## **Self Study Report (SSR)**

### For NAAC-Accreditation of

### The Shirpur Education Society's R C Patel Institute of Technology, Shirpur

Submitted to

## The National Assessment & Accreditation Council Bangalore

Submitted by



**R C Patel Institute of Technology, Shirpur,** Nimzari Naka, Shahada Road, Shirpur, Dist. Dhule, Maharashtra, India,425405

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R. C. PATEL INSTITUTE OF TECHNOLOGY

**R C Patel Institute of Technology, Shirpur,** Nimzari Naka, Shahada Road, Shirpur, Dist. Dhule, Maharashtra, India,425405

## DETAILS OF PROGRAMS OFFERED IN THE INSTITUTE

SI. No.	Program me Level	Name of the Programme/ Course	Duration In Years	Sanctioned/ approved Student strength
		Computer Engineering	4	120
	UG- Ist Shift	Information Technology	4	60
1		Electronics & Telecommunication	4	120
		Mechanical Engineering	4	120
		Electrical Engineering	4	60
		Civil Engineering	4	60
2	UG- IInd Shift	Mechanical Engineering	4	60
		Electronics & Telecommunication	2	24
3	PG*	Computer Engineering	2	24
4	Ph.D.	Electronics & Telecommunication	As Per Norms of	As Per Norms
		Computer Engineering	NMU, Jalgaon	Jalgaon

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#### **Covering Letter by Head of the Institute**



#### **Principal's Message**

R C Patel Institute of Technology, Shirpur was established in the year 2001 with a vision to provide value based quality education to rural area students. It was the vision of our patron Hon Shri Amrishbhai Patel to empower and educate rural and tribal area students and it was also his dream to take higher education to the door steps of the rural students. This great vision is being fulfilled by the institution by providing quality education to rural / tribal area students from neighboring villages. Since from inception institute has been importing quality education to students especially those belonging to the rural and less privileged sections of society.

When RCPIT was envisaged way back in 2001, there were many skeptics who believed that establishing a new engineering institute in a rural region was not a safe bet. But for a handful of resolute optimists, who charted the destiny of RCPIT, the picture was crystal clear - that of an institute matching global standards and putting to rest the debate on urban-rural polarization. Exceptional achievements and performances of RCPIT students, RCPIT faculty and as an Institute are appreciated and rewarded world-wide. Whether in the campus or hostel, the students exhibit a spirit of camaraderie and co-existence and all this without compromising on social disciplines. North Maharashtra University, Jalgaon, in 2015 awarded RCPIT with Grade 'A' for its overall excellence performance in Engineering Education. We are proud to share that, we have placed 1000+ students through Campus Placements in last 5 years. The infrastructure and I.C.T. facilities are regularly upgraded and maintained efficiently through a pool of permanently appointed hardware, electrical and maintenance staff. Green measures such as rain water harvesting have been adopted by the institution towards environment protection and sustenance. Through a support system of mentoring, tutoring, and counseling, and the language lab, the individual needs especially of the disadvantaged/differentlyabled students are being addressed. We are working on collaborating with corporate big wigs and organizing workshops/seminars, Add-on courses to equip students with the skills to improve their employability quotient. Our academic results have surpassed university results for all years. We are toiling hard to reach the zenith by improvising our innate qualities, adopting innovative ideas, acquiring new skills and implementing new techniques to overcome our weaknesses and thus strengthening the institution.

This report is the synergic outcome of the efforts of all the departments of the institution. I appreciate the cooperation put in by the management, the I.Q.A.C. and other members of the staff for this collaborative and collective venture with an open heart. I hope this report will justify our sincere endeavor. In our march towards excellence, we look forward to guidance from the N.A.A.C., which would be taken up with utmost sincerity.

Prof Dr J B Patil Principal, RCPIT Shirpur

#### NAAC - STEERING COMMITTEE

Prof. Dr. J. B. Patil	Chairman	
Prof. Dr. P. J. Deore	Member	
Mr. P. T. Mahajan	Assisting Coordinator	
Prof. S. P. Shukla	Member	
Prof. N. N. Patil	Member	
Prof. N. P. Salunke	Coordinator	
Prof. G. V. Tapkire	Member	
Prof. V S Patil	Member	
Prof. D. R. Patil	Member	

#### **Critical Review Committee**

Prof. Dr. P. J. Deore	Member	
Mr. P. T. Mahajan	Member	
Prof. N. P. Salunke	Member	

#### SSR Preparation Committee

Mrs. Ujwala M. Patil	In-charge Criterion I, Computer Engg.		
	Dept. NAAC Coordinator		
Prof. P. R. Bhole	In-charge Criterion II, E&TC Dept. NAAC		
	Coordinator		
Prof. P. L. Sarode	In-charge Criterion III, Mechanical Engg.		
	Dept. NAAC Coordinator		
Prof T M Dattawar	In-charge Criterion IV, Information		
FIOL I. M. Fallewal	Technology. Dept. NAAC Coordinator		
Prof. C. J. Chitte	In-charge Criterion V, Civil Engg. Dept.		
	NAAC Coordinator		
Prof. Y. R. Kirange	In-charge Criterion VI, Electrical Engg.		
C C	Dept. NAAC Coordinator.		
Dr. M. S. Sonawane	In-charge Criterion VII, App. Sci. Dept.		
	NAAC Coordinator		

### LIST OF ABBREVIATIONS

ACI	American Concrete Institute	
AICTE	All India Council For Technical Education	
AMC	Annual Maintenance Contract	
ASCE	American Society of Civil Engineers	
ASME	American Society of Mechanical Engineers	
BARC	Bhabha Atomic Research Center	
BCUD	Board of College and University Development	
BE	Bachelor of Engineering	
BOS	Board of Studies	
BSNL	Bharat Sanchar Nigam Limited	
СО	Course Outcomes	
CSR	Corporate Social Responsibility	
DOT	Department of Technology	
DST	Department of Science and Technology	
DTE	Directorate of Technical Education	
E&TC	Electronics and Telecommunication	
EDC	Entrepreneurship Development Cell	
EPF	Employees' Provident Fund	
ERP	Enterprise Resource Planning	
FDP	Faculty Development Program	
FE	First Year of Engineering	
GATE	Graduate Aptitude Test in Engineering	
GB	Governing Body (GB)	
GMAT	Graduate Management Admission Test	
GRE	Graduate Record Examination	
HOD	Head of the Department	
HR	Human Resource Management	
IIIC	Industry-Institute Interaction Cell	
ICT	Internet Communication Technology	
IEEE	Institute of Electrical and Electronics Engineers	
IISc	Indian Institute of Science, Bangalore	
IISER	Indian Institute of Science Education And Research	
IIT	Indian Institute of Technology	
IITB	Indian Institute of Technology, Bombay	
IITK	Indian Institute of Technology, Kanpur	
IITM	Indian Institute of Tropical Meteorology	
IQAC	Internal Quality Assurance Committee	
IS	Indian Standards	
ISO	International Organization for Standardization	

IISER	Indian Institute of Science Education & Research		
ISRO	Indian Space Research Organization		
IT	Information Technology		
KVA	Kilo Volt Ampere		
LAN	Local Area Network		
LCD	Liquid Crystal Display		
LMC	Local Management Committee		
LIC	Life Insurance Corporation of India		
LMC	Local Managing Committee		
MBPS	Megabites per Second		
MCQ	Multiple Choice Questions		
MD	Managing Director		
ME	Master of Engineering		
MESA	Mechanical Engineering Student Association		
MODROB	Modernization and Removal of Obsolescence		
MoU	Memorandum of Understanding		
MPSC	Maharashtra Public Service Commission		
MR	Management Representative		
MRC	Management Review Committee		
MSEB	Maharashtra State Electricity Board		
MS-SQL	Microsoft - Structured Query Language		
NA	Not Applicable		
NASA	National Aeronautical and Space Administration		
NBA	National Board of Accreditation		
NGO	Non-Governmental Organization		
NITTTR	National Institute of Technical Teachers Training and		
	Research		
NMU	North Maharashtra University Jalgaon		
NPTEL	National Programme on Technology Enhanced		
	Learning		
NSS	National Service Scheme		
OBE	Outcome Based Education		
OHP	Over Head Projectors		
OPAC	Online Product Access Catalogue		
PC'S	Personal Computer		
PEO	Program Educational Objectives		
PG	Post Graduate		
PhD	Doctor of Philosophy		
PO	Program Outcomes		
QMS	Quality Management System		
R & D	Research and Development		
RAB	Research Advisory Board		

RGSTC	Rajiv Gandhi Science and Technology Commission
SAE	Society of Automotive Engineers
SEDA	Second Year Direct Admitted
SES	Shirpur Education Society
SFC	Student Facilitation Center
STTP	Short Term Training Programs
SVNIT	Sardar Vallabhbhai National Institute of Technology,
TIFR	Tata Institute of Fundamental Research
TV	Television
UG	Under Graduate
UGC	University Grants Commission
UPS	Uninterrupted Power Supply
UPSC	Union Public Service Commission
URL	Uniform Resource Locator
VP	Vice President
VPSA	Vice President Student Activities

#### ACKNOWLEDGEMENT

We have great pleasure to submit Self Study Report (SSR) of Shirpur Education Society's R C Patel Institute of Technology Shirpur to the NAAC Bangalore. The SSR includes the Executive Summary, Profile of the Institution, Criterion wise Evaluative Report, Evaluative Report of Departments and Declaration by the Head of the institution

It is the constant support and efforts by all have led to the completion of Self Study Report. It would be incomplete if we don't recognize and thank each one who has helped in the completion of Self Study Report. We would like to express our gratitude towards our management for constant support and encouragement for improving quality.

Further we would like to thank steering committee which includes Our Principal Sir, Vice Principal Sir, Registrar & PRO and all the heads of Department.

We have received lot of support from administrative section, examination section and accounts section we thank them. We would also thank IT support Team for uploading the SSR on the website.

Further we would like to thank Heads of various departments- Mechanical

Engineering, Electronics Engineering, Computer Science & Engineering, Information Technology, Civil Engineering, Electrical Engineering, Electronics & Telecommunication Engineering, and First Year for providing information and completion of evaluative report of the department.

We would like to offer sincere gratitude to all who have helped directly and indirectly in the completion of SSR.

The NAAC has given us an opportunity to find the Institutional Strengths,

Weaknesses, opportunities and challenges while preparing SSR. Thanks for the golden opportunity given by NAAC.

We are all awaiting for the NAAC visit and are eagerly looking forward to welcome the Peer Team at our institution.

Prof. Dr. J. B. Patil Principal Nilesh P. Salunke IQAC In-Charge

## **Executive Summary**



#### **EXECUTIVE SUMMARY**

#### **About Parent Trust**

R C Patel Institute of Technology, Shirpur is pleased to present the Self-study report (SSR) to the National Assessment and Accreditation Council, Bengaluru. R. C. Patel Institute of Technology, Shirpur (RCPIT) was established in June 2001 (with Intake capacity 180) under the umbrella of The Shirpur Education Society, Shirpur (SES), under the visionary leadership of Shri. Amrishbhai Patel (President, SES, Shirpur; President, SVKM, Mumbai; Chancellor, NMIMS University) The institute was established with an objective of providing Technical Education (TE) to the rural candidates with a focus on infrastructure that match global standards through quality education in accordance with the industry and contemporary market demands. The Shirpur Education Society runs

1. R C Patel Institute of Technology Shirpur

2. R C Patel Institute of Pharmaceutical Research, Shirpur

- 3. H R Patel Institute of Pharmaceutical Research, Shirpur
- 4. Institute of Management Research Development, Shirpur
- 5. R. C Patel Polytechnic, Shirpur
- 6. R. C Patel Senior College, Shirpur.
- 7. R. C Patel D.Ed. College Shirpur
- 8. R. C Patel B.Ed. College Shirpur

Ashram Schools and more than 87 Primary and Secondary schools, etc.

The inputs in terms of students are varying in demographic and geographic characteristics. The talent of students and teachers vary, as do their levels of preparedness and effectiveness in teaching and learning. So, only focusing on measuring performance on graduation rates and merits is not a successful step when we consider diversified inputs. Instead, RCPIT believes in a holistic approach, where all such inputs are directed towards development through overall grooming leads to the success of institute. RCPIT, Shirpur, presently having an intake 600 with 180 qualified faculty as per norms of AICTE. RCPIT is surrounded by many challenges in terms of inputs such as students belonging to tribal area, economically low-income groups and first-generation learners. RCPIT has mixed inputs of talent dispersion, family background and occupation. Geographically, Shirpur and surrounding area belong to tribal population with 90% of economy based on agriculture. Last four years' admission statistics of RCPIT revealed that 50-60% belong to nearby villages (rural and tribal area) & 30-40% belong to nearby taluka; 40-50% parents are farmers and workers on daily wage, 50-60% parents belong to lower economy class having income below 1 lac. Students' entry marks based on CET score (out of 200) who have secured less than 60 marks were 45-55%. In terms of students admitted, RCPIT is gaining advantage over the last 5 years despite of the geographic and demographic constraints. In 2010, admissions were 75% of total intake. In 2016, whereas the admissions in North Maharashtra University

region were only 50% of intake and only 48% in Maharashtra State, admissions in RCPIT were 90% of intake. To overcome input complexity, RCPIT has maintained a proper mix of holistic development in terms of Faculty and Students' engagement and value-added services for holistic development of students as well as faculty. RCPIT's services are not limited to operating service but also encourages supporting services and extension services to the students, faculty, industry and community through following techniques.

- (1) Foundation Bridge Course: To overcome weakness of fundamental knowledge and soft skills, institute conducts a 10 days program on basic engineering subjects like; Mathematics, Physics, Chemistry by in-house faculty. Professional training on English language is given by professional organizations. This helps in retaining and motivating students, maintaining their interest and preparing them for pre-requisite for engineering.
- (2) Financial aid and support: To encourage talent of economically backward students, RCPIT gives fee concession up to 100% based on qualifying marks. RCPIT also assist students for educational loans. To encourage meritorious students and extra-curricular activities, RCPIT through 'R. C. Patel Memorial Scholarships' offers scholarships worth Rs. 75 Lacs every year in addition to government scholarships.
- (3) Innovative Teaching-Learning: The success of RCPIT is largely attributed to the exuberant and qualified faculty high in spirits, disciplined and devoted to the core. Around 100+ journal papers and conference papers are contributed by 80% of faculty as on date. 36 faculties have enrolled for their doctoral program (Ph.D.) after joining RCPIT. Perhaps the most productive and effective method of teaching and monitoring is the one implemented at this institute, called - Tutor System, wherein a batch of students is entrusted to a teacher for not just instruction but as much for care, parenting and counseling. Sessional examinations are conducted periodically to ensure the consistency in the academic performance. In addition, there is periodical appraisal and evaluation of students and faculty as well (with online feedback by the students). The students are divided on the basis of their last years' academic performance through which institute has different remedial, academic tactics and training inputs to the slow learners and toppers. This methodology ensures that the students shine in the University Merit List during every academic year with minimum drop outs and failure. The track record of university result shows that, around 80 to 100 RCPIT students are placed in top ten ranks and every year our students secure medals. RCPIT has consistent record of university results more than 95%. The most attractive feature of this teaching methodology is that library hours, practice for aptitude, soft skills training, language laboratory hours, alumni interaction and industrial guest lectures have been added to the academic time table. Other than University curriculum, from current academic year special emphasis is given to the

project based learning (PBL) module and internship programs in which students are required to develop project, based on the knowledge and skills that he/she has gained during semester with industry sponsored project encouraged at third and final year. Thus, many innovative projects have been accepted by the well-known industries like KPIT Cummins, TCS etc. As an outcome of PBL our students have recently secured Gold Ranking and a cash prize of 5, 00,000/- by KPIT Sparkle competition. Innovative ideas generated through PBL have been converted into many successful start-ups.

- (4) ICT based learning: In RCPIT, Information and Communication Technology acts as a supplement to the teacher for undergraduate students. RCPIT's ICT based education ensures students and faculty to keep updated with latest technology and research trends through various tie-ups / associations like; National Program on Technological Enhance Learning (NPTEL- MHRD, New Delhi), Quality Enhancement in Engineering Education (QEEE- IIT, Madras), Center for Distance Engineering Education Program (CDEEP- IIT, Bombay and IIT, Kharagpur). On an average, 20-25 co-curricular courses are conducted per year using these platforms to update faculty and students' knowledge on latest trends in industrial technology. For the students who are interested in PG studies, RCPIT has e-learning platform of various entrance examinations like; GRE, TOEFL and GATE. Students and faculty are encouraged for certification courses through Massive Open Access Courses (MOOCS). About 100 plus certifications per year have been completed by students and faculty. In this regard 10 of our faculty were awarded as best performers in ICT based 2 months' workshop by IIT, Bombay and are invited to be resource persons for upcoming workshops. Beside this, RCPIT has developed its own virtual learning platform in collaboration with Amrita University for conducting multiple sessions. Special skype sessions are conducted for the interaction with the alumni based in USA, UK, Canada etc, under RCPIT's 'Corporate-to-Campus'. Institute's effort in ICT based education has been rewarded by many forums. For e.g. IIT, Madras, has granted RCPIT a 'Partner' category for its QEEE program (one among three institutes in Maharashtra) consecutively for two semesters. RCPIT is one among the pioneer institutes who has tie-up with IIT, Bombay from its' CDEEP program right from its inception. RCPIT has also tieup with IIT Kharagpur in terms of virtual classrooms and laboratories.
- (5) Employability Development Program (EDP): The focus of RCPIT is to make the candidate employable by its soft skill development program running throughout all semesters at no cost to students. To enhance technical skills, around 15-20 technical add-on courses are provided to students in tie-up with reputed training organizations. Research laboratory of Wipro Technologies and IIT, Mumbai's Robotics Lab are established so that students can work with cutting edge technology.

- (6) Industrial Linkages and Professional Association: RCPIT has many industrial linkages like accreditation by Tata Consultancy Services, establishment of industrial lab by Wipro Technologies, project centers of KPIT Cummins and Persistent. Through, industrial linkages RCPIT, also facilitate placements for almost 70% students by well-known companies. Wipro technologies has awarded RCPIT as 'Best College in Western Region for Campus Placements' and 'Best Principal in Western Region'. RCPIT has established professional chapters like IEEE, IETE, ISTE and departmental associations. In 2016, because of strong industrial linkages RCPIT got featured in AICTE-CII Industry Linkage Survey 2016 (5th Edition) with 'Gold Ranking'.
- (7) **Supporting & Extension Activities:** RCPIT encourages students and faculty for participation in Tech-fest and conferences by providing financial assistance. Annually, National Conference and Technical Symposium are held. Sports and cultural events are conducted periodically with the national level professional trainers. Students of RCPIT are given creative liberties by organizing events and contests to enhance their analytical skills and lateral thinking abilities.
- (8) Relationship Management: Instead of believing in 'clicks' and 'likes', RCPIT believes in Relationships, Bonds and Engagement. RCPIT has an interactive interface with its current students, alumni, community and faculty through its Facebook page with almost 9000 followers and LinkedIn page with almost 1000 members (25%) of alumni are connected. RCPIT has alumni associations in India as well as in USA and Australia. Alumni meets are conducted once in two years in India as well as abroad. RCPIT is also connected with its community through its social activities like health and medical camps, cleanliness drives, tree plantation programs, computer literacy programs, help to needy people and technology assistance to farmers. RCPIT also actively sponsors and take part in education fairs, sports events and University's cultural festival. The institute conducts seminars on career counseling with rural schools and colleges. Approximately 60 Schools and Colleges with 4000 school students are benefited through this counselling programs every year.
- (9) Summary and Conclusion: When RCPIT was envisaged way back in 2001, there were many skeptics who believed that establishing a new engineering institute in a rural region was not a safe bet. But for a handful of resolute optimists, who charted the destiny of RCPIT, the picture was crystal clear that of an institute matching global standards and putting to rest the debate on urban-rural polarization. Exceptional achievements and performances of RCPIT students, RCPIT faculty and as an Institute are appreciated and rewarded world-wide. Whether in the campus or hostel, the students exhibit a spirit of camaraderie and co-existence and all this without compromising on social disciplines. North Maharashtra University, Jalgaon, in 2015 awarded RCPIT with Grade

'A' for its overall excellence performance in Engineering Education. We are proud to share that, we have placed 1000+ students through Campus Placements in last 5 years; more over 500+ alumni are shining abroad, 70% of them belong to rural with complex characteristics. Without exaggeration, we can firmly claim that RCPIT is a cradle of excellence and commitment, molding young minds and shaping our youth for a bright tomorrow. 'The engineering college founded by Hon. Shri Amrishbhai Patel, has gained a reputation as the institute having a maximum number of students in the merit list of North Maharashtra University, year after year and published by Outlook-Spotlight, 'A Diamond in the Crown of Rural India', June 2015. RCPIT inculcates the value of hard work and diligence amongst its students and faculty enabling them to overcome obstacles in the journey of their future lives with dignity and poise. When we look back it gives us immense sense of satisfaction because the phenomenal performance of RCPIT has exceeded the expectations of one and all.

#### **Criterion I: Curricular Aspects**

- R.C. Patel Institute of Technology, Shirpur is affiliated to North Maharashtra University (N.M.U.), Jalgaon.
- Institution follows curriculum designed by the N.M.U. Jalgaon.
- Our principal Prof. Dr. J. B. Patil has worked as Dean Faculty of Engineering and Technology and Chairman for computer engineering Board of Studies who has contributed his views and suggestions in curriculum updating and designing. Also our faculty members served university in various capacities as BOS chairman 01, BOS members 04, Members of academic council 02 and members of senate 02.
- Most of the faculties contributed in syllabus framing, designing workshops and on evaluation Panel.
- Many of the faculties are chairmen and paper setters in university examination panel.
- College collects innovative ideas from students, alumni, parents and industries before redesigning process.
- By taking university calendar as an input, Principal and Heads discuss and prepare the academic calendar for college and for departments.
- Time table in-charge follows the academic calendar to prepare time table.
- Head of the department distribute the teaching load to the faculty by considering subject choices given by faculties.
- For newly introduced courses institute arranges training program for them. Institute also arranges workshops for faculty for effective teaching learning.
- Institute plans and defines the evaluation criteria for Internal Sessional Examination (ISE) and Internal Continuous Assessment (ICA) marks.

- Along with academic calendar, Faculty Academic Dairy is also issued to every faculty member.
- At the beginning of a semester each faculty member prepares calendar planning of faculty activities which includes start and end date of each unit for every class. Every subject teacher has responsibility to complete the unit before the start of Internal Sessional Exam of that unit.
- For practical conduction each faculty prepares batch wise practical plan. Along with number of the practical's prescribed by university, some extra practical's are also conducted by subject teacher.
- Both class teacher and class coordinator monitor the class activity.
- Head of Department monitors the progress of conduction of curriculum at the end of every week.
- Feedback from students is analyzed periodically to improve the teaching learning process. If required necessary corrective actions are taken.
- Institute organizes and conducts various training programs such as soft skill, personality development, entrepreneurship awareness, etc. to enrich the knowledge and fills the gap between industry needs and curriculum for future employability.
- Two teachers are guide for Ph.D. students in the faculty of Computer and Electronics & Telecommunication engineering.

#### **Criterion II: Teaching-Learning and Evaluation**

The institute follows the state government rules of admission for admitting the candidates. The admissions are done through centralized admission process conducted

By statutory body of Govt. of Maharashtra. The institute follows the social reservation and backward category reservation in the admission process. RCPIT takes efforts to serve students of different back grounds and abilities, through effective teaching-learning experiences. The students from rural population are attracted towards the institute due to the facilities offered by the institute like scholarships, hostels, mess, transportation and library facilities.

The institute has made various facilities and comfort zones available to serve the differently-abled students. It sensitizes the staff and students on issues such as gender, inclusion, environment by means of activities like Anti-ragging committee, Women Grievance Cell for Sexual Harassment, Grievances Redressal Cell, Induction Programs for newly admitted students, Local Guardian Scheme and others.

The institute has its own academic calendar in line with the university academic calendar. The lesson plans are prepared by the teaching faculty to ensure the effective delivery and plan the systematic teaching-learning processes.

The periodic review is conducted to ensure the quality in education. The online feed-back system (twice in semester) exists.

The implementation of teaching plan and students' attendance is regularly monitored by Class coordinator, local guardian and Head of Department and regular efforts are made to inform the students and parents.

The institute has well qualified faculty with good retention ratio. It always tries to achieve excellence in teaching – learning by introducing new methods to enhance the employability and academic results. The faculties undergo training and attend the workshops and conferences for career enhancement.

The institute motivates the scientific temper, critical thinking and creativity of students by organizing National and International conferences, workshops, seminars, National level technical symposium "Converges".

The evaluation of learning is rigorous. The institute conducts the four sessional examinations. The performance of the student is tracked by the respective Local guardian (tutor teacher). The remedial measures are taken based on the performance of the students in the sessional and university examination. The latest technological advancement and innovations in educational transactions are well undertaken by the institution to make a visible impact on academic development as well as on evaluation. Latest summative and formative assessment techniques based on technology, wherever possible, are used to evaluate attainment levels of student learning outcomes. This evaluation process is reformed and is being evolved continuously.

#### Criterion III: Research, Consultancy and Extension

From the beginning the focus of the institute was on quality education and innovative teaching learning process. Having done that, now the institute has shifted the focus on research. The Institute has an R&D Cell to monitor and address issues of Research and Development. The R&D Cell has laid down its objectives and goals to achieve short term and long term goals. Great measures has been taken by the institution to facilitate smooth progress and implementation of research schemes and projects. From first year onwards, through project based learning. Most of the senior faculties carry out research projects which have funding from state and national level bodies. Labs of the college as well as the workshop facilities are available to the students where they can complete the work related to their projects

Institute provides the facilities to the students to design, develop, analyze and manufacturing of their project at our institute level and also provides the material or spare required for the project. The books, journals, e-journals, e-resources, technical supports, lab facilities etc. are directly or indirectly help to the students to complete their projects. Students and faculty members undertake inter-disciplinary research work targeted at national level competitions like Converges, Supra-SAE, Supra-Baja, Robo-war, Robo-race etc. Institute has received grant amount 1, 50,000/- form IIT Bombay to develop CDEEP, Center for Distance Education in the year 2011. This is helping us to conduct Distance Education with IIT Bombay and IIT Kharagpur. Many faculties have secured research funds from various funding agencies like AICTE, UGC,

VCRMS and RGS&TC around 38 Lakhs, also from industry and other organizations.

Following facilities are available to the students, faculty and research scholars: Availability of Internet and Wi-Fi is 24x7. A modern research lab occupying an area of 300 sq. mtr. serves as a central facility for all the departments. Center comprises of a server room having eight servers, two IBM servers for data base, a Web server, a Linux server, Library server and a Domain server. All the terminals are provided with internet connectivity by Broad Band with a capacity of 175 Mbps with 1:1. Apart from all licensed software, the center is also equipped with visual aids like LCD projectors, writing pads, Color printers, Scanners. Our Institute is also recognized as one of the nodal remote centers by IIT Bombay where the summer and winter workshops and seminars are broadcasted live through CDEEP (Center for Distance Engineering Education Program) for faculties, students and research scholars. RCPIT is associated with Amrita University for the infrastructural set-up of E-learning and to facilitate the teaching-learning process. The institution has significant policies to promote consultancy first by appreciation second by promoting the faculty, third incentives to the faculty. Through consultancy institute have generated more than 17.86 Lakh in last three years. Out of this consultancy amount 55% amount is shared among the staff. The professional and academic exposure to the staff gets boost from consultancy. It bridges the gap between institute and external organization. The staff members get additional financial assistance in addition to their regular teaching load.

The Institute has several collaborations with organizations and institutes of national and international repute. Through these collaborations, the quality of teaching-learning process, research activities and up gradation of facilities and services are enhanced. The institute has MoUs with several esteemed organizations some industries with whom the MoUs has been established are as follows:

- **1.** MOU with CADD center , Pune for Training in Design related courses which helps to gain technical skills
- 2. MOU with TAACT , Nasik for Automation /PLC/SCADA courses which helps to gain technical skills
- 3. MOU with SEED , Pune for Networking courses
- 4. MOU with CPLC for Aptitude & Soft Skills Training
- 5. MOU with Training Cum Placement agencies like Vibrant Minds, Pehla Job etc.
- 6. MOU with TRAK , Dhule for Technical courses training like C/CPP/JAVA
- 7. MOU with SPARK IT for Android Training. etc.

#### **Criterion: IV Infrastructure and learning resources**

The institution has a clear cut policy for improving the world class infrastructural facilities which would facilitate teaching learning processes. The college is situated in an area of 87767sq.m. The total area of building

constructed for the college built-up area 22,543sq.m. & 12807sq.m. for boys hostel (9071sq.m.) & girls hostel (3735sq.m.). Total Built-up area is 35,350sq.m. and few more structures are under construction. These structures have 34 class rooms, 15 Tutorial Rooms, 63 Laboratories, Drawing Hall, 5 Workshops, 6 Seminar Halls, Computer Centre, Library and Reading Room with proper lighting, seating and ventilation. All classrooms are smart class rooms, equipped with modern audio and visual instruments. Administrative and staff rooms, admission and examination cells, fully automated library with more than 30800 books and 60 journals, 10 magazines, DELNET membership for eresources and e-Journals, personal email ids for National Digital Library and browsing center with 10 leased line connected computers, 49 laboratories equipped with good amount of instrumentation, two boys hostels with a capacity of 400 boarders and four girls hostel with a capacity of 600 boarders, indoor sports hall, canteen, first aid center, day care center, girls rest/recreation room and many washrooms.

The college has also provided safe drinking water facility at various places through installation of RO in the campus and in the hostels also. Uninterrupted electricity supply is ensured in the campus with the help of Generator with sensor system i.e., 125kVA, 100kVA and 250kVA generator backup. Transport facility is provided with the help of two buses with 41 seats. The college has lush green lawns to beautify its campus, besides a playground for outdoor games and athletics. In IT infrastructure, the college is equipped with more than 600 Computers, all of which are internet connected with leased line of 155Mbps.

#### **Criterion: V Student Support and Progression**

The institution publishes its updated prospectus annually and provides all the information regarding admission, various programs, student facilities and placement information. The College undertakes student focused academic and non-academic student support activities, publicized in the college hand book and the college website, to provide them rich learning experience and thereby ensure students progression to higher studies and gainful employment.

The students receive financial assistance especially for SC/ST, OBC and economically weaker sections.

A well-defined structure identifies slow learners in first year and remedial teaching is carried out for them.

The co-curricular and extra-curricular activities organized by the college for development of the students. The soft, communication and organizational skills offered by the Training and Placement Cell prepare students for employment and provide them with job opportunities through the Campus Drives.

The dissatisfaction, grievances and requests of the stakeholders are addressed by the Grievance Redressal Cell. The Anti-Ragging Cell publicizes its stand against it in the campus to curb ragging.

Encouragement for students participation in games / matches / tournaments / seminars at state / national levels, cultural, co-curricular / extra-curricular

activities and competitions in and out of the college, has brought laurels to the individuals and the institution.

Continuous feedback is obtained from alumni, graduating students and Industrial Advisory Board regarding teaching learning process, placements, internships and entrepreneurial activities. To be relevant in today's global market, this assessment is vital for the success of the institute.

#### **Criterion: VI Governance, Leadership & Management**

The vision of the college is to achieve excellence by providing high caliber technical education and to achieve this; the mission of the institute is well articulated. The departments, in turn, have formulated their vision and mission in tune with that of the institute. Based on the Vision and Mission of the institute and inputs from various stakeholders, the Quality Policy was drafted.

The Governing Body (GB) gives general guidelines for appropriate governance to realize the vision. The top management provides effective academic leadership to the faculty, by setting goals and involving them in participative decision-making process not only to achieve the vision, mission and goals of the institute but also in building the organizational culture. Principal, Deans and Heads of the Departments have adequate autonomy in academic and administrative decision making. MRC and IQAC monitor and evaluate all mechanisms of academic and administrative processes and ensure that quality is initiated, promoted and sustained in every activity. The staff and student representatives and all other stakeholders of the college participate in framing policies and decision making at the levels of department and the institute. All quality improvement strategies are planned taking into consideration the feedback of all relevant stakeholders and deployed in a transparent and effective manner. Feedback taken from stakeholders, at the appropriate times, servers to give an understanding of local, global trends and future needs and help in fine-tuning the policies to cater to these needs. Top management provides the necessary leadership, financial and administrative support to realize these policies.

The college has taken several welfare measures both for teaching and nonteaching staff such as employees provident fund, study leave, maternity leave, subsidized transport facility and AICTE scales of pay. The institution has set norms for professional development of faculty members and non-teaching staff by motivating to pursue higher studies, financial assistance to attend FDP, Conferences, Workshops, Seminars in their field of specialization, encouraging to attend and present research papers in National / International conferences and publishing research papers in referred journals. The institution assesses its faculty through a well-structured appraisal system. Faculties are encouraged to improve their performance. Measures are also taken to attract eminent faculty. The financial resources of the college are managed in a very effective and efficient manner. There are established procedures and processes for planning and allocation of financial resources. Statutory auditing is done at the end of each financial year.

The Institution through its IQAC, makes rigorous and continuous efforts to study, analyze and improvise every strategy, activity, process and procedure in all activities with a aim to achieve, sustain and enhance quality with a view to achieve excellence. Continuous feedback, Academic Audit from government regulatory bodies like the affiliating University (NMU Jalgaon), DTE, AICTE. The quality is maintained at every stage be it academics, administration, infrastructure. The Institution has mechanisms for conducting internal academic audit and external audit. Outcome of both internal and external audits are discussed and the areas identified for improvement are taken up and tracked to closure.

#### **Criterion VII- Innovations and Best Practices**

The college conducts green audit and awareness about environmental issues, climate change and enhance it by planting trees every year and by placing potted plants, within the campus. Rain water harvesting is done with a strong desire to conserve water. Waste management is also handled carefully to maintain clean campus.

Several innovations introduced by the institute that have created a positive impact on the functioning of the college and which has been benefitting both teachers and students. The college has introduced topper monitoring and remedial lecture for backlog students which helps in monitoring the student's attendance, decreasing numbers of failure students. The institute also takes efforts for improving their employability skills by conducting aptitude test and add-on courses. Institute also arranges soft skill trainings programs like, aptitude training course, memory techniques and Japanese Language course.

Local guardian is one of the best practices followed very sincerely as every teacher conducts monthly meetings of mentees and individually monitors the growth and progress of its mentees. Feedback from students at the end of the year is a regular practice, which helps to understand the satisfaction level of the students. A parent meeting for newly admitted students is conducted twice a year. It helps the institute to understand and implement any suggestions given by parents regarding infrastructural facilities or academics.

The placement cell of RCPIT Shirpur has been providing training to the students for preparing themselves against placement test and interviews. All the final year students who face campus recruitment drive will undergo pre-placement training by the department with experts invited from corporate other than in house trainers. Alumni Association of the institute is very active; the institute tries to involve alumni in many of the events undertaken for students. This increases the interactions with alumni.

## **SWOC** Analysis



#### SWOC ANALYSIS OF THE INSTITUTE

#### **STRENGHTS:**

- Institute results are consistently higher than average results of the affiliating University. With 50% of top ten ranks from University, with minimum 4 Gold medals consistently from last three years although our institute is located in tribal region and most of our students are first generation learners.
- Curriculum enrichment through value added courses, contents beyond syllabus.
- Strong industry collaboration through T&P cell, and internship, bridging the industry academic gap resulting in good placement.
- Excellent infrastructure with pleasant and disciplined campus climate.
- Democratic participative governance with representation of students, staff & faculty at various levels.
- Student centric functioning with the help of mentoring and student counseling through teacher guardian.

#### WEAKNESSES:

- Location of college in tribal area.
- Most of the students are first generation learners as they belongs to tribal area.
- Low placement in core companies
- Less number of companies in nearby area for consultancy.

#### **OPPORTUNITIES:**

- Explore alumni involvement in academic & placement activities
- Getting academic autonomy for increasing employability skills to cater to the demand for qualified engineers in view of 'Make in India' drive
- Obtaining research and other funding.
- Producing more number of Ph.Ds.' from the Institute research Centre.

#### **CHALLENGES:**

- Rigidity of academic structure & curriculum.
- Improving consultancy.
- Diverse socio economic backgrounds of students.
- Coping up with rapidly changing technologies.
- Active Entrepreneur Development Cell with incubation center.

# PROFILE OF THE INSTITUTION



#### **PROFILE OF INSTITUTION**

1. Name and Address of the College:

	6			
Name:	R.C. Patel Institute of Technology, Shirpur			
Address:	Near Nimzari Naka, Shahada Road, Shirpur			
City:	Pin: 425405 State: Maharashtra			
Shirpur				
Website:	www.rcpit.ac.in			

#### 2. For communication:

Designation	Name	Teleph one with STD	Mobile	Fax	Email
Principal	Prof. Dr.	(02563)	992346	(02563)	principal@r
	J.B. Patil	259600	6699	259801	cpit.ac.in
Vice	Dr. P.J.	(02563)	992349	(02563)	pjdeore@ya
Principal	Deore	259600	9960	259801	hoo.com
Steering Committee Co-ordinator	N.P. Salunke	(02563) 259600	988113 6769	(02563) 259801	sainilesh1@ gmail,com

3. Status of the Institution: Affiliated College Constituent College Any other (specify)



4. Ty	pe 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 ✓

If yes, specify the minority status (Religious/linguistic/ any other) and provide

Documentary evidence.

Gujrathi Linguistic

6. Sources of funding: Government Grant-in-aid Self-financing Any other

✓	

- 7. a. Date of establishment of the college: 28-06-2001
  - b. University to which the college is affiliated /or which governs the college (If it is a constituent college) :- North Maharashtra University, Jalagon, Maharashtra
  - c. Details of UGC recognition:

Under	Date, Month & Year(	Remarks(If	
Section			any)
i. 2 (f)	F.No.8-158/2010	(CPP-I/C)	
	04/03/2011		
ii. 12 (B)	F.No.8-158/2010	(CPP-I/C)	
	15/01/2013		

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	Validi ty	Remarks	
	First AICTE letter of Approval (F.No. 740-89- 043(NDEG)/ET/2001	28/06/2 001	2001- 2002	Approval renewed	
AICTE	AICTE Letter regarding Extension of Approval for A.Y. 2016 – 2017 (F.No. Western/1-2809659212 /2016/EOA)	30/04/2 016	2016- 2017	by submitting required documents	
North	First University Affiliation letter (NMU/5-A/Dhu.73/ 2892/2001)	14/08/2 001	2001- 2002	Approval	
Maharash tra Universit	Permanent Affiliation Letter (NMU/5/D.O8/ 459/2012)	07/06/2 012	From 2012- 2013	annually by	
y, Jalgaon	LatestUniversityAffiliationletter(NMU/5/Cont./N.G.2016-17/D.O.8/142/2016)	20/05/2 016	2016- 2017	required documents	

8. Does the affiliating university Act provide for conferment of autonomy (as
recognized by the UGC), on its affiliated colleges?
Yes V No
If yes, has the College applied for availing the autonomous status?
Yes No 🗸
9. Is the college recognized
a. by UGC as a College with Potential for Excellence (CPE)?
Yes No 🗸
If yes, date of recognition: (dd/mm/yyyy)
b. for its performance by any other governmental agency?
Yes No 🖌
If yes, Name of the agency and
Date of recognition:
10. Location of the campus and area in sq.mts:

Location *	Urban (Tribal Area)
Campus area in sq. mts.	87767
Built up area in sq. mts.	35,350

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and 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

Acoustically designed air-conditioned seminar hall with seating capacity of 120 and audio-video facility is available.

- Sports facilities
  - \* Playground ✓
  - \* Swimming pool ✓
  - \* Gymnasium ✓
  - \*
- Hostel
  - \* Boys' Hostel
    - i. Number of Hostels : 02
    - ii. Number of inmates: 370
    - iii. Facilities (mention available facilities)

Total 370 students are residing in 128 rooms of hostels with recreational (T.V. and newspaper) facilities and mess. Solar heaters are provided for supply of hot

water. In case of medical emergency, the hostel has tie-up with nearby hospital and the medical facilities are available on call. 24 hr. security system is also available.

- \* Girls' Hostel
  - i. Number of Hostels : 03
  - ii. Number of inmates : 507
  - iii. Facilities (mention available facilities)

Total 507 students are residing in 169 rooms of hostels with recreational (T.V. and newspaper) facilities, mess and transportation facility. Solar heaters are provided for supply of hot water. In case of medical emergency, the hostel has tie-up with nearby hospital and the medical facilities are available on call. 24 hr. security system is also available.

- Residential facilities for teaching and non-teaching staff (give numbers available cadre wise) Available, but the no faculty has availed the facility as most of them have their own houses.
- Cafeteria ✓
- Health Centre-
  - \* First aid  $\checkmark$
  - \* Inpatient
  - \* Outpatient
  - \* Emergency care facility
  - \* Ambulance  $\checkmark$
- Health Centre staff-
  - \* Qualified doctor Full time ✓ Part-time
  - \* Qualified Nurse Full time ✓ Part-time
- Facilities like banking, post office, book shops Yes. An Extension counter of a Bank is made available as and when required, a Student Co-operative Store and a center for reprographic facility are existing inside the institute's campus.
- Transport facilities to cater to the needs of students and staff: Yes. The institute provides transport facility for the students from Dhule to Shirpur.
- Animal house Not applicable.
- Biological waste disposal Not applicable.

• Generator or other facility for management/regulation of electricity and voltage:

Institute is having backup with generators of 475 KVA capacity and synchronization panel. UPS is provided in every computer laboratory for uninterrupted electrical supply.

• Solid waste management -

All the solid waste generated is collected and given to collection van of municipality.

• Waste water management -

Waste water generated is collected in to underground drainage system of municipality.

• Water harvesting –

The institute has implemented rainwater harvesting, which has saved significant amount of water expenses. This system recharges the institute bore well

12.	Details	of	programmes	offered	by	the	college	(Give	data	for	current
acad	demic ye	ar)									

SI. No.	Program me Level	Name of the Programme/ Course	Duration In Years	Entry Qualification	Mediu m of instruct ion	Sanction ed/ approved Student strength	No. of students admitted
		Computer Engineering	4		English	120	118
		Information Technology	4		English	60	62
1 UG- Ist Shift	Electronics & Telecommuni cation	4	XII or equivalent	English	120	85	
	Shirt	Mechanical Engineering	4	for First Year and Diploma or equivalent for Direct Second Year	English	120	112
		Electrical Engineering	4		English	60	55
		Civil Engineering	4		English	60	57
2	UG- IInd Shift	Mechanical Engineering	4		English	60	51
3	PG*	Electronics & Telecommuni cation	2	B.E.	English	24	01

		Computer Engineering	2		English	24	02
4		Electronics & Telecommuni cation	As Per Norms	Master Degree in Engineering	English	As Per Norms of	06
4	Pn.D.	Computer Engineering	OI NMU, Jalgaon	or Technology or Equivivalant	English	NMU, Jalgaon	07

\* PG courses are applied for closure from academic year 2017-18.

13. Does the institution offer self-financed Programmes?

Yes	$\checkmark$		No		
If yes, how n	nany?				
All the program programmes. (	<b>1mes offere</b> 6 UG + 02	e <b>d in the I</b> a PG)	nstitu	te are selt	f-financed

14. Whether new programmes have been introduced during the last five years?

Yes	✓	No		Number	01
-----	---	----	--	--------	----

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
Engineering	Computer Engineering	$\checkmark$	$\checkmark$	$\checkmark$
	Information Technology	$\checkmark$	-	-
	Electronics & Telecommunication	~	~	~
	Mechanical Engineering	$\checkmark$	-	-
	Electrical Engineering	$\checkmark$	-	-
	Civil Engineering	$\checkmark$	-	-

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, and M.Com...)

a annual system	NA		
a. annuar system	INA		
b. semester system	6 UG + 02	2 PG	
c. trimester system	NA		
17. Number of Programmes wit	th		
a. Choice Based Credit Syst	tem	NA	
b. Inter/Multidisciplinary A	pproach	NA	
c. Any other (specify and pr	rovide detai	ils) $6 \text{ UG} + 02 \text{ PG}$	]
18. Does the college offer UG a	and/or PG p	programmes in Teacher	Education?
Yes	No	$\checkmark$	
If yes,			
a. Year of Introduction of the and number of batches that	programme at complete	e(s) NA (dd/mm/y d the programme	уууу)
b. NCTE recognition details (if Notification No.: Date: Validity:	f applicable (dd	e)  d/mm/yyyy)	
c. Is the institution opting f Education	for assessm	nent and accreditation	n of Teacher
		[]	
Yes	No		
19. Does the college offer UG of	or PG progr	amme in Physical Edu	cation?
Yes If yes,	No	$\checkmark$	
a. Year of Introduction of t completed the programme <b>NA</b> b. NCTE recognition details ( Notification No.: Date: Validity:	he program	nme(s) and number of le) <b>NA</b> 	f batches that

#### Self Study Report: NAAC

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?  $\mathbf{N}\mathbf{A}$ 

Yes No 20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty No.						Non-			
	Professor		Associate Professor		Assistant Professor		teaching staff		Technical staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Govt. <i>Recruited</i>	03	00	07	02	94	26	52	7	33	02
Yet to recruit	10	05	20	09	00	10	00	00	00	00
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>	00	00	08	02	63	02	00	00	00	00
Yet to recruit	10	05	12	07	00	08	00	00	00	00

\*M-Male \*F-Female

#### 21. Qualifications of the teaching staff:

Highest	Professor		Associate Professor		Assistant Professor		Total			
quanneation	Male	Female	Male	Female	Male	Female				
Permanent teachers										
D.Sc./D.Litt.	-	-	-	-	-	-	-	-		
Ph.D.	03	0	05	01	-	-	8	1		
PG	00	00	10	03	134	23	144	26		
UG	00	00	00	00	01	00	01	00		
Temporary teachers										
Ph.D.	-	-	-	-	-	-	-	-		
PG	-	-	-	-	-	-	-	-		
UG	-	-	-	-	-	-	-	-		
Part-time Teachers										
--------------------	---	---	---	---	---	---	---	---		
Ph.D.	-	-	-	-	-	-	-	-		
PG	-	-	-	-	-	-	-	-		
UG	-	-	-	-	-	-	-	-		

- 22. Number of Visiting Faculty /Guest Faculty engaged with the college. 00
- 23. Furnish the number of the students admitted to the college during the last four academic years.

Categor ies	Y (201	ear 1 6-2017)	Year 2 (2015-2016)		Year 3 (2014-2015)		Year 4 (2013-2014)	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	22	7	10	6	25	12	20	9
ST	22	8	13	3	13	7	21	10
OBC	181	56	199	62	205	61	260	86
General	104	41	69	29	64	30	95	83
Others	68	31	45	13	46	18	43	16

24. Details on student's enrolment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	2429	03	NA	0	2432
Students from other states of India	06	00	NA	0	06
NRI students	0	0	0	0	00
Foreign students	0	0	0	0	00
Total	2435	03	0	0	2438

25. Dropout rate in UG and PG (average of the last two batches)

UG 10.17%

PG NA

26. Unit Cost of Education

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

(a) Including the salary component	<b>Rs. 90,095/-</b>
(b) Excluding the salary component	Rs. 27, 282/

27. Does the college offer any program Yes	nme/s in distance education mode (DEP)? No
If yes, B) is it a registered centre for o another University NA	ffering distance education programmes of
b) Name of the University which	has granted such registration. <b>NA</b>
NA	
c) Number of programmes offered	
d) Programmes carry the recognition Yes	on of the Distance Education Council. NA No

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

SR. No.	Level	Programme/Course Offered	Teacher-Student Ratio
1		Computer Engineering	
2		Information Technology	
3	E Electronics &		
3	D.E	Telecommunication	1:15
4	0.0.	Mechanical Engineering	
5		Electrical Engineering	
6		Civil Engineering	
7	МЕ	Computer Engineering	
8	PG	Electronics &	1:12
0	1.0	Telecommunication	

29. Is the college applying for

Accreditation: Cycle 1 Cycle 2 Cycle 3 Cycle 4

Re-Assessment: **NA** (Cycle 1refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to reaccreditation)

30. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and reassessment only)

Cycle 1: .....dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 2: ..... (dd/mm/yyyy) Accreditation

\* *Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.* 

31. Number of working days during the last academic year. 234

234 Days

32. Number of teaching days during the last academic year (*Teaching days means days on which lectures were engaged excluding the examination days*)

90 Days per Semester

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC 15/10/2015

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) <b>NA</b> (dd/mm/yyyy)	
AQAR (ii) <b>NA</b> (dd/mm/yyyy)	
AQAR (iii) NA (dd/mm/yyyy)	
AQAR (iv) NA (dd/mm/yyyy)	

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

# Criterion I Curricular Aspects



#### **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?** 

#### Vision:

To achieve excellence in engineering education with strong ethical values.

#### Mission:

To impart high quality Technical Education through:

- Innovative and interactive learning process and high quality instructional programs.
- Fostering a scientific temper among students by means of a liaison with the academia, industries and government.
- Preparing students from diverse backgrounds to have attitude for research and spirit of professionalism.
- Inculcating in students a respect for fellow human beings and responsibility towards the society.

#### **Objectives:**

- 1. To provide world class quality and value based education with making teaching-learning interactive through ICT based and project based learning with practical applications.
- 2. Fostering research and dissipate research findings among the students and staff for the development of the nation and community.
- 3. To inculcate and execute innovative ideas and best practices for overall development of institute.
- 4. To provide conductive environment and to create studious, disciplined working environment with safety and security provisions.
- 5. To strive hard for overall development of diversified students with promoting co-curricular and extra-curricular activities.
- 6. To establish linkages with academia and industry for training and enhancing skills of students and staff.
- 7. To be a catalyst for establishing a strong relationships and bonding between all stakeholders.
- 8. To strengthen entrepreneurial skills, career counselling and placements activities to make successful professionals in diverse fields.
- 9. To contribute to the nation by generating a pool of human resources which is employable and capable of competing globally and socially responsible.

10. To motivate 'techno-social' concept by endorsing dynamic equilibrium to maintain socio-culture and ecological environment to fulfill the obligations of the society and the nation at large.

### How these are communicated to the students, faculties, and other stakeholders:

- 1. Vision and Mission of the institute are published on the institute's website <u>http://www.rcpit.ac.in</u>.
- 2. Vision and Mission of the institute are printed in institute's prospectus, Local Guardian (LG) book, Faculty diary, laboratory manuals etc.
- 3. Vision and Mission of the institute are displayed on institute as well as departmental notice boards.
- 4. Vision and Mission of the institute are displayed in various laboratories.

## **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 institute is affiliated to the North Maharashtra University (NMU), Jalgaon and follows curriculum prescribed by the university. Apart from this prescribed curriculum the institute follows very systematic approach to develop and deploy action plans for effective implementation of the curriculum as given below. At the start of every academic year, the affiliating university gives a tentative calendar about start and end of the semester, holidays, practical / oral examination dates and end semester examination.

- By taking university calendar as an input, Principal and Head of Departments (HODs) discuss and prepare the academic calendar for the institute which includes Internal Sessional Examination (ISE) dates and all activities.
- Head of the department distributes the teaching load to faculties by considering subject choices given by faculties.
- For new courses institute arranges training program for that course. Institute also arranges workshop for faculties for effective teaching learning.
- Institute plans and defines the evaluation criteria for ISE and Internal Continuous Assessment (ICA) marks.
- Along with the academic calendar, faculty Academic Diary is also issued to every faculty. Academic Diary covers:
  - Faculty Profile
  - Individual Time Table
  - Academic Calendar
  - Calendar Planning of Faculty Activities
  - Course Objectives
  - Lecture Planning (Teaching Plan)

- Practical Planning Batch wise
- Attendance Record (Theory/ Practical/ Tutorial)
- Lecture Details
- Details of Lecture Compensated
- Summary of Record of Action Taken against Less Attendance
- Record of Practical Assessment
- Record of ISE
- Result Analysis of Internal Sessional Examination
- Result Analysis of End Semester Examination
- Record of Content Beyond Syllabus
- Record of Seminar, Minor and Major Project
- Record of seminar, workshop, conference

#### **Process of effective implementation of curriculum Teaching Practices**

- At the beginning of semester, each and every faculty prepares calendar of individual faculty activities which includes start and end date of each unit for every subject. University syllabus prescribes the number of lectures required for each unit, accordingly faculty prepares his/her unit wise teaching plan. Every subject faculty has to complete the unit before the start of ISE of that unit.
- Each faculty also identifies the course outcomes of each unit.
- For practicals, faculty prepares batch wise practical plan. In addition to the practicals prescribed by university, some extra practicals are conducted for some subjects.
- Lab manuals are provided to students at the start of the semester.
- For active teaching and learning, apart from chalk and board method, faculty adopts some innovative methods like use of Power Point Presentation (PPT), audio, video, lab sessions, formative feedback, think-pair-share and project based learning. These methods encourage students to actively participate in learning process. Faculty also use quizzes, National Program on Technology Enhanced Learning (NPTEL) videos, Quality Enhancement in Engineering Education (QEEE) and Massive Open Online Courses (MOOCs) lectures for conduction of course.
- During lecture conduction, each faculty maintains the day wise record of planned topic, actual covered topic and references used to cover the topic. HODs monitor the overall progress of teaching learning process at the end of every week.
- Class teacher and class coordinator monitor the class activity.
- Feedback from students is analyzed periodically to improve the teaching learning process. If required, necessary corrective actions are taken.

