other stakeholders like Parents through Parents meet, Alumni through Alumni Meets, Industry through Campus recruitment.
- Formation of various committees like Faculty Development, Industry Institute Interaction, Entrepreneurship Development cell, Earn and Learn etc to ensure smooth flow of activities and initiatives and to develop leadership skills and administrative capabilities of staff.
- ➤ Conducting various workshops for quality improvement in skills, knowledge, competencies of students and staff.

#### Faculty-

The faculty members contribute by:

- > Strict adherence to and implementation of Institute quality policies and plans and the Teaching-Learning process.
- ➤ They actively participate and contribute to enhancement of the system and processes by being part of quality circles.
- > They participate in quality enhancement workshops.

#### **6.1.3** What is the involvement of the leadership in ensuring:

- The policy statements and action plans for fulfillment of the stated mission
- Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.
- Interaction with stakeholders
- Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.
- Reinforcing the culture of excellence.
- Champion organizational change

### Involvement of the leadership in ensuring the policy statements and action plans for fulfillment of the stated mission:

- ➤ The leadership has developed the long-term blueprint of the development of the Institute by formulating its Vision, Mission, Objectives and Quality policy.
- For the strategic implementation of its vision and mission it has developed the Pandharpur Pattern in Professional Education (PPPE). The Institute's own self developed pattern fine-tuned over a period of time by brainstorming with all stakeholders for ensuring quality in the system of higher education.
- ➤ Leadership is actively encouraging Research and Research related activities to be undertaken by students and staff by signing Memoranda of Understanding with various reputed Research bodies and Industries.

#### Involvement of the leadership in ensuring formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.

The leadership through active participation of staff has evolved the PPPE which is the chief means of implementation of its quality policy and which takes care of its academic and overall objectives.

- ➤ It has also implemented the Dean system, with four deans respectively of Academics, Administration, Research and Development and Students.
- ➤ The Head of Department take care of the implementation of Pandharpur Pattern in Higher Education at the department level and implementation of the quality policies in the teaching learning process.

### Involvement of the leadership in ensuring Interaction with stakeholders

The interaction with stakeholder takes place through following avenues-

- ➤ Interaction with parents through Parent meets which is conducted once every year department wise.
- ➤ Interaction with industry through Industry Institute Partnership Cell and through company representatives during campus recruitment and through employer feedback...
- Interaction with students through feedback session taking place twice every year at the start of each semester by visiting each and every class and division to identify academic and nonacademic requirements and satisfaction; and student council meetings conducted occasionally.
- ➤ Interactions with alumina during the alumni meet which is organized every year. Also through the alumni association meetings.
- ➤ Interaction with faculty through two general meetings conducted at the start of every semester, and regular faculty interaction.

## Involvement of the leadership in ensuring Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders is done through-

- Regular meetings of Principal, Deans and Head of departments who review the feedback of students, parents, industry, employers, and Research organizations. Based on which remedial measures are identified and implemented with due diligences.
- ➤ Based on them Remedial classes, practice sessions, backlog classes are conducted for students.
- > Personality development and soft skill training is provided for better employability and prospects.
- Financial and non-financial support in terms of sponsorship, duty leave granted to faculty for pursuing higher education and research endeavors.

### Involvement of the leadership in ensuring reinforcing of the culture of excellence.

Reinforcing the culture of excellence through-

- Review of result analysis every semester and taking corrective action based on it like Practice sessions, Backlog sessions and night study.
- Financial and non-financial support, encouragement and motivation for participating in R&D activities, projects and proposals.
- ➤ Encouraging staff to take up Consultancy activities in their areas of expertise.
- ➤ Giving out Academic awards for meritorious Students and University rankers as well as Paper publications in Journals of repute.
- Financial Awards for faculty members for paper publication in Journals and conferences of repute.

- Financial aid to faculty members to attend conferences and seminars in India and abroad.
- Financial assistance to students to participate in conferences.

### Involvement of the leadership in ensuring Champion organizational change:

To keep in line with the changing times and environment the institution is making changes in its structure and policies. It has done it by:

- > Starting courses to upgrade ad update student knowledge like computer programming, soft skills training.
- ➤ Providing training for faculty through Faculty development programs.
- > Sending faculty for industrial training to get versed with current technology and practical applications.
- Introduction of high end audio video aids like smart boards.
- ➤ MOUs with Industry and research organizations.

# **6.1.4** What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The institute has policy documents like System Manual, PPPE, etc. Authority delegation is made by incorporating Deans system in the administration structure for effective monitoring and evaluation of policies and plans.

The procedures adopted by the institute to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time are:

- ➤ Pandharpur Pattern in Professional Education (PPPE)- A pattern devised by Institute itself for ensuring Quality in the Teaching-Learning process. It has four distinct components viz. Teachers Development, Teaching Approach, Study Approach, Students Development and guidelines for the same.
- System manual- A manual defining the definite roles, responsibilities and authority delegated to the Principal, Vice-Principal, Head of Department, Class Co-Cordinator, Subject Teacher, Proctor Teacher, Laboratory In-charge, Librarian, Hostel Rector, Training and Placement officer.
- **Result analysis-** A document of result in terms of :
  - a. Percentage passed, ATKT, Distinction, First class and Second class with toppers and their respective class co-Cordinator.
  - b. Subject wise result with name of subject teacher and percentage result of previous three years.
  - c. Proctor teacher wise result.
- Feedback of students- It is taken by the Dean Academics twice a year at the start of every semester. It has various components like name of subject and teacher, Teaching (Outstanding, Excellent, Good, Average, Poor, Worst), Teaching Approach (Followed, not followed according to PPPE), General Approach (Outstanding, Excellent, Good, Average, Poor, Worst), percentage syllabus covered Problems/ suggestions. A part from General problems/Suggestions pertaining to the department, Administrative office, Hostel, Library and so on.

Meetings are conducted based on the feedback, remedial measures decided and implemented and they are all uploaded on the ftp for all to review.

- Feedback of faculty- Through two general meetings at the start of each semester with both the teaching and nonteaching staff a lot of brainstorming takes place and democratically policies, decisions are reviewed and amended.
- ➤ Design and implementation of Academic calendar- It is done well in advance of the start of the academic year, so that all institute level and department level activities can be streamlined. There has been a very slight variation in the planning and actual implementation so far.
- > Student council meetings- Frequent student council meetings are conducted during which students express their views, opinions and expectations about the various activities and the academic quality policies, which are taken upon for discussion and decisions.

### **6.1.5** Give details of the academic leadership provided to the faculty by the top management?

Principal of the college, Dr. B. P. Ronge, Ph. D. in Mechanical Engineering, has around 30 years experience in technical education. He is a graduate from VJTI, Mumbai and M. Tech. from IIT Bombay. He has research funded projects to his credit and participated in technical conferences in India and abroad. This institute is his brain child and he is the Founder Secretary of the parent body Shri Vithal Education and Research Institute, Pandharpur (SVERI).

#### **6.1.6** How does the college groom leadership at various levels?

The institute is grooming leadership at various levels by appointing various posts and committees and assigning them roles and responsibilities, so that they become adept at decision making, planning and implementation viz-

#### Dean system-

- ➤ The Institute has implemented the Dean systems in to the functioning of the institute in which Four deans have been designated viz. Dean Academics, Dean Administration, Dean Students and Dean Research and Development respectively.
- Each has been relgated with certain roles and responsibilities pertaining to their respective areas, which have been spelled out in the Document of the Dean system circular.

#### **HOD** system-

- ➤ The Institute has also the Head of Department system in place. Head of departments have been appointed to each department. There are five HODs for each department Civil, Mechanical, Electronics and Telecommunications, Computer science and Engineering and First year engineering respectively.
- ➤ Their roles, responsibilities, and authority delegated have been defined and described in the system manual.

#### Student Committees/Clubs/Bodies-

Students are also groomed to become active participants in the system in the form of:

➤ The student council comprises of student representatives of each class, each division and each department, all Principals, Deans, HODs who

- sit together to discuss deliberate, and decide on various matters pertaining to academics and student development.
- Each department has department level clubs like Civil Engineering students association (CESA), Mechanical Engineering Students Association (MESA), Electronics Latent In Technical Endeavor (ELITE), Insight Of Computer Oriented Knowledge (ICON), ISTE students association.
- > Students are also members of Institute level committees like Anti-Ragging committee, Mess and food quality maintenance committee, Restraint to Sexual Harassment committee, Discipline committee, Grievance Redressal committee where they have a say in the system.
- ➤ Cultural, sports, and Olympus committees are prominently comprised of students and they are avenues for students to show their initiative, team building and leadership abilities.

#### **Training and Placement Office-**

The training and Placement officer plays a pivotal role in the marketability of the students to the Industry. He/she enshoulders the responsibility for scouting for prospective employers, inviting and persuading them for campus visit and recruitment, grooming students through training to make them capable and worthy of employment.

## **6.1.7** How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

Decentralization is taken care of by authority delegation through the mechanism of Deans, HODs and related elements in the system. Board of Governors (BOG) resolutions, system manual, circulars, etc. describe the details in this respect.

The college delegates authority and provides operational autonomy to the departments of the institution and is working towards decentralized governance system by implementing:

#### HOD system at the Department level-

- ➤ The Institute has put in place the HOD system at the department level, wherein each department is headed by a Head of department. There are such five Department and hence five HODs each viz. Civil, Mechanical, Electronics and Telecommunications, Computer science and Engineering and First year engineering respectively.
- ➤ The roles, responsibilities and authority delegated has been enumerated in great details in the System manual starting from authority to sanction leaves to student and staff to amount of expenditure, advance and purchases permissible.

#### Class Co-ordinator -

- Each class is appointed a faculty as class co-ordinator. The roles, responsibilities and authority delegated has been enumerated in great details in the System manual
- ➤ He/she takes care of streamlining of lectures, Calling parents of absent students at the end of the day, sending registered ad letters to parents of students absent more than one day, stationary distribution to class, result analysis preparation, review of syllabus coverage and so on.

#### **Proctor Teacher-**

Each Teacher is allotted a batch of twenty students from the class he/she teaches.

Every evening for thirty minutes the proctor teacher sits with his/her students and checks his English five sentence notebook, conducts various activities like group discussion, presentations, aptitude tests, for his all round development. If the student has any personal problems he/she is welcome to share it with the proctor teacher due to the bond the teacher strive to build with interaction with the students during the proctor session.

#### Committees-

➤ Various committees have been constituted that take care of the effective functioning of the system, which include staff members as members and coordinators.

### **6.1.8** Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes, the institute does promote a culture of participative management. All decisions are taken by open discussions during staff meeting democratically and unanimously. Participative management is promoted by constituting different committees with representations from students and staff and making these committees to function. The quality policy of the institution has been playing key role in development of the institute.

The various levels at which it occurs are:

- ➤ The Board of Governors, Local Managing Committee has faculty representatives. Hence decisions taken at the management level are open to inputs from the teaching fraternity.
- ➤ The Industry Institute Partnership Cell promotes the sharing of ideas between industry personnel and the Institute and faculty. It is an avenue through which lots of current new technologies, processes and procedures can be discussed and the knowledge imparted to staff and students. Staffs that are aware about the new tide can pass this information to the student to better equip them for career in industry.
- Each academic year Parents meet is conducted department wise. Parents meet is the forum through which parents ideas, thoughts can be aired and shared, the Institute takes due cognizance of the same. Through discussions and deliberations they are incorporated to make the system better.
- 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. As each constituent is part of the decision making process it enhances the efficiency with which such decisions are implemented. Plus, the morale is high as each one feels his saying has been taken in to consideration or the satisfaction of airing their thoughts in an open forum.

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

**6.2.1** Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the institution has a formally stated quality policy. It was developed through brainstorming in various committees and meeting.

#### **Our Quality Policy**

We are committed for academic and overall development of our students.

- By effective implementation of teaching learning process.
- By establishing respectful and pleasant behavior with the students and inculcation of culture of patience and co-operation.
- By creating environment conducive for learning.
- By providing ample opportunities for personality development.
  - ➤ It is deployed with the means of our very own Pandharpur Pattern in Professional Education (PPPE) which takes care of the implementation of the quality policy.
  - ➤ It is reviewed periodically through the feedback system and changes wherever necessary are reviewed and implemented.

### **6.2.2** Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes the Institute does have a perspective plan for development. The aspects considered for inclusion in the plan are:

- ➤ To cater to the need of the society by providing a technical workforce capable of contributing to the growth of the nation.
- > To achieve excellence in technical education.
- > To be recognized as one amongst the best institutions in India.
- > To develop a culture of research in the Institute and enhance the research aptitude of its faculty and students.

### **6.2.3** Describe the internal organizational structure and decision making processes.

- > The internal organizational structure is as depicted in the flow chart below-
- The Institute follows a bottom-up decision making process. Wherein the issues from students faculty are taken up by the Head of Department.
- From the Head of department it is taken up to the Dean level. Where the matters are segregated in to those pertaining to Students, those pertaining to academics, those pertaining to administration and those pertaining to Research and Development.
- From here the matters are taken up in the meetings of the Principal, Deans and Head of department meetings. Where they are thrashed to minutest level and discussed at length. Inputs from Parents Industry are also taken up at this level.
- From here matters come up to the Planning and Monitoring, the Research Advisory /Academic advisory committee and the Board of governors at the management level. Where the ultimate authority rests in terms of decision making.

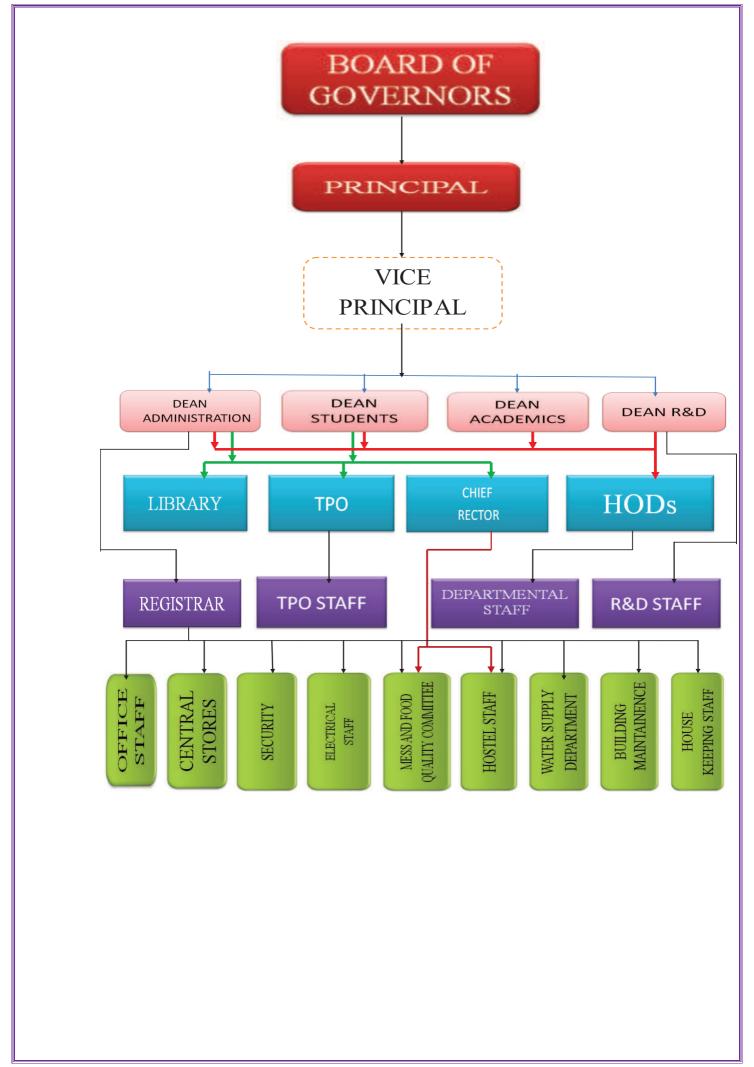


Table No. 6.2.3 The internal organizational structure and decision making processes.

Position	Function/Role
	Apex decision making body at Institute level.
Governors	
Principal	Arranging and coordinating the meetings.  Principal should take all types of decisions, as per the directives fromManagement, Governing Body, Sub-committees of Governing Body, University, DTE, AICTE, Government, etc.  Principal should ensure that:  - feed back sessions are conducted effectively on regular basis.  -sessions on all classes in respect of "Maharashtra Prohibition of Ragging Act, 1999" at the beginning of the Academic Year are conducted.
	- required committees are formed and further observe the smooth functioning of the Institute.
	- PPPE introductory sessions for F.E. students are conducted.
Vice-Principal  Dean, Administration	Should ensure that authority delegated to him/her be effectively exercised. Should ensure that the role of principal defined in the manual in his/her absence when charge of principal is handed over be played effectively. Should ensure that working in all departments is going on as per the PPPE and system manual taking due steps in case of discrepancies. Should ensure that feedback process is conducted and handled effectively. Should ensure that all functions in the college are organized after his/her due endorsement.  Should ensure the effective result oriented working of Training and placement section.  Should ensure that recent information brochure along with CD be made available on ongoing basis.  Coordination of meetings of Statutory Bodies / Committees.  Coordination of the work in respect of accounts and related activities.
	Coordination of Staff recruitment, retention, evaluation, training, welfare and sanction of leaves, except Medical and EL. Coordination of issues related to Stores, Legal related matters. Coordination of repository in hard as well as soft copy of staff data and also students' data. Coordination of University, AICTE, State Govt., DTE, etc. work.
Dean, Academics	Coordination of the development, implementation and review of College Vision and Mission statements.  Preparation of the Institute Academic Calendar and effective monitoring of implementation.  Coordination of effective implementation of PPPE and related circulars.  Coordination of Feed-back of student.  Coordination of Students attendance and test performance communication to parents.  Coordination of Examinations at University and College level and results of College level examinations.  Coordination of centres of excellence.  Coordination of academic programs.  Coordination of other matters as and when referred by the Principal.

Dean, R & D	Preparation of policy documents related to R & D and implementation of
	approved policies.
	Coordination of R & D events such as Conferences, STTPs, Workshops,
	Students and Faculty Development Programs related to Research.  Promoting Posserch Publications, Potents, Technology Transfer, Projects
	Promoting Research Publications, Patents, Technology Transfer, Projects
	and maintaining records thereof.
	Coordination in respect of National and International Collaborations in the field of academic and Research Organizations and Industry and
	signing of MOUs to formalize such collaborations.
	Coordination of Industry-Institute interaction for Sponsored Research,
	Consultancy and Testing.
	Coordination of communication related to R & D activities
	Preparation of Budget and monitoring effective utilization of funds from
	internal and external funding projects.
	Coordination of R & D related Publicity & Institute Newsletter.
	Coordination of other matters as and when referred by Principal.
Dean, Students	Preparation / modification of policies related to students and
,	implementation of approved policies.
	Ensuring maintenance of Ragging free campus.
	Act as a Proctor of the Institute.
	Coordination of student activities such as Functions, NSS, Industrial
	Visits, Sports, Cultural, Student Development Programs, etc.
	Ensure discipline in and outside of the Institute.
	Act as a liaison with parents/guardians about the students' progress.
	Coordination of parents' meets.
	Coordination of Alumni Affairs.
	Sanction of student leaves beyond the purview of the concerned department.
	Coordination of Hostel Administration.
	Coordination of Upkeep and up-gradation of library.
	Coordination of Student Training and Placement activities.
	Coordination of Student Council related activities.
	Resolving problems of the students not settled at departmental level.
	Coordination of publication of College Magazine.
	Coordination of student Grievance Redressal mechanism.
	Coordination of communication in respect of students' functions and
	activities.
	Coordination of preparation and utilization of budget in respect of
	students activity and sports.
	Coordination of other matters as and when referred by the Principal.
H.O.D.	
	1. HOD through Principal, should ensure availability of sufficient staff
	well in advance before the distribution of the load for the next
	semester.  2. HOD should assign duties to various staff and faculty in the
	2. HOD should assign duties to various staff and faculty in the department.
	3. HOD should ensure that before the start of the semester, lab manuals
	are maintained up-to-date and all the setup in the labs. are in
	working condition, and should give occasional visits to the
	laboratory to ensure that the setup are in working condition during
	the semester also.
	4. HOD should conduct department level meetings in a semester of -

- 5. Staff (at least 3, including semester start and end), Lab-in-charges (at least 2), Class-coordinators (at least 2), Proctor Teachers(at least 2), and Class Representatives(at least 2) and maintain the records accordingly.
- 6. HOD should visit each concerned class at least once in a fortnight and do the following:-
- 7. Verification of implementation of PPPE & System rules and taking necessary steps in case of discrepancy.
- 8. Understanding the problems of the students and taking the suggestions, if any.
- 9. Maintain the record in respect of above.
- 10. HOD should ensure that Guest lectures are arranged every week.
- 11. HOD should conduct the feedback sessions for the concerned classes and ensure the compliance of shortcomings.
- 12. HOD should arrange for parent meet at least once in an academic year.
- 13. HOD should ensure for arranging conferences, workshops, STTPs, Project exhibitions etc.
- 14. HOD should ensure effective implementation of office orders, notices, circulars etc. coming from higher authorities or on behalf of higher authorities in respect of the departmental requirements.
- 15. HOD should ensure that there is contribution from departmental faculty in respect of publishing/ presenting papers in National/ International conferences / journals.
- 16. HOD should ensure up-to-date display boards in respect of faculty, staff position, Role of honor, graphical result analysis, student position (Boys & Girls class-wise.), profiles of distinguished and associated alumni, and name lists of associated industries in national / international level.
- 17. Two teachers from the department should be made to go for one month's in-plant training every year by rotation.
- 18. The HOD should forward the original copy received from Monitoring Committee to Hon. Principal with specific remarks in respect of actions taken.
- 19. HOD should keep on reviewing the coverage of syllabi and ensure that 100% syllabus is covered in related subjects of his/her department.
- 20. Making analysis of the Department result immediately, after declaration of the result by the University and taking corrective steps for the failure student.

#### Chief rector

- 1. Hostel Rector/ Rectress should ensure that wings are allotted to the Wing Wardens.
- 2. Hostel Rector/ Rectress should ensure that Wing Wardens are visiting the hostel as per the order and performing their duties accordingly and making the entries in the register. In case of discrepancy, necessary steps be taken.
- 3. Hostel Rector/ Rectress should ensure effective involvement of students in the hostel from Earn & Learn Scheme, for maintaining discipline and culture in the hostels.
- 4. Hostel Rector/ Rectress should ensure that leave to go to Pandharpur and up to one day to go to out of station be sanctioned by concerned wing warden / Asst. Rector(s) / Rector(s) after getting convinced that the case is genuine. For more than one day leave, authority will lay with Rector(s).

- 5. Hostel Rector/ Rectress should ensure that all kinds of wing-wise record including leave applications be maintained in Hostel Office by the concerned Wing Coordinator. Discrepancies be reported by Wing Coordinator to the Rector(s), who should take the necessary steps.
- 6. Hostel Rector/ Rectress should ensure that attendance in a separate register at wing level, be taken by Wing Coordinator daily basis.
- 7. Hostel Rector/ Rectress should ensure that consecutive two or more days absenteeism from hostel without permission be reported to the parents through RPAD letter.
- 8. Hostel Rector/ Rectress should ensure that at wing level 3 registers, as follows are maintained and kept up to date:
  - i. Attendance register by Wing Coordinator.
  - ii. Entry/Exit register by Wing Coordinator.
  - iii. Register in respect of visits of wing warden to be maintained by Wing Coordinator in Hostel office.
- 9. Hostel Rector/ Rectress should ensure that separate register is maintained for recording the details of outside persons entering in hostel.
- 10. Hostel Rector/ Rectress should ensure that condition of cots, tables, chairs, windows including glasses, fans, tube lights, etc. be recorded at the time of first entry of the students in the room and also at the time that the room is left by the students. Due steps be taken in case of discrepancy.
- 11. Hostel Rector/ Rectress should ensure that cleanliness and hygiene conditions are maintained in the Hostels and around.
- 12. Hostel Rector/ Rectress should ensure that timely payment is made by the students towards Hostel fees/deposit.
- 13. Hostel Rector/ Rectress should ensure that the quality of food in the mess is at acceptable level.
- 14. Hostel Rector/ Rectress should ensure that at least two General Body meetings be conducted in a year and accordingly minutes be recorded in proceeding book.
- 15. Hostel Rector/ Rectress should ensure that stock register of all the material (furniture, equipments, locks etc.) be maintained along with purchase order, bills and receipts.
- 16. Hostel Rector/ Rectress should ensure that for all celebrations in the Hostels, an in-charge from Asst. Rectors be appointed for proper conduction of the programme.

TPO

- 1. Training & Placement Officer should plan and act as a marketing/representative person of Institute to industries.
- 2. Training & Placement Officer should maintain up-to-date data in respect of academic performance of all the students of our college in format(s) required by the industries.
  - 3. Training & Placement Officer should prepare/obtain/create classified list/ database for industries in different areas.
  - 4. Training & Placement Officer should ensure that in house training sessions from our faculty be arranged for the students during vacation.
  - 5. Training & Placement Officer should engage at least one lectures for each class of SE and TE students each semester and should introduce the students to current market trend and their expectations from the freshers, and should motivate them for personality development activities. He should maintain the record

- accordingly.
- 6. Training & Placement Officer should arrange and coordinate the in house training activities for the students as well as staff for the remote and sparse areas of strength, if required, from expert persons in industry/academics.
- 7. Training & Placement Officer should arrange (EDP) Entrepreneur Development Programme, with the help of experts/ Govt. bodies, at least once in a year.
- 8. Training & Placement Officer should ensure that, in addition to placement, students are motivated for other competitive examinations for higher education such as GATE, GRE, TOEFL, GMAT, CAT etc.
- 9. Training & Placement Officer should ensure that ample number of aptitude and technical test papers are made available.
- 10. Training & Placement Officer should ensure that industrial visits are made for promoting Training & Placement activities.
- 11. Training & Placement Officer should ensure that feed back is obtained from the employers about the working of our students and record be maintained accordingly.
- 12. Training & Placement Officer should prepare whole list of outgoing students every year and keep track of their progressive career. The record should be maintained accordingly.
- 13. Training & Placement Officer should ensure that one get-together of the ALUMNI of one batch and one more get-together of ALUMNI of all the passed out batches till date be arranged every year at appropriate location.
- 14. Training & Placement Officer should create and maintain the database of all the passed out students of the Institute till date and form/ enrich the Alumni.
- 15. Training & Placement Officer should prepare a report indicating number of companies visited the campus, number of students absorbed through campus, number of students absorbed in out of campus, the branch-wise and company-wise number of students placed in every academic year before the start of admission process.

- 1. Librarian should ensure that library remains open for 24 hours.
- 2. Librarian should ensure that the board giving up-to-date display of 'Library at a glance' is maintained in the library.
- 3. Librarian should ensure that circulation section (Issue/Receipt) is working from 7.00 a.m. to 9.00 p.m.
- 4. Librarian should compile the requirements submitted by the teacher and put before Library Committee meeting to decide about recommendation to higher authority.
- 5. Librarian should put the proposal, to process by Library Committee before Principal for further processing.
- 6. Librarian should ensure that timely subscription is made for renewal of magazines/ journals.
- 7. Librarian should ensure that display of new arrivals in respect of books and journals at a separate place in the library.
- 8. Librarian should ensure that systems and reprographics facility are in good working condition.
- 9. Librarian should ensure that syllabus and sufficient number of questions papers of earlier university examinations in respect of all the subjects are available in the library in subjectwise files.

#### Library

### **6.2.4** Give a broad description of the quality improvement strategies of the institution for each of the following

- Teaching & Learning
- Research & Development
- Community engagement
- Human resource management
- Industry interaction

The quality improvement strategies of the institution are:

### Quality improvement strategies of the institution for Teaching & Learning

- Through implementation, periodic review and upgradation of the Pandharpur Pattern in professional Education (PPPE).
- Through regular training programs for both faculty and students through faculty Development programs and short term training programs.
- ➤ Deputation of staff to one month inplant industrial training every year and industrial visit for students each semester, twice a year to become aware of the use of new technologies and processes.
- ➤ Through feedback of students taken at the start of each semester every academic year.
- ➤ Continuous assessment of students through PPPE write up, assignments, chapter wise tests, and two tests each semester and prelim tests.
- ➤ Use of latest audiovisual aids in teaching ranging from smart boards, LCDs, Class room talky etc.

### Quality improvement strategies of the institution for Research & Development

- ➤ The Institute has signed MOUs with number of research agencies and Industries to foster a climate of research in the organization, initiating staff and students to take up research projects with them and broaden their horizons.
- Numbers of departments in the Institute have acquired a status of research center, further enabling the growth of faculty and staff in the research field.
- ➤ The Institute motivates and encourages students and faculty to attend and publish research papers in various workshops, conferences and journals, by providing financial assistance and recognizes them by giving away awards.

### Quality improvement strategies of the institution for Community engagement

- The Institute has constituted a NSS unit through which various community serving ventures are carried out through camps. Blood donation camps, distribution of drinking water to pilgrims during Ekadashi waris, community building activities in villages etc.
- ➤ Through RHRDF better quality seeds are made available to the farming community.
- Through NKN various schools around the vicinity have been connected to one another through which they can share knowledge, expertise and means with one another.

### Quality improvement strategies of the institution for Human resource management

- Faculty development programs are arranged every month on various topics to update, upgrade knowledge, skills and expertise of faculty members.
- ➤ Short Term Training Programs are arranged department wise inviting experts from different fields for their sessions.
- ➤ Employee Provident Fund benefits are given to the staff. Leaves are sanctioned as per the norms. Staff pursuing higher education is given study leave.
- > Faculty members are deputed for one month inplant industrial training every year.

#### Quality improvement strategies of the institution for Industry interaction

- ➤ It is enhanced through the Industry Institute Partnership cell.
- Industry feedback is taken during campus placement activities by the Training and Placement cell.
- Employer feedback is also taken through students placed in various esteemed organizations.
- > Industrial visits are organized every semester for students.
- ➤ MOUS have been signed with various industries.

## **6.2.5** How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

- ➤ The head of the institution ensures that adequate information is available for the top management and stakeholders by continuous correspondence with them and through presentations in management meetings.
- ➤ Information is also disseminated through FTP, College website, College publications, like News bulletin, information brochures, emails, newspaper reports etc.
- Regular interaction with parents through telephone and letters about absenteeism, attendance, result of students, start of semester etc. Parents meetings are also regularly conducted.
- ➤ Feedback from students, Parents ,industry and employers is reviewed and analyzed.
- ➤ The Head of the Institute conducts regular meetings with Deans, HODs, and faculty members and ensures propagation of Institute policies.

## **6.2.6** How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

- At the start of every semester a General meeting is conducted by the Head of the Institute in which Deans, HODs and faculty members participate and brainstorm over the policies and procedures of the Institute.
- Regular meetings are conducted by the Head of the Institute with Deans and HODs.
- ➤ HODs in turn conduct weekly meetings with their department staff members where syllabus progression, student issues, staff issues are discussed.

## **6.2.7** Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Table No. 6.2.7 Summary of resolutions made during the meeting on 17<sup>th</sup> November 2013 by the Board of Governors (BOG):

Resolution	
	Implementation
About Administrative setup of the Institute.  Administrative setup incorporating Deans System consisting of Dean Administration, Dean Research and Development, Dean Students and Dean Academics is approved.	The Deans System was implemented in the Institute on 01/02/2014 through office order reference number COEPR/2013-14/O.O/59 dated 31/01/2014.  In the same order the persons appointed as deans were mentioned as Dr.S.M.Mukane
<ul> <li>Organization chart in this respect is approved.</li> <li>Dr.B.P.Ronge is authorized to decide about the date of commencement of this</li> </ul>	Dean, Administration; Dr.P.M.Pawar Dean Research and Development; Dr.M.M.Patil Dean Students; and Dr.Sridevi Dileep Dean Academics Role and Authority delegation as mentioned in
<ul> <li>System.</li> <li>Dr.B.P.Ronge is authorized to appoint the persons as Deans with allowance for the posts and tenure of appointment.</li> </ul>	circular COEPR/2013-14/Cir./58
Dr.P.M.Pawar R&D coordinator presented the report of R&D activities	The meeting took note and expressed satisfaction over the activities and congratulated Dr.P.M.Pawar and his team on getting supercomputing GARUDA grid facility.
Due to sad demise of Dr.S.D.Madnaik on 30/08/2013 vacancies are created on Planning and Monitoring, Research Advisory Committee and Human Resource Development committees. Thorough discussion was made and Dr.B.P.Ronge was authorized to nominate persons against the vacancies on these committees.	Dr.V.K.Suri, ex- director Precision Engineering Division, Bhabha Atomic Research Centre, Trombay, Mumbai-400085 was appointed on the vacant position in the committee.
The minutes of sub-committees i.e. Academic Advisory Committee, Equipment/Purchase committee, Building committee, Local Managing committee and Standing committee were put before committee.	The meeting approved the minutes after thorough discussion.
For purchase of materials or other work done, if cost estimate is Rs.5, 000/- or less, the work is done or material purchased through voucher/bill, if the cost estimate is more than Rs.5, 000/- or up to Rs.50, 000/-, notice is displayed on Institute notice board and website, and where cost estimate is above Rs.50,000/- notice is published in newspaper and displayed on website with details. The meeting approved the same and unanimously authorized Dr.B.P.Ronge to make changes in procedure as per requirement	The purchase procedure is implemented and followed in all purchase transactions of the Institute.
Hospital Medical bills of Rs.99818/- of Mr.A.B.Asabe and Mr.D.N.Gaikwad project Assistant and Technical Assistant, who fell in the Gobar gas plant and suffered injuries, were put for reimbursement before the meeting.	The bill was reimbursed by the Institute.

Summary of resolutions made during the mee	ting on 02 <sup>nd</sup> March 2014 by the Roard of
Governors (BOG):	ting on 02 March 2014 by the board of
Budget for the financial year 2014-15 and	It was unanimously approved.
revised budget for the financial year 2013-14	it was unanimously approved.
of the institute was put before the meeting.	
The departmental vision, mission, PEOs and	The copies of vision, mission, PEOs and Pos of
Pos were defined and put before the committee	Mechanical Engineering ,Computer Science
for final approval	
Tor imar approvar	and Engineering, Civil Engineering and Electronics and Telecommunications
	Engineering after thorough discussion were
David D. D. D. D. M. David and Late of the	unanimously approved.
Dean R&D Dr.P.M.Pawar brought to the	The workshop titled "Micro-Nano Sciences in
notice the planning of workshop titled "Micro-	Rural Areas" was organized from 24/04/14 to
Nano Sciences in Rural Areas" in the month of	26/04/14, attended by eminent scientists from
April 2014, to bring together Engineering	all over India.
Institutes on the same platform for regional	
relevant research through cluster formation.	150/ 6/1
To make events such as Olympus, Beats and	15% of the amount collected is paid to the
publishing of Annual magazines of the	concerned student as incentive.
Institute successful students bring sponsorships	
from various companies and organizations. It	
was put before meeting to give fixed	
percentage out of this money to the students.	
Students travel each year to campaign for	TA and DA to be provided to students who
Olympus and other technical events at national	bring registration amount worth of Rs.1, 000/-
level organized by the Institute. The issue of	and above for one day of campaigning and
paying Travelling Allowance (TA) and Daily	Rs.2,000/- and above for two days
Allowance (DA) to such students was put	campaigning.
before the meeting.	TA at actual, Local travel Rs.20/- per student
	per travel, Rs.80/- per day per student and If
	travel is within Pandharpur Taluka Rs.50/- per
	day lump sum amount is paid to the students.
To give extra remuneration to External	The Institute pays Rs.500/- additional
Examiners from out of university for Master of	honorarium form its side to External Examiners
Engineering(ME) courses final dissertation	from out of university for Master of
phase II Examination from college side	Engineering(ME) courses final dissertation
	phase II Examinations.
The minutes of sub-committees i.e.	The meeting approved the minutes after
Equipment/Purchase committee, Building	thorough discussion.
committee, Planning and Monitoring	
committee, and Human Resource	
Development, standing committee were put	
before committee.	
Government of Maharashtra through its	The Institute has decided to go for affiliation to
G.R.No.HTED-11030(11)/1/2013-MHT-(TE-	Dr.Babasaheb Ambedkar Technological
2) dated 31/01/14 has made provision for	University(BATU)Lonere to
Engineering and Pharmacy colleges to get	·
affiliated to Dr.Babasaheb Ambedkar	
Technological University(BATU)Lonere	
The redefined Vision and mission of the	It was unanimously approved.
Institute was put forth before the committee for	7 11
approval.	
To reduce electrical consumption and bill by	The study of alternative energy resources is
use of solar energy.	being looked in to.
	<i>y</i>

Proposal to University Grants commission for 2(f) and 12(B).	Proposal was sent to UGU for 2(f) and 12(B), the institute has received its acknowledgement along with certain queries that are being looked in to.
To go for NAAC accreditation.	Letter of Intent (LOI) has been sent and accepted. Uploading of Self Study Report on 14/02/15.
Summary of resolutions made during the mee	ting on 27 <sup>th</sup> October 2014 by the Board of
Governors (BOG):	D 11: 1: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
63.33% seats of FE got filled in 2014-15. The institute is second highest in Solapur University on admission front. Institute results are highest in Solapur University whereas it has second highest position on Placement front after Walchand College of Engineering, Sangali in Solapur and Shivaji University area. This is outcome of efforts made by college on Quality, result and placement.	Publicity is being given about the effort that the College takes to improve the quality, result and placement by visiting to the students, teachers and parents of Schools and Junior Science Colleges.  ii) Articles in the newspaper are being given frequently.  iii) Accorded its approval for closure of the M.E.  (CAD/CAM) course.
Closure of Information Technology UG course and M.E. (CAD/CAM) PG course.	First year Information Technology, UG course closure letter received from Solapur university and proposal for closure of M.E. (CAD/CAM) PG course submitted to Solapur University.
"Agro Challenge" project exhibition was successfully organized where various equipments manufactured by students of various colleges, required for agriculture were exhibited.	The meeting expressed satisfaction with it and congratulated. Dean R&D conducts one meeting every month with Deans, HODs and Ph.D. holder faculty to take review of R&D activity
The minutes of sub-committees i.e. Research Advisory committee, Finance committee, Building committee, Planning and Monitoring committee, and Human Resource Development, standing committee were put before committee.	The meeting approved the minutes after thorough discussion.
Large amount needed to be paid for Registration and filing of patents and IPR.	i) Registration charges up to Rs.10,000/- for filing Indian patent is going to be given to the faculty who is going to file the patent. ii) The registration charges up to Rs.25, 000/- for filing International patent is going to be given to the faculty who is going to file the patent.
Need for completion of Academic audit.	The principal has been given authority to complete Academic audit.
About Credit and Grading System implemented by Solapur University from 2014-15, for theory subject 30 marks are for In Semester Evaluation (ISE) in Sem-I and II out of 100 marks.	<ul> <li>i) For improvement in ISE marks Retests are arranged for students.</li> <li>ii) To appear for the Retest, Rs. 500/- as Retest charges is taken from the student who wish to appear for the Retest.</li> <li>iii) Retest is at the choice of student to appear or not.</li> </ul>
About Industrial visit re-imbursement. Institute contributes 50% of the total expenses or Rs. 600/- per student whichever is less for	i) For the students of FE, SE and TE class who attends the industrial visit, the re-imbursement amount is going to be adjusted in their next

Industrial visit of the students. This amount is
given to the students after their industrial visit.
It was observed that this amount is misused by
the students and parents are unable to restrain
it. This issue was discussed in the Parents meet
and Palak Shikshak Sabha as well.

year's fees.

ii) For the students of BE class who attends the industrial visit, the re-imbursement amount is going to be given after their BE-II exam.