#### **Conduction of Internal Sessional Examination**

- Institute conducts four ISE throughout the semester. Detailed schedule about the ISEs is given to students at the start of the semester itself.
- For each subject, faculty prepares exhaustive question bank on every unit. While finalizing these questions previous university exam question papers are referred.
- Result analysis of every ISE is carried out and accordingly corrective actions are taken. For slow learners, remedial classes are conducted by respective subject faculty. Along with remedial coaching, toppers monitoring is also carried out to give special guidance to toppers. After every ISE, Principal conducts review meeting with HODs.
- For ISE and ICA calculation, institute has prepared a standard format. Fig 1.1 shows the process of ISE and ICA evaluation.



Fig. 1.1 Process of ISE and ICA Evaluation

#### Attendance Monitoring

- Attendance of every student is monitored at the end of every week and a corrective action is taken against the students with less attendance and same is telephonically communicated to the parent by LG.
- Daily message is sent to parents regarding absentee of their ward through SMS.

#### **Project Based Learning (PBL)**

- From second year onwards, every student has to undertake a semester level project other than university curriculum.
- At the end of every semester, project exhibition is arranged where student visit and discuss their projects.

• Institute has state-of-art laboratories like Mission10X Learning Centre (MTLC), e-Yantra Embedded Robotics lab in association with Wipro Technologies, Bangalore and IIT Bombay, Mumbai respectively.

#### **Industrial Interaction and Internship**

- Institute organizes industrial visits in order to bridge the gap between academic and industry.
- The students are motivated to undergo in-plant training in industries during vacation.
- Institute invites various experts from industries to deliver domain specific technological interaction.
- Institute motivates students to take part in industry oriented competitions like Tata Consultancy Services (TCS) Codevita, TCS Testimony, TCS Enginx, KPIT Sparkle, Capgimini Technext. etc. to make them industry ready.
- Institute has a tie-up with many reputed industries like TCS, Persistent, Wipro, etc.

#### Local Guardian System

- Each faculty is a LG of 20-25 students. LG book includes student details like personal, academic, parent communication (phone calls), co-curricular and extra-curricular activities. Each LG maintains record of student till the completion of his/her graduation.
- LG conducts the meeting with allotted students at the end of every week.
- LG informs ISE marks of allotted students to their parent after every ISE.
- Social media is used extensively to communicate with parents and students.

# **1.1.3** What type of support (Procedural and Practical) do the teachers receive (from the university and Institution) for effect translating the curriculum and improving teaching practices? Support by University

- University organizes syllabus framing workshop where faculties from various institutes give input / their views to frame new syllabus.
- University provides guidance to faculties in the form of teacher and examiner manual.
- University promotes faculty for research by providing grants through various schemes.

#### Support by Institute

• Faculty is encouraged to attend Faculty Development Programs (FDP), Short Term Training Program (STTP) and workshops.

Institute provides financial support to faculty to attend various workshops to improve their knowledge.

- for smooth and effective conduction of curriculum, in addition to Information and Communication Technology (ICT) enabled air conditioned class rooms, institute provides various resources like NPTEL video lectures, QEEE, MOOCs and other e-resources.
- Whenever there is change in syllabus of affiliating university institute arranges orientation program for faculties.
- Wireless Fidelity (Wi-Fi) and Internet facilities are provided throughout the campus for better teaching learning process.
- Faculties are encouraged to apply for projects funded by various funding agencies like University Grant Commission (UGC), All India Council for Technical Education (AICTE), Vice Chancellor Research Motivation Scheme (VCRMS), Rajiv Gandhi Science and Technology Commission (RGSTC), etc. which enhance their professional growth.
- Institute arranges expert lectures, training programs like Mission 10X, Innovative Teaching Learning which help for effective teaching learning process.
- Institute is a Center for Distance Engineering Education Program (CDEEP) of Indian Institute of Technology (IIT), Bombay and Kharagpur where faculties can actively attend various workshops, webinars in order to enrich their knowledge.
- Institute is also a center for QEEE program of IIT Madras.

# **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.

For an effective teaching learning process a learner centric pedagogy is practiced in the following ways

Curriculum delivery-

- 1. Subject allotment based on proficiency matrix, experience of the faculty.
- 2. The inputs are obtained through interaction of senior faculty with the Board of Studies (BOS) Chairman and BOS members of relevant subjects, for effective curriculum delivery
- 3. Time table of all years of all departments are framed with provision for add-on courses, soft skills courses and extra tutorial hours for subjects with higher difficulty level are allotted in time table.
- 4. Every subject faculty prepares a unit wise teaching plan, notes, question bank, lab manuals well in advance and they are circulated among students at the start of every semester.

#### Initiatives taken up by the Institute-

- 1. Monitoring of course delivery and syllabus completion through formal and informal feedback from subject faculties as well as from students.
- 2. Remedial coaching for slow learners.
- 3. A systematic examination process which includes 4 ISE.
- 4. ISE papers are evaluated in front of student and one to one feedback is given to the students for improvement.
- 5. Students' report containing ISE marks and attendance is communicated twice in the semester.
- 6. Guest lectures, Seminars, Industrial visits and Training programs are arranged to support the curriculum.
- 7. QEEE programs of IIT Madras are conducted for various subjects.
- 8. Faculties are encouraged to attend workshops, FDPs, national / international conferences for their skill and subject knowledge up gradation.
- 9. Bridge Course like UDAAN and JUNOON are conducted for first year.

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

The institute networks and interacts with beneficiaries in effective operationalization of the curriculum in following ways:

- Industry-Institute Interaction Cell is formed by the institute for interaction with industrial experts.
- Industrial visits are arranged for industry-institute interaction which help students in smooth transaction from theory to application.
- Institute promotes soft skills development courses conducted by reputed soft skill agencies.



Fig. 1.2 Institute Network

- Interactions of alumni and industry experts are arranged to share latest trends and technologies with the students.
- The institute has established a Training and Placement (T&P) cell to offer specialized training programs in specific areas and for recruitment of students.

#### **Interactions with Research Bodies**

• The faculties of institute receive grants from research bodies such as AICTE, UGC, MHRD, RGSTC, VCRMS etc.

#### University

- Dean of the University and BOS chairman have arranged orientation programs for curriculum delivery.
- Institute facilitates the faculty to attend workshops arranged by 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.)

Contributions of the institute and staff members for the development of the curriculum are as follows.

Number of faculties represented on the Board of Studies of the university are given in table 1.1.

#### Role of institute in university curriculum development:

The institute has organized various syllabus framing workshops. Faculties from the various institutes actively participated in the development of the university syllabus. Faculties from our institute also participated in orientation meetings organized by other institutes in the university. The feedback from students, alumni, industry and faculties are collated together and suggestions are forwarded to concern BOS chairman for necessary action.

Sr. No.	Name of Faculty	Year	Position in University Body of the University
1	Prof. Dr. J. B. Patil	2011-16	Dean of Faculty of Engineering and Technology
2	Prof. Dr. J. B. Patil	2011-16	BOS Chairman (Computer Engineering and IT)
3	Mr. N. P. Salunke	2011-13	BOS Chairman (Mechanical, Production, Automobile Engineering)

#### Table 1.1 Details of Faculties on University Committee

4	Prof. Dr. P. J. Deore	2011-16	BOS Member (Electronics & Telecommunication Engineering)
5	Mr. S.B. Sharma	2011-16	BOS Member (Civil Engineering)
6	Mr. S. P. Shukla	2011-13 2017-19	BOS Member (Applied Science)

During the tenure of Prof. Dr. J. B. Patil as dean of faculty of engineering and technology of NMU, Jalgaon, the CGPA (Cumulative Grade Point Average) pattern was introduced in accordance to guidelines of national knowledge commission. Prof. Dr. J. B. Patil, Prof. Dr. P. J. Deore, Mr. N. P. Salunke, Mr. S.B. Sharma, Mr. S. P. Shukla actively framed and finalized structure and detailed syllabus according to CGPA pattern. All the faculty members of the institute had active role in syllabus framing and detailing.

Also, Prof. Dr. J. B. Patil recommended online (onscreen) evaluation system for Central Assessment Program (CAP) in NMU, Jalgaon.

Table 1.2 and table 1.3 show details of the faculties participated in syllabus framing workshops organized at our institute and other institutes in the university respectively.

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Sr. No.	Academic Year	Name of Department	Number of Participants			
1		Computer	3			
2		IT	3			
3	2012-13	E&TC	6			
4		Electrical	1			
5		Mechanical	9			
6		Computer	4			
7		IT	1			
8	2013-14	E&TC	6			
9		Electrical	1			
10		Mechanical	11			
11	2014.15	Computer	9			
12	2014-15	IT	4			

Table 1.2 Faculties' Participation in Syllabus Framing Workshop atOur Institute.

Sr. No.	Academic Year	Name of Department	Number of Workshops Arranged	Number of Participants
1		IT	1	1
2		Civil	2	4
3	2012-13	Electrical	1	1
4		Applied Science	2	7
5		Mechanical	2	5
6	2013-14	Civil	1	3
7		Electrical	1	1
8		E&TC	1	4
9	2014-15	Civil	2	4
10		Electrical	2	2
Sr. No.	Academic Year	Name of Department	Number of Workshops Arranged	Number of Participants
11	2015 16	Mechanical	1	4
12	2013-10	Electrical	1	1

## Table 1.3 Faculties' Participation in Syllabus Framing Workshop at Different Institutes in University

Faculty worked as subject member or chairman, paper setter and moderator and also involved in university assessment. Table 1.4 shows roles of faculties as paper setter and university assessment.

#### Table 1.4 Role of Faculty at University

G		Role of Faculty			
Sr. No.	Name of Department	Chairman	Member	University Assessment	
1	Computer Engineering	9	10	17	
2	Information Technology	6	5	8	
3	Mechanical Engineering	5	6	24	
4	Electronics & Telecommunication	11	10	18	
5	Civil Engineering	0	7	12	
6	Electrical Engineering	0	4	8	
7	Applied Science	1	4	11	

Institute collects feedback from alumni, industry experts and recruiters on curriculum which is collated together and suggestions are sent to BOS chairman.

**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, the institute develops curriculum for the add-on courses offered. Institute continuously interacts with alumni, recruiters, industry personal etc. to take input on recent technological changes and industry demands. As per inputs, institute plans customized training programs for the students in consultation with recognized third party training institutes. As a result, students acquired core domain expertise and their employability attributes are increased.

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

The institute follows an outcome based approach in the teaching-learning and evaluation processes. The institute ensures the quality in curriculum delivery with well- defined Course Outcomes (CO). Tools used for CO assessment are listed in table 1.5.

Sr. No	Assessment tool	Method of assessment	Assessment frequency
1	Internal Sessional Examination	Direct	Four times per Unit in a semester
2	Student feedback	Indirect	Once in a semester
3	Examination (external)	Direct	Once in a semester

Table 1.5 Tools for CO Assessment

The institute ensures that the stated objectives of the curriculum are achieved in the course of implementation. The methods followed to ensure the achievement of stated objectives are:

- ISE, Practical session and viva-voce are conducted to monitor the CO.
- If at any stage, the department realizes that the said objectives are not being achieved; the department plans for a remedial action and strategies are devised to cover up the gaps, if any; in the

delivery of the curriculum to ensure that it enables the institute to achieve the stated objectives of the curriculum.

- Four ISEs are conducted in each semester for each subject. ISE question paper patterns and assignments for each subject are suitably framed and marks are awarded. Percentage of students passed for any CO is taken as a measure of its attainment. Suppose, more than 50 % of students passed allotted for any course outcome then it will be taken as a measure of its CO attainment.
- Laboratory work/Tutorials/Practical are planned in line with the theory, objectives and outcome of the subject.
- Every practical is evaluated after completion of experiment.
- Faculties attend appropriate FDP organized within and outside the institute to become familiar with the newly added advanced syllabus topics.

#### **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 institute encourages students to enrich the knowledge by filling the gap between industry and curriculum to meet their future employability needs.

#### Goals

- Professional competency
- Employability

#### Objectives

- To bridge the gap between industry and curriculum
- Know-how of latest technology

### **1.** Institute organized various training programs for fulfillment of the goals and objectives, some of them are

- Soft skills training programs
- Personality development programs
- Entrepreneurship awareness programs
- QEEE Programs by IIT Madras.
- National / International Institute / university MOOCs
- Table 1.6 shows details about institute training program for employability.

#### Table 1.6 Institute Training Program and Training Partner Details

SrNo	Department	MOUs /Collaboratin g Association	Contribution to the development of the students	Objective
1	E&TC, Electrical	Technocrat's Academy of Automation &	Automation /PLC/SCADA courses which help	Students will get skill in Process

		Control Technology (TAACT), Nashik	to gain technical skills	Automation to enhance employability.
2	All Departments	Innovations Unlimited Training Services, Bangalore	Aptitude Training and Soft Skills Training Program	Students will be competent in solving aptitude problem and enhance soft skills
SrNo	Department	MOUs /Collaboratin g Association	Contribution to the development of the students	Objective
3	All Departments	Tata Consultancy Services	Campus commune technical event, placement opportunity	Students will be enhance their technical skill & gets job opportunity through technical events.
4	Computer Engineering, IT & E&TC	Seed InfoTech, Pune	Technical Training Program	Students will gain core domain technical skills to enhance employability.
5	All Departments	SCOUT Technologies Pvt. Ltd, Pune	Aptitude Training and Soft Skills Training Program	Students will be competent in solving aptitude problem and enhance soft skills
6	Computer Engineering, IT	Persistent, Pune	Remote Internship (BE Project Program)	Students will get opportunity to receive real world corporate exposer and develop their domain/techni cal skills.
7	All Departments	CPLC, Mumbai	Aptitude Training and Soft Skills Training Program	Students will be competent in solving aptitude problem and enhance soft skills Students will
0	Departments	Mumbai	Placement Activity	gain technical

				skills to
				enhance
				employability.
9		Vibrant Minds	Campus	Students will
	All	Technologies	Recruitment	get campus
	Departments	Pune	Platform Provider	placement
		T une		opportunity.
a 11		MOUs	Contribution to the	
SrNo	Department	/Collaboratin g Association	development of the students	Objective
10	Mechanical	CADD Centre	Training in Design	Students will get designing
	Engineering	I raining	related courses	skill to
	& CIVII Engineering	Ltd Dune	technical abilla	enhance their
	Engineering	Ltd, Pune	technical skills	employability.
		CADD Centre	Training in	Students will
	Electrical	Training	Electrical Design	get designing
11	Engineering	Services Pvt	related courses	skill to
	Lingineering	Ltd Pune	which help to gain	enhance their
ļ			technical skills	employability.
				Students will
				enhance skill
		Data serve	Internship, Remote	through
12	E&TC	InfoTech Pvt Ltd, Pune	Assignment and	Internship,
			Placement Program	Remote
			U	Assignment to
				make
				Students will
				domonstrato
				the level of
				proficiency
		English-		proficiency necessary to
		Nihongo-		enable them to
		German	N5 Level Japanese	function in an
13	All	Language	Training &	environment
	Departments	Institutes	Employability	where
		(Engell),	enhancement	Japanese is
		Aurangabad		used
		-		exclusively to
				impart
				student's
				employability.
14			Internship, Remote	Students will
			Assignment,	get skill to
			Campus Placement	make
	Civil	Mold -Tek	Program, Expert	employable
	Engineering	Technologies	Talk, Participation	through
		Ltd, Nashik	in Syllabus	Internship.
			Revision, Workshop	Remote
			for students &	Assignment,
			Taculty	<i>,</i>

				Workshop and
				Expert talk.
SrNo	Department	MOUs /Collaboratin g Association	Contribution to the development of the students	Objective
15	All Departments	Rao Associates, Mumbai	Internship and placement program	Students will get opportunity to receive real world experience and develop their skills.
16	Computer Engineering, IT & E&TC	Sai Infocorp Solutions Pvt Ltd	Industrial Visit, Guest Lectures, Campus Interview, Workshop-Seminar Conduction	Students will enhance skill through Industrial Visit, Expert Lectures, Workshop and Seminar
17	Electrical Engineering	Sofcon India Pvt. Ltd, New Delhi	Training & Placement Support	Students will get technical skill and get help for placement.
18	Civil Engineering	Patil Structural Consultants, Indore	Remote Assignments for students, Expert Talk, Industry Visit,	Students get knowledge of industry oriented skill from various activity to get employment.
20	All Departments (except Civil)	Tata Consultancy Services	Remote Internship	Students will get opportunity to receive real world experience and develop their skills.

### **2.** The gap between curriculum and the best industrial practices is bridged through

- Arranging hands on training sessions.
- Industrial visits and in plant training.

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

No. The institute at the moment does not offer any twinning or dual degree program.

**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. Issues may cover the following and beyond:

- Range of Core / Elective options offered by the University and those opted by the college
- Choice Based Credit System and range of subject options
- Courses offered in modular form
- Credit transfer and accumulation facility
- Lateral and vertical mobility within and across programmed and course
- Enrichment courses
- Range of Core / Elective options offered by the University and those opted by the institute:
- 1. The NMU gives a list of electives based on the industry requirement to provide an exposure on advanced technological developments.
- 2. Every department has three elective subjects in 7<sup>th</sup> and 8<sup>th</sup> semester. In addition to this, we offer one interdisciplinary elective in the 7<sup>th</sup> semester which is offered by other department.
- 3. Various add-on courses are conducted for students in campus to enhance their employability.
- 4. As an affiliated institute, options are made available to the students for skill development and get certified from QEEE program of IIT Madras.
- 5. Institute has a mechanism to monitor the MOOCs courses offered by various national / international institutes / universities.
- 6. Faculty as a coordinator from our institute, observes the progress of various activities of skill development program.

#### Choice Based Credit System and range of subject options No

- Courses offered in modular form No
- Credit transfer and accumulation facility No
- Lateral and vertical mobility within and across programmes and courses

Yes, institute provides lateral mobility within and across course offered by the institute. If the student fulfills the criteria then he /

she can change the branch after successful completion of first year in a single attempt.

**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, the institute is a private and unaided and all the programs are self-financed.

The admission process is based on the policies and guidelines provided by the Director of Technical Education (DTE), Maharashtra State. The institute follows curriculum designed by NMU, Jalgaon. The fee structure of the institute is decided by Shikshan Shulk Samiti of Government of Maharashtra. Faculties' qualification and salary is as per norms decided by AICTE and Government of Maharashtra.

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

Yes, the institute provides regular training program for the students. The details are given in table 1.7 as follows.

Sr. No	Depar tment	Acedemic Year	Name of Course	Class of student	Total numb er of stude nts benef ited	Outcome
1	СОМР	2013-14	Soft Skill and Aptitude	SE to BE	428	Students able to apply Aptitude solving techniques to solve aptitutde test and enhance softskill.
2	COMP	2014-15	Software Testing	TE	36	Students learned Software Testing Techniques
3	СОМР	2014-15	C, C++	SE & TE	48	Students Computer Programing Proficiency enhanced.
4	COMP	2014-15	Android	BE	50	Students learned Anrdoid Programing

Table 1.7 Additional Skill Oriented Programs and Beneficiaries.

5	COMP	2014-15	Soft Skill and Aptitude	SE to BE	431	Students able to apply Aptitude solving techniques to solve aptitutde test and enhance softskill.
6	COMP	2015-16	Software Testing	TE & BE	51	Students learned Software Testing Techniques
7	COMP	2015-16	CCNA Training	TE	6	Students Networking skill enhanced.
8	COMP	2015-16	Java	TE	32	Computer programing proficiency enhanced
9	COMP	2015-16	С	SE & TE	11	Computer Programing Proficiency enhanced
10	COMP	2015-16	C&C++	SE&TE	16	Computer programing proficiency enhanced
11	СОМР	2015-16	Soft Skill and Aptitude	SE to BE	386	Students able to apply Aptitude solving techniques to solve aptitutde test and enhance softskill.
12	COMP	2016-17	Japanese	SE to BE	72	Foreign Language Proficiency(N5 Level)
13	COMP	2016-17	C & C++	SE	76	Computer programing proficiency enhanced
14	COMP	2016-17	Java	TE	24	Computer programing proficiency enhanced
15	СОМР	2016-17	Software Testing	BE	40	Studets able to apply Software Testing Teniques to Test Software Application
16	COMP	2016-17	CCNA Training	BE	6	Students Networking skill enhanced.
17	СОМР	2016-17	Automation Testing	BE	18	Students learned various Automation Software Testing Tools.
18	COMP	2016-17	Android	BE	35	Students learned Anrdoid Programing

19	СОМР	2016-17	Soft Skill and Aptitude	SE to BE	405	Building Aptitude and preparing the students for the upcoming placement session
20	IT	2013-14	Soft Skill and Aptitude	SE to BE	160	Building Aptitude and preparing the students for the upcoming placement session
21	IT	2014-15	C, C++	SE & TE	15	Computer Programing Proficiency
22	IT	2014-15	Android	BE	8	Students learned Anrdoid Programing
23	IT	2014-15	Soft Skill and Aptitude	SE to BE	123	Building Aptitude and preparing the students for the upcoming placement session
24	IT	2015-16	Software Testing	TE & BE	17	Studets able to apply Software Testing Teniques to Test Software Application
25	IT	2015-16	Java	TE	6	Computer Programing Proficiency
26	IT	2015-16	С	SE	2	Computer Programing Proficiency
27	IT	2015-16	Soft Skill and Aptitude	SE to BE	85	Building Aptitude and preparing the students for the upcoming placement session
28	IT	2016-17	Japanese	SE to BE	13	Foreign Language Proficiency
29	IT	2016-17	C & C++	SE	22	Computer Programing Proficiency
30	IT	2016-17	Java	TE	6	Computer Programing Proficiency

31	IT	2016-17	Software Testing	BE	13	Studets able to apply Software Testing Teniques to Test Software Application
32	IT	2016-17	Android	BE	8	Students learned Anrdoid Programing
33	IT	2016-17	Soft Skill and Aptitude	SE to BE	70	Building Aptitude and preparing the students for the upcoming placement session
34	E&TC	2016-17	Aptitude & Soft Skill	SE to BE	276	Building Aptitude and preparing the students for the upcoming placement session
35	E&TC	2016-17	CCNA	BE	42	Students Networking skill enhanced.
36	E&TC	2016-17	CCNA	BE	23	Students Networking skill enhanced.
37	E&TC	2016-17	Software Testing	BE	7	Studets able to apply Software Testing Teniques to Test Software Application
38	E&TC	2016-17	C&C++	SE	58	Computer Programing Proficiency
39	E&TC	2016-17	JLPT	12(SE)+1 6(TE)+4( BE)	32	Foreign Language Proficiency
40	E&TC	2015-16	CCNA	33(TE)+4 7(BE)	80	Students Networking skill enhanced.
41	E&TC	2015-16	С	SE	19	Computer Programing Proficiency
42	E&TC	2015-16	C++	SE	7	Computer Programing Proficiency
43	E&TC	2015-16	C&C++	SE	13	Computer Programing Proficiency
44	E&TC	2015-16	Java	6(TE)+12( BE)	18	Computer Programing Proficiency

45	E&TC	2015-16	Aptitude & Soft Skill	SE to BE	380	Building Aptitude and preparing the students for the upcoming placement session
46	E&TC	2014-15	Aptitude & Soft Skill	SE to BE	467	Building Aptitude and preparing the students for the upcoming placement session
47	E&TC	2014-15	CCNA	BE	31	Students Networking skill enhanced.
48	E&TC	2013-14	Aptitude & Soft Skill	SE to BE	546	Building Aptitude and preparing the students for the upcoming placement session
49	Electri cal	2016-17	PLC-SCADA	BE	47	Core Domain skill enhanced
50	Electri cal	2016-17	JLPT	SE to BE	19	Foreign Language Proficiency
51	Electri cal	2016-17	Aptitude & Soft Skill	SE to BE	222	Building Aptitude and preparing the students for the upcoming placement session
52	Electri cal	2016-17	C, C++	SE	45	Computer Programing Proficiency
53	Electri cal	2015-16	Electrical Automation	TE & BE	50	Core Domain skill enhanced
54	Electri cal	2015-16	C, C++	44(SE)+1 8(TE)=62	62	Computer Programing Proficiency
55	Electri cal	2015-16	Aptitude & Soft Skill	SE to BE	201	Building Aptitude and preparing the students for the upcoming placement session
56	Electri cal	2015-16	CCNA	BE	1	Students Networking skill enhanced.
57	Civil	2015-16	AutoCAD-2D	SE to BE	53	Core Domain skill enhanced

58	Civil	2015-16	Revit Architecture	TE	20	Core Domain skill enhanced
59	Civil	2016-17	AutoCAD-2D	SE to BE	51	Core Domain skill enhanced
60	Civil	2016-17	Revit Architecture	TE	17	Core Domain skill enhanced
61	Civil	2016-17	Aptitude & Soft Skill	SE to BE	220	Building Aptitude and preparing the students for the upcoming placement session
62	Civil	2015-16	Aptitude & Soft Skill	SE to BE	196	Building Aptitude and preparing the students for the upcoming placement session
63	Civil	2014-15	Aptitude & Soft Skill	SE to BE	185	Building Aptitude and preparing the students for the upcoming placement session
64	Civil	2013-14	Aptitude & Soft Skill	SE to BE	138	Building Aptitude and preparing the students for the upcoming placement session
65	Mech	2013-14	Aptitude & Soft Skill	SE to BE	456	Building Aptitude and preparing the students for the upcoming placement session
66	Mech	2014-15	Aptitude & Soft Skill	SE to BE	620	Building Aptitude and preparing the students for the upcoming placement session
67	Mech	2015-16	CATIA	TE & BE	90	Current Technology skill enhanced
68	Mech	2015-16	UG NX	TE & BE	60	Current Technology skill enhanced

69	Mech	2015-16	Aptitude & Soft Skill	SE to BE	607	Building Aptitude and preparing the students for the upcoming placement session
70	Mech	2015-16	C/C++	SE	173	Computer Programing Proficiency
71	Mech	2016-17	Japanese	SE to BE	58	Foreign Language Proficiency
72	Mech	2016-17	Catia	TE&BE	90	Core Domain skill enhanced
73	Mech	2016-17	Ansys	BE	28	Core Domain skill enhanced
74	Mech	2016-17	C & C++	SE	56	Computer Programing Proficiency
75	Mech	2016-17	Aptitude & Soft Skill	SE to BE	669	Building Aptitude and preparing the students for the upcoming placement session

Soft skills training programs organized by the institute with the help of various companies which satisfy following objectives

- An effective communicator
- As a strong leader
- Crack various competitive examinations
- To develop lateral thinking
- To develop interpersonal negotiation skills

The following table 1.8 shows list of technical workshops organized by the institute with the help of industry expert and high ranking institutes with following objectives.

- Learn research-based strategic learning and teaching practices.
- Learn to empower students to take responsibility for their own happiness and success.
- Collaborate with colleagues on the best practices.
- Practice practical classroom strategies you can use in your classroom tomorrow.
- Understand why many students act as they do when faced with difficult institute courses.

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Academic Year 2012-13					
SN	Title	Resource	Participants		
		person/Agency			
1	Computational Fluid Dynamics	IIT, Bombay	Staff		
2	Introduction to Research	IIT, Bombay	Staff		
	Methodologies				
SN	Title	Resource	Participants		
		person/Agency			
4	Engineering Thermodynamics	IIT, Bombay	Staff		
5	Android Application	IIT, Bombay	Students		
	Programming on Aakash 2				
_	Tablet		<b>G</b> 1		
6	Industrial Automation	TAACT, Mumbai	Students		
Aca	demic Year: 2013-14		G 1 1		
1	Workshop on "Industrial	TAACT, Nashik	Students		
2	Automation .	Ma Contoch Cololion	Cturdoute		
2	Cloud Computing	Mr. Santosn Selokar	Students		
3	Engineering Mechanics	III, Bombay	Stall		
4	Fluid Mechanics	III, Bombay	Staff		
	demic Year 2014-15		C ( - ff		
1	Computer Programming	III, Bombay	Staff		
2	Computer Networking	III, Bombay	Staff		
3	Cyber Security	III, BOINDAY	Staff		
4	Control Systems	III, Kharagapur	Stall		
5	Engineering Thermodynamics	Dr. C. A. Channianala	Students		
0	"Hybrid Electric Venicle Design"	Dr. S. A. Channiwala, SVNIT	Students		
7	Research Methodologies	Dr S A Channiwala	Staff		
/	Research Wienbuologies	SVNIT	Staff		
8	Basics of Machining	Mr. Aditya Omprakash	Students		
	Technology	Jajoo, Nagesh Engg.			
		Pvt. Ltd. Nasik			
9	Numerical Methods for	Dr.V.H.Pradhan,	Students and		
	Engineers	Associate Professor,	Staff		
		SVNIT, Surat			
Academic Year 2015-16					
1	Environmental Studies	IIT, Bombay	Staff		
2	Engineering Physics	IIT, Bombay	Staff		
3	Introduction to Structural	IIT, Kharagapur	Staff		
	Engineering				
4	QEEE Course on "BASIC	Prof. S R Satish	Students		
	DESIGN OF STEEL	Kumar, IIT, Madras			
~	SIKUCIUKES"		C( 1		
Э	QEEE Course on "Compaction of Soil Soil Machanica"	Prof. Ashish Juneja,	Students		
	or son - son mechanics	III, DUIIDay	1		

 Table. 1.8 List of Technical Workshops

6	QEEE Course on "Electromagnetic Engineering"	IIT Madras	Students
7	QEEE Course on "Thermodynamics"	Prof. Aravind Attamatta IIT Madras	Students
SN	Title	Resource person/Agency	Participants
8	QEEE Course on "Basics of Design of Machine Elements"	Dr. Narasimhan Swaminathan, IIT Madras	Students
9	QEEE Course on "Kinematics of Machines"	Prof. Abhijit Sarkar, IIT, Madras	Students
10	QEEE Course on "Braking System Automobile Engineering"	Prof. C S Shankar Ram, IIT Madras	Students
Aca	demic Year 2016-17		
1	QEEE Course on "Maxwell Equations - Electromagnetic Waves"	Prof. B. K. Das, IIT Madras	Students
2	QEEE Course on "Transformer - Electrical Machines"	Prof. Bhuvaneshwari G, IIT Delhi	Students
3	QEEE Course on "Stability Analysis - Control Systems"	Prof. Tushar Jain, IIT Mandi	Students
4	QEEE Course on "Classifications of Signals and Systems - Introduction to Signals and System"	Dr. Arun Pachai Kannu IIT Madras	Students
5	QEEE Course on "Fundamentals of Laplace Transform - Engineering Mathematics"	Dr. Arun Pachai Kannu IIT Madras	Students
6	QEEE Course on "Differential Amplifiers - Analog Electronic Circuits"	Dr. Hitesh Shrimali IIT Madras	Students
7	QEEE Course on "Inverters - Power Electronics"	Dr. Amit Kumar Jain IIT Madras	Students
8	A workshop on An introduction to Machine Leaning with R	Prof.Dr. Milan Joshi	Staff & students
9	QEEE Course on "Applications and Concepts of Thermodynamics "	Prof. S.R. Kale, IIT Dehradun	Students
11	QEEE Course on " Basic Machine Tools and Metal	Dr.Ajaykumar Chattopadhyay, IIT Kharagapur	Students

	Cutting Principles		
	Manufacturing Process "		
SN	Title	Resource	Participants
		person/Agency	
12	QEEE Course on " Introduction	Dr. Suman	Students
	to Convection Heat Transfer -	Chakraborty, IIT	
	Heat Transfer"	Gorakhpur	
13	QEEE Course on "Gears and	Prof. Abhijit Sarkar,	Students
	Gear Trains Kinematics of	IIT, Madras	
	Machines "		
14	Moment Diagrams - Strength of	Prof. Nirjhar Dhang,	Students
	Materials"	IIT, Kharagapur	
15	QEEE Course on "Fundamental	Dr.Suman	Students
	Concepts in Fluid Dynamics"	Chakraborty, IIT,	
		Kharagapur	
16	QEEE Course on "Shear	Dr.Suman	Students
	Strength of Soils Geotechnical	Chakraborty, IIT,	
	Engineering" -	Kharagapur	
17	QEEE Course on Air pollution	Prof. Shiv Nagendra	Students
	& Control Engineering"	IIT, Bombay	
18	OEEE Course on Highway	Prof. Avijit Maji,	Students
	Geometric Design"	IIT, Bombay	
19	OFFE Course on Durability of	Prof Radhakrishna G	Students
17	Concrete"	Pillai IIT. Bombay	Brudents
20	OFFE Course on "Input &	Prof Rupesh Nasare.	Students
20	Output Streams- Interfaces.	IIT Bombay	oradonto
	Package. Collections & Vectors	III Domonj	
	File-OOPS"		
21	OEEE Course on "Linear Data	Dr. Supratim Biswas,	Students
	Structures & Application- Data	IIT Bombay	
	Structures & Algorithms"	-	
22	QEEE Course on "Cloud	Dr. S C Gupta, IIT	Students
	Technology Overview- Cloud	Delhi	
	Computing"		
23	QEEE Course on "Pointers:	Dr. Supratim Biswas,	Students
	Programming in C and Data	IIT Bombay	
	Structures"		
24	QEEE Course on "Routing	Dr. Niloy Ganguly, IIT	Students
	Algorithm-Computer	Kharagapur	
	Networks"		
25	QEEE Course on "Software	Dr. Rajib Mall, IIT	Students
	Process And Management-	Kharagapur	
	Software Engineering"		

**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?

No, the institute is affiliated to NMU, Jalgaon, which does not have a flexibility of distance mode of education.

#### **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 programs and Institution's goals and objectives are integrated?

To ensure whether the academic programs meet the institute's goals and objectives, the following initiatives are taken to supplement the university curriculum.

- A dedicated Training and Placement Cell works in tandem with academic departments. They identify gaps between university syllabus and industry requirement and suggest add-on courses to be taken by the students. T&P cell itself ensures whether these add-on courses are conducted effectively.
- Students are geared up towards employability from the first year of study and that receives intensive training through a variety of skill development courses inculcating soft skills, spoken English, etc. which are conducted in regular time table itself.
- Bridge Course is conducted for first year students to bridge the knowledge gap between 12<sup>th</sup> science and first year engineering.
- Apart from technical lectures, webinars, seminars and workshops, training programs are arranged for overall professional development of students.
- Industrial visits are also arranged to develop interpersonal relationships among the students.
- Every year institute ensures that few sessions are planned and conducted to inculcate moral and ethical values among the students.
- Institute is having counseling cell for higher studies. This cell guides students for various competitive examinations like Graduate Aptitude Test Engineering (GATE), Common Admission Test (CAT), and Test of English as Foreign Language (TOFEL) etc.
- The institute has a tie-up with reputed GATE coaching institute where students get coaching from the experts for GATE with the help of online platform.
- National level seminars and workshops are conducted regularly.
- Our institute is partner institute for the QEEE programs conducted by IIT Madras. Students register for current semester subjects and

they learn from experts of IITs to enrich their experience. Students complete assignments given by IIT professor and on completion of the assignments they get certified.

• Institute encourages many students to undergo for MOOCs from reputed national / international institutes / universities worldwide. Every year many students register for these courses and get certified.

## **1.3.2** What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?

- All practicals, including optional topics from the university practical list are conducted for some subjects.
- Institute promotes soft skills development courses conducted by reputed soft skill agencies.
- Using our PBL mechanism, we encourage the students to take up the projects from the topic identified by alumni and industry experts which will help the students to understand these topics practically.

## **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** 

#### Girls and boys together participate in various co-curricular activities such as workshops, paper presentations, project competition, organization of paper contests, group discussions and technical quiz programs etc. Both boys and girls are involved in various clubs associated with academic, co-curricular and extracurricular activities so as to stop gender inequality. Institute arranges various programs based on the theme, 'Save Girl Child', 'Woman Victimization', 'Muskan', etc.

#### **Climate Change and Environmental Education**

The subject of 'Environmental Studies' is a part of the curriculum. In addition to this, some departments like civil engineering and mechanical engineering have subjects like environment engineering, automobile engineering deals with climate change and pollution. Apart from these students arrange functions like Tree Plantation, Swachha Bharat Abhiyan, Earth Hour, etc.

#### Human Rights

The curriculum also includes courses on professional ethics and human rights. Institute has various committees like Yuvati Sabha, Woman Anti-Harassment committee, Anti-Ragging committee for human rights. Institute also arranges special lectures and seminars to create awareness on these issues.

ICT

all the classrooms and laboratories in the institute are equipped with ICT enabled technology. For this purpose institute has Wi-Fi enabled campus with dedicated Internet leased line of 155 mbps. Institute encourages faculty to use various ICT tools in teaching learning process like PPTs, Webinar, MOOCs, NPTL videos, animations, etc. We have our own virtual classroom setup which helps us in teaching learning.

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

#### Moral and Ethical Values

- Institute conducts enrichment programs like Art of Living, ISKCON, Yoga day, etc.
- Every year our institute arranges Gandhi Thought Examination conducted by Gandhi Research foundation, Jalgaon.
- Employable and Life Skills
  - University curriculum has three soft skill courses in addition to that programs like JUNOON and UDAAN for first year are organized every year.
  - Employability development program is arranged for students of second year to final year.
  - Institute arranges Japanese language training program, tied up with TCS for employability.
  - Various add-on courses are conducted for students in campus to enhance their employability.
  - Students are also encouraged to opt industry certification like Cisco Certified Network Associate (CCNA), International Software Testing Qualifications Board (ISTQB).
- Better Career Options
  - Institute has a counseling cell for higher studies. This cell guides students for various competitive examinations like Graduate Aptitude Test Engineering (GATE), Common Admission Test (CAT), Test Of English as Foreign Language (TOFEL) etc.
  - Japanese Language training is available for students.

• Various add-on courses are conducted for students to train them according to the industry requirement.

#### Community Orientation

Students have formed many voluntary groups to engage in community services mentored by faculty.

- E-builder group: The motive to form this group was to start the social activities organized by the student themselves with the help of faculties. As we are located in tribal area, student goes in tribal areas to spread computer literacy and to educate the villagers with regards to clean environment, drinking purified water, sanitation etc., in order to improve the living standards of villagers. They also organize various events like Tree Plantation, Swaccha Bharat Abhiyan, Digital India, etc.
- Rahat Group: Students under this group, distribute cloths, stationary material, food, sports equipment etc. to the poor and needy students.

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

In alumni meet or alumni interaction as well as recruiters suggested that students should take value added courses in institute during 3<sup>rd</sup> year or in final year to improve their skill set. As a result, students get placed in industry for example CCNA, ISTQB.

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

- Institute conducts examination based on fundamental knowledge before the start of Bridge Course for newly admitted students of first year. Based on the analysis of the pre examination the contents are chosen and delivered in the Bridge Course. After completion of Bridge Course again examination is conducted. Analysis of pre and post examination is used for content preparation of next year Bridge Course.
- Before conduction of Bridge course institute conducts, pre-test and post-test to understand the quality of understanding.
- To monitor the quality of soft skill program, in-house faculties attend the program. Student's evaluation on quality of conduction is carried out through online and offline examination.
- Employability development program conducted by outside agency. For monitoring and evaluation of this program online and offline tests are conducted. Similarly other employability programs are evaluated either by test or certifications like CCNA, ISTQB.

- QEEE programs are regularly monitored by departmental coordinator and evaluated by IIT Madras in the form of certification.
- Similarly for add-on courses, we have appointed departmental coordinator for evaluation with respective certifying institute.

#### **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?

- Being as an affiliated institute, we follow curriculum designed by university. Whenever syllabus is revised suggestions are send to BOS.
- The institute has organized various syllabus framing workshops. Faculties from the various institutes actively participated in the development of the university syllabus. Faculties from our institute also participated in orientation meetings organized by other institutes in the university. The feedback from students, alumni, industry and faculties are collated together and suggestions are forwarded to concerned BOS chairman for necessary action.
- Faculties from our institute have participated in syllabus framing workshops organized at R.C. Patel Institute of Technology and other institutes in the University.

# **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 programs?

Yes, the institute has a mechanism to get feedback from alumni and industry about the adequacy of curriculum. Whenever there is change in syllabus, we take feedback from alumni of respective departments. These feedback are sent to BOS chairman.

Institute and faculties send suggestions on curriculum to BOS chairman. These suggestions are discussed in the faculty meeting with Dean. The suggestions are collated together and sent to academic council for the approval.

1.4.3 How many new programs/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programs?) NO

## CriterionII

## Teaching-Learningand Evaluation



Criterion: II
#### 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?

#### Publicity

- The Institute is a part of the centralized admission process (CAP) of Directorate of Technical Education (DTE), Government of Maharashtra. This ensures total transparency in admission process.
- Admission notification is published by DTE in all leading newspapers, as well as on their website.
- Institute advertises the admission process in leading state and national level newspapers and appropriate media.
- The college publishes prospectus for wide circulation.
- Admission information to different courses along with eligibility is also published on college website.
- Institute has its own admission cell to provide the information about the admission matters to parents and candidates.
- Institute distributes college information brochure in nearby junior colleges.
- The institute is an authorized Application Receipt Center (ARC) for the Centralized Admission Process (CAP) of Government of Maharashtra.
- Institute conductscareer guidance and DTE admission process awareness programs for the 12<sup>th</sup> students/diploma students.
- Every year institute provides Maharashtra State Common Entrance Examination (MHT-CET) / Joint Entrance Examination(JEE) form filling facility free of cost to 12<sup>th</sup> students.

#### Transparency

- The institute participates in centralized admission process of DTE, Maharashtra state government. It follows all admission rules, regulations and guidelineslaid down by Government of Maharashtra.
- Even though institute can admit 51% of minority students, still for the purpose of transparency, institute surrenders these to Government of Maharashtra so that 100% seats can be available to students.

• The admission process carried out by DTE is highly transparent and all the necessary information is made available during the admission process on the DTE website.



#### a. b. Fig 2.1 a) admission advertisement for publicity, b) Career counseling program

**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

#### F.E. (Admission) for UG Programme

- 85% Students are admitted through MHT-CET conducted by admission regulatory authority, Government of Maharashtra.
- 15% Students are admitted through JEE conducted by Central Board of Secondary Education (CBSE).

The process of admission and the criteria for admission are well documented in the brochure published by DTE for given academic year. The method adopted by DTE for generating admission merit list, changes every year. In the admission process from 2011 to 2014, merit list was prepared by DTE based on the score obtained in CET and subject to other rules of eligibility as specified by DTE. In the admission process for 2014-15 and 2015-16, students were allotted colleges based on the composite score obtained by the candidate. This composite score is generated by combination of marks in the qualifying exam and JEE-Mains or CET conducted by DTE.

In year 2016-17, first year engineering admissions merit list prepared on the basis of marks or score secured by the candidate in the CET/JEE.

#### Direct Second Year admission for diploma pass students.

- There is a provision for diploma holders for admission in the second year of the B.E. program (20% seats) under lateral entry scheme. The admission is based on the marks obtained in diploma examinations conducted by Maharashtra state Board of Technical Education (BTE).
- For direct second year admissions, institute participated in the admission process carried out by DTE through CAP. Eligibilitycriterion for admission is,candidate should pass diploma in Engineering and Technology with at least 50% marks (at least 45 % marks, in case of backward class categories and persons with disability candidates belonging to Maharashtra state only).

#### PG Programme (M.E)

The selection process for admission is based on the score in the national level Graduate Aptitude Test for Engineering (GATE) conducted by IITs.

Eligibility criterion for PG programme is,candidate should be pass Bachelor Degreewith minimum 50% aggregate marks (minimum 45% marks in case of backward class categories and persons with disability candidates belonging to Maharashtra state only) in the relevant course of Bachelor of Engineering (specified by the concerned University) and with positive GATE Score.

For PG programme admissions, institute participated in the admission process carried out by DTE.

#### 2.1.3 Give the minimum and maximum percentage of marks for admission at entrylevel for each of the Programmes offered by the college and provide a comparisonwith other colleges of the affiliating University within the city/district.

Minimum and maximum marks for First Year Engineering UG Programs at entry level for respective programs offered by the college are given in table 2.1.

CN	Admission	Dronah	MH	CET	AIF	EEE	EE Compos	
211	Year	Dialicii	Min	Max	Min	Max	Min	Max
		Civil	44	109	80	98		
		Comp	25	128	90	106		
		IT	37	95	72	83		
1	2016-17	Electrical	42	89	65	100	NA	NA
		ETC	62	85	23	118		
		Mech I	33	110	77	121		
		Mech II	35	77	66	78		
		Civil			316904	452294	20.72	77.93
		Comp			202919	422537	17.82	83.87
		IT			268982	454440	20.59	67.5
2	2015-16	Electrical	NA	NA	272853	555952	21       8         294       20.72       77.93         537       17.82       83.87         440       20.59       67.5         952       18.84       72.58         980       13.59       78         630       31.06       83.83         623       38.26       82.6         566       27.13       81.44         427       27.82       71.05         851       18.62       50.04         474       25.03       68.5         273       27.51       69.9         215       42.94       65.01	
		ETC			435874	756980		78
		Mech I			167119	386630	31.06	83.83
		Mech II			408015	494623	38.26	82.6
		Civil			206134	359566	27.13	81.44
		Comp			309848	409427	27.82	7.13         81.44           7.82         71.05
		IT			584357	719851	MIIIMAXNANA20.7277.9317.8283.8720.5967.518.8472.5813.597831.0683.8338.2682.627.1381.4427.8271.0518.6250.0425.0368.527.5169.942.9465.018.0179.538.3371.28NANA	
2	2014 15	Electrical	ΝIΛ	NIA	235638	599474		
5	2014-13	ETC I	INA	INA	322113	391273	27.51	69.9
		ETC II			496347	541215	42.94	65.01
		Mech I			106572	399140	8.01	79.5
		Mech II			412734	504296	38.33	71.28
		Civil	33	121	54	81		
		Comp	38	152	30	69		
		IT	41	92	12	75		
4	2012 14	Electrical	42	97	36	75	NIA	NT A
4	2013-14	ETC I	41	134	28	96	INA	INA
		ETC II	39	106	19	37		
		Mech I	39	132	55	100		
		Mech II	39	82	16	55		

Table 2.1: FE admission minimum and maximum percentile of RCPIT

Criterion: II

Minimum and maximum marks for First Year Engineering PG Programs at entry level for respective programs offered by the college are given in table 2.2.

SN	Admission Year	Branch	Min GATE / CET marks	Max GATE / CET marks
		Computer Engineering	3.86	4.2
1	2016-17	Electronics & Telecomm Engineering	15.67	15.67
		Computer Engineering	3.21	74.47
2	2015-16	Mechanical Engineering	9	72
2	2013 10	Electronics &Telecomm Engineering	64.8	73.07
		Computer Engineering	-2.16	7.57
3	2014-15	Mechanical Engineering		
3		Electronics & Telecomm Engineering		10.86
		Computer Engineering	20	45
4	2013-14	Mechanical Engineering	28	31
•	2013-14	Electronics & Telecomm Engineering	25	46

 Table 2.2: PGadmission minimum and maximum GATE/CET marks
 ofRCPIT

Though the admission process is governed by DTE, Maharashtra State through CAP, for comparison with other colleges the DTE website does not publish relevant data, in terms of minimum and maximum percentage of marks for admitted students at the entry level.

### 2.1.4 Is there a mechanism 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.

Since admission rules and regulations are laid down by DTE Government of Maharashtra and admission process (allotment) is carried out by DTE Maharashtra, institute does not have any rights to review or change the admission process.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission 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 admission process in the State is governed by DTE; institute follows the rules, regulations and guidelines set up by state government body. It admits students of categories like, SC, ST, and OBC, women, economically weaker sections as per the government norms, rules and regulations and allotments. Our institute is minority institute, where 51% seats are reserved for minority students.

Institute offers the admissions under the Tuition Fee Waiver Scheme (TFWS) which is mainly developed for economically weaker section of the society as allotted by the central admissions committee. There is special reservation for the candidate of Jammu and Kashmir as per the norms.

Table 2.3 shows category wise first year admission details, which represent the diversity maintain by institute towards national commitment.

Category	2016-17	2015-16	2014-15	2013-14
Male	397	336	353	439
Female	143	113	128	164
SC	29	16	37	29
ST	30	16	20	31
VJ	6	7	10	7
NT-1	31	26	24	23
NT-2	15	9	13	12
NT-3	4	3	1	4
OBC	237	261	266	346
SBC	17	13	16	12
PH	0	0	0	1
TFWS (economically weaker)	26	27	26	26

Table 2.3: Admission details

Though the admission process and student profile is govern by competent authority of Government of Maharashtra, we on our part, declared the scholarship for meritorious students.

### **2.1.6** Provide the following details for various programmers 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.

Since our institution is affiliated to North Maharashtra University Jalgaon and approved by AICTE & DTE, the students do not directly apply to the college but

apply for admission to CAP conducted by DTE Government of Maharashtra; therefore it is difficult to calculate the demand ratio.

Table 2.4 shows the demand ratio calculated from intake capacity and number of admitted students.

SN	UG Programme	Year	Intake	No of students admitted	Demand Ratio %
		2016-17	120	85	70.84
1 ETC	ETC	2015-16	120	39	32.5
1	EIC	2014-15	180	84	46.67
	2013-14	180	142	78.89	
		2016-17	120	118	98.34
2	Computer	2015-16	120	111	92.5
Z	Computer	2014-15	120	84	70
		2013-14	120	111	92.5
		2016-17	60	60	100
2	IT	2015-16	60	32	53.34
3		2014-15	60	22	36.67
		2013-14	60	44	73.34
4 Mechanical		2016-17	180	163	90.56
	Mechanical	2015-16	180	163	90.56
		2014-15	180	175	97.23
		2013-14	180	180	100
		2016-17	60	57	95
5	C''1	2015-16	60	60	100
5	CIVII	2014-15	60	60	100
		2013-14	60	60	100
		2016-17	60	55	91.67
6	Flectrical	2015-16	60	42	70
0	Licuital	2014-15	60	56	93.34
		2013-14	60	57	95

**Table 2.4: Demand Ratio** 

#### Reasons for increase / decrease in intake capacity:

• Number of students admitted in Mechanical Engineering, Civil Engineering and Electrical Engineering program are almost constant.

- In Computer Engineering program, except year 2014-15 numbers of students admitted are almost constant. The numbers of students were decreased, because of recession in software domain.
- In year 2014-15 and 2015-16 Electronics and Telecommunication Engineering and Information Technology program, number of admissions has fallen down drastically because of industry trends, market position and economic trends in national as well as international domain.
- The students mostly select the colleges based on the surrounding locality and placement trend.

#### Actions initiated for improvement-

- Strengthening the training and placement activities.
- Participating in career counseling camp arranged by various agencies.
- Counseling before and during admission.
- Conducting presentations in higher secondaryschools in our catchmentarea.
- Inviting higher secondary school students for college for a tour.
- Strengthening brand of institute on social media.
- Collecting mobile numbers of students from nearby area and regularly sending news updates, achievements of institute.
- Advertising all the institute events in news paper and social media like facebook, linkedin, whatsapp etc.
- Tie up with reputed institutes and industries like IIT Bombay, IIT Madras, Wipro Technologies, e-Yantra etc.

#### 2.2 Catering to Student Diversity

### **2.2.1** How does the institution cater to the needs of differentlyabled students and ensure Adherence to government policies in this regard?

Admissions to differentlyabled students are made as per the policies of government by allotting a certain percentage of reservation. Institute has created modern infrastructure, whichtakes care of the requirements of differentlyabled students in the following ways:

- Provision of ramp, elevator and wheelchair.
- Special toilet blocks are built, availability of suitable height desk, special seating arrangements are made at the time of examination. These students alsoprovided extra time in examinations as per the rules.