**6.2.8** Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Yes, the affiliating university has a provision to accord status of autonomy to an affiliated institution.

The efforts made by the institution in obtaining autonomy are as follows:

- The Institute has undergone the National Board of Accreditation process in 2008 and received accreditation for three of its courses viz. Mechanical Engineering, Electronics and telecommunication Engineering and Computer science engineering for a period of three years. It is now in the process of reaccreditation.
- The Institute has got permanent affiliation from Solapur University for Mechanical Engineering, Electronics and telecommunication Engineering and Computer science engineering courses.
- The Institution has been awarded research centre status for Mechanical Engineering, Electronics and telecommunication Engineering, Civil Engineering and Computer science engineering courses.

**6.2.9** How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?

The institute has constituted a Grievance Redressal committee which takes care of handling of grievances from both students and faculty members. The constitution of the committee is as given below-

**Table No. 6.2.9 Grievance Redressal Committee** 

Sr.No.	Name & Address	Designation	Status	
1.	Dr.B.P.Ronge Plot No. 16, Gut No. 58, Golden Colony, Gend Vasti, Karad Road, Pandharpur- 413304.	Secretary of Trust and Principal, College of Engineering, Pandharpur	Chairman Ex- Officio	
2.	Dr.Ms.M.M.Patil Vishnu Priya, Hari Pooja Residency, Wakhari Road, Pandharpur - 413304, Dist- Solapur.	Dean, Students	Member	
3.	Dr.S.M.Mukane Plot No.23, S.No.61/1, Isbavi, Near Shahanai Garden and New Water Tank, Karad Road, Pandharpur-413304.	Dean, Administration	Member	

Sr.No.	Name & Address	Designation	Status
4.	Dr. Sridevi Dileep	Dean, Academics	Member

	Staff Quarters, Engineering College Campus, Gopalpur-Ranjani Road, Gopalpur, Pandharpur-413304.		
5.	Ms. Debopriya Chakraborty Girls' Hostel, Engineering College Campus, Gopalpur- Ranjani Road, Gopalpur, Pandharpur-413304.	B.E. (CSE.)	Student Member

**6.2.10** During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

There have been no instances of court cases filled by and against institute in the last four years

- **6.2.11** Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?
  - > The Institution has a well developed and documented student feedback system in which the Head of the Institution visits all the classes every semester to record academic and extra- curricular feedback of the students pertaining to syllabus, teaching, staff, hostels, mess etc.
  - ➤ The recorded points are then discussed with the faculty members by the Head of the Institution through a meeting with respective departments. All the findings and problems are discussed and remedial measures taken and implemented immediately.
  - All the recorded information along with remedial measures is uploaded on FTP for all stakeholders to view and monitor.

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

- **6.3.1** What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?
  - ➤ Regular Faculty development programs on various subjects spanning from research to soft skills are conducted in the college.
  - ➤ The College regularly conducts seminars and conferences at the state /national / international level. At these seminars and conferences, the faculty gets an opportunity to interact with experts from different fields.
  - The institute provides financial aid to faculty members to attend conferences and workshops both in the country and abroad. Faculty members are encouraged to attend seminar and conferences.
  - ➤ The institute also gives away financial awards to faculty member who publish their research papers in journals of repute.
  - The Institute recognizes and felicitates faculty members who upgrade their qualifications to M.E, PhD etc. Thus, faculty members are encouraged to upgrade and pursue higher education.
  - MOUs have been signed with prestigious research organizations like Bhabha Atomic Research Centre, Mumbai( BARC), RRCAT, Ramkrishna IT systems, REANU Microelectronics Ovt Ltd, Top Gear

- Transmissions, Laxmi oil pumps and systems, Kannad srvices and training, sangli, Eduvance the educational arm of Vanmant technologoes Pvt.Ltd,Mumbai and so on, which provides faculty members with an opportunity to work with them.
- Experts from the industry and academia are called to address the students & faculty and staff members.
- ➤ The Institute also encourages and facilitates faculty member to become members of various professional bodies like Indian Society for Technical Education (ISTE), Institute of Electrical and Electronics Engineers(IEEE),IEI, etc.
- **6.3.2** What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?
  - Training needs are assessed based on a competency matrix, competency needs and gaps observed are identified. Based on it training programs are arranged for the faculty members.
  - ➤ The Dean Academics heads the Faculty Development initiatives to be taken in the institute and coordinates the Faculty development programs.
  - ➤ The Management Representative of ISO 9001:2008 consolidates training needs and arranges for its completion either through in-house or external resources as considered appropriate.
  - ➤ Staff members also work as members and coordinators of various committees. Once a staff member is made in charge of a committee, complete freedom is given to him/her to plan and execute programs. Reasonable financial freedom is also given.
  - ➤ Progress made on the planned programs is periodically reviewed by the Principal through interaction with faculty.
- **6.3.3** Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.
  - > Student feedback is taken during each semester, with a component designed to assess the staff members lecture and content delivery.
  - ➤ HODs also assess the staff members.
  - > Self appraisal system is followed in the Institute, which contains various components for appraisal of the staff like:
    - 1. Performance of Engaging Lectures / Practicals- covers the planned lectures, actual lectures conducted and the percentage coverage of subject taught. Performance is judged as, Excellent-1.0(100-91), Good 0.7(90-81), Average-0.5 (Below 81)
    - 2. Performance of Attendance of Students.- It is calculated by considering the number of students present, number of lectures conducted 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 of 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 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.
  - For Teachers Concerned with Laboratory Work Assignments / Evaluation.
  - Curriculum / Learning Resources Development.
  - Seminars/ Training: CO-curricular Activities.
  - Administrative Functions

## **6.3.4** What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

- ➤ The major outcome of the performance appraisal report is it is used as a basis for doling out increments and promotion to the deserving candidates.
- ➤ In some cases it is also useful in giving out monetary benefits to the faculty. It is communicated to the staff through their increment order and promotion order.

## **6.3.5** What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- > Staff quarters are provided to both teaching and non-teaching staff on the campus for accommodation.
- ➤ Career enhancement benefits for those who wish to pursue Higher education.
- Employee Provident Fund facility is provided according to EPF Act in which the Institution also pays equal share every month.
- ➤ The Institute provides the facility of Insurance policy if taken by the staff; premium can be deducted through salary.

### **6.3.6** What are the measures taken by the Institution for attracting and retaining eminent faculty?

- ➤ The Institute sponsors candidates pursuing higher education and grants study leave, duty leave wherever applicable.
- ➤ The Institute provides financial assistance for attending seminars conferences, workshops in India and abroad.
- The Institute provides a platform for research endeavors of its faculty through its MOUs with prominent research organizations like BARC (Bhabha atomic Research Centre), RRCAT, Ramkrishna IT systems, REANU Microelectronics Pvt. Ltd., Top Gear Transmissions, Laxmi oil pumps and systems, Kannad srvices and training, sangli, Eduvance the educational arm of Vanmant technologoes Pvt.Ltd,Mumbai and so on.
- ➤ The Institute provides pay scales as per UGC rules and security of service to the faculty who have desired qualifications, knowledge and skills.
- Those who are employed on adhoc and contractual basis are offered better pay scales and assurance of job. They are continued in the coming sessions and where required the faculty on contractual basis is offered permanent employment.

In some cases additional increment is also given to a candidate with good skills and qualification.

#### 6.4 Financial Management and Resource Mobilization

### **6.4.1** What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- In addition to internal and statutory audit continuous review is taken in the meetings of Deans and HODs conducted by the Principal.
- The effective and efficient use of available financial resources is monitored through the budget.
- ➤ The lab incharge of each and every department prepare his/her detailed month wise yearly budget requirements and forwards it to Head of department. The HOD then in consultation with faculty and lab Incharges finalises his/her month wise yearly budget including both heads of recurring and non-recurring budget.
- Such department wise budget are put forth in the meeting of the Principal, Deans and HODs. Where it is studied in details and discussed upon to the satisfaction of everyone.
- ➤ Taking in to consideration all the department wise budgets a college level budget is prepared. This budget is then 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 floated. Upon receiving bids and quotations, a comparative is prepared. All this is put in front of the Purchase committee, in their presence the `negotiations between the vendors and buyers occur. The party selected is then presented with the purchase order. This ensures that right equipment is purchased at most competitive price.
- At the time of delivery of articles by the companies, the quality of the materials are checked and verified against the order copy and are received by the departments. Further, the details of all the materials / articles are entered in specified registers and dead stock register and a stock is maintained.
- ➤ Income/expenditure is closely monitored by the accounts branch.
- ➤ Payments are made only if authorized by the Principal. Payments are made either through cheques or drafts.
- Record of every transaction is maintained in the form of authentic records
- Monthly budget utilization is then given 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 shall be discussed in the HODs meeting and is requested to the management for approval.

**6.4.2** What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The accounts of the Institute are audited regularly as per the Government rules.

- ➤ An internal auditor audits our accounts every quarter. The internal auditor checks receipts with fee receipts and payments with vouchers and necessary supporting. He also ensures that all payments are duly authorized.
- ➤ The external auditor conducts statutory audit at the end of financial year. The institution is having qualified practicing charted accountant firm as internal and external auditors who are auditing the accounts of the college once in six months. After the audit, the report is sent to the management for review.
- The last audit was done at the end of the financial year 2013-2014 on year ending 31/03/2014.
- There have been no audit objections in the last four years.
- **6.4.3** What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.
  - ➤ The institute being a private un aided college and not getting any financial aid/grant from the state or central government has only Fee collection is the major source of revenue/income generation for the college.
  - ➤ In addition to tuition fee, the institution is also collecting fee towards hostel and transport.
  - ➤ College closely monitors the expenditure so that the excess cash other than cash for urgent requirement will be kept as short term deposits to increase the fund flow.
  - The deficit if any is managed through loans from banks.

Audited income and expenditure statement of academic and administrative activities of the previous four years

SHRI VITHAL	EDUCATION & RESEARCH INSTITUTE,	PANDHARPUR.
	(COLLEGE OF ENGINEERING SECTION )	

EXPENDITURE		Name and Address of the Owner, where the Owner, which the
Io Administrative Exps.	The state of the s	AMOUNT
To Advertisement Exps.	(5370530	
To Affilation Fees	638637 By Course Fees	184806
To ARC Exps	309500 By University Fees A/c	327713
To Architects and Interiors Designers Fe	215725 By Adverstiement of BEAT:	15000
To Audit Fees	2000000 By ARC Fees	362376
To Bank Commission	22000 By Book Bank General	192400
To Beautification Exps.	20040 By Cancellation Charges	5000
To Book Binding Exps.	371005 By Change of Branch Form	Fees 21100
To BUS EXPENSES	16400 By College Fees	73170
	1176505 By Conveyance Receipt	253094
To Coolies & Cartage Exps.	10585 By Development Fees	4770699
To Consumable	1833016 By Fligibility Forms	9020
To CAD/CAM Consumable 70340	By FEES (DSWO)	8730000
To Computer Consumable 1001164	By Payable Converted	4734940
To Consumable 89517	By Magazine Receipts(Explo	rer) 103000
To Extr Consumable 144210	By Miscelleoneous Receipts	4964782
Fuild Mechanics Lab. 139616	By No Due Form Fees	4680
I C Engine Lab 8681	By Olympus 2010 Adv	5000
Language Lab 50000	By Processing Fee	69865
Workshop Consumable 329488	By Sale of Admi. Form & Bro	Fees 612351
	By Sale of Fm Form Fees	400
To Earn & Learn Exps	1965720 By Softskill Training (Infosys	Tech.) 225000
To Electrification Exps.	1474626 By Stationary Charges	977424
To Enviormental Study Material	24450 By Testing Fees	47080
To FEES (DSWO), SOLAPUR	10180108 By Transfer Certificate Fees	269600
To Function & Ceremoney	60054 By Tustion Fees A/c	102640090
To Gardeing Exps.	15590 By Xerox Receipt	59988
To Gate Exam Exps	35000	129593548
To Generator Exps.	694406	120000000
To Gymkhana Exps.	264395	
To Hostel Exps.	111000	
To insurance	59687 By Deficit transferred to	192810
To Interest on Loan	1898461 Balancesheet	1-7010
To Internet & E-Mail Exps.	580135	
To ISO 9001 Exps.	27575	
To Legal Exps.	20500	
To Light Bill Exps.	3312089	
To Magazine Exps.	331036	
To Medical Exps.	126000	
To Salary	71635663	
Teaching staff salary 55310205		
Non Teaching staff salar 9991344		
Remuneration expenses 1303544		
Contract Exp. 2797227		
E.P.F 2153233		
Honorarium 80110	P Kan	
30110	18	
	2 At No. 173000 (2)	
Balance C.F.:	N. S. A. Control of the Control of t	C/F = 129786358

SHRI VITHAL EDUCATION & RESEARCH INSTITUTE, PANDHARPUR. (COLLEGE OF ENGINEERING SECTION)

EXPENDITURE	AMOUNT		LANGSTREE
EXPENDITURE  Balance B/F:  To Meeting Exps. A/c  To Miscelloneous Expo.  To Postage & Telegram Exps.  To Printing & Stationary Exps.  To Processing Fees (AICTE/DTE/Uni.)  To Professional Fees  To Reading Exps.  To Repair & Maintenance  To Research & Development  To Ro Plant Exps.  To Staff Development  To Student Activity  To A & D.A. Exps.  To Telephone Exps.  To Training & Placement Exps.  To University Fees Paid  To Water Expenses A/c.  To Xerox Exps.  To Depreciation (Annexure - F.)		JE03.2011 INCOME  Balance B.F	AMOUNT:- 129786358
TOTAL :-	129786358	TOTAL :-	129786358

The above Income & Expenditure A/c and Annexures form tracgral part of the Accounts . This is the Income & Expend Account reffered to in my Aduit Report As per my report of evendate examined & found correct

Shiri Watua Education & Research Institute, Pandharpur

For M's Ankush P Kaulwar & C CHANTERED ACCOUNTANTS

PROPRIETOR

(Membership NO.113808)

# SHRI VITHAL EDUCATION & RESEARCH INSTITUTE, PANDHARPUR. COLLEGE OF ENGINEERING PANDHARPUR INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED: 31.03.2012

To Administrative Exps. 7125466 By Course For Consumable Exps. 4019737 By University To University Fees Paid 161171	Fees A/c 282724
To Consumable Expo 4019737 By University To University Focs Paid 161171	Fees A/c 282724
To Consumable Expo 4019737 By Universit To University Foes Paid 161171	Fees A/c 282724
To University Fees Paid 161171	
101171	
To Advertisement Exps. 797682 By Book Bar	A Change of the Control of the Contr
	k General 174650
	on Charges 1000
an invited of	Branch Form Fees 16700
	ce Receipt 252625
	ont Fees 6416718
To Coolies & Cartuge Exps. 9255 By Eligibitity To Earn & Learn Exps. 1910476 By FEES (DS	
To Electrification Exps. 1227928 By verification To Environmental Study Material 13970 By Gate Example 13970 B	
	Receipts(Explorer) 89500
To FEES (DSWO) SOLAPUR 8730000 By No Due F To Generator Exps. 889787 By R & D Fu	
To Gymkhana Exps. 264266 By ARDB Fu	ds 348000
	id 43303
	ms & Bro. 726360
DOUBLES CHILDREN	Charges 1836505
The state of the s	147720
	estationic Fees 175500
To ISO 9001 Exps. 126668 By futton Fe to Legal Exps. 40000	92601770
To Light Bill Exps. 3067222	
To Magazine Exps. 293696	
To Medical Exps. 133661	
To Meeting Exps.A/c 109915	133200480
To Miscelloneous Exps. 26295	
To NB.A.Expenses 3626	
Account of the second of the s	
	ei .
To Professional Fees (AICTE DTE Line) 125000	
To R&D Expenses 639498	
TO SEE STORE THE SECOND	
The state of the s	
Staff Development 2296-44 Honararium 42412	
Honararium 42412	
Balance E/F > 123050497	Balance C/F :- 148678299

SHRI VITHAL EDUCATION & RESEARCH INSTITUTE, PANDHARPUR. COLLEGE OF ENGINEERING PANDHARPUR

EXPENDITURE ACTOR THE YEAR EADS 31.03.2012 INCOME AMOUNT Balance B-F 12305049 Balance B F 148678299 To Repair & Maintenance 6106023 To Sanitation Expa-245358 To Student Activity 3366612 To T.A. & D.A. Exps. 488596 To Telephone Exps. 172154 To Training & Placement Exps. 471250 To Water Expenses A/c 832999 To Xerox Exps. 72636 To Depreciation (Annexure - F.) 12453123 To Vehicle Exps.

The above Income & Expenditure A.c and Amexures form integral part of the Accounts. This is the Income & Expend. Account reffered to in my Adua Report As per my report of evendate examined & found correct

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Kaulwar PROBRIETOR

(Membership NO.113808)

For M's Ankush P.Kaulwar & Co. CHARTERED ACCOUNTANT

# SHRI VITHAL EDUCATION & RESEARCH INSTITUTE, PANDHARPUR COLLEGE OF ENGINEERING PANDHARPUR

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SHRI VITHAL EDI CATION & RESEARCH INSTITUTE, PANDHARPER.

COLLEGE OF ENGINEERING PANDHARPUR

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TOTAL :-	172347889		TOTAL:-	172347889

The above Income & Expenditure A/c and Amexures form integral part of the Accounts. This is the Income & Expend. Account reffered to in my Admit Report As per my report of evending examines & found correct.

She Withal Education & Research Institute, Pandharpur

Saimanti Olaman Transaction and

B. Parage

For M/s Ankush P.Kaulwar & Co. CHARTERED ACCOUNTANT

Ankush R Kaulwar PROPRIETOR

(Membership NO.113808)

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EXPENDITURE		AMOUNT	INCOME	AMOUNT
To Administrative Exps.		16931493	By Course Fees	231000
To Advertisement Exps.		500357	By University Fees A/c	396816
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To ARC Exps		27433	By ARC Fees	44850
To Audit Fees		44000	By Bank Commission	633280
To Bank Commission -Ex	ps.	5065	By Book Bank General	183310
To Book Binding Exps.		68452	By Conveyance Receipt	438298
To BUS EXPENSES		1234041	By Development Fees	8562002
To Consumable Exps.		599078	By Miscelleoneous Revenue	979367
To Coolies & Cartage Exp	IS.		By Gym	22840
To Depreciation A/c		10624816	By Lab Development Fee	9000
To Earn & Learn Exps		1815316	By Magazine Receipts(Explorer)	49000
To Electrification Exps.	22	235861	By Miscelleoneous Receipts	5883450
To ELIGIBILITY FEES-U		64200	By No Due Form Fees	6410
To Environmental Study M	aterial	28950	By PHOTO-STATE -FORM	6340
To Exam.Exps.		187236	By PRINTS	1321
To Flayover Bridge A/c		290430	By Processing Fee	64840
To Generator Exps.		118525	By R & D Funds	393000
To Gymkhana Exps.			By Sale of Admi.Form & Bro.	676500
Fo Insurance		31266	By Sale of Tendar Form	24800
To Internet & E-Mail Expe	k.	374602	By Stationary Charges	808245
To 18O 9001 Exps.		54712	By Testing Fees	380832
To Legal Exps.		42000	By Transfer Certificate Fees	409000
To Light Bill Exps.			By Tuition Fees A/c	148761044
l'o Magazine Exps.		206507	By Xerox Receipt	347385
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To Meeting Exps.A/e		108978		1
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To N.B.A.Expenses		14236		
To Olympus Exps		179503		
To Postage & Telegram Es	rps.		By Deficit Transferred to	10980191
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	Balance C/F :-	163459509	B Rame Hallmord F	- 180295121

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funding and the utilization of the same (if any).

- Faculty members are encouraged and motivated to submit proposal to AICTE /DST/DBT/UGC/BARC/RRCAT etc.
- > Faculty members regularly submitted proposal of organizing the FDP/ Seminar to AICTE. College received financial assistance from AICTE for organizing national/ international conference and successfully conducted these seminars in college.

### 6.5 Internal Quality Assurance System (IQAS)

### **6.5.1** Internal Quality Assurance Cell (IQAC)

- **a.** Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes? The formation of Internal Quality Assurance Cell (IQAC) formation is in the process.
- **b**. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?
- **c.** Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.
- **d.** How do students and alumni contribute to the effective functioning of the IQAC?
- **e.** How does the IQAC communicate and engage staff from different constituents of the institution?

Sub points b to e in 6.5.1 are not applicable

- **6.5.2** Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.
  - Yes, the institution has an integrated framework for Quality assurance of the academic and administrative activities.
  - ➤ The institute is ISO certified and has implemented ISO 9001:2008 quality management system.
  - Also the decentralized governance system on the levels of Deans, HODS, Class coordinators and Proctor teachers helps to monitor the quality of academic and administrative activities.
- **6.5.3** Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.
  - Yes, the Institution does provide training for effective implementation of its Quality assurance procedures. It begins with the receipt of appointment letter by the faculty, where in he/she is handed over a copy of the code of conduct, Pandharpur Pattern in Professional Education (PPPE) and the system manual along with circulars, which is the mainstay of the quality assurance procedures of the Institute.
  - ➤ Every faculty member is supposed to maintain a copy of Pandharpur Pattern in Professional Education (PPPE) and the system manual along with circulars in each his/her subject file.
  - ➤ The Quality assurance procedures are also uploaded on the institute website.
  - During the two general meeting at the start of each semester of all staff members along with the Head of the Institute all the quality assurance procedures are explained in details thoroughly with presentations by each Dean, Head of Department and Training and Placement officer. The same is reiterated in the departmental staff meetings.

- ➤ The Training and Placement officer also conducts an Orientation program for the newly joined staff members. Wherein they are made aware of the quality assurance procedures of the Institute, doubts if any clarified and assessed at the end of the program.
- Frequent training by out of house trainers is also conducted to make the faculty aware about the importance, role of Quality in Higher education

# **6.5.4** Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

- Yes, the academic audit is undertaken at the Institute level with the help of the various tools in the quality assurance procedures implemented by the Institute, like-
- The academic calendar guides in detail the various academic activities to be taken up during the academic year along with their dates and schedules. Actual performance is reviewed based on it.
- During the student feedback the attendance record and the syllabus coverage are monitored.
- During departmental meetings conducted every week the HODs monitor the attendance record, syllabus coverage, assignments, PPPE write-up and performance of the students in the tests and exams.
- In the Local managing Committee meeting an important issue on the agenda is the result analysis.

# **6.5.5** How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The institute abides by the rules, regulations and guidelines of Solapur University, UGC and AICTE in all matters of the academic processes like teaching-learning, conduct of exams and evaluation. Additionally, the quality assurance systems are aligned with the requirements of ISO 9001:2008 and the National Board of Accreditation.

# **6.5.6** What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

- ➤ The Head of Department conducts weekly meeting during which he/she takes review of the whole teaching learning process of his department which includes review of teaching plans, attendance sheets, assignments, tests, results etc. Based on it extra sessions, practice sessions and remedial classes are planned and implemented. Parents of defaulters are called upon to meet and monthly attendance is sent to all parents along with test performance.
- ➤ The student feedback is another tool that helps to review the teaching learning process taking in to consideration students' perspectives. After which a department meeting with the Head of Institute is conducted and the feedback is deliberated upon and it concludes with a definitive action plan based on the findings in the feedback.

- > Students of BE are required to maintain a project diary which is reviewed by the project guide to dwell upon the progress of the student.
- ➤ Chapter wise tests, two unit tests per semester and university exam results are discussed and reviewed in the department and institute level meetings and corrective measures are planned based on them. Backlog classes, practice sessions and remedial classes are planned for the students.
- ➤ In the Institute level General meeting conducted twice every academic year complete review and assessment, modes of implementation of are reviewed.

# **6.5.7** How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

Institute communicates the internal and external stakeholders its quality assurance policies, mechanisms and outcome through –

- Institute website on which it is uploaded.
- ➤ It is printed in the form of placard and displayed at all the prominent places in the Institute like all departments, porch, canteen, hostel etc.
- ➤ It is also printed in the diary provided to the staff members; on the assignment books and journal; College magazine Explorer.
- ➤ It is communicated to student at the start of each class on the first day of start of semester.
- ➤ The Institute informs its external stakeholders through prospectus, pamphlets, publicity in news papers and television.

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

### CRITERIA VII: INNOVATIONS AND BEST PRACTICES

### 7.1 Environment Consciousness

### 7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes, Institute conducts Green Audit and Energy Audit of the college campus and facilities.

# 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

There are many tasks and activities that are taken by the college to make the campus green and eco-friendly.

### \* Energy conservation

- ➤ Electricity consumption is reduced by turning off electric devices like computers, fans, lights, air conditioner etc. before leaving the rooms.
- The fans and lights in each and every room can be controlled by a single switch outside the room. It can also be controlled through a centralized switch panel. Thus at the click of the switch fans and lights of each room, department, the whole institute can be turned off/on.
- ➤ Environment friendly Compact Fluorescent Lamp (CFL) bulbs are used instead of energy consuming tube lights at all places like seminar halls, meeting halls, board rooms, hostels, corridors etc. which helps to reduce energy consumption by around 50%. Also, Compact Fluorescent Lamps are in the process of being replaced by Light Emitting Diode (LED) which will further reduce energy consumption by around 50%.
- ➤ The Institute has installed Capacitor Bank with help of which power factor is maintained at Unity, as only required amount of energy can be supplied and utilized. For this MSEB gives concession of 14% in electricity bill.
- Solar water heaters are used in both hostel premises to reduce electrical energy consumption.
- ➤ Class rooms, laboratories, offices, seminar hall, board room, library, study room, cabins etc. are equipped with window curtains to reduce heat conduction and reduce the consumption of electricity.
- ➤ Ventilators have been installed in workshop and canteen which help to reduce temperature and provide ample amount of natural light.
- ➤ Biogas plant having capacity of 1 tonne is installed in college campus, which is running with feed from college campus (canteen and mess) and cow dung from the vicinity. The gas generated from the plant is used in hostel mess.

### \* Use of renewable energy

➤ Solar energy is the most powerful source of renewable energy. Solar cells are used to convert solar energy into electrical energy to heat the water which fulfills the human needs. Four number of solar water heater systems having 1000 liter per day capacity consist of 8 collectors with 9 copper tubes per collector are used to facilitate hostel students.

- ➤ The solar system consist of a 1 HP AC pump with 3 phase supply, PV panels, controller and installation structure along with necessary cables and pipe. The moving trolley includes array of 12 specially designed solar panels of 100 W each. The water pumped using this system is used for nursery plants.
- ➤ Biogas plant having capacity of 1 tonne is installed in college campus, which is running with feed from college campus (canteen and mess) and cow dung from the vicinity. The organic manure generated through this plant is utilized by the farmers. The gas generated from the plant is used in hostel mess.

### \* Water harvesting

Rain water harvesting is also done in the campus by providing suitable catchment areas.

### \* Efforts for Carbon neutrality

- ➤ The solar energy is converted in to electrical energy which does not produce carbon dioxide and other air pollutants. Waste management is done by biogas plants. Tree plantation is carried out by GREEN TEAM to reduce the carbon percentage in atmosphere.
- Non Private Vehicle Day is observed by the institute wherein staff and students are prohibited from using their private vehicles while coming and leaving the institute.
- ➤ The green lawns and plantation in and around the campus is also helpful in fixation of carbon content present in environment.
- Frequent inspection of college vehicles and generator set and other equipment ensures lowest possible emission and pollution free environment thereby neutralizing the carbon effect.
- Solar water heaters are used in both hostel premises to reduce electrical energy consumption and thereby it reduces the emission of carbon dioxide.

#### \* Plantation

- ➤ GREEN TEAM is established in 2012 with faculty members and students to create awareness and interest among the students and faculties for developing green environment every year.
- ➤ This activity was initiated in August 2012 between Gopalpur to Mundewadi junction on either side of road.
- ➤ In this regard the institute provided resources such as vehicle to carry plants from forest office / university, excavator and vehicle for pouring of water frequently.

### \* E-waste management

Non-working switches, electric cables, monitors, keyboard, mouse etc. are stored and properly disposed based upon highest bidding by scrap merchant.

### 7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

Table No. 7.2.1: Innovations

S. No.	Name of the	Description	Impact on the functioning of
	Innovation	-	the college
1.	Administrative innovation: Deans System	Faculty members are given additional responsibilities as Deans for Academics, Administration, Students and Research & Development.	With the growth in the size of college, Deans system facilitates more control of the activities related to Academic, Administration, Student and Research and Development. It resulted in decentralization and efficient administration.
2.	ICT & E- Learning resources	Students and faculty are provided with elearning resources such as digital library. Various books are available in PDF format in e-library.	Fi enabled, students are able take benefit of e-library and access the reference and text books
3.	Paperless communication	Taking a step further in making a green campus, college has made a move to go fo paper less communication.	college email-ids. Notices, circulars and other

### 7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

## Format for Presentation of Best Practice (1)

### 1. Title of the Practice

The title should capture the keywords that describe the Practice.

Pandharpur Pattern in Professional Education (PPPE)

### 2. Goal

Describe the aim of the practice followed by the institution. Mention the underlying principles or concepts in about 100 words.

Pandharpur Pattern in Professional Education (PPPE) is an indigenously developed mechanism for ensuring effective implementation of teaching – learning process and overall development of the students and ongoing development of faculty members. It consists of four distinctive components out of which first two focus on teachers' development and guidelines for becoming an outstanding teacher, whereas, last two focus on guiding the students about getting excellent academic performance and by going one step ahead achieving overall development.

In short the formula is:

PPPE = TEACHERS' DEVELOPMENT + TEACHING APPROACH + STUDY APPROACH + STUDENTS'DEVELOPMENT = EXCELLENT ACADEMIC and OVERALL PERFORMANCE

#### 3. The Context

Describe any particular contextual features or challenging issues that have had to be addressed in designing and implementing the Practice in about 150 words

Institute is located in rural part of Maharashtra. Most of the students admitted to the college were from rural and agricultural background. The students as well as the parents lacked awareness about technical education. Also, it was challenging to find competent faculty members.

It was essential to ensure the academic development of the students. Students lacked confidence and were over anxious which led to poor academic performance in spite of ability. Through channelized efforts, by a proper mechanism, performance of the students can be improved. Hence, teaching and study approaches had to be defined in order to cater to this need.

Pandharpur does not have any industry presence. Students had to compete with students of other established colleges for employment. To improve the employability, overall development of the students was essential in addition to academic performance.

Pandharpur Pattern in Professional Education (PPPE) was designed and developed to overcome these challenges.

#### 4. The Practice

Describe the Practice and its implementation in about 400 words. Include anything about this practice that may be unique in the Indian higher education. Please also identify constraints or limitations, if any.

Details of PPPE components are described below:

**A. Teachers' development**: This component takes care about teachers being up-to-date on academic, research and communication fronts.

For competence on academic front, teachers are required to upgrade their qualification. They should attend summer/ winter schools, etc. They are

required to get industrial exposure through visits and training for one month during vacation. They are required to study journal papers and two teachers are required to give presentations in their respective departmental weekly meetings. They are required to present papers and publish articles in conferences/seminars and journals.

The teachers who are weak on communication front are required to write five sentences in English. They should speak only in English with his/her fellow colleagues and students; and inculcate in them the attitude of speaking in English and motivate them for the same.

**B.** Teaching approach: It helps the teachers to deal with the subject and the concerned students. It explains, how the teacher should maintain the records such as subject file, attendance of the students, performance of students, behavioral aspects of students, feedback from the students, teaching plan, etc. Teachers are required to prepare the teaching plan well in advance and maintain it up-to-date.

Teachers are required to remember the names of the concerned students. They are required to be in class/lab in time and also leave in time. They are required to ensure that the students occupy the benches from the first row. They are further required to take due care about attendance of the students. It also deals with how the teachers should handle teaching of the subject.

- **C. Study approach:** It tells the students about the importance of maintaining record, being up-to-date and also gives guidelines about how to study for excellent academic performance. The students are required to maintain separate notebooks for all the subjects, have collection of question papers, understand the importance of attendance and act accordingly, go for write-up of concepts taught in the classroom, etc.
- **D. Students' development:** Students are required to write 5 sentences in English on daily basis and get them checked from the concerned proctor teachers. They are also required to carry Personality Development book during vacation and prepare report on the same. On the first day of the new semester they are required to give presentation in the class. In proctor session students are required to undergo the activities like aptitude tests, presentations, etc.

### 5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks and review results. What do these results indicate? Describe in about 200 words.

About 80% of the students are placed through campus interviews. Many industries revisit the campus for placements. This indicates the quality of education in the institute.

The pass percentage of students of first year has increased from about 55% to 81% as shown in table no.5.12 this indicates the effectiveness of implementing the teaching-learning process as per PPPE.

In the last four years, about 30% of the faculty members have been supported by the college for upgrading their qualification. Total of 11 faculty members have completed their Ph. D. during the last four years. Presently there are about 14 Ph.D. faculty members and about 14 have registered for the same. 25 teachers are in process of getting their PG degree.

95% of the faculty members have attended more than 25 Faculty Development Programmes (FDPs) and/or attended industrial training in the past two years. This indicates the overall exposure of the faculty to advanced technologies and industry.

College has research grants of about Rs.6 Cr. At present and about 30% of the faculty are involved in research. Paper publications of the faculty and students in national/ international journals/ conferences have reached about 320. This indicates the exposure and development of research culture.

### 6. Problems Encountered and Resources Required

Please identify the problems encountered and resources (Financial, Human and other) required to implement the practice in about 150 words.

Among the most difficult problems faced for implementation of PPPE are, those associated with teaching effectiveness. The preparation of teachers, specific subject matter, specific academic skills, etc., did not take into consideration sufficiently the complexity of factors required for becoming an excellent teacher. There was a strong need to train teachers to adapt to instruction style of PPPE.

Primary problem faced in the implementation of PPPE was lack of awareness. The students were not aware of the right approach of study and were not adaptive to change. The emotional problems encountered are excessive stress in doing academic tasks and low self-esteem or not believing in one's capabilities.

Gradually after witnessing the merits of the pattern, PPPE was duly accepted and now it is deeply embedded in the fabric of the teaching learning process of the Institute. The required resources and infrastructure have been provided by the institute to support the process.

### 7. Contact Details

Name of the Principal: Prof. Dr. B. P. Ronge

Name of the Institution: Shri Vithal Education & Research Institute's College

of Engineering, Pandharpur

City: Pandharpur Pin Code: 413304 Accredited Status:

Work Phone: 180030004131 Fax: Website: www.sveri.ac.in E-mail:

coe@sveri.ac.in Mobile: 9545193434

### Format for Presentation of Best Practice (2)

### 1. Title of the Practice

The title should capture the keywords that describe the Practice.

Communication Improvement Programme (CIP)

#### 2. Goal

Describe the aim of the practice followed by the institution. Mention the underlying principles or concepts in about 100 words.

Communication Improvement Program (CIP) is an indigenously developed mechanism with an aim to make integrated efforts to increase the verbal and written English communication competency of the students to achieve success in academics and placements.

The aim of CIP is to make integrated efforts to increase the English communication competency of the students to achieve success in academics and placements and to acquire overall personality development.

### 3. The Context

Describe any particular contextual features or challenging issues that have had to be addressed in designing and implementing the Practice in about 150 words.

Majority of the students are from rural areas and most of them are coming through regional language medium schools. They possess necessary ability but English becomes an obstacle in their way of career. During academics also lack of confidence of being unable to communicate in English leads to feeling of inferiority complex, resulting in risk of failing, or worse, dropping out of college. Further challenge is to make the students employable in the competitive world. Feedback from the industries consistently stressed the need for improvement in the communication of the students.

CIP is evolved as a mechanism to enable the students to communicate everyday information in a clear concise manner, enable to comprehend instructions and become an active listener and communicate relatively complex ideas in an understandable manner.

#### 4. The Practice

Describe the Practice and its implementation in about 400 words. Include anything about this practice that may be unique in the Indian higher education. Please also identify constraints or limitations, if any.

- ➤ CIP is developed for effective communication skills that enable students to express, speak effectively, interpersonally and in large or small groups.
- CIP document has six modules
  - o Tense
  - Voice
  - Speech
  - o Degree
  - o Use of Have/Has/Had, Can/Could, used to
  - Vocabulary
- Document with explanations, examples and exercises on the above components to indigenously developed as CIP. Teachers are trained on above modules before the start of the semester. CIP is included as a part of time-table for four hours per week. It is designed such that the entire course will take about three months duration. During the classes, students are taught the concepts such as tense, voice, etc. and practice is made through solving the exercises. Some of the exercises are oral in nature, to enhance the listening and pronunciation capabilities of the students.
- ➤ Vernacular accent and lack to exposure to new words posed some constraint on the pronunciation part of learning. Teachers are also not proficient with English communication and extensive trained had to be given to teachers for dealing with these modules.

#### 5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks and review results. What do these results indicate? Describe in about 200 words.

- It has been observed that there has been perceptible difference in the attitude and communication ability of the students. This is observed through their presentations made in the class, tests and other report submissions.
- > Students have actively participated in conferences and presented papers.
- ➤ Placement process consists of the following rounds: email-writing, aptitude test, Group Discussion(GD) and Interview. The average placement per department is mechanical department (78%), Electronics and telecommunication department (74%), computer and science department (82%), civil engineering Department(40%), Information technology (72%). This is an indication that students are able to clear these rounds with relative ease due to competent communication.
- The companies that hired our students have come back to us over the years. This indicates the quality of education and the potential of the students
- Employer survey is sought from the employers. The results of the survey indicate that our students possess the ability to communicate effectively.

### 6. Problems Encountered and Resources Required

Please identify the problems encountered and resources (Financial, Human and other) required to implement the practice in about 150 words.

Among the most difficult problems faced for implementation of PPPE are, those associated with teaching effectiveness. There was a strong need to train teachers to adapt and teach CIP.

Primary problem faced in the implementation of CIP was lack of awareness. The students were not adaptive to change. The emotional problems encountered are excessive stress in doing tasks and low self-esteem or not believing in one's capabilities.

Gradually after witnessing the merits of CIP it was duly accepted and now it is implemented effectively. The required resources and infrastructure have been provided by the institute to support the process.

#### 7. Contact Details

Name of the Principal: Prof. Dr. B. P. Ronge

Name of the Institution: Shri Vithal Education & Research Institute's College

of Engineering, Pandharpur

City: Pandharpur Pin Code: 413304 Accredited Status:

Work Phone: 180030004131 Fax: - Website: www.sveri.ac.in E-mail:

coe@sveri.ac.in Mobile: 9545193434

### EVALUATIVE REPORT OF THE MECHANICAL DEPARTMENTS

1. Name of the Department Mechanical Engineering Department

2. Year of Establishment 1998-99

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG in Mechanical Engg., PG in Design Engg., PG in CAD/CAM,

Names of Interdisciplinary courses and Ph.D. in Mechanical Engg

4. Names of Interdisciplinary courses and die departments/units involved

5. Annual/ semester/choice based credit Semester Wise system (programme wise)

6. Participation of the department in the courses offered by other departments

7. Courses in collaboration with other Nil

universities, industries, foreign institutions, etc

8. Details of courses/ programmes Nil discontinued (if any) with reasons

9. Number of teaching posts

	Sanctioned	Filled
Professors	2	1
Associate Professors	4	4
Asst. Professors	12	38

Nil

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D. Litt. /Ph.D. / M. Phil. etc..)

	LIII./Ph.D./ M			ı	
Name	Qualification	Designation	Specialization	No. of	No. of Ph.D. Students
				Years of	guided for
				Experience	the
					last 4 years
Dr. Kachare P. S	Ph.D., M.E.,	HOD &	Design,	17	Nil
	B.E.	Associate	Vibrations.		
		Professor			
Prof. Dr. Ronge B. P.	Ph.D.,	Professor	Design,	30.5	Nil
	M. Tech.,		Industrial Engg,		
	B.E.		Production.		
Prof. Dr. Sridevi	Ph.D., M.S.,	Associate	Material Science	11.5	Nil
	B.E.	Professor			
Dr. Lendave S. A.	Ph. D, M.Sc.,	Associate	Physics	13	Nil
DI. Lelidave S. A.	B.Sc	Professor			
Prof. Jadhav S. V.	Ph. D*, M.E.	Assistant	Energy System	16.5	Nil
F101. Jauliav S. V.	B.E.	Professor			
Prof. Gidde R.R.	Ph.D*, M.E.,	Assistant	Design	6.5	Nil
FIOI. Glade K.K.	B.E.	Professor			
	Ph.D*,	Assistant	Production	5.5	Nil
Prof. Bhosale S. B.	M.Tech.,	Professor			
	B.E.				
Drof Wangilear S S	Ph.D*, M.E.,	Assistant	Production	8.7	Nil
Prof. Wangikar S.S	B.E.	Professor			

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Prof. Gaikwad B. D.	M.Tech., B.E.	Associate Professor	Production	21	Nil
Prof. Gavali S. R.	M.E., B.E.	Assistant Professor	Heat Power	12	Nil
Prof. Raut L. B.	M.E., B.E.	Assistant Professor	Design	17.5	Nil
Prof. Shinde A. B.	M.E., B.E.	Assistant Professor	CAD/CAM	4	Nil
Prof. Honnutagi V. C.	M.Tech., B.E.	Assistant Professor	Production	1.1	Nil
Prof. Khomane S. M	M.E.*, B.E.	Assistant Professor	Design	3	Nil
Prof. Parse P. K.	M.E.*, B.E.	Assistant Professor	Design	3.5	Nil
Prof. Narkar R. R.	M.E.*, B.E.	Assistant Professor	CAD/CAM	18.5	Nil
Prof. Patil S. K.	M.E., B.E.	Assistant Professor	Design	7	Nil
Prof. Khedkar Y. M	M.E.*, B.E.	Assistant Professor	Design	4.5	Nil
Prof. Ghodake D. S.	M.E.*, B.E.	Assistant Professor	Heat Power	1.5	Nil
Prof. Palkar M. G.	M.Sc., M.Tech,	Assistant Professor	Energy Engg.	7	Nil
Prof. Salunkhe S. B.	Ph.D*, M.E., B.E.	Assistant Professor	Design	4	Nil
Prof. Mahajan O. L.	M.E., B.E.	Assistant Professor	Design	4.5	Nil
Prof. Lawate D. D.	M.E.*, B.E.	Assistant Professor	Design	5.5	Nil
Prof. Bhosale S. D.	M.E., B.E.	Assistant Professor	CAD/CAM	5	Nil
/Prof. Mulani R. D.	M. Sc., B. Sc.	Assistant Professor	Chemistry	4	Nil
/Prof. Malage A. V.	M. Sc., B. Sc.	Assistant Professor	Mathematics	7	Nil
Prof. Dhurupe R.A	M. Sc., B. Sc.	Assistant Professor	Mathematics	4	Nil
Prof. Vyavahare B.A	MA, BA	Assistant Professor	English	4.5	Nil
Prof. Kore R. R.	M.E.*, B.E.	Assistant Professor	Design	2	Nil
Pror.S.J.Shinde	M.E.*, B.E.	Assistant Professor	CAD/CAM	3	Nil
Prof S.S.Gaikwad	M.E., B.E.	Assistant Professor	Design	6.5	Nil

Prof A.I.Deokar	M.E.*, B.E.	Assistant Professor	Design	0.5	Nil
Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Prof S.S.Shinde	M.E.*, B.E.	Assistant Professor	Design	0.5	Nil
Prof S.V.Chavan	M.E.*, B.E.	Assistant Professor	Thermal	0.5	Nil
Prof A.A.Mote	M.Tech., B.E.	Assistant Professor	Production	0.5	Nil
Prof B.N.Dupade	M.E.*, B.E.	Assistant Professor	Design	0.5	Nil
Prof .J.P.Pawar	M.E., B.E.	Assistant Professor	Design	18.5	Nil
Prof .S.M.Kale	M.E.*, B.E.	Assistant Professor	Heat Power	2	Nil
Prof. A. D.Landge	M.Tech., B.E.	Assistant Professor	Thermal	0.5	Nil
Prof.S. B.Fand	M.S., BE	Assistant Professor	Mechanical	6	Nil
Prof S. P. Jagatap	M.E.*, B.E.	Assistant Professor	Design	2.5	Nil
Prof. T. S. Jagatap	M.E.*, B.E.	Assistant Professor	CAD/CAM	2	Nil
Prof. M. M. Kamble	M.E.*, B.E.	Assistant Professor	Design	0.5	Nil

## 11. List of senior visiting faculty

Sr. No.	Name of Resource Person	Name of the Industry/ Company/ Institution	Topic
1	Mr. Rajesh Kulkarni	Thermax Ltd., Pune	Manufacturing & Energy
2	Mr. Dipak Kahnere	Shaswat Urja Pvt. Ltd.	Energy
3	Mr. Santosh Joglekar	Karad Servise & Training Centre Sangli	Service
4	Mr. Rajesh Kulkarni	Thermax Ltd., Pune	Manufacturing & Energy
5	Mr. Santosh Patil	TCS, Pune	Software

# 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

1. Prof. S. P. Thengil- 100% – AME (SE Mech)

2. Prof. N. B. Badave - 100% - Engg. Mathematics-III, Numerical Methods (SE Mech)

### 13. Student - Teacher Ratio (programme wise)

STR is desired to be 15 or superior

STR = (x + y + z) / N1

Where,

x = Number of students in 2nd year of program

y = Number of students in 3rd year of program

z = Number of students in 4th year of program

N1 = Total number of faculty members in the program (By considering fractional load)

Year	X	y	Z	x+y+z	N1	STR
2013-14	154	149	138	441	30	14.7

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sr. No.	Name of the Technical Staff	Designation	Laboratory	Adequacy
1.	Mr. S.B. Surwase	Skilled Technician	Work shop	
2.	Mr. S.N. Jadhav	Skilled Technician	Work shop	
3.	Mr. B.S. Surwase	Semi Skilled Technician	<ul><li>CAD-CAM-1</li><li>CAD-CAM-2</li><li>ME CAD- CAM</li></ul>	
4.	Mr. S.R. Sarvade	Semi Skilled Technician	• F.E. Work shop	
5.	Mr. A.H. Kalubarme	Semi Skilled Technician	<ul><li>META Lab</li><li>HMT Lab</li><li>MMM Lab</li><li>ESA Lab</li></ul>	Each lab has
6.	Mr. N.V.Ligde	Semi Skilled Technician	Work shop	stipulated cadre strength as per AICTE norms.
7.	Mr. B.S. Pawar	Semi Skilled Technician	• F.E. Work shop	All the technical staffs are highly
8.	Mr. C.M. Jadhav	Semi Skilled Technician	Work shop	qualified and also have ability to think creatively.
9.	Mr.S.M.Lonkar	Semi Skilled Technician	<ul><li>Work shop</li><li>CNC Lab</li></ul>	tillik cicatively.
10.	Mr.D.D.Dubal	Lab Attendant	<ul><li>ICE Lab</li><li>RAC Lab</li><li>FM Lab</li><li>TOM Lab</li></ul>	
11.	Mr.S.R.Apsingekar	Semi Skilled Technician	Vibration Lab	
12.	Mr.P.H.Gadmire	Semi Skilled Technician	<ul><li>META Lab</li><li>HMT Lab</li><li>MMM Lab</li><li>ESA Lab</li></ul>	

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

15. Qualifications of teaching faculty with DSc/ D.Litt / Ph.D/ MPhil / PG.						
Sr.	Name	Qualification	Sr.	Name	Qualification	
No.			No.			
1.	Dr. Kachare P. S	Ph.D., M.E., B.E.	33.	Prof S.V.Chavan	M.E.*, B.E.	
2.	Prof. Dr. Ronge B. P.	Ph.D., M. Tech., B.E.	34.	Prof A.A.Mote	M.Tech., B.E.	
3.	Prof. Dr. Sridevi	Ph.D., M.S., B.E.	35.	Prof B.N.Dupade	M.E.*, B.E.	
4.	Prof. Dr. Lendave S. A.	Ph. D, M.Sc., B.Sc	36.	Prof .J.P.Pawar	M.E., B.E.	
5.	Prof. Jadhav S. V.	Ph. D*, M.E. B.E.	37.	Prof.S.M.Kale	M.E.*, B.E.	
6.	Prof. Gidde R.R.	Ph.D*, M.E., B.E.	38.	Prof .A.D.Landge	M.Tech., B.E.	
7.	Prof. Bhosale S. B.	Ph.D*, M.Tech., B.E.	39.	Prof .S.B.Fand	M.S., BE	
8.	Prof. Wangikar S.S	Ph.D*, M.E., B.E.	40.	Prof S. P. Jagatap	M.E.*, B.E.	
9.	Prof. Gaikwad B. D.	M.Tech., B.E.	41.	Prof T.S.Jagatap	M.E.*, B.E.	
10.	Prof. Gavali S. R.	M.E., B.E.	42.	Prof.M.M.Kamble	M.E.*, B.E.	
11.	Prof. Raut L. B.	M.E., B.E.	43.	Prof S.S.Shinde	M.E.*, B.E.	
12.	Prof. Shinde A. B.	M.E., B.E.				
13.	Prof. Honnutagi V. C.	M.Tech., B.E.				
14.	Prof. Khomane S. M	M.E.*, B.E.				
15.	Prof. Parse P. K.	M.E.*, B.E.				
16.	Prof. Narkar R. R.	M.E.*, B.E.				
17.	Prof. Patil S. K.	M.E., B.E.				
18.	Prof. Khedkar Y. M	M.E.*, B.E.				
19.	Prof. Ghodake D. S.	M.E.*, B.E.				
20.	Prof. Palkar M. G.	M.Sc., M.Tech,				
21.	Prof. Salunkhe S. B.	Ph.D*, M.E., B.E.				
22.	Prof. Mahajan O. L.	M.E., B.E.				
23.	Prof. Lawate D. D.	M.E.*, B.E.				
24.	Prof. Bhosale S. D.	M.E., B.E.				
25.	/Prof. Mulani R. D.	M. Sc., B. Sc.				
26.	/Prof. Malage A. V.	M. Sc., B. Sc.				
27.	Prof. Dhurupe R.A	M. Sc., B. Sc.				
28.	Prof. Vyavahare B.A	MA, BA				
29.	Prof. Kore R. R.	M.E.*, B.E.				
30.	Pror.S.J.Shinde	M.E.*, B.E.				
31.	Prof S.S.Gaikwad	M.E., B.E.				
32.	Prof A.I.Deokar	M.E.*, B.E.				

### 16. Number of faculty with ongoing projects from

a) National: 1. Prof. B. D. Gaikwad

Project by- RGSTC, Maharashtra Govn.

b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Project Funded by: RGSTC, Maharashtra

Government

Fund Received: 15.14 Lacs

18. - Research Centre /facility recognized by the University: Yes

### 19. Publications:

\* a) Publication per faculty

Name at long per faculty	Publications			
Name	Journal	Conference		
Dr. Kachare P. S	5	-		
Prof. Dr. Ronge B. P.	6	3		
Prof. Dr. Sridevi	10	3		
Prof. Dr. Lendave S. A.	10	10		
Prof. Jadhav S. V.	_	-		
Prof. Gidde R.R.	_	2		
Prof. Bhosale S. B.	2	6		
Prof. Wangikar S.S	1	4		
Prof. Gaikwad B. D.	4	4		
Prof. Gavali S. R.	_	2		
Prof. Raut L. B.	10	2		
Prof. Shinde A. B.	_	3		
Prof. Honnutagi V. C.	_	-		
Prof. Khomane S. M.	_	-		
Prof. Parse P. K.	_	-		
Prof. Narkar R. R.	-	-		
Prof. Patil S. K.	2	1		
Prof. Khedkar Y. M	-	-		
Prof. Ghodake D. S.	-	-		
Prof. Palkar M. G.	_	-		
Prof. Salunkhe S. B.	1	1		
Prof. Mahajan O. L.	1	2		
Prof. Lawate D. D.	_	1		
Prof. Bhosale S. D.	1	1		
/Prof. Mulani R. D.	_	-		
/Prof. Malage A. V.	1	-		
Prof. Dhurupe R.A	_	-		
Prof. Vyavahare B.A	_	2		
Prof. Kore R. R.	_	2		
Pror.S.J.Shinde	_	-		
Prof S.S.Gaikwad	2	-		
Prof A.I.Deokar	_	-		
Prof S.S.Shinde	_	-		
Prof S.V.Chavan	_	-		
Prof A.A.Mote	-	-		
Prof B.N.Dupade	-	-		
Prof .J.P.Pawar	-	1		
Prof.S.M.Kale	-	-		
Prof .A.D.Landge	-	1		
Prof .S.B.Fand	-	-		
Prof S. P. Jagatap	-	-		
Prof T.S.Jagatap	-	-		
Prof M.M.Kamble	-	-		
L	1	1		

\* Number of papers published in peer Nil reviewed journals (national / international) by faculty and students

\* Number of publications listed in Nil International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Monographs Nil \* Chapter in Books Nil

\* Books Edited Dr. B. P. Ronge

\* Books with ISBN/ISSN numbers with details of publishers

- \* Citation Index
- \* SNIP
- \* SJR
- \* Impact factor
- \* h-index

### 20. Areas of consultancy and income generated:

Area: Manufacturing Process

Income: Rs. 1033/-

### 21. Faculty as members in

a) National committees: Prof. Dr B. P. Ronge and Dr. P. S. Kachare in I E I Kolkata.

b) International Committees: NIL

c) Editorial Boards: NIL

### 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: 30%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 15%

### 23. Awards / Recognitions received by faculty and students: Nil

# 24. List of eminent academicians and scientists / visitors to the Department

Sr. No.	Name of Resource Person	Name of the Industry/ Company/ Institution	Topic
1	Mr. Rajesh Kulkarni	Thermax Ltd., Pune	Manufacturing & Energy
2	Mr. Dipak Kahnere	Shaswat Urja Pvt. Ltd.	Energy
3	Mr. Santosh Joglekar	Karad Servise & Training Centre Sangli	Service
4	Mr. Rajesh Kulkarni	Thermax Ltd., Pune	Manufacturing & energy

ı				
I	5	Mr. Santosh Patil	TCS, Pune	Software

### 25. Seminars/ Conferences/Workshops organized & the source of funding

a. National : Two week STTP on Fluid Mechanics conducted by IIT, Khargpur

Source of funding: 1. NMEICT, India

b. International: Nil

### 26. Student profile programme/course wise: Nil

Name of the	Applications	Selected	Enrolled		Pass
Course/programme	received				Percentage
(refer question no.			*M	*F	
.,					

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
Mechanical Engineering Department	95%	5%	Nil

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Academic Year	Students Appeared for GATE	Students Qualified GATE
2010-11	102	04
2011-12	105	05
2012-13	112	04

### 29. Student progression

Student progression	Against % enrolled
UG to PG	5%
PG to M.Phil.	Nil
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
Employed	
Campus selection	
Other than campus recruitment	

Enirepreneurship /Self-employment	Nil

#### 30. Details of Infra structural facilities

### a) Library

### **Central library:**

The central library provides following facilities:

- 1. OPAC (Online Public Access Catalogue)
- 2. Books Circulation through Software.
- 3. Book Bank Schemes.
- 4. Digital Library
- 5. Internet Connectivity
- 6. E- Journals Access throughout Campus.
- 7. LAN [Local Area Networks]
- 8. Reprography Services.
- 9. Printing Facility
- 10.CD's/DVD's for different Courses of Studies
- 11. Resource Sharing Facility
- 12. Special Section on Personality Development Books.
- 13. Special competitive examinations study section.

### Digital library:

The details of digital library are as below:

- 1. Total No. PC's in Digital Library: 18
- 2.No. of users per day in digital Library: 60
- 3. Area of Digital Library: 40 sq.Mtrs.
- 4. Digital Library Timings: 8.00AM to 8.00 PM daily.
  - In library we are having plenty of technical papers in soft as well as hard copy. Also our library contains plenty of books beyond syllabus which will help the student for their self-learning.
  - Our library subscribed for many relevant journals, magazines which are helpful for students to study beyond syllabus.

The details of library are as given below:

Sr No.	Resource	Quantity
1	Reference Books	775
2	Regular text books	7990
3	National Journals	24
4	ASME Journals	26
5	Elsevier Journals	110
6	CD's/DVD's With Books	389
7	CD's/DVD's for extra learning	145
8	Recorded Video Courses-IIT Bombay	08
9	MPSC/UPSC books	325
10	Personality Development Books	335
11	QAT and CAT	322
12	GATE Books	648

### b) Internet facilities for Staff & Students

- i) 100 Mbps line
- ii) WiFi
  - ➤ They can download books, technical papers, important information which will be helpful for their study.
  - ➤ With internet they can share their technical ideas with friends and faculty members outside and research persons.
- c) Class rooms with ICT facility: Nil

### d) Laboratories

- Laboratories are kept open beyond college hours also where students use the instruments for their project work and some research work.
- For awareness about self-learning and subjects beyond syllabus lectures or seminars are arranged for the same.
- To have the feel of self-learning and its implementation many events such as paper presentation, project exhibition, robo race, techno quiz, etc are arranged under a national level event called Olympus.
- 31. Number of students receiving financial assistance from college, university, government or other agencies: Nil

# **32.** Details on student enrichment programmes (special lectures / workshops / seminar)

with external experts

Module Description	Any other contributory Inst./	Develop ed / organiz ed by	Duration	Resource Persons	Target Audience	Usage and citation etc.
Fluid Machinery & Fluid Power	MECH SVERI	МЕСН	One Day	Prof. A. M. Mulla RIT, Islampur.	Students	Academic
Operational Research	MECH SVERI	MECH	One Day	Prof. K. R. Deshpande	Students	Academic
Operational Research	MECH SVERI	MECH	One Day	Prof. K. R. Deshpande	Students	Academic
Applied Thermodyna mics	MECH SVERI	МЕСН	One Day	Mr. Rajesh Kulkarni	Students	Academic
Computationa 1 Fluid Dynamics	MECH SVERI	МЕСН	One Day	Prof. Kiran Chaudhari	Students	Academic
Industrial Interactin	MECH SVERI	MECH	One Day	Dr. B. Ravi I.I.T. Mumbai	Students	Academic

Module Description	Any other contributory Inst./ Industry	Develop ed / organiz ed by	Duration	Resource Persons	Target Audience	Usage and citation etc.
Fluid Machinery & Fluid Power	MECH SVERI	МЕСН	One Day	Prof.A.M. Mulla RIT, Islampur.	Students	Academic
Finite Element Analysis	MECH SVERI	МЕСН	One Day	Prof. R. M. Shinde	Students	Academic
Placement Activities	MECH SVERI	MECH	One Day	Mr. Santosh Patil	Students	Academic
Guidance	MECH SVERI	MECH	One Day	Mr. Sanjay Taralgatti	Students	Academic
Finite Element Analysis	MECH SVERI	MECH	One Day	Prof. R. M. Shinde	Students	Academic
Computationa 1 Fluid Dynamics	MECH SVERI	MECH	One Day	Prof. Abhijit Malge	Students	Academic
Micro M/c & Nano M/c	MECH SVERI	MECH	One Day	Dr. Shiv G Kapoor	Students	Academic
Seminar on CAD/CAM & Automobile Seating System Design	MECH SVERI	МЕСН	One Day	Mr. Ameya Khambete & Mr. Sushant Mule	Students	Academic
ANSYS presentation seminar	MECH SVERI	MECH	One Day	Mr. G. S. Awasekar Mr. A.K. Shah	Students	Academic
Fuzzy Logic, Real time instancing network & communicatio n	MECH SVERI	МЕСН	One Day	Prof. A. M. Mulla RIT, Islampur.	Students	Academic
PLCM	MECH SVERI	MECH	One Day	Prof. U. M. Nimbalkar	Students	Academic
Transient response pld & bode plot	MECH SVERI	МЕСН	One Day	Prof. A. M. Mulla RIT, Islampur.	Students	Academic
Basic of Thermodyna mics, Heat & mass Transfer	MECH SVERI	МЕСН	One Day	Dr. U. N. Gaitonde	Students	Academic

Module Description	Any other contributory Inst./	Develop ed / organiz ed by	Duration	Resource Persons	Target Audience	Usage and citation etc.
Compurer graphics shape base frame product manufacturing process	MECH SVERI	MECH	One Day	Prof. U. M. Nimbalkar	Students	Academic
Transient response pld & bode plot	MECH SVERI	МЕСН	One Day	Prof. A. M. Mulla RIT, Islampur.	Students	Academic
Compurer graphics	MECH SVERI	MECH	One Day	Prof. U. M. Nimbalkar	Students	Academic
Basics Friction Wear Lubrication	MECH SVERI	МЕСН	One Day	Prof. Sachin Gadakh	Students	Academic
Auto- lips	MECH SVERI	MECH	One Day	Prof. P. N. Nagane	Students	Academic
Hydro static lubricant	MECH SVERI	MECH	One Day	Prof. P. N. Nagane	Students	Academic
Industrial Product Design	MECH SVERI	MECH	One Day	Prof. N. V. Hargude	Students	Academic

### 33. Teaching methods adopted to improve student learning:

- 1. Pandharpur Pattern in Professional Education (PPPE)
- 2. PPT with LCD Projector
- 3. Presentation with Smart Board
- 4. Use of Models, Charts and Animations, Videos

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

### 35. SWOC analysis of the department and Future plans

### a. Strengths:

- o Brand Value of SVERI
- o Devoted Faculty and Staff
- o Culture based on respect and discipline
- Pandharpur Pattern in Professional Education (PPPE)
- Placements
- o Academic Performance
- o R & D environment
- o 8. Well equipped laboratories
- o Extracurricular activities through MESA, Proctor etc

#### b. Weakness

- Students Communication
- o Our location
- o Attrition
- o Inadequate industry presence

## c. Opportunities

- Higher education
- Consultancy
- o Research Grants

### d. Challenges

- o Industrial exposure to students and faculty
- o Increasing consultancy and R and D funded projects

### Future Plans:

- 1. Starting the advanced software courses in the department
- 2. Training foreign language courses in department

# **Evaluative Report of the Departments Civil Engineering Department**

Name of the Department
 Year of Establishment
 Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)
 Names of Interdisciplinary courses and die

Civil Engineering Department 2008-2009
UG in Civil Engineering (Structure), PG in Civil Engineering (Nil
Ph. D in Civil Engineering
Nil

4. Names of Interdisciplinary courses and die departments/units involved

5. Annual/ semester/choice based credit system Semester Wise (programme wise)

6. Participation of the department in the courses Yes offered by other departments

7. Courses in collaboration with other universities, Nil industries, foreign institutions, etc

8. Details of courses/ programmes discontinued (if Nil any) with reasons

9. Number of teaching posts

	Sanctioned	Filled
Professors	1	01
Associate Professors	1	01
Asst. Professors	3	14

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experi- ence	No. of Ph.D students guided fort the last 4 years
1	Prof. M.M. Pawar	B. E. (Civil Engg.) M. E. (Civil - Environment) [Ph. D. (Water Management)]	Associate Professor and Head	Environment and Water Management	13	
2	Dr. P. M. Pawar	B. E. (Civil), M.Tech. (Structure –IIT Guwahati), Ph. D. (Aerospace- Gold Medal, IISc Bangalore)	Professor and Dean R&D	Structure and Aerospace	12	3

Sr. No.	Name	Qualification	ation Designation Specialization		No. of Years of Experi- ence	No. of Ph.D students guided fort the last 4 years
3	Prof. S. S. Dharane	B.E.(Civil), M.E.(Structure)	Assistant Professor	Structure	17	
4	Prof. S.S.Jadhav	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	13	
5	Prof. A. V. Zambare	B. Tech. (Agril. Engg.) M. Tech. (Agril. Engg.) [Ph.D]	Assistant Professor	Agril. Engg.	12	
6	/Prof. V. S. Kshirsagar	B. Sc. M.Sc. (Environmental Science) M.Tech. (Environmental Engg.) NET.[Ph.D]	Assistant Professor	Environmental Engg.	08	
7	Prof. S.D. Jagdale	B. E. (Agril), M. Tech. Civil (Hydraulic Engg.)	Assistant Professor	Hydraulic Engg.	3.5	
8	Prof. R.S. Sathe	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	2.5	
9	Prof. A.B. Kokare	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	2.5	
10	Prof. S.K.Patil	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	1.5	
11	/Prof. S.P.Patil	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	1.5	
12	Prof. A.H. Parande	B. E. (Civil) [M.E.(Structure)]	Assistant Professor	Structure	04	
13	/Prof. Shruthi Hiremath	B. E. (Civil) M.E.(Geo Tech)	Assistant Professor	Geo Tech	2.5	
14	Prof. S. S. Dodamani	B. E. (Civil) M. Tech. (Remote Sensing & GIS)	Assistant Professor	Remote Sensing & GIS	3.5	
15	Prof. R. B. Gavhane	B. Tech. (Agri. Engg.) M.Tech . (Water Management)	Assistant Professor	Water Management	1.5	
16	Prof. S. S. Gaikwad	B. E. (Civil) M.Tech.(Construction Management)	Assistant Professor	Construction Management	01	

## 11. List of senior visiting faculty:

Students are interacting with experts from various reputed organizations/industries for enhancement of skills and knowledge on solving contemporary issues in industry.

Sr. No.	Date	Name of Resource person	Name of the Industry/ Company/ Institution	Торіс	Number of Students present
1	09/10/2009	Dr. Khatri Vishwas	Post Doctorate fellow IISc Bangalore	Green building	50
2	30/10/2009	Prof. Poonam Shinde	Field Expert in Geology	Engineering Geology	53
3	01/03/2010	Prof. S. P. Thengil	Practicing Engineer	Structural Mechanics	60
4	07/04/2010	Prof. P.B. Tamhankar	Practicing Engineer	Structural Mechanics, Design of Steel Structures	49
5	17/07/2010	Prof. Kumbhar P. D.	Professor RIT Sakhrale	Building Construction and Design	48
6	14/10/2010	Prof. B. G. Kulkarni	Professor WCE, Sangli	Fluid Mechanics	53
7	26/03/2011	Prof. K.C. Barsawade	Practicing Engineer	Concrete Technology	53
8	08/01/2011	Prof. P.B. Tamhankar	Practicing Engineer	Structural Design and Design of steel structures	53
9	01/10/2012	Prof. P.B. Tamhankar	Practicing Engineer	Structural Mechanics II and III	55
10	03/01/2012	Miss. Kirti Dave	Adjunct professor and business consultant IIT Bombay	Expectations of civil industry from Freshers	150
11	27/06/2012	Dr. Pawar P.M.	Professor Civil Engineering	Hands on experience on research related tools	46
12	19/07/2012	Prof. Bhumkar V. S.	Practicing Engineer	Advance Concrete Structures	51
13	08/06/2012	Prof. J G Kulkarni	HOD CIVIL Sinhagad, Kegaon	Theory of Elasticity and Plasticity	12
14	01/12/2013	Prof. J. G. Kulkarni	HOD CIVIL Sinhagad, Kegaon	Theory of plates and shells / Finite Element method	12

Sr. No.	Date	Name of Resource person	Name of the Industry/ Company/ Institution	Торіс	Number of Students present
15	18/08/2013	Mr. Zanwar Prakash	MD Dry Tech.	Entrepreneurship development and dry construction	160
16	25/08/2013	Dr. Padhye R. D	Professor WCE, Sangli	Advanced Concrete Technology	51
17	29/09/2013	Dr. Patankar J. P	Retired Professor WCE, Sangli	Design of concrete Structures	12

### 12. Percentage of lectures delivered and practical classes handled

(programme wise) by temporary faculty: 2% to 3%

### 13. Student - Teacher Ratio (STR) (programme wise)

STR is desired to be 15 or superior

Assessment =  $20 \times 15/STR$ ; subject to maximum assessment of 20

STR = (x + y + z)/N1

Where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the

programme

(by considering fractional load)

Year	X	у	Z	x+y+z	N1	STR	Assessment (Max. = 20)
(2011- 12)	51	63	61	175	12	14.58	20.57
(2012- 13)	57	56	63	176	12	14.66	20.46
(2013- 14)	76	48	51	175	13	13.46	22.28
	Average Assessment						

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Name of the	Designati	Qual	ification	Other	Responsibility
Technical Staff	on	At Joining	Now	Technical skills gained	
Mr. Kakade B.B.	Lab assistant	DCE	B.E.	Laboratory Skill	Maintaining equipments and assistance during the conduction of experiments.
Mr. Karatkar Vaibhav	Lab assistant	HSC, ITI	HSC, ITI	Laboratory Skill	Maintaining equipments and assistance during the conduction of experiments.
Mr. Sangolkar G.S.	Lab assistant	SSC, ITI	SSC, ITI	Laboratory Skill	Maintaining equipments and assistance during the conduction of experiments.
Mr. Mane R.L.	Peon	SSC	SSC		Maintaining cleanliness and office duties.

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sr. No.	Name	Qualification	Specialization
1	Prof. M.M. Pawar	B. E. (Civil Engg.) M. E. (Civil -Environment) [Ph. D. (Water Management)]	Environment and Water Management
2	Dr. P. M. Pawar	B. E. (Civil), M.Tech. (Structure –IIT Guwahati), Ph. D. (Aerospace- Gold Medal, IISc Bangalore)	Structure and Aerospace
3	Prof. S. S. Dharane	B.E.(Civil), M.E.(Structure)	Structure
4	Prof. S.S.Jadhav	B. E. (Civil) [M.E.(Structure)]	Structure
5	Prof. A. V. Zambare	B. Tech. (Agril. Engg.)M. Tech. (Agril. Engg.) [Ph.D]	Agril. Engg.
6	/Prof. V. S. Kshirsagar	B. Sc. M.Sc. (Environmental Science)M.Tech. (Environmental Engg.) NET.[Ph.D]	Environmental Engg.
7	Prof. S.D. Jagdale	B. E. (Agril), M. Tech. Civil (Hydraulic Engg.)	Hydraulic Engg.

Sr.	Name	Qualification	Specialization
No.			
8	Prof. R.S. Sathe	B. E. (Civil) [M.E.(Structure)]	Structure
9	Prof. A.B. Kokare	B. E. (Civil) [M.E.(Structure)]	Structure
10	Prof. S.K.Patil	B. E. (Civil) [M.E.(Structure)]	Structure
11	/Prof. S.P.Patil	B. E. (Civil) [M.E.(Structure)]	Structure
12	Prof. A.H. Parande	B. E. (Civil) [M.E.(Structure)]	Structure
13	/Prof. Shruthi Hiremath	B. E. (Civil) M.E.(Geo Tech)	Geo Tech
14	Prof. R. B. Gavhane	B. Tech. (Agri. Engg.) M.Tech. (Water Management)	Water Management
15	Prof. S. S. Gaikwad	B. E. (Civil) M. Tech.(Construction Management)	Construction Management

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

The institutes have signed MOU with BARC, Mumbai for establishing Rural Human and Resource Development Facility (RHRDF) for development and modifications of BARC technologies or projects.

Sr. No.	Name of the Projects	No. of faculty
1	Nisargruna-Biogas plant.	1
2	Water technology.	1
3	Soil organic carbon testing.	1

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

# 18. Research Centre /facility recognized by the University: YES

#### 19. Publications:

\* a) Publication per faculty

Sr.	Name	Paper Publications		
No.		Journals	Conference	
1	Prof. M.M. Pawar	-	-	
2	Dr. P. M. Pawar	20	12	
3	Prof. S. S. Dharane	25	-	

Sr.	Name	Paper Pu	ıblications
No.		Journals	Conference
4	Prof. S. S. Jadhav	1	-
5	Prof. A. V. Zambare	5	-
6	/Prof. V. S. Kshirsagar	-	1
7	Prof. S. D. Jagdale	1	1
8	Prof. R. S. Sathe	-	-
9	Prof. A. B. Kokare	-	-
10	Prof. S. K. Patil	1	-
11	/Prof. S. P.Patil	-	-
12	Prof. A. H. Parande	-	-
13	/Prof. Shruthi Hiremath	-	-
14	Prof. R. B. Gavhane	-	-
15	Prof. S. S. Gaikwad	1	1

The following table gives the author wise number of publications, average citation index, SNIP, SJR, Impact Factor and H-Index for their publications.