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 performance of students in the last qualifying examination is the basis for assessment of the knowledge and skills of the students before the commencement of the programmes.
- Teachers also interact with students during admission process, counseling programs which help them identifying students needs.
- Every year institute organizes "Induction Program" for newly admitted students and their parents.
- Institute organizes programs like UDAAN and JUNOON for first year students.
- Students' needs in terms of knowledge and skills are indentified through test which is conducted before the bridge course, the required implements covered and emphasized in the bridge course.
- After completion of bridge course, students are assessed again through test.

# 2.2.3. What are the strategies drawn and deployed by the Institution to bridge the knowledge gap of the enrolled students to enable them to cope with the program of their choice (Bridge / Remedial / Add -on / Enrichment courses, etc.)

- To fill the knowledge gap of the enrolled students and to enable them to cope with the programme, before the commencement of actual program, institute conducts "Bridge Course" for newly admitted students.
- Students' needs in terms of knowledge and skills are indentified through test, which is conducted before and after the conduction of the bridge course.
- For late admitted students, special make-up classes are arranged.
- Separate remedial classes are conducted for the weak students or slow learners.
- For subjects with higher difficulty level, extra tutorials are conducted.
- Institute arrangesvarious personality development and soft skill development courses for second year to final year students e.g. CPLC, UDAAN, JUNOON are conducted, similarly in house faculty conducts soft skill courses for first year students.
- Through the tie up with reputed institutes like, IIT Madras, institute organizes various add-ons, enrichment courses for the students.
- Institute provides platform to students through which they interact and experiment with current technologies used in Industries. (e.g. eYantra Lab

Criterion: II

for robotics by IIT Bombay, MTLC center provided by Wipro for embeddedsystem).

- Organizing co-curricular activities like technical symposium, workshops and conferences for supplementing the knowledge of students.
- Students are encouraged to complete the certification courses e.g. MOOCs, QEEE etc offered by various reputed institutes.
- Experts from the industries and from reputed institutes like IITs, NITs are invited for giving lectures to bridge the knowledge gap of the enrolled students.
- Industrial visits are conducted to make the students aware of industry working and processes.
- In-plant trainings are arranged to the students to fill their knowledge gap.

### **2.2.4.** How does the college sensitize (awareness) its staff and students on the issues such as gender inclusion, environment, etc.

Institute takes all the efforts to educate its staff and students on the issue of gender inclusion, environment in following ways:

- Institute provides equal opportunity for all to participate in various activities and processes which include co-curricular and extracurricular activities, sports, deputation to the courses, and higher studies, appointments, committees, placements etc. without any discrimination.
- Institute has setup "Yuvati Sabha", under the banner of which many women empowerment programs are conducted.
- Institute has set up Women Grievances Redressal Cell that functions separately for the benefit of the women employees and girl students.
- Institute promotes environmental awareness amongst the faculty and student community through programs like tree plantation, earth hour, Swatch Bharat Abhiyan etc.
- To inculcate awareness about environment, pollution problem, institute observes every Thursday as no vehicle day.
- Institute promotes social awareness through programs like blood donation camp, cloth / book distribution to tribal schools etc.
- Environmental issues are also part of curriculum in various courses taught such as environmental studies.
- Institute has introduced the system of unisex dress code with the view to have uniformity among boys and girls.



a. b. Fig 2.2 a) Swatch Bharat Abhiyan, b) Beti Bachao Beti Padhao street play

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

When student admitted, institution identifies students' needs through test which is conducted before the bridge course, the required implements covered and emphasized in the bridge course. After completion of bridge course, students are assessed again through test.

Institution also knows students marks in qualifying examination and common entrance test, based on this data, divisions are made, so that advance learner students are in upper division. These divisions are shuffle after every year.

Strategies adopted to respond to the requirements of advanced learners are as follows:

- For the top divisions, the methodology adopted for teaching is slightly different. These divisions have different teaching plan, for such divisions subject teacher try to teach them beyond syllabus.
- Every year top ten students are identified and they are nurtured by teachers specifically allotted for them.
- Regular meetings are scheduled with students, where all their difficulties are discussed and additional inputs are given, so that their academic performance increases.
- Students are encourage to enroll for add on courses offered under QEEE, MOOCs. Students enrolled for these courses are continuously monitored by dedicated teacher.
- During the conduction of tutorials, the number of problems solved and difficulty level is slightly more for top division students.
- Institute provides guidance and organizes expert talks and guest lecture for the students appearing for competitive examinations such as GATE, GRE,

Criterion: II

and TOFEL. It also provides study material for various competitive examinations.

- They are encouraged to take part in different contests floated by industries and renowned institutes like E-Baja, M-Baja, Mega ATV, contest, TCS Code vita, TCS Game On, Sparkle by KPIT Cummins, IIT Technical Fest.
- Institute provides platform to students by which they can interact and experiment with current technologies used in industries. (e.g. eYantra lab for robotics, Wipro lab for embedded system)
- Various scholarships are announced to motivate 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 obtains and analyzes information about students at the risk of drop-out or having consistent poor academic performance in the following manner.

- Head of the Department conducts regular meetings with local guardian (LG) to obtain the data about financially and academically weak students.
- Local Guardian interacts regularly with the students assigned to them and find out the academic performance of student and probable reasons for the same. He/she co-relates the result with the categories of the student viz. section of society, physically challenged, slow learners and economically weaker students.
- Based on the result analysis students having failure in more than three subjects and are at the risk of drop out are identified.
- Thorough data analysis is done after every ISE and data is tabulated for slow learners.

The institute analyzes the data of the above section students as follows:

#### Slow learners:

- On the basis of their ESE result, separates the divisions are formed. Experienced teachers are assigned to the divisions of slow learners.
- From thorough analysis of result, the students who are likely to fail in ESE are identified. Remedial classes are arranged for these students.

- For the students having backlog subject, additional classes are arranged in their regular schedule.
- Failed students are allowed to attend classes if they wish, without any fees.
- For complex numerical subjects, tutorials are arranged.
- Instead of suggested one-hour tutorial by university, institute have assign two hours for each tutorial.

#### Physically challenged:-

• Providing extra time while writing exam papers and /or providing a writer to students with physical disabilities as per university rule.

#### Economically weaker section:-

It has been noticed that students coming from economically weaker section are sometimes at the risk of drop out. In such a case, help comes from following sources:

- Concession in institute fee is provided to needy students.
- Installment facility is given to student for paying institute fees.
- If LG notices that, the student may drop out because of inability to pay the institute / university fees, sometimes teachers may contribute the fees.

#### Disadvantaged section of students -

- SC / ST / OBC / Minority students are given benefits of reservation in terms of admission into engineering courses and scholarships as per government norms.
- The students are guided at student section in institute office about the social welfare schemes, which helps the students to apply for these schemes in proper format and procedure.

#### 2.3 TEACHING-LEARNING PROCESS [100]

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

The institute has the following process to plan and organize the teaching and learning as well as evaluation schedules:

- Choice based preferences are asked for next semester before the staff member proceed for a vacation and load distribution is done by HOD.
- HOD also assigns the responsibilities to the faculties for the activities to be conducted throughout the semester.
- The class teachers, class coordinators and local guardians are nominated to ensure the smooth academic conduction and monitoring during the entire semester.
- The institute follows the academic calendar given by the affiliating university,
- Before finalizing institute level academic calendar, meeting of Principal with all HODs scheduled, all the events and activities planned during the semester are discussed. Based on the university academic calendar, institute level academic calendar is prepared, taking into account of planned activities and holiday. This institute level academic calendar is provided to all departments before the commencement of the semester. It contains the relevant information regarding the teaching-learning schedule (working days), schedule of various events (co curricular and extracurricular), unit wise teaching plan, meeting with HOD, provisional detention list display, ISE (internal sessional examination), ESE schedule, holidays etc. The academic calendar is prepared so that teachers and students get the information about all the activities planned in semester. It is displayed on all notice boards, uploaded on institute's website.
- Teacher then prepares his/her own calendar planning and the teaching activities for semester.
- Every subject teacher prepares the teaching plan prior to the starting of the semester by taking help of institute academic calendar. The teaching plan includes lecture number, topics planned date, topics covered date etc.
- The teaching plan prepared by teacheris approved by concern HOD and monitored by the class coordinator and HOD.
- Academic diary for complete year is issue to the teacher. Teacher fills up academic diary with the help of academic calendar and teaching plan.

- Academic diary contains academic calendar, teacher's activity calendar, lecture/practical planning, lecture/practical conduction, student attendance, unit wise question bank, ISE result, ESE result etc.
- The subject teachers then prepare/update file containing subject notes, question bank. Teacher also prepares ICT based material, list of web recourses, video lectures to be used.
- The subject teacher prepares/update laboratory manuals.
- Periodically meeting of faculty members is conducted by HOD to review student attendance status, ISE performance and other academic activities etc.
- Feedback is collected from students in each semester.
- After every ISE, meeting of subject teacher is held with Principal. Results are analyzed thoroughly, remedial measures are suggested and weaker students are identified for remedial classes.
- Students' performance (Attendance and ISE) periodically communicated to their parents telephonically, through post, as required.
- One teacher is allotted for every 20-25 students who acts as LG for the students and who monitors their academic performance.
- LG conduct meeting of their students every week to guide the students about the importance of attendance, regular assessment and also to resolve their problems if any.
- The institute also conducts extracurricular and co-curricular activities for the students. Any shortcomings in the syllabus are taught as add-on course.
- Whenever courses are declared by MOOCs, QEEE from IIT Madras, coordinator from each department select the relevant courses to be offered to students during semester.
- QEEE, MOOCs coordinator prepares planning of QEEE courses to be conducted in the semester.

#### Evaluation

- Teachers are expected to evaluate the ISE papers during tutorial/practical/any other available hours during the next week of ISE conduction and submitting the result at the end of week.
- Evaluation of ISE papers are carried out in presence of student, so that mistake can communicated to the students.

#### Academic calendar of North Maharashtra University for 2016-17

Faculty of Engineering & Technology Tentative Academic Calendar for 2016-2017(UG Program)

#### Term-I

SN	Business	Date	No of months/
			weeks/day
1	Starting of Semester for SE to BE	04/07/2016	15 wooks
2	End of Semester for TE to BE	13/10/2016	15 weeks
3	Start of Practical/ Oral Examinations of	04/11/2016	
	TE to BE		08 days
4	End of Practical/ Oral Examinations of	11/11/2016	00 days
	TE to BE		
5	Start of Theory Examination FE to BE	15/11/2016	01 month
6	End of Theory Examination FE to BE	14/12/2016	01 monui
7	Starting of Semester for FE	01/08/2016	14 weeks
8	End of Semester for FE & SE	05/11/2016	14 weeks
9	Start of Practical / Oral Examinations of	16/12/2016	
	FE & SE		07 dava
10	End of Practical / Oral Examinations of	22/12/2016	07 days
	FE & SE		

#### Term-II

SN	Business	Date	No of months/	
			weeks/day	
1	Starting of Semester for FE to BE	02/01/2017	14 weeks	
2	End of Semester for FE to BE	08/04/2017	14 WCCKS	
2	Start of Practical/ Oral Examinations of	10/11/2017		
3	SE to BE		11 dava	
4	End of Practical/ Oral Examinations of	20/04/2017	11 days	
4	SE to BE			
5	Start of Theory Examination FE to BE	24/05/2017	01 month	
6	End of Theory Examination FE to BE	24/05/2016	01 monui	
7	Start of Practical/ Oral Examinations of	26/05/2017		
/	FE & Project Exam for BE	20/03/2017	05 dava	
0	End of Practical/ Oral Examinations of	20/05/2017	US days	
ð	FE & Project Exam for BE	30/03/2017		

Fig. 2.3 Academic calendar of North Maharashtra University for 2016-17

Criterion: II

DATE     December 2016     January 2017     February 2017     March 2017     April 2017       1     Sunday     End of Unit III     Sunday       2     End of Unit III     Sunday       3     Oppt. Meeting     Letter Dispatch I       4     Sunday     Sunday     **Shree Raam Navami**       6     Image: Sunday     Image: Sunday     Image: Sunday	May 2017	DATE 1 2 3 4 5 6
I     Sunday     End of Unit III     Sunday       2     End of Unit III     Sunday       3     Start of Unit IV     Start of Unit IV       4     Suinday     Dept. Meeting     Letter Dispatch I       5     Sunday     Sunday     **Shree Raam Navami**       6     Image: Sunday     Image: Sunday     Sunday	Eundor	1 2 3 4 5 6
2     End of Unit III     Sunday       3     Start of Unit IV     Start of Unit IV       4     Sunday     Dept. Meeting     Letter Dispatch I       5     Sunday     Sunday       6     Start of Unit IV     Navami**	Eundox	2 3 4 5 6
3     Start of Unit IV       4     Sunday     Dept. Meeting     Letter Dispatch I       5     Sunday     Sunday     **Shree Raam NavamI**       6     Start of Unit IV     Sunday	Eundor	3 4 5 6
4     Sunday     Dept. Meeting     Letter Dispatch I       5     Sunday     Sunday     **Shree Raam Navam!**       6     1355,411	Eurodaar	5
5         Sunday         Sunday         Sunday         Navami**           6         ////////////////////////////////////	Euroday	5
6 15E -111	Sunday	6
	Sunday	-
7 End of Unit V [Teaching End]	and the second s	7
8 Sunday 15E -111 Submission Letter Dispatch II		8
9 Sunday		9
10 End of Unit II	**Buddha Purnima **	10
11 Start of Unit III Project Exhibition Start of Pract Exam		11
12 Sunday Sunday		12
13 35€+8 ** Dhulivandan **		13
14 Dept. Meeting 15E 11 Dr Ambedkar Jayanti **	Sunday	14
15 Sunday ////////////////////////////////////		15
16 Sunday		16
17 End of Unit I Converges	-	17
18 Sunday Start of Unit II Converges (Diploma)		18
19 Sunday & Shiv Jayanti Sunday	-	19
20 Provisional Detention List - 1 End of Pract Exam		20
21	Sunday	21
22 Stunday End of Unit IV		22
23 Start of Unit V Sunday		23
24 · ** Mahashiwratri ** 156 · 11 Start of Theory Exam	End of Theory Exam	24
25 Sunday Dept. Meeting 15E-19 Staff Conference		25
26 Teaching Start Start of Unit I ** Republic Day ** Sunday Sunday		26
27 Provisional Detention List - II 15E - 14 9BL P - 111		27
28 PBLP-II ** Gudi Padwa **	Sunday	28
29 Sunday		29
30 ASE A Sunday		30
31 //SE-1, PBLP-1		0

Fig 2.4Institute academic calender for 2016-17 Sem-II

Criterion: II

### **2.3.2** How does IQAC contribute to improving the teaching – learning process?

IQAC cell contribute to the teaching learning process by performing following functions:

- IQAC collects the information from department, about the coverage of syllabus, evaluation results, co-curricular and extracurricular activities organized, any special activities carried out, research activities, students and other stakeholder feedback about academicsand administrative processes.
- Using this information, IQAC takes review of existing teaching learning process and related infrastructure. This enables IQAC to suggest improvement in teaching learning process.
- IQAC takes the review of University, AICTE and DTE guidelines about teaching learning. It also interacts with renowned institutes, gets the best practices, and shares the same with students and faculty members.
- The cell analyzes results of ISE and university examinations and the remedialmeasures.
- IQAC collects review of course diary, continuous assessment, theory and practical attendance, lab manuals, staff feedback etc in every semester.

SN	Name of the Member	Designation	Position
1	Prof Dr J B Patil	Principal	Chairperson
2	Dr K B Patil	Director, SES	Management representative
3	Shri Atul R. Bhandari	Industrialist	Industrialist
4	Shri Y N Bhandari	Chairman, Shirpur People Co-op Bank	Local Society representative
5	Dr P J Deore	Vice Principal and Head, E&TC Dept	Member
6	P T Mahajan	Administrative Officer	Member
7	S P Shukla	Head, Applied Science Dept	Member
8	N N Patil	Head, Computer Department	Member
9	N P Salunke	Head, Mechanical Department	IQAC Coordinator
10	D S Lal	Head, Civil Department	Member
11	V S Patil	Head, Electrical Department	Member

 Table 2.5Members of IQAC

12	D R Patil	Head, IT Department	Member
13	U M Patil	Associate Professor, Comp Dept	Member
14	P R Bhole	Assistant Professor, E&TC Dept	Member
15	T M Pattewar	Assistant Professor, IT Dept	Member
16	P L Sarode	Assistant Professor, Mech Dept	Member
17	Y K Kirange	Assistant Professor, Electrical Dept	Member
18	C J Chitte	Assistant Professor, Civil Dept	Member
19	Dr M S Sonawane	Assistant Professor, Applied Science Dept	Member
20	Sunanda Khargaria	Alumni	Member
21	Charushila Marathe	Student	Member
22	S L Marathe	Parent	Member

# **2.3.3** How is learning made more student-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?

The entire academic process of planning, delivery and transparent assessment is designed to be student centric. Based on the contents of the topic to be taught in a particular class, the curriculum delivery is a mix of different teaching methods viz. chalk and talk, interactive, group discussions, demonstrations, laboratory sessions, abstract concepts through animations, video lectures etc.

The participative learning activities implemented by the faculty include:

- Every teacher ensures that the classroom climate is very conducive in which students feel free to contribute and debate their ideas.
- Advance information is given about topics to be taught in the next class so that the students can come prepared for active discussion with teachers.
- By allotting first 5-7 minutes of the lecture to revise the contents covered in thelast lecture by asking some questions to check the understanding of the studentsand to develop a link for the topic of current lecture. Any doubts of the studentsare clarified through re-explanation or by dissecting the topic in bits interactivelyup to a level where student gets their doubt cleared. (Interactive Learning)
- By quiz questions during lecture session based on pre knowledge or provokingstudents to think critically. (Interactive Learning)

- By calling group discussions on the assignment problems which develops teamwork, communication skills, think, share and pair attitude. (Interactive Learning)
- Collaborative learning is supported by allotting group project and minor-projects to a group of 3-4 students underthesupervision of a faculty.
- Collaborative learning is also develop through the students encouragement in participation in various events organized by renowned industries and academic institutes like Transform Maharashtra, KPIT Sparkle, E Baja, M Baja, Avishkar etc.
- Independent learning is encouraged through assignments, seminars, also through participation in QEEE, MOOCs courses.

Some of the support structures and systems available for teachers to develop and promote learning skills among students are as follows:

- Teachers are trained through Wirpo Mission10X to conduct activitybased class.
- Institute is remote center of IIT Bombay and IIT Khargapur. Under the program NMEICT, sponsored by MHRD institute conducts various STTPs for teachers.
- Institute have well-equipped digitized library with access to e-journal and NPTELlearning resources, Delnet, National Digital Library (NDL) and direct access to the library resources for independent learning.
- Accesses to on-line journals are made available for staff and students to learn the latest research and developed techniques in engineering.
- Repository of seminar /project reports in the library for the reference of students and faculty.
- Infrastructure for ICT enabled teaching and learning for interactive learning.
- Air-conditioned seminar halls with the precise ambience for conducting seminars, workshops and guest lectures.
- Ample computer facility with 155MBps internet connection and wi-fi connectivity for fast and precise access of information for independent and interactive learning.
- In-plant training and Industrial visits are arranged to make students more practical and informative.
- Students organize and participate in technical symposium, conference, co-curricular and extra-curricular activities through which they nurture their organizational, managerial and communication skills apart from enriching their technical knowledge.

- Facilitating internship in industries and companies for collaborative learning. e.g. TCS internship
- Provision of language lab makes the students good at English communication.
- Training classes conducted for students for learning Japanese language.
- Separate sessions are conducted for improvement in the students in terms of soft skills and aptitude improvement.
- Institute organizes alumni expertlecture series, which gives platform for students to interact and learn from their seniors.
- Organize various workshops for faculty to learn and adopt various interactive learning techniques such as flip class room, think pair share implementation, project based learning, use of analogy, role play, etc
- Students are motivated to participate in various events like technical symposium, project competitionsetc. organized by leading industries and renowned institutes.

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

- Studentsare encouraged to take part in different events like E-BAJA, M-BAJA, Mega ATV contest, TCS Code vita, TCS Game On, TCS testimony, Sparkle by KPIT Cummins, IIT tech fest organized by leading industries and renowned institutes.
- Institute organizes different events under the banner of Converges -Technical Symposium. The events are paper / poster presentation, project exhibition, robo competitions, programming contest, bridge making, web site design contest etc to develop creativity and critical thinking among the students.
- Institute encourage students to carry outsmall project in every semester, and helping them to critically analyze the outcome of the projects.
- Assigning topics for seminars, which initiate creativity in preparation and delivery.
- Involving students in teaching learning process through quizzes, debates, discussions etc.
- Institute motivates students to undertake in-plant training.
- Institute invites entrepreneurs, industry persons, and the eminent personalities to share their success stories with students.

- To make students aware of industry processes and for practical knowledge field visits are conducted.
- Guest lectures, field visits, industrial visits, workshops are organized to develop the sense of practical knowledge.
- Institute collaborated with IIT Bombay for eYantra laboratory, which helps students to learn and perform the robotics.
- Institute also have MTLC center provided by Wipro Technologies for embedded system.
- Students have access to Bosch laboratory available in our sister institute for performing various experiments and project work.
- Expert lectures of industry persons, scientists, entrepreneurs are organized to share their experiences and to make students aware of new technology and practices followed in industry.
- Students are motivated to become members of professional society's chapter and student forums.
- Institute motivates students to participate in national/state level paper presentation / project competitions organized by other institutes and universities such as Avishkar,IIT Tech fest etc. Students are also given travel fare and other necessary support for participation of such events.

# 2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? E.g.: Virtual laboratories, e-learning-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.

Following are the technologies and facilities available in the institute: Seminar hall, ICT enabled air-conditioned classrooms, open and licensed simulation software.

#### **NPTEL e-learning video resources**

- Institute has 2 TB of data of NPTEL video lectures.
- NPTEL video resources are readily available to the faculty and students.
- NPTEL video course includes 130 courses of different subjects with total 4604 topics.

#### **Open Educational Resources**

• Faculty members use visual library, digital library, Auto Desk, Pro V, Umbrella, LaTeX, Oscad, Scilab and other Open Source platforms to make the subject easy to understand.

#### Massive Open Online Course (MOOC)

• E-learning web portals like Coursera, edx etc. are accessible through institute network.

• Live and online lectures by distinguished professors / researchers / academicians are used by faculty and students for better comprehension of the course.

### National Mission on Education through Information and Communication Technology (NME-ICT):

- Institute is remote center of IIT Bombay and IIT Khargapur. Under the program NMEICT, sponsored by MHRD institute conducts various STTPs.
- Institute has conducted around 27 workshops on different subject for various courses under NMEICT program sponsored by MHRD. The Institute's remote center ID for these workshops is 1108.

#### QEEE

Institute runs QEEE program of IIT Madras, under which students register for the various subjects. Because of highly consistent performance of our institute for last semester, institute awarded as partner category by IIT Madras.

#### A-View

Institute is also received A-View interface from Amrita University for the conduction/recording of lectures.

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

Students are exposed to advanced level of knowledge and skills through following ways:

- Providing latest reference, textbooks and journals.
- Organizing Conferences/Seminars/Workshops/Expert lectures by eminent scientists, entrepreneurs and industry Persons.
- Various courses from IIT Madras offered under QEEE program.
- By registration and completion of MOOCs courses offered by renowned universities.
- Participation in tech fest every year institute organize national level technical symposium, which consist of events like paper/poster presentation, robo competition, programming contest, bridge making, web designing etc.
- Institute also sponsor the students for various events organized at state and national level.
- Participation in summer school, industrial training. e.g. third year electronics and telecommunication branch student, Prasad Sanjeev Phadke participated in Summer School, 2015 at Tokushima University, Japan. Final year electronics and telecommunication

branch student, Vaishnavi Mundada completed industrial training at Britania – Home Appliances, Brazil.

Faculty members are exposed to advanced level ofknowledge and skills through following ways:

- Institute is remote center of IIT Bombay and IIT Khargapur for its distance learning program and Institute has conducted around 27 workshops on different subject for various coursesOnline workshops for faculty members.
- Every year institute organizes national level technical conference for research scholars.
- Institute deputes the faculty members for national and international conferences, seminars, workshops.
- Our faculty members has received research grant from national bodies.
- Institute encourages the faculty to attend Wipro sponsored Mission 10X programs and pedagogy programs offered by Infosys, IIT Bombay.

# 2.3.7 Detail (process and number of students benefited) on the academic, personal and psychosocial support and guidance services(professional, counseling /mentoring / academic advice) provided tostudents.

#### AcademicSupport

- Remedial classes –Result analysis of every ISE is carried out thoroughlyand slow learners are identified, respective subjectteacher conductsremedial classes for such students.
- Topper Monitoring after every ISE, subject expert gives feedback of evaluated answer paper to each topper students.
- Classes for backlog students –separate classes are conducted for the backlog students as per their demand.
- During the evaluation of ISE answer papers, teacher evaluates answer paper in presence of students, and provides feedback to student.

#### Personal and psycho-socialsupport

- Individual level counseling through local guardianscheme. For every 20-25 students, a teacher is appointed as a localguardian to counsel the students and record their improvements from timeto time.Thecounselingrenderedbythelocalguardianisrecordedinthe local guardian dairy and monitored by the head of the department. Thelocalguardian also identifies the weak students and accordingly remedialclasses arearranged.
- The students get academic and personal guidance from theconcerned

subject teachers apart from the localguardian.

#### GuidanceServices

• There are full-time training and placement officers who train thestudents in terms of soft skills and arrange lectures by experts onindustrial/ technical skills. The personality development program organized bythe institution also helps thestudents.

• When student enters the institute, institute arranges program Junoon from professional agency, which guide students regarding engineering profession and career choice.

• T&P cell with the help of professional agency prepares students for their resume, group discussion and personal interview. All the final year students are benefitted from this activity.

• Institute has appointed one teacher from each department to T&P cell, who also act as mentor to his/her department students for career guidance.

• Class coordinatorof class acts as the mentor for the students of therespective class, in addition to this class coordinator / class teacher is tasked with monitoringattendance, counselingstudents, interacting withparents, monitor the performance ofstudents, maintain class discipline and generalbehavior, monitor the syllabuscompletion, and nominate classrepresentatives, all the students are benefitted by this scheme.

• Institute has appointed full time counselor for counseling the students for their psychological problems.

• Institute has formed Yuvti Sabha, which also act as counselor for the girl students for their problems.

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 faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

To make teaching learning process effective, easier and more meaningful, the institution has been practicing innovative teaching techniques. Conventional teaching have made more effective by using the ICTs. Using PPTs, online demonstration, video clippings, online site links, group discussions, case studies, role plays etc., have helped substantially the students towards participatory learning and acquainting themselves with new innovative teaching learning process.

Innovative teaching approaches adopted by the faculty-

• Teachers make use of models, graphs, power point presentation to present the content in the syllabus.

• The teachers circulate tutorial problems, assignments, lecture notes and other relevant materials to the students.

• The teachers try to make lectures more student-centric by using ICT based teaching, cooperative learning.

• Students are provided with platforms like seminars, project exhibitions etc. for their interpersonal skill development.

• Project based learning undertaken by student groups.

• Use of open educational resources, e-learning - resources such as NPTEL, MIT material, QEEE courses from IIT Madras.

• The special attention made on learning beyond syllabus through modern techniques.

#### Efforts made by the institution to encourage the faculty:

• Encouragement and motivation of faculty for up-gradation and updating of professional knowledge.

• Institute arranges / deputes the faculty for teaching-learning programs like Wipro Mission 10X, IUCEE teacher academy.

• Arranges expertise IIT Bombay, IIT Kharagpur faculty lectures on various engineering subjects through CDEEP.

• Faculty members are deputed for participating in the FDP, Workshops to update their skills on recent technologies.

• Institute setup embedded laboratory in collaboration with Wipro Technologies and Robotic Laboratory (eYantra) with IIT Bombay.

• Institute provides subscriptions for various National and International Journals.

• Institution has developed smart classrooms. The teachers utilize these facilities to illustrate the concept clearly through audio/video aids.

• Central feedback system and guidance/appreciation for faculties.

• Awards of Appreciation to teacher for 100% subject results.

Impact of innovative practices on student learning:

• Because of this encouragement ten teachers are selected by IIT Bombay as Associate Faculty E-Outreach Program.

• These innovative practices published in "Introducing Research-based Instructional Strategies in a Rural Engineering College in India", paper. The paper published in the 2017 ASEE Annual Conference & Exposition

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

- Staff can issue up to 10 books, access the journals and magazines to support the teaching & research.
- Downloading of research papers and their printouts can be obtained from the library.
- Question papers of university examination are made available.
- Students get the books for home. In addition, they have access to reference section and journals. They can study; prepare seminars, papers and projects using the library resources.
- In addition to the well stocked-Library, each department has its own departmental Library to facilitate easy access to the faculty and students. Project and seminar reports submitted by the students are kept in departmental library and current students can refer the previous reports.
- To sensitize the students and orient them towards library resources, training programs are organized by the library staff at the beginning of the academic year. The library maintains the information and provides alerts on new developments.

# 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.

Yes, challenges are faced by the institution for completing the curriculum within the planned time frame and calendar. The challenges are posed because of

- Late admissions due to delay in admission process carried out by DTE for the first year and direct second year (lateral entry).
- University provides uniform time slots for all the subjects but certain Mathematical subjects need more time depending upon grasping power of students.

#### Efforts to overcome the challenges:

- Considering above challenges academic calendar is prepared taking view of above challenges with the optimal utilization of available weeks for teaching learning activities.
- For certain subjects which require more teaching hours, extra lectures are scheduled in the time table itself from the start of semester.
- Sometimes, depending on requirement, classes are scheduled on Sunday and holidays.

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

Institute monitor and evaluate the quality of teaching-learning through:

- Regular follow-up is taken through the periodic meeting of the HOD by the Principal and staff meeting by the HOD.
- Teacher feedback is collected from the students. Based on the online feedback received from the students, teachers are informed about their weakness and suggestions are given for improvement, if required.
- Institute follows class room observation scheme in which HOD/Principal attend lecture and practical randomly.
- HOD/Principal visits the lecture and practical session of the teacher and after observation the comments are given to the teacher, if any.

#### 2.4 TeacherQuality

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.

Institute has adequate, well-qualified and competent teachers; following table shows their qualification details.

Highest	Pro	ofessor	As	sociate	Ass	istant	Т	otal
Qualification			Pro	ofessor	Pro	tessor		
	Male	Female	Male	Female	Male	Female	Male	Female
Permanent teachers								
Ph.D	03	0	04	01	01	-	8	1
P.G.	00	00	10	03	133	25	143	28
U.G.	00	00	00	00	01	00	01	00

 Table 2.6 Details of Teacher Qualification

Recruitment strategies:

- Recruitment of faculty is as per UGC/AICTE norms.
- As per the requirement calculated by each department before the commencement of academic year, institute invites the applications through advertisement in the leading newspapers and institute website.
- After receiving applications in response of advertisement, short listed and qualifiedcandidates are called for the interview.
- The candidates are selected department wise by the corresponding interview panel, which ensures that only well-qualified and competent candidates are selected.
- Selection committee consists of the subject experts and nominees of university.

- Appointment orders are issued on recommendation of committee and recommendation of committee send to university for approval process.
- Institute ensures that, if it gets qualified candidates from different category, institute employs these candidates irrespective of their gender and category.
- All the posts are filled in time with requirement.

Strategies adopted for retention:

- Institute provides regular increments, equal opportunities for promotions, medical insurance, and staff welfare fund.
- The existing faculty is encouraged for higher studies.
- Institute provides duty, medical and study leaves, TA/DA, registration fee for attending seminars / conferences, workshop is provided.
- For professional advancement, institute provides financial support to attend international conferences in terms of TA/DA, registration fees.
- Teachers are allotted subjects as per their area of specialization and preference.
- Management felicitates faculties for achievements and academic excellence.
- Institute provides seed money to researcher for starting his/her research.
- As an appreciation to effort made by the teachers, cash award of 25000/- is given to respective department for securing Gold Medal in university.
- Teachers scoring API in outstanding category awarded with cash prize of fifty thousand or sponsoring for the international conference with full registration fees and travel expenses.
- Annual gettogether of the institute employees with society employees with their familiesarranged by trust, which increases the communication among the employees, creating the positive environment.

2.4.2 How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programs/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.

• Institute identifies qualified senior faculty and/or experts in the emerging areas and involves them to fulfill the scarcity through adjunct appointment, and/ or expert lecture/sessions, invited lectures.

- Institute organizes expert lectures by inviting the senior and experienced persons from research organizations, industries and academic Institutes.
- The institute arranges training programmes for the faculty members in recentadvanced topics and provides more faculty development programs to satisfy thisrequirement.
- As institute is associated with IIT Bombay and IIT Kharagpur through CDEEP, faculty members attend workshops on different areas conducted by experts from IIT.
- The institute encourages the faculty members to attend the workshops, seminar andconferences on latest topics and emerging areas by providing them on duty leave and financial support.
- Institute encourages faculty to attend various webinars.

### 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.

Staff Development Programmes	Nun	ber of fac	ulty Nomin	ated
	2016-17	2015-16	2014-15	2013-14
HRD Programme	7	-	53	8
Orientation Programme	8	-	-	-
Staff training conducted by the university	-	8	14	16
Staff training conducted by other institutions	46	15	29	41
Summer / winter schools, workshops, etc.	45	24	88	155
Avishkar (Univ/State level paper / poster presentation)	36	15	7	5
Seminars	25	21	26	50

#### a. Nomination to staff development programmes:

 Table 2.7 Nomination of staff

b. Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teachinglearning:

Table 2.8 Faculty training programmes organized

Year	2016-17	2015-16	2014-15	2013-14
No of faculty training programmesorganized	17	17	24	22

#### c. Percentage of faculty:

The following table 2.9 shows the year wise data on the percentage of faculty who have acted as resource persons/ presented papers in National and International conferences / seminars organized by external agencies:

Table 2.9 Details of faculty act as a resource person					
Faculty Participation	2016-17	2015-16	2014-15	2013-14	
as resource persons in Workshops / Seminars / Conferences organized by	7			1	
external professional agencies	•			-	
participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	76	24	31	58	
presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	51	74	120	203	

#### Table 2.9 Details of faculty act as a resource person

# 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.)

- Teachers are encouraged to acquire higher qualifications.
- The institute encourages teachers to attend the conferences, seminars, workshops and trainingprogrammes organized by the universities and other organizations.
- The institute reimburses registration fees / travel expenses to the teacherfor presenting paper in national / international conferences or for attending the workshop.
- Teachers are encouraged to apply for research grants available at various funding agencies.
- Institute provides seed money to researcher for starting his/her research, if required.
- Institute provides study leave to teacher, if required.

# 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.

Table 2.10 shows details of awards won by faculty/department in the area of teaching and connected research in the last four years.

SN	Year	number of faculty who received awards / recognition
1	2017-18	03
2	2016-17	17
3	2015-16	02
4	2014-15	03

Table 2.10 Details of awards won by faculty

The institution provides autonomy to teachers to plan and execute the teaching methodologies with well- stocked library, e-resources, and fast internet services along with financial support and encouragement for pursuing research. These have naturally paved way for faculty to outperform.

The institute's culture, support and motivation rendered by the management for continued achievement by the faculty in the area of teaching and research and the conductive academic environment prevailing in the college have helped the faculty in securing these special awards.

## **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**, Institute has developed its own online feedback system, "Vidyarthi Rai Pranali", for evaluation of teachers by students. In each semester, the feedback from students is obtained by issuing online questionnaires relating toall subjects. Students evaluate their respective teachers on thebasis of their teachingstyle, methodology or pedagogic skills and their interaction level. The feedbacksystem helps to identify the strengths and weaknesses of the faculty. Based onassessment of performance, HOD gives necessary directions for the improvement inthe teaching methods. The faculty with good feedback will be well appreciatedwhich will further strengthen their commitment to the teaching learning process.

IQAC cell and Principal monitors the feedback system and takes appropriate corrective actions. In addition to this, Annual Appraisal of the faculty member is evaluated by the IQAC of the institute. Basedupon these evaluations, remedial measures are taken to improve the quality ofteaching and learning.

#### **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?

#### Awareness of the evaluation processes:

Scope of evaluation at the institute is limited to the ISE and ICA. Practical and theory examination evaluation is done by the University.

- The regulations, curricula and syllabi of all the programs offered by the institute are available in the institute library and respective department, on the affiliated University websites as well as on institute's website. The regulations contain the details of the evaluation process.
- The academic calendar and examination schedule are brought to the notice of teachers as well as students by displaying it on notice boards and institute websites.
- Newly admitted students and their parents are made aware of the regulations and evaluation process of university during their induction program
- University circulars regarding evaluation process pertaining to student's interest are displayed on the institute notice boards.
- All the students including newly admitted are well informed about the criterion for evaluation of ISE and ICA marks.
- ISE answer papers are evaluated in presence of student, and discussed with them, during tutorial/practical/zero hour sessions.
- Marks obtained by student in ISE and ICA for all the courses are displayed on departmental notice boards and communicated to parents through telephone and post.

### 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?

- North Maharashtra University has adopted CGPA pattern. It includes ISE and ICA for continuous assessment.
- University adopted online Digital Exam Paper Delivery System (DEPDS), in which final ESE question paper sent online just before start of examination.
- Audit points for the participation of students in co-curricular and extracurricular activities.

- University initiated online submission of marks of continuous assessment (ICA and ISE) and audit points.
- University has adopted onscreen evaluation system.
- Institute has introduced some additional practices for continuous assessment. Institute conducts four ISE instead of two suggested by university.
- Institute has devised detail mechanism for evaluation of ICA, so that transparency is maintained and favoritism avoided.
- All the ISE answer papers are evaluated in presence of student, feedback is given on every answer attempted by student.

# **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?

- Students can apply for photocopy of answer sheet and revaluation of answer books of university ESE as per the procedures of the University.
- Central examination coordinator and departmental examination coordinators are appointed for smooth conduct of ISEs.
- Institute adheres to the academic calendar planning for conduction and evaluation of ISE.
- ICA evaluation is displayed on notice board so that transparency is maintained.
- All the ISE answer papers are evaluated in presence of students.
- As university sends ESE question paper online, institute has provided all the infrastructure and established modern examination center with high-speed internet and Xerox facility for conduction of examinations.
- Our institute is one of the university center for onscreen evaluation for which institute have all required infrastructure.

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

The formative evaluation includes the routine and regular assessment of students' development. Formative Assessment of the students is done by teacher on the following parameters:

- Class room attendance of student.
- Practical laboratory journals are immediately graded after completion of practical.
- Major, minor project continuous assessment is done.

• Four sessional examinations are conducted to award the ISE marks. The summative evaluation at the end of each semester is through the following:

- University end semester examination
- University end semester practical / oral examination.
- Projectexamination

#### Positive impact of the approaches:

- 1. University results are improved qualitatively and quantatively.
- 2. Because of number of students securing higher grades, number of students eligible for campus placement is also increased.

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.)

Efforts are taken by the institute authority to have transparency in the internal assessment through;

- Display of academic calendar on notice board consisting details of test slot and institute/department events, at the start of semester.
- Display of ICA, ISE calculation with example at the starting of semester.
- Unit wise question bank is provided to the students.
- Students have been given ample opportunities to discuss issues regarding test performance with the concerned teacher.
- To monitor the student progress, institute has the continuous internal evaluation system, which consists of theory and practical class attendance, performance in ISE.
- While performing internal assessment of practical, weightage is given for behavioraspects and independent learning. Each laboratory experiment is evaluated according to following criteria: Lab Attendance – 2 marks
   Observations and Conclusion – 2 marks
   Oral – 1 marks
- ISE answer papers are evaluated in presence of student, and immediate feedback is given to the student.
- Result of ISE is displayed on notice board and is also communicated to parents.
- Internal continuous assessment evaluation is displayed on notice board.

- Monthly attendance of the student is displayed on notice board and also communicated to the parents through telephone.
- The parents are requested to meet the teachers/heads of the departments to discuss the progress of the student in the academic matters.

# 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?

Graduate attributes specified by the college are:

- Engineering Knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- Problem Analysis: Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 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.
- 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.
- 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.
- 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.
- Environment and Sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams and in multi disciplinary settings.
- 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.
- 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.
- 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.

Attributes like engineering knowledge, problem analysis, design/development of solutions, investigations of complex problems, use of modern tools, project management are fulfill through university syllabus, for attributes engineer and society, ethics, communication, lifelong learning are fulfilled through various co curricular and extracurricular activities.

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

- For redrassal of grievances with reference to evaluation, students have free admittance to concerned subject teachers or the department head.
- Students having grievances with the internal evaluation process can directly discuss their doubts individually with respective teachers.
- Students can approach the Head of Department, in case of any grievances, thus institute have effective redressal mechanism.
- Institute provides support for solving students grievances related to examination form filling, results, eligibility etc.
- At the university level, the office of the Controller of Examinations works as the mechanism for redressal of grievances regarding evaluation.
- For university examination, students can apply for photocopy of answer paper. Students can also apply for revaluation of answer paper to the controller of examination of university as per the procedures of the University.

#### 2.6 Student Performance and Learning Outcomes

### **2.6.1** Whether the College has clearly stated learning outcomes? If yes, give details on how the students and staff are made aware of these?

**Yes,** the college has clearly stated learning outcomes. Individual learning outcomes within courses are also defined which are listed in faculty course diary.

Syllabus contains all the learning outcomes, which are displayed on institute websites. Before staring the unit, teacher explains students about the expected outcomes from the unit.

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 student results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

- The progress and performance of the students during four years of programmeduration isdone by class tests, internal sessional examinations, assignments, orals etc.
- To monitor the student progress, institute has the continuous internal evaluation system which consists of four tests (per term),
- ICA report is displayed on notice board of the respective department.
- Institute has local guardian scheme, under which each faculty member closely observes the progress of 20-25 students. Student's attendance (weekly), test marks, university examination marks are communicated to parents regularly.
- Performance of the students is conveyed to the parents through progress report (twice in a semester).

Class	Branch	201	l <b>6-1</b> 7	201	5-16	201	4-15	201	3-14
		% Result	Univ % result						
First	Common	65.39	59.37	74.71	54.4	68.79	51.91	63.73	55.54
Second Year	E&TC	75.47	68.41	72.84	78.73	89.78	74.07	81.12	70
	Comp	88.51	72.54	92.03	85.91	97.16	82.11	97.43	75.52
	IT	75	78.93	85	68.17	81.25	69.79	73.07	74.63
	Mech	75.22	62.95	81.81	55.27	82.48	51.73	71.76	57.27

#### Table 2.11Result analysis

	Civil	81.08	71.46	90.14	63.4	84.93	65.68	85.71	66.39
	Electrical	61.64	40.03	88.15	89.15	94.44	87.7	95.8	80.7
	E&TC	74.7	71.23	84.17	79.11	98.6	67.97	96.69	80.35
	Comp	95.8	87.99	99.24	94.31	92.59	93.01	98.56	88.16
Third	IT	90.9	65.42	97.91	91.94	88.57	81.41	100	88.18
Year	Mech	92.2	82.96	94.95	81.07	95.13	71.18	98.62	82.7
	Civil	95.94	72.99	92.64	74.25	93.85	81.82	98.36	83.99
	Electrical	61.11	57.74	95.58	82.85	97.26	83.65	-	-
	E&TC	95.31	79.37	94.6	82.73	94.83	78.77	97.21	82.24
	Comp	99.27	91.52	99.28	89.08	97.79	85.23	97.72	84.78
Final	IT	100	79.27	100	81.44	100	86.43	95.23	91.3
Year	Mech	80.88	69.59	90.62	89.79	52.11	45	84.12	53.41
	Civil	97.26	83.22	100	77.94	89.66	81.67	100	77.03
	Electrical	98.68	95.85	100	100	_	-	_	-

Above table shows continuous improvement in institute results, they are consistently better than the university percentage results. The reason behind this improvement is tutorial system, remedial classes, local guardian scheme and topper monitoring system.

#### Achievement – Gold Medal

Year	Branch	Name of Student	Achievement
	E&TC	Haswani Sneha Mukesh	Gold Medal + Top in all girls in Univ.
2016-17	Mechanical Engineering	Nagpure Hemant Dhondu	Gold Medal
	Information Technology	Patil Shalini Yashwant	Gold Medal
	Computer Engineering	Arunima Sharma	Gold Medal
	Civil Engineering	Wankhede Divya Bhagwantrao	Gold Medal
2015 16	E&TC	Chaudhary Snehal Subhash	Gold Medal
2015-10	Mechanical Engineering	Baviskar Bhatu Bhanudas	Gold Medal

Table 2.12University Gold medal winner

	Information Technology	Gujarathi Sayali Narendra	Gold Medal
	Computer Engineering	Sutar Paurnima Vijay	Gold Medal + Top in all girls in Univ.
	E&TC	Kukreja Nirali Maheshkumar	Gold Medal
2014-15	Information Technology	Patel Kajalben Sharadbhai	Gold Medal
	Computer Engineering	Amisha Tayal	Gold Medal + Top in all girls in Univ.
	E&TC	Kukreja Pooja Shymlal	Gold Medal + Top in all girls in Univ.
2013-14	Mechanical Engineering	Shaikh Ateeb Shakeel	Gold Medal
	Information Technology	Gawande Rudal Dixit	Gold Medal

Table 2.13Number of Students in University Top-10 Rank

SN	Year	No of students in Top-10
1	2016-17	90
2	2015-16	89
3	2014-15	91
4	2013-14	87

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

A well-defined structure has been evolved by the institute to facilitate the achievement of the intended learning out comes

- Subject in-charge prepare course file for each course that includes syllabus, course objectives, course outcomes, lesson plans, assignment topics, question banks, additional topics for theory and experiments for laboratory.
- Preparation of lecture notes for theory courses and lab manuals for practical courses.

- The content delivery mode includes lectures, demonstrations, discussions, seminars, interaction, etc.
- In addition to class room teaching, use of NPTEL videos, MOOCs, QEEE coursesfor the achievement of learning outcomes.
- Communication skills, soft skills and the student personality development classes are conducted to develop over all skills of the students.
- Every course teacher plans various modes of delivery such as chalk/talk, power point presentations, case study, tutorials, quiz, projects, seminars, self-learning, industry visits, internships etc. for achieving desired learning outcome.
- Each department conducts guest lectures, workshops, seminars and conferences for students.
- Industrial visits and in-plant trainings are organized.
- Minor and Major projects are carried out.
- The achievement of learning outcome is carried out by using various formative and summative assessment methods.
- The achievement of learning outcome is also carried out by the university assessment process like ESE, ICA, major and minor project evaluation.
- For every course, attainment of course outcome is carried out by ISE.

#### 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?

- For the student's placements dedicated training and placement cell gives the guidance.
- Institute organizes technical paper presentation and project exhibition which helps students inculcate a professional approach and imbibe ethicalengineering practices
- Students are encouraged to participate in state/national/international technical events like Avishkar, Robotics, Supra, Baha etc.
- Training & Placement cell at institute trains the students for placement andhelps them to develop an all-round personality by conducting a variety ofsessions on aptitude training, soft skills etc.
- Apart from soft skill and aptitude training, the institution also provides technicalskill development programs to the students. The training of the software likeAUTOCAD, CATIA, ANYSIS, CCNA, RedHat Linux etc from the experts.

- The institute has collaboration with experts in this area like SEED InfoTech, Pune, CADD Centre, CPLC Mumbai, Pehla Job etc for the training.
- Institute has a language laboratory for the students toenhance communication skills. Institute also conducts Japanese language program for students.

## **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?

Institute collectsdata on students' performance and learning outcomes through:

- Student performance is evaluated on the basis of performance in academics, extra and co-curricular activities.
- Local guardian of student maintains all the record of students' attendance, internal sessional examination performance, co-curricular andextracurricular activities.
- Report of student's participation in different activities viz. quiz program, seminar, group discussion, poster presentation provides the data about learning outcomes achieved by students and same is analyzed.
- Institute has the continuous internal evaluation system, which consists of sessional examinations (four in term). University conducts end semester examination. Analysis of internal examination result and end semester examination result is carried out and the same is related to achievement of learning outcomes.
- Skills related outcome like team work, communication (both oral and written), use of modern tools etc. attained by the students are assessed through directtools like laboratory assignments, practical oral examinations, minor projects, projects, seminars, presentations, co-curricular and extracurricular activities.
- Knowledge related outcomes are attained by the students through the curriculum and are assessed through direct assessment tools, i.e. internal sessional examinations, project, University examination, practical, oral examination etc. as well as indirect assessment tools like exit survey, etc. carried out annually/per semester. Data collected using these tools are analyzed at department and institute level.
- During the placement activities, feedback on student performance is taken from the employers. Also, in the HR meet, the input is taken from the HRs related to current trends and requirements from the

industry. After the analysis of all the feedback, training needs are identified and accordingly training sessions are planned and conducted.

• Institute also collects and analyzes data from other stakeholders like parents, employers and alumni. This analysis and their suggestions are used for the improvement of teaching learning process and to overcome the gaps between industry and academia.

#### Plan to overcome the barriers of learning

- Students are divided into two categories as, slow learners and advanced learners.
- Remedial classes for the subject where the number of failures are more.
- Periodical meetings are conducted to identify the difficulties in learning and remedial measures are suggested.
- Regular meetings with HODs are conducted by Principal for effective implementation of academic schedule and the flaws and other issues of implementation will be taken for discussion to overcome the academic barriers.
- Using the analysis report of ISE and ESE, lesson plan and lecture plan are modified to overcome the barriers of learning.
- The curriculum does not cover all the assignments related to the latest technologies, thus institute has taken an initiative to overcome this gap by arranging courses like Oracle, RedHat, CCNA, etc.
- Soft skills and life-long learning skills are not being attained satisfactorily through curriculum. Training and Placement Cell of the institute organizes professional training for students to help them in writing resume, facing interviews and improving their soft skills.
- At department level, students are encouraged to participate in various extra and co-curricular activities organized by departmental associations of the institute or other institutes.

In addition to above methods, using new technologies like NPTEL videos, animation, e-resources etc institute tries to enhance the student learning.

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

The institution has a clearly defined process to monitor and to ensure the achievement of the learning outcomes. The learning outcomes are defined and measured at level of course outcome (CO). The achievement of course

outcomes is evaluated by various methods such as unit tests, assignments, practical assessment, tutorials, seminars, minor and minor projects.

- To ensure the achievement of learning outcomes, institute focuses on planning and effective execution of teaching learning process. The academic calendar is designed in the beginning of the semester has a detailed schedule of all teaching learning activities, along with this, every subject teacher prepares faculty activity calendar.
- The institute ensures the achievement of learning outcomes through effective implementation of academic calendar.
- At institute level, IQAC looks after the achievements and gaps of learning outcomes and other quality parameters of teaching-learning process. IQAC also takes care of other academic support processes.
- Student placement through in campus & off campus interviews and number of students pursing higher studies indicates the achievement of learning outcome.
- Teaching learning process is continuously monitored and immediate remedial measures are taken to overcome problems.

#### 2.6.7 Does the institution and individual teachers 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 institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning.

- Every course teacher defines learning objectives in conformity with course outcomes. Course teacher aligns their teaching method to ensure that student acquires the skill expected out of learning objective either in classroom or practical or tutorial or assignment or minor / major project.
- During the semester, teacher does the evaluation of student performance by using various direct assessment tool like oral / practical performance, assignments, sessional examinations, etc and indirect tools like course exit survey.
- Results of formative and summative assessment are the major indicators used by the respective course teachers for evaluating student performance.

• Non-performing students are identified and proper corrective and preventive actions are planned, so that students can improve their performance in summative examination.

#### **Example:**

If a student scores less marks in internal sessional examination, course teacher prepares them for summative examination by putting extra efforts by means of corrective action.

# Criterion III Research, Consultancy And Extension



## CRITERION: III RESEARCH, CONSULTANCY and EXTENSION

#### **3.1 Promotion of Research**

**3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?** The institute has a research center for the Department of

- Electronics and Telecommunication and
- Computer 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.

Yes, the college has a Research and Development committee to monitor and address issues of research and development. Table no 3.1 shows the composition of research committee.

S N	Name of faculty	Organization	Department	Position
1	Dr. Pradip Waychal	Independent	Electronics and Telecommunication	Chairman
2	Dr. N. R. Chandak	NMIMS Shirpur	Civil Engineering	Academic Advisor
3	Dr. N. S. Chaubey	NMIMS Shirpur	Computer Engineering	Academic Advisor
4	Dr. Ajay Pasari	Industry	Chemical Engineering	Academic Advisor
5	Prof. R.B. Wagh	RCPIT Shirpur	Computer Engineering	Coordinator
6	Prof. J. B. Jadhav	RCPIT Shirpur	Electronics and Telecommunication	Member
7	Prof. P.L.Sarode	RCPIT Shirpur	Mechanical Engineering	Member
8	Prof. Mrs. V.M. Patil	RCPIT Shirpur	Information Technology	Member
9	Prof. H.R.Kumawat	RCPIT Shirpur	Civil Engineering	Member
10	Prof. N.R. Ansari	RCPIT Shirpur	Electrical Engineering	Member

Table.3.1 Composition of research committee

The Research and Development committee has laid down its objectives as follows.

#### **Objectives:**

- To encourage the faculty members to prepare research proposals
- To encourage faculty and students to publish papers in reputed journals and conferences
- To encourage faculties and students to publish quality papers
- To instruct faculties and students to follow rules regarding plagiarism.
- To keep a track of various research funding schemes of funding agencies
- To scrutinize the research proposals made by the faculties.
- To keep records of research proposals communicated and sanctioned
- To organize Seminars / Conferences/ Workshops in the relevant areas.
- To develop research proposal for up-gradation of laboratories through AICTE / UGC / MODROB/ MHRD/ VCRMS funding
- To encourage the faculty to do Ph.D.
- To encourage the number of patents and IPRs.
- To conduct National Conferences.
- Motivate faculty and students to design and fabricate and implement viable functional projects for the benefits of institution and society.

After the recommendations made by the committee for implementation Research Grants for last Three years as shown in Table no-3.2

	Number of	Grants	
Year	Research	Received	Funding Agency
	Proposals granted	in lakh	
2014-15	14	19.46	AICTE,UGC/RGSTC,UGC/VCRMS
2015-16	14	7.29	UGC/VCRMS
2016-17	8	6.12	UGC/VCRMS

Table. 3.2 Research Proposals Grant Received

#### Impact of these recommendations:

Impact of these recommendations is that 32 Faculties have enrolled for Ph.D, six faculties have completed their PhD's and three patents are applied.

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

#### **§** Autonomy to the principal investigator

Yes, the principal investigator is given full autonomy for implementing his/her research project.

#### § Timely availability or release of resources

Yes, funds are made available to the principal investigator as soon as they are received from the funding agency. Also in case of delay in receiving grants or as per the feasibility of the project institute provides seed money to the principal investigator.

#### **§** Adequate infrastructure and human resources

Existing infrastructure and human resources are made available to the principal investigator. Also institute provides some specialized equipment if needed.

#### § Time-off, reduced teaching load, special leave etc. to teachers

Teachers utilize the free time between lectures for conducting their research. Permission of Duty leave, "DL" is given for any project related work such as, paper presentation, attending conferences, seminars/workshops, testing and analysis and field work.

#### § Support in terms of technology and information needs

Teacher has full access to the entire technology and information infrastructure available in the college.

## **§** Facilitate timely auditing and submission of utilization certificate to the funding authorities

Yes. The finance section and auditor of the college ensure this aspect. All the projects executed in the college under various heads have been timely completed and their utilization certificates have been submitted to the concerned agencies, as per the rules.

#### § Any other

Institute provides financial support for paper presentation and attending conferences.

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

The Institution has a well-defined policy to promote research culture in students. From first year onwards, through project based learning students work on mini-projects specific to their branch of study. The final year project work is carried out as per the guidelines of University. Students are encouraged by teachers for presenting their papers in conferences. Industrial visits, seminars, workshops and guest lectures are organized to bridge the gap between academia and industry. The technical club (CESA, EESA, MESA and ACIES) organizes an annual intra- and inter- college technical symposium – "Converges". Under these, competitions such as paper presentation, model

making, Robo wars, electronic surfers, website development, bridge making, and circuit design, Code-vita etc. Students are also encourage for Internship and to participate in competition like KPIT Sparkle, Transform Maharashtra, E- Yantra, paper presentation, robotics, etc. College provides funding for participation in 'Mega ATV' and 'BAJA' competitions. Institute also planning to set Makers lab, Incubation Center and applying for Atal Tinkring lab in order to developing scientific temper and research culture and aptitude among students

# **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.

Institute encourages faculties to undertake research by collaborating with other research organizations/ industry. Most of the senior faculties carry out research projects which have funding from state and national level bodies as shown in Table no 3.3.

S N	Year	Name of faculty	Title of Research Project	Collaborativ e/Individual
1	2016-17	Prof. M. L. Mali	Web Documents Authorship Protection by Using English Language Grammar Constructs	Individual
2	2016-17	Prof. M.M. Saiyyad	Implementation of Modified Recommendation System using Machine Learning	Individual
3	2016-17	Prof. H. N. Randhir	A New Approach to Secure Digital Document Using Visual Cryptography	Individual
4	2016-17	Prof. Ms. S. C. Nahatkar	Smart Robo Walk with Obstacle Detection Using Fire Bird V Robot	Individual
5	2016-17	Prof. P. D. Jamadar	Design and Development of Fiber Extraction Machine	Individual
6	2016-17	Prof. D. S. Lal	Effect of Fitness on Mechanical Properties of Cement Mortar Incorporating Pond Ash	Individual
7	2016-17	Prof. R. D. Patil	Evaluation of Condition Assessment of Concrete with Ultrasonic Pulse Velocity	Individual
8	2016-17	Prof. M. N. Patil	Seismic Analysis of Multi Storied Building by using ETABS	Individual

#### Table.3.3. Details of funded Research Projects of last four years

9	2015-16	Prof. U. M. Patil	An Intelligent System for Exploration of Web User Behavior	Individual
10	2015-16	Prof. S. N. Pardeshi	User Behavior Information from The Free Log	Individual
11	2015-16	Prof. R. J. Jaiswal	Implementation of Modified Technique for Web Document Protection Using Unicode	Individual
12	2015-16	Prof J. P. Patil	MRI Findings of Japanese Encephalitis	Individual
13	2015-16	Prof. A. H. Khadke	Development of Novel, Economic Embedded System using Cypress PSoC board	Individual
14	2015-16	Prof. M. B. Barawarkar	Handwritten Devanagari Character Recognition	Individual
15	2015-16	Prof. B. V. Patil	Remote Monitoring of Crop Field Using Wireless Sensor Network for Shirpur Town	Individual
16	2015-16	Prof. S. D. Patil	Offline Fingerprint Recognition System	Individual
17	2015-16	Prof. A. B. Jaiswal	Image Denoising using Adaptive Filter	Individual
18	2015-16	Prof. H. K. Wagh	Effect Of Thickness and Helix Distance/ Height of Helical Spring Locked Washers in the Evaluation of Loosening Performance of Bolted Joints.	Individual
19	2015-16	Prof. T. M. Pattewar	Residential Monitoring of Telemedicine System Based on Embedded Computer	Individual
20	2015-16	Prof. S. N. Patil	An Algorithm for Hearing Aid	Individual
21	2015-16	Prof. V. D. Punjabi	An Alternative Approach to Remove Impulse Noise from Digital Images to Reduce Execution Time	Individual
22	2015-16	Prof. H. R. Kumavat	Condition Assessment of Concrete with Non-Destructive Testing	Individual
23	2014-15	Prof. N. N. Patil	Development of Robust Watermarking Techniques for Devanagari Text	Individual
24	2014-15	Prof. R.B. Wagh	New Web Personalization Techniques to Improve Browsing Experience	Individual
25	2014-15	Prof. S.R. Sonawane	Self-Configuring Intrusion Detection System	Individual
26	2014-15	Prof. P.S. Sanjekar	Personal Authentication based on multimodal biometrics	Individual

27	2014-15	Prof. P.D. Saraf	Modified SPIHT Algorithm for Hardware Implementation	Individual
28	2014-15	Prof K. H. Sonawane	Algorithm for Minimizing No. of Hops and Wavelengths in WDM Network	Individual
29	2014-15	Prof S. A. Patil	Local Binary Pattern based Face Recognition System for Automotive Security	Individual
30	2014-15	Prof P. M. Goad	Loss Propagation Model in Heterogeneous Media	Individual
31	2014-15	Prof P. R. Bhole	Banana Plantation Disease detection using Image Processing	Individual
32	2014-15	Prof N. L. Lokhande	Identification of speaker	Individual
33	2014-15	Prof. N. P. Salunke	Experimental analysis of rectangular fin array and development of Neural network mode for prediction of H.T. Coefficient.	Individual
34	2014-15	Prof. P. L. Sarode	Experimental Analysis of Evaporative Cooling wall for Different Cross Section Profile.	Individual
35	2014-15	Prof. P L Sarode	Fabrication and Calibration of Five hole Pressure Probe	Individual
36	2014-15	Prof. K. A. Saner	To Analysis the Varying Fin shapes for Microprocessor Cooling.	Individual
37	2014-15	Prof. S. V. Yeole	Solar Water Heater with Absorber Plate Having Concavities and Concentrating Collector	Individual
38	2014-15	Prof. D. R. Patil	Malicious Website Detection	Individual
39	2014-15	Prof. B. P. Patil	Discrimination of internal fault from Magnetizing in rush current in Transformer	Individual
40	2014-15	Prof. N. G Haswani	To Design and Develop Wireless System for Sewage / Drainage Congestion System	Individual
41	2014-15	Prof. N. P. Salunke, Prof. K. A. Saner	Design and Experimental Analysis of a CDA Compressor Cascade for Gas turbine.	Collaborativ e
42	2014-15	Prof. Mrs. S A Patil	Local Binary pattern based face recognition system	Individual

Table 3.4 Details of PhD	Research	Projects
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S N	Year	Name of faculty	Title of Research Project	Completed Ongoing
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1	2016-17	Prof. Mrs. A.A. Bhandari	Application of variational homotopy perturbation method to non-linear equations arising in stream aquifer interaction problems	Completed
2	2016-17	Prof. P.G. Bhadane	Approximate analytical solution by Laplace transform homotopy perturbation method of some non-linear equations arising in fluid flow through porous media	Completed
3	2016-17	Prof. S.V. Desale	Numerical solution of boundary layer flow equations along a at plate by Keller box method	Completed
4	2016-17	Prof. M. S. Sonawane	Studies on Chemical Synthesis & Characterization of Cobalt Sulphide and Nickel Sulphide Thin Films for Electrochemical Supercapacitor.	Completed
5	2016-17	Prof. T.H.Jaware	Design and Development of classification algorithm for brain MR images of Neonates and premature infants: A soft computing approach.	Completed

Institute has research supervisors for M.E. and Ph.D. programmes. Incentives were given to Ph.D. guides as per the norms. Faculties involved in research supervision are shown in table no.3.5

SN	Name of Faculty	Department	No of PG students	No of Ph.D. students
1	Prof. Dr. J.B.Patil	Computer Engineering	-	7
2	Prof. Dr. P. J.Deore Electronics and Telecommunication		12	6
3	Prof. S.A. More	Electronics and Telecommunication	10	-
4	Prof. Ms. S. A. Patil	Electronics and Telecommunication	11	-
5	Prof. J.B. Jadhav	Electronics and Telecommunication	8	-
6	Prof. N. N. Patil	Computer Engineering	16	-
7	Prof. U. M. Patil	Computer Engineering	9	-
8	Prof. R. B. Wagh	Computer Engineering	13	-
9	Prof. D. R. Patil	Computer Engineering	16	-
10	Prof. T. M. Pattewar	Computer Engineering	12	-
11	Prof. N.P. Salunke	Mechanical Engineering	03	-

Table.3.5. Details of Research Supervisors (ME/ PhD)

12	Prof. P.L. Sarode	Mechanical Engineering	04	-
13	Prof. H.K.Wagh	Mechanical Engineering	02	-
14	Prof. M.R.Patil	Mechanical Engineering	02	-
15	Prof. S.V.Yeole	Mechanical Engineering	02	-

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

Institute regularly conducts / organizes workshops/ training programs/ sensitization programs in order to inculcate research culture among the staff and students as shown in Table no 3.6.

Table.3.6. Workshops/ training programs conducted/organized by the institution

	Academic Year 2012-13			
SN	Title	Resource person/Agency	Audience (Staff and students)	
1	Computational Fluid Dynamics	IIT, Bombay	Staff	
2	Introduction to Research Methodologies	IIT, Bombay	Staff	
3	Aakash for Education	IIT, Bombay	Staff	
4	Engineering Thermodynamics	IIT, Bombay	Staff	
5	Android Application Programming on Aakash 2 Tablet	IIT, Bombay	Students	
6	Industrial Automation	TAACT, Mumbai	Students	
	Academic Year : 20	013-14		
SN	Title	Resource person/Agency	Audience (Staff and students)	
1	Workshop on "Industrial Automation".	TAACT, Nashik	Students	
2	Cloud Computing	Mr. Santosh Selokar	Students	
3	Engineering Mechanics	IIT, Bombay	Staff	
4	Fluid Mechanics	IIT, Bombay Staff		
	Academic Year 20	14-15		
1	Computer Programming	IIT, Bombay	Staff	
2	Computer Networking	IIT, Bombay	Staff	
3	Cyber Security	IIT, Bombay	Staff	
4	Control Systems	IIT, Kharagapur	Staff	
5	Engineering Thermodynamics	IIT, Bombay	Students	
6	"Hybrid Electric Vehicle Design"	Dr. S. A. Channiwala, SVNIT, Surat	Students	

	Dr. S. A.		
Research Methodologies	Channiwala,	Staff	
	SVNIT, Surat		
	Mr. Aditya		
Basics of Machining Technology	Omprakash Jajoo,	Students	
Basies of Machining Technology	Nagesh Engg. Pvt.	Students	
	Ltd. Nasik		
	Dr.V.H.Pradhan,		
Numerical Methods for Engineers	Associate	Students	
Numerical Methods for Engineers	Professor, SVNIT,	and Staff	
	Surat		
Academic Year 20	15-16		
Environmental Studies	IIT, Bombay	Staff	
Engineering Physics	IIT, Bombay	Staff	
Introduction to Structural Engineering	IIT, Kharagapur	Staff	
	Prof. S R Satish		
QEEE COURSE ON "BASIC DESIGN OF	Kumar, IIT,	Students	
STEEL STRUCTURES	Madras		
	Prof. Ashish		
QEEE Course on "Compaction of Soil -	Juneja, IIT,	Students	
Soll Mechanics	Bombay		
QEEE Course on "Electromagnetic		Ctor dansta	
Engineering"	III Madras	Students	
QEEE Course on "Thermodynamics"	Prof. Aravind		
	Attamatta	Students	
	IIT, Madras		
OFFE Course on "Pasies of Design of	Dr. Narasimhan		
Machina Elements"	Swaminathan		
Machine Elements	IIT Madras		
OFFE Course on "Vinemotics of	Prof. Abhijit		
Machines"	Sarkar,	Students	
Wachines	IIT, Madras		
OFFE Course on "Braking System	Prof. C S Shankar		
Automobile Engineering"	Ram,	Students	
Automobile Engineering	IIT Madras		
Academic Year 20	16-17		
QEEE Course on "Maxwell Equations -	Prof. B. K. Das,	G( 1 )	
Electromagnetic Waves"	IIT Madras	Students	
	Prof.		
QEEE Course on "Transformer -	Bhuvaneshwari G,	Students	
Electrical Machines"	IIT Delhi		
QEEE Course on "Stability Analysis -	Prof. Tushar Jain.	<b>G</b> , <b>1</b>	
Control Systems"	IIT Mandi	Students	
QEEE Course on "Classifications of			
Signals and Systems - Introduction to	Dr. Arun Pachai	Students	
Signals and System"	Kannu IIT Madras		
QEEE Course on "Fundamentals of	Dr. Arun Pachai Kannu IIT Madras Students		
Laplace Transform - Engineering			
	Research Methodologies         Basics of Machining Technology         Numerical Methods for Engineers         Academic Year 20         Environmental Studies         Engineering Physics         Introduction to Structural Engineering         QEEE Course on "BASIC DESIGN OF STEEL STRUCTURES"         QEEE Course on "Compaction of Soil - Soil Mechanics"         QEEE Course on "Compaction of Soil - Soil Mechanics"         QEEE Course on "Electromagnetic Engineering"         QEEE Course on "Basics of Design of Machine Elements"         QEEE Course on "Kinematics of Machines"         QEEE Course on "Braking System Automobile Engineering"         QEEE Course on "Maxwell Equations - Electromagnetic Waves"         QEEE Course on "Transformer - Electrical Machines"         QEEE Course on "Stability Analysis - Control Systems"         QEEE Course on "Stability Analysis - Control Systems"         QEEE Course on "Classifications of Signals and System - Introduction to Signals and System"         QEEE Course on "Fundamentals of Laplace Transform - Engineering	Research MethodologiesDr. S. A. Channiwala, SVNIT, SuratBasics of Machining TechnologyMr. Aditya Omprakash Jajoo, Nagesh Engg. Pvt. Ltd. NasikNumerical Methods for EngineersDr. V.H.Pradhan, Associate Professor, SVNIT, SuratNumerical Methods for EngineersDr. V.H.Pradhan, Associate Professor, SVNIT, SuratRegineering PhysicsIIT, BombayIntroduction to Structural EngineeringIIT, BombayIntroduction to Structural EngineeringIIT, KharagapurQEEE Course on "BASIC DESIGN OF STEEL STRUCTURES"Prof. S R Satish Kumar, IIT, MadrasQEEE Course on "Compaction of Soil - Soil Mechanics"Prof. Ashish Juneja, IIT, BombayQEEE Course on "Thermodynamics"IIT MadrasQEEE Course on "Basics of Design of Machine Elements"Dr. Narasimhan Swaminathan IIT, MadrasQEEE Course on "Kinematics of Machines"Prof. C S Shankar Ram, IIT, MadrasQEEE Course on "Braking System Automobile Engineering"Prof. C S Shankar Ram, IIT MadrasQEEE Course on "Transformer - Electromagnetic Waves"Prof. B. K. Das, IIT MadrasQEEE Course on "Transformer - Electroical Machines"Prof. Shavarii G, Biuvaneshwari G, IIT MadrasQEEE Course on "Stability Analysis - Prof. Tushar Jain, IT DelhiProf. Tushar Jain, IT MadrasQEEE Course on "Transformer - Electrical Machines"Prof. Delhuvaneshwari G, IT DelhiQEEE Course on "Stability Analysis - Control Systems"Prof. Tushar Jain, IT MadrasQEEE Course on "Stability Analysis - GProf. Tushar Jain,<	

	Mathematics"			
~	QEEE Course on "Differential	Dr. Hitesh Shrimali	G( 1 )	
0	Amplifiers - Analog Electronic Circuits"	IIT Madras	Students	
_	OEEE Course on "Inverters - Power	Dr. Amit Kumar	~ 1	
1	Electronics"	Jain IIT Madras	Students	
	A workshop on An introduction to	Prof Dr Milan	Staff &	
8	Machine Leaning with R	Ioshi	students	
	OFFE Course on "Applications and	Prof S R Kale	students	
9	Concepts of Thermodynamics "	IT Debradun	Students	
-	OFFE Course on "Applications			
10	Examples and Problem Solving	Prof. S.R. Kale	Students	
10	Approach of Thormodynamics "	IIT Dehradun	Students	
	OFFE Course on "Desig Mashing Table	Dr. Alex Vieneer		
11	QEEE Course on Basic Machine Tools	Dr.Ajay Kumar	Chudomto	
11	and Metal Cutting Principles		Students	
-	Manufacturing Process	III Knaragapur		
10	QEEE Course on Introduction to	Dr. Suman	<b>G</b> . 1	
12	Convection Heat Transfer - Heat	Chakraborty,	Students	
	Transfer"	IIT Gorakhpur		
	OEEE Course on "Gears and Gear	Prof. Abhijit		
13	Trains Kinematics of Machines "	Sarkar,	Students	
		IIT, Madras		
	QEEE Course on "Shear Force and	Prof. Nirjhar		
14	Bending Moment Diagrams - Strength	Dhang, IIT,	Students	
	of Materials"	Kharagapur		
	QEEE Course on "Fundamental	Dr.Suman		
15	Concepts in Fluid	Chakraborty, IIT,	Students	
	Dynamics"	Kharagapur		
	OFFE Course on "Sheer Strength of	Dr.Suman		
16	QEEE Course on Shear Strength of	Chakraborty, IIT,	Students	
	Sons -Geolechnical Engineering	Kharagapur		
	OFFE Commence Alignment lighting 8	Prof. Shiv		
17	QEEE Course on Air pollution &	Nagendra IIT,	Students	
	Control Engineering"	Bombay		
10	OEEE Course on Highway Geometric	Prof. Aviiit Maii.	G. 1 .	
18	Design"	IIT. Bombay	Students	
		Prof. Radhakrishna		
19	QEEE Course on Durability of	G Pillai IIT	Students	
17	Concrete"	Bombay	Stadents	
	OFFE Course on "Input & Output	Prof Rupesh		
20	Streams-Interfaces Package	Nasare IIT	Students	
20	Collections & Vectors File-OOPS"	Rombay	Students	
	OFFE Course on "Linear Data	Dr. Supratim		
21	Structures & Application Data	<u>Di. Supraum</u> Biewas	Students	
<i>4</i> 1	Structures & Algorithms"	UT Bombay		
	OEEE Course on "Cloud Technology	Dr. S.C.Curto		
22	QEEL Course on Cloud Technology	UT. S C Gupta	Students	
	OFFE Community "Decision of the second computing"	Dr. Grannet		
23	QEEE Course on Pointers:	Dr. Supratim	Students	
-	Programming in C and Data Structures"	Biswas,		

		IIT Bombay		
24	QEEE Course on "Routing Algorithm-	Dr. Niloy Ganguly	Students	
	Computer Networks"	IIT Kharagapur		
25	QEEE Course on "Software Process And	Dr. Rajib Mall	Studente	
25	Management-Software Engineering"	IIT Kharagapur	Students	

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

Intentions of the Institute are to promote research culture among the Teachers and students. Following are the Faculties who were doing research in their Respective domain as given in Table no 3.7

S N	Specialized Research Area	Name of Faulty	
1	Image Processing	<ul> <li>Prof. Dr. J.B. Patil, Prof. Dr. P. J. Deore, Prof. P.</li> <li>R. Bhole, Prof. S.A. More, Prof. V.S. Patil, Prof.</li> <li>S.A. Patil, Prof. M.B. Barawarkar, Prof. S. D.</li> <li>Patil, Prof. T.H. Jaware, Prof. R.D. Badgujar, Prof.</li> <li>V.R. Patil Prof. P. S. Sanjekar Prof. H.N.Randhir</li> <li>Prof. M.S. Ishi Prof. V. D. Punjabi</li> </ul>	
2	Antenna and Filters	Prof. J. B. Jadhav	
3	Signal Processing	Prof. P. G. Patil, Prof. A. B. Jaiswal, Prof. M. B. Dembrani	
4	Communication Engineering	Prof. M. L. Patel, Prof. A. H.Khadake, Prof. S.C. Nahatkar	
5	VLSI	Prof. N. L. Lokhande, Prof. J. P. Patil, Prof. K. H. Sonawane	
6	Information hiding and Security	Prof. Nitin N. Patil	
7	Data Mining and Web Mining	Prof. U. M. Patil, Prof. T.M.Pattewar	
8	Web Security	Prof. D.R.Patil	
9	Semantic Web Mining, Ontology	Prof. Ms.V.M.Patil	
10	Web Personalization Recommendation System	Prof. R. B. Wagh	
11	Network Security	Prof. S.M.Pardeshi Prof. V. D. Punjabi	
12	Artificial Intelligence, Image Processing	Prof. S. N. Patil	
13	Computer Network and Communication	Prof. P.R.Patil	
14	Thermal Engineering	Prof. N.P.Salunke, Prof. M.R. Patil Prof. Y.R. Pathak	
15	Design Engineering	Prof. P.L.Sarode, Prof. K A Saner	

Table.3.7 Prioritized Research Areas and the Expertise

16	CAD/ CAM & FEA	Prof. S. V.Yeole Prof.H.K.Wagh
17	Concrete Technology, Alternative Construction Materials	Prof. D. S. Lal
18	Non Destructive Test on concrete Structures	Prof. H.R.Kumawat
19	Physics	Prof. S.P. Shukla, Prof. M.S. Sonawane, Prof. P.V. Baviskar
20	Chemistry	Prof. V.K.Suryawanshi, Prof. K.E. Suryawanshi, Prof. K.A. Isai, Prof. P.N. Patil
21	Mathematics	Prof. P.G. Bhadane, Prof. Mrs. A.A. Bhandari, Prof. S.V. Desale, Prof. H S Jagatap.

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

Inspirational interactions, with eminent scientists from various institutes, instills a strong desire in the faculty members and students to pursue research which leads to enhanced teaching-learning process and research culture. Scientists from S.V.N.I.T. like Profs. Dr. H.B. Naik, Dr. Purnanand V. Bhale Dr. V.H. Pradhan Dr. S. A. Channiwala visit RCPIT in last five years in different occasions to interact with faculty and Students. Dr. B. M. Patre from S.G.G.S. Nanded addressed faculty over Scilab and its application to global optimization and differential equations. Dr. Ulhas Shiurkar, Principal, Deogiri COE, Aurangabad holds meetings with faculty to advise them on research projects to be taken up through Rajiv Gandhi Science and Technology Commission (RGSTC), Government of Maharashtra and other funding agencies. Dr. Pradip Waychal sir guides faculty and students on research methodology through interdisciplinary projects. B. Satyanarayana, Scientific Officer (G), Dept. of High Energy Physics, Tata Institute of Fundamental Research. He not only provides guidance to the institute in developing Research and Academic Culture through policy decisions taken at the Governing Body but also Interacts with teachers and students. Institute allocates special funds for these activities. All HOD's are in touch with reputed institutions, imminent scientists and personalities to invite them to the Institute.

**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?** Policy is in places but no faculty has availed sabbatical leave yet.

**3.1.10** Provide details of the initiatives taken up by the institution in creating awareness /advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to

#### land)

Labs of the college as well as the workshop facilities are available to the students where they can complete the work related to their projects. Some of the students' research projects have been implemented in the college, for example-

- 1. "Students' Feedback for Quality Evaluation of Technical Teaching" was successfully developed by final year Information Technology students. The system was successfully deployed in the campus in the year 2011-12 and is functioning properly till date. In this project, a set of fourteen multiple choice questions covering various aspects of teaching and evaluation methods were designed to obtain feedback from the students of different branches of engineering. The feedback was taken during the mid and end of every semester. The performance of the teacher was graded as excellent, good or satisfactory depending on the student's evaluation.
- 2. "SMS based wireless Electronic Notice board using LEDs" was successfully developed by final year Electronics and Communication students. The system was successfully deployed in the Electronics and Communication Department in the year 2011-12 and is functioning properly till date. GSM based wireless Electronic notice board will display the message which is sent by user. Wireless message board is used to display informative messages, notice, or any announcements. These messages can be changed by sending SMS from mobile.
- 3. "Automatic Opening and Closing of College Main Gate" was successfully developed by final year mechanical engineering students. The system is successfully mounted in the year 2013-14 to operate the sliding main gate automatically of the institute.
- 4. "Automatic shutter operating system" was successfully developed by final year mechanical engineering students. The system is successfully mounted in the year 2014-15 to operate the shutter of the workshop of the institute.
- 5. "Design and fabrication of mixer for sand and bentonoit clay mixing" was successfully developed by third year mechanical engineering students. The system is successfully mounted in the year 2015-16 for sand mixing in the workshop of the institute.
- 6. "Electric Furnace with Tilting Mechanism" was successfully developed by final year mechanical engineering students. The system is successfully mounted in the year 2015-16 for heat treatment in the workshop of the institute.
- 7. "Result Analyzer" was successfully developed by final year Computer Engineering students. The project was successfully used in the campus in the year 2017 for result analysis of May 2017 University exam. It is observed that it working successfully. It reduces time which required for manual calculation. This system helps to calculate result fast so it optimizes the manpower.
- 8. "Weather Information Display" was successfully developed by final year

Electronics and Communication students. The system was successfully deployed in the Electronics and Communication Department in the year 2017 and is functioning properly till date. This project work is to develop display which shows present humidity level and temperature, which can be install at public places.

- 9. "Solar based mobile charger" was successfully developed by final year Electronics and Communication students. The system was successfully deployed in the Electronics and Communication Department in the year 2017 and is functioning properly till date. This system is used for charging purposes of mobile.
- 10. "BMI Calculator using Arduino" was successfully developed by final year Electronics and Communication students. The system was successfully deployed in the Electronics and Communication Department in the year 2017 and is functioning properly. The aim of the project was to design Arduino based automated Body Mass Index (BMI) calculator with LCD display, which calculates the body mass index using the two basic parameters that are weight and height. The hardware of the project consists of a weighing mechanism i.e. weighing machine, which is used to calculate the body weight of a person, and a height sensing mechanism (using ultrasonic sensors).
- 11. Students from RCPIT participate 'Transform Maharashtra' competition which is organized by Government of Maharashtra. 'Transform Maharashtra' provides an opportunity to college students in Maharashtra to put their heads together and come up with policy and/or program level solutions to 11 critical challenges being faced by the State at present. These solutions should be implementable by the Government. The top team in each of the themes, chosen based on judges' criteria had to present their solution to the Leadership of the State. The Institute recorded second highest participation from Maharashtra state 38 teams from our institute has selected in 'Transform Maharashtra' competition. 18 teams are selected in top 10 rank under popular choice and 4 teams are selected in top 10 rank under judge's choice. All the selected students in Top 10 rank has got cash prize of Rs. 3, 04,000 in total and got a chance to present their ideas in front of Hon. Devendra Fadnavis (Chief Minister of Maharashtra) on 1st May2017 at Mumbai. Overall 61 teams from our institute were submitted their ideas in Transform Maharashtra under 11 different themes. RCPIT stood at 2nd rank in terms of participation.

#### **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.

Out of the total budget of the institute, approximately 2.74 %, is earmarked for research related activities. As shown in Table no 3.8.a. This budget is allocated for major heads like consumable expenses, Research Center, Laboratory Expenses, Library journals, Reference Books, E-resources, E-journals, Faculty Development Program, Software's, lab Infrastructure, filing patents and Project Learning Center.

Year	Total budget earmarked for research (%)
2014-15	3.11%
2015-16	3.27%
2016-17	1.84%

Table.3.8.a. Total budget earmarked for research in Percentage

# **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, seed money has been availed to the faculty. Institute has a provision for providing the seed money of Rs.50, 000 per faculty up to fifty faculty to promote the research activities. Total 0.05% amount of total budget since last four years is disbursed for completion of research project. And approximately 2% faculty has availed this facility in the last four years.

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

Yes, the institute has made financial provisions for students minor and major projects. The institution provides the facilities to the students to design, develop, analyze and manufacturing their project at our institute level and also provide the material or spare required for the project. The institute also provide platform for the students by organizing the technical symposium or converges, participation of students in M-Baja, E-Baja, e-Yantra competition every years to express their innovative idea's through their practical exposure. By providing financial assistance.

# **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.

In order to develop interest in interdisciplinary projects institute arranges a

common workshop comprising students and faculties from all departments, to discuss their idea regarding interdisciplinary projects .Within this some of the project were identified for further work. The institute also encourage faculties for the guidance of interdisciplinary project targeted through the various competitions or events like Converges, Supra-SAE, Supra-Baja, Robo-war, Robo-race, KPIT Sparkle etc. The institute encourages the students for the interdisciplinary projects. Following are some of the distinct projects.

- 1. Electric Vehicle E-BAJA- Electrical, Mechanical, E & Tc, Computer Engineering.
- 2. Solar bicycle Electrical & Mechanical Engineering winner of KPIT/Sparkle
- 3. Robo for high power transmission lines- Electrical & Mechanical Engineering winner of KPIT/Sparkle

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

- Institute permits use all laboratories, research facilities and workshop for extended hours for staff and students.
- Students of E-Baja and M-Baja, KPIT Sparkle, e-Yantra uses CAD/CAM laboratory and workshop facilities for extended hours for their work.
- Undergraduate students during their minor and major projects utilizes institute laboratories (e.g. central computer laboratory, project laboratory, CAD/CAM laboratory) and workshop facilities for extended hours.
- The institute encourages to carry out the research work in the institute laboratories to the faculty and to motivate the maximum utilization of laboratory facilities.
- Institution has recognized Research Centers for E &Tc and Computer Department.
- Institute have a research committee which always help to identify the Govt. grants for faculty research projects and encourage faculties for the research.

# **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, Institute received special grants from ministry of human resource and development (MHRD) for e-Yantra Robotics lab in association of IIT Bombay. For setting up of Robotics lab at our institute with the goal of spreading embedded systems and Robotics educations among the students and faculty. Our institute also invested Rs. 3.41 lakh for the development of Robotics lab.

S N	Beneficiary Agency	Title of Project	Grant Receive d in Rs	Facilities Developed (List of Equipment)
1	AICTE- MODROBS	Development of IC Engine lab	950000	Variable Compression Ratio (VCR) diesel/multi- fuel engine set up.
2	RGSTC	Design and experimental analysis of a CDA Compressor cascade for Gas turbine	475000	Wind Tunnel set up
3	VCRMS	Experimental analysis of Evaporative cooling wall for different cross section profile	70000	Temperature Sensors, Evaporative Rods ( Circular and Elliptical)
4	VCRMS	Experimental analysis for rectangular fin array and development of Neural Network model for prediction of heat transfer coefficient	70000	Temperature Sensors, Rectangular fin array
5	VCRMS	Discrimination of Interturn Fault from Magnetizing in rush current in transformer	70000	Digital Oscilloscope 4-CH, 70 MHz
6	VCRMS	Condition assessment of concrete with Non Destructive Testing	70000	Rebound Hammer
7	VCRMS	New Web Personalization Technique to improve Browsing Experience	35000	Books and Journals
8	VCRMS	Personal Authentication based on multimodal biometrics	60000	Books and Journals
9	VCRMS	Self-Configuring Intrusion Detection system	26000	Books and Journals
10	VCRMS	Modified SPIHT Algorithm for hardware implementation	55000	Books and Journals
11	VCRMS	An Intelligent system for Exploration of Web User Behavior	62000	Minitab Tool
12	VCRMS	Use Behavior Information from the	18000	Books and Journals

Table 3.8.b. List of equipment's/facilities created by special grants.

		Free Log		
13	VCRMS	Implementation of modified technique for Web Document Protection Using	24000	Books and Journals
14	VCRMS	Unicode Web Documents Authorship Protection by using English Language	40000	Books and Journals
15	VCRMS	Implementation of modified Recommendation system using Machine Learning	40000	Books and Journals
16	VCRMS	Malicious Websites Detection	68567	Books and Journals
17	VCRMS	Residential Monitoring of Telemedicine System Based on Embedded Computer	50000	ALPS KIT
18	VCRMS	Algorithm for Hearing Aid	67000	CAM2 software, books
19	VCRMS	Local Binary pattern based Face Recognition System Automotive Security	70000	Digital Camera-1 Sony Alpha A58Y,CCTV Camera and Books
20	VCRMS	Algorithm for Minimizing No. of Hops and Wavelengths in WDM Network	60000	Books
21	VCRMS	Development of Novel, Economic Embedded System using Cypress PSoC board	70000	Cypress PSoC kit and miscellaneous components
22	VCRMS	Handwritten Devanagari Character Recognition	43000	Books
23	VCRMS	Offline Fingerprint Recognition System	41000	Books
24	VCRMS	Loss propagation model in Heterogeneous Media	45000	Multi-field EMF Meter and books
25	IIT, Bombay	Two Week Workshop on Basic Electronics	375000	CPLD Simulation Kits Total-25 nos.

S N	Year	Department	Name of faculty (Chief Consultant)	Client Organization	Amount received (In Rs.)
1	2016-17	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	8540
2	2016-17	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	54780
3	2016-17	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	29200
4	2016-17	Computer Engineering	Prof. N. N. Patil	Aptech Limited, Mumbai	40000
5	2016-17	Computer Engineering	Prof. N. N. Patil	World Wide ITES, Kolhapur	13500
6	2016-17	Computer Engineering	Prof. N. N. Patil	Aptech Limited, Mumbai	46000
7	2016-17	Computer Engineering	Prof. N. N. Patil	World Wide ITES, Kolhapur	27000
8	2016-17	Computer Engineering	Prof. S .R. Sonawane	RBTE Aurangabad	58225
9	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	76630
10	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	28120
11	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	18760
12	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	8500
13	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	25000
14	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	7720
15	2015-16	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	59800
16	2015-16	Computer Engineering	Prof. S .R. Sonawane	RBTE Aurangabad	91000
17	2014-15	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	6400
18	2014-15	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	48000
19	2014-15	Computer Engineering	Prof. S .R. Sonawane	RBTE Aurangabad	116000
20	2013-14	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	15720
21	2013-14	Computer Engineering	Prof. N. N. Patil	Tata Consultancy Services	45600
22	2013-14	Computer	Prof. N. N. Patil	Tata Consultancy	27048

Table 3.8.c. Fund generated by project works

		Engineering		Services	
23	2013-14	Computer Engineering	Prof. N. N. Patil	RBTE Aurangabad	28000
24	2013-14	Computer Engineering	Prof. N. N. Patil	RBTE Aurangabad	52500
25	2013-14	Computer Engineering	Prof. D.R.Patil	Tata Consultancy Services	30300
26	2013-14	Computer Engineering	Prof. D.R.Patil	Tata Consultancy Services	20360
27	2013-14	Computer Engineering	Prof. D.R.Patil	Tata Consultancy Services	13730
28	2013-14	Computer Engineering	Prof. S .R. Sonawane	RBTE Aurangabad	116000
29	2013-14	Civil Engineering	Prof. H. R. Kumavat	Jamia Institute of Engineering and Management Studies, Akkalkuwa	10200
30	2013-14	Civil Engineering	Prof. R. N. JAIN	Jamia Institute of Engineering and Management Studies, Akkalkuwa	10200
31	2013-14	Civil Engineering	Prof. P. S. PATIL	Jamia Institute of Engineering and Management Studies, Akkalkuwa	12800
32	2016-17	E&TC Engineering	Prof. M. B. Dembrani & Prof. Miss S. A. Patil	Ahinsa Polytechnic, Dondaicha, Dist- Dhule	0
33	2015-16	E&TC Engineering	Prof. N. L. Lokhande	Vasantrao More Polytechnic College, Parola, Dist-Jalgaon	0
34	2015-16	E&TC Engineering	Prof. Miss S. C. Nahatkar & K. H. Sonawane	Vasantrao More Polytechnic College, Parola, Dist-Jalgaon	0
35	2015-16	E&TC Engineering	Prof. P. R. Bhole & Prof. A. H. Khadke	Vasantrao More Polytechnic College, Parola, Dist-Jalgaon	0
36	2013-14	E&TC Engineering	Prof. Miss S. C. Nahatkar	Jamia Institute of Engineering & Management Studies,	0

				Akkalkuwa	
37	2013-14	E&TC Engineering	Prof. Miss S. C. Nahatkar	Jamia Institute of Engineering & Management Studies, Akkalkuwa	0
38	2015-16	Mechanical Engineering	Prof. H. K. Wagh	Ahimsa polytechnic, Dondaicha	11800
39	2015-16	Mechanical Engineering	Prof. B. Y. Patil	Vasantrao More Polytechnic, Tehu, Parola	19600
40	2015-16	Mechanical Engineering	Prof. P. L. Sarode	Lauria Lastituta of	25600
41	2015-16	Mechanical Engineering	Prof. M. R. Patil	Engineering and	12800
42	2015-16	Mechanical Engineering	Prof. H.K. Wagh	Studies,	14000
43	2015-16	Mechanical Engineering	Prof. Juned A. R.	Аккаїкиша	2400
44	2015-16	Mechanical Engineering	Prof. A. H. Kumbhar	R C Patel Institute	318500
45	2015-16	Mechanical Engineering	Prof. V. M. Patil	Shirpur	213500
46	2014-15	Mechanical Engineering	Prof. A. H. Kumbhar	Jamia Institute of	12400
47	2014-15	Mechanical Engineering	Prof. P. L. Sarode	Management	24800
48	2014-15	Mechanical Engineering	Prof. Juned A. R.	Akkalkuwa	3600
49	2013-14	Mechanical Engineering	Prof. N. P. Salunke	Ahinsa polytechnic, Dondaicha	20880
			Prof. P. L. Sarode	Jamia Institute of	
50	2013-14	Mechanical Engineering	Prof. S. V. Yeole	Engineering and Management Studies, Akkalkuwa	18000

# **3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.**

Institute encourages research culture among the faculty and students. In order to develop a sustainable and feasible growth. Institute have a research committee which always help to identify the government grants for research projects. Following are the ongoing and completed projects from various funding agencies. Table no 3.9 shows the ongoing and completed research projects.

Project	Title of the Project	Name of Faculty	Name of the Funding agency	Grant in Rs.	Ongoing/ Completed
Major	Design and Experimental Analysis of a CDA Compressor Cascade for Gas turbine.	Prof. N. P. Salunke	RGSTC	475000	Completed
Major	Development of Robust Watermarking Techniques for Devanagari Text	Prof. N. N. Patil	RGSTC	379000	Completed
Minor	New Web Personalization Techniques to Improve Browsing Experience	Prof. R. B. Wagh	VCRMS	70000	Completed
Minor	Self-Configuring Intrusion Detection System	Prof. S. R. Sonawane	VCRMS	47000	Completed
Minor	Personal Authentication based on multimodal biometrics	Prof. Mrs. P. S. Sanjekar	VCRMS	70000	Completed
Minor	Modified SPIHT Algorithm for Hardware Implementation	Prof. Mrs. P. D. Saraf	VCRMS	70000	Completed
Minor	Algorithm for Minimizing No. of Hops and Wavelengths in WDM Network	Prof. K. H. Sonawane	VCRMS	60000	Completed
Minor	Local Binary Pattern based Face Recognition System for Automotive Security	Prof. Mrs. S. A. Patil	VCRMS	70000	Completed
Minor	Loss Propagation Model in Heterogeneous Media	Prof. P. M. Goad	VCRMS	45000	Completed
Major	Banana Plantation Disease Detection Using Image Processing	Prof. P. R. Bhole	UGC	140000	Ongoing
Major	Local Binary Pattern based Face Recognition System for Automotive Security	Prof. Mrs. S. A. Patil	UGC	90000	Ongoing
Major	Identification of speaker	Prof. N. L .Lokhande	UGC	110000	Ongoing

Table 3.9. Ongoing and Completed Projects Academic year 2014-2015

Minor	Experimental Analysis of Rectangular Fin Array and Development of Neural Network Mode for Prediction of H.T. Coefficient.	Prof. N. P. Salunke	VCRMS	70000	Completed
Minor	Experimental analysis of Evaporative cooling wall for different cross section profile.	Prof. P. L. Sarode	VCRMS	70000	Completed
Major	Fabrication and Calibration of Five hole Pressure Probe	Prof. P. L. Sarode	UGC	200000	Ongoing
Major	To Analysis the varying fin shapes for microprocessor cooling.	Prof. K. A. Saner	UGC	270000	Ongoing
Major	Solar water heater with Absorber plate having Concavities and concentrating collector	Prof. S. V. Yeole	UGC	215000	Ongoing
Major	Malicious Website Detection	Prof. D. R. Patil	RGSTC	100000	Ongoing
Minor	Discrimination of interterm fault from Magnetizing in rush current in Transformer	Prof. B. P. Patil	VCRMS	70000	Ongoing

Academic year 2015-2016

Project	Title of the Project	Name of Faculty	Name of the Funding agency	Grant Receive d in Rs.	Ongoing/ Completed
Minor	An Intelligent System for Exploration of Web User Behavior	Prof. Mrs U. M. Patil	VCRM	62000	Ongoing
Minor	User Behavior Information from The Free Log	Prof. S. N. Pardeshi	VCRMS	18000	Ongoing
Minor	Implementation of Modified Technique for Web Document Protection Using Unicode	Prof. R .J. Jaiswal	VCRMS	24000	Ongoing
Minor	MRI Findings of Japanese Encephalitis	Prof. J. P. Patil	VCRMS	58000	Ongoing
Minor	Development of Novel, Economic Embedded System using Cypress PSoC board	Prof. A. H. Khadke	VCRMS	70000	Ongoing

Minor	Handwritten Devanagari Character Recognition	Prof. Mrs. M. B. Barawkar	VCRMS	43000	Ongoing
Minor	Remote Monitoring of Crop Field Using Wireless Sensor Network for Shirpur Town	Prof. B. V. Patil	VCRMS	60000	Ongoing
Minor	Offline Fingerprint Recognition System	Prof. Mrs. S. D. Patil	VCRMS	41000	Ongoing
Minor	Image Denoising Using Adaptive Filter	Prof. A. B. Jayaswal	VCRMS	70000	Ongoing
Minor	Effect of Thickness and helix distance/ height of helical spring locked washers in the evaluation of loosening performance of bolted joints.	Prof. H. K. Wagh	VCRMS	70000	Ongoing
Minor	Residential Monitoring of Telemedicine System Based on Embedded Computer	Prof. T. M. Pattewar	VCRMS	50000	Ongoing
Minor	An algorithm for Hearing Aid	Prof. Mrs. S. N. Patil	VCRMS	69000	Ongoing
Minor	An Alternative Approach to Remove Impulse Noise from Digital Images to Reduce Execution Time	Prof. V. D. Punajbi	VCRMS	24000	Ongoing
Minor	Condition assessment of concrete with Non- Destructive testing	Prof. H. R. Kumavat	VCRMS	70000	Ongoing

#### Academic year 2016-2017

Project	Title of the Project	Name of Faculty	Name of the Funding agency	Grant Receive d in Rs.	Ongoing/ Completed
Minor	Smart ROBO walk with Obstacle Detection using Fire Bird V- Robot.	Prof. S. C. Nahatkar	VCRMS	50000	Ongoing
Minor	Seismic Analysis of Multistoried Building by using ETABS	Prof. M. N. Patil	VCRMS	101000	Ongoing
Minor	Evaluation of condition assessment of concrete with Ultrasonic Pulse Velocity	Prof. R. D. Patil	VCRMS	105000	Ongoing

Minor	Effect of Fitness on Mechanical Properties of Cement Mortar incorporating Pond Ash	Prof. D. S. Lal	VCRMS	113000	Ongoing
Minor	A New approach to secure digital document using visual Cryptography	Prof. H. N. Randhir	VCRMS	48000	Ongoing
Minor	Design and development of Fiber Extraction Machine	Prof. P. D. Jamadar	VCRMS	115000	Ongoing
Minor	WebDocumentsAuthorshipProtection byusingEnglishLanguageGrammarconstructs	Prof. M. N. Mali	VCRMS	40000	Ongoing
Minor	Implementation of a modified Recommendation system using Machine Learning	Prof. M. A. Saiyyad	VCRMS	40000	Ongoing

#### **3.3 Research Facilities**

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

Following facilities are available for students, faculty and research scholars

- Availability of Wi-Fi throughout the campus.
- Internet facility of 155 Mbps is available to students and staff. This facility is also available after college hours too.
- Computing facility with state of the art computers within intranet is available and adequate licensed software is also available.
- Residential facilities (with computer and internet facilities) for research scholars is also available.
- Additional 20 Mbps VPNoBB internet connection on radio link under NMEICT project is also available.
- RCPIT is recognized as one of the nodal remote centers by IIT Bombay where the summer and winter workshops and seminars are broadcasted live through Center for Distance Engineering Education Program (CDEEP) under the initiative of Ministry of Human Resources and Development (MHRD) for faculties, students and research scholars.
- The institute is providing workstations for faculties for their research work.

- RCPIT is also a partner organization with IIT Madras for QEEE program for new and interactive educational experience through distinct learning modules for our students.
- A fully air conditioned seminar hall with a seating capacity of over 125 audience, serves as an excellent hall for seminars, guest lectures, technical paper/project presentations and screening of informative educational movies. Table no 3.10 shows the research facilities available in the institute for students and research scholars within the campus.

Name of Department	Research facilities
Mechanical Engineering CAD CAM Lab	Modeling and Analysis software- CATIA V5R17,UNIGRAPHICS (NX-5),SOLIDEDGE V20,ANSYS-11
Mechanical Engineering I.C.	Variable Compression Ratio (VCR) diesel/multi-fuel
Engine Lab	engine set up.
Mechanical Engineering Turbo Lab	High speed wind tunnel set up.
Computer Engineering	<ol> <li>PCs – HP AIO with latest configuration – 24 quantities connected in LAN with internet facility.</li> <li>Licensed software- System and Application software</li> <li>Printer</li> </ol>
	1. Computing Facilities: MATLAB 2009 Software + Signal Processing Toolbox, Xilinx, IE3D.
Electronics and Telecommunication Engineering	2. Hardwar Facilities: Spectrum analyzer, Microwave Bench, Digital Storage Oscilloscope, Logic Analyzer / Pattern Generator, VLSI Universal programmer kit (5 no.) with CPLD & FPGA daughter boards, PTH, DSP TMS 320 board.
	3. No of Computers 21, Optiplex 380 model software, Tina Pro, PCB123softwares.
Civil Engineering Concrete Technology Lab	Compression Testing Machine (CTM) and
Civil Engineering SOM Lab	Universal Testing Machine (UTM)
Civil Engineering FM Lab	Wind Tunnel set up
Civil Engineering Surveying Lab	Total Station set up
Civil Engineering EE Lab	Spectrometer set up

Table 3.10.Research facilities Available

Licensed Software: Table no 3.11 shows the licensed software available in the Institute department wise for Students and research scholar within the campus Table no 3.11 Available licensed software

Department	Name of the Laboratory	Software Specifications	No. users	
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		CATIA V5 R17	05 Users	
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		ANSYS-11	05 Users	
Mechanical	CADCAM	UNIGRAPHICS(NX-5)	15 Users	
Engineering	CADCAM	SOLIDEDGE V20	20 Users	
		Auto CAD- 2010	15 Users	
		Auto CAD- 2016 (from AICTE)	120 Users	
Electronics and		MATLAB 2009 Software +	20 Llooma	
Telecommunication	Research Lab	Signal Processing Toolbox	20 Users	
Engineering:		Xilinx	Multi-users	
		IE3D	5 Users	
		Tina Pro	5 Users	
		DCD 122	Unlimited	
		FCB 123	users	
Computer Engineering:	Research Lab	Minitab 17 Academic	Single User	

#### Library facilities:

- The Central library is digitalized with SLIM software and is connected with the main server up to the hostel via Wi-Fi network so that students can access OPAC (Online Public Access Catalogue) through the hostel terminals.
- Reprographic facility has also been made available to the students and faculty members. Digitalization of the library has been successfully done.
- The Library is self-sufficient with the entire academic fulfillment and has a sound collection of books, National, International Journals, Educational CDs, and DVDs. Apart from this, the library is having E-Books, E-journals, E-Magazines, IIT Video Lectures (NPTEL).
- The Library has Institutional membership with IIT Bombay and DELNET.
- A separate book compartment is available for the books purchased through the Research Grants.

## **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?

The institutes has aim to improve its infrastructure requirements to facilitate research. Many efforts were been taken by the institute in this direction which are as follows.

- Research committee in IQAC cell makes separate budget allocation every year to enhance the research facilities for procuring advanced equipment in laboratories and to enhance the R&D activities in the emerging areas.
- College motivates faculty to apply for research grants from various government agencies like AICTE/UGC/CSIR etc., under various schemes like MODROBS, Research Promotion Scheme (RPS) mainly to establish research facilities.

- Institute has state-of-art laboratories like Mission10X Learning Centre (MTLC), e-Yantra Embedded Robotics lab in association with Wipro Technologies, Bangalore and IIT Bombay, Mumbai respectively.
- RCPIT is associated with Amrita University for the infrastructural set-up of E-learning and to facilitate the teaching-learning process. By the virtue of this initiative, the institute enables a two way communication between RCPIT and Experts/Alumni

# **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.

Yes, the institute has received special grants under various schemes like MODROBS, Research Promotion Scheme (RPS) mainly to establish research facilities. Table 3.12 shows List of equipment's/facilities created by special grants.

CN	Beneficiary	Title of Project	Grant	Facilities Developed
SIN	Agency	The of Project	in Rs	(List of Equipment)
1	AICTE- MODROBS	Development of IC Engine lab	950000	Variable Compression Ratio (VCR) diesel/multi- fuel engine set up.
2	RGSTC	Design and experimental analysis of a CDA Compressor cascade for Gas turbine	475000	Wind Tunnel set up
3	VCRMS	Experimental analysis of Evaporative cooling wall for different cross section profile	70000	Temperature Sensors, Evaporative Rods ( Circular and Elliptical)
4	VCRMS	Experimental analysis for rectangular fin array and development of Neural Network model for prediction of heat transfer coefficient	70000	Temperature Sensors, Rectangular fin array
5	VCRMS	Discrimination of Interturn Fault from Magnetizing in rush current in transformer	70000	Digital Oscilloscope 4-CH, 70 MHz
6	VCRMS	Condition assessment of concrete with Non Destructive Testing	70000	Rebound Hammer
7	VCRMS	New Web Personalization Technique to improve Browsing Experience	35000	Books and Journals

Table 3.12 List of equipment's/facilities created by special grants.