Sr. No.	Name of the Faculty	Dept.	No of Publicatio ns	Av.Citation Index	SNIP	SJR	IF	H Index
1	Dr. P.M. Pawar	Civil	21	396	-	-	-	10

# 20. Areas of consultancy and income generated

Sr. No.	Year	Area of Consultancy	Income Generated in Rs.
1	Up to 2011	Different Material	72963/-
2	2012	Testing work	592034/-
3	2013		566348/-
4	2014		150200/-

# 21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards...

	Name of faculty	Name of committee
Sr.		
No.		
1	Prof. Dr. P. M. Pawar	Member of LIC, member Member of ISTE
2	Prof. M. M. Pawar	Member of LIC member
3	Prof. Ms. V. S. Khirsagar	Member of LIC member
4	Prof. Mr. A. V. Zambare	Member of LIC member
5	Prof. S. S. Dharane	Member of LIC member, Member of ISTE
6	Prof. Mr. S. S. Jadhav	Member of ISTE

# 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme: 100
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

# 23. Awards / Recognitions received by faculty and students

Sr. No.	Name of the organizing Institute	Name of the Event	Name of contest/Competition	Name of the student	Award	Year
1	Walchand Institute of	WITCH AR-14	PROJECT COMPETETION	Vinod Kumar	Second	2014
	Technology, Solapur			Sambhaji Nalwade	-	2014
	_			Metri Vikas	-	2014
				Sagar Kadam	Second	2014
			TECHNICAL WORKSHOP	Govind Devkate	-	2014
			ON GEOGRAPHIC	Akshay Chaudhari	-	2014
			INFORMATION SYSTEM	Prashant Korake	-	2014
		AAKAR 2013	MODELISMO	Akshay Chaudhari	-	2013
2	Sanjay Bhokare Group of	KAUSH ALYA-	PAPER MEET	Vishal Rajput	-	2014
	Institutes, Miraj	2014		Sumit Kashid	-	2014
				Sumit Veer	-	2014
3	IIT Bombay	TECHF	INCLINO	Sushant Kadam	-	2013
		EST 2013-14		Rahul Kapase	-	2013
		2013-14		Amit Sodmise	-	2013
				Sachin Gaikwad	-	2013
				Mayor Karne	-	2013
				Prashant Korake	-	2013
				Akshay Chaudhari	-	2013
				Vaibhav Kshirsagar	-	2013
4	SKN Sinhgad COE, Korti,	SPECT RUUM	OPTICAL ARCHERY	Snehal Phalake	-	2013
	Pandharpur	2013		Amala Bilapate	-	2013
				Arati Patil	-	2013
				Supriya Mukate	-	2013

Sr. No.	Name of the organizing Institute	Name of the Event	Name of contest/Competition	Name of the student	Award	Year
			ROBORACE	Nikhil Chandgude	-	2013
				Avinash Thorat	-	2013
				Vivek Valekar	-	2013
				Anand Valekar	-	2013
				Sandeep Kavitake	-	2013
				Avinash Jadhav	-	2013
				Sanket Khatawkar	-	2013
				Naiknaware Atul	-	2013
			PAPER PRESENTATIO N	Hrishikesh Sabale	-	2013
			QUIZ COMPETITION	Shraddha Mohite	-	2013
5	College of	MIND	ID - CIVIL	Amit Sodmise	-	2013
	Engineering	SPARK		Manohar Shinde	-	2013
	Pune	13		Rohini Rathod	-	2013
				Sagar Barawkar	-	2013
			EPITOME	Pratap Dandage	-	2013
				Mayur Karne	-	2013
				Vinod Kumar	Third	2013
				Vinayak Konkappi	Third	2013
				Sambhaji Nalawade	-	2013
				Hrishikesh Sabale	-	2013
				Sushant Kadam	-	2013
				Rahul Kapase	-	2013
				Lakshman Kawathe	-	2013
6	College of Engineering	MIND SPARK	EPITOME	Vinod Kumar	-	2012
	Pune	12		Vinayak Konkatti	-	2012
				Sambhaji Nalwade	-	2012
				Sagar Kadam	-	2012
				Kavathe L. N.	-	2012
				Kadam S.V	-	2012

Sr. No.	Name of the organizing Institute	Name of the Event	Name of contest/Competition	Name of the student	Award	Year
7	GCE KARAD	INCAR	CONCRETE	Mahadik Vishal	-	2012
		NO 2K12	SHOWDOWN	Prashant Sonkawde	-	2012
8	PIMPRI	TECHN	PAPYRUS	Jadhvar Pratibha	-	2012
	CHINCHWAD COE PUNE	OLLIG ENT '12	[MECH]	Pradyna Gaikwad	-	2012
9	S.B. PATIL COE	OCULUS -	BRIDGE CRAFT	Ghogare Komal V.	-	2012
	INDAPUR	TECHN O		Jadhvar Pratibha	-	2012
10	ADARSH INSTITUTE	SANKA LPANA	INFOGREED	Gund Prashant	-	2012
	OF TECHNOLOY	2012		Mahadik Vishal	-	2012
	[POLYTECHC] VITA			Prafull Patil	-	2012
	SANGALI			Prashant Sonkawde	-	2012
11	SKN SINHGAD	SPECT RUUM	PAPER PRESENTATIO	Shyani Dususow	-	2011
	COE KORTI	2011	N	Y Girish Singh	-	2011
	PANDHARPU R		[CIVIL]	Tai Taigh	-	2011
	K			Shinde Nita	-	2011
				Reshma Yadav	-	2011
				Shinde Nita	-	2011
				Reshma Yadav	-	2011
12	SKN SINHGAD	SPECT RUUM	QUIZ	Yumnam Girish Singh	-	2011
	COE KORTI PANDHARPUR	2011		Shyani Dususow	-	2011
			FIELD EXPO	Mulani Tausith	-	2011
			CONCRETE SHOWDOWN	Komal Pedekar	-	2011
			CONCRETE SHOWDOWN	Tasmiya Mujawar	-	2011
			CONCRETE SHOWDOWN	Reshma Chavan	-	2011

Sr. No.	Name of the organizing Institute	Name of the Event	Name of contest/Competition	Name of the student	Award	Year
13	COE	ELYSI	PAPER	Pedekar Komal		2011
13	Baramati	UM'11	PRESENTATION	Dattatray	_	2011
	Durumati	OWI II	TRESERVITATION	Tasmiya		2011
				Mujawar	_	2011
				Reshma Chavan	_	2011
				Trosimia Chavan		2011
				Reshma Yaday		2011
				Shinde Nita	_	
14	GCE Karad	BITTZ	PICASA	Shinde Nita	_	2010
		2K10				
15	Nagesh Karjagi	ORCHI	AVISHKAR	Shyani Dususow,	Third	2012
	Orchid COE	TECH'2	QUIZ	Girish Singh		
	&Technology	012	COMPETETION			
	,Solapur					
16	GCE Karad	INCAR	PAPER	Shaikh Arshanaj,	Second	2012
		NO	PRESENTATIO	Geetanjali		
		2K12	N	Ghadge		
17	Pimpri	TECHN	PAPYRUS	Geetanjali	First	2012
	Chinchwad	OLLIG	[MECH]	Ghadge,		
	COE Pune	ENT '12		Shaikh Arshanaj		
10	amia, 1	app of	D A DED	G	0 1	2011
18	SKN Sinhgad	SPECT	PAPER	Geetanjali	Second	2011
	COE Korti	RUUM	PRESENTATIO	Ghadge,		
	Pandharpur	2011	N	Shaikh Arshanaj		
			[CIVIL]			

# ${\bf 24. \ List \ of \ eminent \ academic ians \ and \ scientists \ / \ visitors \ to \ the \ Department}$

Sr. No.	Name of Resource person	Designation	Торіс
1	Dr. Khatri Vishwas	Post Doctorate fellow IISc Bangalore	Green building
2	Prof. Poonam Shinde	Field Expert in Geology	Engineering Geology
3	Prof. S. P. Thengil	Practicing Engineer	Structural Mechanics
4	Prof. P.B. Tamhankar	Practicing Engineer	Structural Mechanics, Design of Steel Structures
5	Prof. Kumbhar P D	Professor RIT Sakhrale	Building Construction and Design
6	Prof. B. G. Kulkarni	Professor WCE Sangli	Fluid Mechanics
7	Prof. K.C. Barsawade	Practicing Engineer	Concrete Technology
8	Prof. P.B. Tamhankar	Practicing Engineer	Structural Design and Design of steel structures

9	Prof. P.B. Tamhankar	Practicing Engineer	Structural Mechanics II and III
10	Miss. Kirti Dave	Adjunct professor and business consultant IIT Bombay	Expectations of civil industry from Freshers
11	Dr. Pawar P.M.	Professor civil engineering	Hands on experience on research related tools
13	Prof. J G Kulkarni	HOD CIVIL Sinhagad, Kegaon	Theory of Elasticity and Plasticity
14	Prof. J. G. Kulkarni	HOD CIVIL Sinhagad, Kegaon	Theory of plates and shells / Finite Element method
15	Mr. Zanwar Prakash	MD Dry Tech.	Entrepreneurship development and dry construction
16	Dr. Padhye R.D	Professor WCE Sangli	Advanced Concrete Technology
17	Dr. Patankar J.P	Retired Professor WCE Sangli	Design of concrete Structures

# 25. Seminars/ Conferences/Workshops organized & the source of funding

# a) National

STTP	Date	Source of Funding
One week STTP on "Recent advances	21 <sup>st</sup> - 25 <sup>th</sup> June 2014	ISTE
in Earthquake Engineering" at		
SVERI's, COE, Pandharpur		
One week STTP on "Case Studies on	22 <sup>nd</sup> - 26 <sup>th</sup> Dec. 2014	Institute
Civil Engineering" at SVERI's, COE,		
Pandharpur		
Two week ISTE-IITB workshop on	26 <sup>th</sup> Nov 6 <sup>th</sup>	Institute
"Engg. Mechanics" at SVERI's,	Dec.2013.	
COE, Pandharpur		
"Soft Computing Methods for	$19^{th} - 23^{rd}$ Dec. 2012	Institute
Engineering"		

# **b) International:** Nil

### 26. Student profile programme/course wise:

20. Student prome programme, course wise.							
Name of the	<b>Applications</b>	Selected	Enrolled		Pass		
Course/programme	received				percentage		
(refer question no. 4)							

<sup>\*</sup>M = Male \*F = Female

### 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
Civil Engineering (2014-2015)	100%	Nil	Nil
Civil Engineering (2013-2014)	98%	2%	Nil

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Year	No. of Students Qualified
GATE-2014	5
GATE-2013	3
GATE-2012	3

### 29. Student progression

Student progression	Against % enrolled
UG to PG	44
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
Campus selection	19
<ul> <li>Other than campus recruitment</li> </ul>	124
Entrepreneurship/Self-employment	Nil

### 30. Details of Infrastructural facilities

### a) Library

# **Departmental Library Includes:**

- > Text books
- > Reference books
- Projects Reports
- ➤ Lab Manuals
- > Articles

# b) Internet facilities for Staff & Students

### **Table: 30.1 Internet Facilities**

Name of the Internet	NKN	BSNL		
provider				
Available bandwidth	1 Gbps (1024Mbps)	200 Mbps		
Access speed	1:1 1:1			
Availability of internet in an	YES			
exclusive lab	1.	LS		
Availability of internet in	V	ES		
most computing labs	1.	25		

Name of the Internet provider	NKN BSNL			
Availability in departments and other units	YI	ES		
Availability in faculty rooms	YES			
Institute's own e-mail facility to faculty or students	Yl	ES		
Security / privacy to e-mail / internet users	Y	ES		

c) Class rooms with ICT facility:  $\ensuremath{\mathsf{YES}}$ 

d) Laboratories

**Table: 30.2 Laboratory Details** 

Laboratory Description in the Curriculum	Exclusive /Shared	Space (sq. m) Number of students	Number of Experiments	Qualify of Instruments	Lab Manuals
Concrete Technology Laboratory	Exclusiv e	108 - 30	a) Concrete technology- 14 b) Adv. Concrete Technology-14 c) Structural Mechanics-I-10	Excellent 1. Concrete mixer with 1 hp motor 2. Rebound hammer 3. Compaction factor test 4. Slump cone test 5. Aggregate impact test	Available
Transportation Engineering Laboratory and Geology Laboratory	Shared	75 - 25		Excellent 1. C. B. R. Test apparatus. 2. Lynx Marshal stability apparatus. 3. Loss angles abrasion testing machine. 4. Ductility testing machine.	Available
Geotechnical Engineering Laboratory	Exclusiv e	75 - 25		Excellent 1. Direct shear test apparatus motorized. 2. Triaxial test apparatus. 3.SPT Instrument 4.Consolidation test apparatus 5. Permeability test set up.	Available

Laboratory Description in the Curriculum	Exclusive /Shared	Space (sq. m) Number of students	Number of Experiments	Qualify of Instruments	Lab Manuals
Computer Laboratory	Exclusiv e	99 - 20	/	Excellent 1. Dell Optilex 380 Computer with 19"Dell wide Monitor. 2. Laser Printer Cannon Lbp 2900 3. Printer Epson LQ 1150 4. ETABS & SAP 2000	Available
Fluid Mechanics Laboratory	Shared	97 – 30	a)Fluid mechanics –I 11 b) Fluid mechanics-II 10	Excellent 1. Pelton wheel turbine test rig. 2. Centrufugal Pump test rig with DC motor variable speed. 3. Francis turbine test rig. 4. Veturimeter and Orifice meter. 5. Calibration of notches.	Available
Environmental Engineering Laboratory	Shared	65 - 20	a)Environmental Engineering-I 12 b)Environmental Engineering –II 10	Excellent 1. BCD Incubator double wall. 2.Digital ph mater 3.Digital conductivity meter 4. Digital turbidity meter.	Available
Surveying Laboratory	Exclusiv e	49 - 30	a) Surveying- I - 10 b) Surveying –II - 10	Excellent 1. Pentax total station with 1 second accuracy. 2. Theodolite 10 second accuracy. 3. Dumpy level erect image.	Available
Drawing	Exclusiv e	86 – 40	a) Building Construction & Drawing 10 b) Building Planning & Design 10	Excellent  1. Customised drawing table.	Available

# 31. Number of students receiving financial assistance from college, university, government or other agencies

Details				Amount in Rs.			
		Scholarship Assistance	CFY 2014-15 (Rs.in Lakh)	CFYm1 2013-14 (Rs.in Lakh)	CFYm2 2012-13 (Rs.in Lakh)	CFYm3 2011-12 (Rs.in Lakh)	CFYm4 2010-11 (Rs.in Lakh)
	SC	Department	,	133.97	126.65	113.53	103.55
	SBC	of Social		38.68	54.78	55.22	46.56
	VJNT	Justice and		32.26	148.33	130.69	107.53
Category	OBC	Special		79.96	97.21	90.17	79.97
	ST	Assistance, Maharashtra	11.4	0.67	0.67	NIL	0.73
EBC		State Government	Under process	3.81	181.20	159.79	114.33
Merit Scholarship		SVERI		13.06	NIL	10.27	9.21
Earn & Learn		SVEKI		18.15	19.57	19.10	19.66
То	tal Amou	nt		320.56	628.40	578.78	481.53

# **32.** Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- > Entrepreneurship Development Programme
- > Communication Improvement Programme
- Proctor sessions

### 33. Teaching methods adopted to improve student learning:

> PPPE Method

# **34.** Participation in Institutional Social Responsibility (ISR) and Extension activities: YES

#### 35. SWOC analysis of the department and Future plans

# **Strength:**

- > Excellent results
- ➤ GATE Training
- > Well equipped laboratories for practical and consultancy work
- Affiliation of UG, PG, and PhD programme by solapur university
- > Overall development of student through CESA

#### Weakness:

- > English communication
- ➤ In adequate industry exposure
- > Technical fundamentals need to be improve

#### **Opportunities:**

- > Public sector
- Private sector
- Consultancy work
- > Research and development work
- ➤ Learning opportunities through Field training, Internship, Entrepreneur Development Programme and Short Term Training Programmes
- ➤ Learning opportunities through software (AutoCAD, STAAD- pro etc.)

#### **Challenges:**

- > Promote research culture
- ➤ More industrial exposure through MoUs
- > Enhancement of placement
- ➤ Actively participation for various RHRDF projects

### **Future plans**

- > To develop earthquake engineering laboratory
- > Implementation of projects on root level
- > To get more funds from funding agencies for project completion
- > To place more number of students in various companies

# EVALUATIVE REPORT OF THE ELECTRONICS AND TELECOMMUNICATION DEPARTMENTS

1. Name of the Department Electronics and Telecommunication

Engineering 1998-99

Year of Establishment
 Names of Programmes / Courses offered
 UG in Electronic

Names of Programmes / Courses offered UG in Electronics and UG, PG, M.Phil., Ph.D., Telecommunication Engineering

Integrated Masters; Integrated Ph.D., etc.)

PG in Electronics and

Telecommunication Engineering

Yes

Ph.D in Electronics and

Telecommunication Engineering

4. Names of Interdisciplinary courses and die Nil

departments/units involved

5. Annual/ semester/choice based credit system Semester Wise (programme wise)

6. Participation of the department in the courses

offered by other departments

7. Courses in collaboration with other universities, Nil

industries, foreign institutions, etc

8. Details of courses/ programmes discontinued (if Nil

any) with reasons

9. Number of teaching posts

Teaching Post	Sanctioned	Filled
Professors	04	01
Associate Professors	05	02
Asst. Professors	14	05

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualificat ion	Designa- tion	Speciali- zation	No of Years of Experience	No of Ph.D Students guided for the last 4 years
Prof. Dr.S.M. Mukane	Ph. D.	Professor	ENTC	19	202 0220 2030 3 3 0223
Prof. Dr. Mrs. M. M. Patil	Ph. D.	Professor	Electronics	14	
Prof. M. S. Mathpati	M.E	HOD & Assistant Professor	ENTC	13	
Prof. Mrs. M. M. Pawar	M.E.	Associate Professor	Electronics	10	
Prof. Mrs.D.A. Tamboli	M.Tech	Assistant Professor	Control systems	10	
Prof. Ms. J. A. Kendule	M.E.	Assistant Professor	ENTC	10	

**Self Study Report** 

**SVERI's College of Engineering, Pandharpur** 

Name	Qualifica- tion	Desig- nation	Specialization	No of Years of Experi- ence	No of Ph.D Students guided for the last 4 years
Prof. S. C. Gurav	M.Tech	Assistant Professor	Digital Communication	6.5	
Prof. S. R. Bodapatla	M.Tech.	Assistant Professor	Electrical	5	
Prof. S. S. Sathe	M.Tech.	Assistant Professor	Digital Electronics & Communication system	5	
Prof. A. A. Jadhav	M.E.	Assistant Professor	Electronics and Telecommunication	5	
Prof. P. P. Ghodwade	M. Tech	Assistant Professor	VLSI design and Embedded systems	1	
Prof. S. A. Inamdar	M.E.	Assistant Professor	ENTC	7	
Prof. Ms.N.P. Kulkarni	M.E.	Assistant Professor	Electronics and Telecommunication	5	
Prof. A. B. Chounde	M.E.	Assistant Professor	Electronics and Telecommunication	5	
Prof. M. M. Zade	M.E.	Assistant Professor	Industrial electronics	8	
Prof. Ms. D. R. Awate	M.E.	Assistant Professor	Electronics and Telecommunication	3.3	
Prof. A. P. Narwadkar	M.E.	Assistant Professor	Electronics-Digital Systems	2	
Prof. Ms. S. S. Kadam	M.E.	Assistant Professor	Electronics and Telecommunication	1.5	
Prof. Ms. M. Biswas	M.E.	Assistant Professor	Electronics and telecommunication	1	
Prof. Ms. P. Biswas	M.E.	Assistant Professor	Electronics and telecommunication	1	
Prof. A. K. Rathod	M.E.	Assistant Professor	Electronics and Telecommunication	2.5	
Prof. A. R. Bellure	M. Tech	Assistant Professor	Power Electronics	1.5	
Prof. Ms. R. R. Mhetre	M.E.	Assistant Professor	Electronics and Telecommunication	1	
Prof. Ms. N. Chayengia	M.E.	Assistant Professor	Electronics and telecommunication	0.5	
Prof. A. M. Hanjagi	M.Tech	Assistant Professor	Digital Communication &Networking	2	
Prof. S. G. Kashid	M.E.	Assistant Professor	Electronics-Digital systems	2	

Name	Qualification	Designation	Specialization	No of Years of Experience	No of Ph.D Students guided for the last 4 years
Prof. S. R. Badigar	M.Tech	Assistant Professor	Digital electronics	0.5	years
Prof. V. H. Bonge	M.E.	Assistant Professor	Electronics-Digital Systems	0.4	
Prof. P.M. Deshmukh	M.E.	Assistant Professor	Electronics	1	
Prof. S. D. Sirsat	M.Tech	Assistant Professor	Electronics and telecommunication	2.4	
Prof. Ms. P. P. Kawathekar	M.E.	Assistant Professor	Electronics	0.4	
Prof. A. B. Yadav	M.Tech	Assistant Professor	Ceramic Engineering	1	
Prof. Ms. A.D. Shinde	M.Tech	Assistant Professor	Electronics	1	
Prof. Ms. S. A. Barbole	M.E.	Assistant Professor	VLSI and Embedded systems	0.3	
Prof. Ms. M. P.Kolekar	BE	Assistant Professor	Electrical	0.3	

# 11. List of senior visiting faculty:

Name of the Person	Designation	Place of Work	Purpose of Visit
Ms.Sumedhapatil			Career guidance
Prof.DipankarNagchoudri	Founder member,	VLSI Society of India	Workshop on VLSI
Mr.AkshayHemanth Sane	Module Leader	TCS Pune	Carrer development
Balajigaikwad	RF planning & optimization lead	Nokia indiapvt ltd	Guest lecture
Mr. Sanjay Jogalekar		Kanaad services	Guest lecture on Microprocessor

Name of the Person	Designation	Place of	Purpose of Visit
		Work	
Mr.ShailabhHaldule	Head India	Nihilent	Lecture on "Bridging Gap
	sales	Technology	between Industry and
			Academics"
Dr.swatisankalpa	COE	D.Y. PATIL	Lecture on "Mobile
		COE.	computing"
		kolhapur	
Mr.PrabhakarGavali		Prolific	Industrial automation &
		syatems	PLC
		pune	

# 12. Percentage of lectures delivered and practical classes handled by temporary faculty:

(2014-2015)

Electronics and Telecommunication Engineering.	% of lectures delivered	% of practical classes handled
Microprocessor (TE)	7%	-

# 13. Student - Teacher Ratio (programme wise)

Programme of Study	No. of Students	No. of Teachers	Student - Teacher Ratio
UG+PG	418+8=426	36	11.83

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

	Sanctioned	Filled
Academic Support Staff	10	10
(technical)		
Administrative Staff	-	-

# 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Ph. D faculties	2
Ph. D pursuing faculty	2
PG faculty	20
UG faculty	10

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Name	Project
Prof. Dr. S. M. Mukane	ICT enabled school education in rural
	area around 15-20 K.M. from NKN
	node, project funded by RGSTC of
	1.37crore

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total

Grants received:

Name	Project
Prof. Dr. S. M. Mukane	ICT enabled school education in rural area around 15-20 K.M. from NKN node, project funded by RGSTC of 1.37crore

# 18. Research Centre /facility recognized by the University: Yes

#### 19. Publications:

- \* a) Publication per faculty
- \* Number of papers published in peer reviewed journals (national /International) by faculty and students
- \* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database International Social Science Directory, EBSCO host, etc.)
- \* Monographs\* Chapter in Books\* Books Edited
- \* Books with ISBN/ISSN numbers with details of publishers\* Citation Index
- \* SNIP\* SJR
- \* Impact factor
- \* h-index

Name of Faculty	No. of Publication			ion	Books/Monograph/ Chapter
	IJ	NJ	IC	NC	Published
Prof. Dr. S. M. Mukane	9		6	3	
Prof. Dr. Mrs. M. M. Patil	12		4	2	Diagnosis of Alzheimer's disease from 3D MR images with statistical features of Hippocampus
Prof. M. S. Mathpati	1		1	1	

Name of Faculty	No	No. of Publication		ion	Books/Monograph/ Chapter		
•	IJ NJ IC		IC	NC	Published		
Prof. Mrs. M. M.	10		6	2			
Pawar							
Prof. Mrs.D.A.	1	3		1			
Tamboli	1		1				
Prof. Ms. J. A. Kendule	1		1				
Prof. S. C. Gurav				+	+		
1 ioi. S. C. Guiav							
Prof. S. K. Bodapatla	1		1				
Prof. S. S. Sathe				1			
Prof. A. A. Jadhav	10	1	1	-	Use of early burst drop predication technique to improve scheduling in OBS network		
Prof. P. P. Ghodwade		1					
Prof. S. A. Inamdar				1			
Prof. Ms.N.P. Kulkarni	1		1				
Prof. A. B. Chounde			2				
Prof. M. M. Zade	1			1			
Prof. Ms. D. R. Awate							
Prof. A. P. Narwadkar	1	1	1	1			
Prof. Ms. S. S. Kadam				1			
Prof. Ms. M. Biswas	1		1	2			
Prof. Ms. P. Biswas	2		1	2			
Prof. A. K. Rathod							
Prof. A. R. Bellure							
Prof. Ms. R. R. Mhetre							
Prof. Ms. S. M.				1	1		
Borate							
Prof. Ms. N.				+			
Chayengia							
Prof. A. M. Hanjgi				2			
Prof. S. G. Kashid			5				
Prof. S. R. Badigar	2		1				

Name of Faculty	No. of Publication		ion	Books/Monograph/ Chapter	
	IJ	NJ	IC	NC	Published
Prof. V. H. Bonge			1		
Prof. P.M. Deshmukh					
Prof. S. D. Sirsat	4		1		
Prof. Ms. P. P.					
Kawathekar					
Prof. A. B. Yadav	4	1	1	3	
Prof. Ms. A.D. Shinde			2		
Prof. Ms. S. A. Barbole	2			1	

# 20. Areas of consultancy and income generated:

Name	Project
Prof. Dr. S. M. Mukane	ICT enabled school education in rural area around 15-20 K.M. from NKN node, project funded by RGSTC of 1.37crore

# 21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

ISTE Life Membership (LM): 14

# 22. Student projects

a) Percentage of students who have done in-house projects including inter

Departmental /programme:

Academic Year	Percentage of students
2013-2014	100%
2012-2013	100%
2011-2012	100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies: Nil

# 23. Awards / Recognitions received by faculty and students:

Academic Year	Awards/Recognition
2013-2014	4
2012-2013	9
2011-2012	-

# 24. List of eminent academicians and scientists / visitors to the Department

Name of the Person	Designation	Place of Work	Purpose of Visit
R.K.S.Pro	Freelance consultant	URKS PRO TIRUMAL nagar colony meerpet Hyderabad-500040	
Digamberyedage	Lead	Cognizant Tech solution pune	
DipankarNageharedhugi	Founder member	VLSI Society of India	Workshop on VLSI
Balajigaikwad	RF planning & optimization lead	Nokia indiapvt ltd	ELITE

# 25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

# b) International

Seminars/ Conferences/Workshops organized	The Source of funding
National Conferences on "Emerging	IDBI bank Pandharpur
trends in electronics and	Solapur university, Solapur
telecommunication"	
Sttp on "image processing using	Solapur university, Solapur
MATLAB"	
Sttp on " Advanced RF & Microwave	Solapur university, Solapur
device design technology"	

# 26. Student profile programme/course wise: NIL

Name of the	Applications	Selected	Enro	lled	Pass
Course/programme	received		*M	*F	Percentage

<sup>\*</sup>M = Male \*F = Female

# 27. Diversity of Students

Name of the	% of students	% of students	% of students
Course	from the same state	from other States	From abroad
SE	100	Nil	Nil
TE	100	Nil	Nil
FE	99.35	0.65	Nil

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

Academic Year	Number of Student
2013-2014	Nil
2012-2013	Nil
2011-2012	Nil

# 29. Student progression

Student progression	Against % enrolled			
	A	cademic Yea	ır	
	2013-2014	2012-2013	2011-2012	
UG to PG	6.8%	10.10%	22.5%	
PG to M.Phil.	-	-	-	
PG to Ph.D.	-	-	-	
Ph.D. to Post-Doctoral	-	-	-	
Employed	16.23%	86.86%	55.05%	
<ul> <li>Campus selection</li> </ul>				
Other than campus recruitment	7.65%	10.1%	13.51%	
Entrepreneurship/Self-employment				

### 30. Details of Infrastructural facilities

a) Library

1. Seating capacity: 20 Students:

# 2. Library holdings:

Library Holdings	No. of Volumes
Books	150
Journals/periodicals	-
Newspapers	1(Employment news)
E-resources	-
Project reports	234
Seminar reports	234

# b) Internet facilities for Staff & Students

ISP	Railtel Pvt. Ltd.	Bsnl.pvt.Ltd	
Leased line	1 Gbps	2Mbps	
Compression ratio	1:1	1:1	
Wi-Fi facility	Yes	Yes	
Firewall	Cyberoam 300NG	Cyberoam 300NG	
Router	Cisco ASR 1002	Cisco ASR 1002	

# c) Class rooms with ICT facility

Room Description	Usage	Shared/ Exclusive	Capacit y	Rooms equipped with PC, internet, book rack, meeting space, etc.
F-17	Class room	Exclusive	80	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-18	Class room	Exclusive	80	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-19	Class room	Exclusive	80	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-20	Class room	Exclusive	80	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-21	Class room	Exclusive	80	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-22	Seminar and conference room.	Exclusive	120	Desk, platform, fans, tube lights, green board, Chairs, class room talky, podium, LCD projector, PC, PA system and storage box.
F-23	Tutorial Room	Exclusive	20	Chairs with pad, table and green board.

Room Description	Usage	Shared/ Exclusive	Capacit y	Rooms equipped with PC, internet, book rack, meeting space, etc.
F-24	Tutorial Room	Exclusive	20	Chairs with pad, table and green board.
F-25	Tutorial Room	Exclusive	20	Chairs with pad, table and green board.
R-1	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-2	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-3	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-4	Faculty room and personal interaction with students	Shared	03	Tables and chairs, fans, tubes, computer with LAN connection
FR-5	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-6	Faculty room and interaction with students	Shared	03	Tables and chairs, fans, tubes, computer with LAN connection
FR-7	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-8	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-9	Faculty room and personal interaction with students	Shared	03	Tables and chairs, fans, tubes, computer with LAN connection
FR-10	Faculty room and personal interaction with students	Shared	02	Tables and chairs, fans, tubes, computer with LAN connection
FR-11	Faculty room and personal interaction with students	Exclusive	01	Tables and chairs, fans, tubes, computer with LAN connection
FR-12	HOD Cabin	Exclusive	01	Tables and chairs, fans, tubes, Almirah, computer with LAN connection

# d) Laboratories

Lab Description in Curriculum	Exclusive Use / shared	Space (Sq.m), Number of students	List of labs and number of Experiments	Quality of Instruments	Lab Manuals
Electronic Circuit Design & Power Electronics Lab	Exclusive	72.6, 25	1.Electronic Circuit Analysis and Design-I 08 2.Circuits and Networks 08 3.Linear Integrated Circuit 08 4.Industrial Electronics 12	Excellent 1. DSO-HAMAG Make, HM-1507-3 2. Spectrum Analyzer – HAMAG Make, HM- 5014-2	Available
Microprocesso r Lab	Exclusive	76.3, 25	1.Microprocessor 20 2.Microcontroller 12 3.Digital Techniques 10 4.Control System 10	Excellent 1. LPC2148 ARM Processor Kit 2. Intel P-4, 2.66 GHz PCs 3. Dual Trace CRO 20 MHz (CS) 4. CDS Trainer kits (DT)	Available
Communicatio n Engineering Lab	Exclusive	84.6, 25	1.Analog Communication 10 2.Digital Communication 12 3.Optical Communication 10	Excellent 1. Antenna Trainer Kit ST-2261 2. DSO-TDS-2014 3. FSM Development Board	Available
Electronics Design and Project Lab	Exclusive	76, 25	1.Electronic Workshop Lab 12 2. Electronic Circuit Analysis and Design- II 10 3.Electronic System Design 11	Excellent 1. DSO-HAMAG Make, HM-1507-3 2. Spectrum Analyzer – HAMAG Make, HM- 5014-2 3. Charts & Models	Available
Computer Aided Electronics Design Lab(I)	Exclusive	69.7, 25	1.Image Processing 12 2.Data Structure 12 3.Electronic Software Lab 10	Excellent 1. Dell Desktops- 380 2. Lenovo Core 3, 2 <sup>nd</sup> Generation	Available

Lab Description in Curriculum	Exclusive Use / shared	Space (Sq.m), Number of students	List of labs and number of Experiments	Quality of Instruments	Lab Manuals
Computer Aided Electronics Design Lab(II)	Exclusive	82, 25	1.Very Large Scale Integrated Circuits 10 2.Digital Signal Processing 10 3.Fuzzy Logic 10	Excellent 1. Dell Desktops- 380 2. Lenovo Core 3, 2 <sup>nd</sup> Generation 3. MATLAB 2009-10	Available
Computer Aided Electronics Design Lab(III)	Exclusive	73.6, 25	1.Computer Communication Network 10 2.Embedded System 10 3.Hardware Mini Project 10	Excellent 1. LPC2148 ARM Processor Kit 2. Lenovo Core 3, 2 <sup>nd</sup> Generation	Available
Microwave Engineering Lab	Exclusive	76.7, 25	1.ElectromagneticEngineering and Radiating Systems 08 2.Radar and Microwave Engineering 10	Excellent 1. Microwave test bench 2. Antenna Trainer Kit 3. Motorized Antenna Unit	Available

# 31. Number of students receiving financial assistance from college, university, government or other agencies:

Details		Scholarship Assistance	CFY 2014-15 (Rs. in Lakh)	CFY1 2013-14 (Rs. in Lakh)	CFY2 2012-13 (Rs. in Lakh)	CFY3 2011-12 (Rs. in Lakh)	CFY4 2010-11 (Rs. in Lakh)
	SC	Department of Social Justice		133.97	126.65	113.53	103.55
	SBC	and Special Assistance, Maharashtra State Government	and Special Assistance, Maharashtra  UNDER PROCESS	38.68	54.78	55.22	46.56
Category	VJNT			32.26	148.33	130.69	107.53
	OBC				79.96	97.21	90.16
	ST			0.67	0.67	-Nil-	0.73

Details	Scholarship Assistance	CFY 2014-15 (Rs. in Lakh)	CFY1 2013-14 (Rs. in Lakh)	CFY2 2012-13 (Rs. in Lakh)	CFY3 2011-12 (Rs. in Lakh)	CFY4 2010-11 (Rs. in Lakh)
EBC			3.81	181.19	159.79	114.33
Merit Scholarship	SVERI	UNDER PROCESS	13.06	-Nil-	10.27	9.21
Earn and Learn	SVENI		18.15	19.57	19.10	19.66
Total Amount			320.56	628.40	578.78	481.53

# **32.** Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

Sr. No.	Name Of Event	Name of contests /competition	Level of contests	Number of participants	Date	Year
1		PAPERFEST		32	15th Sept.	
2		WIZ-O-TECH		25	15th Sept.	
3	OLYMPUS	CIRCUIT SUDOKU a)Beginner's Group	OKU ginner's 188	15th Sept.	2014-15	
4	2K14-15	CIRCUIT SUDOKU b)Expert Group	National		Бері.	2014 13
5		PRATYAKSHIK a)Microprocessor programming		45	14th	
6		PRATYAKSHIK b)Microcontroller Programming		30	Sept.	
7		PAPERFEST		50	15 <sup>th</sup> - 16 <sup>th</sup> Sept.	
8	OLYMPUS 2K13-14	WIZ-O-TECH		20	13	
9		CIRCUIT SUDOKU a)Beginner's Group	National	30	15 <sup>th</sup>	2013-14
10		CIRCUIT SUDOKU b)Expert Group		30	Sept.	

#### 33. Teaching methods adopted to improve student learning.

Lecture (LT)	Laboratory Session (LS)	Demo (DM) & Case Studies (CS)
Group Discussion (GD)	Seminar (SM)	Industrial Visit (IV)

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

#### 35. SWOC analysis of the department and Future plans

#### Strengths:-

- 1. Excellent reputation for high quality programs, faculty and research.
- 2. Commitment of students, faculty and staff towards quality, dedication, positive moral and work ethics.
- 3. Content beyond syllabus is taught to impart futuristic technical education to improve the students' standards in today's global arena.
- 4. Constant encouragement is given to faculty members for doing research leading to Master's and Ph.D.
- 5. Well maintained infrastructure and laboratories.
- 6. Enhancement of Industry institute interaction and research through MoU with different national as well as multinational companies.

#### Weakness:-

- 1. R&D and consultancy work in collaboration with national agencies and industries as a resource of funding need to be improved.
- 2. Students come with different background and culture causing heterogeneous students groups, which creates problems initially but corrected towards end.
- 3. Students are from rural background so emphasis is needed for improving English communication.
- 4. Inadequate industries in nearby area.

### **Opportunities:-**

- 1. Scope for professional consultancies.
- 2. Preparing students for GATE/GRE and PSUs.
- 3. Enter into collaborative projects with industries and other institutes for better exposure to students.
- 4. Strengthen the industry institute interaction for better placement and overall development of students.

#### Challenges:-

- 1. Risk of losing prominent faculty and staff for genuinely better opportunities at other nearby colleges.
- 2. Growing competition from nearby colleges.
- 3. Collaboration with foreign universities to promote study abroad and student exchange program.

#### EVALUATIVE REPORT OF THE DEPARTMENTS

1. Name of the Department Computer Science and Engineering

2. Year of Establishment 1998-99

3. Names of Programmes / Courses offered UG in Computer Science and

(UG, PG, M.Phil., Ph.D., Engineering

Integrated Masters; Integrated Ph.D., etc.)