8	VCRMS	Personal Authentication based on multimodal biometrics	60000	Books and Journals
9	VCRMS	Self-Configuring Intrusion Detection system	26000	Books and Journals
10	VCRMS	Modified SPIHT Algorithm for hardware implementation	55000	Books and Journals
11	VCRMS	An Intelligent system for Exploration of Web User Behavior	62000	Minitab Tool
12	VCRMS	Use Behavior Information from the Free Log	18000	Books and Journals
13	VCRMS	Implementation of modified technique for Web Document Protection Using Unicode	24000	Books and Journals
14	VCRMS	Web Documents Authorship Protection by using English Language Grammar Constructs	40000	Books and Journals
15	VCRMS	Implementation of modified Recommendation system using Machine Learning	40000	Books and Journals
16	VCRMS	Malicious Websites Detection	68567	Books and Journals
17	VCRMS	Residential Monitoring of Telemedicine System Based on Embedded Computer	50000	ALPS KIT
18	VCRMS	Algorithm for Hearing Aid	67000	CAM2 software, books
19	VCRMS	Local Binary pattern based Face Recognition System Automotive Security	70000	Digital Camera-1 Sony Alpha A58Y,CCTV Camera and Books
20	VCRMS	Algorithm for Minimizing No. of Hops and Wavelengths in WDM Network	60000	Books
21	VCRMS	Development of Novel, Economic Embedded System using Cypress PSoC board	70000	Cypress PSoC kit and miscellaneous components
22	VCRMS	Handwritten Devanagari Character Recognition	43000	Books
23	VCRMS	Offline Fingerprint Recognition System	41000	Books
24	VCRMS	Loss propagation model in Heterogeneous Media	45000	Multi-field EMF Meter and books
25	IIT, Bombay	Two Week Workshop on Basic Electronics	375000	CPLD Simulation Kits Total-25 nos.

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

Following are the research facilities made available to the students and research scholars outside the campus/other research laboratories-

- The institute has MOU with IIT Bombay to avail library facility for our students and faculties.
- Also institute has tie up with NMIMS, Shirpur for BOSCH Laboratory for Staff and Students for their research work.
- Residential facilities (with computer and internet facilities) for research scholars are also available.
- Many of our faculties were pursuing Ph.D. from reputed institutes like SVNIT, National Chemical Laboratory (NCL), Universities and these laboratories are also available for research.
- Workshop is also available for the students and research scholars.

## **3.3.5** Provide details of the library/ information resource center or any other facilities available specifically for the researchers?

Students and research scholars have access to many text books, reference books, national and international journals, CD's, videos. Besides many newspapers, magazines, career oriented publications, are also available for students and research scholars in the library. Along with this following facilities are availed.

- Availability of well seating arrangement and computers.
- Reprographic facility has also been made available to the students and faculty members. Digitalization of the library has been successfully done.
- Library also have special compartment for the books purchased through the research grant.
- The Library is self-sufficient with the entire academic fulfillment and has total collection of books of Title-4752 and Volumes-30995, online Journals-3 (Database).
- Apart from this, the library is having 60 National and International Print Journals, 11 Magazines, 1100 Educational CDs, and DVDs, 62 Thesis, NDL and DELNET, E-journals databases, IIT Video Lectures (NPTEL) on 129 subjects.
- The Library has Institutional membership with IIT Bombay and DELNET.

## **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.

Following are the collaborative research facilities developed /created by the research institutes in the college.

- RCPIT is Authorized Mission 10X Technology Learning Center (MTLC) powered by Wipro Technology, Bangalore. As a part of this center, RCPIT College has invested 10 Lakhs and has purchased 20 UTLP (Unified Technology Learning Platform) Kits. Deploying UTLPs to bridge the gap between industry and academia. Those who complete UTLP course successfully will get absorbed by Wipro.
- The college is also encourage the students to participate in e-Yantra Robotics Competition (e-YRC)at IIT Bombay that helps to create the next generation of embedded systems engineers with a practical outlook to help provide practical solutions to some of the real world problems.
- Photovoltaic lab training kit is provided by IIT Bombay for conduction of different research experiments.

#### **3.4 Research Publications and Awards**

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

### a. Patents obtained and filed (process and product)

Institute encourages faculties to do research and file patents as a result of that total three patents has been filed which are as follows.

- Title of Invention "Test rig for testing washers in nut bolt assembly" by Inventors Prof. H K Wagh, RCPIT Shirpur in collaboration with Dr. Girish R. Desale (NCL Pune) Granted Design Patent no. 279123 (Application number 201611001045) on June 3, 2016.
- 2. Title of Invention "Test rig for compressive testing helical spring locked washers" by Inventors Prof. H K Wagh, RCPIT Shirpur in collaboration with Dr. Girish R. Desale (NCL Pune) Process Patent Filled (Application number 201611001045) in Dec 2016.
- 3. Title of Invention "Method of ROI extraction for Palmprint" by Inventors Prof. Priti Sanjekar, & Prof. Dr. J.B. Patil, RCPIT Shirpur (Application number 201621044219A) in Dec 2016. Patent Published in Feb 2017

#### b. Original research contributing to product improvement

Research activities have been carried out and research papers have been published that lead to product improvement.

1. "An overview of Multimodal Biometrics" authors Prof. Priti Sanjekar, & Prof. Dr. J B Patil, This paper presents an overview of multimodal biometrics. This includes the block diagram of general multimodal biometrics, modules of multimodal biometric system, different levels of fusion in multimodal biometrics and related work is also covered in this paper. The paper is published in Signal & Image Processing: An International Journal in 2013.

- 2. "Performance Analysis of a Novel Text Watermarking Technique for Devanagari Text" authors Prof. Nitin N Patil, & Prof. Dr. J B Patil, This paper presents extended work of previously implemented Marathi language text watermarking technique. Here we test for performance analysis of the proposed technique. We further investigate this technique against different possible text watermarking attacks using standard corpus of varying lengths. Our aim is to verify whether the technique predominates the essential properties of typical text watermarking system. The constructive experimental outcomes confirm the effectiveness and the robustness of the proposed technique. The paper is presented in 2017 & published in Proceeding of International Conference on Intelligent Communication, Control and Devices by Springer Singapore.
- 3. "Implementation of a Novel Watermarking Technique for Devanagari Text" authors Prof. Nitin N Patil & Prof. Dr. J B Patil. The paper is published in 2015 in International Journal of Information and Electronics Engineering. This paper presents extended work of previously implemented Marathi language text watermarking technique. Here we test for performance analysis of the proposed technique. We further investigate this technique against different possible text watermarking attacks using standard corpus of varying lengths. Our aim is to verify whether the technique predominates the essential properties of typical text watermarking system. The constructive experimental outcomes confirm the effectiveness and the robustness of the proposed technique.
- 4. Final year electrical engineering students have developed solar power bicycle which runs on electric power generated by solar plate mounted on it. Along with a gear system. This project was shortlisted in KPIT Sparkle award for best project as a move towards Green Technology,
- c. Research studies or surveys benefiting the community or improving the services
- 1. R C Patel Institute of Technology is situated at Shirpur, Dist- Dhule which has 48% tribal population as against the national average of 8%. That results in poor literacy of 64%. Our parent body Shirpur Education Society is, striving hard to serve weaker section of society. The college was established in 2001 and spent a decade in developing a stable institution. Having done that from 2012, we have taken a structured project to serve the deprived population to enhance the diversity. We formed an apex team of a few senior faculty, which interacted with various constituents such as alumni, employers of our students, social and political leaders of the area, and a sample tribal people to understand problems and to seek possible suggestions. Broadly, we spent a decade in establishing financial viability, academic credibility and in a step-by-step manner started supporting

students financially, cognitively, academically and professionally. As a result of that, prior to 2012, we had 7% tribal students and 18% girl students and in 2016 the numbers were 21% and 27%, respectively. Their passing percentage also increased from 34% and 54% prior to 2012, to 74% and 79%, for tribal and girl students, respectively.







R. C. Patel Institute of Technology, Shirpur is among 11 shortlisted institutes across the world for 5th Global Engineering Dean Council (GEDC) Airbus Award for Diversity in Engineering Education. This is the recognition of RCPIT on global platform for increasing enrolment of girl students and tribal students and also for making them successful and employable in Engineering Education. Three inspiring finalists will be invited to the GEDC Annual Conference in Niagara Falls, Canada from 10th to 13th October 2017 to present their work to the conference delegates and to a distinguished Jury. Along with the global visibility the award offers, the winning project will receive 10,000 USD to support further work in this field.

- 2. Our team of students prepared a survey of mother and child health care in and around Shirpur Taluka and come up with an eight point action plan to counter the health issues. Based on this study students participated at IIT Bombay organized annual TECHFEST and won third prize in Dec 2016. The theme of the competition is Empowerment & Development of Rural Women.
- 3. Final year Electronics and Communication students successfully developed "Weather Information Display" This project work is to develop display which shows present humidity level and temperature. Which can be installed at public places.
- 4. Students from Electrical Engineering department developed a robot for Power Transmission Line Inspection. This project got Gold prize with a cash prize of Rs 5, 00,000 (Five Lakh) at KPIT Sparkle 2017 competition. This is a national level competition where students participate to present an inspiring idea.

#### d. Research inputs contributing to new initiatives and social development

1. Institute encourage students to contribute in developing new things and show case their knowledge for new initiatives. Students form RCPIT participate in BAJA competitions. The BAJA SAE Series is an event for the undergraduate engineering students, organized globally by the Society of Automotive Engineers, USA. The BAJA SAE tasks the students to design, fabricate and validate a four wheel off road vehicle to take part in series of events spread over a course of 3 days. In 2015 Virtual BAJA merit list, Team ASSASINS from the Institute, participating for the first time, ranked 60<sup>th</sup> among 400 teams participating from all over the country. It was also the only team from North Maharashtra University to qualify for main event. In the main event, the team secured 68<sup>th</sup> rank among the 152 teams present. At the 2016 Main event of BAJA, our Institute secured 9<sup>th</sup> rank in E-BAJA among the 35 finalists and 68<sup>th</sup> rank among the 150 finalists in M-BAJA.

- 2. Students form RCPIT participate 'Transform Maharashtra' competition which is organized by Government of Maharashtra. 'Transform Maharashtra' provides an opportunity to college students in Maharashtra to put their heads together and come up with policy and/or program level solutions to 11 critical challenges being faced by the State at present. These solutions should be implementable by the Government. The top team in each of the themes, chosen based on judges' criteria had to present their solution to the Leadership of the State. The Institute recorded second highest participation from Maharashtra state 38 teams from our institute has selected in 'Transform Maharashtra' competition. 18 teams are selected in top 10 rank under popular choice and 4 teams are selected in top 10 rank under judge's choice. All the selected students in Top 10 rank has got cash prize of Rs. 3, 04,000 in total and got a chance to present their ideas in front of Hon. Devendra Fadnavis (Chief Minister of Maharashtra) on 1st May2017 at Mumbai. Overall 61 teams from our institute were submitted their ideas in Transform Maharashtra under 11 different themes. RCPIT stood at 2nd rank in terms of participation.
- **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?

Institute publishes "Scientific Treasure" - a book of compilation of Journal papers published by faculty during each academic year for internal circulation.

#### **3.4.3** Details of publications by the faculty and students:

#### a. Publication per faculty:

Table no 3.13 Number of publication per faculty in both National & International Journal

SN	Year	No. of Faculty in Institute	No. of papers published in both National & International Journal	Publication per faculty
1	2013-14	29	74	2.551
2	2014-15	32	102	3.118
3	2015-16	36	106	2.944
4	2016-17	40	61	1.525

The fall in number of papers published in last year can be attributed to shift in Research promotion policy. Now Faculty has to choose peer reviewed journals listed in international database of repute for their publications.

**b.** Number of papers published by faculty and students in peer reviewed journals (national / international)

Institute encourages faculties to do research and publish papers in reputed journals in accordance with Research promotion policy of the Institute. Institute has a strict policy to check plagiarism in publication so that no malpractice in research should occur. Plagiarism is examined through open access plagiarism software. Table no.3.14 shows number of papers published by faculty in Journal

CN	Year	Number of papers published by faculty in Journal		
210		National	International	
1	2013-14	0	74	
2	2014-15	01	101	
3	2015-16	0	106	
4	2016-17	01	60	

Table no.3.14 Number of papers published by faculty in Journals

Table no.3.15 shows the number of papers published by student in Conference and Journal

Table no.3.15 Number	of	papers	published by	/ faculty	y in	Journals
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		Number of papers	Number of papers	
SN Year		presented by Students	published by Students	
		in Conference	in Journal	
1	2013-14	54	16	
2	2014-15	39	32	
3	2015-16	23	44	
4	2016-17	12	19	

106

60

c. 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.)

Number of papers listed on Google Scholar SN Year National International 1 2013-14 0 74 2 01 101 2014-15

 Table no.3.16
 Number of papers listed on Google Scholar

Monographs : Nil d.

2015-16

2016-17

3

4

Chapter in Books : One (Springer International Publishing, Springer e. Series in Bio-/Neuroinformatics)

0

01

- f. **Books Edited :** Nil
- g. Books with ISBN/ISSN numbers with details of publishers : 74 Table no. 3.17 shows the Books published

SN	Year	Number of books published with ISSN
1	2013-14	6
2	2014-15	3
3	2015-16	21
4	2016-17	44

Table no. 3.17 Books published by faculties

#### h. Citation Index :

Table no.3.18 No. of citations in a year

SN	Year	No. of citations in a year
1	2013	78
2	2014	215
3	2015	214
4	2016	279
5	2017	116

- i. **SNIP** : Nil
- j. SJR : Nil
- k. Impact factor :

Table no.3.19 Average Impact factor

SN	Year	Average Impact factor
1	2013-14	1.8224
2	2014-15	1.0431
3	2015-16	2.3264
4	2016-17	2.118

#### l. h-index :

No. of faculty in No. of faculty in SN Year Institute with h Institute with h Average h index index 10 index 2013 1 1.1667 18 5 2 2014 29 12 1.0690 37 3 2015 1.1892 15 2016 1.1842 38 4 15 5 2017 1.18 64 18

Table no. 3.20 shows the average h index

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

#### a. Research awards received by the faculty

Many of our faculties regularly participates in AVISHKAR competition, conducted by North Maharashtra University, Jalgaon every year. 58 no of faculties have participated in this competition and 02 no of participants get awarded within last four years.

#### b. Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

- 1. Eight participants from the Institute were recognized as Associate Faculty for IIT Bombay's future FDP program. IIT Bombay organized a four Week FDP on "Use of ICT in Education for Online and Blended Learning" under the Teach 10000 Teachers (T10KT) project. Out of 2200 participants who qualified for certification, eight participants from the Institute were among the 383 Top Performers. They had an opportunity to participate in 24th International Conference on Computers in Education, ICCE 2016 organized by Asia Pacific Society for Computers in Education and IEEE Conference on Technology for Education 74E.
- 2. Thirty four (34) faculties have been recognized as reviewer for reputed journals.
- c. Incentives given to faculty for receiving state, national and international recognitions for research contributions.
  - 1. Institute has policy regarding "Promotional incentives based on the API scored" for promotion in research. Through this policy teacher scoring API in outstanding category he/she shall be awarded with
  - a. Special Award-I Cash Prize of fifty thousand or Sponsoring for the conference with full registration fees and Travel expenses international
  - b. Special Award-II For the teacher securing API score in outstanding category and eligible for special award-I for three years in a slot of five years, he/she shall be awarded with Special award-II (Incentive of the one increment and one year benefit may be given to such teacher for the promotion to higher post).

2.Institute has also implemented policy for financial assistance for attending National/ International Conference/Workshop/Seminar once during an academic year per faculty to promote research attitude among the faculty.

#### **3.5 Consultancy**

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

- Industry-Institute interaction has been established by institution. One faculty member from each department is a member of this cell.
- The experts from various industries are invited by institute for delivering lectures on actual project exposure to students and empower them.
- Apart from academics, industrial visit has been planned for students to give them brief experience of actual industrial floor work.
- Institute also have many tie ups with industries for placement, student support, staff support.

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

- Yes, the institution has significant policy to promote consultancy first by Appreciation, second promoting the faculty and third incentives to the faculty.
- Institute also publicizes the expertise and facilities available for consultancy services through website and letters to nearby industries.
- The professional and academic exposure to the staff get boost from consultancy
- It bridges the gap between institute and external organization
- Due to direct linkage between institute and external organization students may get opportunities to get absorbed in different position of external organization

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

- Institute encourages the staff to utilize their knowledge by organizing consultancy services. Also in the institutions Academic Performance Indicator (API) form grades are assigned for consultancy work.
- Institute has a distributing policy for funds transfer (Incentives) among the staffs and college which received from consultancy.

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

Institution renders consultancy services to industries and academic institutes Government / Non- Government organizations/ community/ public and financial resources are generated through consultancy services for institution. Table no 3.21 (a) shows the major consultancy services provided by the institution and the revenue generated during the last four years by the faculty.

S N	Year	Department	Name of faculty	Client Organization	Amount receive d (in Rs.)
1	2016-17	Civil Engineering		Shirpur Construction Pvt Ltd.	27000
2	2016-17	Civil Engineering		Shirpur Construction Pvt Ltd.	23850
3	2016-17	Civil Engineering	Prof. D. S. Lal	Shirpur Warwade Nagar Parishad	2500
4	2016-17	Civil Engineering	Prof. G. V. Tapkire Prof. H. R. Kumavat Warwade Na Parishad Yash Construction Ltd Yash	Shirpur Warwade Nagar Parishad	2500
5	2016-17	Civil Engineering		Yash Construction Pvt Ltd	5000
6	2016-17	Civil Engineering		Yash Construction Pvt Ltd	5000
7	2015-16	Civil Engineering	Prof. D. S. Lal Prof. G. V. Tapkire Prof. H. R. Kumavat	Shirpur Construction Pvt Ltd.	37350
8	2015-16	Civil Engineering	Prof. D. S. Lal Prof. H. R. Kumavat Prof. G. V. Tapkire	Third Party Audit	5000
9	2014-15	Civil Engineering	Prof. D. S. Lal Prof. G. V. Tapkire Prof. H. R. Kumavat	Shirpur Construction Pvt Ltd.	16125
10	2014-15	Civil Engineering	Prof. D. S. Lal Prof. H. R. Kumavat Prof. G. V. Tapkire	Third Party Audit	5000
11	2013-14	Civil Engineering	Prof. D. S. Lal Prof. G. V. Tapkire Prof. H. R. Kumavat	Shirpur Construction Pvt Ltd.	10300
12	2012-13	Civil Engineering	Prof. D. S. Lal Prof. G. V. Tapkire Prof. H. R. Kumavat	Shirpur Construction Pvt Ltd.	14550
13	2012-13	Civil Engineering	Prof. D. S. Lal Prof. H. R. Kumavat Prof. G. V. Tapkire	Third Party Audit	5000

Table .3.21. (a) Major Consultancy Services

## **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?

Mutual benefits accrued due to consultancy both for Institute and for the Industry. The institute has generously shared the income as per this policy shown in table 3.21 (b) share distributed as follows.

		College Machinery is	College Machinery is
SN	Title	Used	not Used
		% Distribution	% Distribution
1	<b>College</b> Contribution	45 %	30 %
2	Principal	7 %	7 %
3	Head of Department	6 %	6 %
4	Staff	37 %	52 %
5	Registrar	1 %	1 %
6	Accounts	1 %	1 %
7	Peon	3 %	3 %
	Total	100 %	100 %

Table 3.21	$(\mathbf{h})$	Share	of	income	as	ner	this	policy	
1 auto	(υ,	) Share	υı	meome	as	per	uns	poney	

This policy has been decided to motivate more faculty members to get involved in consultancy as well as the fund garnered through this policy is utilized for the institutional development.

#### 3.6 Extension Activities and Institutional Social Responsibility

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

- Social responsibility is a duty of every individual citizen and he or she has to perform it so as to maintain a socio- economic balance in the society.
- The vision of our institute is to provide proper environment for development of Social, Emotional, Intellectual and physical quotients of our students.
- The Moral and ethical values of good human being and citizenship are inculcated in our students by value added education by our Teachers and Mentors.
- Departmental students associations like MESA, ESSA, CESSA, CESA and ACIES are actively involved in conducting various activities for overall development of students.
- Students are encouraged to identify the needs of society. And apply the engineering knowledge to solve their problems.
- In order to imbibe different qualities in student our university academic system has special audit points for the extracurricular activities of the student.

#### **Social Awareness Program**

The institute focuses on creating good neighborhood- community network and student engagement among students by arranging visits to nearby villages along with teachers to assess the need of society and to do work for them.

For example field visits were arranged by students and teachers are as follows 1. Our students visited nearby village, Grampanchayat Babhulde, Tal-Shirpur for awareness among villagers for Swine Flu during Swine Flu Jan-Jagruti Abhiyan.

2. Our students participated in Serva Shiksha Abhiyan held at Untawad Tal. Shirpur to create awareness regarding importance of learning among poor children's of the village.

3. Institute also runs a social group formed by students named E-Builder and Rahat. Students from all departments are participated in group activities like offering Grocery, Stationary, Sports equipment's to Tribal children also cloths and grocery items were distributed to the poor people. As shown in figure 3.1. (a) and (b).



Figure 3.1. (a) And (b) Stationary, Sports equipment's to Tribal children

4. Institute annually conducts blood donation camps in association with Government Civil Hospital Dhule, Jeevan Jyoti Blood Bank Dhule, Navjeevan Blood bank Dhule. Total of 1713 blood bags were donated to the different blood bank till date from last four years. Table no 3.22 shows the record of blood donation Camps Held in R.C.Patel Institute of Technology, Shirpur and figure no 3.2 (a) and 3.2 (b) shows pictures of Blood donation Camp.

Year	Blood Units Donated
2013-14	256
2014-15	451
2015-16	556
2016-17	450

Table 3.22. Units of blood donated at RCPIT



Figure no 3.2 (a) and 3.2 (b) Blood donation camp drive at RCPIT.

5. Every year during monsoon, institute conducts tree plantation drive. Over the years, it has made our campus as well as Shirpur city lush and green. Hundreds of tree have been planted in the different regions of the city. As shown in figure no 3.3.(a) and (b).



Figure no 3.3. (a) and (b) Tree Plantation in Hostel Premises

Our students participate in the Swachh Bharat Abhiyan program, As shown in Figure 3.4. (a) and (b).



Figure 3.4. (a) And (b) Glimpse of Swachhta Abhiyan

#### Gandhi Vichar Sanskar Pariksha (GVSP) by Gandhi Research Foundation

It's an exam on Gandhi's Life, Thought and Work. Around 428 students of our institute had participated in this exam. This exam is organized in association with Gandhi Research Foundation, Jalgaon.

#### **Seminar on Personality Development**

Students along with staff members attended seminar on Personality Development by H.G.Shikshashtakam Das Director ISKCON Youth forum, Nasik. During this program students were able to understand how personality of human being is related with the inner consciousness of human being. Figure 3.5. (a) And (b) shows the presentation by H.G.Shikshashtakam Das.



Figure 3.5. (a) And (b) Glimpse of presentation by H.G.Shikshashtakam Das

Students of our institute organized Beti Bachao Abhiyan, Beti Padhao Abhiyan (translation: Save girl child, educate a girl child) is a social campaign of the Government of India that aims to generate awareness and improve the efficiency of welfare services intended for girls fig 3.5 (c) shows glimpse of such event.



Figure 3.5. (c) And (d) Students during Beti Bachao, Beti Padhao program Students from our institute conducted Social Awareness about Hygiene among the pregnant women and children of the rural area. Students also participated in poster presentation program on woman's day.





Figure 3.5. (e) & (f) Students participated poster presentation program on woman's day.

Total 2755 Units of blood bags are donated by our institute to various blood banks of nearby area which are utilized for needy and poor peoples of society. Institute donates its used Desktops to nearby Ashram schools for increase in computer literacy to rural and tribal students.

All these activities help in forming institution-neighborhood community network, and making our students into good and responsible citizens. These activities also helps to develop the leadership and management qualities among the students along with it creates an awareness of social responsibilities.

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

In order to increase students' participation in these social activities, new system of co-curricular and extra-curricular credit based assessment was being introduced in the university curriculum science 2012-13.

As per this system in addition to academics performance each student is also given grades based on his/her participation in extra-curricular and cocurricular activities like technical, cultural, social, sports, project work, internships, attending value added courses etc. This system helps develop employability skills as well as promote good citizenship values among the students.

Assessment of each student is done by his/her Local Guardian. This helps institute to keep track of the overall development of every student. Table no 3.23 shows the Distribution of Audit points as per North Maharashtra University, Jalgaon Curriculum.

Co-curricular Activity				Extra-curricular Activity	
SN	N Name of Activity Audit Points		SN	Name of Activity	Audit Points
01	Technical Conference Attendance (Min State Level)	01		Sports	
02	Technical Paper Presentation (Min State Level)	02		Member of Inter College Team	01
03	Award Winning Technical Paper Presentation	04	01	Member of Inter University Team	02
04	Technical Workshop for Minimum 2 Days	01		Member of National Level Team	03
05 Technical Courses other than Curriculum for Each Course 02			Cultural Events		
06	Professional Society Membership (1 point for each membership)         01           Any Foreign Language Course (2 points for each course)         02		02	Inter College Level	
07				Inter University Level	02
08	Any other Relevant Activity*	-		Inter State Level	03
mi	inimum 16 Audit points for co-curricular activiti	es shall	03	Membership of NSS, NCC	01
be obtained by the student during his course of study distributed over at least 4 semesters. For lateral entry students, <b>12</b> Audit points to be obtain in <b>3</b> semesters.		04	Social Service Activities (Blood Donation, Tree Plantation, Adult Education etc.)	01	
		05	Any other Relevant Activity*	-	

#### Table 3.23. Distribution of Audit Points as per University

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

Institute obtains the stakeholder perception on the overall performance and quality of the institution by following ways.

#### **Feedback of Students and Parents**

1. Online feedback of students is taken twice in a semester.

2. The Local Guardians and heads of department stay in touch with parents telephonically on a regular basis.

3. Parents are also regularly meets faculty and HOD. When the students are unable to meet the requirements of attendance and ISE performance.

#### Feedback of Alumni

1. Alumni Groups are formed in each department, During the Alumni meet feedback is collected.

2. The Alumni groups are also actively involved with institute through social media for their valuable suggestions and guidance.

3. On every alternate Saturday we invite alumni to Interact with students and take their feedback.

#### **Feedback of Industry**

1. Institute has tie up with the various industries. During their visits to our institute we collect their views regarding performance and quality of the institution.

2. Institute also invites many imminent personalities from industries and collect their views regarding performance and quality of our students the suggestion for improvement.

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

## Institution plan and organize its extension and outreach programs as follows

• The different activities are planned in consultation with the student secretaries along with faculty in charge.

• In the beginning of each year budget is allocated for different extension and outreach programs.

The details of activities over last four years are. As shown in table no 3.23

	Academic Year 2016-17					
S N	Activity	Date	Details			
1	Gandhi Vichar Parishad Exam	30/10/2016	Organize Social activities like exam on Gandhi's life associated with Gandhi Vichar Parishad Jalgaon.			
2	Social Program(Stationary distribution)	24/09/2016	A social programme was arranged by Computer engineering Students at 'N. Z. Marathe School' Waghadi, on 24th September 2016. For Dum and Deaf students.			
3	Tree Plantation	22/08/2016	Republic day was celebrated and the celebrations in the college were extended to the plantation of trees by our college students			
4	"Swachh Bharat Abhiyan"	26/01/2017	students of our institute participated in cleaning of city area of Shirpur			
5	Blood Donation Camp	14/9/2017	Blood Donation Camp -arranged on the birthday of president Hon Amrishbhai Patel September14, 2017			
6	Social Awareness Program(Cashless India Program)	26/01/2017	Students from our institute conducted Social Awareness Program for villagers regarding how cashless/online transaction is done during their (Cashless India Program)			
7	Social Awareness Program( Beti Bachao Beti Padhao on Womans day)	8/3/2017	Students from our institute conducted Social Awareness Program Beti Bachao Beti Padhao on Woman's day			

Table 3.23	. Extension	and	Outreach	Programs
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Academic Year 2015-16				
S N	Activity	Date	Details	
1	Gandhi Vichar Parishad Exam	2/1/2016	Organize Social activities like exam on Gandhi's life associated with Gandhi Vichar Parishad Jalgaon.	
2	Social Program	26/01/2016	A social programme was arranged by SE and TE Civil Students at 'Savitribai Phule Mukbadhir Vidyalaya, Thalner Tal. Shirpur, Dist Dhule on 26th January 2016. For Dum and Deaf students.	
3	Tree Plantation	26/01/2016 and 22/08/2016	Republic day was celebrated and the celebrations in the college were extended to the plantation of trees by our college students	
4	"Swachh Bharat Abhiyan"	31/01/2016	students participated in cleaning of city area of Shirpur and at Untawad village	
5	Education Awareness Program	31/01/2016	our students participated in Serva Shiksha Abhiyan held at Shirpur and in the village area of Untawad	
6	Visit to the Orphanage	17/02/2016	visited Mukbadhir Niwasi Vidyalaya,Thalner,Tal-Shirpur and Given Stationary and Fruit to Orphan child in school	
7	Quiz Competition	28/02/2016	Green Mind Environmental Quiz Competition at S.S.B.T.S' C.O.E, Bambhori	
8	lecture on Dr. A. P. J. Abdul Kalam	21/3/2016	A lecture on Dr. A P J Abdul Kalam (by Shri Mahendra Subhas Patil Trainer Sanskar Gurukul Dhule)	
9	Social Awareness Program	29/03/2016	Swine Flu Jan-Jagruti in the village at Grampanchayat Babhulde,Tal- Shirpur	
10	Blood Donation Camp	3/4/2016	Blood Donation Camp -arranged on the birthday of president Hon Amrishbhai patel September14, 2016	
11	Expert lecture	1/5/2016	Expert lecture on "Smart City and Town Planning" by Mr. Madhavrao T. Patil, CEO of Shirpur Varwade Nagar Parishad, for SE TE BE Students	

	Academic Year 2014-15					
S. N	Activity	Date	Details			
1	Social Activity for awareness	25/02/2015	Bharat Jago Daud			
2	Tree	26/03/2015	plantation of tree in the RCPIT College			

	Plantation		Campus
3	Swine Flu Jan Awareness Program	29/03/2015	Social Activity Swine Flu Jan - Jagruti at Babhulde Grampanchayat
4	Pulse Polio Vaccination Camp	10/03/2015	Arranged Pulse Polio Vaccination Camp at Grampanchayat Kalamsare Tal-Shirpur, Dist Dhule
5	Computer Literacy workshop	20/03/2015	Computer Literacy Program conducted at 28 Z.P. Schools of Shirpur Taluka
7	Swachhta Abhiyan	1/4/2015	Swachhta Abhiyan By Municipal Corporation Shirpur
8	World Environment Day	10/8/2015	Awareness program at various High School of Shirpur Taluka
9	Paryavaran Jan Jagruti	8/8/2015	Paryavaran Jan Jagruti at Forest Office Shirpur
10	Blood Donation Camp	14/09/2015	Blood Donation Camp -arranged on the birthday of President Hon. Amrishbhai Patel
11	Help for Physically Disabled Person	15/09/2015	Help for Physically Disabled Person at Thalner, Tal-Shirpur, Dist- Dhule
12	Model Making Competition	17/10/2015 to 18/10/2015	Students prepared model regarding civil engineering considering environmental condition

	Academic Year 2013-14				
1	Help to Deaf	12/8/2014	Food Distribution, Mukbadhir School,		
1	Dumb students	12/0/2014	Thalner		
	Blood				
2	Donation	14/9/2014	R.C.Patel Institute of Technology, Shirpur		
	Camp				

## Impact of extension and outreach programs on the overall development of students.

• Extension and outreach programs allows students to apply new knowledge to the next level.

• Extension and outreach programs allow students to have their own educational experiences.

• Extension and outreach programs also helps them to develop their social awareness.

**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?

Our university does not allow NSS, NCC, YRC units for engineering colleges, but we encourage students to work in social field. Students have formed many voluntary groups to engage in community services.

- E-builder group: The motive to form this group was to start the social activities organized by the students themselves with the help of teachers. As we are located in tribal area, student goes in tribal areas to spread computer literacy and to create awareness among the villagers with regards to cleanliness, drinking purified water, sanitation etc., in order to improve the living standards of villagers. They also organize various events like Tree Plantation, Swachh Bharat Abhiyan, Digital India, etc.
- Rahat Group: Students under this group, distribute cloths, stationary material, food, sport equipment's etc. to the poor and needy students.
- Students form RCPIT participated in 'Transform Maharashtra' competition which is organized by Government of Maharashtra. 'Transform Maharashtra' provides an opportunity to college students in Maharashtra to put their heads together and come up with policy and/or program level solutions to 11 critical challenges being faced by the State at present. These solutions should be implementable by the Government. The top team in each of the themes, chosen based on judges' criteria had to present their solution to the Leadership of the State. The Institute recorded second highest participation from Maharashtra state 38 teams from our institute has selected in 'Transform Maharashtra' competition. 18 teams are selected in top 10 rank under popular choice and 4 teams are selected in top 10 rank under judge's choice. All the selected students in Top 10 rank has got cash prize of Rs. 3, 04,000 in total and got a chance to present their ideas in front of Hon. Devendra Fadnavis (Chief Minister of Maharashtra) on 1st May2017 at Mumbai. Overall 61 teams from our institute were submitted their ideas in Transform Maharashtra under 11 different themes. RCPIT stood at 2nd rank in terms of participation.

## **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?

R C Patel Institute of Technology is situated at Shirpur, Dist- Dhule which has 48% tribal population as against the national average of 8%. That results in poor literacy of 64%. Our parent body Shirpur Education Society is, striving hard to serve weaker section of society. The college was established in 2001 and spent a decade in developing a stable institution. Having done that from 2012, we have taken a structured project to serve the deprived population to enhance the diversity. We formed an apex team of a few senior faculty, which

interacted with various constituents such as alumni, employers of our students, social and political leaders of the area, and a sample tribal people to understand problems and to seek possible suggestions. Broadly, we spent a decade in establishing financial viability, academic credibility and in a stepby-step manner started supporting students financially, cognitively, academically and professionally. As a result of that, prior to 2012, we had 7% tribal students and 18% girl students and in 2016 the numbers were 21% and 27%, respectively. Their passing percentage also increased from 34% and 54% prior to 2012, to 74% and 79%, for tribal and girl students, respectively.

The graphs in Fig 3.6 and 3.7 indicate the quantitative improvement in the enrollment and performance of girl and tribal students of the first year, respectively, which is the primary measure of the success of our project.

The girls' enrollment (Fig 3.6 a) has steadily climbed from below 20 % to above 25 % and slowly inching towards the national average of 29%. The percentage of girls, who have successfully completed the first year has risen from 54% to close to 79% (Fig 3.6 b) and their percentage marks have also risen from mid 60s to mid-70s (Fig 3.6 c). During these years, we must point out, that the university performances on these accounts were at the same levels, for example, the passing percentage of the first-year students at the university level has been languishing at around 45% for the last 5 years.







Fig 3.6 c: Increasing success of girl students (Girl students scoring more marks)

The tribal enrollment (Fig 3.7 a) has steadily climbed from 7 % to above 20 % and makes us aware that we have to work harder to reach closer to equitable 48%. The percentage of tribal, who have successfully completed the first year has risen from 34% to above 70% (Fig 3.7 b). Their first-year percentage marks also show upward trends (Fig 3.7 c).



Fig 3.7 b: Increasing success of tribal students (% tribal students completing the first year successfully)



Fig 3.7 c: Increasing success of tribal students (Tribal students scoring more marks)

The program has started in 2012 and a very few batches had benefits of the program for all the four years. Despite that we see a positive trend in placement as shown in Fig 3.8a for girl students and Fig 3.8 b for tribal students. The placement data, obviously, does get impacted by the market situation resulting in some variations.



Fig 3.8 a: Increasing success of girl students



Fig 3.8 b: Increasing success of tribal students (The placement data)

We had planned the project to serve underrepresented students as well as to assure overall success of the college. While we have detailed out our achievements with respect to the underrepresented students, we must point out that our college have received significant number of the Top 10 ranks in the North Maharashtra University, with which we are affiliated (Fig 3.9). Further, our passing percentage has been at 69% as against the university percentage of 45%. In that sense working for diversity helps a college in many ways.



Fig 3.9: Percentage of top rankers from RCPIT in the North Maharashtra University, Jalgaon

R. C. Patel Institute of Technology, Shirpur is among 11 shortlisted institutes across the world for 5th Global Engineering Dean Council (GEDC) Airbus Award for Diversity in Engineering Education. This is the recognition of RCPIT on global platform for increasing enrolment of girl students and tribal students and also for making them successful and employable in Engineering Education. Three inspiring finalists will be invited to the GEDC Annual Conference in Niagara Falls, Canada from 10th to 13th October 2017 to present their work to the conference delegates and to a distinguished Jury. Along with the global visibility the award offers, the winning project will receive 10,000 USD to support further work in this field.

Institute also conducts campus placements for Non Engineering students.

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.

#### **Tree Plantation**

Students every year carry out tree plantation in the campus as well as in the city area of Shirpur and over the year they have seen the campus and city going greener. Due to these activities students have become more aware about environment and social responsibilities.

#### **Computer literacy Program**

Students of rural schools were been given computer education and taught different skills of computer operations under Computer literacy Program. Because of that student realize the importance of good communication and knowledge of subject. They also became aware about how to interact people with people from diverse backgrounds. This also helps students in their campus placement.

#### **Social Awareness**

When students do visits to different villages and in rural areas they understand the difficulties faced by people who may not be as fortunate as them. This makes them emotionally more sound and encourage them to give back something to society. During the Swachhta Abhiyan students realize the importance of cleanness, hygiene, health and physical care. Cleanness programme is launched collectively by all the members of institution with a feeling of oneness among the faculty members, students, office correspondents, management members as a whole so that healthy practice of cleaning with healthy environment concept is developed for all. Institute also conducts blood donation campus every year in order to inculcate value of social responsibility among students.

All these activities helps the overall development of students. Which also compliments academic learning experience.

#### **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

Institute regularly conducts many extension activities like Computer Literacy Programme, Digital payment workshop, Tree Plantation, Blood Donation camp, Swachhta Abhiyan, where members of villages, Community, participates voluntarily. In Swachhta Abhiyan peoples of Shirpur Municipal Corporation had taken active participation in cleanness drives. On Yoga day we invite neighborhood people and make awareness regarding physical fitness. In addition to that during blood donation camps other than students many people from outside campus take active participation. Institute is associated with spiritual organization like ISKCON and Shri Sattya Sai Seva Organization which conducts Spiritual and social activities for student's in order to make them more generous towards others. As spirituality encourages students to be more positive.

## **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.

The college has developed collaborative relations with the institutes in the region in following ways

1. Blood donation camp in collaboration with Government Civil Hospital

Dhule, Government Civil Hospital Shirpur, Blood bank Dhule and Shirpur.

- 2. Tree plantation in collaboration with schools at different villages.
- 3. Institute also participates in KG to PG program run by a NGO at District place. Which helps to create Educational Awareness among rural people in this Region.
- 4. Collaboration with Shirpur Municipal Corporation to Implement of Swachhta Abhiyan program.

**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.

Institute got Best Institute award in Education Awareness Programme like KG to PG run by a NGO at District Place. For fulfilling its social responsibility in Educational Awareness.

Students from our institute got Third (3rd) prize in Techfest held at IIT, Bombay for social Awareness about Hygiene among the pregnant women and children of the rural area. As shown in figure 3.5 (a) and (b) .Students regularly visit to different villages and in rural areas educate them to take preventive measures and maintain Hygiene. Video for this event is available online at this link <u>https://www.youtube.com/watch?v=NCvWi9CjzVI</u>



Figure 3.5 (a) and (b) Student at work and Prize in Techfest held at IIT, Bombay

Students form RCPIT participated in 'Transform Maharashtra' competition which is organized by Government of Maharashtra. 'Transform Maharashtra' provides an opportunity to college students in Maharashtra to put their heads together and come up with policy and/or program level solutions to 11 critical challenges being faced by the State at present. These solutions should be implementable by the Government. The top team in each of the themes, chosen based on judges' criteria had to present their solution to the Leadership of the State. The Institute recorded second highest participation from Maharashtra state 38 teams from our institute has selected in 'Transform Maharashtra' competition. 18 teams are selected in top 10 rank under popular choice and 4 teams are selected in top 10 rank under judge's choice. All the selected students in Top 10 rank has got cash prize of Rs. 3, 04,000 in total and got a chance to present their ideas in front of Hon. Devendra Fadnavis (Chief Minister of Maharashtra) on 1st May2017 at Mumbai. Overall 61 teams from our institute were submitted their ideas in Transform Maharashtra under 11 different themes. RCPIT stood at 2nd rank in terms of participation.

SĒS		R.C.P	ATEL		ev 🏉	🔻 TRA	NSFOI
r No	Taam Name	Team Leader Name		Department	Popular Award	Judges Award	RASHT
	realities	realities and the second secon	infoBrite fitor	Department	Rank	Rank	
1	Piezo-Boys	Deore Girish		Mechanical	1-		50000
2	TEAM MACTRANS	Maheshwari Shubham	9823513446	Mechanical	1*		50000
3	The Challengers	ChaudhariDevendra	7385146212	Mechanical	2 <sup>nd</sup>		30000
4	Incredible Maharashtra	Shubham S Pawar	7057529861	Mechanical	3 <sup>rd</sup>	2 <sup>nd</sup>	80000
5	ShivbhaktaPratishthan	Kasar Chetan		Mechanical	5 <sup>th</sup>		3000
6	The Mechanical Maestros	Agrawal Manish G	8605325747	Mechanical	6 <sup>th</sup>	4 <sup>th</sup>	9000
7	Maharashtra Trnasformers	Borasevuvrai	7588132191	Mechanical	6 <sup>th</sup>		3000
8	Raja	Patil Cirich	04000022424	Mechanical	2 <sup>th</sup>		2000
0	TachMach	Sachio Mabaian	0000033030	Mechanical		Top 70%	3000
10	Mabafarm	Sachin Manajah	70700000004	Mechanicat Moch/E&TC	ard	100 70%	2000
11	E Hunter	Achuini Painut	91491011192	ESTC	10th		2000
12	PCDIT	Akchadawagh	0742072/21	ERTC	Idai	Tep 70%	5000
12	Invoma	Robit Patil	9/222222744	ERTC		Top 70%	
14	Diring Star	Madhuri Patil	77995/9091	ERTC		Top 70%	-
15	Snark	Manasi Patil	8007938014	F&TC	7th	100 1010	3000
16	MHPOWER	Ankita Patil	9011380439	E&TC/Mech	7.0	Top 70%	0000
17	Friends&Company	Bhayana Patil	7774920939	F&TC		Top 70%	
18	Indialovers	Marathe Varsha	8657018118	E&TC		Top 70%	
19	Star	Nikita wadile	9112919174	E&TC	8th		3000
20	Invictius	Abhinay Chobey	9545670982	E&TC		Top 70%	
21	Fighters rural illiteracy	KuwarHemlata C.	8275273476	Electrical	10th		3000
22	Team Spark	PatilChetan N.	9823849433	Electrical	9th		3000
23	Photon	Bhil Hitesh S.	8390454516	Electrical		Top 70%	
24	Velocipedes	ShimpiPurshottam	8805840276	Electrical		Top 70%	
25	Techfire	Vaishnavi Rajendra Deore	7057209877	Computer	5th		3000
26	Naman	Kapil Mohan Deore	7875704808	Computer	8th		3000
27	Sparkles	Badgujar Manali suresh	9156698355	Computer	8	Top 70%	
28	Elite	More UnnatiVijay	9146748861	Computer		Top 70%	
29	Rockers	Ghanshyam Ananda Nhavi	8097147769	Computer		Top 70%	
30	Civilian	GiraseKaustubh	7588001684	Civil	3rd		20000
31	ShivbhaktPratishthan	PatilKapil	8421087211	Civil	4th		3000
32	Liveable City Maker	BhushanPatil	8888202271	Civil		9 <sup>th</sup>	6000
33	Drought Free Maharashtra	Raheja Hitesh	9404439975	Civil		10 <sup>th</sup>	6000
34	One Drop	SagarKalankar	7841847975	Civil		70%	
35	Innovator	Shweta Shah	7066248841	Civil	15	70%	
36	Live In Light	ChaudbariAshwini	7066560097	Civil		70%	
37	INNOVATOR'S	Hitesh Kothawade	8390357016	Civil Enga		70%	-
38	KRIITI	KasishmaCanausda	0200211277	Old Engy.		70%	-

R. C. Patel Institute of Technology, Shirpur is among 11 shortlisted institutes across the world for 5th Global Engineering Dean Council (GEDC) Airbus Award for Diversity in Engineering Education. This is the recognition of RCPIT on global platform for increasing enrolment of girl students and tribal students and also for making them successful and employable in Engineering Education. Three inspiring finalists will be invited to the GEDC Annual Conference in Niagara Falls, Canada from 10th to 13th October 2017 to present their work to the conference delegates and to a distinguished Jury. Along with the global visibility the award offers, the winning project will receive 10,000 USD to support further work in this field.

Institute got "Distinguished College" award for instrumental in implementing Industry Academia Partnership. From IIT, Bombay. As shown in figure 3.6 (a) Institute also got "Distinguished Principal" award for enhancing students' performance, promote safe learning environments and establish partnership between students and member of the industry as well as a social fabric. From IIT, Bombay. As shown in figure 3.6 (b)



Figure 3.6 (a) and (b) Distinguished College & Distinguished Principal Award from IIT, Bombay.

#### **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.

The Institute has several collaborations, linkages with organizations and institutes for research activities. This helps for sharing facilities and equipment's. Many of our faculties are doing Ph.D. from reputed Institutes and using their laboratory facilities for Research work. Following are the research laboratories of reputed institute/ organization shown in Table no 3.24

SN	Name of Institute / Organization
1	North Maharashtra University, Jalgaon for PhD.
2	Wipro Technology Ltd Bengaluru. For training and knowledge session through Webinar to Faculty.
3	Shree Sant Gajanan Maharaj College of Engineering, Shegaon for PhD.
4	Sardar Vallabhbhai National Institute of Technology, Surat for PhD.

5	National Chemical Laboratory, Pune for PhD.
6	Prof. Ram Meghe Institute of Technology & Research, Badnera-Amravati for
	PhD.
7	Manoharbhai Patel Institute of Engineering & Technology, Gondhia for PhD.
8	Indian Institute of Technology, Bombay for Library
9	SVKM's NMIMS, Shirpur for Four laboratories (Robotics, Sensorics,
	Advanced Hydraulics, Pneumatics) which form a part of BOSCH-
	REXROTH-NMIMS Centre of Excellence in Industrial Automation
	Investment cost of this lab is Rs. 5 crores

Various laboratories have been set up in the institute in collaboration with industry to enhance research and employability of students. These include e-Yantra Robotics Lab

# **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.

The institute has MOUs with several esteemed organizations some industries with whom the MOUs has been established are as shown in table no 3.25

S N	MOUs /Collaborating Association	Contribution to the development of the institution	Departments
1		1. Remote Internship Program	
		2. Campus Placement Program	E & TC,
	Tata Consultancy	(Engg. & Non-Engg)-Accreditation	Computer, IT,
	Services Ltd; Pune	3. Development of JLPT Unit-TCS	Mechanical,
		Japan Hikari Academy	Electrical
		4. Expert Lecture	
2	Persistent Systems	1. BE- Project Program	Computer IT
	Ltd; Pune	2. Campus Placement Program	Computer, 11
3	Forbes Marshall	In Plant Training Program	Mechanical
4	Wipro Technologies	1. Faculty Development Workshop	Computer, IT, E &
		2. Mission 10X Technology Lab	TC, Electrical,
	Ltu, I une	Centre	Civil
5	Bakeri Urban		
	Development Pvt.	Internship Program for SE, TE &	Civil
	Ltd; Ahmedabad	BE Students	CIVII
	(Gujarat)		
6	Mold-Tek	1. Internship Program for TE, BE	Civil
	Technologies Ltd;	2. Remote Assignments-TE & BE	CIVII

Table no 3.25 MOUs with several esteemed organizations

	Nashik	3. Campus Placement Program-BE	
		4.Expert Talk	
		5.Workshop/ Training program for	
		students & Faculty	
		6.Syllabus Revision	
		1. Internship Program	E & TC
7	Data-Serve InfoTech	2. Campus Placement Program	E & IC, Computer IT
/	Pvt. Ltd; Pune	3. Expert Talk	Electrical
		4. Remote Assignments.	Electrical
		1.Remote Assignments for students	
	Patil Structural	2. Expert Talk	
8	Consultants; Indore	3. Industry Visit/Field Visit Support	Civil
	(MP)	4. Students Workshop/Faculty	
		Workshop.	
		1. Industry Visit	
		2. Expert Talk	
		3.Campus Interview	
	Sai Info Com	4. Project work & Sponsorship	
9	Sal-Info Corp Solutions Pvt. Ltd	5. Training to students & Faculty	e TC
		6. Conduction of Workshops &	alt
		Seminars	
		7. IEEE paper writing &	
		publication, External OR Exams	
	Rao & Associates;	Internships & Placement Support	E & TC,
10			Computer, IT,
10	Mumbai		Mechanical,
			Electrical, Civil
			E & TC,
11	Vibrant Minds Technologies; Pune	Campus Placement Support	Computer, IT,
			Mechanical,
			Electrical, Civil
	English-Nihongo-		
12	German Language	JLPT-N5 Level Japanese Training	All Branches
	Institutes (Engell),	& Employability enhancement	
	Aurangabad		
	CADD Centre	1. Training on various software	Mechanical. Civil
13	Training Services	related to branch	Electrical
	Pvt. Ltd; Pune	2. Placement Assistance	
	Technocrat's	1. Training & hands on PLC &	Mechanical.
14	Academy of	SCADA	E&TC. Electrical
	Automation &	2 Workshop	Lare, Licenteur
	Control Technology		

	(TAACT); Nashik		
	Innovations	Aptitude Training and Soft Skills	
15	Unlimited Training	Training Program	All Branches
	Services, Bangalore		
		Soft Skill and Placement	
16	Pehla Job, Mumbai	Association Program	All Branches
17	Seed InfoTech Ltd;	CCNA, JAVA, C. C++, Software	E & TC, Comp-
	Pune	Testing	IT. Electrical
			,
	Chitale's	Aptituda & Soft Skill Davelopment	
18	Personalized	Program	All Branches
	CPLC. Mumbai		
	SCOUT	Aptitude & Soft Skill Development	
19	Technologies Pvt.	Program	All Branches
	Ltd, Pune		
20		1. Personalized Counselling	
20	Career Kundalı, Pune	2.Psychometric Test and	All Branches
		Personalized Sessions	
	M/s. Treezec - E Solutions Pyt I td:	Android Training & Placement	
21	Mumbai	Support	Computer & IT
22	Sofcon India Pvt.	Training Program-PLC SCADA &	Flectrical
	Ltd, Pune	Placement Support	Licettear
23	SAS-Statistical	Faculty Development Program	Computer & IT
	Analytical Software		Machanical E &
24	BOSCH-REXROTH	Training on Industrial Automation	Mechanical, $\mathbf{E} \propto$
	Lau-5 V KIVI INIVIIIVIS		IC, Electrical Machanical E &
25	TRAK Computers, Dhule	Basic Language Courses	TC Computer IT
23			Flectrical
	Sayana Cinalay	Foundation Bridge Course (Ice-	FE-All Branches
26	Ialgaon	Breaking Session)	Students
	Shirpur Construction		
27	Shirpur	Consultancy	Civil Engineering
28	Shirpur Construction,	Extension & Outreach Activities,	All Dronchas
	Shirpur	Social work	All Dialiches
29	ISKON, Nashik	Moral and ethical values, Social	All Branches Staff
		work	& Students
30	Shri Sattya Sai Seva	Moral and ethical values, Social	All Branches Staff
50	Organization, Dhule	work	& Students

Institute collaboration with other industries has impact as follows:
Students have the opportunity for going on industrial visits and getting exposure to the real working environment. Transfer of technology information and knowledge from industry to the faculty and students is done through collaborative programs like guest lectures, seminars, workshops and other interactive programs. It also helps in improving placement, visibility of the institute is increased in the nearby industry.

# 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.

Yes the industry-institution-community interactions have contributed to the establishment to develop good relations and creation placement for students and many more as shown in table no.3.26

S N	Industry/institution/organization	Facilities Developed for student and staff support	Contribution
1	e-Yantra Robotics Lab	Student & Staff Support	New technology
2	Wipro MTLC	Student Support (Major Project)	New technology
3	Wipro Mission 10X	Teaching Learning Centre for Staff	Value Addition
4	Employment Development Courses	Student Support	Value Addition
5	CADD Center, Pune	Student Support	Value Addition
6	Tata Consultancy Services	Student Support	Placement Services
7	Make My Trip (Motif Inc)	Student Support	Placement Services
8	Accel Frontline	Student Support	Placement Services
9	Qspider	Student Support	Placement Services
10	SEED InfoTech	Student Support	Placement Services
11	CMS Info System	Student Support	Placement Services
12	Bharat Wire Ropes Ltd (BWR)	Student Support	Placement Services
13	OS3 InfoTech Pvt Ltd	Student Support	Placement Services
14	CMS IT Services	Student Support	Placement Services
15	Epic Research Pvt Ltd	Student Support	Placement Services
16	Harsh Constructions Pvt Ltd	Student Support	Placement Services
17	Softcon India Pvt Ltd	Student Support	Placement Services
18	Prothious Engineering Services	Student Support	Placement Services
19	Syntel Ltd, Pune	Student Support	Placement Services
20	CADD Center	Student Support	Placement Services
21	Expert Global Services Pvt Ltd	Student Support	Placement Services

Table 3.26. Industry-Institution-Community Interactions

	(SEED)		
22	Arete Technology & Aas Invotation	Student Support	Placement Services
23	Hinduja Global Solutions (HGS)	Student Support Placement Servic	
24	Tudip Technologies	Student Support	Placement Services
25	L&T InfoTech Ltd , Mumbai	Student Support	Placement Services
26	Tarang Exports Pvt Ltd	Student Support	Placement Services
27	Variate Consultants Pvt Ltd	Student Support	Placement Services
28	KPIT Technologies	Student Support	Placement Services
29	Persistent Systems Ltd	Student Support	Placement Services
30	Yippee Technology Pvt Ltd	Student Support	Placement Services
31	SVKM NMIMS	Student Support	Placement Services
32	Vodafone	Student Support	Placement Services
33	3idea Technology	Student Support	Placement Services
34	Opulent InfoTech	Student Support	Placement Services
35	Shiram Transport Finance Cos	Student Support	Placement Services
36	Tech Flow Engineering Pvt Ltd	Student Support	Placement Services
37	Constro Wiz Integrated Ser. Pvt Ltd	Student Support	Placement Services
38	Deccan Farm Equipment Pvt Ltd	Student Support	Placement Services
39	Dumanis Automation India Pvt Ltd	Student Support	Placement Services
40	HTC Diesel Pvt Ltd	Student Support	Placement Services
41	Innovative Vastu Nirman Pvt Ltd	Student Support	Placement Services
42	N D Automation Pvt Ltd	Student Support	Placement Services
43	Optim Consultancy, Nashik	Student Support	Placement Services
44	Pure Study	Student Support	Placement Services
45	Softenger India Pvt Ltd	Student Support	Placement Services
46	Uvimax Engineering Ser. Pvt Ltd	Student Support	Placement Services
47	Vasundhara Group	Student Support	Placement Services
48	Ano Sales LLP	Student Support	Placement Services
49	Bedmutha Industries, Nashik	Student Support	Placement Services
50	Cognizant Technology	Student Support	Placement Services
51	DOCTRONIC	Student Support	Placement Services
52	Hands In Technology	Student Support	Placement Services
53	iGate (Referal Drive)	Student Support	Placement Services
54	QED Baton	Student Support	Placement Services
55	Qubatic Engineering Pvt Ltd	Student Support	Placement Services
56	Sai Info Corp Solutions Pvt Ltd	Student Support	Placement Services
57	Vihan Constructions Pvt Ltd	Student Support	Placement Services
58	XL Dynamics Pvt Ltd	Student Support	Placement Services
59	AGS Transact Technologies Ltd	Student Support	Placement Services
60	Amazon	Student Support	Placement Services
61	CERN system Technology	Student Support	Placement Services
62	Infosys Off Campus	Student Support	Placement Services
63	Infosys Spark IT	Student Support	Placement Services
64	Maharashtra Posco Steeel Pvt Ltd	Student Support	Placement Services
65	NabhanganBuildcon	Student Support	Placement Services
66	Nexa Motors	Student Support	Placement Services
67	Nitor InfoTech	Student Support	Placement Services

68	Pangulf Technologies	Student Support	Placement Services
69	Polaris Software FT	Student Support	Placement Services
70	Purple Talk	Student Support	Placement Services
71	Speed Tech serve Pvt Ltd	Student Support	Placement Services
72	Web Tech Developers Pvt Ltd	Student Support	Placement Services
73	ZTC, Bhusawal	Industrial Visit	Value Addition
74	Sardar Sarovar Dam, River Narmada, Vadodara	Industrial Visit	Value Addition
75	Maharashtra Engineering Research Institute, Nashik	Industrial Visit	Value Addition
76	Vadodara Airport	Industrial Visit	Value Addition
77	ISRO, Ahmadabad	Industrial Visit	Value Addition
78	Sardar Sarovar Gujarat, India.	Industrial Visit	Value Addition
79	Shirpur Power Pvt. Ltd., Nardana	Industrial Visit	Value Addition
80	Mahindra & Mahindra, Nasik	Industrial Visit	Value Addition
81	Deesan Text fab Pvt Ltd Shirpur	Industrial Visit	Value Addition
82	Bedmutha Ind. Pvt Ltd, Nardana.	Industrial Visit	Value Addition
83	Nashik Engineering cluster, Ambad MIDC, Nashik	Industrial Visit	Value Addition
84	Thermax India Ltd Pune.	Industrial Visit	Value Addition
85	ARAI, Pune.	Industrial Visit	Value Addition
86	Hyphen Electromech P. Ltd, Nashik	Industrial Visit	Value Addition
87	Solar Photovoltaic Power Plant, Sakri	Industrial Visit	Value Addition
88	Technocrat's Pvt. Ltd. Nasik	Industrial Visit	Value Addition
89	Suzlon Infrastructure Services Ltd, Nandurbar	Industrial Visit	Value Addition
90	Nitiraj Engineers Pvt. Ltd, Dhule	Industrial Visit	Value Addition

# 3.7.4 Highlighting 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.

Institute regularly invites eminent scientists/ personalities in the Institute to contribute their knowledge and expertise among faculties and students. Details of eminent scientists/participants visited the college during last five years as shown in Table no 3.27

Т	`able 3.27.	Details of en	ninent s	cientists/j	partici	pants	visited	the college	
									-

S N	Year	International / national conference	Resource person/eminent scientist Eminent persons who participated	Designation
1	2012-13	National Conference	Dr. G. K. Kharate,	Principal, Matoshri COE, Nasik

2	2013-14	on Advances in	Dr. Ulhas Shiurkar	Principal, Deogiri COE, Aurangabad	
3	2013-14	Communicat	Mr. Sandip Dabhade	Lead Engineer	
		10n &	F	Alcatel Lucent, Bombay	
4	2014-15	Computing	Dr. N. J. Patil	Head of Department, Instrumentation DNPCOE, Shahada	
5	2014-15		B. Satyanarayana	Scientific Officer Tata Institute of Fundamental Research	
6	2015-16		Mr. Sandip Dabhade	Lead Engineer Alcatel Lucent, Bombay	
7	2015-16		Dr. D. M. Patre	Professor SGGS, Nanded	
8	2012-13		Dr. H.B. Naik	Professor Dept. of Mechanical Engineering SVNIT, Surat	
9	2012-13		Dr. R. K. Shrivastav,	Head of Department Mechanical Engineering Govt COE, Aurangabad	
10	2012-13	National Conference Advances	Dr. Purnanand V. Bhale,	Assistant Professor Dept. of Mechanical Engineering SVNIT, Surat	
11	2013-14	Engineer	Dr. Ravindra Bankar	Scientist, Indian Institute of Tropical Metrology, Pune	
12	2013-14		Sadanand Nam joshi	Research Scholar SVNIT Surat	
13	2014-15	•	Dr. R. K. Shriyastay.	Head of Department Govt, COE, Aurangabad	
14	2015-16	•	Prof. U. N. Shete	Associate Professor Govt, COE, Jalgaon	
15	2012-13	National	Dr. S. S. Sane	Head, Computer Engineering Department, K K Wagh Institute of Engineering Education & Research Nashik	
16	2013-14	Conference on Emerging Trends in Computer	Dr. Ram Bhavsar	Associate Professor, School of Computer Sciences, North Maharashtra University, Jalgaon	
17	2013-14	Technology	Dr. N. S. Chaubey	Associate dean, Mukesh Patel School of Technology Management & Engineering, Shirpur	
18	2014-15		Prof. M. N. Behere,	Head of Department,	

				MCA, Institute of
				management Research and
				Development, Shirpur
				Associate dean,
10	2015 16		Dr. N. S. Chaubay	Mukesh Patel School of
19	2013-10		DI. N. S. Chaubey	Technology Management &
				Engineering, Shirpur
				Professor and Head,
20	2012-13		Dr. N. S. Chaubey	Computer Engg. And I.T.,
				SVKM's NMIMS, Shirpur.
				Associate Professor, School
21	2013-14	National	Dr. Ajay Patil	of Computer Science, NMU,
		National		Jalgaon
		contenence		Assistant Professor,
		Emorging		Dept. of Computer
22	2014-15	Trends in	Prof. S. D. Mone	Application,
		Information		R. C. Patel Arts, Commerce,
		Tachnology		Science and College, Shirpur
		recimology		Assistant Professor,
	2015-16		Prof. S. D. Mone	Dept. of Computer
23				Application,
				R. C. Patel Arts, Commerce,
				Science and College, Shirpur
24	2012 12		Drof N D Khiyaara	Head of Department
24	2012-13		FIOL IN. D. KIIIVSala	SSVPS Polytechnic, Dhule
				Professor
25	2012-13		Dr. Sunil. Y. Kute	Dept. of Civil Engg.
25	2012-13			KKW Institute of
				Technology, Nashik
				Professor
26	2013-14	National	Dr. Sunil V. Kute	Dept. of Civil Engg.
20	2013-14	National	Di. Suini. 1. Kute	KKW Institute of
		Emerging		Technology, Nashik
		Trends in		Professor
27	2013-14	Civil	Prof. R A Ogale	Dept. of Civil Engg.
		Engineering		SSVPS Coe, Dhule
		Linginicering		Professor
28	2014-15		Prof. R A Ogale	Dept. of Civil Engg.
				SSVPS Coe, Dhule
20	2015-16		Prof N B Khiveara	Head of Department
	2013-10			SSVPS Polytechnic , Dhule
				Professor
30	2015-16	015-16	Prof. R A Ogale	Dept. of Civil Engg.
				SSVPS Coe, Dhule

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 –

- a) Curriculum development/enrichment: The benefits of these collaborations and linkages with IIT Bombay, IIT Madras for QEEE, IIT Kharagapur, MOOCs, Webinar, and A-View have specifically impacted inclusion of subject's knowledge and also great experience for students. Most departments have industry advisors Interactions to promotion research activities and creating awareness on industry requirements.
- b) **Internship/ On-the-job training:** Institute have collaborations with several organizations like, TCS, Bakeri Group, Persistent, Arete Technology, ABM technology, Data serve InfoTech to provide internship for students.
- c) **Summer placement:** TCS provide summer placement offer in terms of internship.
- d) Faculty exchange and professional development: Nil
- e) **Research:** Many of our faculties are doing PhD from reputed Institute like SVNIT Surat, NCL Pune etc. And it results in many publications
- f) Consultancy: The Institution utilizes the knowledge of faculties for giving consultancy to nearby organizations & Institutes like Shirpur construction for Nagaryothan Yojana- construction of concrete Road (Testing of concrete cube).
- g) **Extension:** Institute encourages students in social service for performing extension activities.
- h) **Publication:** Institute motivate staff to do research work and published their work in Internationally/Nationally in reputed journals
- i) Student Placement: Through collaborations, good number of student internships are available, which in turn helps the students to get placed in better organizations. Esteemed organizations like, TCS, , L & T, Persistent, Syntel Ltd, Kinetic, Bosch, Bharat Wire Ropes Ltd (BWR), Accel Frontline, Accenture, Vodafone, OS3 InfoTech, Infosys and several others visits our campus for providing students placements regularly.
- j) **Twinning programs:** We were in process for linking with some institutes and programs like Industrial Automation with NMIMS
- k) Introduction of new courses: Institute conducts a Training module for final year students in eights semester for improving placement. we call it as Training & Placement Module
- 1) Student exchange: NIL
- m) **Any other:** Our 32 faculties have enrolled for PhD D many of them were from other Universities and Institutes which helps in developing collaborative research opportunities.

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

- Head of all the Departments along with Training & Placement department have linkages with many Industries and Industry persons which helps to explore the possibilities for Research and Consultancy.
- The Institution inculcated a habit among the departments to invite personnel from industries and reputed Institutes.
- The governing council of the college meets and shares the ways and means of integrating the inclusive growth with collaborators in addition to other constructive measures.
- Experts from industries are invited to deliver lectures for the students on the latest developments in the industries and industrial requirements.
- Informal discussions between TPO and recruiting companies lead to linkages for placement.
- Industrial visits, in-plant training, internship, projects and placements are arranged for the students in such industries.
- Alumni initiate linkages and collaborations.
- Japanese language course is introduced after the visits of principal and head of department at TCS. During the discussion it is observed that more job opportunities are available for students at Japanese end. Now for this course around 185 students have enrolled.

## Criterion IV Infrastructure

## And

## Learning Resources



#### CRITERIA 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?

Good and modern infrastructure will definitely facilitate the better teaching learning process. As per the policy matter, the institute has already developed world class educational facilities as per the norms of governing authorities and beyond the norms such as

- Modern classrooms
- ➢ Highly equipped laboratories
- Seminar halls
- Library with reading room
- > Workshops
- ➢ Canteen
- Lush green campus
- Enough parking
- Playgrounds
- Separate hostels for girls and boys
- ➢ Generator facility
- Internet with Wi-Fi connection within the institute campus and in hostel premises.

#### 4.1.2 Detail the facilities available for

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

Institute is established in 2001. The adequate availability of physical infrastructure is identified time to time and, has been planned and constructed accordingly. Institute imparts six courses viz. Computer Engineering, Civil Engineering, Information Technology, Mechanical Engineering, Electronics & Telecommunication Engineering and Electrical Engineering. Each of the disciplines is provided with built-up constructed as per the requirements of AICTE.

Institute and hostels is situated in an area of 85336sq.m. The total buildup area of institute is 21396sq.m. & 12806sq.m. of boys & girls hostel. The effective teaching learning executed with institute instructional area and infrastructural facilities with carpet area are 17260sq.m. as shown in following tables.

	-	
Sr. No.	Particulars	Total area in sq. m.
1	Instructional Area	10130
2	Administrative Area	1282
3	Amenities	1188
4	Circulation and others	4660
	Total	17260

Table 4.1 Infrastructure facilities

#### Table 4.2 Instructional area

	For existing intake				
Particulars	Nos. as p	oer AICTE	Area in Sq. m.		
	Required	Available	Required	Available	
Class Rooms	32	33	1848	2725	
Tutorial Rooms	8	10	264	468	
Laboratories	44	49	2904	4310	
Language Laboratory	1	1	66	161	
Drawing Hall	1	1	132	173	
Workshop	1	1	200	200	
Additional Workshop	4	4	800	800	
Seminar Hall	3	3	396	444	
Computer Centre	1	1	150	237	
Library and Reading Room	1	1	400	612	
Total Instructional Area 10130					

Administrative Area in Sq. m. =1282sq. m.

Table 4.3 Amenities Area

Sr		For existing intake as per AICTE		
No	Particulars	Area in sq. m.		
1.01		Required	Available	
1	Toilets (Ladies & Gents)	Adequate	419	
2	Boys Common Room	Adequate	75	
3	Girls Common Room	Adequate	75	
4	Cafeteria	Adequate	575	
5	Stationery Stores & Reprography	Adequate	30	
6	First Aid Cum Sick Room	Adequate	14	
		Total Amenities Area	1188	

Circulation and others in sq. m. = 4660sq. m. Others (Parking) Area in sq. m. = 3000sq. m.

	fuore in other fuerifies				
Sr. No.	Parameter	Sr. No.	Parameter		
1	All Weather Approach Road	8	Reprographic facilities in the Institutions.		
2	Pure Water Supply	9	Sewage Disposal		
3	Electrical Generator	10	Telephone, Intercom and FAX		
4	Digital Library	11	General Notice Board and Departmental Notice Boards		
5	Parking facilities	12	Medical and Counseling Facilities		
6	Medical facilities	13	Institution web site		
7	Insurance facilities	14	First Aid Room		

Co-Curricular activities:

Following is the infrastructural facilities for co-curricular activities:

- ➢ Seminar hall
- ➤ A-view hall
- MTLC center
- ➢ e-Yantra Lab
- ➢ QEEE Hall
- CDEEP Hall
- Language lab

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.

The extra-curricular activities include the indoor and outdoor games, gymnasium, cultural activities, public speaking, communication skills, health and hygienic, yoga, etc. The Institute is providing facilities for the students to participate in sports, cultural and extra-curricular activities. Institution conducts cultural programs in collaboration with electronic media and encourages the students to participate in it to bring inherent talents of them.

Dedicated sports facilities with guidance of a qualified full time physical director is made available to students. Details of extra-curricular activities are given below.

Outdoor Games

Institute provides facilities for following outdoor games such as

- Cross Country
- ➤ Tennis
- ➢ Basket Ball
- ➢ Volley Ball
- ➢ Kabaddi
- > Athletics
- > Cricket
- Ball Badminton

- > Mallkhamb
- Soft Ball
- ➢ Base Ball
- ➤ Hand Ball
- ➤ Football
- ➢ Hockey
- Indoor Games
  - Institute provides indoor games such as
  - ➤ Chess
  - > Badminton
  - Boxing
  - Yoga
  - Weight Lifting Power Lifting
  - Best Physique
  - > Fencing
  - ➤ Wrestling
  - > Table Tennis
  - ➢ Taekwondo

The gymnasium has high end machineries and equipments for body building. For communication skills, University has already incorporated soft skills as a course for all disciplines.

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).

Institute has following master plan showing all details as existing as well as future plan in forth coming years.



Master plan of institute

The amount spent during last four years on infrastructure, laboratory equipments and library is given in table no. 4.5

		2013-14	2014-15	2015-16	2016-17
Sr. No.	Infrastructure Heads	Budget Spent in Rs.	Budget Spent in Rs.	Budget Spent in Rs.	Budget Spent in Rs.
1	Building	291339426.52	296955363.52	297601743.52	305235324.52
2	Laboratory Equipments	68712955.10	71665009.10	76477197.10	78436892.24
3	Library	12540780.38	14877349.38	15486852.38	15544803.38

Table 4.5 Amount spent on Infrastructure in last four years

Classrooms and laboratory for Civil and Electrical Department have been completed. Lift (Elevator) had been successfully installed. Extended Cafeteria, New Laboratory, and Seminar Hall has been completed recently.

The institution provides all sorts of facilities for the extensive use of ICT resources to the students and faculty. Such kind of facilities is listed below.

- All class rooms are equipped with ICT based teaching and learning materials like LCD Projector, Screen, Audio, Video and Internet facilities etc.,
- ➤ A separate server with e-materials and videos is available in all the departments for the access of the students and the faculties.
- Digital library is functioning as a separate section of central library for the effective usage of e-materials, e-journals by the students and faculty.
- An exclusive Language Laboratory functioning to improve the oral and written communication of the students and faculty.
- Internet facility is available to access journal in the campus.

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

Institute always ensure that infrastructural facilities meet the requirements of the students with physical disabilities time to time.

- The institute allocates class room for physically disabled students on the ground floor if it is possible.
- > They are allowed to use suitable wheel chair inside the campus.
- > The adjustable chairs are made available in the laboratories.
- Ramps and Lift are provided for the convenience of the students with physical disabilities.
- Extra time is given for University theory examination.

> Preference is given to the students with physical disabilities in usage & issuing books in Library. They can exchange the books on any day & time. For other students the exchange of books is as per the time table.

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

Institute has 2 Boys & 4 Girls hostels and details as given below in table no.4.6. Table 4.6 Hostel facilities

	1 a	JIC 4.0 III	JSIET TACH	nies	
rs	Boys	Boys	Girls	Girls	Gi

Sr.	Particulars	Boys	Boys	Girls	Girls	Girls	Girls
No.		Hostel 1	Hostel 2	Hostel 1	Hostel 2	Hostel 3	Hostel 4
1	No. of Rooms	60	64	64	39	17	47

List of provisions in the hostels:

Recreational facilities - gymnasium, yoga center.

Facilities for medical emergencies

In case of emergencies, ambulance facility is provided by the institute in order to take the students/staff to nearby hospitals.

Library facility in the hostels

The central library is kept open beyond the working hours to facilitate the use of library by the hostel students. The hostels are very close to institute campus so they can reach in short duration to library.

Internet and Wi-Fi facility

The internet connectivity in the campus is 155 Mbps and Wi-Fi facility is also available.

Recreational facility-common room with audio-visual equipments

Yes. There are common rooms with audio visual equipments in both boys' and girls' hostels.

> Available residential facility for the staff and occupancy

Institute has modern guest house for faculty and staff members in boys' hostel with all amenities.

Constant supply of safe drinking water

The institute provides RO facility for safe drinking water in all boys', girls' hostels and within institute.

 $\triangleright$  Security

- Trained Security Personnel are deployed at the institute main gates, all the • instruction blocks, hostels and other strategic locations. Under the supervision of a security officer, they keep constant vigilance on all the movements inside the campus, take care of the security of all the equipments in the buildings.
- CCTV Cameras are installed in various vantage points inside institute campus.

### **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?

Institute has made provision available to students and faculties in terms of health care on the campus and off the campus.

- First aid room is available in the campus
- In case of emergencies, transport is provided by the institute in order to take the students/staff to nearby hospitals.

➤ An ambulance is always kept ready for transporting patients for emergency.
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, counseling and career guidance, placement unit, health centre, canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

The common facilities available on campus are mentioned in table no. 4.7 as follows:

Sr. No.	Common Facilities		Availability
1	IQAC		
2	Grievance redressal unit		
3	Women's harassment prevention Cell Counseling and career guidance		Equipped with Phone, Computer, Fan,
4			etc.
5	Training and Placement Cell		
6	Health centre		
7	Canteen		01 Nos.
8	Recreational spaces for staff and students	$\checkmark$	Lawn
9	Safe drinking water facility,		06 Nos.
10	Auditorium		
11	Generator/Power back up facility		03 Nos.
12	Transport		02 Nos.

Table 4.7 Details of the Common Facilities available on the campus

#### 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 institute has "Library Advisory Committee" comprising of faculty members. The composition of the committee is mentioned in Table No. 4.8 as follows:

Sr. No.	Name of Faculty	Designation	Position
1	Prof. P. G. Patil	Assistant. Professor (Electronic and Telecommunication)	Chairman
2	Mr. M. D. Sonawane	Librarian	Secretary
3	Prof. P. M. Goad	Assistant. Professor (Electronic and Telecommunication)	Member
4	Prof. C. S. Pawar	Assistant. Professor (Computer Engineering)	Member
5	Prof. Ms. V. M. Patil	Assistant. Professor (Information Technology)	Member
6	Prof. Y. R. Pathak	Assistant. Professor (Mechanical Engineering)	Member
7	Prof. M. S. Sathe	Assistant. Professor (Mechanical Engineering)	Member
8	Prof. V. J. Patel	Assistant. Professor (Civil Engineering)	Member
9	Prof. L. S. Mahajan	Assistant. Professor (Civil Engineering)	Member
10	Prof. Y. K. Kirange	Assistant. Professor (Electrical Engineering)	Member
11	Prof. M. S. Sonawane	Assistant. Professor (First Year Engineering)	Member
12	Prof. H. S. Jagtap	Assistant. Professor (First Year Engineering)	Member

Table 4.8 Library Advisory committee

The purpose of the committee is to improve the Library Services and library policies in the institute. It also provides literature support to the students and staff members. The committee looks after purchasing of the books and relevant materials as per the norms of governing authorities. To render the library user friendly, the committee meets twice in year to discuss and finalize proposed policies, budget, specific issues and suggestions to the library.

Significant initiatives have been implemented as follows:

- Books purchasing in library as per syllabi concerned
- > Updating of book, journals and other study materials
- Reprographic facility
- Purchase of recent books suggested by faculty
- ➤ Maintenance of user and accession register.
- > Availability of necessary library facilities, better services to students time

to time.

- Display of new arrivals
- Modernization of book bank facility
- Renewal of electronic resources management package for e-journals/eresources

#### **4.2.2 Provide details of the following:**

- Total Built-up area of the library (in Sq. Mts.)
- Total seating capacity
- Working hours

Layout of Library

- Monday to Saturday
- Holidays & Sunday
- Before Examination Days
- During Examination Days
- During Vacation

- : 612 sq. m. : 150
- : 9:00 am to 6:00 pm
- : Closed
- : 9:00 am to 8:00 pm
- : 9:00 am to 8:00 pm
- : 9:00 am to 6:00 pm
- ECONCECION STATEMENT STATEMENT

The library layout specification is mentioned in Table No. 4.9 as follows:

**Criterion: IV** 

184

Sr. No.	Sections	Specification (sq. m.)
01	Book Circulation Counter	69.5
02	Reading Section	305.18
03	Printing and Reprography Section	8.94
04	Book Stack Section	171.81
05	e-Library Room (e-Lib)	12.51
06	Periodical Section	15.6
07	Baggage section	8.94

Table 4.9 Sections of library with specification



Library



**Reading Section** 



News Paper

Suggestion Box

Suggestion Box



**Periodical Section** 

**Circulation Counter** 



**Printing and Reprography** Section

## 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.

The library ensures the purchase of books, important journals (soft and hard copies) with the request from individual department. Faculty recommends the books to be purchased for their academic courses and research. Faculty approach to departmental library advisory committee member, then member discuss requirement to department head and finally approve through the Principal. The librarian keeps track of the purchase order and ensures that the supply is on time. After acquisition of the books and journals, accession, computerization, automation and classification of books are done and placed in the appropriate racks for reference and issue. Accession is done by assigning unique number, entering in the accession register, affixing Bar-code label and library stamp. The amount spent on procuring new books, journals and e-resources during the last four years is mentioned in table no. 4.10 as given below.

Library Holdings	20	013-14	20	14-2015	20	015-16	2	016-17
	No.	Total Cost Rs.	No.	Total Cost Rs.	No.	Total Cost Rs.	No.	Total Cost Rs.
Text books Include Reference Books	4007	1696474	4731	2321563	2236	1313223	657	541472
Journals/Perio dicals	97	154613	73	182476	63	160303	61	163074
e-resources & E-Journals	8	1366279	8	1553301	8	1743151	8	1956342

rable No. 4.10 Details amount spent on norary
---

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

Following are the details on the ICT and other tools deployed to provide maximum access to library collection.

> OPAC (Online Public Access Catalogue):

Institute library offers computerized catalogue search services through the Web OPAC (http://library/w27/ available on Intranet). The bibliographic records consisting of more than 30,000 books, dissertations of PG, question papers of previous university examination are available in the Library, RCPIT; Shirpur can be searched through this interface.



 Electronic Resource Management package for e-journals: Institute has following memberships for electronic resource management.

• DELNET(Development Library Network):

To promote sharing of resources among the libraries by developing a network of libraries, by collecting, storing and disseminating information and by offering computerized services to the users. To undertake scientific research in the area of Information Science and Technology, create new systems in the field, apply the results of research and publish them. To offer technical guidance to the memberlibraries on collecting, storing, sharing and disseminating information.

← ⇒ C <sup>i</sup>	164.100.247.30						
		Usage Statistics	/ Know your ILL-Book Status /	# Your Account / Contact DELNET	/ 🗭 Log Out		
	<b>DELNET</b>	Your ac	count will be inactive in 274 days.	Language: English	*		
	tot otimitin			Institution : R. C. Patel Institute of	Technology		
	Search the DELNET Digital Library Resources						
		All Fields	<ul> <li>Select Format •</li> </ul>	Q Find Advanced			
	You are accessing union catalog of Books, Journals etc						
	Full-text Digital Library Resources						
	E-BOOKS E-Books: Read and Donwload th FullText Medical Books	em online	E-JOU Dental E-jor Architecture Education E Engineering	RNALS (Full-Text) umais E E-journais E-journais a nat Technology E-journais			
		NS	Law E-journ Managemen Full-Text Me Nursing E-je	nais nt E-journais edical Journais ournais			

• NDL (National Digital Library):

NDL India has been designed to benefit all kinds of users like students (of all levels), teachers, researchers, librarians, library users, professionals, differently abled users and all other lifelong learners. NDL India will provide a single window search facilities to act as a onestop shop for all digital resources. Information can be personalized based on the education level, choice of language, difficulty level, media of content and such other factors while other digital libraries may not include all these choices. This is like a customized service provided in a 24x7 integrated environment to suit a user's requirement and will be like a one-stop shop for all.

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of India	🚨 व्यक्तिगत जानकारी 🔒 पार	सवर्ड बदलें 🖂 ऍन.डी.एल. इंडिया खाता		MINISTRY OF HUMAN INDIAN INSTITUTE OF RESOURCE DEVELOPMENT TECHNOLOGY KHARAGPUR
	प्रथम नाम	Mahesh		
र्एन.डी.एल. इंडिया के विषय में	उपनाम	Sonawane		🛔 एक्टिविटी क्षेत्र
	राज्य	Maharashtra	•	Hello, Marlesh Sonawarle
कीचडे शिक्षण वस्तु प्रकार	शहर	Shirpur		नशनल ।डाजटल लाइब्ररा आफ़ इंडिया में आपका स्वागत हैं
ाक्त फीचर्ड विषय क्षेत्र	शैक्षणिक भूमिका	UG and PG	•	निम्नलिखित गतिविधियों के माध्यम से आप ऍन.डी.एल. इंडिया की सफर कर सकतें हैं
	भाषा	English	- Í	= 11.77
फीचर्ड सोर्सेज	संस्थान का नाम	R. C. Patel Institute of Technology		Q स्रोज
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सिमाचार और घटनाक्रम		संचित करें रद्द करें		all-Add Users
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> Federated searching tools to search articles in multiple databases:

OPAC serves as a federated search engines as within OPAC one can find addresses to data bases, by clicking databases can be accessed. Intranet domain name of OPAC for accessing databases are also available on this link http://Library/w27.

Library website

Library website can be accessed from anywhere. It gets updated on regular basis and contains information about the library. All the collections of books, print journals, e-journals, NPTEL Videos etc are available in OPAC which works on intranet.

http://www.rcpit.ac.in/mainpage.php?pid=111

➤ In-house / remote access to e-publications: Yes

$\triangleright$	Library Automation:	
	Institute library is fully automated using SLIM 21 (System	for Library
	Information and Management) software.	
$\triangleright$	Total number of computers for public access	: 10 Nos.
$\triangleright$	Total numbers of printers for public access	: 02 Nos.
$\triangleright$	Total numbers of scanners for public access	: 01 Nos.

- Internet band width/ speed
   Institutional repository
   Yes
- Content management system for e-learning : Yes

### ➢ Participation in resource sharing networks (like Inflibnet) : Yes 4.2.5 Provide details on the following items:

The details usage library is as given in table no. 4.11.

Table No. 4.11Details of usage of Library

Sr. No.	Particulars	Details
1	Average Number of Walk ins	203 Per Week
2	Average Number of books issue /Return	495 per week
3	Ratio of library books to students enrolled (Student: Book)	3 :1
4	Average number books added during last three year	7424
5	OPAC Login Number of Hits	2001 (till dated 12/08/2017)
6	Number of information literacy training organized	Once in the year
7	Details of "weeding out" of books and other materials	The procedure for weeding out of books is maintained and handled by the librarian after such books observed existing racks.

**4.2.6** Give details of the specialized services provided by the library:

Institute has some specialized services provided by the library mentioned in table no. 4.12.

1 at	Table No. 4.12 Specialized services provided by the horary					
Sr. No.	Particulars	Details				
1	Manuscripts	Dissertations list and softcopy (PG)				
2	Reference	Available on stack room – Reference Books, Dissertations, Print Journals, CDs/DVD				
3	Reprography / scanning	Available for faculty and for students they can reach to cooperative store.				
4	Inter-library Loan Service	<ul><li>Available with following library</li><li>1. DELNET, Delhi</li><li>2. Indian Institute of Technology Bombay</li></ul>				
5	Information Deployment and Notification	Display on notice board & available on request or e-mail				
6	Download	Yes, no such limit for e-resources/e-databases				
	Printing	Yes, two Xerox cum printing machines available				
7	Internet Access	155 Mbps				
8	Printouts	Yes, 2 Xerox cum Printing machine				
9	Reading list / Bibliography compilation	Easily available on OPAC link http://Library/w27				
10	In-house/remote access to e-resources	E-resources are made available through personal email id and institute email id.				

Table No. 4.12 Specialized services provided by the library

11	User Orientation and awareness	Library always take an initiative to have user orientation and awareness program for first year newly admitted students.			
12	Assistance in searching Databases	Librarian always sends current awareness services weekly through email and also maintained it on OPAC.			
13	INFLIBNET/ IUC facilities	Institute joined N-List of Inflibnet			

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

The library staffs lend support to staff and students in the following ways-

- Providing required information about books, journals and important information from newspapers.
- > Searching for books availability using OPAC.
- > Identifying and locating the books from the stack.
- > Assisting in accessing the online information.
- Assisting in searching and downloading the required articles from the available online databases.
- > Rearrange returned books in appropriate rack.

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

- By considering visually/physically challenged persons, library is at ground floor with ramp to facilitate physically challenged persons to reach library easily.
- The library staff is always ready to assist the physically challenged persons in obtaining the materials / documents. They are usually given top priority during issue/return of books.

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 from users is analyzed for improving the library services is as follows.

- > The feedback of Library is taken annually from students as well as faculty.
- The collected feedback is analyzed and conveys to library advisory committee and strategic decisions decided accordingly.
- In addition to feedback, user suggestion is also collected in suggestion box which is available at the entrance of the library located circulation counter and opens its monthly.

#### 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 the different configuration and number of systems available for each) System Configurations

The detail configurations of computer system, server and laptop as well as lists of printer, scanner and UPS are given in following tables.

Sr. No.	Desktop Configuration	Make	Year of Purchasing	No. of Systems
1	Dell Optiplex 380nDTV (N series) 380DT Chassis Heat sink 65 watt Core 2 Duo Processor E75(2.93Ghz/1066FSB/3M L2 cache) Intel R G41 Express Chipset W/Ich 27 Integrated Broadcom Graphics Media Accelerator X4500 Real tech high definition Audio 4 GB NECC DDR3 Ram		2008	93
2	Dell Optiplex 745nDTV (N series) 380DT Chassis Heat sink 65 watt Core 2 Duo Processor E75(2.93Ghz/1066FSB/3M L2 cache) Intel R G41 Express Chipset W/Ich 27 Integrated Broadcom Graphics Media Accelerator X4500 Real tech high definition Audio 4 GB NECC DDR3 Ram DELL		2011	43
3	Dell 390 Intel Core i3(3.10 Ghz),320 GB SATA HDD,4 GB DDR3 RAM , Integrated Broadcom Graphics Media Accelerator , Real tech high definition Audio, DVD R/W,DELL 18.5 LED Monitor		2012	106
4	Dell 3010 (3.10 Ghz),500 GB SATA HDD,4 GB DDR3 RAM , DVD R/W,DELL 18.5 LED Monitor		2013	96
5	DELL Optiplex 3010 Core i5 8 GB RAM 1 TB HDD		2013	01
6	HP Pro One 400 All in One: Core i3,4 GB DDR3 RAM,500SATA HDD	HP	2015	451
			Total	790

#### Table No. 4.13 Details of computer system configurations year wise

Sr.	Server Configuration	Make	Year of	No. of
No.	berver configuration	Whate	Purchasing	Severs
1	IBM Server 8647-52xIBM single Xeon 2.8GHz,256MB DDR ram /dual,U320 Conroller,36GB Non hot swap SCSI HDD,10/100/1000 Gigabit Ethernet	IBM	2005	02
2	IBM x220 Server Intel Pentium3at 1.5GHz,Dual Processor Level 2 Cache 256KB,Hot plug optional 18.2 GB Ultra 160 SCSIHDD (10 Kbps,128 MB ECC SDRAM(Expandable to 4 GB)Network integrated 10/100MBPS Ethernet	IBM	2006	01
3	IBM eServer xSeries 8648 IAS X226 Intel Xeon 3.0 GHz,2 MB L2 Cache with EM64T Technology,800 MHz FSB, 1 GB ECC DDR2 SDRAM, Dual Channel U320 SCSI Controller, Gigabit Ethernet,73 GB 10K rpm Ultra 320 SCSI HDD Hot Swap, 48X CD ROMd. Dual Redundant Power Supplies	IBM	2006	01
4	Server 5(Dell) AS PE840 2.13 GHz Dual Core,4 GBRAM, 140 GB HDD	DELL	2007	01
5	IBM Server (Rack Server) 520 x6 Swap HDD , DVD/RW	IBM	2008	01
6	HP ML10 Server Xeon Processor 32 GB RAM 3 TB HDD. Tower Server Dual LAN GIGABIT.	HP	2014	02
7	Dell 1 U Rack Model- R430 Intel® Xeon® E5-2609 V4 (1.7 GHz/ 8-core/1600 MHZ/20MB/85W) 1 X 8 GB DDR4 (12 DIMM Slots) 1 X 300 GB SAS 7.2KK RPM (8LFF (3.5inch) Hot Plug AS/SATA) RAID 0,1,5 (H730)+1GB CACHE IDRC Enterprises DVD Writer 1 X Inbuilt (550W) 3 Yrs. Pro-Support & Mission Critical / 24x7 4Hr Onsite.	DELL	2017	02
	· · · · · · · · · · · · · · · · · · ·		Total	10

Table No. 4.14 Details of server configurations year wise

#### Table No. 4.15 Details of Laptop Configurations year wise

Sr. No.	Laptop Configuration	Make	No. of Laptops	Year of Purchasing
1	Dell Laptop Vostro	DELL	1	2005
2	DELL Studio 15	DELL	1	2009
3	DELL Mini (Inspirion)	DELL	18	2010
4	Dell Vostro Dual Core	DELL	5	2012
5	Dell Vostro i3	DELL	9	2013
6	Dell Inspirion 15 i3	DELL	22	2014
7	Dell Inspirion core i7	DELL	1	2015
			Total	57

		()		-	
Sr. No.	Printer Specification	Туре	Make	Model	Quantity
1	Dot Matrix LX 300 II	Dot Matrix	Epson	LX 300II	6
2	Dot Matrix LX 300	Dot Matrix	Epson	LX 300II	8
3	Dot Matrix LX 310	Dot Matrix	Epson	LX 300II	5
4	HP LaserJet 1020	Laser Jet	HP	1020	13
5	HP LaserJet mfp 1005	Laser Jet	HP	MFP 1005	8
6	HP LaserJet mfp1213	Laser Jet	HP	MFP 1213	1
7	Hp LaserJet 1008	Laser Jet	HP	Laser Jet 1008	2
8	HP LaserJet Mfp 3030	Laser Jet	HP	MFP 3030	1
9	Epson LQ 1150	Ink Jet	Epson	LQ 1150	1
10	Epson Inkjet L 110	Ink Jet	Epson	L 110	1
				Total	46

Table No. 4.16(a) List of Printer

#### Table No. 4.16(b) List of Scanner

Sr. No.	Scanner Specification	Туре	Make	Model	Quantity
1	HP Scanjet 2410	Flat Bed Scanner	HP	2410	4
2	HP Scanjet 200	Flat Bed Scanner	HP	Scanjet 200	3
3	Canon CanoScan LiDE 120 Scanner	Flat Bed Scanner	Canon	CanoScan LiDE 120 Scanner	7
	·			Total	14

#### Table No. 4.16(c) List of UPS

Sr. No.	UPS Specification	Туре	Make	Model	Quantity
1	Emerson Make 6 KVA Online UPS	UPS	Emerson	6 KVA	11
2	Emerson Make 10 KVA Online UPS	UPS	Emerson	10 KVA	3
3	Emerson Make 3 KVA Online UPS	UPS	Emerson	3 KVA	5
				Total	19

#### • Computer-student ratio

Table No. 4.17 Computer student ratio

Computer-student ratio	As per AICTE		
	Required	Available	
UG	1:6	1:4	
PG	1:4	1:1	

- Stand alone facility All computers are connected in LAN.
- LAN facility All the computer systems are connected through LAN with 100Mbps/1.0Gbps speed.
- Licensed software

Institute has Microsoft campus agreement and list of system software and application software is mentioned in following table no. 4.18.

Sr. No.	Licensed software	Software/Systems/facilities used
1	Microsoft Windows 7 Enterprise	System Software
2	Microsoft Windows 7 Professional	System Software
3	Microsoft Windows Vista	System Software
4	Microsoft Windows 8 Enterprise	System Software
5	Microsoft Windows 8 Professional	System Software
6	Microsoft Windows 8.1 Enterprise	System Software
7	Microsoft Windows 8.1 Professional	System Software
8	Microsoft Windows 10 Enterprise	System Software
9	Microsoft Windows 10 Professional	System Software
10	Microsoft Server 2008	System Software
11	Microsoft Server 2008 R2	System Software
12	Microsoft Server 2008 Enterprise	System Software
13	Microsoft Server 2012	System Software
14	Microsoft Server 2012 R2	System Software
15	Microsoft Share point server 2007	System Software
16	Microsoft Share point server 2012	System Software
17	Lync 2010	System Software
18	Lync 2013 with sp1	System Software
19	Office Communicator Server 2007	System Software
20	Office audit and Control management Server	System Software
21	Rational Rose	Application Software
22	Oracle 9i	Application Software
23	Kaspersky Antivirus	Application Software
24	MATLAB 2008a	Application Software
25	Microsoft office 2007	Application Software
26	Auto cad	Application Software
27	Shri Lipi	Application Software
28	Minitab 7 Academic	Application Software
29	Cisco Packet Tracer Freeware	Application Software
30	Ansys 11	Application Software
31	Unigraphics NX5	Application Software
32	SolidEdge	Application Software
33	CATIA V5R17	Application Software
34	AUTOCAD 2010	Application Software
35	AUTOCAD 2016(from AICTE)	Application Software
36	Xilinx License Version (Educational)	Application Software

Table No. 4.18 List of Softwares

37	Matlab 2009 software & signal processing toolbox (20 Licenses)	Application Software
38	8085 simulator(WSIM 85)	Application Software
39	Circuit creator /PCB 123 software	Application Software
40	Tina Pro 5 users software IE3D	Application Software

- Number of nodes/ computers with Internet facility All 790 computer systems connected in LAN which is provided with Internet facility of 155Mbps by BSNL Leased Line.
- Any other In addition to the Internet facility, the Institute has few more things which are listed below.
  - Institute has been approved to have a 20Mbps VPN over broad band connection on Radio link under HRDs NMEICT project
  - ➢ Free Wi-Fi facility is provided by Reliance Jio.
  - Up gradation of Wi-Fi facility with latest configuration of CISCO network solution is in process.

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

The details of the computer and internet facility made available to the faculty and students on the campus is as follows-

- All latest configurations are available in all computer labs including computer center for students.
- Computer with internet facility is provided to each faculty member at their location.
- Internet facility is made available to students not only in computer center including all departmental computer labs.
- Each department has their own computing facility for their faculty and students.
- The campus is Wi-Fi enabled for the easy use of internet by the students and faculty.

The details of the computer and internet facility made available to the faculty and students on the off-campus is as follows-

- > Internet facility is made available to students in hostel premises.
- All HODs are availed of laptop with internet dongle to be used on campus as well as off campus.

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

Institute always depicts its willingness in the IT infrastructural up-gradation. Institute usually upgrades the computer systems with latest configuration available. Owing to the technological changes and the role of ICT in transfer of such knowledge to the student community, the Institute is advanced in its initiatives to develop the IT infrastructure by

- Up gradation of Wi-Fi facility with latest configuration of CISCO network solution is in process.
- Maximize Cyberoam next generation firewall up to 1000 users.
- > Upgraded computer systems with new HP all in one.
- These computers are on rental basis. After five years of purchased, these will be replaced by computers with latest configurations.
- Maximize utilization of E-learning facilities
- Procuring and installing industry specific softwares and to enable the students to become industry ready products

Non- working computer hardware components are used as models to demonstrate these components in respective labs.

**4.3.4** Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

The details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories for the last four years is given in table no. 4.19.

Sr.	Computer	2013-14	2014-15	2015-16	2016-17
No.	Heads	Amount Spent in Rs.	Amount Spent in Rs.	Amount Spent in Rs.	Amount Spent in Rs.
1	Computer Software & Accessories	26793153.35	27265850.35	28102417.35	29208372.49
2	Computer Consumables Expenses	2277886	949899	2297586.95	1116353.86

Table No. 4.19 Computer annual budget for the last four years

## **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 institute provides all sorts of facilities for the extensive use of ICT resources to the students and faculty. Such kind of facilities is listed below.

- Class rooms are equipped with LCD Projector, Screen, Audio, Video and Internet facilities.
- The campus is Wi-Fi enabled for the easy use of internet by the students and faculty.
- National Programme on Technology Enhanced Learning Centre has been established to promote our students to listen the video lectures of eminent Professors of IITs, and IISc.
- Quality Improvement workshops and FDP conducted to enhance the quality of both the faculty members and the students. It motivates and aids the faculty to switch from the traditional learning mode to the blended learning mode for the enhancement in quality of technical education.
- A separate server with e-materials and videos is available in all the departments for the access of the students and the faculties.
- ➢ For every course, power point presentation is being prepared by the faculty and it is used for taking classes in interactive way.
- Digital library is functioning as a separate section of library for the effective usage of e-materials, e-journals by the students and faculty.
- An exclusive Language Laboratory functioning to improve communication of the students and faculty.
- Computerized feedback system is operational.
- > Students are allowed to use their laptop inside the institute.

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 has always stressed on a student centric teaching learning process.

- Internet is a network of networks, providing opportunities for inquiry-based learning where faculty and students can access the largest information archives and could connect with each other, learn flexibly, and collaborate with others around the world.
- Faculty must begin to re-appraise the methods by which they meet student learning needs and match curriculum to the requirements of human thought.
- The institute understands that the faculty has to be reoriented from time to time. The institute encourages the faculty and technical assistants to undergo training on the computer-aided teaching and training.
- Well equipped computer Labs and LCD projectors are available to the faculty for conducting seminars, workshops, computer aided training, faculty development programmes and conferences.

- The campus is Wi-Fi enabled for the easy use of internet by the students and faculty.
- The digital library facility helps the students and faculty members to gain knowledge. Moreover, the campus is fully enabled Wi-Fi access to avail internet facilities.
- The technical assistants are always available for any need based assistance in the use of ICT.

**4.3.7** Does the Institute avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

- The institute has availed of the National Knowledge Network connectivity through North Maharashtra University, Jalgaon which is affiliating university.
- Institute has been approved to have a 20Mbps VPN over broad band connection on Radio link under HRDs NMEICT project.

#### 4.4 Maintenance of Infrastructure and 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)?

Institute gives great prominence to creation, maintenance and upkeep of the entire infrastructure necessary for effective teaching-learning, positive development and efficient maintenance. The following table no. 4.20 shows maintenance and upkeep of the entire infrastructure during last four years.

-					
	Budget Head	2013-14	2014-15	2015-16	2016-17
Sr. No.		Amount Spent in Rs.	Amount Spent in Rs.	Amount Spent in Rs.	Amount Spent in Rs.
1	Building & Furniture	10851464.6 4	11579011	13537728.76	13701362
2	Equipments	1870247	1521615	1807493	1920324
3	Computers	2277886	949899	2297586.95	1116353.86
4	Vehicles	246640	51748	50056	32972
5	General Maintenance & Repair	1446842	1615137	815154	527912

Table No. 4.20 Maintenance and upkeep of the entire infrastructure

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

Institute has mechanism for maintenance and upkeep of infrastructure, facilities and equipments is as follows-

- Stock verification is done to identify the non-working equipment and suggestions for necessary replacements are presented.
- Regular cleaning and up keeping of the equipment is monitored by the faculty member in-charge of the laboratories.
- The annual budget and allocation of funds for and regular monitoring of utilization of funds for maintenance ensures the improvement in the infrastructure of the Institute.
- Annual maintenance contract (AMC) is availed for critical and sophisticated equipment and software.
- ➤ The sensitive equipment, like computers and science apparatus are maintained by the lab assistants and the electrical equipments, water

purifying machine, RO, photocopiers, printers, are timely serviced by the technical experts.

- A team of security guards comprising one Security Officer and 13 Security Guards is there on campus for security and vigilance of the entire premises.
- In addition to these technical people designated as lab assistants are available in all departments to attend regular difficulties of students and staff of the concerned departments.

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

Institute take up calibration and other precision measures for the equipments/instruments considerably with the following procedure.

- The institute has authorized the HODs to take up the calibration of precision equipments/instruments as per the standards of the instruments.
- The laboratory equipment are maintained and calibrated as per the budget allotted to the concerned department.
- The Institute has Network Administrator and team of Lab Assistants to take care of the maintenance of the computers and networking facilities.

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

Institute has taken major steps for upkeep and maintenance of sensitive equipment, voltage fluctuations and constant water supply is as follows-

- There are Generators backup (100 kVA, 125 kVA and 250 kVA) with sensor system to ensure uninterrupted power supply.
- All computer labs is provided with Uninterrupted Power Supply (UPS) to ensure no data lost and any sort of damage.
- To take care of voltage fluctuation for overall building 415kVA stabilizer is provided.
- RO Plant Systems are installed in the campus and there is a continuous drinking water supply.
- The Institute has an in-house electrician and other supporting staff to take care of the electrical equipment and for other regular maintenance.
- > All buildings provided with Fire-fighting equipment and First aid boxes.
- Institute has separate server room for maintaining and controlling of services throughout the building.

# Criterion V Student Support And Progression



**Criterion:V** 

#### CRITERION V: 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, the institute publishes its updated college prospectus annually. It acts as a good guide to all the students and parents seeking admission in our college. The information provided through this are as follows:

- The Vision and Mission statements
- Objectives of the institute
- Profile of the institute and departments
- Facilities and amenities available in the institution
- Department Details
- Courses offered
- Eligibility criteria for admission
- Directorate of Technical Education (DTE) rules and regulations
- Admission procedure
- Major activities and achievements
- Placements record
- Fees structure and Scholarships
- Transportation facilities for students
- Residential facilities for students

In addition to this, students get information through institute website, social sites like face book, LinkedIn, etc. All information related to institute is regularly updated on website.

## 5.1.2. Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

Financial assistance in the form of scholarship is given every year to needy and meritorious students. Table 5.1 shows details of students receiving institutional scholarships / freeships during the last four years.

Sr. No.	Academic Year	No of Students received scholarship	Amount Disbursed in Rs.
1	2016-17	40	1774673/-
2	2015-16	88	4004415/-

**Table 5.1 Details of Institutional Scholarship** 

Sr. No.	Academic Year	No of Students received scholarship	Amount Disbursed in Rs.	
3	2014-15	98	2830906/-	
4	2013-14	94	2253579/-	

5.1.3. What percentage of students receives financial assistance from state government, central government and other national agencies?

Table 5.2 shows details of students receiving financial assistance from state government & central government.

	State Government			Government of India		
Year	Number of students received scholarsh ip	Total numbers of the students	Percenta ge (%)	Number of students received scholarsh ip	Total numbers of the students	Percenta ge (%)
2016-17	793	2435	32.56	1292	2435	53.05
2015-16	704	2304	30.55	1228	2304	53.29
2014-15	820	2464	33.28	1234	2464	50.08
2013-14	937	2520	37.18	1136	2520	45.08

 Table 5.2 Details of State & Central Government Scholarship

#### 5.1.4 What are the specific support services/facilities available for?

a) Students from SC/ST, OBC and economically weaker sections

Students from SC/ST, VJ, SBC, OBC, NT-B, C, D and economically weaker sections receive scholarship/free ship from the Social Welfare Department as per Government regulations. Economically weaker section students get EBC concession in fees from Govt. of Maharashtra through Directorate of Technical Education (DTE). Additional scholarship from institute is given to meritorious students from SC/ST, OBC and economically weaker sections.