PG in Computer Science and

Engineering

Ph.D in Computer Science and

Engineering

4. Names of Interdisciplinary courses and die Nil

departments/units involved

5. Annual/ semester/choice based credit system Semester Wise

(programme wise)

6. Participation of the department in the courses Yes

offered by other departments

7. Courses in collaboration with other universities, Nil

industries, foreign institutions, etc

8. Details of courses/ programmes discontinued (if Nil

any) with reasons

9. Number of teaching posts

	Sanctioned	Filled
Professors	2	3
Associate Professors	5	1
Asst. Professors	22	30

# 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr.No.	Name of faculty	Qualification	Designatio n	Specializa -tion	Experi ence (Years)	No. of Ph.D. student guided for the last 4 years
01	Dr.Shrinivas Kini	Ph.D.(CSE)	Professor & HOD	CSE	23	2
02	Prof. Shivaji Tukaram Nanaware	M. Tech. (Pursuing)	Asst. Professor	CSE	14	-
03	Prof. Dr. Suhas Dasharath Raut	Ph.D.(CSE)	Adjunct Professor	CSE	30.6	-
04	Prof. Dr. Madhav Kamlakar Raul	Ph.D (English)	Associate Professor	English	9	-

Sr.No.	Name of faculty	Qualification	Designatio n	Specializa -tion	Experi ence (Years)	No. of Ph.D. student guided for the last 4 years
05	Prof. Satish Gurunath Patil	M Tech (CSE)	Asst. Professor	CSE	13	-
06	Prof. Yoginath RevansiddhappaKal shetty	Ph.D. (CSE Appear)	Asst. Professor	CSE	10	-
07	Prof. Amit Ramanimohan Sarkar	Ph. D (CSE Appear)	Asst. Professor	CSE	9.6	
08	Prof. Ms. Vanita Dnyandev Jadhav	M. Tech. (CSE)	Asst. Professor	CSE	9.5	
09	Prof. Mrs. Maheshwari Antosh Dayade	M. Tech. (CSE)	Asst. Professor	CSE	7.5	
10	Prof. Mrs. Prajakta Abhishek Satarkar	M. Tech. (CSE)	Asst. Professor	CSE	6.8	
11	Prof. Ms. Kanchan Ashok Deshmane	M. Tech. (CSE)	Asst. Professor	CSE	6.5	
12	Prof. Sahadev Maruti Shinde	M. Tech. (CSE)	Asst. Professor	CSE	6.5	
13	Prof. Mrs. Priyanka Shrenik Doshi	M. Tech. (CSE)	Asst. Professor	CSE	6.2	
14	Prof. Ashok Gorakh Korke	M. Tech. (CSE)	Asst. Professor	CSE	6.2	
15	Prof. Amrut Ramchandra Pawar	M.E. (CSE)	Asst. Professor	CSE	6	
16	Prof. Girish Subhash Kulkarni	M. Tech. (SE)	Asst. Professor	SE	6	
17	Prof. Vijaykumar Narshimhalu Yadav	M. Tech. (CSE)	Asst. Professor	CSE	5.6	
18	Prof. Nareshkumar RevansiddappaMust ary	M. Tech. (CSE)	Asst. Professor	CSE	5.4	
19	Prof. Mrs. Swati Prashant Pawar	M.E. (CSE)	Asst. Professor	CSE	5	
20	Prof. Sharankumar Maharudrappa Kumbhar	M. Tech. (CSE)	Asst. Professor	CSE	5	
21	Prof. Srikrushna Laxmikant Utpat	M.E. (CSE) (Pursuing)	Asst. Professor	CSE	5	

Sr.No.	Name of faculty	Qualification	Designation	Specializa -tion	Experi ence (Years)	No. of Ph.D. student guided for the last 4 years
22	Prof. Dattatray Tipanna Huvianhalli	B. E.(CSE)	Asst. Professor	CSE	4	·
23	Prof. Mrs. Sanjivani Sachin Kadam	M.E. (Pursuing)	Asst. Professor	CSE	2.5	
24	Prof. Dr. Dileep Vakulabharanam	Ph.D.(Maths)	Asst. Professor	Mathemat ics	2	
25	Prof. Amitesh Anand Tripathi	M.Tech. (Pursuing)	Asst. Professor	CSE	2	
26	Prof. Mangesh Rajeev More	M. E. (CSE)	Asst. Professor	CSE	1	
27	Prof. Ganesh Gopalrao Patil	M. E.(IT)	Asst. Professor	IT	1	
28	Prof. Ms. Swati Mohan Patil	M.E. (CSE Appear)	Asst. Professor	CSE	1	
29	Prof. Ms. Poonam Vijaykumar Gaikwad	M.E. (CSE Appear)	Asst. Professor	CSE	1	
30	Prof.Mrs. Maheshwari Antosh Dyade	M. Tech. (CSE)	Asst. Professor	CSE	10	
31	Prof. Ms. Shital Nivruttee Karande	M.Tech. (CSE Appear)	Asst. Professor	CSE	1	
32	Prof. Mrs. Sonam Suresh Dongare	M.E. (CN Appear)	Asst. Professor	CSE	1	
33	Prof. Ms. Nilofar Imran Attar	B. E.(CSE)	Asst. Professor	CSE	1	
34	Prof. Ms. Bharati Tukaram Pandhare	B.E. (CSE)	Asst. Professor	CSE	6 months	

# 11. List of senior visiting faculty

Sr No.	Name of the Person	Name of Organization	Subject	Class	Date
1	Prof. Dr. Sharad Kale	BARC, Mumbai	Research on radiation	SE	7/7/2013
2	Prof. Dr. Madhuri Sawar	IIT, Mumbai	Akash Project	SE	14/7/2013
3	Prof. Sanir Kittor	Aptitude Trainer	Aptitude	TE	21/7/2013
4	Prof. Dr. P. J. Kulkarni	WCE, Sangli	Network Security	BE	28/7/2013
5	Prof. T. A. Chavan	SIT, Pune	ACC	SE	4/8/2013
6	Prof. Suhas Patil	Bharti Vidyapeeth, Pune	Operating System	TE	11/8/2013

Sr	Name of the Person	Name of	Subject	Class	Date
No.		Organization			
7	Prof. Vikas Jadhav	PICT ,Pune	GATE	TE	18/9/2013
8	Prof. Digamber Yedage	CTS,Pune	Java	TE	25/9/2013
9	Prof. Dr. Sanjeev J. Wag	Maharashtra	VC++	BE	1/10/2013
		Academy of engg,			
		Alandi, Pune			
10	Prof. Dr. U N Gaitonde	IIT, Mumbai	Personality	BE	8/10/2013
			development		
11	Prof. Nitin N. Borge	SME, Mumbai	ACC	SE	15/10/2013
12	Prof. Jamadar M. Husen	Instro Park, Solapur	VB	SE	22/10/2013
13	Prof. D. M. Padulkar	VPCOE, Baramati	CG	SE	29/10/2013

# 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

1. Prof. N. B. Badave - 100% - Engg. Mathematics (SE CSE- C Div)

# 13. Student - Teacher Ratio (programme wise):

### STR is desired to be 15 or superior

Assessment = 20 \* 15 / STR; subject to Max. Assessment of 20

STR (Student Teacher Ratio) = (x + y + z) / N1

x =Number of students in  $2^{nd}$  year of the

program

y = Number of students in  $3^{rd}$  year of

the program

z = Number of students in 4<sup>th</sup> year of

the program

N1 = Total Number of Faculty Members in the

program (by considering fractional load)

Year	X	y	Z	x + y + z	N1	STR	Assessment (Max. is 20)
2013-14	149	97	143	389	27.2	14.30	20.97

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Santioned	Filled
Support staff (technical)	4	4
Administrative staff	3	3

# 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:

Sr. No	Name of faculty	Qualification
1.	Dr.Shrinivas Kini	Ph.D. (CSE)
2.	Prof. Shivaji Tukaram Nanaware	M. Tech. (Pursuing)
3.	Prof. Dr. Suhas Dasharath Raut	Ph.D. (CSE)
4.	Prof. Dr. Madhav Kamlakar Raul	Ph.D. (English)
5.	Prof. Satish Gurunath Patil	M. Tech. (CSE)
6.	Prof. Yoginath RevansiddhappaKalshetty	Ph.D. (CSE Appear)
7.	Prof. Amit Ramanimohan Sarkar	Ph. D (CSE Appear)
8.	Prof. Ms. Vanita Dnyandev Jadhav	M. Tech. (CSE)
9.	Prof. Mrs. Maheshwari Antosh Dayade	M. Tech. (CSE)
10.	Prof. Mrs. Prajakta Abhishek Satarkar	M. Tech. (CSE)
11.	Prof. Ms. Kanchan Ashok Deshmane	M. Tech. (CSE)
12.	Prof. Sahadev Maruti Shinde	M. Tech. (CSE)
13.	Prof. Mrs. Priyanka Shrenik Doshi	M. Tech. (CSE)
14.	Prof. Ashok Gorakh Korke	M. Tech. (CSE)
15.	Prof. Amrut Ramchandra Pawar	M.E. (CSE)
16.	Prof. Girish Subhash Kulkarni	M. Tech. (SE)
17.	Prof. Vijaykumar Narshimhalu Yadav	M. Tech. (CSE)
18.	Prof. Nareshkumar RevansiddappaMustary	M. Tech. (CSE)
19.	Prof. Mrs. Swati Prashant Pawar	M.E. (CSE)
20.	Prof. Sharankumar Maharudrappa Kumbhar	M. Tech. (CSE)
21.	Prof. Srikrushna Laxmikant Utpat	M.E. (CSE) (Pursuing)
22.	Prof. Dattatray Tipanna Huvianhalli	B. E. (CSE)
23.	Prof. Mrs. Sanjivani Sachin Kadam	M.E. (Pursuing)
24.	Prof. Dr. Dileep Vakulabharanam	Ph.D. (Maths)
25.	Prof. Amitesh Anand Tripathi	M.Tech. (CSE) (Pursuing)
26.	Prof. Mangesh Rajeev More	M. E. (CSE)
27.	Prof. Ganesh Gopalrao Patil	M. E.(IT)
28.	Prof. Ms. Swati Mohan Patil	M.E. (CSE Appear)
29.	Prof. Ms. Poonam Vijaykumar Gaikwad	M.E. (CSE Appear)
30.	Prof.Mrs. Maheshwari Antosh Dyade	M. Tech. (CSE)
31.	Prof. Ms. Shital Nivruttee Karande	M.Tech. (CSE Appear)
32.	Prof. Mrs. Sonam Suresh Dongare	M.E. (CN Appear)
33.	Prof. Ms. Nilofar Imran Attar	B. E. (CSE)
34.	Prof. Ms. Bharati Tukaram Pandhare	M.E. (CSE) (Pursuing)

# 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National: 1. Prof. A. R. Sarkar
 Project: ICT enabled school education in rural area around 15-20
 K.M. from NKN node,

**Project by:** Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai.

# 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

1. **Project Funded by:** Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Mumbai.

Fund Received: 1.37crore

# 18. Research Centre /facility recognized by the University: Yes

#### 19. Publications:

### a) Publication per faculty

Sr.	Name of faculty		Publications	
No		International	International	National
		Conference	Journal	Conference
1.	Mr. Dr. S. N. Kini	11	-	-
2.	Mr. Dr. S. D. Raut	09	-	-
3.	Mr. Dr. D.	04	-	06
	Vakulabharanam			
4.	Mr. Dr. M. K. Raul	06	-	05
5.	Mr. Dr. R. N. Haridas	02	-	02
6.	Mr. A. R. Sarkar	05	-	01
7.	Mr. S. G. Patil	-	-	-
8.	Mr. Y. R. Kalshetty	02	-	01
9.	Mr. S. T. Nanaware	-	-	-
10.	Mrs. P. A. Satarkar	02	-	01
11.	Mr. A. G. Korke	01	-	01
12.	Mrs. P. S. Doshi	02	-	01
13.	Mrs. K. A. Deshmane	-	-	-
14.	Mrs. M. A. Dyade	-	-	-
15.	Mr. G. S. Kulkarni	01	-	01
16.	Mr. N. R. Mustary	01	03	02
17.	Mrs. S. P. Pawar	-	01	-
18.	Mr. V. N. Yadav	01	-	-
19.	Mr. A. M. Dyade	-	-	-
20.	Mrs. V. D. Jadhav	01	-	04
21.	Mr. A. R. Pawar	-	01	-
22.	Mr. D. T. Huvianhalli	-	02	-
23.	Mr. M. R. More	-	01	-
24.	Mr. S. M. Shinde	01	01	-
25.	Ms. R. G. Sache	01	02	-
26.	Mr. P. G. Gaikwad	02	01	-
27.	Mr. R.G. Sonkamble	-	01	-
28.	Mr. G. R. Shaikh	01	-	-

\* Number of papers published in peer Nil reviewed journals (national / international) by faculty and students

\* Number of publications listed in Nil International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Monographs
\* Chapter in Books
\* Books Edited
Nil

- \* Books with ISBN/ISSN numbers with details of publishers
- \* Citation Index
- \* SNIP
- \* SJR
- \* Impact factor
- \* h-index

### 20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees: Nilb) International Committees: Nilc) Editorial Boards....: Nil

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental /programme : 100%

b) Percentage of students placed for projects in organizations outside the institution *i.e.* in Research laboratories/Industry/other agencies: Nil

#### 23. Awards / Recognitions received by faculty and students

Sr. No	Name of the organizing Institute	Name of the Event	Name of contest/	Name(s) of the Student(s)	Award	Year
1		Over 2012	competition PPT	Neha Sharma and	3 <sup>rd</sup>	
1.	KBP, COE and	Quest 2013				
	Poly. Satara		Presentation	Jyoti Jadhav	Prize	
2.	COE, Osmanabad	Weengs	Project	Minal Kulkarni and	Runner	
		2013	Exhibition	Shital Kale		
3.	VVP I T, Solapur	Wisotech20	Paper	Akash Waghmare	Runner-	
		13	Presentation	and Suraj Kulkarni	up	
4.	A.G. Patil	AGTech	Paper	Uddhav Ghodake	2 <sup>nd</sup>	
	institute of tech.,	2013	Presentation	and Ajit Pawar	Prize	2013-
	Solapur			3		14
5.	SKN Sinhgad	Spectrum -	Paper	Neha Sharma	1 <sup>st</sup> Prize	
	College of Engg,	13	Presentation			
	Korti, Pandharpur					

Sr. No	Name of the organizing Institute	Name of the Event	Name of contest/competition	Name(s) of the Student(s)	Award	Year
6.	SKN Sinhgad College of Engg, Korti-Pandharpur	Spectrum - 13	Poster Presentation	Pratibha Chavan	1 <sup>st</sup> Prize	
7.	SKN Sinhgad College of Engg, Korti- Pandharpur	Spectrum'12	Quiz Competition	Pujari Varsharani N and Pawar Poonam H.	1 <sup>st</sup> Prize	2012- 13
8.	BIT, Barshi	Youth Festival-12	Vaad –Vivad	Bharati Pandhare	1st Prize	
9.	Universal COE, Pune	ULTIMAT UM 2012	Paper Presentation	Abdul Hamid Rashenkar and Yogesh Randive	1 <sup>st</sup> Prize	
10.	Sinhagad, Korti, Pandharpur	Spectrum - 11	Paper Presentation	Veeresh Bhavi and Bijay Jaadab	2 <sup>nd</sup> Prize	
11.	Government College of Engineering, Karad	NEXUS 11	Paper Presentation	Tanuja Suresh Dubal	2 <sup>nd</sup> Prize	2011-
12.	COE, Warnanagar	SOFTCOM 11	Paper Presentation	Debopriya Chakraborty and Neha Sharma	2 <sup>nd</sup> Prize	
13.	D.Y Patil college of engineering &Technology Kolhapur	Acumen 2K- 12	Open Book Programming	Kokate Sunil	2 <sup>nd</sup> Prize	
14.	College of Engineering, Malegaon	REBEL 2011	Web-Weaver	Swapnil Bharate and Prasad Pawar	2 <sup>nd</sup> Prize	
15.	WIT, Solapur	WITchar 2011	Paper Presentation	Amol Borge	3 <sup>rd</sup> Prize	
16.	KBP, COE and Poly. Satara	Quest 2010	Paper Presentation	Amol Borge	1 <sup>st</sup> Prize	2010- 11
17.		TulTechfest 2011	Paper Presentation	Amol Borge	2 <sup>nd</sup> Prize	
18.	STCOE, Tuljapur	TulTechfest 2011	Web Designing	Amol Borge	3 <sup>rd</sup> Prize	

# 24. List of eminent academicians and scientists / visitors to the department:

Sr.	Name of Resource	Name of the Institution /
No.	Person	Organization
1	Dr. L. M. R. J. Lobo	WIT Solapur
2	Dr. P. J. Kulkarni	WCE Sangli
3	Dr. D. M. Padulkar	VPCoE Baramati
4	Dr. S. D. Raut	Orchid Solapur
5	Dr. Sharad Kale	BARC, Mumbai
6	Dr. Madhuri Sawant	IIT, Mumbai
7	Dr. U. N. Gaitonde	IIT, Mumbai
8	Dr. Suhas Patil	Bharti Vidyapeeth, Pune
9	Dr. Vikas Jadhav	PICT ,Pune
10	Dr. Digamber Yedage	CTS, Pune
11	Dr.Sanjeev J. Wagh	Maharashtra Academy of Engg.,
11		Alandi, Pune
12	Dr. Ravindra Hegadi	WIT Solapur

### 25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National -1
- b) International- Nil
  - 1. The Computer Science & Engineering department has organized National Level STTP Workshop on "Latest Trends in Data Mining and Machine Learning" funding from College.

26. Student profile programme/course wise: Nil

Name of the Course/programme	Applications received	Selected	Enrolled		Pass Percentage
(refer question no. 4)			*M	*F	

### 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students From abroad
SE	100	-	-
TE	99.99	0.01	-
BE	99.99	0.01	-

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?

2 students have cleared GATE examination 2013-14.

#### 29. Student progression

<b>Student Progression</b>	Against % enrolled
UG to PG	20.88%
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
Campus selection	77.88%
Other than campus recruitment	Nil
Entrepreneurship/Self-employment	Nil

#### 30. Details of Infrastructural facilities

#### a) Library:

The central library provides following facilities:

1. No. of Books available for CSE dept:

UG: 1273 text books and 895 reference books

ME: 59 text books and 412 reference books

- 2. Book Bank Schemes.
- 3. Digital Library
- 4. E- Journals Access throughout Campus (75 IEEE E-journals and 70 Science Direct e-journals)
- 5. Printing Facility
- 6. CD's/DVD's for different Courses of Studies
- 7. Special Section on Personality Development Books.
- 8. Special Section on competitive examinations study.

Apart from the central library, department library provides infrastructure facilities like conference table, chairs, LCD Projector and computer with internet connectivity, cupboards, bookracks, books and other facilities like

- 1. E- Journals Access—75 IEEE E-journals and 70 Science Direct e-journals
- 2. Printing Facility
- 3. CD's/DVD's for different Courses of Studies and software
- 4. Copies of Project Reports
- 5. Copies of subject-wise toppers university exam answer sheets

## b) Internet facilities for Staff & Students:

Name of the Internet provider	NKN & BSNL
Available bandwidth	1 Gbps (1024Mbps) & 2 Mbps resp.
Access speed	1:1
	1:1
Availability of internet in an exclusive lab	Yes
Availability of in most computing labs	Yes
Availability in departments and other units	Yes
Availability in faculty rooms	Yes
Security / privacy to e-mail / internet users	Yes

## c) Class rooms with ICT facility: Yes

## d) Laboratories:

The laboratories are well equipped with computer; all the systems are with required configuration, required installed software (Licensed copy) and smart board.

Laboratory Description in Curriculum	Exclusive Use / shared	Space (Sq.m), Number of students	List of respective subject labs	Quality of Instruments	Laboratory Manuals
Advanced Software Lab	Shared	63, 23	1.Operating System  2. System Programming	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3. Printer, 4. Power Backup	Available
Database lab	Shared	63, 23	<ul><li>1. Database Engineering</li><li>2.Java Programming</li></ul>	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3.Printer, 4. Power Backup 5. C Compiler, Oracle 8.1, JDK 1.2	Available

Laboratory Description in Curriculum	Exclusive Use / shared	Space (Sq.m), Number of students	List of respective subject labs	Quality of Instruments	Laboratory Manuals
Linux lab	Shared	84,35	1.Compiler Construction 2.Advanced C Concepts 3.Operating System-I 4.Object Oriented Programming 5.Network Security	Excellent 1. PC's with Core Duo Processor, 2. Linux Operating System, 3.Printer, 4. Power Backup 5. GCC Compiler	Available
Project lab	Shared	72, 23	1.Java Programming	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3.Printer, 4. Power Backup 5.JDK 1.2	Available
Digital Technique lab	Shared	60, 30	1.Digital Technique	Excellent Digital Trainer Kit	Available
Computer Graphics	Shared	80, 32	1.Advanced C Concepts 2.Visual Basic	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3.Printer, 4. Power Backup 5.VB Compiler, TC	Available
Computer Centre	Shared	139, 65	1.Web Technology 2. Computer Network-I 3. Computer Network-II 4. Visual C++	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3.Printer, 4. Power Backup 5.JDK 1.2	Available

Laboratory Description in Curriculum	Exclusive Use / shared	Space (Sq.m), Number of students	List of respective subject labs	Quality of Instruments	Laboratory Manuals
Microprocessor Lab	Exclusive	60, 30	1. Microprocessor	Excellent Digital Trainer Kit	Available
Computer Programming Lab	Shared	68, 30	1.Data Structure 2. Advanced C Concepts 3.Visual Basic	Excellent 1. PC's with Core Duo Processor, 2.XP Operating System, 3.Printer, 4. Power Backup	Available

# 31. Number of students receiving financial assistance from college, university, government or other agencies

				Amount in Rs.				
Details		Scholarship Assistance	CFY 2014-15 (Rs.in Lakh)	CFYm1 2013-14 (Rs.in Lakh)	CFYm2 2012-13 (Rs.in Lakh)	CFYm3 2011-12 (Rs.in Lakh)	CFYm4 2010-11 (Rs.in Lakh)	
	SC	Department		133.97	126.65	113.53	103.55	
	SBC	of Social		38.68	54.78	55.22	46.56	
Cataman	VJNT	Justice and		32.26	148.33	130.69	107.53	
Category	OBC	Special		79.96	97.21	90.17	79.97	
	ST	Assistance, Maharashtra	111	Undan	0.67	0.67	NIL	0.73
EBC	Ctata	3.81	181.20	159.79	114.33			
Merit Scholars	hip	SVERI		13.06	NIL	10.27	9.21	
Earn & Learn				18.15	19.57	19.10	19.66	
7	Total An	nount		320.56	628.40	578.78	481.53	

# **32.** Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

Sr No	Name of the Person	Name of Organization	Subject	Class	Date
1	Dr. Sharad Kale	BARC, Mumbai	Research on radiation	SE	7/7/2013
2	Dr. Madhuri Sawant	IIT, Mumbai	Akash Project	SE	14/7/2013
3	Mr. Sanir Kittor	Aptitude Trainer	Aptitude	TE	21/7/2013
4	Dr. D. B. Kulkarni	WCE, Sangli	Network Security	BE	28/7/2013
5	Prof. T. A. Chavan	SIT, Pune	ACC	SE	4/8/2013

Sr No	Name of the Person	Name of Organization	Subject	Class	Date
6	Dr. Suhas Patil	Bharti Vidyapeeth, Pune	Operating System	TE	11/8/2013
7	Mr. Vikas Jadhav	PICT, Pune	GATE	TE	18/9/2013
8	Mr. Digamber Yedage	CTS, Pune	Java	TE	25/9/2013
9	Dr. Sanjeev J. Wagh	Maharashtra Academy of engg, Alandi, Pune	VC++	BE	1/10/2013
10	Dr. U N Gaitonde	IIT, Mumbai	Personality development	BE	8/10/2013
11	Prof. Nitin N. Borge	SME, Mumbai	ACC	SE	15/10/2013
12	Prof. Jamadar M. Husen	Instro Park, Solapur	VB	SE	22/10/2013
13	Dr. D. M. Padulkar	VPCOE, Baramati	CG	SE	29/10/2013

#### 33. Teaching methods adopted to improve student learning

- 1. Conducting remedial coaching classes for the poor achievers.
- 2. Once in a semester, industrial visit has been planned.
- 3. Activities like seminars and group discussion are carried out in proctor sessions.
- 4. Soft skill training programs & Entrepreneurship Development Program (EDP) are conducted.

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Through the NSS, students of our department has participated in various social activities viz. water distribution camp on the occasion of AAshadhi Ekadashi at Pandharpur, Blood donation camp on various occasions, Tree plantation Programme from Gopalpur to Chalepati, and organizing Poster exhibitions like "to save girl child", "Ill effects of Tobbaco, Gutkha, and Alkoholic Drinks" and "Clean India Mission".

#### 35. SWOC analysis of the department and Future plans

#### a. Strengths:

- Department has well equipped Computer Laboratory with internet facility.
- Conducting remedial coaching classes for the poor achievers.
- Devoted Faculty and Supporting Staff
- Academic Performance of students
- Developing computer operating skills to non-computer Science supporting staff members.

#### b. Weakness

- Consultancy and Research not up to expectations.
- No Patents and / or Intellectual property rights established by department.
- Inadequate industry presence in the local area for exposure to students.

## c. Opportunities

- Consultancy for local SME/MSME industry and opportunity for students to address problems of local industries.
- Higher education and research areas to be explored.

#### d. Challenges

- To involvement of industry professionals live projects to students.
- Faculty retention.
- To develop patentable Ideas and getting support systems for the same.

In the foreseeable future the department wants to en-cash on the benefits of provisioning of NKN based school distant collaborative education and percolate the same to higher education also. Further we want to establish good relations with the society and the industries around us especially agro-based industries which cater to local agricultural farmers. Patents and IPR are the next ones on focus.

#### **Evaluative Report MBA Department**

1. Name of the Department Master in Business Administration

2. Year of Establishment 2008

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Master in Business Administration

Nil

**Integrated Masters; Integrated Ph.D., etc.)** 

4. Names of Interdisciplinary courses and die Nil

departments/units involved

**5. Annual/ semester/choice based credit system** Semester Pattern

(programme wise)6. Participation of the department in the courses

offered by other departments

7. Courses in collaboration with other universities, Nil industries, foreign institutions, etc

8. Details of courses/ programmes discontinued (if Nil any) with reasons

9. Number of teaching posts

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	08	08

#### 10. Faculty Profile

Sr.	Name of Staff	Qualificatio	Designation	Specializatio	No. of Years
No.		n		n	of Experience
1.	Mr. Chetan C. Patange	MBA	Asst. Professor	Marketing & HR	04
2.	Ms. Minal M. Bhore	MBA	Asst. Professor	Marketing	06
3.	Ms. Rohini R. Bhosale	MBA	Asst. Professor	Marketing & Finance	06
4.	Ms. Shalan A. Jagtap	MBA	Asst. Professor	Marketing & Finance	05
5.	Mr. Mohsin I. Bohari	MBA	Asst. Professor	Marketing & Production	04
6.	Mr. Anantkumar T. Pol	MBA, M.Com.	Asst. Professor	Marketing & Finance	05
7.	Mr. Prashant B. Kadam	MBA	Asst. Professor	Marketing & Personnel Management	08

### 1. List of senior visiting faculty

Sr.	Name of Visiting	Qualification	Teaching	Industrial
No.	faculty		Experience	Experience
1.	Dr Rajshekhar	B.Com(Hons),	30 years	2 years
	Ramling Yelikar	M.B.A., LL.B.,		
		Ph.D.		
2.	Mr. Prasad Bhagwat	B. Pharm, MMM	16 years	2 years
3.	Mr. Rajendra Umap			
4.	Mr. Amol Randive	BBA, MBA, SET,	05	-
		NET		
5.	Dr. Jayashri Chavan	B.Com, M.Com,	09	-
		M.Phil, PhD		
6.	Dr. U. M. Deshmukh	MBA, PhD,	19 years	-
		M.Com, FDPM		
7.	Mr. Rajan Umap	MBA	15 years	

# 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Adv. N. J. Babar - 100% Subject - Legal Aspects of Business (MBA-I)

### 13. Student - Teacher Ratio (programme wise)

STR is desired to be 15 or superior

$$STR = (x + y) / N1$$

Where,

x = Number of students in 1<sup>st</sup> year of program

y = Number of students in 2<sup>nd</sup> year of program

N1 = Total number of faculty members in the program

(By considering fractional load)

Year	X	y	x+y	N1	STR
2013-14	19	15	34	07	05
2012-13	34	11	45	08	5.62
2011-12	11	22	33	08	4.12

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sr. No.	Name of the Technical Staff	Designation	Laboratory	Adequacy
1.	Mr. U. M.	Skilled	Computer Lab	-
	Yelmar	Technician		

### 15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Name	Qualification
Mr. Chetan C. Patange	MBA
Ms. Minal M. Bhore	MBA
Ms. Rohini R. Bhosale	MBA
Ms. Shalan A. Jagtap	MBA
Mr. Mohsin I. Bohari	MBA
Mr. Anantkumar T. Pol	MBA
Mr. P. B. Kadam	MBA

- 16. Number of faculty with ongoing projects from: NIL
- 17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
- 18. Research Centre /facility recognized by the University: Nil

#### 19. Publications:

\* a) Publication per faculty

Name	Publications		
Name	Journal	Conference	
Mr. Chetan C. Patange	-	02	
Ms. Minal M. Bhore	02	09	
Ms. Rohini R. Bhosale	03	08	
Ms. Shalan A. Jagtap	-	01	
Mr. Mohsin I. Bohari	-	-	
Mr. Anantkumar T. Pol	-	04	
Mr. P. B. Kadam	09	04	

<sup>\*</sup> Number of papers published in peer reviewed journals (national / international) by faculty and students: Nil

\* Monographs: Nil \* Chapter in Books: Nil \* Books Edited: Nil

<sup>\*</sup> Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host etc.): Nil

- \* Books with ISBN/ISSN numbers with details of publishers
- \* Citation Index
- \* SNIP
- \* SJR
- \* Impact factor
- \* h-index

#### 20. Areas of consultancy and income generated:

TRADEXPO 2014: In the view of giving practical exposure to students and the strong customer base to trade of Pandharpur taluka, MBA department took initiative to start TRADEXPO this year. It was Organized on 19<sup>th</sup> 20<sup>th</sup> 21<sup>st</sup> sept. 2014. It was open for dealers of various companies, small scale business from different sectors like **automobile**, **electronics**, **agriculture**, **readymade garment**, **imitation and jewelry**, **telecommunication** etc. In TRDEXPO we got participation from reputed companies like Maruti Suzuki, Volksvagon, Tata Motors, JohnDeere, Sonalika, Mahindra Tractors, Honda Motors, hero etc. we succeeded in getting 45 stalls from different industries and in three days trade of around Rs. 50 lakhs was done from all the stall holders.

For the first time we have taken this initiative & it gave very good platform for Trade of Pandharpur to advertize, relationship development, and development of strong customer base.

**Income Generated:** Rs 1,75,000/-

#### 21. Faculty as members in

a) National committees: Nil

b) International Committees: Nil

c) Editorial Boards: Nil

#### 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: Nil
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 100 %

#### 23. Awards / Recognitions received by faculty and students: Nil

# 24. List of eminent academicians and scientists / visitors to the

Depa	Department					
Sr.	Name of Visiting	Qualification	Teaching	Industrial		
No.	faculty		Experience	Experience		
	Mr. Sachidanand	Bsc. PGDBM HR	-	13		
	Kulkarni					
	Mr. Kiran Joshi	BE, MBA	15	10		
1.	Dr Rajshekhar Ramling	B.Com(Hons),	30 years	2 years		
	Yelikar	M.B.A., LL.B.,				
		Ph.D.				
2.	Mr. Prasad Bhagwat	B. Pharm, MMM	16 years	2 years		

Sr.	Name of Visiting	Qualification	Teaching	Industrial
No.	faculty		Experience	Experience
3.	Mr. Rajendra Umap			
4.	Mr. Amol Randive	BBA, MBA, SET,	05	-
		NET		
5.	Dr. Jayashri Chavan	B.Com, M.Com,	09	-
		M.Phil, PhD		
6.	Dr. U. M. Deshmukh	MBA, PhD,	19 years	-
		M.Com, FDPM		
7.	Mr. Rajan Umap	MBA	15 years	-
8.	Mr. K. P. Galani	MBA	05 years	01 year
9.	Dr. Ramesh Kasetwar			

# 25. Seminars/ Conferences/Workshops organized & the source of funding Nil

# **26. Student profile programme/course wise:** Not Applicable (for CAP Round)

#### 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
MBA	98%	2%	Nil

# 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? Nil

#### 29. Student progression

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
Employed	
Campus selection	
Other than campus recruitment	
Enirepreneurship/Self-employment	5 %

### 30. Details of Infra structural facilities

## a) Library

#### A. Central library:

The central library provides following facilities:

- 1. OPAC (Online Public Access Catalogue)
- 2. Books Circulation through Software.

- 3. Book Bank Schemes.
- 4. Digital Library
- 5. Internet Connectivity
- 6. E- Journals Access throughout Campus.
- 7. LAN [Local Area Networks]
- 8. Reprography Services.
- 9. Printing Facility
- 10.CD's/DVD's for different Courses of Studies
- 11. Resource Sharing Facility
- 12. Special Section on Personality Development Books.
- 13. Special competitive examinations study section.

#### **B.** Digital library:

The details of digital library are as below:

- 1. Total No. PC's in Digital Library: 18
- 2. No. of users per day in digital Library: 10
- 3. Area of Digital Library: 40 sq.Mtrs.
- 4. Digital Library Timings:

### 8.00AM to 8.00 PM daily.

- In library we are having plenty of technical papers in soft as well as hard copy. Also our library contains plenty of books beyond syllabus which will help the student for their self-learning.
- ➤ Our library subscribed for many relevant journals, magazines which are helpful for students to study beyond syllabus.

The details of library are as given below:

Sr No.	Resource	Quantity
1	Reference Books	146
2	Regular text books	3612
3	National Journals	30
4	ASME Journals	26
5	Elsevier Journals	275
6	CD's/DVD's With Books	1150
7	CD's/DVD's for extra learning	942
9	MPSC/UPSC books	657
10	Personality Development Books	4308
11	QAT and CAT	250
12	IBPS Exam Books	10

#### b) Internet facilities for Staff & Students

### i) 1 GBPS lease line

- ii) Wi-Fi
  - ➤ They can download books, technical papers, important information which will be helpful for their study.
  - ➤ With internet they can share their technical ideas with friends and faculty members outside and research persons.

#### c) Class rooms with ICT facility: Yes

#### d) Laboratories

- Laboratories are kept open beyond college hours also where students use the instruments for their project work and some research work.
- For awareness about self-learning and subjects beyond syllabus lectures or seminars are arranged for the same.
- ➤ To have the feel of self-learning and its implementation many events such as paper presentation, project exhibition, robo race, techno quiz, etc are arranged under a national level event called Olympus.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Sr.	Year/Type of	2011-12	2012-13	2013-14	2014-15
No.	Scholarship				
01	Government	14	12	14	28
02	College(Earn and	03	03	03	04
	Learn)				

# **32.** Details on student enrichment programs (special lectures / workshops / seminar) with external experts

Sr.	Name of	Academic	Purpose	Resource	Participant
No.	Activity	Year		Person	
1	One Day	2014-15	Professionalism	Dr. Ramesh	MBA-I & MBA-
	Workshop		and Ethics	Kasetwar	II students
2	One Day	2014-15	Interview Skills	Prof. Prasad	MBA-I & MBA-
	Workshop			Bhgwat	II students
3	One Day	2014-15	Banking and	Mr. K. P. Galani	MBA-I & MBA-
	Workshop		Share Market		II students
			awareness		
4	One Day	2014-15	Opportunities and	Dr. R. R. Yelikar	MBA-I & MBA-
	Workshop		Threats for MBA		II students
			students		
5	IBPS	2013-14	Students	Mr. Abhijeet	MBA-I & MBA-
	Tarining		preparation for	Saymote	II students
			Banking exam		
6	One Day	2013-14	Personality	Prof. Prakash	MBA-I & MBA-
	Workshop		Development	Vasekar	II students
7	One Day	2013-14	Relationship	Prof. Rajan	MBA-I & MBA-
	Workshop		Management	Umap	II students
8	One Day	2013-14	Contextual	Mr. Sachidanand	MBA-I & MBA-
	Workshop		Behaviour	Kulkarni	II students
9	One Day	2012-13	Aims and	Mr. Ratikant	MBA-I & MBA-
	Workshop		Ambitions for	Ray	II students
			budding		
			Managers		

Sr.	Name of	Academic	Purpose	Resource	Participant
No.	Activity	Year		Person	
10	One Day	2012-13	Employability	Mr. S. Venu	MBA-I & MBA-
	Workshop		Skills and		II students
			Resume Writing		
11	One Day	2012-13	Placement	Mr. Saneer	MBA-I & MBA-
	Workshop		Preparation	Kittur	II students
12	One Day	2012-13	Challenges in	Prof. Amol	MBA-I & MBA-
	Workshop		Business	Randive	II students

#### 33. Teaching methods adopted to improve student learning: PPPE

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

We have started to provide career guidance sessions in senior colleges in our area. The basic purpose is to create awareness about career opportunities after graduation.