#### b) Students with physical disabilities

The facilities provided by the institute to differently abled students are as follows:
- Ramps and Lift are provided for the convenience of these students.
- Special toilets are provided for students with physical disability.
- Reserved seating arrangement is provided for students with physical disability.
- They are given extra time during examinations as per University norms.

### c) Overseas students

There are no overseas students admitted in the Institute.

d) Students to participate in various competitions/National and International

Information is circulated among students about various paper presentations, seminars, project competitions, model makings, technical fests, cultural events, sports events, etc. which are organized by reputed institutions such as IITs, NITs, Universities and other colleges, etc. as well as notified on notice boards. Students are provided with financial supports in terms of Travelling Allowance (TA) etc. Students are guided by teachers for participation in these competitions. Usage of laboratories and computer facilities, e-journals, library, workshop etc. is extended to students.

e) Medical assistance to students: health centre, health insurance etc.

First aid facilities are available in every department and hostel. Doctor is appointed in the institute for medical assistance. All students are covered under Medical / Health Insurance policy of North Maharashtra University, Jalgaon.

### f) Organizing coaching classes for competitive exams

The institution supports the students by arranging special training programs, soft skills training programs conducted by the internal and external experts. Vidyalankar Educational Services, Mumbai is providing facility for GATE exam. Institute has purchased Gate Tutor Software for students. Further the institute organizes expert lectures to motivate and guide the students to participate in these examinations. Institute arranges expert talk for student to motivate for taken admission in abroad for study.

**g)** Skill development (spoken English, computer literacy, etc.,) The institute has a language lab with state of art infrastructure to facilitate students for spoken English. To improve soft skills institute has incorporated additional lectures in the time table which are conducted by external agencies. Soft skills are taught as a part of the curriculum. In addition, guest lectures by eminent and distinguished personalities are arranged by the Training and Placement department and every department takes efforts to enhance soft skills such as spoken English, resume writing, personality development etc. Japanese Language course is provided to the students.

### h) Support for "slow learners"

Slow learners are identified from end semester examination (ESE) result of university. Based on result of ESE a separate division is formed for slow learners. Experienced teachers are appointed for slow learners division.

# i) Exposures of students to other institution of higher learning/ corporate/business house etc.

The College ensures all measures to expose the students to the real world experiences besides providing quality education to the students within the college campus.

Interaction with corporate/entrepreneurs/high profile academicians /guest lecture by eminent faculty and series of leadership lectures are organized periodically by the institute to give exposure to the students in all facets of life.

Every semester industrial visit is carried out for students. This increases linkage with industry personals. The institute provides bus facility to visit nearby industries to give exposure of industrial atmosphere and working culture to the students. Institute encourages students to participate in national and international level competitions conducted by NITs, IITs, etc.

RCPIT has tie-ups / associations like; National Program on Technological Enhance Learning (NPTEL- MHRD, New Delhi), Quality Enhancement in Engineering Education (QEEE- IIT, Madras), Center for Distance Engineering Education Program (CDEEP- IIT, Bombay and IIT, Kharagpur).

On an average, 18-20 co-curricular courses are conducted per year using these platforms to update student's

knowledge on latest trends in industrial technology.

Institute encourages many students to undergo for MOOCs from reputed national / international institutes / universities worldwide. Every year many students register for these courses and get certified.

### j) Publication of student magazines

College publishes Newsletter twice in a year for staff as well as students which includes students' achievements and participation in various activities.

- 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.
  - Institute organizes expert lectures of eminent industrialists/ industry persons, administrators, technocrats to inculcate and nurture entrepreneurship/managerial/leadership qualities amongst the students.
  - To develop innovative skills among the students every year suggest innovative project topics to final year students.
  - As a part of third year curriculum, students undergo vocational training during summer vacation for about a month and submit a report based on it. This provides exposure to industrial work culture; processes and lives experience of its functioning and help to understand the prerequisites for an entrepreneur.

Table 5.3 shows numbers of entrepreneurs of the departments.

Sr.	Nama of Dapartmont	Number of
No.	Name of Department	Entrepreneurs
1.	Civil Engineering	10
2.	Computer Engineering	3
3.	Electrical Engineering	0
4.	E&TC Engineering	8
5.	Information Technology	4
6.	Mechanical Engineering	9

**Table 5.3 Details of Department wise Entrepreneurs** 

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, debate and discussions, cultural activities etc.

\* Additional academic support, flexibility in examinations

\* Special dietary requirements, sports uniform and materials

\* Any other

The institution is committed to encourage students for participating in various extracurricular activities by ensuring consistent encouragement and motivation. The necessary facilities are provided and adequate funds are allotted. The sports and cultural committees are formed to supervise the extracurricular activities. Similarly, all co- curricular activities like literary festivals/ debate/ essay competition/ project contest/ poster competitions etc are conducted in Converges (A Technical Fest) every year. Students are encouraged for participating in various Add on courses by every department. 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 explore their talents.

# The policies and strategies of the institution in promoting these activities include:

- i. The institution also promotes the participation of the students in inter-collegiate competitions.
- ii. Special provision in the budget is made for sports and cultural activities.
- Provision of funds are made to conduct extracurricular and co-curricular activities such as Quiz competitions, Debate and Discussions, Cultural activities etc. through departmental students associations.
- iv. Allowance like TA-DA, Registration fees, additional expenses are provided.

### (a) Additional academic support, flexibility in examinations:

- Flexibility in conduction of internal tests/ examinations for participants and remedial classes and lab sessions are conducted to compensate any academic loss of the students.
- Special leave is granted for students who are from classes for participating in cultural or sports events.
- Academic support is provided for all those students participating in extracurricular activities by including them in the classes to help them make up the classes missed.

### (b) Special dietary requirements, sports uniform and materials:

- Apart from good academic record, sports play a very important role in building one's personality. Institute encourages students to participate in a variety of sports activities at intercollegiate, university, state and national levels.
- Well qualified and University approved Director of Physical Education is appointed to look after sports activities of the institute.
- Institute provides required kits/material and daily allowance to students participating in sports activities.
- College provides sports uniform to all the students participating in the inter- collegiate/inter University events and provides dietary supplements for such students.

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.

The institution encourages the students to prepare for various competitive examinations through awareness programs, special coaching and training. The Training and Placement cell concentrate to achieve the above goals by giving additional informative classes.

Students are guided for various competitive examinations like Graduate Aptitude Test Engineering (GATE). Vidyalankar Educational Services, Mumbai is providing facility for GATE exam, where students get coaching from the experts with the help of online platform.

Preliminary information of GRE/TOEFL is given to students. Institutes have collection of book for competitive exams like GRE/TOEFL/GATE.

Table 5.4 shows number of students qualified in various competitive exams.

Sr. No.	Academic Year	No. of Students Qualified GRE/TOEFL/GATE/CAT
1	2016-17	1
2	2015-16	9
3	2014-15	13
4	2013-14	37

Table 5.4 Details of Students qualified in various competitive exams

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

The institute provides regular counseling to the students to address various issues viz. academic, personal, career, and psycho-social.

• Academic:

Related to the academic counseling, the institute has Local Guardian (LG) scheme. In this scheme, one LG is assigned to a batch of students (minimum 20). The LG is required to conduct periodic meetings with the students. The LG looks after their academic requirements such as attendance monitoring, exam preparation, books requirements, notes requirements and makes arrangements for remedial classes. The LG regularly maintains

the academic record of the student and informs the parents about the same after each internal assessment test and University examinations after every semester.

This helps teachers build a close professional and personal relationship with a student and also helps in continuous monitoring of the progress in all aspects of the students.

### • Personal:

The LG regularly interacts with the students on one to one level. The LG is responsible to develop friendly and faithful relationship with every student to make them comfortable to share their personal problems. The student is encouraged to share his/her personal problems. Such personal problems are kept as secret between that student and LG only. The solution for such problems is found out through the consultation with senior faculty members.

### • Career Counseling:

At the beginning of the pre-final year of study the student is given the option of either choosing placement training or progressing in higher studies.

Students who have opted for campus placement are slotted into various activities of the placement cell - soft skill development, group discussions, mock interviews, intensive training in clearing general and technical aptitude tests – using skilled resources from both inside and outside the institution.

The institute encourages the students to go for higher studies and research.

### • Psycho-Social:

The students during the course of their studies in the institute come across various issues. Few students face psychological problems because of peer pressure, fear, anxieties, depression, sadness, family problems etc. These students face difficulties in coping up with academic development particularly at entry level. The senior faculty members along with HoD and Principal help these students through counseling. The LG remain in constant touch with all students to handle all sorts of their academic and personal problems. During the meetings, LG can detect a student having psychological disorders and report to HoD. Corrective action is initiated from LG, HoD up to principal depending upon the severity of psychological disorders. Students are counseled to become better human beings and advised to stand tall for the social cause.

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 the programmes).

Yes, there is a structured mechanism for career guidance and placement of students. There is a separate training and placement cell headed by Training and Placement officer with one faculty from each department as a member.

Training and Placement coordinators carry out different activities related to both training and placement. These include:

- Collection of data and CVs of each student
- Arranging for training activities to enhance aptitude and soft skills
- Arranging group discussions and mock interviews
- Arranging expert / guest lecturers of industry personnel
- Arranging industrial training / educational visits to understand the concepts practically
- Arranging Campus placement of different industries

The following services are provided in the career guidance and placement.

### **Information of job Opportunities:**

The students are informed regarding the vacancies offered by various employers. The notice of the advertisements is put up on the notice board at training and placement cell as well as at every Department. Updated information is also made available on Institute website. The students are informed regarding all necessary information and important dates for such vacancies.

### **Discussion of Exam Module & Preparation of the Exam:**

The training and placement cell organizes lectures on career opportunities. Interactions are conducted between the training and placement personnel/ invited experts and the students to brief them about exam module and pattern, the syllabus, and the methodology of attempting the paper. Mock tests are held to facilitate them in this pursuit. Their performance is analyzed after every test and then a brain storming session is organized to assess their strengths and weaknesses.

### Soft Skills Training Areas:

Soft skill training areas include positive attitude development, goal setting, leadership, decision making, team building, communication skills, mock interviews, vocational training, etc.

### Follow up:

The placement cell keeps track of the post examination developments. As and when the result is declared, the cell informs the students regarding the result. The results are analyzed and then the next process of helping the successful candidates is taken up.

#### **GDPI:**

The Institute organizes sessions of Group Discussions and Mock Personal interviews for the candidates who have succeeded in the written test. The drilling exercise takes place till the candidate is totally confident regarding his performance for the final interview.

The placement cell of the Institute invites many reputed companies for campus recruitment. The details of branch wise placement are shown in Table 5.5.

SN	Department Name	No. of Students Placed					
	- • Far	2016-17	2015-16	2014-15	2013-14		
1	E & TC	79	50	32	7		
2	Computer	69	48	18	22		
3	IT	12	8	5	11		
4	Mechanical	58	59	5	7		
5	Electrical	39	26	NA*	NA*		
6	Civil	25	21	25	1		
	Total	282	212	85	48		

**Table 5.5 Details of Placement Record** 

\* NA: Not Applicable as First batch of Electrical Engineering passed out in academic year 2015-16

Figure 5.1 shows details of year wise placement of institute in last four academic years. From the figure, it can be seen that number of placement are increased.



### Fig. 5.1 Details of Year wise Placement of Students

Table 5.6 (a), (b), (c) & (d) shows branch wise percentage of students placed during campus interviews for academic year 2016-17, 2015-16, 2014-15 & 2013-14 respectively.

Sr. No.	Department	Interested/ Eligible students	No. of students Placed	Placement Percentage
1	E & TC	110	79	71.82
2	Computer	95	69	72.63
3	IT	30	12	40.00
4	Mechanical	155	58	37.42
5	Electrical	55	39	70.91
6	Civil	41	25	60.98
	Total	486	282	58.02

 Table 5.6 (a) : Placement Percentage for Academic Year: 2016-17

 Table 5.6 (b):
 Placement Percentage for Academic Year: 2015-16

Sr. No.	Department	Interested/ Eligible students	No. of students Placed	Placement Percentage
1	E & TC	105	50	47.62
2	Computer	105	48	45.71
3	IT	25	8	32.00
4	Mechanical	120	59	49.17
5	Electrical	50	26	52.00
6	Civil	35	21	60.00
	Total	440	212	48.18

 Table 5.6 (c):
 Placement Percentage for Academic Year: 2014-15

Sr. No.	Department	Interested/ Eligible students	No. of students Placed	Placement Percentage
1	E & TC	105	32	30.48
2	Computer	95	18	18.95
3	IT	30	5	16.67
4	Mechanical	150	5	3.33
5	Electrical	NA	NA	0.00
6	Civil	40	25	62.50
	Total	420	85	20.24

Sr. No.	Department	Interested/ Eligible students	No. of students Placed	Placement Percentage
1	E & TC	110	7	6.36
2	Computer	95	22	23.16
3	IT	45	11	24.44
4	Mechanical	95	7	7.37
5	Electrical	NA	NA	0.00
6	Civil	20	1	5.00
	Total	365	48	13.15

 Table 5.6 (d):
 Placement Percentage for Academic Year: 2013-14

The number of students selected during campus interviews by different employers from 2016-17, 2015-16, 2014-15 & 2013-14 graduated batch of students is tabulated in Table 5.7 (a), (b), (c) & (d) respectively.:

Table 5.7 (a): Details	of Students placed by	different Employers for
	Academic Year: 2016	-17

Sr. No	Name of Company	E&T C	Comp	IT	Mech	Elect	Civil	Total
1	Tata Consultancy Services (TCS)	6	3	-	5	-	-	14
2	ProtoTech Solutions	-	-	-	-	-	-	0
3	<b>Eternus Solution</b>	-	-	-	-	-	-	0
4	Make My Trip (Motif Inc)	14	12	2	23	3	12	66
5	Amazon	-	-	-	-	0	0	0
6	OS3 InfoTech Pvt Ltd	6	6	1	0	-	-	13
7	Sai Info Corp Solutions Pvt Ltd	-	1	1	-	-	-	2
8	Epic Research Pvt Ltd	2	1	0	10	1	2	16
9	Virtusa Polaris	-	-	-	-	-	-	0
10	SEED - Job Fest (CCNA)	-	-	-	-	-	-	0
11	Finacial System Software (FSS)	-	-	-	-	-	-	0
12	Qspider	11	11	2	6	5	2	37

Sr. No	Name of Company	E&T C	Comp	IT	Mech	Elect	Civil	Total
13	Kalpak ElectroTech Pvt Ltd	-	-	-	-	-	-	0
14	Systematic Industries Pvt Ltd	-	-	-	-	-	-	0
15	KPIT Technologies	-	-	-	-	6	-	6
16	Accel Frontline	18	1	-	-		-	19
17	CMS IT Services	4	4	1	-	1	-	10
18	WebTech Devlopers	-	1	0	-	-	-	1
19	Opulent InfoTech	3	-	-	1	0	0	4
20	Nexa Motors	-	-	-	1	-	-	1
21	SEED Infotech (Hire,Train & Deploy)	5	9	1	-	-	-	15
22	ConstroWiz Integrated Services Pvt Ltd	-	-	_	-	1	2	3
23	Nabhangan Buildcon	-	-	-	-	-	1	1
24	Softcon India Pvt Ltd	-	-	-	-	15	-	15
25	Arete Technology & Aas Invotation	2	6	0	0	1	1	10
26	ParaMatrix Technology	-	-	-	-	-	-	0
27	Qubatic Engineering Pvt Ltd	-	-	-	-	-	2	2
28	N D Automation Pvt Ltd	-	-	-	-	3	-	3
29	Dumanis Automation India Pvt Ltd	-	-	-	-	3	-	3
30	Quinnox	-	-	_	-	-	-	0
31	Shiram Transport Finance Co (STFC)	-	-	-	-	-	-	0
32	IIC Technologies	-	-	-	-	-	-	0

Sr. No	Name of Company	E&T C	Comp	IT	Mech	Elect	Civil	Total
33	Hinduja Global Solutions (HGS)	4	2	-	4	-	-	10
34	STUP Consulting Pvt Ltd	-	-	-	-	-	-	0
35	CMS IT Services (TCR)	1	1	-	-	-	-	2
36	UTS Technologies (SEED)	-	-	-	-	-	-	0
37	AnoSales LLP	2	-	-	-	-	-	2
38	Sanveo	-	-	-	-	-	-	0
39	HandsIn Technology	-	2	-	-	-	-	2
40	Prothious Engineering Service	-	-	-	-	-	-	0
41	HTC Diesel Pvt Ltd	-	-	-	3	-	-	3
42	Expert Global Services Pvt Ltd (SEED)	-	7	4	-	-	-	11
43	Speed Techserve Pvt Ltd	-	1	-	-	-	-	1
44	Infosys Off Campus	-	1	-	-	-	-	1
45	Uvimax Engineering Services Pvt Ltd	-	-	-	3	-	-	3
46	Vasundhara Group	1	-	-	2	-	-	3
47	Innovative Vastu Nirman Pvt Ltd	-	-	-	-	-	3	3
48	Xento Systems	-	-	-	-	-	-	0
49	HGS - Android	-	-	-	-	-	-	0
50	Reliance Jio InfoCom	-	-	-	-	-	-	0
51	TurlteDove - Android	-	-	-	-	-	-	0
52	Rendered Ideas Softgames Pvt Ltd	-	-	-	-	-	-	0
	Total =	79	69	12	58	39	25	282

Sr. No	Name of Company	E&TC	Comp	IT	Mech	Elect	Civil	Total
1	Tata Consultancy Services (TCS)	8	10	5	13	10	-	46
2	Persistent Systems Ltd (PSL)	-	1	-	-	-	-	1
3	L&T Infotech (Off campus)	2	1	-	-	-	-	3
4	Bharat Wire Ropes Ltd (BWR)	3	0	0	5	5	2	15
5	<b>Eternus Solution</b>	-	-	-	-	-	-	0
6	ProtoTech Solutions	-	-	-	-	-	-	0
7	Polaris Software FT	-	1	-	-	-	-	1
8	Finacial Software Solutions (FSS)	-	-	-	-	-	-	0
9	Tudip Technologies	-	3	-	-	-	-	3
10	Nitor InfoTech	-	1	-	-	-	-	1
11	Amazon.Com	-	-	-	1	-	-	1
12	Shiram Transport Finance Cos	-	-	-	4	-	-	4
13	Accel Frontline IT Services	23	2	-	-	-	-	25
14	CMS IT Services Pvt Ltd	3	2	-	-	-	-	5
15	3idea Technology	-	-	-	4	-	-	4
16	TCS Off Campus	9	8	1	18	2	-	38
17	Tarang Exports Pvt Ltd	-	6	1	-	-	-	7
18	Deccan Farm Equipment Pvt Ltd	-	-	-	3	-	-	3
19	Bharat Wire Ropes Ltd (BWR) (2nd Phase)	-	-	_	5	2	-	7

Table 5.7 (b): Details of Students placed by different Employers for Academic Year: 2015-16

Sr. No	Name of Company	E&TC	Comp	IT	Mech	Elect	Civil	Total
20	Kalpak Electrotech	-	-	-	-	-	-	0
21	CADD Center	-	2	-	2	-	8	12
22	DOCTRONIC	-	2	-	-	-	-	2
23	SEED CAMPUS (JOB FEST)	-	-	-	-	-	-	0
24	Prothious Engineering Services	-	-	-	-	-	8	8
25	WebTech Devlopers Pvt Ltd	-	-	-	-	-	-	0
26	Variate Consultants Pvt Ltd	1	-	-	1	5	-	7
27	XL Dynamics Pvt Ltd	-	-	-	1	-	1	2
28	AGS Transact Technologies Ltd	-	1	-	-	-	-	1
29	Vihan Constructions Pvt Ltd	-	-	-	-	-	2	2
30	Yippee Technology Pvt Ltd	1	-	-	-	1	0	2
31	Pangulf Technologies	-	-	-	1	-	-	1
32	Syntel	-	5	1	-	-	-	6
33	The Project Health	-	-	-	-	-	-	0
34	Pure Study	-	2	-	-	1	-	3
35	Make My Trip	-	1	-	1	-	-	2
	Total =	50	48	8	59	26	21	212

Sr. No	Company Name	E&TC	Comp	IT	Mech	Civil	Total
1	Tata Consultancy Services	3	3	-	-	-	6
2	Persistent Systems Ltd	-	2	-	-	-	2
3	Tudip Technology Pvt Ltd	-	1	-	-	-	1
4	Softenger India Pvt Ltd	-	2	-	1	-	3
5	Honda Motors & Scooter India Pvt Ltd	-	-	-	-	-	0
6	OS3 Infotech India Pvt Ltd	-	-	1	-	-	1
7	CERNSystem Technology	-	-	-	-	-	0
8	Polaris Software Finacial Technology	-	-	-	-	-	0
9	CMS InfoSystem	4	-	2	-	-	6
10	Harsh Constructions Pvt Ltd	-	-	-	-	15	15
11	Prothious Engineering Services	-	-	-	-	6	6
12	Bosch	-	-	-	-	-	0
13	SVKM's NMIMS	-	-	-	-	4	4
14	Pubmatic	-	-	-	-	-	0
15	TechFlow Engineering Pvt Ltd	-	-	-	1	-	1
16	Yippee Technology Pvt Ltd	-	3	-	1	-	4
17	Syntel	-	-	-	2	-	2
18	CMS InfoSystem (T&R Model)	11	5	2	-	-	18

Table 5.7 (c): Details of Students placed by different Employers forAcademic Year: 2014-15

Sr. No	Company Name	E&TC	Comp	IT	Mech	Civil	Total
19	SEED Infotech	14	-	-	-	-	14
20	QED Baton	-	2	-	-	-	2
	Total =	32	18	5	5	25	85

Table 5.7 (d): Details of Students placed by different Employers forAcademic Year: 2013-14

Sr. No	Company Name	E&TC	Comp	IT	Mech	Civil	Total
1	Tata Consultancy Services, Pune	2	1	1	1	-	5
2	Persistent Systems Ltd , Pune	-	3	-	-	-	3
3	Tudip Technology Pvt Ltd , Pune	-	3	2	-	-	5
4	L&T InfoTech Ltd , Mumbai	-	4	-	-	-	4
5	OS3 InfoTech Pvt Ltd , Navi Mumbai	-	4	-	-	-	4
6	Paramatrix Technology , Navi Mumbai	-	-	-	-	-	0
7	Syntel Ltd, Pune	1	3	1	-	-	5
8	Bedmutha Industries,Nashik	-	-	-	2	-	2
9	Infosys_Spark IT	-	1	-	-	-	1
10	Vodafone	1	1	3	-	-	5
11	iGate (Referal Drive)	-	-	2	-	-	2
12	TechFlow Engineers Pvt Ltd	-	-	-	3	-	3
13	CERNsystem Technology	-	-	1	-	-	1
14	Cognizant Technology	-	2	-	-	-	2
15	Optim Consultancy , Nashik	2	-	1	-	-	3

Sr. No	Company Name	E&TC	Comp	IT	Mech	Civil	Total
	Maharashtra						
16	Posco Steeel Pvt	-	-	-	1	-	1
	Ltd						
17	PurpleTalk	1	-	-	-	-	1
	Prothious						
18	Engineering	-	-	-	-	-	0
	Services						
10	Skylark						0
19	Constructions	-	-	-	-	-	0
20	SVKM NMIMS	-	-	-	-	1	1
	Total =	7	22	11	7	1	48

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 student grievance redressal cell comprised of the head of the institute & head of all departments. The cell takes care of students grievances. Students can apply to the cell for redressal of grievances. The cell solves issues related to inadequate facilities, recess timings, sanitation, etc.

Table 5.8 shows details of members for student grievance redressal cell

 Table 5.8 Student Grievance Redressal Cell

SN	Name of the Member	Designation	Position
1	Prof Dr J B Patil	Principal	Chairperson
2	Prof Dr P J Deore	Vice Principal and Head, E&TC Dept	Member
3	Prof S P Shukla	Head, Applied Science Department	Member
4	Prof N N Patil	Head, Computer Department	Member
5	Prof N P Salunkhe	Head, Mechanical Department	Member
6	Prof G V Tapkire	Head, Civil Department	Member
7	Prof V S Patil	Head, Electrical Department	Member
8	Prof D R Patil	Head, IT Department	Member

Table 5.9 shows the grievances reported and redressed during the last four years.

Sr.No.	Academic Year	Grievances Reported	Grievances Redressed
1.	2016-17	04	04
2.	2015-16	03	03
3.	2014-15	03	03
4.	2013-14	05	05

**Table 5.9 Details of Grievances Reported and Redressed** 

**5.1.11** What are the institutional provisions for resolving issues pertaining to sexual harassment?

Yes, to solve the issues pertaining to sexual harassment 'Internal Complaint Committee' is formed in the institute. Table 5.10 shows details of members of Internal Complaint Committee for resolving issues pertaining to sexual harassment

Sr. No.	Name of Staff	Authority	Position
1.	Prof. Mrs. U. M. Patil	Associate Professor	Coordinator
2.	Prof. Mrs. S. A. Patil	Associate Professor	Member
3.	Prof. Mrs. V. M. Patil	Assistant Professor	Member
4.	Prof. Mrs. S. D. Patil	Assistant Professor	Member
5.	Prof. Mrs. A. A. Bhandari	Assistant Professor	Member

### **Table 5.10 Internal Complaint Committee**

Till date no such case of sexual harassment has been reported in the institute.

# 5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, the institute has formed anti-ragging committee including head of institution and departments. CCTV cameras are installed in the campus and hostels to monitor such activities. No such instance of ragging reported in the institute. The committee is formed as per norms laid down by AICTE/UGC/DTE/NMU.

### No instance of ragging reported during last four years.

Table 5.11 shows members of Anti Ragging committee:

Sr.	Designation	Name	Associated	Contact
No.			With	Number
1.	Head of Institute	Prin. Dr.	Concerned	02563 259600
		Jayantrao B.	Institute	
		Patil		
2.	Police Authority	Police	Police	02563 255022
		Inspector,	Administration	
		Shirpur		
3.	Civil Authority	Tahsildar,	Civil	02563 255043
		Tahsil Office,	Administration	
		Shirpur		
4.	Local Media	Shri. Kishor J.	Deshdoot Print	7588001662
	Representative	Mali	Media	
5.	NGO Representative	Shri. Yogesh	Lions club	9423191411
		N. Bhandari	32382	
6.	Faculty Representative	Prof. Suhas P.	Concerned	9822104148
	– Male	Shukla	Institute	
7.	Faculty Representative	Prof. Mrs.	Concerned	9422750443
	– Female	Amruta A.	Institute	
		Bhandari		
8.	Parent Representative	Shri. Mukesh	Concerned	09826087357
	-Male	T. Agrawal	Institute	
9.	Parent Representative	Smt. Vijayabai	Concerned	7875376025
	-Female	P. Bhadane	Institute	
10.	Student	Mr. Rohan P.	Concerned	7387483377
	Representative- Male	Kagane	Institute	
	(Fresher)			
11.	Student	Miss. Janavi B.	Concerned	7028595714
	Representative-	Girase	Institute	
	Female (Fresher)			
12.	Student	Mr. Hemant D.	Concerned	7709503791
	Representative- Male	Nagpure	Institute	
	(Senior)			
13.	Student	Miss. Sneha M.	Concerned	8275266870
	Representative-	Haswani	Institute	
	Female (Senior)			
14.	Non- Teaching	Mr. Prashant T	Concerned	9822190091
	Representative-Male	Mahajan	Institute	
15.	Non-Teaching	Mrs. Archana	Concerned	9881270340
	Representative-Female	D. Bhandarkar	Institute	
16.	Rector-Boys Hostel	Mr. Parmanand	Concerned	9823489388
		S. Raghuvanshi	Institute	
17.	Rector-Girls Hostel	Mrs. Bharti V.	Concerned	9422233799,
		Borse	Institute	02563 256175

## **Table 5.11 Anti Ragging Committee**

Designation	Name	Contact Number
Co-ordinator (Head First Year)	Prof. Suhas P. Shukla	9822104148
Member	Prof. Satish V. Desale	9767895395
Member	Prof. Premkiran G. Bhadane	9420247019
Member	Prof. Mrs. Amruta A. Bhandari	9422750443

### Table 5.11 (Continued...) Anti Ragging Squad

# **5.1.13** Enumerate the welfare schemes made available to students by the institution.

Following are the welfare schemes available to the students:

- Financial assistance to the University / Institute top 3 students under "R. C. Patel Memorial Scholarship Scheme" in the form of college fees.
- Book bank facility for top 10 students.
- Remedial coaching without any additional fees for backlog subjects to the students.
- Fees concession is given by institute for economically backward students who are from poor family background.
- 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?

Institute has functioning Alumni Association. Alumni Association is not registered. Institute is planning to register in near future.

### Major Contributions & Activities from alumni:

- Deliver guest lectures and interact with students to enhance their knowledge.
- Guiding students in Campus Recruitment related process by conducting session
- Supporting candidate or pass out students in Referral Drive by recommendation his/her profile in internal recruitment process of his/her company
- Alumni members residing in various parts of India and abroad share their experiences with staff and students whenever they visit the institution.
- Alumni mentorship and guidance for real time projects
- Mock Interview session & Aptitude practice session by Alumni before Campus Recruitment process

- Alumni News Letter Connect between Alumni / College / Students /Staff
- Alumni Support in Curriculum enrichment and help in bridging the gap between the Industry & Institute
- WhatsApp Group Local Group + Global group
- Face Book Group
- Alumni who are in Abroad Studying or Working guide students with Higher studies preparation and admission related process and also accommodation related support
- Alumni Support in bringing Campus Recruitment at College by inviting his/her company at RCPIT premises

Table 5.12 shows details of alumni meet and interactions.

Activity	Total Number	Description
Alumni Meet	2	<ol> <li>Alumni Meet at Pune (300+ alumni participated)</li> <li>Alumni Meet at California (6-7 Alumni Participated)</li> </ol>
	3	2014-15
Alumni Interactions	$2\overline{2}$	2015-16
	25	2016-17

 Table 5.12 Details of Alumni Meet and Interactions

## **5.2 Student Progression**

- 5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed
- Table 5.13 shows details of percentage of students progressing to higher education or employment

Student progression	Academic Year (Figures in %)					
Student progression	2016-17	2015-16	2014-15	2013-14		
UG to PG	4.66	6.25	16.20	31.40		
PG to M. Phil	Not Applicable					
PG to PhD	Not Available	0	0	0		
Employed	58.02	48.18	20.24	13.30		
Campus selection	58.02					
• Other than campus recruitment	6.58	15.23	16.43	23.27		

<b>Table 5.13</b>	<b>Students</b>	Progression
I GOIC CIIC	Neu a chies	I I OGI CODIOII

**Trends observed:** Students going for PG courses is decreased for last four academic years. Due to constant efforts of T & P department in campus placements are increased in last four academic years. Fig. 5.2 shows increase in year wise campus placement in percentage over the last four academic years.



Fig. 5.2 Year Wise Campus Placement in Percentage

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.

The overall pass percentage of the institute for the last four academic years is shown in Table 5.14.

Sr. No.	Academic Year	No. of Students appeared for exam	No. of successful Students	Success %
1	2016-17	677	618	91
2	2015-16	607	572	94
3	2014-15	605	486	80
4	2013-14	537	497	93

### **Table 5.14 Overall Pass Percentage of Institute**

The programme wise detail of the institute in comparison with the performance of previous years is given in tabular and graphical form as below:

Table 5.15 shows programme wise pass percentage for the academic year 2016-17.

<b>Result of Final Year (B.E.)Academic Year: 2016-17</b>								
Pass (%)	CIVIL	COMP.	ELECT.	E&TC	IT	МЕСН.		
College (%)	97.26	99.27	98.68	95.31	100	80.89		
University (%)	83.22	91.82	95.85	79.37	79.27	69.20		
RCPIT Rank in University	3rd	2nd	2nd	1st	1st	4th		
Gold Medal	1	1	0	2 (1 + 1 girls topper)	1	1		
Top Ten Rankers	1,3,5, 10	1,2,4,5,6 ,9	2,8	1,2,2,3,5 ,7,8	1,5,6,7,9	1,2,6,7,7,8, 10		

Table 5.15 Programme wise Pass Percentage for Academic Year 2016-17

Fig.5.3 shows comparison of RCPIT result with university for academic year 2016-17



Fig. 5.3 Comparison of RCPIT result with university for 2016-17

Table 5.16 shows programme wise pass percentage for the academic year 2015-16

Result of Final Year (B.E.) Academic Year: 2015-16								
Pass (%)	CIVIL	COMP.	ELECT.	E&TC	IT	MECH.		
College (%)	100	99.28	100	94.6	97.29	90.62		
University (%)	77.94	89.08	100	82.73	81.44	89.79		
RCPIT Rank in University	1st	2nd	1st	1st	1st	3		
Gold Medal	0	2 (1 + 1 girls topper)	0	1	1	1		
Top Ten Rankers	2,4,10	1,2,3,4,6	4,5,6,8,10	1,2,3,4,5,6,8	1,2,3,5,8	1,3,6		

Table 5.16 Programme wise Pass Percentage for Academic Year 2015-16

Fig.5.4 shows comparison of RCPIT result with university for academic year 2015-16



Fig. 5.4 Comparison of RCPIT result with university for 2015-16

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Table 5.17 shows programme wise pass percentage for the academic year 2014-15

Result of Final Year (B.E.) Academic Year: 2014-15								
Pass (%)	CIVI L	COMP.	ELECT.	E&TC	IT	MECH.		
College (%)	89.66	97.79	N.A.	94.83	100	52.11		
Universit y (%)	81.67	85.23	N.A.	78.77	86.43	45		
RCPIT Rank in Universit y	2nd	3rd	N.A.	1st	1st	6		
Gold Medal	0	2 (1 + 1 girls topper)	N.A.	1	1	0		
Top Ten Rankers	2,4,6,9	1,3,4,5,5, 6,10	N.A.	1,2,3,4,7,9, 10	1,2,3,5,7, 9	4,5,6,7,8 , 10		

Table 5.17 Programme wise Pass Percentage for Academic Year 2014-15

Fig.5.5 shows comparison of RCPIT result with university for academic year 2014-15



Fig. 5.5 Comparison of RCPIT result with university for 2014-15

Note: N.A.: Not Applicable (First batch of Electrical engineering passed in 2015-16)

Table 5.18 shows programme wise pass percentage for the academic year 2013-14.

Result of Final Year (B.E.) Academic Year: 2013-14								
Pass (%)	CIVIL	COMP.	ELECT.	E&TC	IT	MECH.		
College (%)	100	97.72	N.A.	97.21	95.23	84.12		
University (%)	77.03	84.78	N.A.	82.24	91.3	53.41		
RCPIT Rank in University	1st	2nd	N.A.	1st	3rd	1		
Gold Medal	0	0	N.A.	2 (1 + 1 girls topper)	1	1		
Top Ten Rankers	4,6,7	2,3,5,8,9	N.A.	1,3,7	1,2,3,4,5,6	1,3,4,5,10		

Table 5.18 Programme wise Pass Percentage for Academic Year 2013-14

Fig.5.6 shows comparison of RCPIT result with university for academic year 2013-14



Fig. 5.6 Comparison of RCPIT result with university for 2013-14 Note: N.A.: Not Applicable (First batch of Electrical engineering passed in 2015-16)

Figure 5.7 & 5.8 shows numbers of gold medals and numbers of top ten rankers of the institute in university examination for the last four academic years.



Fig. 5.7 No. of Gold Medals of RCPIT



Fig. 5.8 No. of Top Ten Rankers of RCPIT

# **5.2.3** How does the institution facilitate student progression to higher level of education and/or towards employment?

- The institute facilitates the students' progression by interaction with corporate/entrepreneurs/high profile academicians /guest lecture by eminent faculty and series of leadership lectures are organized periodically by the institute to give exposure to the students in all facets of life.
- The institute assists the students for their placements through training and placement cell which organizes the campus interviews of many reputed organizations for the students.
- RCPIT has a Memorandum of Understanding to facilitate and co-ordinate institute-industry interactions.
- Students' vacations are effectively utilized by arranging Add on courses for the students.
- The involvement of students under the guidance of faculty members for undertaking industry-oriented projects is not only useful to the students and academic staff, but also to the promotion of interactive networking between the institute and involved industries.
- Special lecture on soft skills, technical aptitude are arranged for the students to make them industry ready. To improve soft skills institute has incorporated additional lectures in the time table which are conducted by external agencies.
- The institution supports the students by arranging special training programs, soft skills training programs conducted by the internal and external experts.
- Institute is having departmental committee for higher studies. This committee guides students for various competitive examinations like Graduate Aptitude Test Engineering (GATE), Common Admission Test (CAT), and Test of English as Foreign Language (TOFEL) etc.
- Vidyalankar Educational Services, Mumbai is providing facility for GATE exam.
- Japanese Language course is provided to the student to add additional language skill.
- In addition, guest lectures by eminent and distinguished personalities are arranged by the Training and Placement department.

# **5.2.4** Enumerate the special support provided to students who are at risk of failure and drop out?

- Special support is provided by all departments to students who are academically weak.
- The cases are identified via Mentoring mechanism and Departmental academic monitoring cell consisting of HOD, class teachers & local guardian.

- Parents are informed about the performance of their ward and they are invited with the student to discuss the reasons and best possible solutions.
- Students who are failed in examination are allowed to take provisional admission by paying nominal fees and attend lectures till result is declared as per university norms.
- The subject teacher identifies the students who are at risk of failure through internal sessional examination and end semester examination of university. These students are given extra assignments and remedial lectures.
- These remedial lectures are scheduled apart from the regular time table. Teachers of respective subject conduct extra classes for this activity.
- Question bank & set of question papers of previous sessional/university examinations are provided to students.
- Slow learners are identified from end semester examination (ESE) result of university. Based on result of ESE a separate division is formed for slow learners.
- Experienced teachers are appointed for slow learners division.

## **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.

The institute has excellent sports facilities for the students. Institute conducts various sports, games, cultural and other extracurricular activities for students. Range of sports and games available to students are Swimming, Wrestling, Football, Cricket, Volleyball, Basketball, Kabaddi, Handball, Athletics, Archery, Hockey, Badminton, Table Tennis, Chess, and Fencing etc. The Institute organizes A National Level Technical Symposium Converges every year. The extra-curricular activity includes tree plantation, blood donation, cleanliness drive, food donation, help to divyang, etc.

Table 5.19, 5.20, 5.21 & 5.22 shows sports activities and achievements for academic year 2016-17, 2015-16, 2014-15 & 2013-14 respectively.

Sr. No	Name of The Game/ Events	Inter- Collegiat e Particip ated Teams Position	Inter- Collegiate Participate d Teams /No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
01	Fencing	1 <sup>st</sup>	02	02	01
02	Table Tennis (M)	1 <sup>st</sup>	05	03	01
03	Badminton (M)	1 <sup>st</sup>	07	05	01
04	Best Physics	$2^{nd}$	01	01	00
05	Base Ball (M)	$2^{nd}$	15	06	00
06	Base Ball (W)	$2^{nd}$	15	05	00
07	Soft Ball (M)	$1^{st}$	15	05	00
08	Soft Ball (W)	1 <sup>st</sup>	15	05	01
09	Chess (W)	2 <sup>nd</sup>	05	02	00

### Table 5.19 Academic Year 2016-2017 Sport Activities and Achievements

Sr. No	Name of The Game/ Events	Inter- Collegiat e Particip ated Teams Position	Inter- Collegiate Participate d Teams /No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
10	Badminton (W)	3 <sup>rd</sup>	04	02	01
11	Football	3 <sup>rd</sup>	16	02	01
12	Basketball (M)	3 <sup>rd</sup>	12	01	00
13	Cricket (M)		16	02	00
14	Athletics	$2^{nd}$	10	02	00
15	Hockey	4 <sup>th</sup>	16	01	00
16	Cricket (W)		01	01	00
17	Handball		12	01	00
18	Lawn Tennis		02	00	00
19	Wight Lifting		01	00	00
20	Power Lifting		01	00	00
21	Taekwondo			04	00
	Total Participated	d Players	171	50	06

Sr. No	Name of The Game/ Events	Inter- Collegiate Participat ed Teams Position	Inter- Collegiate Participate d Teams /No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
01	Hockey	1 <sup>st</sup>	12	04	01
02	Table Tennis (M)	$1^{st}$	05	03	02
03	Badminton	$1^{st}$	07	03	00
04	Chess	2 <sup>nd</sup>	05	00	00
05	Base ball (M)	2 <sup>nd</sup>	15	05	00
06	Base ball (w)	2 <sup>nd</sup>	15	03	01
07	Soft ball (M)	2 <sup>nd</sup>	15	02	00
08	Soft ball (W)	2 <sup>nd</sup>	15	06	00
09	Table Tennis	3 <sup>rd</sup>	04	00	00
10	Cricket (M)	3 <sup>rd</sup>	16	02	01
11	Hand ball (M)	3 <sup>rd</sup>	12	01	00
12	Basketball (M)	3 <sup>rd</sup>	12	01	00
13	Kabaddi	3 <sup>rd</sup>	12	02	00
14	Athletics	3 <sup>rd</sup>	10	01	00
15	Badminton(w)	4 <sup>th</sup>	03	00	00
	Total Participate	158	33	05	

## Table 5.20 Academic Year 2015-2016 Sport Activities and Achievements

Sr. No	Name of The Game/ Events	Inter- Collegiat e Particip ated Teams Position	Inter- Collegiate Participate d Teams /No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
01	Chess	$1^{st}$	05	02	00
02	Table Tennis (M)	$1^{st}$	05	03	02
03	Cricket (M)	$1^{st}$	16	05	00
04	Basket Ball (W)	$1^{st}$	08	04	00
05	Badminton (M)	$1^{st}$	07	02	00
06	Mallakhamb	$1^{st}$	03	01	00
07	Fencing	$1^{st}$	01	01	01
08	Baseball (M)	$2^{nd}$	12	03	00
09	Table Tennis	3 <sup>rd</sup>	03	01	00
10	Volleyball	3 <sup>rd</sup>	12	01	00
11	Ball Badminton	3 <sup>rd</sup>	05	01	00
12	Basketball (M)	$4^{th}$	09	00	00
13	Kabaddi	$4^{th}$	10	01	00
14	Football	$4^{th}$	15	01	00
15	Handball	Qtr. Final Loss	12	00	00
16	Athletics		05	00	00
17	Baseball (W)	Selectio n Trial	01	01	00

## Table 5.21 Academic Year 2014-2015 Sport Activities and Achievements

Sr. No	Name of The Game/ Events	Inter- Collegiat e Particip ated Teams Position	Inter- Collegiate Participate d Teams /No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
18	Badminton (W)	Selectio n Trial	04	01	01
19	Best Physiques		01	00	00
20	Weight Lifting		02	00	00
21	Cricket (W)	Selectio n Trial	03	00	00
<b>Total Participated Players</b>			139	28	04

Sr. No	Name of The Game/ Events	Inter- Collegiat e Particip ated Teams Position	Inter- Collegiate Participate d Teams / No Players	Inter- Zonal Level (NMU) Participat ed Players	(AIU) All India Inter- Universi ty Level Particip ated Players
01	Table Tennis (M)	1 <sup>st</sup>	05	03	01
02	Cricket (M)	1 <sup>st</sup>	16	04	00
03	Basket Ball (W)	1 <sup>st</sup>	12	05	01
04	Football (M)	1 <sup>st</sup>	16	04	00
05	Mallakhamb		00	01	00
06	Badminton	$2^{nd}$	07	02	00
07	Swimming (M)	$2^{nd}$	01	01	00
08	Swimming (M)	3 <sup>rd</sup>	01	01	00
09	Handball	3 <sup>rd</sup>	12	02	00
10	Chess	3 <sup>rd</sup>	05	00	00
11	Baseball	$4^{th}$	12	01	00
12	Basketball (M)	4 <sup>th</sup>	12	00	00
13	Volleyball	4 <sup>th</sup>	12	00	00
14	Badminton (W)	$4^{th}$	04	00	00
15	Hockey	Trial	03	00	00
16	Cross-country		06	00	00
	Total Participated	d Players	124	24	02

### Table 5.22 Academic Year 2013-2014 Sport Activities and Achievements

Sports calendar for academic year 2016-17 is as shown below.
SPORT CALENDER FOR ACDEMIC YEAR 2016-17								EVENTS	
				WE	EK DAY	YS			EVENIS
WEEK NO.	MONTH	MON	TUE	WED	THRS	FRI	SAT	SUN	
1		1	2	3	4	5	6	7	
2		8	9	10	11	12	13	14	
3	AUG'2016	15	16	17	18	19	20	21	
4		22	23	24	25	26	27	28	
5		29	30	31					30-31-CHESS
1					1	2	3	4	2-3-BADMINTON
2		5	6	7	8	0	10	11	2-5-27 (2)(1)(1)(1)(1)
3	SEPT'2016	12	13	14	15	16	17	18	15-16 FENCING
4		19	20	21	22	23	24	25	
5		26	27	28	29	30			30-BASKET BALL
			_,						
1							1	2	1-BASKET BALL
2		3	4	5	6	7	8	9	T DI MILLI DI LL
3	OCT2016	10	11	12	13	14	15	16	
4		17	18	19	20	21	22	23	13-15-ATHLETICS
5		24	25	26	27	28	29	30	
6		31							
1			1	2	3	4	5	6	10-12 WEIGHT
2		7	8	9	10	11	12	13	LIFITNG, BEST
3	NOV'2016	14	15	16	17	18	19	20	PHYSIC
4		21	22	23	24	25	26	27	
5		28	29	30					TAEKWONDO
1					1	2	3	4	
2		5	6	7	8	9	10	11	1-12-CRICKET
3	DEC'2016	12	13	14	15	16	17	18	
4		19	20	21	22	23	24	25	19-20 SOFT BALL
5		26	27	28	29	30	31		29-30 TABLE
1								1	1-2 FOOT BALL
2		2	3	4	5	6	7	8	6-7 HAND BALL
3	JAN'2017	9	10	11	12	13	14	15	13-14 BASE BALL
4		16	17	18	19	20	21	22	20 HOCKEY
5		23	24	25	26	27	28	29	29-30 LAWN
6		30	31						TENNIS

#### Sports Calendar for Academic Year 2016-17

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.

The Institute organizes A National Level Technical Symposium Converges every year. The motto of the event is for Convergence of Knowledge with multi-disciplinary state-of-art applications in the field of Engineering and Technology. A number of participant for numerous engineering and technical institutes, participating in various events of the Converges. It has created a higher platform that brings together the academic and the research community for sharing and updating of knowledge in these areas.

The BAJA SAE Series is an event for the undergraduate engineering students, organized by the Society of Automotive Engineers, India. The event conducted in the name of Mini-BAJA. BAJA SAE tasks the students to design, fabricate and validate a single seated four wheeled off road vehicle to take part in series of events that test the vehicle for the sound engineering practices that have gone into it, the agility of the vehicle in terms of grad ability, speed, acceleration and maneuverability characteristics and finally its ability to endure a back breaking durability test. Also e - BAJA is an electric engine driven BAJA event organized by SAEINDIA. This was a new initiative introduced in 2014 on the counsel of former President of India, APJ Abdul Kalam, in order to promote greener mobility

Table 5.23 shows details of major student achievement in co curricular, extracurricular and cultural activities

Voor	Activity	Loval	Student
I Cal	Activity	Level	Participation
		University/Zonal	1
	Cultural	State	0
		National/International	4
		University/Zonal	1310
2016-17	Co-curricular	State	233
		National/International	1349
		University/Zonal	365
	Extra-Curricular	State	86
		National/International	18
		University/Zonal	1
	Cultural	State	9
		National/International	36
		University/Zonal	577
2015-16	Co-curricular	State	121
		National/International	2083
		University/Zonal	872
	Extra-Curricular	State	23
		National/International	0
		University/Zonal	3
	Cultural	State	-
		National/International	29
		University/Zonal	238
2014-15	Co-curricular	State	224
		National/International	702
		University/Zonal	243
	Extra-Curricular	State	28
		National/International	33
		University/Zonal	-
	Cultural	State	-
		National/International	3
		University/Zonal	12
2013-14	Co-curricular	State	48
		National/International	235
		University/Zonal	103
	Extra-Curricular	State	27
		National/International	-

#### Table 5.23 Major Student Achievement

Table 5.24 shows some of the student achievements in Extra-curricular activities students selected for Inter-University Sports.

Name of Event	Year	Number of Students
Fencing, Table Tennis Badminton, Best Physics, Base Ball, Soft Ball, Chess, Badminton, Football, Basketball, Cricket, Athletics, Hockey, Cricket, Handball, Lawn Tennis, Wight Lifting, Power Lifting, Taekwondo	2016-17	50
Hockey, Table Tennis, Badminton, Chess, Base Ball, Soft Ball, Hand Ball, Basketball, Kabaddi, Athletics, Cricket	2015-16	33
Chess, Table Tennis, Cricket, Basket Ball, Badminton, Mallakhamb, Fencing, Baseball, Table Tennis, Volleyball, Kabaddi, Football, Handball, Athletics, Weight Lifting, Cricket	2014-15	28
Table Tennis, Cricket, Basket Ball, Football, Cross-country, Badminton, Swimming, Handball, Chess, Baseball, Volleyball, Hockey, Mallakhamb	2013-14	24

<b>Table 5.24</b>	
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## 5.3.3 How does the college seek feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

Institute has a feedback forum namely "Vidyarthi Ray- Pranali" from the students and the alumni. Institute also seeks the feedback in verbal and written form from the Employers in the prescribed form during Campus Interviews. On certain occasions the institute calls its alumni for guiding the students. After such meeting, the institute asks for feedback or suggestions for overall improvement of the institute and suitable steps are taken for implementation of suggestions received from the graduates and employers. Feedbacks contain information regarding institutional provisions about Quality of Students, Students' Performance in interview, Curriculum improvement etc. The feedback helps in designing the training modules prepared by T and P cell for the current students. Employers and alumni give valid suggestions on curriculum development as well as infrastructure facilities.

#### QUESTIONNARIE FOR ALUMNI FEEDBACK

Note: Please tien do t anti-	Candor	Mala		Γ	Female	
	Gender	Maia				
Bill aggregate % (Tick any one)			79.04	63.65	54-47	46-40
%	100-85	84-74	73-64	63-00	04-47	E
Grade	A+	A	В	C	D	6
	T	Excellent	Good	Average	Fair	Poor
] Teaching Learning			×			
terms of learning support and acade	mic)					
edit System						
lization of Teaching Aids						
inference and Workshop Conducted						
orary Facility (Books and journals available)						
ernet and Wi-fi facility						
uest Lectures conducted						
dustrial/Education/Field tour arranged		And a second				
ae of latest technology	1	and the local division of the local division			14	
novative practices						
acute Support						
active and Course Contents						
ynabus and Godrad Contents						
xamination System						
Itudious Environment						
Paper presentation/Project presentation Encourage	anteria					
BI Infrastructure		Excellent	Good	Average	Fair	Poor
in terms of comfort, aesthetic and use	e of latest			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
technology)						
Building			1			
Class Room Comfort with Audio-Visual facility		2				
Laboratory Equipment						
Sports						
Cultural						
Hostel						
the second s						
Canteen						
Library			And a supervision of the local division of t			
Canteen Library Computer Lab / Center						
Canteen Library Computer Lab / Center Sanitary						
Canteen Library Computer Lab / Center Banitary		Exceilent	Good	Average	Fair	Poor
Canteen Library Computer Lab / Center Banitary [C] College Promotional Activit	ty	Exceilent	Good	Average	Fair	Poor
Canteen Library Computer Lab / Center Sanitary [C] College Promotional Activit Website	ty	Exceiient	Good	Average	Fair	Poor
Canteen Library Computer Lab / Center Banitary [C] College Promotional Activit Website Social Media like facebook/twitter/Youtube/Whats	t <b>y</b> Mpp	Excellent	Good	Average	Fuir	Poor
Canteen Library Computer Lab / Center Sanitary [C] College Promotional Activit Website Social Media like facebook/twitter/Youtube/Whate Print Media Advertisemont/News	ty Mpp	Exceilent	Good	Average	Fair	Poor
Canteen Library Computer Lab / Center Sanitary [C] College Promotional Activit Website Social Media like facebook/twitter/Youtube/Whate Print Media Advertisemont/News Hoarding and Banners	ty Mpp	Excellent	Good	Average	Fair	Poor

[D] Student's Support System	Excellent	Good	Average	Fair	Poor
Local Guardian & Counselling system					
Soft Skill Training Courses					
Technical Training Courses			1.		
Placement Assistance	1				
Higher Education Guidance		CONTRACTOR CONTRACTOR	1		
Safety and Security			1		
Health care and Gym	,		1		
College Canteen and Mess/Food					
Hostel facility					
Hostel Canteen and Mess//food					
Hostel Discipline and Environment	and beneficite the state			ana ana kaong K	Automatical Automatical
Indoor and Outdoor game facility				AND DESCRIPTION OF LODIES.	
Cultural Activity	AND DESCRIPTION OF THE OWNER.				*******
Administrative/Office Support (in terms of time consumed for processing of your request)	1				
Department Support (in terms of time consumed for processing of your request)					
Library (in terms of Booke / Journals available and time consumed for processing of your request)				1 1	1
Scholarship/Freeship & Financial Aids support					
Student Reward and Award (appreciation)		1			1
Anti-Ragging Environment (Ragging-Free)		1.0			
Bus Transportation					
[E] Others	Excellent	Good	Average	Fair	Poor
Brand Image & Management Reputation					
Camous everal Life and Culture					
		L			
(F) What you achieved (gain)?	Excellent	Good	Average	Fair	Poor
(Rate your development in last 3 / 4 yrs, studying in Technical/Professional Education)		111			
General Knowledge					
Technical Skills (Special Course/program)					1 1 1
Soft Skills (English Proficiency, Communication, Aptitude, Body Language, behavioral style)					
Group/Friend Development					
Social & Humanity		A DESCRIPTION OF TAXABLE PARTY.			-
Leadership					
Solf-Confidence Level					
Emotional Stability					
Pressure/Stress Handling ability					
Creativity / Idea Generation					
NAMES OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.			CONTRACTOR OF A CONTRACTOR OF		

#### [G] where you join after completing your degree course ( to don one option only)

Options	Higher Education	Family run business	Start new Business	Serving Industry In India	Travelling abroad for any reason	Profession	Field	know
Tick Row								

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 encourages all the students to publish their articles/papers in magazines/journals. The college organizes student technical

symposium under the name "Converges" every year for enriching the zeal of students with various activities such as paper presentation and other technical events. The department also organizes paper and poster presentation competitions. The teachers guide and mentor the students to carry out novel projects, publish articles/technical papers in various conferences and journals. Newsletters in the form of Activity Report are annually released by every department that highlight the achievements of the students and faculty members and showcase special activities conducted during the term like Guest Lectures, Training Sessions, etc.