#### 35. SWOC analysis of the department and Future plans

#### **Strengths:**

- ➤ Our Students obtain 85% to 100% results in University examinations every year.
- > Development of soft skills from renowned trainers.
- Department has well equipped Computer Laboratory with internet facility.
- Faculties with good experience from industry and academics.
- Organization of workshops for competitive exams like IBPS and EDP.

#### Weakness:

- > Inadequate industrial presence in our area.
- ➤ Being in outskirt especially rural area, it's very difficult to develop students in English communication.

#### **Opportunities:**

- ➤ Conducting National/International level Seminars/Conferences especially in the field of management research
- ➤ Signing MOUs with industries and reputed management institutes for giving practical exposure to students and faculties
- > Students' participation in Seminars using ICT facility.
- Extending professional services towards society for entrepreneurship development.

## **Challenges:**

- ➤ Molding students to match the level of metro city students
- > Development of research culture to solve industry problems

#### **Future Plans:**

- > Extending education to graduate level by starting courses like BBA.
- > Becoming university recognized research centre for Ph. D in management education

#### DECLARATION

I certify that the data included in this Self Study Report (SSR) are true to the best of my knowledge.

This Self Study Report (SSR) is prepared by the Institution after internal discussion, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this Self Study Report (SSR) during the peer team visit.

Signature of the Head of the Institution
With SEARINCIPAL,

SVERI'S COLLEGE OF ENGINEERING,

Place: Date:



#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No.:SOL/UTY/BCUD/Affi/1490/6308

Date: 20 JAN 2010

Vidyaparishad Tharao No.1

Date:19/12/2009

To,

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About permanent affiliation of Engineering Courses from June 2007

Reference: 1. Local Inquiry Committee Report dated 15/04/2008.

2. Committee Report about verification of norms dated 17/02/2009.

Sir.

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the permanent affiliation of Engineering Courses of your Institute from 2007 and your report with respect to fulfillment of conditions and Management Council resolution No.1 dated 19/12/2009, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period
1.	Engineering 1. Computer Science & Engineering 2. Mechanical Engineering 3. Electronics & Telecommunication Engineering	Permanent Affiliation	From Academic Year 2007-2008

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

Ref.No. SUS/BCUD/AFFILIATION/1391 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.71

Date:24/04/2014

To,

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of affiliation (Civil and IT)Part I to IV for academic year 2014-2015

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses (Civil and IT)Part I to IV of your Institute from academic year 2014-2015 and Management Council resolution No.71 dated 24/04/2014, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	Engineering (Civil and Information Technology) Part I to IV	renewal of Affiliation	Academic Year 2014- 2015(One Year)	

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

SVERI'S COLLEGE OF ENGINEERING

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#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No. SUS/BCUD/AFFILIATION/1391 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.13

Date:24/04/2014

To.

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of M.E.(Mechanical Engineering [CAD/CAM]) Part I and II from

academic year 2013-2014.

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses M.E. Mechanical Engineering [CAD/CAM] Part I and II of your Institute from academic year 2013-2014 and Management Council resolution No.13 dated 24/04/2014, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Academic Years 2013-2014,2014- 2015 and 2015-2016 (Three Years)	
1.	M.E.  Mechanical Engineering [CAD/CAM])  Part I and II	Renewal of Affiliation		

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No. SUS/BCUD/AFFILIATION/1390 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.70

Date: 24/04/2014

To.

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of M.E. (Mechanical Design Engineering) Part I and II from academic year

2014-2015.

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses M.E. (Mechanical Design Engineering) Part I and II of your Institute from academic year 2014-2015 and Management Council resolution No.70 dated 24/04/2014, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	M.E. Mechanical Design Engineering Part I and II	Renewal of Affiliation	Academic Years 2013-2014,2014-2015 and 2015-2016 (Three Years)	

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

#### SOLAPUR UNIVERSITY, SOLAPUR

#### Ref.No. SUS/BCUD/AFFILIATION/1383 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.11

Date:24/04/2014

To,

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject : About renewal of M.E.(Electronics & Telecommunication Engineering) Part I and II from

academic year 2013-2014

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses M.E. (Electronics & Telecommunication Engineering) Part I and II of your Institute from academic year 2013-2014 and Management Council resolution No.11 dated 24/04/2014, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	M.E. (Electronics & Telecommunication Engineering) Part I and II	Renewal of Affiliation	Academic Years 2013-2014,2014-2015 (Two Years)	

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director.

BCUD, Solapur University, Solapur

Ref.No. SUS/BCUD/AFFILIATION/1385 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.15

Date:24/04/2014

To.

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of M.E.(Civil Structure Engineering) Part I and II from academic year

2013-2014.

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir.

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses M.E. (Civil Structure Engineering) Part I and II of your Institute from academic year 2013-2014 and Management Council resolution No.15 dated 24/04/2014, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	M.E. ( Civil Structure Engineering) Part I and II	Renewal of Affiliation	Academic Years 2013-2014,2014-2015 (Two Years)	

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No. SUS/BCUD/AFFILIATION/1399 Date:6/5/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

Vidyaparishad Tharao No.265

Date:24/04/2014

To,
The Principal,
College of Engineering,
Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of M.E.(Computer Science & Engineering) Part I and II from academic year 2014-2015.

Reference: 1. Local Inquiry Committee Report dated 10/02/2014.

Sir.

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Engineering Courses M.E.(Computer Science & Engineering) Part I and II of your Institute from 2014-2015 and your report with respect to fulfillment of conditions and Management Council resolution No.265 dated 24/04/2014, your Institute is given approval with following conditions:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	M.E. (Computer Science & Engineering) Part I and II	Renewal of Affiliation	Academic Years 2014-2015 (one Year)	

Condition:

Recognition of faculty members as PG teacher shall be obtained from the university.

Above mentioned conditions should be fulfilled by the Institute and report for the same with related documents should be submitted to university as early as possible. Fulfillment of conditions will be done on or before 30/06/2014, if not action will be taken against Institute.

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No. SUS/BCUD/AFFILIATION/1484 Date:24/5/2012

Vidyaparishad Tharao No.91

Date:30/04/2012

To,

The Principal,

College of Engineering,

Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of M.B.A. Part Ito II from academic year 2012-2013.

Reference: 1. Local Inquiry Committee Report dated 22/03/2012.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of M.B.A. Part I and II of your Institute from academic year 2012-2013 and Management Council resolution No.91 dated 30/04/2012, your Institute is given approval as per the details given below:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	M.B.A. Part I and II	Renewal of Affiliation	Academic Years 2012-2013,2013- 2014,2014-2015 (Three Years)	

With reference to above affiliation, the Institute should follow the norms about maximum number of admissions and other related norms.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

Ref.No. SUS/BCUD/PGBUTR/1193 Date:28/05/2009

To,
The Principal,
College of Engineering,
Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: Regarding proposal for renewal of Ph.D. Research Centre from June 2009.

Reference: 1. Local Inquiry Committee Report dated 11/04/2009.

2. Management Council resolution No.218(11) dated 17/04/2009.

Sir,

With reference to above cited Management Council resolution No.218(11) dated 17/04/2009 we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Ph.D. programs (Mechnical Engineering) from June 2009 and your report with respect to fulfillment of conditions, your Institute is given approval for the academic year (2009-2010,2010-2011,2011-2012,2012-2013 and 2013-2014) for the five years.

Program:

Ph.D. Mechanical Engineering

Thank you,

Yours faithfully,

Director.

BCUD, Solapur University, Solapur

Ref.No. SUS/BCUD/PGBUTR/1738 Date:04/06/2012

To,
The Principal,
College of Engineering,
Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About first affiliation of permanent non grant basis Ph.D. in Civil Engineering

Research Centre

from the academic year 2011-2012.

Reference: Local Inquiry Committee Report dated 30/12/2011.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Ph.D. programs (Civil Engineering) from June 2011 and your report with respect to fulfillment of conditions and Management Council resolution No.131 dated 30/04/2012, your Institute is given approval with following conditions:

Sr. No.	Courses	Type of Affiliation	Affiliation period  Academic Years 2011-2012, 2012- 2013, 2013-2014, 2014-2015 and 2015- 2016 (Five Years)	
1.	Ph.D. (Civil Engineering)	First Affiliation		

With reference to above affiliation, Maharashtra University Act 1994 related rules and regulations and Ph.D. Research facility Centre/Place norms should be followed by the Institute.

Thank you,

PRINCIPAL,

SVERI'S COLLEGE OF ENGINEERING,

Yours faithfully,

Director,

BCUD, Solapur University, Solapur

Ref.No. SUS/BCUD/PGBUTR/643/8616 Date:30/12/2011

To,
The Principal,
College of Engineering,
Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About first renewal of Ph.D. Computer Science & Engineering research centre from

academic year 2011-2012.

Reference: Local Inquiry Committee Report dated 31/08/2010.

Sir,

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Ph.D. programs (Computer Science & Engineering) from June 2009 and your report with respect to fulfillment of conditions and Management Council resolution No.63 dated 09/09/2011, your Institute is given approval with following conditions:

Sr. No.	Courses	Type of Affiliation	Affiliation period	
1.	Ph.D. (Computer Science & Engineering)	Renewal of Affiliation	Academic Years 2011-2012, 2012- 2013, 2013-2014, 2014-2015 and 2015- 2016 (Five Years)	

With reference to above affiliation, Maharashtra University Act 1994 related rules and regulations and Ph.D. Research facility Centre/Place norms should be followed by the Institute.

Thank you,

PRINCIPAL,

SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR. Yours faithfully,

Director,

BCUD, Solapur University, Solapur

#### SOLAPUR UNIVERSITY, SOLAPUR

Ref.No. SUS/BCUD/PGBUTR/5738 Date:30/08/2014

#### AFFILIATION RENEWAL PERMISSION LETTER

To,
The Principal,
College of Engineering,
Gopalpur, Tal-Pandharpur, Dist-Solapur.

Subject: About renewal of permanent non grant basis Ph.D. in Electronics & Telecommunication Engineering Research Centre for the academic year 2014-2019.

Reference: 1. Proposal regarding Ph.D. Research Centre for the program Electronics & Telecommunication Engineering for the Academic Years 2014-2019.

2. Local Inquiry Committee Report dated 27/01/2014.

 A letter of fulfillment of conditions No. SUS/BCUD/PGBUTR/8411 dated 31/01/2014.

4. Our condition fulfillment report No. COEPR/2014-15/23 dated 07/04/2014.

Sir.

With reference to above cited subject we would like to inform you that, based on the report of Local Inquiry Committee appointed for the renewal of affiliation of Ph.D. programs (Electronics & Telecommunication Engineering) of your Institute from 2014-2015 and your report with respect to fulfillment of conditions and Management Council resolution No.46 dated 16/08/2014, your Institute is given approval with following conditions:

Sr. No.	Courses Type of Affiliation		Affiliation period	
1.	Ph.D. (Electronics & Telecommunication Engineering )	Renewal of Affiliation	Academic Years 2014-2015, 2015-2016 ,2016-2017, 2017-2018 and 2018-2019 (Five years)	

With reference to above affiliation, Maharashtra University Act 1994 related rules and regulations and Ph.D. Research facility Centre/place norms should be followed by the Institute.

Thank you,

SVERI'S COLLEGE OF ENGINEERING

PANDHARPUR.

Yours faithfully,

Director,

BCUD, Solapur University, Solapur



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. Western/1-2018756854/2014/EOA/Corrigendum-1

Date: 20-Jun-2014

Corrigendum

To, The Secretary, Tech. & Higher Education Deptt. Govt. of Maharashta, Mantralaya, Annexe Building, Mumbai-400032

Sub: Extension of approval for the academic year 2014-15.

Ref: Application of the Institution for Extension of Approval for the Year 2014-15

 EOA Issued on
 F.No. Western/1-2018756854/2014/EOA
 04-Jun-2014

 EOA Printed on
 F.No. Western/1-2018756854/2014/EOA
 16-Jun-2014

 Corrigendum 1
 F.No. Western/1-2018756854/2014/EOA/Corrigendum-1
 20-Jun-2014

#### Sir/Madam,

In partial modification of the letter F.No. Western/1-2018756854/2014/EOA and in terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Western	Application Id	1-2018756854
8 100	Permanent Id	1-9554891
SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR	Institute Address	P.B NO 54 GOPALPUR-RANJANI ROAD, GOPALPUR TAL.PANDHARPUR DIST.SOLAPUR 413304.PANDHARPUR,SOLAPUR.Maharashtra,413 304
SHRI VITHAL EDUCATION AND RESEARCH INSTITUTE. PANDHARPUR	Society/Trust Address	P.B.NO 54 GOPALPUR-RAJNI ROAD, GOPALPUR, PANDHARPUR, SOLAPUR, Maha rashtra, 413304
Unaided - Private	Carrier va	Name of the last o
	SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR  SHRI VITHAL EDUCATION AND RESEARCH INSTITUTE, PANDHARPUR	SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR  SHRI VITHAL EDUCATION AND RESEARCH INSTITUTE, PANDHARPUR  Application id  Permanent Id  Institute Address  Society/Trust Address

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

Application Number: 1-2018756854\*

Page 1 of 4

NoteThis is a Computer generated Corrigendum Letter for EoA. No signature is required.

Letter Printed On:9 October 2014.

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All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India org

to conduct following courses with the intake indicated below for the academic year 2014-15

Application ld: 1-2018756854			Course		Affiliating Body			for 2014-		
Program	Shift	Level	Full/Part Time	Full/Part Time		Intake 2012-13	Intake 2013-14	Intake Approved fi	NRI	PIO
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUA TE	ELECTRONICS & TELE- COMMUNICATION ENGINEERING	FULL	Solapur University , Solapur	120	120	120	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUA TE	COMPUTER SCIENCE AND ENGINEERING	FULL	Solapur University , Solapur	120	120	120	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUA TE	CIVIL ENGINEERING	FULL TIME	Sotapur University , Solapur	60	60	60	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUA TE	DESIGN ENGINEERING	FULL	Solapur University , Solapur	18	18	18	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUA TE	ELECTRONICS AND TELECOMMUNIC ATIONS ENGINEERING	FULL TIME	Solapur University , Solapur	18	18	18	NA	NA
MANAGEMENT	1st Shift	POST GRADUA TE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Solapur University , Solapur	60	60	60	NA	NA

Application Number: 1-2018756354\*

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7th Floor, Chandralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 <a href="https://www.aicte-India.org">www.aicte-India.org</a>

Application Id. 1-2018756854		Course	1000	Affiliating Body			2014-			
Program	Shift	Level		Full/Part Time		Intake 2012-13	Intake 2013-14	Intake Approved for 20	NRI	PIO
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUA TE	MECHANICAL ENGINEERING	FULL	Solapur University , Solapur	120	120	120	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUA TE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Solapur University , Solapur	18	18	18	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUA TE	STRUCTURAL ENGINEERING	FULL TIME	Solapur University , Solapur	18	18	18	NA	NA
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUA TE	CAD CAM	FULL	Solapur University , Solapur	18	18	18	NA	NA

Validity of the course details may be verified at www.aicte-india.org>departments>approvals

The above mentioned approval is subject to the condition that SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.



All India Council for Technical Education (A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Changralok Building, Janpath, New Delhi- 110 001 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legat/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

(Dr. Kuncheria P. Isaac) Member Secretary, AICTE

#### Copy to:

- The Regional Officer,
   All India Council for Technical Education Industrial Assurance Building 2nd Floor, Nariman Road Mumbai 400 020, Maharashtra
- The Director Of Technical Education, Maharashtra
- The Principal / Director, SVERI'S COLLEGE OF ENGINEERING, PANDHARPUR P. B. NO. 54 GOPALPUR-RANJANI ROAD, GOPALPUR TAL.PANDHARPUR DIST, SOLAPUR 413304., PANDHARPUR, SOLAPUR, Maharashtra, 413304
- SHRI VITHAL EDUCATION AND RESEARCH INSTITUTE, PANDHARPUR P.B.NO 54 GOPALPUR-RAJNI ROAD, GOPALPUR, PANDHARPUR, SOLAPUR, Maharashtra, 413304
- 5. Guard File(AICTE)

Application Number: 1-2018756854\*

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Letter Printed On:9 October 2014.

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#### Shri Vithal Education and Research Institute's

- 1) COLLEGE OF ENGINEERING, PANDHARPUR
- 2) COLLEGE OF PHARMACY, PANDHARPUR
- 3) COLLEGE OF PHARMACY (POLY.), PANDHARPUR
- 4) COLLEGE OF ENGINEERING(POLY), PANDHARPUR

Gopalpur-Ranjani Road, Gopalpur, Pandharpur- 413 304, Dist-Solapur (Maharashtra)

### PANDHARPUR PATTERN IN PROFESSIONAL EDUCATION

#### Aim:

To achieve the best results in the University of all classes, of all branches and overall development of the students.

### **About the Pattern:**

Pandharpur pattern is an integration of teachers' development, teaching approach by the teachers, study approach by students, and students' overall development. Thus,

PANDHARPUR PATTERN = TEACHERS' DEVELOPMENT +
TEACHING APPROACH + STUDY APPROACH +
STUDENTS'DEVELOPMENT = EXCELLENT ACADEMIC and
OVERALL PERFORMANCE

## A) **Teachers' Development:**

It is concerned with overall academic and competitive development of the teachers.

### \* Salient Requirements:

- 1) The teacher should try to upgrade his/her academic qualification. e.g. B.E. to M.E./M.Tech., B.Phrarm to M. Pharm, M.Sc. to M.Phil., Ph.D., M.E./M.Tech to Ph.D., M. Pharm to Ph.D. etc.
- 2) The teacher should submit the report regarding (1) above to the concerned H.O.D. (in case of Engineering) and to the Principal every year.
- 3) The teacher should read at least one technical paper/article, from Periodical /Journal, on an average per week and submit the report of the same to the H.O.D./Principal.
- 4) The H.O.D./Principal should arrange a discussion session on the report submitted, on weekly basis, at departmental level after college hours.
- 5) The H.O.D./Principal should maintain a separate file for each staff member with his/her dept. to preserve the data related to the concerned staff.
- 6) Every teacher should try to present/publish articles in National / International Conferences/Journals of his/her concern, and after publishing such articles,

- submit the report to the concerned H.O.D. (in case of Engg.) and to the Principal.
- 7) Every teacher should try to take the advantage of workshops, summer/winter schools, etc. and submit the report to the concerned H.O.D. (in case of Engg.) and to the Principal after completion of the same.
- 8) The teacher should try for the industrial exposure during vacations, to the extent possible and submit the report to the H.O.D./Principal accordingly.
- 9) To improve the communication skill, the teacher must:
  - i) Speak only in English with his/her fellow colleagues and students; and inculcate in them the attitude of speaking in English and motivate them for the same.
  - ii) Write five sentences in the 200 pages notebook every day from English newspapers /Journals with the meaning of difficult words and reason (s) for selecting these sentences. The H.O.Ds./Principal should ensure the regularity of the work.
  - iii) Teacher must submit the note book to the H.O.D./ Principal at the end of semester and collect it at the beginning of the next semester.
  - iv) The completed notebook must be kept in the custody by the H.O.D./Principal and teacher should go for the new notebook.
- 10) The teacher should read and also motivate students to read personality development related books such as Power of Positive Thinking, Seven Habits of Highly Effective People, Only Results No Excuses, Autobiographies of Eminent Personalities, etc., especially during vacations. For difficult/new words and appealing sentences/paragraphs, a separate note book should be maintained by the teacher.
- 11) About all above, the H.O.D.s should report exceptional cases, where the spirit of work and the results are not observed, to the Principal.

# B) Teaching Approach:

It is concerned with:

- i) How the teacher should deal with the subject and the concerned students.
- ii) How the teacher should maintain the records such as subject file, attendance of the students, performance of students, behavioral aspects of students, feed back from the students, teaching plan, etc.
- iii) Motivating and making the students to follow the study approach.

## \* Salient Requirements:

- 1) The teacher should remember and call the student at least by the first name and surname, with whom he/she is concerned.
- 2) The teacher must prepare, maintain and go to the class with the subject file and he/she should never carry the book(s) to the class.

The file should contain:

- i) On the top of the file, the name of the subject written in bold letters.
- ii) Inside, the first page(s) must be the copy of subject syllabus

(cyclostyled/printed/xerox/hand written, etc.).

- iii) After the syllabus, minimum six recent question papers of the concerned subject of earlier University examinations, if the subject is new, corresponding no. of model question papers prepared by the concerned teacher and put in the file.
- iv) After question papers, the file should contain the chapter wise notes in the following manner;

a) Chapter no.:
b) Title of the Chapter:
c) Syllabus of the Chapter (Handwritten by the teacher)
d) Assignment no.: -
Question no. 01(Name of Exam.)(Marks)
Question no. 02 (Name of Exam.)(Marks)
and so on

These are the questions on this chapter from above question papers.

- e) Bit by bit notes on the syllabus of the chapter with sketches wherever necessary.
- v) Above step (iv) must be repeated for all the chapters of the subject.
- 3) The teacher should see that the students occupy the benches from front rows without leaving any seat vacant.
- 4) The teacher must prepare the teaching plan for his/her concerned subject (s) in triplicate and submit one copy to Principal, second copy to H.O.D. (in case of Engg.) and his/her copy should be put in the concerned subject file before syllabus copy, within four days after subject allotment. H.O.D. must preserve copies of teaching plans of all the concerned teachers.
- 5) The teacher must report to the respective class well in time and must be there for full hour(s) as per the time table and also leave the class on time.
- 6) For practicals/ tutorials, the teacher must report in time and be with the students for full session and also leave the session on time.
- 7) At the start of every semester, the teacher must discuss:
  - i) The meaning/concept (how the word(s) is/are evolved) and importance of the title of the subject.
  - ii) Central idea of the subject.
  - iii) Why the subject is introduced into the Engineering or Branch, as the case may be.
  - iv) The write up of above (i) to (iii) be prepared by the teacher and put after the teaching plan in the subject file.
- 8) The teacher should start dealing with chapter wise syllabus as follows:
  - i) The teacher should dictate and tell the students to note down word by word the syllabus of the chapter and assignment question(s) on the chapter including exam. name(s) and marks weightage.
  - ii) The teacher should explain meaning/concept (how the word(s) is /are evolved) and importance of the title of the chapter.

- iii) The teacher should explain the central idea of the chapter.
- iv) The teacher should discuss the importance of the chapter (i.e. why the chapter is introduced) in the subject syllabus.
- v) The teacher should prepare write up, for (ii) to (iv) above and put before chapter notes, in the subject file.
- vi) The teacher should start explaining the chapter syllabus bit by bit.
- vii) While explaining a particular bit, if it refers to the answer of some question (s) in the assignment, on the chapter the teacher must immediately cross-refer that explanation to that question (s).
- viii) Above steps (i) to (vii) should be repeated by the teacher, for all the chapters in the subject.
- 9) If the subject has practical load, the teacher should follow the following procedure.

There are three aspects involved in this viz. performing experiments in the lab, practicals in computer sections and assignment type work.

- \* Requirements for preparing for the lab -experiment type work:
  - i) H.O.D.s should see that every lab. of their concern must have lab. manual prepared through lab. Incharge.
  - ii) The lab. manual should contain

    \_\_\_\_\_The title of lab.

    \_\_\_\_\_List of subjects for which that lab. is used.

    \_\_\_\_\_Subject wise list of experimental set ups.

    \_\_\_\_\_Each experiment should contain
    - a) The title of the experiment.
    - b) Aim of the experiment.
    - c) Description of apparatus/equipments.
    - d) Principle/theory involved in the experiment with description and sketches wherever necessary and also derivation of the equations wherever applicable.
    - e) Procedure involved (stepwise) in the experiment.
    - f) Observations (fixed/constants).
    - g) Observation table.
    - h) Result table.
    - i) Sample calculations for any two readings.
    - i) Graphs, if any, along with the nature.
    - k) Conclusion.

\_\_\_\_A set of model readings along with all calculations, graphs etc. should be kept ready along with experimental write up.

# \* Requirements for Computer practicals:

Model write-ups are to be prepared with all the possible types of problems using following steps.

- i) Formulate and define the problem clearly.
- ii) Prepare the stepwise procedure (Algorithm).

- iii) Depending upon the Algorithm draw the graphical representation(Flow Chart) which will explain clearly the flow of information through the program.
- iv) Referring to the Algorithm and flow chart, prepare a rough coding.
- v) Considering all the possible input values prepare the optimized code.
- vi) Get it executed on the machine.
- \* Requirements for preparing subjects having assignment type termwork:
  - i) A specimen problem should be defined.
  - ii) A stepwise solution for the problem is to be prepared along with necessary theory and derivations.
  - iii) Self-explanatory sketches be provided wherever necessary.
- 10) The list of dos and don'ts be prepared and be made part of lab manual.
- 11) Dead stock and consumable registers be maintained at lab level.
- 12) The subject teacher must prepare the student absentee report and submit one copy to class Co-ordinator before the close of the day.
- 13) Class Co-ordinator should make phone call to the parents of the student if he/she remains absent without permission even for a lecture or a practical during the day, on the same day before leaving the campus.
- 14) If the same student continues to be absent on the next day, the class Co- ordinator must dispatch an RPAD letter to his/her residence before leaving the campus.
- 15) Attendance recording be prepared and maintained by the teacher as follows:
  - i) If a student is absent without permission for a lecture/practical, '.' be put against his/her Roll No. on that date. If absentism is with permission for participation in sports, paper presentation, NSS, representation of College, etc., 'DL' be written in place of '.' and student be treated as present considering him/her on duty leave.
  - ii) If the absenteeism is for the reason related to the student and if leave is sanctioned 'L' be written in place of '.'.
  - iii) If Duty Leave or Leave is not sanctioned, the student has to pay fine and after confirmation '•' be replaced by 'F'.
  - iv) Teacher should see that if there is '.', it should be converted either into 'DL' (if Duty Leave is sanctioned), 'L' (if Leave is sanctioned) or 'F' (if fine is paid) within maximum two next lectures or by next practical as the case may be.
- 16) After the completion of syllabus, the teacher should discuss about techniques of solving and representing the University Papers through demonstration.
- 17) The teacher should maintain very cordial and respectful relations with the

students.

- 18) The teacher should not threaten or suppress the students.
- 19) The teacher must see that the students concerned with him/her follow the study approach.
- 20) The students should monitor the effective implementation of Teaching Approach.

### C) Study Approach:

\*Requirements of the study approach:

- 1) Attendance of the student must be 100%, **NO MATTER WHAT.**
- 2) The student must report to the class well in time.
- 3) Every student must have two more 200 pages notebooks than as many subjects as he/she has, during the semester. Engineering Graphics and related subjects, where sketch book is required, such sketchbook will be replacement for the notebook for that subject.
- 4) At home/room, the student must maintain a separate file for each subject which must contain a copy of syllabus of the subject and as many no. of recent question papers as possible from earlier University exams. (if subject is new then model question papers) (minimum six question papers/ model question papers).
- 5) Every student must come to the class with all but one notebooks and sketch book (if any ) every day irrespective of time table. This is to cope up with the situation whereby some teacher, as per time table, is not available and hence some other teacher, whose lecture is not in time table, engages this lecture.
- 6) When the teacher starts teaching, the student must try to write in the notebook, as much as possible, with understanding, starting with the date.
- 7) These notebooks are going to be the references, for the students and they must preserve them and maintain them neatly.
- 8) If during teaching, some point is not clear to the student, he/she must stand up and request the teacher to re-explain it .
- 9) After college hours, after reaching home / room, the student must get fresh immediately and spend 20 minutes without doing anything or doing whatever the student wishes.
- 10) Immediately after 20 minutes session is over, the student must catch hold of his/her chair, table, notebooks, pen, loose papers, stapler with pins and books as per the requirement.
- 11) The student must open the notebook of the subject, the lecture of which was first engaged during the day and start writing on the loose pages whatever was written in that notebook on that day, with understanding. This should start with title of the subject the date and the page nos..
- 12) If some point is not clear, the student must try to get it understood from friend(s)/book in minimum possible time. If point is still not clear, leave

some blank space on the page and then continue writing further part from the notebook with '\*' mark to the point which is not clear.

- 13) The student must follow up the step nos. (11) and (12) for all the subjects of which lectures were engaged during that day.
- 14) If all the subjects are not covered during that evening/ night, the student must try to cover the remaining part, the very next day morning .If some part is still left out, it must be covered first, the next day evening.
- 15) Repeat step nos. (11) to (14) for assignment questions.
- 16) If there is/are some uncleared point(s), the student must reach early next day to the college /concern teacher along with the material and get it/ them cleared from the teacher, noting it down at the space provided.
- 17) The student must carry, to the college, the write up pages, including Assignment Question Answers, prepared on the teachings of the previous day and get them signed from the concerned teacher. If it does not happen from the student, the case must be reported to Vice-Principal/Principal about the same by the teacher. Assessed material be preserved by the students in respective subject files.
- 18) Repeat the step nos. (9) to (17) for all the teaching days during the Semester/part.
- 19) All Pharmacy students are required to wear their 'Apron' for practical hours compulsorily.
- 20) Students must bring their respective practical Record Book / Dissection Box for practicals.
- 21) The two extra 200 pages notebooks be utilized, one for writing 5 sentences in English and another for difficult words with meanings and sentences/paragraphs from personality development related books during vacation.

### D) Students' Development:

- 1) As mentioned earlier the student must maintain two additional 200 pages notebooks.
- 2) One of those notebooks must be used for writing 5 sentences everyday from English newspaper/journal/periodical by putting the dates.
  - \* Requirements for the same are as follows:
    - i ) The student must maintain English-English-Mother tongue type Dictionary of his /her own.
    - ii) After writing every sentence, the difficult words must be underlined and written below along with the first meaning in English and second meaning in Mother-tongue, by referring the dictionary.
    - iii) After write up is over, the student must write the reason(s) for selecting these 5 sentences.

- iv) The Proctor Teacher, on daily basis, must assess this write up.
- v) Every day, after coming to the college, the student must get the notebook checked from the Procter Teacher, as per the directives given by him/her.
- vi) Some of the cases in which write up is not in proper way or not written with proper spirit, must be handled separately in depth calling the concerned student and discussing in the class in general for the benefit of all the students.
- vii) Tuesday will be off day for this work.
- viii) The contents of "Pandharpur Pattern in Professional Education" are to be written by the student in this Notebook, meant for 5 sentences, from backside, in their own handwriting.
- 3) The second 200 pages notebook should be utilized / used while reading the personality development related book during the vacation after semester/part examination.
  - \* Requirements for the same are as follows:
    - i) The student must divide the notebook in two parts by folding the middle page.
    - ii) The student must get issued with one personality development related book from the Library before going home after semester/ part examination.
  - iii) The student must carry English-English-Mother tongue Dictionary along with the book and the notebook.
  - iv) The student must start reading the book right from the first page slowly and very carefully from the next day of reaching home. The book should not be read like a novel or a story book.
  - v) Whenever the student comes across the difficult / new word, he/she must start writing such word, from the first page of the first part, with the first meaning in English and the second meaning in mother tongue. This should start with the date.
  - vi) If the student feels any sentence/ paragraph very appealing / inspiring / motivating/ important, he/she must start writing the same from the first page of the second part of the notebook. This should start with the date.
  - vii) The student must get notebook checked from the Proctor Teacher immediately after coming back after the vacation and the Proctor Teacher should submit the report to the H.O.D. about the same within 7 days after the start of the semester/part examination.
- viii) The student must prepare minimum 2 pages report about the reading of the Book.
- ix) The student must give presentation in the class in presence of class Co-ordinator and concerned teachers and submit the report to the class Co-ordinator.
- x) The class Co-ordinator must submit his/her report about presentation in viii) above to the concerned H.O.D. along with reports from the students within 7 days after the start of the semester/part.
- xi) The step nos. (ii) to (x) be repeated during every vacation after

semester/part examination.

- xii) The student must preserve this notebook as a ready reference.
- 4) All the staff members and students must speak only in English amongst themselves.
- 5) The student must remember the surnames and initials of all teachers teaching to his/her class.

"HUM HONGE KAMYAB EK DIN
MAN MEIN HAI VISHWAS,
POORA HAI VISHWAS,
HUM HONGE KAMYAB EK DIN"

"WISHING YOU EVERY SUCCESS."

(Prof. B. P. Ronge)
SECRETARY
SHRI VITHAL EDUCATION & RESEARCH
INSTITUTE, PANDHARPUR.

# Guidelines About Implementation of Pandharpur Pattern in Professional Education

At the beginning the details of Pandharpur Pattern in Professional Education (PPPE) be read by the Principal.

- 1) One copy be issued to every staff member, through H.O.D. with due acknowledgement.
- 2) H.O.D. should read details of this pattern in the presence of new staff members.
- 3) For students, first time the Principal along with concerned H.O.D and class Co-ordinator will go to each class and explain details of the PPPE and make the students to note down the details.
- 4) One copy of PPPE should be displayed on notice board permanently.
- 5) One copy of PPPE to be displayed in Principal's cabin, Vice Principal's cabin, H.O.D.s cabin, Library, Training and Placement Office.
- 6) The copies on the main notice board, Principal's cabin, Vice Principal's cabin, H.O.D.s' cabin, Library, Training and Placement office and in office file would be in colour and laminated one.
- 7) Every teacher must preserve his/her copy of PPPE on permanent basis.
- 8) One copy of PPPE to be given to each Class Representative.

#### SHRI VITHAL EDUCATION & RESEARCH INSTITUTE's



- 1) COLLEGE OF ENGINEERING, PANDHARPUR.
- 2) COLLEGE OF PHARMACY, PANDHARPUR.
- 3) COLLEGE OF PHARMACY (POLY.), PANDHARPUR.
- 4) COLLEGE OF ENGINEERING (POLY.), PANDHARPUR

Gopalpur -Ranjani Road, Gopalpur, P.B. No. 54, Tal - Pandharpur- 413 304, Dist. Solapur (Maharashtra) Ph.: (02186) 225083, Fax: (02186) 225082. (Approved by AICTE, New Delhi and affiliated to Solapur University, Solapur)

# SYSTEM MANUAL

### A] Principal:

- 1. Arranging and coordinating the meetings of:-
  - 1 Governing Body (at least 3 in a year)
  - 2 Sub-committees of Governing Body (as & when required but at least 2 in a year).
  - 3 Local Managing Committee (at least 1 in a year)
  - 4 Standing Committee (at least 2 in a year)
  - 5 H.O.D.s (at least once in a week)
  - 6 Students Council (at least 3 in a year)
  - 7 Grievance redressal committee (as & when required but at least 2 in a year).
  - 8 High Level Standing Committee (as & when required but at least 2 in a year).
  - 9 Committee to restrain sexual harassment in the campus (as & when required but at least 2 in a year).
  - Staff meeting (as & when required but at least 2 in a year).
  - 11 Meeting with Rector(s) (at least once in a month).
  - Meeting of Training & Placement cell (at least 2 in a year)
  - Other meetings as per the requirements.
- 2. Principal should ensure that feed back sessions are conducted effectively on regular basis.
- 3. Principal should arrange for the sessions on all classes in respect of "Maharashtra Prohibition of Ragging Act, 1999" at the beginning of the Academic Year.
- 4. Principal should ensure that required committees are formed and further observe the smooth functioning of the Institute.
- 5. Principal should ensure that PPPE introductory sessions for F.E. students conducted
- 6. Principal should take all types of decisions, as per the directives from Management, Governing Body, Sub-committees of Governing Body, University, DTE, AICTE, Government, etc.

### **B**| Vice- Principal

### I) Role:

- 1. Vice-Principal should ensure that authority delegated to him/her be effectively exercised.
- 2. Vice-Principal should ensure that the role of Principal, defined in this manual, in his/her absence, when charge of Principal is handed over; he played effectively.
- 3. Vice-Principal should ensure that working in all the departments is going on as per the PPPE and system manual taking due steps in case of discrepancies.
- 4. Vice-Principal should ensure that feed back process is conducted and handled effectively.
- 5. Vice-Principal should ensure that all functions in the college are organized after his/her due endorsement.
- 6. Vice-Principal should ensure the effective result oriented working of Training and Placement section.
- 7. Vice-Principal should ensure that decent information brochure along with CD be made available on on-going basis.

### **II)** Authority Delegated:

- 1. Maximum 2 days Casual Leave/ C.O at a time.
- 2. Advance to the students for the amount greater than Rs. 1,000/- (One Thousand) and upto maximum Rs. 2,000/- (Two Thousand) per student.
- 3. Release of payments under Earn & Learn Scheme.
- 4. Purchases upto Rs. 25,000/- (Twenty Five Thousand) at a time subject to maximum of Rs. 5,00,000/- (Five Lacs) during one financial year.
- 5. Special cases of Repairs & Maintenance worth upto Rs. 5000/-(Five Thousand), where proper procedure cannot be followed.
- 6. 3 to 5 days leave of students at a time.
- 7. Students' problems are not sorted out at HOD level.
- 8. Handling of inward correspondence except persona and / or confidential letters in the name of the undersigned.
- 9. AICTE, D.T.E, Jt.D.T.E, University related work.
- 10. Earn & Lean Scheme.
- 11. Signing of quotation call letter.
- 12. Sanction of duty leave / on duty leave after confirmation through document.

### C Dean, Administration

 Coordination of meetings of Statutory Bodies / Committees such as – Board of Governors, Finance, Equipments and Purchase, Sales & Disposal, Building, Planning and Monitoring, Human Resource & Development, Research Advisory Council / Academic Advisory, Local Managing, Standing, Anti-Ragging / High level Standing, Grievance Redressal, Committee to Restrain Sexual Harassment, Transport, etc. Nature of work is to decide dates, prepare agenda and maintain notices

- and proceeding book, and related documents. This shall be done in consultation and with approval from the Principal.
- 2. Coordination of the work in respect of accounts and related activities such as College Budget and Utilization, Other fiscal matters, signing of cheque payment vouchers, transfer vouchers and signing of cash vouchers only in respect of Earn and Learn and Students' Industrial Visits.
- 3. Coordination of Institute Publicity which include, apart from others, Information Brochure, Advertisements and News in various media.
- 4. Coordination of Grievance Redressal mechanism, except student related problems.
- 5. Coordination of Staff recruitment, retention, evaluation, training, welfare and sanction of leaves, except Medical and EL.
- 6. Coordination of issues related to Stores.
- 7. Coordination of Legal related matters.
- 8. Coordination of Students' admissions, branch transfers and related matters.
- 9. Coordination of repository in hard as well as soft copy of staff data and also students' data such as admission records, branch transfer documents, general register, result ledgers, etc.
- 10. Coordination of Student Scholarships.
- 11. Coordination of repair and maintenance, house-keeping and security related works.
- 12. Coordination of University, AICTE, State Govt., DTE, etc. work.
- 13. Coordination of Transport facility.
- 14. Coordination of establishments such as canteen, mess, etc.
- 15. Coordination of correspondence. However, in case where if statutory signature of Principal or Secretary, as the case may be, be taken. Also letters of invitation & Thanks shall have additional signature of Principal.
- 16. Coordination of other matters as and when referred by the Principal.

### D. Dean, Academics

- 1. Coordination of the development, implementation and review of College Vision and Mission statements.
- 2. Preparation of the Institute Academic Calendar and effective monitoring of implementation.
- 3. Coordination of effective implementation of PPPE and related circulars.
- 4. Ensuring up-to-dateness of Subject Files and Teaching Plan.
- 5. Ensuring effectiveness of Attendance recording by teachers.
- 6. Coordination of Feed-back of students.
- 7. Coordination of GD and MOODLE sessions.

- 8. Coordination of Students attendance and test performance communication to parents.
- 9. Coordination of Pre-Submission of students.
- 10. Coordination of Examinations at University and College level and results of College level examinations.
- 11. Coordination of centres of excellence.
- 12. Coordination of academic programs.
- 13. Ensuring effectiveness of weekly meetings at Departmental level.
- 14. Coordination of Faculty Development Programs.
- 15. Coordination of communication related to academics.
- 16. Coordination of matters related to academics not covered in above points.
- 17. Coordination of other matters as and when referred by the Principal.

### E. Dean, R & D

- 1. Preparation of policy documents related to R & D and implementation of approved policies.
- 2. Coordination of R & D events such as Conferences, STTPs, Workshops, Students and Faculty Development Programs related to Research.
- 3. Promoting Research Publications, Patents, Technology Transfer, Projects and maintaining records thereof.
- 4. Coordination in respect of National and International Collaborations in the field of academic and Research Organizations and Industry and signing of MOUs to formalize such collaborations.
- 5. Coordination of Industry-Institute interaction for Sponsored Research, Consultancy and Testing.
- 6. Coordination of P.G. and Ph.D. Research activities.
- 7. Coordination of communication related to R & D activities
- 8. Preparation of Budget and monitoring effective utilization of funds from internal and external funding projects.
- 9. Coordination of R & D related Publicity & Institute Newsletter.
- 10. Conduct of Research meetings-Agenda, minutes, follow-up and maintaining record accordingly.
- 11. Coordination of other matters as and when referred by Principal.

### F. Dean, Students

- 1. Preparation / modification of policies related to students and implementation of approved policies.
- 2. Ensuring maintenance of Ragging free campus.
- 3. Act as a Proctor of the Institute.

- 4. Coordination of student activities such as Functions, NSS, Industrial Visits, Sports, Cultural, Student Development Programs, etc.
- 5. Ensure discipline in and outside of the Institute.
- 6. Act as a liaison with parents/guardians about the students' progress.
- 7. Coordination of parents' meets.
- 8. Coordination of Alumni Affairs.
- 9. Sanction of student leaves beyond the purview of the concerned department.
- 10. Coordination of Hostel Administration.
- 11. Coordination of Upkeep and up-gradation of library.
- 12. Coordination of Student Training and Placement activities.
- 13. Coordination of Student Council related activities.
- 14. Resolving problems of the students not settled at departmental level.
- 15. Coordination of publication of College Magazine.
- 16. Coordination of student Grievance Redressal mechanism.
- 17. Coordination of communication in respect of students' functions and activities.
- 18. Coordination of preparation and utilization of budget in respect of students activity and sports.
- 19. Coordination of other matters as and when referred by the Principal.

### G] H.O.D.:

#### I) Role:

- 1. HOD through Principal, should ensure availability of sufficient staff well in advance before the distribution of the load for the next semester.
- 2. HOD should assign the following duties to various staff and faculty in the department----
  - 1. Library Representative.
  - 2. Training & Placement Representative.
  - 3. Time Table In-charge.
  - 4. Test Coordinator.
  - 5. Lab-in charges.
  - 6. Class coordinators.
  - 7. Proctor teachers.
  - 8. Parent Teacher Association In-charge.
  - 9. NBA documentation In-charge.
  - 10. Maintenance In-charge.
  - 11. Stationery Representative.
  - 12. Faculty/Staff development coordinator.
  - 13. Project Coordinator.
  - 14. Representatives on Student Associations.

The role of the above activities be defined by HOD, in case it is not already defined at Institute level.

- 3. HOD should distribute the load for the next semester before the start of vacation after earlier semester.
- 4. HOD should ensure that before the start of the semester, lab manuals are maintained up-to-date and all the setup in the labs. are in working condition, and should give occasional visits to the laboratory to ensure that the setup are in working condition during the semester also.
- 5. HOD should ensure that result analysis is submitted to Principal within 7 days from the date of making the ledger available at departmental level.
- 6. HOD should conduct department level meetings in a semester of Staff (at least 3, including semester start and end), Lab-in-charges (at least 2), Class-coordinators (at least 2), Proctor Teachers(at least 2), and Class Representatives(at least 2) and maintain the records accordingly.
- 7. HOD should conduct the class-wise meeting of First 10 rankers at the beginning of the academic year after declaration of earlier year's result and one more meeting at the beginning of next semester to understand the problems/ suggestions from students and provide additional facilities and resources to boost their moral to fetch the ranks in the University.
- 8. HOD should visit each concerned class at least once in a fortnight and do the following:
  - i. Verification of implementation of PPPE & System rules and taking necessary steps in case of discrepancy.
  - ii. Understanding the problems of the students and taking the suggestions, if any.
  - iii. Maintain the record in respect of above.
- 9. HOD should ensure that Guest lectures are arranged every week.
- 10. HOD should conduct the feedback sessions for the concerned classes and ensure the compliance of shortcomings.
- 11. HOD should ensure to arrange for adjusting the load of absent teacher(s). However explanation be sought from such teacher(s) after they join the duty.
- 12. HOD should arrange for parent meet at least once in an academic year.
- 13. HOD should ensure for arranging conferences, workshops, STTPs, Project exhibitions etc.
- 14. HOD should ensure the participation of the department in preparation of the budget.
- 15. HOD should ensure effective implementation of office orders, notices, circulars etc. coming from higher authorities or on behalf of higher authorities in respect of the departmental requirements.
- 16. HOD should ensure that students present in the department without complete uniform are with the proper permission or have fine paid receipt.
- 17. HOD should take monthly review of defaulters in respect of attendance and accordingly ensure the display of notices and dispatch of RPAD letters to the parents through the Class Coordinator and preserve the record accordingly.
- 18. HOD should ensure that there is contribution from departmental faculty in respect of publishing/ presenting papers in National/ International conferences / journals.
- 19. HOD should arrange the training for the staff in respect of new softwares, new equipments, materials, apparatus, instruments etc. as per requirement.
- 20. HOD should ensure that our 'Give respect Take respect' policy is observed by everybody in the department and taking due steps in case of discrepancy.
- 21. HOD should ensure that the staff from his/her department is in complete uniform. In case of discrepancy necessary steps be taken by him/her.
- 22. HOD should ensure up-to-date display boards in respect of faculty, staff position, Role of honor, graphical result analysis, student position (Boys &

- Girls class-wise.), profiles of distinguished and associated alumni, and name lists of associated industries in national / international level.
- 23. HOD should ensure that letters be dispatched to the parents well in advance before start of the semester, informing the starting date of the semester along with fees details, if required.
- 24. HOD should ensure that the records in respect of curricular, co-curricular and extra curricular activities related to students of his/ her department are maintained by respective In-charges.
- 25. Two teachers from the department should be made to go for one month's inplant training every year by rotation.
- 26. Oral/ Practical Exam. Bills be submitted to the office within one week after the last day of Practical/Oral examination.
- 27. The HOD should ensure that monthly purchases under his/her authority at department level are executed and proper records maintained.
- 28. The HOD should forward the original copy received from Monitoring Committee to Hon. Principal with specific remarks in respect of actions taken.
- 29. HOD should keep on reviewing the coverage of syllabi and ensure that 100% syllabus is covered in related subjects of his/her department.
- 30. Making analysis of the Department result immediately, after declaration of the result by the University and taking corrective steps for the failure student.
- 31. To the extent possible, HOD should see that a group allotted to a Proctor Teacher at S.E. level be continued with upto final year.

### **III)** Authority Delegated:

- 1. Upto 3 campus leaves in a month for the staff concerned, after confirming about the balance during the month.
- 2. Maximum 1 day Casual Leave/C.O. at a time to the staff concerned.
- 3. Advance to the students upto Rs. 1,000/- (One Thousand) per student.
- 4. Departmental purchases, upto Rs. 10,000/- (Ten Thousand) at a time subject to maximum of Rs. 1,00,000/- (One Lac) during one financial year.
- 5. Departmental level Repairs & Maintenance worth upto Rs. 5,000/- (Five Thousand), where proper procedure can not be followed.
- 6. Maximum upto 2 days leave to students concerned, at a time.
- 7. Signing applications of concerned students for No Dues.
- 8. Signing of I-Cards of the student.
- 9. Students' Problems.
- 10. Signing of quotation call letters.
- 11. Signing application on plain paper by staff indicating willngness to go on duty leave/on duty leave.
- 12. Final Signature on No Dues form.

# **H] Class Co-Ordinator:**

- 1. Class Coordinator should have the list of the students concerned with his/her class with Roll No., Name of the student as well as their parents address (local & permanent), phone numbers, e-mail id. etc.
- 2. Class-coordinator should prepare lists of students i) staying in hostels, staying in city and coming by ii) college bus, iii) S.T. bus, and iv) their own vehicle.

- One copy of each of these lists be given to all Subject Teachers for theory and practical.
- 3. Class-coordinator should maintain the copy of his/her class time table.
- 4. Class-coordinator should ensure that journal and other stationery be distributed to the students before the end of first week of the semester and record be maintained accordingly.
- 5. Class Coordinator should maintain result analysis of his/her class students for at least earlier two examinations.
- 6. Class-coordinator should ensure that Xerox copy of University examination mark sheet be sent to the parents as soon as the same is available in the college.
- 7. Class Coordinator should prepare the result analysis report of his/ her class in triplicate and submit two copies to HOD after the result of University examination. He/She should do so after collecting the subject-wise result analysis copies from the Subject Teachers.
- 8. Class-coordinator should arrange for extra efforts for his/her class students, who have majorly failed in subject(s) of earlier examination. This should be done in consultation with HOD. Further, the records of such activities be maintained with signature of HOD.
- 9. Class-coordinator should ensure that attendance report and class test performance be communicated to parents on proper address by letters. Such letters should be dispatched on or before 7<sup>th</sup> day from the last paper of the class test examination.
- 10. Class-coordinator should maintain record in respect of leave and absenteeism of his/her class students.
- 11. Class-coordinator should collect the absenteeism report from Subject Teachers on everyday basis and ensure that phone calls are made or RPAD letters are dispatched respectively to the residence of the students who are absent on the same day ( for lecture(s) / Practical(s) or whole day ) or who are absent for consecutive second day, before leaving the campus.
- 12. Class-coordinator should prepare and display defaulters list on monthly basis. Further, he/ she should send RPAD letters to the parents. All such records with signature of HOD be preserved by him/her.
- 13. Class-coordinator should take review of syllabus coverage by all the Subject Teachers for his/her class, from the students, on monthly basis and convey the same to HOD and ensure that Subject Teachers go for necessary steps in this regard to cover the syllabus. The record should be maintained accordingly.
- 14. Class-coordinator should, in co-ordination with Subject Teachers and under the guidance of HOD, initiate and encourage for arranging guest lectures and maintain the record accordingly.
- 15. Class-coordinator should make analysis of the class result immediately, after declaration of the result by the University and taking corrective steps for the failure students.
- 16. Class-coordinator should conduct minimum three meeting of Proctor and Subject Teachers concerned with his/her class during the semester and maintain the minutes of the same in the register.
- 17. Class-coordinator should also maintain the record in respect of other curricular, co-curricular and extra curricular activities of his/her class student.
- 18. All record files be submitted by Class-coordinator to HOD at the end of the semester.

### I] Subject Teacher:

- 1. Subject Teacher should totally and effectively implement PPPE and make the students to implement the same in its true spirit.
- 2. Subject Teacher should ensure that all the students are in complete uniform and otherwise with proper permission or have fine paid receipt.
- 3. Subject Teacher should maintain Roll call book and control sheet on backside of it up-to-date. In control sheet chapter wise bits taught be recorded.
- 4. Subject Teacher should ensure that every concerned student has maintained separate 200 pages excellent quality long register for his/her subject by making dated signature on first page after ensuring details such as name, class, Roll no., subject name, Subject Teacher's name, Proctor Teacher's name etc. on that page. If new/second note book is made, it must also bear dated signature of the concerned teacher.
- 5. Subject Teacher should ensure that separate files are prepared by the students for his/her subject PPPE and assignment write up at his/her home/room.
- 6. Subject Teacher should ensure that students start with date and then illustrative examples and other explanatory notes/ points in the proper notebook during the lecture session.
- 7. If some student is without subject notebook, he/she be sent out of the class and treated absent for the lecture and report to Class coordinator accordingly, during college hours on the same day itself.
- 8. Subject Teacher should report the names of absent students for his/her lecture / practical to Class coordinator on the same day during college hours, before leaving the campus.
- 9. Subject Teacher should check up PPPE/assignment write up on day to day basis by making dated signature.
- 10. Subject Teacher should make the students to submit PPPE/assignment write up file for final check up before accepting the terms work.
- 11. Subject Teacher should totally and effectively implement PPPE for himself/herself and for the concerned students.
- 12. Subject Teacher should utilize Inter-college, Inter-department, and Intradepartment expertise for enriching the knowledge of the students in the concerned subject. Further, he/ she should maintain the record of all the activities done by him/her during the semester to give maximum to the students in that subject.
- 13. Misbehavior aspect of a student be reported to Proctor Teacher, Class-coordinator, HOD and depending upon gravity of the case to Principal to put before grievance reddressal committee.
- 14. Subject Teacher should display contact time for the students of his/her subject near his/her seating arrangement. This timing should be excluding the time for Proctor group.
- 15. Subject Teacher should ensure that for the missing lecture/practical, student should copy the write up in his/her notebook from his/her friend's notebook.
- 16. Subject Teacher for practical should arrange the extra practices at the end of the semester to see that all the students go for 100% completion of practical.
- 17. If some students remain absent for the test, additional test be conducted in genuine cases.
- 18. Subject Teacher should ensure that students not attending the test or failing in the test should solve that test paper including optional questions. However, this should not treat that student present for test

- 19. Subject Teachers should ensure timely submission of term-work by the students and for that purpose he/ she should be strict in checking/ signing the journal/ tutorial/ experimental write-up/ assignments, etc on regular basis, rather than checking the entire things at the end of semester.
- 20. Subject Teacher for practical must list and display, with proper schedule set of experiments/assignments/tutorials/case studies as the case may be, to be performed during the semester, at the start of the semester itself.
- 21. Depending upon the depth of practical, Subject Teacher for practical should document and display the analysis, details of problem solving approach algorithm clues, etc. as and when such practical is announced.
- 22. Subject Teacher for practical should help Lab-in-charge to prepare and display the required information related to laboratory.
- 23. Subject Teacher for practical in coordination with subject teacher, should submit all requirements **consumables**, **instruments**, **equipments**, **systems**, **etc** related to his/ her subject to Lab-in-charge before start of the semester.
- 24. If a teacher is absent for some meeting/discussion, workshop etc. he/she should copy the notes from his/her friend's diary in respect of discussion and decision made there in.
- 25. As soon as subject load distribution is over, Subject Teachers should verify the availability of books required for the concerned subject and submit the demand note and otherwise through HOD to Librarian.
- 26. Subject Teachers should maintain in his/her current academic file, all the documents concerning conduction of his subject/ practical. For example copy of syllabi, university question papers, additional question banks, new assignments, notices for tests, test performance reports, notices for extra lectures if any, assignment lists, invitation letters and thanks giving letters to guest faculties (from outside as well as inside), participation in curricula development through workshops, etc.
- 27. There should be proper co-ordination amongst Subject Teacher for theory as well as practical, if they are different. If teachers are different, Subject Teacher for practical should discuss with Subject Teacher for theory to make the list of oral questions more exhaustive.
- 28. Subject Teacher should prepare result analysis of his/her subject in duplicate and submit one copy to Class-coordinator.
- 29. Subject Teacher should submit test marks to the Class-coordinator within 4 days after completion of his/her subject test examination.
- 30. Only students coming from city by S.T. bus be allowed late maximum up to 15 minutes only at the beginning of the first session of the day. If college bus is late due consideration be given accordingly. In other cases, students should be allowed to enter in the class/practical session either with the permission from HOD or receipt of fine paid, irrespective of the session.
- 31. Subject Teacher should ensure that syllabi and sufficient number of earlier University examination question papers in respect of his/her subject are available in the library.
- 32. Subject Teacher should make analysis of the subject result immediately, after declaration of the result by the University and take corrective steps for the failure students.
- 33. Subject Teachers should preserve all type of records at least for last three years.

### **J] Proctor Teacher:**

- 1. P.G. sessions hereafter be treated as proctor sessions.
- 2. Proctor Teacher, in addition to weekly session, should conduct half an hour session, after college hours, for the concerned group students.
- 3. As far as possible from S.E. onwards, same Proctor Teacher be allotted for the same group for 3 years.
- 4. In time table for one department, all the P.G. sessions to the extent possible be scheduled at one time on one day of the week. Other departments should support in respect of space required
- 5. Opinion of the Proctor Teacher be given due weightage in respect of behavior of the concerned group students at departmental level.
- 6. Proctor Teacher should prepare and maintain a register of their respective group students along with addresses (Present and permanent) and phone numbers for correspondence. This register should contain all personal data of students concerned.
- 7. Proctor Teacher should make dated signature on first page of every subject notebook ensuring the dated signature of concerned Subject Teacher.
- 8. Proctor Teacher should ensure that class notes are regularly written by the students in respective subject notebooks.
- 9. Proctor Teacher should ensure that every student in his/her group has maintained separate 200 pages 5 sentence register. Further he/ she should ensure that the PPPE is written from back side in his/her own handwriting by making dated signature at the end of the write up and also dated signature on first inside page. If new register is made by a student PPPE write up in the handwriting of the student must appear at the back and dated signature must be made by Proctor Teacher to ensure the same and also on first inside page of the register.
- 10. Proctor Teacher should check 5 sentences, words with meaning and reason(s) meticulously. Find out the mistakes, correct the same and instruct the students not to repeat the mistakes, and then make signature on the 5 sentences write up, on daily basis.
- 11. If 5 sentences notebook of a student is full, the student must be made to go for new notebook and write PPPE again from backside and make dated signatures on first page and at the end of PPPE write up as usual.
- 12. Following will be the exceptions for writing 5 sentences:
  - 1. One day before semester class test and during test period.
  - 2. During Industrial visits.
  - 3. One day before and during campus interview.
  - 4. One day before and during participation in paper presentation, sports and related activities.
  - 5. During P. L.
  - 6. On seminar and project days only for B.E.
  - 7. During the period of sanctioned leave.

However, Proctor Teacher should ensure that the dates along with justification be written by the students in the 5 sentences notebook on the day(s) 5 sentences are not written.

13. Proctor Teacher should ensure that for all the subjects during semester the concerned students have make separate 200 pages long good quality register for each subject. This can be ensured by confirming dated signature of concerned Subject Teachers on inside first page and then making his/her dated signature on the same page. Proctor Teacher should maintain record confirming that all students from his/her group have taken signatures on all the

- note books. If second notebook is made for the same subject, the same must also bear dated signatures of Subject Teacher and Proctor Teacher.
- 14. Proctor Teacher should motivate the respective group students to follow the study approach and in particular maintain the records in respect of efforts made and results wherever possible.
- 15. Proctor Teacher should maintain the contact with the parents of the concerned students, through phone as well as letters, communicating them about the progress/ status of the concerned students.
- 16. Proctor Teacher should visit to the Hostel/Room/Residence, as the case may be, of the students concerned with, his/her group to establish and strengthen good report and for counseling academic and overall development of the concerned students.
- 17. Proctor Teacher should prepare their respective group result analysis in triplicate and submit two copies to HOD, one for department and second for office, within three days from the date of receipt of Xerox copy of ledger by the respective department.
- 18. Proctor Teacher should psychologically counsel the concerned group students so as to maintain the decorum of and discipline in the institute, in addition to helping them, solving their academic and personal problems.
- 19. Proctor Teacher should motivate the concerned group students for curricular, co-curricular and extra curricular activities and maintain the record of the same. At the end of the academic year two copies be submitted in the form of a report attached with copies of certificates and other documents, if any. (one copy for the department and one for the office.)
- 20. Proctor Teacher should maintain good rapport with parents of the students in his/ her group and also maintain the record of feedback from parents in proper format.
- 21. During "Function":
  - i. Proctor Teacher should have full control over his/her group students.
  - ii. Proctor Teachers should carry their respective group students to the Function and ensure their presence and discipline. Students be made to sit proctor-wise by the concerned Proctor Teachers in functions. The attendance of the students be taken by respective Proctor Teachers after the function is over.
  - iii. In case of students creating disturbance, Proctor Teacher should handle the situation by noting down the names of students concerned with their group and taking the matter to H.O.D., if required.
  - iv. The Proctor Teacher should ensure that all the students from his/her group are in complete uniform at the time of function.
  - v. If some student is absent, the case be reported in writing to HOD, who will charge fine to the student and also consider this aspect as a part of behavior of the student during the semester.
- 22. Student not responding well at proctor level be dealt in the common meeting of HOD, Class Coordinator and Proctor Teacher.
- 23. If Proctor Teacher wishes to go on leave, he/ she must also adjust his/her load related to proctor work. Leave be sanctioned by H.O.D./Vice-Principal/Principal after ensuring this.
- 24. Proctor Teacher should maintain fee record of work performed in respect of above points.

### **K]** Laboratory In-Charge:

### I) Role:

- 1. Laboratory in-charge should submit the requirements of the laboratory for preparing the budget to the HOD.
- 2. Laboratory in-charge should prepare and display the chart giving details of equipment along with instrument, on the laboratory notice board.
- 3. Laboratory in-charge should display time table for his/her laboratory.
- 4. Laboratory in-charge should display the list of DOs and DON'Ts at appropriate place(s) in the laboratory.
- 5. Laboratory in-charge should ensure that the concerned practical teacher(s) display the list of experiments, exercises, assignment etc. as the case may be on the laboratory notice board.
- 6. Laboratory in-charge should ensure that laboratory manual for the laboratory is up-to-date.
- 7. Laboratory in-charge should ensure that the subject related charts, if any, be displayed on the wall of the laboratory in coordination with subject teachers..
- 8. Photographs of great scientist related to the Laboratory/ Department should be displayed.
- 9. Laboratory in-charge should ensure that entry register for students be maintained at laboratory level and entries are made accordingly. This is apart from the attendance taken by the Subject Teacher for practical.
- 10. Register be maintained in the laboratory for recording the material issued from the laboratory on temporary basis.
- 11. Laboratory in-charge should ensure that the equipment / apparatus / instruments / systems in respect of his/her laboratory are in working condition. In case of break down, immediate steps be taken by him/her and be recorded accordingly.
- 12. Laboratory in-charge should ensure cleanliness and discipline in his/her laboratory.

### L] Librarian.:

- 1. Librarian should ensure that library remains open for 24 hours.
- 2. Librarian should ensure that the board giving up-to-date display of 'Library at a glance' is maintained in the library.
- 3. Librarian should ensure that circulation section (Issue/Receipt) is working from 7.00 a.m. to 9.00 p.m.
- 4. Librarian should compile the requirements submitted by the teacher and put before Library Committee meeting to decide about recommendation to higher authority.
- 5. Librarian should put the proposal, to process by Library Committee before Principal for further processing.
- 6. Librarian should ensure that books/journals are available at proper places.

- 7. Librarian should ensure that timely subscription is made for renewal of magazines/journals.
- 8. Librarian should ensure that entry registers be maintained in library including reading rooms and more effective use of the same is made by the students and staff.
- 9. Librarian should ensure that display of new arrivals in respect of books and journals at a separate place in the library.
- 10. Librarian should ensure that systems and reprographics facility are in good working condition.
- 11. Librarian should ensure that syllabus and sufficient number of questions papers of earlier university examinations in respect of all the subjects are available in the library in subjectwise files.
- 12. Librarian should ensure that the students with complete uniform or with permission from the authority for not being in uniform or those having receipt of the fine paid be only entertained in the library.
- 13. Librarian should ensure proper behavior of the library staff with the students and faculty members.

### M] Hostel Rector/Rectress:

- 1. Hostel Rector/ Rectress should ensure that wings are allotted to the Wing Wardens.
- 2. Hostel Rector/ Rectress should ensure that at least 2 copies of Hostel Rules be displayed, on permanent basis, on the Hostel notice boards.
- 3. Hostel Rector/ Rectress should ensure that Wing Wardens are visiting the hostel as per the order and performing their duties accordingly and making the entries in the register. In case of discrepancy, necessary steps be taken.
- 4. Hostel Rector/ Rectress should ensure that time table is prepared and effectively executed in respect of staff visits to the hostels. In case of discrepancy, due steps be taken.
- 5. Hostel Rector/ Rectress should ensure effective involvement of students in the hostel from Earn & Learn Scheme, for maintaining discipline and culture in the hostels.
- 6. Hostel Rector/ Rectress should ensure that in each wing at least one student from Earn & Learn Scheme be made to stay and play the Role as Wing Coordinator.
- 7. Hostel Rector/ Rectress should ensure that this Wing Coordinator maintains entry/exit register for that wing students effectively.
- 8. Hostel Rector/ Rectress should ensure that no student leaves the hostel either for Pandharpur or for out of station without getting the leave sanctioned. The record of the same be maintained accordingly.
- 9. Hostel Rector/ Rectress should ensure that leave to go to Pandharpur and up to one day to go to out of station be sanctioned by concerned wing warden / Asst. Rector(s) / Rector(s) after getting convinced that the case is genuine. For more than one day leave, authority will lay with Rector(s).
- 10. Hostel Rector/ Rectress should ensure that all kinds of wing-wise record including leave applications be maintained in Hostel Office by the concerned Wing Coordinator. Discrepancies be reported by Wing Coordinator to the Rector(s), who should take the necessary steps.

- 11. Hostel Rector/ Rectress should ensure that attendance in a separate register at wing level, be taken by Wing Coordinator daily basis.
- 12. Hostel Rector/ Rectress should ensure that Wing Coordinator report the absent cases effectively.
- 13. Hostel Rector/ Rectress should ensure that the students absent without permission, pay a fine of Rs. 25/- per day and also such case be reported to the concerned HOD.
- 14. Hostel Rector/ Rectress should ensure that consecutive two or more days absenteeism from hostel without permission be reported to the parents through RPAD letter.
- 15. Hostel Rector/ Rectress should ensure that Asst. Rector take the rounds of the concerned hostels and accordingly entries are made in a separate register.
- 16. Hostel Rector/ Rectress should ensure that at wing level 3 registers, as follows are maintained and kept up to date:
  - i. Attendance register by Wing Coordinator.
  - ii. Entry/Exit register by Wing Coordinator.
  - iii. Register in respect of visits of wing warden to be maintained by Wing Coordinator in Hostel office.
- 17. Hostel Rector/ Rectress should ensure that separate register be maintained at Hostel office level for recording the visits of Asst. Rector(s) and staff (especially in semester I)
- 18. Hostel Rector/ Rectress should ensure that no trace passer or unauthorized persons (who are not the members of the hostel) be allowed to enter in the Hostel without permission from Asst. Rector(s) or higher authority.
- 19. Hostel Rector/ Rectress should ensure that separate register is maintained for recording the details of outside persons entering in hostel.
- 20. Hostel Rector/ Rectress should ensure that condition of cots, tables, chairs, windows including glasses, fans, tube lights, etc. be recorded at the time of first entry of the students in the room and also at the time that the room is left by the students. Due steps be taken in case of discrepancy.
- 21. Hostel Rector/ Rectress should ensure that review of points submitted by Wing Wandens to Rector(s)' office be taken on weekly basis and all efforts be made to solve the problems.
- 22. Hostel Rector/ Rectress should ensure that absenteeism and casual approach in respect of visits by Wing Wardens and staff be reported to the Principal on weekly basis.
- 23. Hostel Rector/ Rectress should ensure that cleanliness and hygiene conditions are maintained in the Hostels and around.
- 24. Hostel Rector/ Rectress should ensure that timely payment is made by the students towards Hostel fees/deposit.
- 25. Hostel Rector/ Rectress should ensure that there will not be shortage of logistics such as firewood, diesel for generator, water for drinking as well as for use, cots, tables, chairs, fans, etc.
- 26. Hostel Rector/ Rectress should ensure that the quality of food in the mess is at acceptable level.
- 27. Hostel Rector/Rectress should ensure that every year one G.S. is appointed through election or nomination for every hostel.
- 28. Hostel Rector/ Rectress should ensure that at least two General Body meetings be conducted in a year and accordingly minutes be recorded in proceeding book.
- 29. Hostel Rector/ Rectress should ensure that stock register of all the material (furniture, equipments, locks etc.) be maintained along with purchase order, bills and receipts.

- 30. Hostel Rector/ Rectress should ensure that separate register be maintained for consumables along with purchase order, bills and receipts.
- 31. Hostel Rector/ Rectress should ensure that for all celebrations in the Hostels, an in-charge from Asst. Rectors be appointed for proper conduction of the programme.

### **II)** Authority Delegated:

- 1. Sudents' Problems.
- 2. Signing of quotation call leteers.

### N] Training and Placement Officer:

- 1. Training & Placement Officer should plan and act as a marketing/representative person of Institute to industries.
- 2. Training & Placement Officer should maintain up-to-date data in respect of academic performance of all the students of our college in format(s) required by the industries.
- 3. Training & Placement Officer should prepare/obtain/create classified list/database for industries in different areas.
- 4. Training & Placement Officer should ensure that in house training sessions from our faculty be arranged for the students during vacation.
- 5. Training & Placement Officer should ensure that proper coordination is maintained in respect of Training & Placement among all the departments.
- 6. Training & Placement Officer should ensure that students are motivated for training in various industries and record be maintained accordingly.
- 7. Training & Placement Officer should engage at least one lectures for each class of SE and TE students each semester and should introduce the students to current market trend and their expectations from the freshers, and should motivate them for personality development activities. He should maintain the record accordingly.
- 8. Training & Placement Officer should arrange and coordinate the in house training activities for the students as well as staff for the remote and sparse areas of strength, if required, from expert persons in industry/academics.
- 9. Training & Placement Officer should arrange (EDP) Entrepreneur Development Programme, with the help of experts/ Govt. bodies, at least once in a year.
- 10. Training & Placement Officer should ensure that, in addition to placement, students are motivated for other competitive examinations for higher education such as GATE, GRE, TOEFL, GMAT, CAT etc.
- 11. Training & Placement Officer should ensure that ample number of aptitude and technical test papers are made available.
- 12. Training & Placement Officer should ensure that industrial visits are made for promoting Training & Placement activities.
- 13. Training & Placement Officer should ensure that PPT presentation concerning the profile of college be prepared and maintained up-to-date.
- 14. Training & Placement Officer should ensure that hospitality as per the culture and tradition of this Institute is extended to guest coming for session or placement.

- 15. Training & Placement Officer should ensure that feed back is obtained from the employers about the working of our students and record be maintained accordingly.
- 16. Training & Placement Officer should ensure that students are well prepared from the point of view of Aptitude Tests, Technical Tests, GDs., Personal interviews and presentation etc.
- 17. The Training and Placement officer should ensure that proper notices regarding arrival of company are displayed, students are informed well ahead about the profile of the company visiting and their requirements, if possible.
- 18. Training & Placement Officer should prepare whole list of out-going students every year and keep track of their progressive career. The record should be maintained accordingly.
- 19. Training & Placement Officer should ensure that one get-together of the ALUMNI of one batch and one more get-together of ALUMNI of all the passed out batches till date be arranged every year at appropriate location.
- 20. Training & Placement Officer should create and maintain the database of all the passed out students of the Institute till date and form/ enrich the ALUMNI.
- 21. Training & Placement Officer should ensure that the results of placement efforts displayed at proper places of the institute that catch the attention of the visitors.
- 22. Training & Placement Officer should prepare a report indicating number of companies visited the campus, number of students absorbed through campus, number of students absorbed in out of campus, the branch-wise and companywise number of students placed in every academic year before the start of admission process.
- 23. Training & Placement Officer should ensure that students are motivated for reading English News papers.
- 24. Training & Placement Officer should ensure that students are motivated to speak in English amongst themselves.

### O] General:

- 1. Every staff should ensure that every student in the campus is in complete uniform, in case of discrepancy such student should personally taken by that staff to cash section and made to pay the fine.
- 2. Every teacher should ensure that every student speaks only in English in the campus even while speaking with other students. If discrepancy is observed, the student be made to pay a spot fine of Rs. 15/-.
- 3. On the first working day of every semester, HOD should visit the respective classes and make announcement in respect of 2 above.
- 4. Every staff should maintain a 200 pages notebook, which shall be collected from college store, in addition to diary and on day to day basis note down the list of planned activities performed during the day.
- 5. Staff members before going on leave should adjust all kind of load related to him/her.

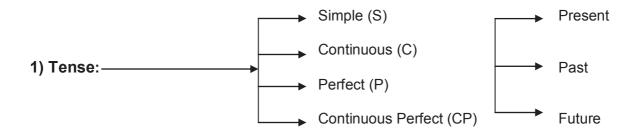
- 6. For paper presentation in International Conference abroad, liberal view be taken by the college to extend some financial assistance on case to case basis.
- 7. For paper presentation in India at National level or Inter-National level, first 5 papers in an academic year per department be fully supported by the college in respect of registration fees and travel. However, there should be commitment from the teacher to serve our Institute for acceptable period of time.
- 8. If a paper is published in an Inter-National Technical journal a cash prize of Rs. 10,000/- be awarded per paper to the concerned along with appreciation letter. However, commitment as in 7 above will be applicable.
- 9. If a paper is published in an National Technical journal a cash prize of Rs. 3,000/- be awarded per paper to the concerned along with appreciation letter. However, commitment as in 7 above will be applicable.
- 10. Principal, Vice-Principal, H.O.Ds., Registrar, Librarian, Class Coordinators, Subject Teachers and Proctor Teachers should ensure that students are in complete uniform.
- 11. Beyond his/her group students, every teacher should effectively monitor the students for uniform..
- 12. Every employee of the institute should ensure that no documentation file be shown to the suppliers/ other outside person without permission.

(Prof. B.P.Ronge) SECRETARY

# Communication Improvement Programme

#### Modules:

- 1) Tense
- 2) Voice
- 3) Speech
- 4) Degree
- 5) Use of Have/Has/Had, Can/Could, used to
- 6) Vocabulary



Sentences in all the tenses can be in Active Voice, but there is no Passive Voice for Continuous, Perfect Tense and Continuous & Perfect Future Tense.

- 2) Voice: There are two kinds of voice
  - a) Active Voice
  - b) Passive Voice
- 3) Speech: There are two kinds of Speech
- a) **Direct Speech:** If something is found in " " in the sentence mentioned by somebody...
  - b) Indirect Speech: If " "is not found in the sentence with reference or mention of Somebody....
- 4) Degree: There are three kinds of Degree
  - a) Positive
  - b) Comparative
  - c) Superlative
- 5) Use of Have/Has/Had, Can/could, use to/ used to
- 6) Vocabulary

### 1) Tense:

Where and when we need to take care of tense?

We need to take care of tense in the sentence while constructing it.

What a sentence is made up of (formula of a sentence)
Sentence = Subject (S) + Verb (V) + [Object (O)]
1 - It may or may not be there in the sentence. However it is must for

[ ]:- It may or may not be there in the sentence. However it is must for converting the sentence into passive voice.

The word which decides tense of a sentence is the verb. Hence Let's first understand the details of verb.

**VERB:** - The word which indicates (shows) the action. e.g. eat, jump, cut, learn, etc.

#### Types of verbs- There are two types of verb -

- 1. Main verb
- 2. Helping or supporting verb or auxiliary

Auxiliary (supportive) verb: - It is the verb when used alone in the sentence, plays role of main verb (i.e. it indicates the action) else in most of the cases it is used as additional verb along with main verb in the sentence.

e.g.

- 1. I am a boy.
- 2. I am a girl.
- 3. One month back, I was at my residence.

**Note**: In the above sentences, the auxiliary verbs are performing the function of main Verb.

**Note**: Supporting verb, if used only in simple present or simple past or simple future tenses, plays the role main verb.

e.g.

- 1. I am a person.
- 2. Yesterday at 3.00 pm, all of us were in the class.
- 3. Tomorrow at 2.15 pm, we shall be in the class.
- 1. India is participating in 2008 Beijing Olympics. (Continuous Present Tense)
- 2. Yesterday at 5.00 pm I <u>was moving</u> towards my residence. (Continuous Past Tense)
- 3. Tomorrow at 5.45 pm, <u>I will be moving</u> towards my residence. (Continuous Future Tense)
- 1. I have completed my PPPE write up for yesterday. (Perfect Present Tense)
- 2. When I was in 11<sup>th</sup> standard, I <u>had participated</u> in cricket tournament. (Perfect Past Tense)
- 3. One year after completion of my graduation, I <u>shall have reached</u> the U.S.A. (Perfect Future Tense)

Sr.	T	Supporting Verbs				
No.	Types of of Main Sub Tense Tense	Present	Past	Future		
1	Simple (S)	AM for I, IS for he, she, it and ARE for we, you & they. If used alone, plays the role of MAIN VERB, else no supporting verb.	WAS for I, he, she, it and WERE for we, you & they. If used alone plays the role of MAIN VERB, else no supporting verb,	SHALL for I & we and WILL for he, she, you, it, they. In simple future tense supporting verbs SHALL or WILL are never used alone in the sentence.		
2	Continuous (C)	AM for I, IS for he, she, it and ARE for we, you & they. ING is added to the main verb.	WAS for I, he, she, it and WERE for we, you, they. ING is added to the main verb.	SHALL BE for I, we and WILL BE for he, she, it, you & they. ING is added to the main verb.		
3	Perfect (P)	HAS for he, she, it and HAVE for I, we, you & they. Main verb is in PAST PARTICIPLE form.	HAD for I, we, you, he, she, it, & they. Main verb is in PAST PARTICIPLE form.	SHALL HAVE for I, we and WILL HAVE for you, he, she, it & they. Main verb is in PAST PARTICIPLE form.		
4	Continuous Perfect (CP)	HAS BEEN for he, she, it and HAVE BEEN for I, we, you & they. ING is added to the main verb.	HAD BEEN for I, we, you, he, she, it & they. ING is added to the main verb.	SHALL HAVE BEEN for I & we and WILL HAVE BEEN for you, he, she, it & they. ING is added to the main verb.		

The use of supporting verbs as given in above table is applicable for the sentences in ACTIVE VOICE.

### MAIN VERB:

The word in the sentence which indicates the action is known as the main verb.

There are three forms of main verb.

- 1. Present form
- 2. Past form
- 3. Past Participle form

**Subject:** It is the word which makes the action as per the verb or as indicated by the verb in the sentence.

E.g.: I eat mango.

It may be noun or pronoun

**Object:** It is the word on which action happens as indicated by the verb in the sentence, it is the word which is noun or pronoun.

**Noun:** It is the name given to a person, place, thing (Tangible or Intangible), idea, emotions, feelings and animals etc.

**Pronoun:** The word which is used instead of noun to avoid repetition.

#### **Pronoun Structure**

*First Person* (I):- When we talk about ourselves it is known as first person pronoun.

**Second Person** (II):- When two individuals are together and on individual talks to other it is known as second person singular pronoun. When two or more individuals are together and one individual talks to more than one individual directly it is second person plural pronoun.

**Third Person** (III):- when two or more individuals are together and one individual talks to another individual or group of individuals, with reference to one or more individuals who are present or absent there, it is third person pronoun. If reference is to an individual it is third person singular and if reference is to a group it is third person plural.

Person	Singular	Plural
First Person (I)	I	WE
Second Person (II)	You	You
Third Person (III)	He, She, It	They

### **Tense**

#### 1. SIMPLE TENSES-FEATURES

### (A) Simple Present Tense:-

- i) It tells about the position just before the start of the action.
- ii) It is used to tell the information about the universal truths, habitual actions, truths in limited sense, etc.
- iii) There is only one verb in the sentence and it is in present form.
- iv) If the subject is third person singular (He, She, It) 's' or 'es' is added to the verb; in case it is not supporting verb playing the role of main verb.

Abuse – f'kO;k ns.ks Abused Abused

#### **B) Simple Past Tense**

- i) It gives information about just end of the action.
- ii) Sometimes it is used as an option for Perfect Present Tense.
- iii) There is only one verb in this sentence and it is in past form.

Abuse – f'kO;k ns.ks Abused Abused

### C) Simple Future Tense

- i) It gives information about the action which will be started in future.
- ii) There are two verbs in the sentence, out of which ,first one is aux. verb and second one is main verb.
- iii) The details of supporting verb are **SHALL** for I & We, **WILL** for You, He, She, It & They.
- iv) Main verb is in present form.

### **Use of Main Verbs (from verb list)**

S.No.	Verb	Person	Present	Past	Future
1	Abuse	I	Abuse	Abused	Shall Abuse
		We	Abuse	Abused	Shall Abuse
		You	Abuse	Abused	Will Abuse
		You	Abuse	Abused	Will Abuse
		Не	Abuses	Abused	Will Abuse
		She	Abuses	Abused	Will Abuse
		It	Abuses	Abused	Will Abuse
		They	Abuse	Abused	Will Abuse

### **Supporting Verbs (playing the role of Main verbs)**

S.No.	Verb	Person	Present	Past	Future
1	Am/Is/Are	I	I am in	I was in seminar	I shall be in
	Was/Were		seminar hall		seminar hall
	Shall/Will	We	We are in	We were in	We will be in
			seminar hall	seminar hall	seminar hall
		You	You are in	You were in	You will be in
			seminar hall	seminar hall	seminar hall
		You	You are in	You were in	You will be in
			seminar hall	seminar hall	seminar hall
		He	He is in	He was in	He will be in
			seminar hall	seminar hall	seminar hall
		She	She is in	She was in	She will be in
			seminar hall	seminar hall	seminar hall
		It	It is in	It was in seminar	It will be in
			seminar hall	hall	seminar hall
		They	They are in	They were in	They will be in
			seminar hall	seminar hall	seminar hall

### 2.CONTINUOUS TENSES- FEATURES

### A) Continuous Present Tense:-

- i) It tells about the action in process.
- ii) There are two verbs in the sentence out of which, one is supporting verb and other is main verb.
- iii) The details of supporting verb are **AM** for I, **IS** for He, She, It and **Are** for We, You & They
- iv) 'ING' is added to the main verb.

Notice – y{k ns.kss Noticed Noticed

#### B) Continuous Past Tense:

- i) It gives information about the action which was started in the past and remained incomplete in the past itself.
- ii) There are two verbs in the sentence out of which, the first one is supporting verb and second one is main verb.
- iii) The details of first supporting verb are **WAS** for I, He, She & It and **Were** for We, You & They.
- iv) '**ING**' is added to the main verb.

Notice – y{k ns.kss Noticed Noticed

### C) Continuous Future Tense:-

- It gives information about the action which will be started in the future and will be incomplete.
- ii) There are three verbs in the sentence out of which, first two are supporting verbs and third one is main verb.
- iii) The details of first supporting verb are **SHALL** for I & We, **WILL** for You, He, She, It & They.
- iv) The second supporting verb is 'be'.
- v) '**ING**' is added to the main verb.

Notice – y{k ns.kss

Noticed

Noticed

### **Use of Main Verbs (from verb list)**

S.No.	Verb	Person	Present	Past	Future
1	Abuse	I	am	was	Shall be
			noticing	noticing	noticing
		We	are	were	Shall be
			noticing	noticing	noticing
		You	are	were	will be noticing
			noticing	noticing	
		You	are	were	will be noticing
			noticing	noticing	
		He	is noticing	was	will be noticing
				noticing	
		She	is noticing	was	will be noticing
				noticing	
		It	is noticing	was	will be noticing
				noticing	
		They	are	were	will be noticing
			noticing	noticing	

#### 3. PERFECT TENSES- FEATURES

### (A) Perfect Present Tense:-

- i) It gives information about the end of action.
- ii) There are two verbs in the sentence out of which, one is supporting verb and other is main verb.
- iii) The details of supporting verb are **HAVE** for I, We, You & They and **HAS** for He, She, It.
- iv) Main verb is in past participle form.

#### B) Perfect Past Tense:-

- i) It gives information about the action completed in the past.
- ii) There are two verbs in the sentence out of which, one is supporting verb and other is main verb.
- iii) The details of supporting verb are **HAD** for I, We, You, He, She, It & They.
- iv) Main verb is in past participle form.

### C) Perfect Future Tense:-

- i) It gives information about the action which will be started in future and will be completed in the future.
- ii) There are three verbs in the sentence out of which, first two are supporting verbs and third one is main verb.
- iii) The details of first supporting verb are **SHALL** for I & We, **WILL** for You, He, She, It & They.
- iv) The second supporting verb is 'have'.
- vi) Main verb is Past Participle form.

Dig – [kksn.ks Dug Dug

### Use of Main Verbs (from verb list)

S.No.	Verb	Person	Present	Past	Future	
1	dig	I	Have dug	Had dug	Shall have dug	
		We	Have dug	Had dug	Shall have dug	
		You	Have dug	Had dug	Will have dug	
		You	Have dug	Had dug	Will have dug	
		He	Has dug	Had dug	Will have dug	
		She	Has dug	Had dug	Will have dug	
		It	Has dug	Had dug	Will have dug	
		They	Have dug	Had dug	Will have dug	

#### 4. CONTINUOUS PERFECT TENSES- FEATURES

#### (A) Continuous Perfect Present Tense:-

- i) It gives information about the action which was started in the past, is in progress in present and will continue in future.
- ii) There are three verbs in the sentence out of which, two are supporting verbs and third one is main verb.
- iii) The details of first supporting verb are **HAVE** for I, We, You & They and **HAS** for He, She, It.
- iv) The second supporting verb is 'been'.
- vii) 'ING' is added to the main verb.

### (B) Continuous Perfect Past Tense:-

- i) It gives information about the action which was started in the past remained incomplete and continued thereafter in the past itself.
- ii) There are three verbs in the sentence out of which, first two are supporting verbs and third one is main verb.
- iii) The details of first supporting verb are **HAD** for I, We, You, He, She, It & They.
- iv) The second supporting verb is 'been'.
- viii)'ING' is added to the main verb.

### (C) Continuous Perfect Future Tense:-

- i) It gives information about the action which will be started in future, will remain incomplete and continued in future itself.
- ii) There are four verbs in the sentence out of which, first three are supporting verbs and third one is main verb.
- iii) The details of first supporting verb are **SHALL** for I & We, **WILL** for You, He, She, It & They.
- iv) The second supporting verb is 'have'.
- v) The third supporting verb is 'been'.
- vi) 'ING' is added to the main verb.

Stand – mHks jkg.kss Stood Stood

### Use of Main Verbs (from verb list)

S.No.	Verb	Person	Present	Past	Future
1	dig	I	have been	had been	Shall have
			standing	standing	been standing
		We	have been	had been	Shall have
			standing	standing	been standing
		You	have been	had been	Will have been
			standing	standing	standing
		You	have been	had been	Will have been
			standing	standing	standing
		He	has been	had been	Will have been
			standing	standing	standing
		She	has been	had been	Will have been
			standing	standing	standing
		It	has been	had been	Will have been
			standing	standing	standing
		They	I have	had been	Will have been
			been	standing	standing
			standing		

### NOTE:-

In future tense, if we wish to talk about a little affirmation 'SHALL' shall is replaced by 'WILL', in case of I & We and 'WILL' will is replaced by 'SHALL', in case of You, He, She, It & They.

- i) 'I shall' will become 'I will'.ii) 'You will' will become 'You shall'.
- iii) 'He will' will become 'He shall' and so on..........

## A] SIMPLE TENSE

Sr.	Verb	Present	Tense	Past	Tense	Futur	e Tense
No.		Sentence in Active Voice	Sentence in Passive Voice	Sentence in Active Voice	Sentence in Passive Voice	Sentence in Active Voice	Sentence in Passive Voice
		i) There is one verb in the sentence ii) It is in Present form iii) 'S' or 'ES' is added to the main verb, if the subject is third person singular.	i) There are two verbs in the sentence. One is supporting verb and the other is main verb. ii)Supporting verbs are AM for I, IS for He, She & It and ARE for We, You & They ii) Main verb is in Past Participle form.	i) There is one verb in the sentence ii) It is in Past form	i) There are two verbs in the sentence. One is supporting verb and the other is main verb. ii)Supporting verbs are WAS for I, He, She & It and WERE for We, You & They ii) Main verb is in Past Participle form.	i) There are two verbs in the sentence. One is supporting verb and the other is main verb. ii)Supporting verbs are SHALL for I, & We, WILL for You, He, She, It & They ii) Main verb is in Present form.	i) There are three verbs in the sentence. Two are supporting verbs and One is main verb. ii) First Supporting verbs are SHALL for I, & We, WILL for You, He, She, It & They iii) Second supporting verb is 'BE' iv) Main verb is in Past Participle form.
1.	Abuse f'kO;k ns.ks Abused Abused	I abuse my friends.	My friends are abused by me.	I abused my friends.	My friends were abused by me.	I shall abuse my friends.	My friends will be abused by me.
2.	Accept fLOkdkj.ks Accepted Accepted	We accept challenges.	Challenges are accepted by us.	We accepted challenges.	Challenges were accepted by us.	We shall accept challenges.	Challenges will be accepted by us.

# B] CONTINUOUS TENSE

Sr.	Verb	Present	Tense	Past	Tense	Futur	e Tense
No.		Sentence in Active	Sentence in	Sentence in	Sentence in	Sentence in	Sentence in Passive
		Voice	Passive Voice	Active Voice	Passive Voice	Active Voice	Voice
		i) There are two	i) There are three	i) There are two	i) There are three	i) There are Three	There is no passive
		verbs in the	verbs in the	verbs in the	verbs in the	verbs in the	voice for continuous
		sentence. Out of	sentence. First	sentence. Out of	sentence. First	sentence. Out of	future tense.
		them one is	two are	them one is	two are supporting	which two are	
		supporting and the	supporting verbs	supporting and	verbs and the	supporting verbs	
		other is main verb.	and the other is	the other is main	other is main verb.	and the other is	
		ii) Supporting verbs	main verb. ii)First	verb.	ii)First Supporting	main verb.	
		are AM for I, IS for	Supporting verbs	ii) Supporting	verbs are WAS for	ii)First Supporting	
		He, She & It and	are AM for I, IS for	verbs are WAS	I, He, She & It and	verbs are SHALL	
		ARE for We, You &	He, She & It and	for I, He, She & It	WERE for We,	for I, & We, WILL	
		They	ARE for We, You	and WERE for	You & They	for You, He, She,	
		iii) 'ING' is added to	& They	We, You & They	iii) Second	It & They	
		Main verb	iii) Second	ii) 'ING' is added	supporting verb is	ii) Second	
			supporting verb is 'BEING'	to Main verb	'BEING'	supporting verb is 'BE'	
			_		iv) Main verb is in	iii)'ING' is added	
			iv) Main verb is in Past Participle		Past Participle form.	to the main verb.	
			form.		TOTTI.	to the main verb.	
1.	Abuse	She is abusing her	Her friends are	She was abusing	Her friends were	She will be	There is no passive
	f'kO;k	friends	being abused by	her friends	being abused by	abusing her	voice for continuous
	ns.ks		her.		her.	friends	future tense.
	Abused						
	Abused						
2.	Accept	We are accepting	Challenges are	We were	Challenges were	We shall be	There is no passive
	fLOkdkj.ks	challenges.	being accepted by	accepting	being accepted by	accepting	voice for continuous
	Accepted		us.	challenges.	us.	challenges.	future tense.
	Accepted						

# C] PERFECT TENSE

Sr.	Verb	Present	Tense	Past Tense		Future Tense		
No.		Sentence in Active	Sentence in	Sentence in	Sentence in	Sentence in	Sentence in Passive	
		Voice	Passive Voice	Active Voice	Passive Voice	Active Voice	Voice	
		i) There are two	i) There are three	i) There are two	i) There are three	i) There are Three	There is no passive	
		verbs in the	verbs in the	verbs in the	verbs in the	verbs in the	voice for continuous	
		sentence. Out of	sentence. Out of	sentence. Out of	sentence. First	sentence. Out of	future tense.	
		them one is	them, two are	them one is	two are supporting	which two are		
		supporting and the	supporting verbs	supporting and	verbs and the	supporting verbs		
		other is main verb.	and the other is	the other is main	other is main verb.	and the other is		
		ii) Supporting verbs	main verb.	verb.	ii) First Supporting	main verb.		
		are HAS for He,	ii) The first	ii) Supporting	verb is HAD for I,	ii) First Supporting		
		She & It and HAVE	supporting verbs	verb is HAD for I,	He, She, It, We,	verbs are SHALL		
		for I, We, You &	are HAS for He,	We, He, She, It,	You & They	for I, & We, WILL		
		They	she & It and	You & They	iii) Second	for You, He, She,		
		iii) Main verb is in	HAVE for I, We,	iii) Main verb is in	supporting verb is	It & They		
		past participle form	You & They	Past Participle	'BEEN'	ii) Second		
			iii) Second	form.	iv) Main verb is in	supporting verb is		
			supporting verb is		Past Participle	'HAVE'		
			'BEEN'		form.	iii)The main verb		
			iv) Main verb is in			is in past		
			Past Participle			participle form.		
4	A I.	11. 1 11.2.	form.	11. 1	11: 6:	11. 911.	TI	
1.	Abuse	He has abused his	His friends have	He had abused	His friends had	He will have	There is no passive	
	f'kO;k	friends.	been abused by	his friends	been abused by	abused his	voice for continuous	
	ns.ks		him.		him.	friends.	future tense.	
	Abused Abused							
2.		We have accepted	Gifts have been	We had accepted	Gifts had been	We shall have	There is no passive	
۷.	Accept fLOkdkj.ks	We have accepted gifts.	accepted by us.	We had accepted gifts.	accepted bys us.		There is no passive voice for continuous	
	ILOKUKJ.KS	giito.	accepted by us.	giits.	accepted bys us.	accepted gifts.	voice for continuous	

Accepted			future tense.
Accepted			

# D] CONTINUOUS PERFECT TENSE

Sr.	Verb	Present	t Tense	Past Tense		Future	e Tense
No.		Sentence in Active	Sentence in	Sentence in	Sentence in	Sentence in	Sentence in Passive
		Voice	Passive Voice	Active Voice	Passive Voice	Active Voice	Voice
		i) There are three	There is no	i) There are three	There is no	i) There are four	There is no passive
		verbs in the	passive voice for	verbs in the	passive voice for	verbs in the	voice for continuous
		sentence.	continuous perfect	sentence.	continuous perfect	sentence. Out of	future tense.
		Out of them one is	present tense	Out of them two	past tense	which three are	
		supporting and the		are supporting		supporting verbs	
		other is main verb.		and the other is		and the other is	
		ii) First supporting		main verb.		main verb.	
		verbs are HAS for		ii) First Supporting		ii) First Supporting	
		He, She & It and		verb is HAD for I,		verbs are SHALL	
		HAVE for I, We,		He, She, It, We,		for I, & We, WILL	
		You & They		You & They		for You, He, She,	
		iii) Main verb is in		iii) Second		It & They	
		past participle form		supporting verb is		ii) Second	
		iv) 'ING' is added		'BEEN'		supporting verb is	
		to the main verb.		iv) 'ING' is added		'HAVE'	
				to the main verb.		iii) Third supporting	
						verb is 'BEEN'	
						iv) 'ING' is added to the main	
1.	Abuse	They have been	There is no	They had been	There is no		There is no passive
1.	f'kO;k	abusing.	passive voice for	abusing.	passive voice for	They will have been abusing.	voice for continuous
	ns.ks	abusing.	continuous perfect	abusing.	continuous perfect	been abusing.	future tense.
	Abused		present tense		present tense		luture terise.
	Abused		present tense		present tense		
2.	Accept	He has been	There is no	He had been	There is no	He will have been	There is no passive
۷.	fLOkdkj.ks	accepting.	passive voice for	accepting.	passive voice for	accepting.	voice for continuous
	ILONUNJ.NS	accepting.	passive voice ioi	accepting.	passive voice ioi	accepting.	voice for continuous

Accepted	continuous perfect	continuous perfect	future tense.
Accepted	present tense	present tense	

#### **VOICE**

#### There are two types of Voice:-

- I) Active Voice
- II) Passive Voice

#### I) Active Voice:-

- i) In this voice, Subject makes the action.
- e.g. Madhav Sir teaches English.
- ii) Whatever sentences we have coined in point 1 under tense all of them are in active voice.
- iii) In this voice, the importance is given to the subject.
- iv) the supporting verb changes as per the person and number of subject.
- v) In simple present tense only 's' or 'es' is added to the main verb, if the subject is third person singular.

#### II) Passive Voice :-

i) Subject and object may be implied take 180 degree shift in the sentence, in other words subject becomes object and vice-versa may be with little change in form.

e.g.-

I become me and vice-versa.

We becomes us and vice-versa

You remain you and vice-versa

He becomes Him and vice-versa

She becomes her and vice-versa

It remains it and vice-versa

They becomes them and vice-versa

Thus, in this voice the sentence starts with object and ends with subject(may be implied). In most of the cases usually subject isn't implied.

- ii) If at all subject after becoming object physically retains its place in the sentence it is preceded by the word 'BY'.
- e.g. You are requested by me against You are requested.
- iii) Object is given importance in the sentence by making it subject and starting the sentence with the same.

- iv) One supporting verb is always added in the sentence which changes according to the main and sub type of tense.
- v) The main verb is always in past participle form.
- vi) If in the active voice object is without preposition or if it is with the preposition 'TO' then only in most of the cases passive voice of such sentence is possible. In case of object with other prepositions like on, under, in, below, over, etc. one has to be selective to confirm whether passive voice is possible or not.
- vii) If the sentence in the active voice ends with object which is the noun made out of main verb, the passive voice of such sentence isn't possible. e.g. I go to play.
- viii) In daily used language, passive voice is usually used with the persons as subject or object i.e. when the subject and object are I, We, You, You, He, She, It, & They.

# **SPEECH**

There are two ways of narration: 1) Direct narration/speech and 2) Indirect narration/speech

**Direct Narration/Speech-** When we deal with the exact words of the speaker, it is called as direct speech. These exact/original words are placed in double inverted comma. Here we find nearness of time and place related words. E.g. now, here, this, these, today etc.

#### For example-

- 1) "I am a student," Rahul said.
- 2) Geeta said to Radha, "Will you accompany me?"
- 3) The teacher said, "Bring the file immediately."
- 4) The man said, "Alas! India lost the match!"

**Indirect Narration/Speech (Reported Speech)-** Here in indirect speech, there is narration of the dialogues by third person or one of the participants in direct speech. Here we find distance of time and place related words. E.g then, there, that, those, that day etc.

### For example-

- 1) Rahul said that he was a student.
- 2) Geeta asked Radha if she would accompany her.
- 3) The teacher ordered to bring the file immediately.
- 4) The man exclaimed sadly that India had lost the match.

# Rules for conversion of Direct speech into indirect speech:

1) When the reporting verb is in past tense, all present tenses of the direct speech are converted into relevant past tenses.

# TABLE OF TENSE CHANGES IN ABOVE CONDITION

SR.NO	TENSE OF THE SENTENCE IN DIRECT SPEECH		TENSE OF THE SENTENCE IN INDIRECT SPEECH
1	Simple present tense		Simple past tense
	Direct: "I always drink coffee", she said		<i>Indirect:</i> She said that she always drank coffee.
2	Continuous present tense	BECOMES	Continuous past tense
	<b>Direct:</b> He said, "my mother is writing letter."		<i>Indirect:</i> He said that his mother was writing letter.
3	Perfect present tense		Perfect past tense
	<b>Direct:</b> He said, "I have passed the examination."		<i>Indirect:</i> He said that he had passed the examination.
4	Present perfect continuous tense	_	Past perfect continuous tense
	<b>Direct:</b> "I have been working here since two years," Said Prakash.		<i>Indirect:</i> Prakash told that he had been working since two years.
5	Simple past tense Direct: He said, "His horse died in the night."		Perfect past tense Indirect: he said that his horse had died in the night.
6	Continuous past tense	_	Continuous perfect past tense
	<b>Direct:</b> Hari said to Jack, "I was preparing for the exam."		<i>Indirect:</i> Hari told Jack that he had been preparing for the exam."
7	Perfect past tense	Remains	Perfect past tense
	<b>Direct:</b> "I had purchased a car," he explained.		<i>Indirect:</i> He explained that he had purchased a car.

2) If reporting verb is in present tense, the tenses of the sentences in indirect speech remain unchanged.

E.g. Direct: He says, "I am well."

Indirect: He says that he is well.

3) If reporting verb is in future tense, the tenses of the sentences in indirect speech remain unchanged.

E.g. Direct: She will say, "I study hard." Indirect: She will say that she studies hard.

4) The tenses will not change if the statement is still relevant or if it is a universal truth.

E.g. Direct: The teacher said, "The earth goes round the sun." Indirect: The teacher said that the earth goes/went round the sun.

- 5) No punctuation mark other than full stop is used in a sentence of indirect speech.
- 6) During this conversion, all types of sentences in direct speech are converted into assertive sentences.(in indirect speech)
- 7) Words expressing nearness of time and place are changed into words denoting distance.

Direct: He said, "I am glad to be here this evening." Indirect: he said that he was glad to be there that evening.

SR.	TIME OR PLACE RELATOR		TIME OR PLACE RELATOR
NO	(DIRECT SPEECH)		(INDIRECT SPEECH)
1	NOW		THEN
2	HERE		THERE
3	THIS		THAT
4	THESE		THOSE
5	TODAY	BECOMES	THAT DAY
6	TOMORROW		THE NEXT DAY
7	AGO		BEFORE
8	YESTERDAY		THE PREVIOUS DAY/THE DAY BEFORE
9	LAST NIGHT		THE NIGHT BEFORE
10	THUS		SO

8) When modal constructions are used, the form of the modal or another modal that has a past meaning is used.

Direct Speech	$\Rightarrow$	Indirect Speech
can He said, "I can go to school every day."	$\Rightarrow$	could He said (that) he could go to school every day.
may He said, "I may go to school every day."	$\Rightarrow$	might He said (that) he might go to school every day.
must He said, "I must go to school every day."	$\Rightarrow$	had to He said (that) he had to go to school every day.
should He said, "I should go to school every	$\Rightarrow$	should He said (that) he should go to school every

C	lay."		day.	
1	<b>ought to</b> He said, "I <b>ought to</b> go to school every lay."	$\Rightarrow$	ought to  He said (that) he ought to go to school every day.	

# TABLE OF SPEECH CONVERSION

SR. NO	TYPE OF SENTENCE IN DIRECT SPEECH	SIGNS OF SENTENCE	REPORTING VERBS	CONJUCTION	
1	STATEMENTS(A/N)	-S+V+O Pattern -Full stop at the end -Affirmative or negative	Said/ Told/explained	that	
2	INTERROGATIVE 1) Wh-question	-Wh-word at the beginning  - Question mark at the end	Asked/Questioned/	Same Wh-word	
	2) Verbal question	-Aux.verb at the beginning (A/N) -Question mark at the end	Enquired	If/ Whether	
3	IMPERATIVE	-main verb at the beginning -Full stop at the end -The word 'please' if-request	Ordered/requested/ Commanded/Urged	to	
4	EXCLAMATORY	-Interjection at the beginning -The words 'what a' or 'How' at the beginning -Exclamation mark at the end	Exclaimed / Shouted/ Declared	that	
5	SUGGESTION	-The word 'Let's'	Suggested	that	

## **EXERCISES:**

### 1) **STATEMENTS**:

- Direct: She said, "I saw him."
- Indirect: She said that she had seen him.
- Direct: He said to me, "I do not believe you."
- Indirect: He said that he did not believe me.
- Direct: She said to him, "I do not believe you."
- Indirect: She said to him that she did not believe him.
- Direct: I said to him, "I did not believe you."
- Indirect: I said to him that I did not believe him.
- Direct: I said to you, "I do not believe you."
- Indirect: I said to you that I do not believe you.

## 2) **QUESTIONS**:

- Direct: He said to me, "What are you doing?"
- Indirect: He asked me what I was doing.
- Direct: A stranger asked me, "Where do you live?"
- Indirect: A stranger enquired where I lived.
- Direct: The Policemen said to us, "Where are you going?"
- Indirect: The Policemen asked us where we were going.
- Direct: He said, "Will you listen to such a man?"
- Indirect: He asked them if they would listen to such a man.
- Direct: His angry mother said, "Do you suppose you know better than your father?"
- Indirect: His angry mother asked whether he supposed that he knew better than his father.

#### 3) IMPERATIVE:

- Direct: Raja said to John, "Go away."
- Indirect: Raja ordered John to go away.
- Direct: He said to Mary, "Please wait here till I return."
- Indirect: he requested Mary to wait there till he returned.

- Direct: "Call the first witness", said the Judge.
- Indirect: The Judge commanded them to call the first witness.
- Direct: He shouted, "Let me go."
- Indirect: he shouted to them to let him go.
- Direct: He said, "Be quite and listen to my words".
- Indirect: He urged them to be quite and listen to his words.

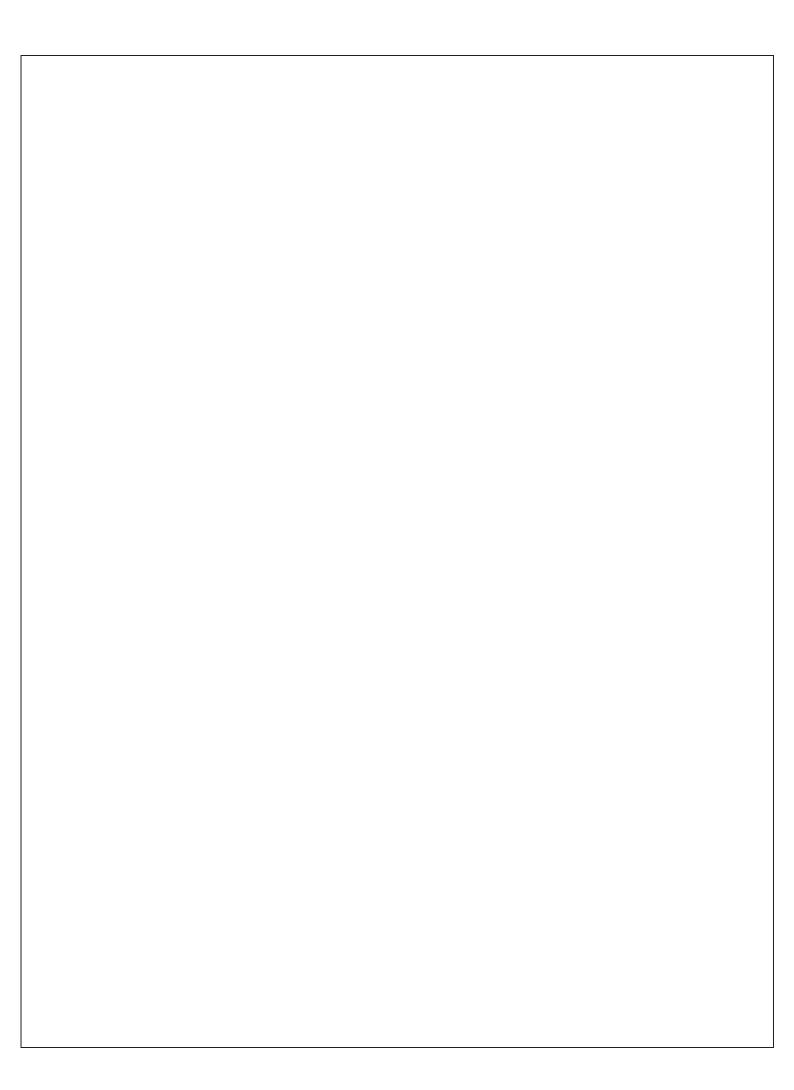
### 4) **EXCLAMATORY:**

- Direct: He said, "Alas! I am undone".
- Indirect: He exclaimed sadly that he was undone.
- Direct: "Hurrah! We have won the match," he said.
- Indirect: He exclaimed joyfully that they had won the match.
- Direct: Alice said, "How clever I am?"
- Indirect: Alice exclaimed that he was very clever.
- Direct: He said, "Bravo! You have done well."
- Indirect: he appreciated him, saying that he had done well.
- Direct: "So help me, Heaven!" he cried, "I will never steal again".
- Indirect: He called upon Heaven to witness his resolve never to resolve.

# Some more exercises-

Que-Change the following sentences into direct/indirect:

- 1) "Change the train immediately," said the guard.
- 2) "Have you completed your work?" said the teacher.
- 3) The wireman said, "Don't touch this electric pole."
- 4) Mother said to me, "Do you like this kind of books?"
- 5) My teacher said' "The sun rises in the East."
- 6) "What a fantastic car is this!" She said.
- 7) "I was painting a picture that time," She said.
- 8) The old woman requested if I would help her to cross that road.
- 9) "Let's go fast and reach in time," Father said.
- 10) "She may take the annual exam," the principal said.



# **DEGREE**

Degree is used to convey the same meaning in a different way. It is used to mention the similarity, contrast or supremacy of things, people, etc. This comparison is done with an adjective of quality.

There are three degrees of comparison

- 1) Positive degree
- 2) Comparative degree
- 3) Superlative degree

#### **CHART OF DEGREES:**

SR.NO.	DEGREE	SENSE	SIGNS	NUMBER OF CONSERNED OBJECTS
1	POSITIVE	EQUALITY/ SIMILARITY	SO (ADJ.)AS, AS(ADJ.)AS	TWO
2	COMPARATIVE	CONTRAST	(ADJ.)ER THAN, MORE (ADJ)THAN	TWO
3	SUPERLATIVE	SUPREMACY	THE (ADJ.)EST, THE MOST(ADJ.)	MORE THAN TWO

#### CONVERSION OF DEGREES OF COMPARISON-

## A) THE CONVERSION FROM COMPARATIVE TO POSITIVE-RULES:

- 1) We should start the sentence with the noun that occurs after the word 'than'.
- 2) The verb should be made negative.
- 3) The given adjective should be put between 'AS-----AS' or 'SO------AS', in root form.
- 4) The earlier noun should be shifted to the end.
- E.g. 1) Mumbai is larger than Pune.
  - -> Pune is not as large as Mumbai.
  - -> Pune is not as large as Mumbai.
  - 2) Sham is more studious than Ram.
  - -> Ram is not as studious as Sham.
  - 3) Mahabaleshwar is not more beautiful than Matheran.
  - -> Matheran is as beautiful as Mahabaleshwar.

#### B) THE CONVERSION FROM POSITIVE TO COMPARATIVE-RULES:

- 1) We should start the sentence with the noun that occurs after 'as'.
- 2) The verb should be made affirmative/negative as per the given sentence.
- 3) We should take comparative form of the adjective.
- 4) The earlier noun should be shifted to the end.
- E.g. 1) Pune is not as large as Mumbai.
  - -> Mumbai is larger than Pune.
  - 2) Sham is as clever as Ram.
  - -> Ram is not more clever than Sham.
  - 3) Study is as useful as sports activities.

-> Sports activities are not more useful than study.

### C) THE CONVERSION OF SUPERLATIVE INTO OTHER DEGREES-

When a thing or person etc. of specific feature is compared with other objects etc. of same feature, all three degrees are possible.

SUPERLATIVE	COMPARATIVE	POSITIVE
THE (ADJ.)EST	(ADJ.)ER THAN	NO OTHER (N)(V)AS-
	ANYOTHER	(ADJ.)AS
THE MOST (ADJ.)	MORE (ADJ.) THAN	NO OTHER (N)(V)SO-
. ,		(ADJ.)AS

- E.g. 1) Mumbai is the biggest city in Maharashtra.
  - C.D: Mumbai is bigger than any other city in Maharashtra.
  - P.D: No other city in Maharashtra is as big as Mumbai.
  - 2) This is the most useful book in English.
    - C.D: This book is more useful than any other book in English.
    - P.D: No other book in English is as useful as this.
  - 3) Switzerland is the most beautiful country in the world.
    - C.D: Switzerland is more beautiful than any other country in the world.
    - P.D: No other country in the world is as beautiful as Switzerland.

# D) THE COMPARISION WITH 'ONE OF THE':

SUPERLATIVE	COMPARATIVE	POSITIVE
ONE OF THE (ADJ.)EST	(ADJ.)ER THAN	VERY FEW (Np)(V)AS-
	MANY/MOST OTHER	(ADJ.)AS
ONE OF THE MOST (ADJ.)	MORE (ADJ.) THAN	VERY FEW (Np)(V)SO-
		(ADJ.)AS

- E.g. 1) English is one of the easiest languages in the world.
  - C.D. English is easier than many other languages in the world.
  - P.D. Very few languages in the world are as easy as English.
  - 2) India is one of the most cultured countries in the world.
  - C.D. India is more cultured than many other countries in the world.
  - P.D. Very few countries in the world are as cultured as India.
  - 3) Shailesh is one of the cleverest students in the class.
    - C.D. Shailesh is cleverer than many other students in the class.
    - P.D. Very few students in the class are as clever as Shailesh.

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