### **5.3.5** Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes. Institute encourages active participation of students through student councils. Student council is formed in the institute as per the university resolution 1994/Act 40/ 2B. The members are selected as per university rules and regulation, from each class. Initially first two students are called who are the toppers from each class and from each branch. After selection of members, one of the students is nominated for General Secretary (GS) and one of the girl students is nominated for Ladies Representative (LR). Similarly, the selection of Cultural committee and sports committee coordinators have been selected, But every nomination requires support of two students from the elected members. After GS, LR, Sports coordinator is elected and other members are appointed as Class Representative of concern department. This student council actively works for different activities conducted in the institute like blood donation camp, tree plantation drive, annual gathering, etc. University Representative is elected at university level from the representative of different colleges by conducting election. Also from the selected university representatives one member is selected as a President of university student council and another member as secretary on university level student council.

### **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 students in various academic, administrative and other activities. This empowers students to gain qualities of leadership and governance. The student representatives are allowed on the following academic and administrative bodies.

- Anti Ragging Committee
- Sports Committee
- Cultural Committee
- Hostel & Food Committee
- Anti-Women's Harassment Committee
- Student Welfare Committee

- Student Volunteer Committee
- Departmental Students Associations (CESA, EESA, MESA, ACIES)
- 5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

Any other relevant information regarding Students Support and Progression which the college would like to include.

The institute has formed an Alumni Association to help former students to bond with the institute and as well as the present batch of students. The association organizes reunion of former students in the campus, where RCPITians from across the globe get a chance to come together to reminisce their graduate days and share their experiences among themselves and with their juniors.

The institute network and collaborate with the alumni of the institution through

**Alumni Meet:** Every year alumni meet is organized by institute in order to bring all alumni together. It provides all students to share their ideas and suggestions towards betterment of the institute.

**Placement assistance:** Successful alumni provide placement assistance to their juniors.

# Criterion VI Governance, Leadership and Management



#### CRITERION – VI: GOVERNANCE, LEADERSHIP & 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.?

The vision, mission and goals of the institution are in tune with the objectives of higher education are as follows;

#### Institutional Vision and Mission

#### Vision:

To achieve excellence in engineering education with strong ethical values.

Mission:

- To impart high quality Technical Education through:
- Innovative and Interactive learning process and high quality instructional programs.
- Fostering a scientific temper among students by means of a liaison with the Academia, Industries and Government.
- Preparing students from diverse backgrounds to have attitude for research and spirit of Professionalism.
- Inculcating in students a respect for fellow human beings and responsibility towards the society.

#### **Objectives:**

- To provide world class quality and value based education with making teaching-learning interactive through ICT based and project based learning with practical applications.
- Fostering research and dissipate research findings among the students and staff for the development of the nation and community.
- To inculcate and execute innovative ideas and best practices for overall development of institute.
- To provide conductive environment and to create studious, disciplined working environment with safety and security provisions.
- To strive hard for overall development of diversified students with promoting co-curricular and extra-curricular.
- To establish linkages with academia and industry for training and enhancing skills of students and staff.
- To be a catalyst for establishing a strong relationships and bonding between all stakeholders.

- To strengthen entrepreneurial skills, career counseling and placements activities to make successful professionals in diverse fields.
- To contribute to the nation by generating a pool of human resources which is employable and capable of competing globally and socially responsible?
- To motivate 'techno-social' concept by endorsing dynamic equilibrium to maintain socio-culture and ecological environment to fulfill the obligations of the society and the nation at large.

The mission statement defines the institution's distinctive characteristics;

#### 1. In terms of addressing the needs of the society

Inculcating in students a respect for fellow human beings and responsibility towards the society.

- Responsibility and commitment towards society.
   2. The students it seeks to serve
   To innovate and interactive learning process and high quality recognized
   instructional programs.
- Quality Education
- Innovative & Interactive learning process
  - 3. Institution's traditions and value orientations

Fostering a scientific temper among students by the means of a liaison with the Academia, Industries and Government.

- Promoting research activities
- Liaison of academic, industry and government
  - 4. Vision for the future

Preparing students from diverse backgrounds to have aptitude for research and spirit of Professionalism.

• To prepare students of diverse background with spirit of professionalism.

### 6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

#### I. Role of Top Management Planning

- To set Vision, Mission and Ethical Values for the institute.
- Making a SWOC analysis for the program
- Enrollment planning
- Planning the constraints of budget
- Planning manpower, tasks and resources to achieve objectives
- Setting marketing and publicity plan for the program **Decision Making**
- Increase/Decrease in Intake or addition of New Course/Program
- Upgradation of Campus facilities, Infrastructure, Amenities
- Staff and Student welfare
- Collaborations and Linkages

- Affiliation, Accreditation and Approvals
- Social contribution **Organizing**
- Identification and classification of functional and academic activities.
- Assignment of duties, Delegation of authority and creation of responsibility for Principal and Head of Departments.
- Coordinating authority, responsibility and relationships.
- Organizing support and research activities. **Staffing**
- Recruitment, Selection & Placement of academic and non-academic staff
- Training & Development of staff.
- Performance Appraisal and Promotions of staff
- Reward and Awards for staff **Directing**
- Supervising functional and academic activities
- Motivating staff and students towards research and extracurricular activities.
- Leading the team to achieve objectives.
- Communicating polices, rules and regulations to stakeholders. Calling meetings between the directors, principal and senior staff. **Controlling**
- To measure performance of the institute in terms of University Exam results and campus placements.
- Implementing corrective action. Rewards and Punishments.

#### **II. Role of Principal**

#### **Forecasting and Planning**

- Searching scope of improvement
- Searching for new opportunities
- Forecasting Enrollments
- Forecasting Staff required
- Forecasting Infrastructure required
- Planning Academic Processes, Operating and Supporting activities Budget Preparation and approval
- Preparing income and expenses statements.
- Allocation of resources.
- Ensuring optimum utilization of recourses at every stage. **Branding, Publicity & Marketing**
- Preparing annual plan for Publicity & Marketing
- Career Counseling visits
- School Visits
- Educational Exhibition participation
- Publication of brochures/leaflet, Video CD,
- Print & Digital media Advertisement.

- College Website presentation.
- Social Media Presentation. Admissions/Enrollments
- Inviting application for admissions.
- Designing admission procedure and policies. Getting approval of number of admissions from Govt/University Authorities.

#### **Policies / Procedures**

Formulation of policies and procedures for effective student & staff welfare, university results, students' placements, industry liaisons, quality education, staff motivation in accordance with the management support to keep healthy relations among Students vs. Staff Vs. Organization Vs. Society.

#### Staffing

**Recruitment:** Ensuring the need of recruitment, finding number posts to be filled up as per the norms, Advertisement for the recruitment, arranging interview procedure, getting approval of selected candidates at different posts from the University/Authorities.

**Training:** Ensuring all the staff has got trained and motivated towards their role and responsibilities. Ensuring pleasant atmosphere for teaching by providing teaching aids and suitable atmosphere etc.

**Staff Welfare:** Promoting AICTE/University grants/schemes, research work. Granting leaves, TA/DA honorarium. Encouraging professional memberships, career ladder schemes, up gradation of knowledge and encouraging higher qualifications etc. Providing Medical and Insurance facility. To look after Staff salary, increment & promotion implementation.

#### Procurement

Finding out need of procurement, analyzing quotations, negotiations, finalization of quotation. Suggestions & finding out new technology & deposal of scarp.

#### **Students Welfare**

- Promoting Technical-non-technical training courses and soft skill development program.
- Assuring Security & Safety System. Encouraging studious and disciplinary environment in the campus all the time.
- Providing assistance for student's Financial aids.
- Ensuring planning and implementing academic activities as per academic plan.
- Promoting research activities
- Boosting self-esteem and self-confidence among the students through co and extra-curricular activities
- Providing extended facilities for Sports, Scholarships for backward class students, rewards and awards for meritorious students, ensuring home friendly atmosphere in institute/hostels. Canteen, Students Amenities.
- Encouraging industrial tours/visits.
- Fostering a scientific and professional temper by means of a liaison with academia, industry and society.

- To make students employable and competent for the global market.
- To promote value added services and quality education.
- To cherish the achievements through awards and rewards.
- Promoting alumni interactions through meets and lectures. Hostel Management:
- To provide amenities: Providing infrastructural needs like hostel facility, gymnasium, sports, indoor games and transportation. To attend mess contractor meetings, hostel discipline and food management meetings.

#### Interaction, Relationships and Bonding

- Parents Meetings
- Students Meetings (Toppers and Slow Learners)
- Staff Meet
- Local Guardian Meetings
- HOD Meetings
- Local Management Committee Meetings
- Governing Body Meetings
- Director Body Meetings
- Alumni Meetings
- Press Meetings
- Hostel Meetings
- Social Meetings
- Sports and Cultural Meets
  - Social Networking Sites

#### **Office Administration**

Work planning and assignment of work to various administrative levels like Salary and Time office, Registrar office. Providing necessary infrastructure for smooth conduction of administrative activities.

#### **Institute Publications**

To motivate publications of semester technical news bulletin, Admission Brochure, Placement Brochure, Annual Magazine, Research book publication, Alumni Brochure, Press Releases, Institute Activity Reports, Social Media publication like LinkedIn, Facebook and other social networking websites.

#### Examinations (Internal/University/Practical/Theory)

Ensuring and coordinating smooth conduction of examination with discipline. Analyzing of university and internal exam results and making corrective steps. **Event Management** 

Motivating cultural events, State/University Job Fare, State/University level conference/paper presentation contest/sports competitions, Career Counselling, Parents/ Induction program, Blood Donation, Awareness Camps, Alumni Meets, Conferences, Workshops, Technical Symposium, Orientation Program and Farewell function etc. Ensuring smooth conduction of events with the allocated resources and budget.

#### **Co-ordination and Communication**

Coordinating academic activities with HODs, Staff and Students through regular. Internal and External communication with Students, Staff, Superior Management, Parents, Alumni and Government authorities, regulating authority, approval, affiliation authority and associations.

#### **Involvement in Social media**

Interaction with stakeholders on Institute's Facebook, WhatsApp, LinkedIn pages. Posting on Social Media.

#### **Guidance for proposals and reports**

Providing guidance for making proposals of schemes and grants and for preparation of government/university reports.

#### **Finance Management**

Budget preparation and allocation of Budget. To approve the expenses made. To manage the properties and investments including trust and immovable properties. To keep track on recurring and non-recurring expenditure. To prepare annual accounts and the budget and present it to the management.

#### **Maintenance of Estate & Repairs**

Ensuring pleasant, clean and neat campus all the time.

Ensuring preventive maintenance of classrooms, laboratories, sports ground, student/staff amenities and other infrastructure in the campus. To suggest repairs/upgrade technology.

#### **Building Institute Brand Image**

News Publications/Press releases in print media. Attending press/media. Motivating social affairs like blood donation camp, tree plantations, computer awareness program in rural areas through Students/Staff Association etc. Sponsoring sports, educational exhibition, cultural events etc. Motivating society towards Central Govt./State Govt. programs like; Unnat & Swachch Bharat Abhiyan program through the participation of students and employee. **Feedback and Control** 

- Students' Feedback for staff evaluation •
- Students evaluation for betterment and for parent's information •
- Staff evaluation for Increments, Promotion and Awards/Rewards •
- Control mechanism for addition/deletion or improvisation and change for • betterment

#### **III. Role of Faculty**

#### Academic

- Academic Development
- To develop learning resources / e-resources material & Laboratory • Development
- To act as a motivational force and should be able to create a learning • environment. To make teaching-learning interactive
- To prepare and analysis Students performance and evaluation •
- Promoting co-curricular and extra-curricular activities •
- Guiding and counseling students to achieve their goals and personal moral •

- Self-development through upgrading qualifications, training, certification programs and research activities.
- Class room and Laboratory management
- To engage in continued learning to improve quality education and pursue new ideas and advances in technology
- To use and develop relevant teaching aids (ICT based)
- To be innovative, creative and entrepreneurial in their approach to ensure skill development amongst the students
- To maintain the Teacher's Diary regularly with the lesson plan.
  - To update the subject knowledge continuously and should be aware of latest development in their subject.
- To suggest best techniques and methods to carry out academic processes. Supporting and Extension
- To promote interaction with Academia, Industry and Society.
- To participate and contribute to community development programs
- Promoting R & D, Consultancy, Entrepreneurship and Job creation
- Support students' training and placements
- To adopt student centric practices
- Participating in public affairs, utilizing professional capacity.
- Meet standards of professional and ethical conduct in relation to students, parents, alumni and colleagues through healthy relationships.
- To advocate for conditions of success for students with special needs.
- To inculcate the desirable value systems amongst the students
- To promote and motivate students towards Govt. initiatives, environment caring and community development programs.

#### Administrative

- To follow policies, rules and regulations
- Policy planning, monitoring at departmental and institute level.
- Design and develop new academic processes.
- Preparing project proposals, applications and reports
- Developing academic and research activities
- Ensuring optimum utilization of resources
- To maintain accountability, transparency,
- Respecting institute cultural and moral standards and the dignity of the students as well as the community
- To be loyal and honest in carrying out the policies of the institute.
- To create safe, healthy and satisfying studious environment.
- Develop a positive, respectful working relationship.
- To coordinate and support programs / events activities and various committees for the smooth functioning.
- To perform and support work assigned by the principal or Management. Figure 6.1 shows, role of top management, Principal and faculty as follows;



#### Figure 6.1 Role of Top Management, Principal and Faculty

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



Figure 6.2 Involvement of Leadership

Figure 6.2 shows the institute monitors and evaluates its policies and action plans are as follows;

### Involvement of the leadership in ensuring the policy statements and action plans for fulfillment of the stated mission

• Governing body as an apex body of the institute takes leadership and encourages decision of formulation of policies and planning of marketing, academic, finance, social activities after taking consideration of market scanning, experience and future prospectus. Governing body while formulating policies and planning considers stakeholders' suggestions and requirements and the vision and mission statements of the institutes. Governing body designs and executes Long-term planning. Two meetings are arranged once in an academic year.

- The decision approved in governing body is then forwarded to Local Management Committee and Director Body of the institute for the execution the plan. Regular meetings are conducted to take follow-up and to solve the constraints. Local managing committee consists of board of directors, principal, head of departments and the registrar.
- The management of RCPIT believes in implementing fair and transparent management policies. It believes in taking all the members into confidence before implementation of process and plans. Issues are discussed and agendas are placed during the General Body meeting. It is made sure that any major decision enjoys the full unanimous support of the members without any conflict of ideologies or interests whatsoever.

#### Involvement of the leadership in ensuring formulation of action plans for all operations and incorporation of the same into the instrumental strategic plan.

• Strategic plan is made with in view of past suggestions, future needs, time and budget constraints. The Head of Departments and Coordinators together decentralizes the role and responsibilities to the staff and members for executing the strategic plan across functional and operating activities. There are several functional and operating groups to achieve objectives as listed below;

Career Counseling committee Admission committee Cultural committee Sports committee Grievance Redressal cell Library committee Building and maintenance committee Purchase committee **Research** committee Co-curricular and Extra-curricular committee IOAC Cell Local Guardian committee DSR verification committee Anti-ragging committee SC-ST cell Assessment and performance measurement committee Anti- Woman's harassment committee Hostel committee & Food committee Ombudsmen committee Staff welfare committee Student welfare committee

Students volunteer Examination Committee Training and Placement cell Departmental time-table & class management committee Discipline committee Publicity and Marketing committee Social activities committee

• All teaching and non-teaching staff are members of at least one committee. They are involved in delivering and implementing operational and functional activities on day to day basis. They interact with students, parents, alumni, community and industry. The members pass feedback to upper body for the improvisation or corrective steps to be taken.

Operation and Functional group	Strategic Plan	Action Plan and Activities		
Career Counseling committee	Ensuring full admissions	Counseling meritorious students from diversified background at schools, colleges and coaching classes, exhibitions etc.		
Admission Committee	Effective support services	Adoption of time saving and error free technology and procedure. To provide assistance for financial and documents preparations.		
Cultural committee	To open-up hidden talent & skills	Ensuring availability of instruments & time schedule. Involvement in competitions.		
Sports committee	To maintain mind peace, health and spirit	Ensuring availability of ground, sporting materials, related amenities & time schedule. Participations in competitions/tournaments.		
Grievance Redressal cell	To create responsive and accountable attitude among all the stakeholders & to maintain harmonious educational	Provide suggestion box at administrative block, library and departments. Provide e-mails of members. Ensure assure that the grievance has been properly solved in a stipulated time limit.		

**Table 6.1 Operation and functions of various committees** 

	atmosphere	
Library committee	To update knowledge and get aware with latest technology	Provide book bank facility, access to memberships, video lectures and e-journals. To purchase newest arrivals and additions. To maintain library automation.
Building and maintenance committee	Ensuring smooth functioning of equipment, machines and to maintain campus with preventive actions	To carry preventive and breakdown maintenance, regular cleaning of amenities and academic materials. Suggestions for repairs and replacements.
Purchase committee	Satisfying the needs and demands with optimum utilization of resources	Searching need for procurement. To provide independent review and evaluation with logistics, finance and technical aspects.
IQC and Academics committee	Ensuring total Quality education	To provide effective ICT based teaching-learning processes adding to innovations and best practices with quality control mechanism.
Research committee	To foster scientific temper for the development of community	To initiate, facilitate, integrate and support innovation and ideas for research. Provide mechanism and facilities.
Co-curricular and extra- curricular committee	Personality & overall development with value addition	Grooming & motivating students & staff for character building, to develop spiritual and moral values & physical growth by participating or leading.
Local Guardian committee	Feel Loyal, Affiliate and Home in the absence of family	Updating parents about students' academic and other performance periodically. To increase moral, to support, to motivate in their academics & personal matters.
DSR verification committee	Caring and maintaining belongings & assets	To Maintain DSR updating. Department-wise cross verification physically. Report of missing and breakages.

Anti-ragging committee	Providing respectful and secured environment	To follow anti-ragging act as per the guidelines of AICTE. Provide anti-ragging instructions with contacts. Conduct awareness programs. Tighten security services.
SC-ST cell	Inclusivity of diversity	To promote the special interests of students belonging reserved category to provide special inputs in areas where the students experience difficulties. To assist them in providing their scholarships. To organize interactive sessions and informal meetings with students to attend to their personal, social and academic problems.
Assessment and performance measurement committee	Corrective actions, Continuous improvisation and Rewards	To find scope for improvement and self-development. To train and educate. To suggest rewards and punishment.
Anti- Woman's harassment committee	Inclusivity of diversity & to maintain gender equality	To provide safe and comfortable environment and amenities. Arrange awareness and health programs. To provide the procedures for the resolution of complaints and settlements. To provide equal facilities and treatments.
Hostel committee & Food committee	Home away from home	To make a hostel life of a student cherishable for a lifetime by providing excellent amenities, food, safety, security, entertainment facilities and maintaining discipline.
Ombudsmen committee	To resolve complaints	To investigate and address complaints of maladministration or a violation of rights. To identify systematic issues leading to poor service or breaches of people's rights

Staff welfare committee	To provide favorable working conditions to achieve personal and institute goals.	Provision for approval and association, memberships. Communication and coordination among staff. Providing entertainment and celebration activities. Appreciation by cash awards or rewards. Consolation of personal life occasions. Loan assistance. Consolation for o injuries or hospitalization / mediclaim / group insurance. TA/DA for research activities. Granting leaves and updating service records. Support for child education. Assistance for achieving higher qualifications.
Student welfare committee	To provide harmonious atmosphere & studious environment in the campus	Supporting the students to facilitate learning. Developing good relationship with students. Addressing their various issues. Conduct a meeting periodically to discuss students' welfare. Developing a relationship with parents. Organizing special coaching for slow learners. Developing students-teacher relationship. Providing them environment to develop their talent and skills.
Students volunteer committee	To be reliable, punctual, trustworthy, responsive, leader and confident	Creating an opportunity to meet, interact and network with leading academic and industrial researchers.
Examination committee	To ensure honesty and fairness during examinations	Arranging examination blocks, supervisions. Communicating instructions. To make provisions to avoid malpractices.
Training and Placement cell	Ensuring job opportunity for everyone	Introducing skill building and certification programs for making everyone employable for the industry and entrepreneurship. To help

		students to prepare for
		placement interviews/higher
		studies and help them to choose
		an appropriate industry. To
		establish and maintain industrial
		relations.
Publicity and	To grante multi-	To create brand image. To make
Marketing	To create public	visual promotions for institute
committee	interest	activities and courses.
Departmental		Preparing time table as per
time-table &	effective utilization	academic plan. Teaching load
class	of time and	distribution. Lab-wise subject
management	infrastructure for	allotment. Providing time slot
committee	delivering	extra classes. Providing teaching
	curriculum	aids. Maintaining class rooms.
		To maintain and channelize all
Discipline	Following laws,	functional and operating
committee		activities as per guidelines and
	rules and regulations	with ethical values of institute
		and community.
C '-1		To promote personal & group
	Making responsible	process skills by the means of
Activities	for community	contributing towards community
committee		& environment.

#### Involvement of the leadership in ensuring interaction with stakeholders

• In educational services, stakeholders plays a vital role as the service providers (management people, staff) as well as service receivers (students, industry, alumni). The institute does not depend in just links and clicks, but it believes in relationships and bonding among all stakeholders. The institute acts as a lubricant and works to explore all possible avenues towards the overall growth and development of the institute by motivating interactions among all stakeholders.

Stake Holder	Ensuring involvement and interaction		
Management	Continuous feedback and consultation. Meetings		
	regarding policy framing and decision making.		
Students	Involvement at classes, tutorials and co-		
	curricular, extra-curricular activities. Interaction		
	at amenity centers.		
Staff	Class and Laboratory instructions and		
	interaction.		
Parents	Regular meetings, contacts by electronic media		
	for reporting and feedback.		

	•	-		-	
Ta	ble	6.2 Involv	ement and	interaction	of stake holder

Alumni	Expert talk, suggestions & carrer guidance by personal visits, social media and alumni meet.
Industry	Placements, projects, internship support & training by industry visits, campus visits and electronic media
University	Responding to requirement. Supporting in curriculum design and smooth conduction of examination by staff participation.
Government & controlling Authorities	Compliance to regulations & defficiencies. Preperation of reports of affiliation, approvals, gradation. Participating meetings, workshops and seminars arranged by controlling authorities.
Community	Publication of news & printed leaflets. Sponsoring sports & cultural events. Participation in medical camps, environment development activities & social awareness activities. Promoting activities and achievements of the institutes through social networking sites.

#### Involvement of the leadership in ensuring proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

Market survey, research inputs from stakeholders and consulting techniques are used to identify the needs and demands of stakeholders.

- Some courses are started by the inputs and suggestions received by the nearby parents and students.
- Add-on courses, soft & technical skill training and certification programs are in action due to the need of the industry and companies like TCS, Accenture visited for the campus placements.
- Marketing survey from the prospective students are obtained to design operating services and marketing activities.
- Remidial methods for slow learners and toppers are started to fulfil the needs of students and demand from the parents.
- Management people recognized the need of fee concession for girls to inrease girls enrollments. Even, management has waived off fee for some students as per the inputs received by the staff due to fincial problems of the parents.
- University and controlling authority through the circulars and GRs made bindings for accreditations. The institute is currently working on it.
- The institute sponsors Education exhibition as per the appeal made by the NGO.
- LinkedIn pages, facebook and WhatsApp groups are formed in consultation of Alumni. Alumni association is formed as per the inputs received by the alumni.

- Dhule-Shirpur AC bus facility is made available to the students residing at Dhule on the basis of the appeal made by the concorned students and parents.
- Management provided world class infrastructure and AC classrooms and laboratories as per the survey and observation made by the management. ICT based teaching-learning initiative started by the management by obervations made on global competition and growth of ICT based education world-wide.
- Staff of Library Committee identify the need of adding library hours in academic Time Table to make a habit of reading to update knowledge.

Stakeholder for consultation	Mode of research inputs	Area where the inputs are invited
Management	Meetings & Interaction	Student and Staff welfare
Students	Survey, Feedback & Interaction	Operating and Functional activities
Staff	Meetings & Interaction	Institute & students' overall development
Parents	Feedback, Meetings & Interaction	Students facility & convenience
Alumni	Feedback, Meetings & Interaction	Alumni meets and visits
Industry	Meetings & Interaction	Add-on courses, certification program, Soft and Technical skill development
University	Meetings & Interaction	Infrastructual, amenities and students' academics bindings
Government & controlling Authorities	Meetings & Interaction	Accreditations, Infrastructure and amenities
Community	Survey, & Interaction	Sponsorships, Social and Environment development activities.

#### Table 6.3 Consultation with stake holder

#### **Reinforcing the culture of excellence**

Our institute's culture is a multidimensional. It is built upon the institute's stakeholders' beliefs, values, interactions and artifacts that result from such interactions. It is based on the honesty, trust, transparency, respect, responsibility and commitment of leaders and members of the institute towards quality education and value-added services.

Vision & Mission is communicated and understood at each level of the institute and objectives are defined at each stage harmonious with vision and mission of the institute.

		4 C's of shared leadership (Dimensions and values)				values)
Criterio n for shared leadershi		CONTE XT Trust Honesty	CULTURE Respect Transparen cy	CHANGE Recognition Responsibilit ies	CONTACTS Collaboratio n Commitment	Resulting culture
4P's of culture of excellence	Staff are invol ved.	Expert ise of staff is used to inform decisio ns.	Staff participate in decision- making.	All levels and functions have input into policy developme nt.	Expertise of all stake- holders contributes to collective decision- making.	Bureaucr atic and participat ive
	Proces ses are suppor tive.	Shared leaders hip is demon strated.	Decentra lized groups & engagem ent in decision- making.	All levels and functions have input into policy implementa tion.	Communiti es of practice are modelled.	Respect Values and Ethics
	Profess ional develo pment is	Share d leader ship is a comp	Mento ring for shared leaders hip is	Leaders at all levels proactively encourage shared leadership.	Colla borati on is facilit ated.	Decisio n Making & authorit y at
	Physical Resourc es are availabl e	Space, time and finance for collabora tion are available.	Leadership contributio n is recognized and rewarded.	Flexibility is built into infrastructure and systems.	Opportunitie s for regular networking are supported. Optimum utilization of resources	Support & affiliation

	The	Leadership	Leadership is	It is based on	
	institute's	relies less	recognized	collaboration	
	leadershi	on control	as stemming	s between	
Institute	p relies	and more	from	individual	
<b>'</b> S	less on	on respect	multiple	staff that	
leadersh	positional	for	levels and	together	
ip	power	experience	functions as	contribute to	
	and more	and	a mix of top-	a collective	
	on	expertise	down,	identity to	
	placing	that support	bottom-up	encourage	
	trust in	individuals	and middle-	collaboration	
	expertise	in sharing	out	, networks	
	by the	their	contributions	and	

#### Involvement of the leadership in champion organizational change

Institute motivates organizational change for promoting new ideas, innovative practices, benchmarking quality education and services for overall development of stakeholders. We believe change is necessary for the survival of individual as well as the organization. The process and the role of stakeholders in organization change is described below;



Figure 6.3 Analysis of SWOC

#### Identifying the need for change

Strategic change is initiated by the top management which identifies the need for change from the feedback received by the stakeholders and its visionary approach. The change may be due to political, economic, social or technological changes. However, operational and functional change is identified by HODs and departmental and administrative staff. Most of time change happens because of continuous improvement in processes at departmental or administrative level. The Institute through SWOC analysis (analysis of Internal and External environment) provides the support of related data. Study of benefits and costs for stakeholders is evaluated with the existing systems. Feedbacks are also obtained from the stakeholders. External factors like government policies and industrial and technological reforms are also taken into consideration. It is ensured that the organizational change is in accordance with the vision and mission of the institute

#### Meetings and discussions with Governing Body and Board of Directors

The above detailed report is then presented to the Governing Body and Board of Directors for their reviews and further discussions. GB and BOD then initiate involvement and participations of stakeholders wherefrom the need is identified. Prolonged discussions are carried out with the stakeholders with the number of alternative options available for the organizational change. With the selection of appropriate alternative option, strategic planning of human resource, infrastructure processes and amenities are initiated. Assignment of new roles and responsibilities are initiated. They provide new infrastructure, methods and facilities that are needed to change the organization.

#### Selection of human resource and engaging leaderships

The new roles and responsibilities are assigned with the proper selection with best fit and decentralization of work assigned along with authority and responsibilities. Principal and the HODs manage and drive change relentlessly to ensure change remains on track, and that it is sustainable and successful. They consciously build an architecture that integrates all elements of organizational, departmental or administrative change. They have the supporting data and know the competitive advantage that change will bring to the institute. They scrutinize change and all the plans associated to it. The leadership emphasis to a common purpose and benefit which derives from the change.

#### **Education and Training**

HODs and functional coordinators are the responsible for communicating the reasons for the change as well as the process needed to make the change. They support by walk the talk and they are in tune with the overall change initiative and activities. Their motivation to the staff significantly influences an ability to effectively implement change. Training and education is provided whenever the supporting staff is unfamiliar with the process and the knowledge. The process involves team work, participation and support.

#### **Feedback and Control**

Feedback are obtained for corrective measures and providing motivations like awards and rewards or special incentives.

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?

Measure identifier (Policy and Plans)	Responsible Person / team	Measures to be conducted	Time frequency for monitoring
Teaching-Learning	Principal & HODs	To attend class & lab sessions to give feedback & control	Ones in a semester (during semester)
Assessment Performance Index committee	Director and Principal	Monitoring and evaluation of faculty as per prescribed format	Ones in an academic year (at the end of academic year)
Academic overall process	IQAC	To check and verify teacher's diary	Twice in a semester (during semester)
Infrastructure and Amenities	Purchase & DSR verification committee	To provide infrastructure and amenities in time and ensuring optimum utilization of resources	Twice in a semester (at the starting of semester)
Human Resource	Recruitment and HRD	Ensure staff appointment as per academic load / AICTE norms. Technical Training	Ones in a semester (at the starting of semester)
Strategic decisions & planning	Governing Body and Board of Directors	Feedback and control. Planning educational activities.	Ones in a semester (at the starting of semester)
Functional decision & planning	Local Managing Committee	Feedback and control. Directing educational & administrative processes.	Twice in a semester (at the starting of semester)
Financial Audit	Finance officer and team from trust	To review financial transactions of the Institute	Twice in a year
Students Welfare	Local Guardian	Feedback and control. Support, affiliation &	Ones in a week-end

Table 6.5	Various	Policies	and	Plans

		motivation	
Occasional	Functional	Involvement,	At the start &
activities	committee	interaction,	throughout the
		coordination &	activity
		cooperation	
Day-to-day	Operational	Class & lab	Day-to-day
activities	committee	management,	
	(Staff)	administration	

### **6.1.5** Give details of the academic leadership provided to the faculty by the top management?

#### Academic autonomy

- To implement best teaching-learning process
- To suggest best practices and innovative ideas
- To utilize computational and library facilty during non-working hours
- To do research and consultancy work
- To determine teaching methods and teaching aids
- To aquire additional qualifications & certification programs
- To suggest procurement of equipments, machinery & books of their choice

#### Administrative and social Involevement & Participation

- Involving senior faculty in Governing Body and LMC
- Community involvement
- Social networking participation
- Participation in curriculam and syllabus development programs
- Involvement in various committees
- To suggest recruitment and to participate in selection process of technical non-teaching jobs
- To chalk out plan of action for operating activities.
- To assign responsibility along with authority for implementing operating and day-to-day activities.

#### Professional development and training

- Providing support for training by sponsoring certification programs, workshops, conferences and seminars.
- Sponsoring study leaves for acquiring higher qualifications



#### Figure 6.4 Academic leadership provided to faculty 6.1.6 How does the college groom leadership at various levels?

The institute culture translates shared leadership into a set of common dimensions and associated values for the overall development to achieve collective objectives through following ways of grooming leadership.

S. No.	Levels of leadership	Ways of grooming leadership	
1	Academic leadership	Teaching oriented to catering the needs of the high achieversTime bound assignments & Presentations with quality.Use of Library & Technology as learning resource.Exposure to industry.Interaction with experts and visiting faculty.Participation & presentation in conference, seminars and workshops.Periodic internal assessment and examinations.	
2	Functional, Operational & event leadership	Formulating programs which suit requirements of growth. Articulating roles and responsibilities. Participatory decision making and involving in implementation. Working in teams Sharing, collaborating and contributing Accepting feedback and improvements. Corrective actions & learning.	

#### **Table 6.6 Levels of Leadership**

		Developing sportsman spirit.
		Encouraging participation.
	Sports &	Coaching
3	Games	Learning to accept failures.
	leadership	Reviving ambitions
	1	Mustering courage.
		Winning for team and establishing fame.
		Identifying talents
		Practicing trails
	Cultural	Organizing events
4	activities	Promoting participation
	leadership	Extending appreciation
	1	Rewarding
		Developing quest for perfection.
5	Career	Providing adequate opportunity
	Development	Entrusting responsibility
		Creating confidence
		Building skills
		Upgrading knowledge
		Encouraging research activities
		Attaining job satisfaction
		Excelling in career
6	Student	Students are motivated to be class representatives
	Leadership	Students are part of the class committee, hostel and
		food committee.
		They are encouraged to organize student centric events
		like conferences, technical festivals, cultural and sports.
		They are given responsibilities and they will be
		monitored and guided by faculty members.
		Their services to the society are much appreciated.
		They are part of social awareness and environment
		awareness programs.

# 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?

The institute culture translates shared leadership into a set of common dimensions and associated values for the overall development to achieve collective objectives which is further achieved by the decentralization of departments and units with delagation of role, responsibility and authority to each member.

Departments	Authority	Role & Responsibilities
and Units		
	Strategic planning and decision making. Feedback & control.	HODs, co-ordinators and staff members are involved in defining the policies and procedures, framing guidelines and rules &
HODs	Deciding structure. To suggest procurement and recruitment. To make assessments of faculty and staff	regulations pertaining to admission, placement, discipline, grievance, counseling, training & development, and library services etc., and effectively implementing the same to ensure smooth and systematic functioning of the institute.
		For the various programs to be conducted by the institute all the staff members will meet, discuss, share their opinion and plan for the event and form various committees involving students and coordinate with others.
		Staff members are also involved in deciding academic activities and examinations to be conducted by the institute.
Departmental Committee • Purchase committee • IQAC and Academics committee • Research committee • Co- curricular and extra- curricular	Functional goals, planning and decision making. Feedback & control	For the various events to be conducted by the department, all the staff members will meet, discuss, share their opinion and plan for the event and form various committees involving students and coordinate with others. Teaching Staff of various departments participate in sharing the knowledge by discussing on the latest trends

#### Table 6.7 Role and Responsibilities of Head and Various Committee

Committee		in their respective area of
• Local		specialization.
Guardian		
committee		The co-ordinators and the
• Time Table		departments most together and
Committee		plan the programmes to be
• Class		conducted
coordination		conducted.
• Dont		
• Dept.		
Placement		
committee		
• Examination		
committee		
Faculty and		All the staff members are involved
Staff	Operating goals,	in deciding day to day academic
	planning. To maintain	activities of the department.
Low level staff	and control Day-to-day	
	operating activities.	Students support to maintain the
		discipline to ensure
		smooth and systematic functioning
		of the institute.
		Office staff are involved in
		executing day to day support
		services for both students and
		faculties.

### **6.1.8** Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes. From the point of view of academic results and functional outcomes, the effectiveness of the institute is the effect of the organization of the institute and by the way faculty members work with each other. The faculty members co-operate with each other, with the leadership and with the community, is indeed the extent of their commitment to the institute.

This type of management adopts more of a listening approach from various stakeholders of the institute. Middle level management (Coordinators, Heads and Staff Members) has an input into the decision-making and the top level management is benefited from their ideas. This enjoys greater involvement of the top management that motivates staff by meeting their esteem needs. Staff

and the members accept responsibility for work to be done, accept that it is their job to carry out a part of the institute's activities and that they will be held accountable for the quality of their work. The heads & coordinators cooperate the work of the groups leading to further leadership of subgroups. The heads and coordinators also ensures excellent working conditions to carry work and operation with self-development and satisfaction. The institute is built on participative management style which motivates participation through decision making, including setting of goals, achieving targets, takes place at all levels of the organization.



#### Figure 6.5 Culture of participative management

#### 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.

#### Quality Policy statement of the institute

"To provide quality technical education with state-of-the-art infrastructure, value-added services and human resource development obtained through
honesty, trust, transparency, responsibility and commitment for the overall development, benefit and satisfaction of all stakeholders"

	Top Management (Strategic Quality)	Principal & HODs (Functional Quality)	Staff & Members (Operating Quality)
Honesty	Policy framing	Academic standards	Teaching- Learning
Trust	Human resource	Stakeholder Relationships	Information & communication
Transparency	Educational Process	Assessment & Evaluation	Students' academic
Respect	Appreciation & welfare	Promotion, Loyalty & Increments	Rewards & Awards
Responsibility	Finance, Social, Target market, Technology. Stake holders benefit.	Inclusivity & Diversity, Training	Employment
Commitment	Infrastructure and amenities	Operating & Functional activities	Results & Outcomes

 Table 6.8 Institute stated policy perform on various level

**6.2.2** Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan. Yes.

One Year perspective Plan	Five years Perspective Plan
Academic and Inj	frstrauctural
<ul> <li>To attract funds for research projects and academic program</li> <li>Enhancing employability and competancy of students through strong industrial linkages</li> <li>NAAC &amp; NBA Accreditation of all programs and courses</li> <li>Industrial accreditation and colaboartion</li> <li>To facilitate e-learning</li> <li>To establish a 'Makers Lab'</li> <li>To emphasis and attract Industry oriented sponsor projects, contents based &amp; deployable projects</li> </ul>	<ul> <li>To establish more industry project centers</li> <li>To establish 'Incubation Centre' to promote stratups</li> <li>To establish German Language Training Centre</li> <li>To construct an Auditorium hall with a capacity of 2000</li> <li>To provide VSAT Connectivity under UGC Infonet Program</li> <li>To establish solar based campus</li> </ul>
Administr	ative
<ul> <li>To attract more diservified students</li> <li>To implement Enterprise Resource Planning (ERP) at all levels.</li> <li>To expand professional memberships for institute, faculty and staff</li> <li>To strengthen alumni networks in USA for the support of higher education of existing students</li> <li>Digitization of day to day activity to create a paperless administration.</li> </ul>	<ul> <li>To expand target markets beyond states to attract diversity.</li> <li>Benchmarking best practices and processes of IITs, NIITs and foregn well-known universities.</li> <li>To inrease girls and tribal students inclusivity by 30%</li> <li>To raise sanctioned intake upto 1000 intake capacity.</li> <li>To be an autonomous institute</li> <li>ISO certification</li> </ul>
Leadership and (	Governance
• To develop brand image by expand nation and widening publicity prog	ling social activities across the grams world-wide.

#### Table 6.9 Short term and long term perspective plan

# **6.2.3 Describe the internal organizational structure and decision making processes.**

The institute has a well defined organizational structure with effective processes developed for all its major activities. Figure 6.2 shows the internal organizational structure of the institute is given below;



Figure 6.6 Internal Organisation Structure 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following.

- It supports continuous engagement of students and staff in attending workshops and seminars to acquire new knowledge and improve their practical skills through Centre for Distance Engineering Education Program (CDEEP) in association with IIT, Bombay & IIT Kharagpur.
- The institute has a tie-up with Amrita Vishwa Vidyapeetham University for e-learning and ICT based education. It encourages to use ICT as an effective teaching tool and training wherever needed.
- Monitoring slow learners and toppers, class divisions are made on the basis of students merit and special inputs are made as per their needs.
- Tutor and local guardian ensures to maintain educational interests of diversified students and parents.
- To keep minimum Drop-out the institute conducts induction program for students and parents to be familiar with the institutes educational processes and practices. The institute also conducts bridge/foundation course for the first year students which increases further intersest in engineering education and decreases drop-out.
- Credit test of each unit of subject is conducted to get experience & practice of university examination.
- Institute provides video lectures through NPTEL membership which is assecible to students and staff of the institute.
- Parents meets are regularly conducted to report the progress of the students. Daily attendance of the students are communicated through SMS to parents.
- Institute has initiated project based learning where every student has to work and present a small industrial project in every semester.
- The institute treats Alumni as an intergral part of its teaching-learning by providing alumni expert talk, interaction and alumni meets through video conferences and their visits. Alumni also provides Project Mentorship for project assistance through Alumni Association.
- It provids provision to visit other academic instituitions and industrial organizations of academic excellence and adopt their best practices in teaching and learning.
- The academic performance of students and faculty are awarded by cash prizes and certificate of appreciation. Every year cash prizes of approximately 10 Lacs are awarded.
- The institute obtains feedback from the students and the heads for the improvisation and performance appriasal of staff.
- Institute and hostels campus are provided with wi-fi facility. Study rooms are also provided in institute and hostel campuses.
- The institute invites industry personnel as a visiting faculty to deliver subject lectures to bridge the gap between Industry & Academia
- The institute inspires foreign university visits for the head of the institute to get awared of best innovative practices in teaching & learning.

- To facilitate effective teaching-learning, comfortable environment is maintained by the institute by providing AC classrooms and laboratories and contented seating arrangements, backed by clean campus.
- To promote open source technology for teaching-learning like Linux, Latex, Scilab, Moodle, A-View

#### **Research & Development**

- The institute is 'partner' for QEEE- Quality Enhancement in Engineering Education for quality enhancement program which an initiative taken by the Department of Higher Education, Govt. of India and IIT, Madras which focuses on student and faculty development programs.
- The institute provides environment for research activities for supporting the knowledge and findings of students and staff for the benefit of the community.
- The institute has established recognized and affiliated research centers that stimulates hard core research activities, supervising and producing Doctorates (Ph.D. students)
- To stimulate research activities, the institute's library provides online reference books, e-journals through DELNET, NDL, Inflibnet.
- It has provided computational, library and laboratory facility for 24X7 days for co-curricular activities of students and staff.
- It supports sponsorships and grants for acquiring additional qualifications, certification programs and attending conferences, seminars and workshops.
- It provides financial assistance to travel abroad in case the publications are selected for presentation in foreign countries. The students are provided with financial assistance for presenting paper for state or national conferences.
- Every year the institute conducts a national level symposium for degree and diploma students and a national level conference for each department for faculty and PG students.
- Staff encourages and supports student research by providing them small projects related to the curriculum or of societal interest.
- Students' employability skills are enhanced by conducting Employability Development Program throughout the semesters and till the completion of the engineering program.
- Students are encouraged to obtain foreign and recognized university certification programs through MOOCS, to acquire add-on courses which ensure 90% of students' engagement through institute's industry linkages.

- The institute motivates to achieve higher qualifications by providing online resources for the preparation of PG entrance examinations through 'Vidyalanakar'.
- The institute has appointed special 'Counselor' who act as a catalyst and lubricant for executing development programs for students in addition to TPO.
- The institute has formed departmental associations for the overall development of students by arranging quiz competitions, paper presentations and activities for self & group development.
- To be practiced on language, the institute provides language laboratory which enhances language skill development.
- Institute conducts training and developmental program like Wipro's Mission 10X for staff.
- The institute has a Japanese Language Training Center to create employment opportunities.
- The institute provides institutional memberships of IEEE, ISTE and IETE for research activities.
- The institute facilitates active participation in governments initiatives like 'Transform Maharashtra' and IIT's quizzes and project competitions and industrial events like e-baja, m-baja, KPIT Sparcles, Smart India Hackathon, where the students has achieved rewards and awards.
- The institute engages in cultural and sports activities to develop intrapersonal skills, leadership and group performing.
- The institute inspires publications like; technical & alumni newsletter.

# Community engagement

- The institute's community engagement program starts with career counselling and engineering awareness program by visiting 5 districts, 100 schools and coaching classes. Every year approximately 15000 students and parents get benefited through this program.
- Institute also sponsors and take active participation in Educational Exhibitions arranged at district.
- Institute has developed social networking sites like, LinkedIn, Facebook and has also developed WhatsApp groups through which the faculty, students, parents and alumni take active participations for the overall development. The institute also provides knowledge based information through its website.
- The institute's social 'E-builder' group through its extension activities, contributes and helps poor and needy children of ashram schools.
- The students take active participation in governments initiatives like 'Swaccha Bharat Abhiyan' and 'Tree Plantation'. Every year approximately 25+ acres of public land is cleaned and approximately 1000+ trees are planted through students social activities.

- Institute inspires blood donation camp every year. Approximately 600+ blood bags are donated.
- The institute not only promote in-house placement for engineering students but also promotes job fairs for diploma, non-science and science students.
- The institute is in continuous engagement with the media through the publication of its activities and programs for the community awareness.
- The institute promotes projects for community services through technology.
- The institute conducts a workshop for students of 8<sup>th</sup> to 10<sup>th</sup> standard for making hands free experience on Electronics projects
- The institute provides donations to various government organization like; to Collector Office, Dhule under Flag Day Fund, National Association for the Blind for welfare of the community.

#### Human resource management

#### **Organizational Structure**

Institute provides participative organizational structure at all levels which ensures delegation of authority with strong relations, support, coordination and cooperation.

#### Staffing

Institute's recruitment process ensures obtaining adequate staff with appropriate skills, abilities, knowledge and experience to fill job responsibilities.

#### **Education, Training and Development**

The Principal, HODs, Teaching and Non-teaching staff are educated and trained to accomplish the common shared goals. The institution frequently arranges for training programs in-house and deputes to other organization for acquiring balanced skills (technical skills, teaching skills, soft skills etc.) from all dimensions. The institute ensures that all employees possess the knowledge and skills to perform satisfactorily in their jobs or to advance in the institute.

#### **Working Environment**

The administration of the institute continuously monitors workplace safety, health and welfare policies to retain a competent workforce and comply with statutory standards and regulations and provides suitable technology, comfortable and pleasant environment where the staff work with their zeal. The institute provides medical insurance for their staff. The institute frequently arranges entertainment and celebration programs to them and their family.

#### **Staff Relations**

The institute provides good communication network through daily SMS, WhatApp, facebook feeds which enable staff to be constantly

informed of the progress being made in the institute. Each staff is encouraged to participate in planning and decision making of committee / group activities. The institute recognizes the staff as human beings with feelings, interest, needs and emotions and treating them equally and with fairness and respect.

# Career development and welfare

The institution encourages quality improvement programs and deputes faculty on sabbatical leave for higher education. The faculty are entitled to benefits like CL, CCL, EL, ML, adequate vacation. The institute provides financial assistance for housing and car loans. The institute ensures fair balance between their personal goals and the institutes goals.

#### **Appreciation and rewards**

Staffs are appreciated by rewards and awards for their recommendable work.

#### **Industry interaction**

- Institute has promoted industry & academic associations by establishing e-yantra robotics laboratory in association with IIT, Bombay and Wipro Technologies industrial laboratory for making small projects.
- The institute facilitates summer training, industrial field training and internship programs like TCS internship, KPIT oracle 10 G, RedHat outreach.
- The institute provides industrial project centers like Persistent
- Institute invites industry resource persons to deliver lectures, seminars on industrial development issues and to deliver domain specific technological interaction.
- Institute invites various experts from industries Institute motivates students to take part in industry oriented competitions like Tata Consultancy Services (TCS) Codevita, TCS Testimony, TCS Enginx, KPIT Sparkle, Capgimini Technext. etc. to make them industry ready.
- Institute has a tie-up with many reputed industries like TCS, Persistent, Wipro, etc.

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?

	Principal's feedback and information through Meetings & Electronics communication with Top Management & Stakeholders										
	Head of Institute (Principal)										
ency to obtain	Sources of Informa tion	Staff	Studen ts	Parents	Alumni	Commu nity	Industr y	Govt. and regulati ng authorit ies			
nd freque	Meetin gs	Daily	Often	Once in a semester	Occasio nally		Occasio nally	Occasio nally			
back a	E-mails	Always			Often	Sometim es	Often	Often			
r feedl	SMS		Often	Sometim es	Sometim es	Sometim es					
ion fo	Whats App	Daily			Always		Always				
Informati	Social Networ king	Daily	Often	Sometim es	Often	Often	Often				
Sources of	Written formats	Once in a semester	Once in a semest er								
	Telepho nic	Often	Often	Sometim es	Sometim es		Sometim es				

Table 6.10	Ensuring	adequate	information	of the institute
1 abic 0.10	Linsuing	aucquaic	mormation	or me montate

	Review Purpos e & expecte d output	Academic review Operatin g & functiona l review Administr ative & financial review	Operat ing, suppor ting activiti es, Amenit ies & faciliti es	Financi al assistant Students facilities Students perform ance	Expert Talk Higher Educatio n assistan ce	Social awarene ss Relation s & bonding	Latest trends & technolo gy use for curricul um design Skill Require ment Employ ment require ment	Rules & regulati ons Policy framing
--	---	---	--	---	---	---	--	---

#### 6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

- Participative Management
- Involvement in decision making
- Performance evaluation
- Word-class infrastructure with computational facilities
- Rewards and awards
- Self-development programs
- Delegation of authority and decentralization of responsibilities
- Secured, safety and comfortable working environment
- Education and training
- Community engagement
- Welfare programs
- Cooperation, relationships and bonding

# **6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions**.

#### Strategies to improve results

The council suggested to improve result of students. The institute started extra coaching classes for the tough subjects after or before working hours. The x-students are allowed to attend regular classes at no costs.

#### To give award and rewards for academic performance of students

The council suggested to conduct award and reward function for the appreciation of students and department for their success in university examination result of May 2015. The institute conducted this function by awarding cash prices of approximately 10 lacs to the gold medalists, university and college toppers and the department which achieved gold medal.

#### To procure books & equipment and recruit staff

The books, equipment, consumables as per the departmental requirement as suggested by the council members. Teaching and non-teaching staff were also recruited to ensure adequate availability of staff at various levels for smooth functioning of day-to-day activities.

#### To conduct publicity and career counseling programs

As per the recommendations made by the council, the institute prepared publicity and career counseling programs at 3 districts covering nearly 95 schools, colleges and coaching classes. Advertisement activities in print, audio and visual media were also chalked out.

# To affiliate first year to Dr. Babasaheb Ambedkar Technological University, Lonere from academic year 2017-18

The council, based on the SWOC analysis, referred to affiliate first year engineering to Dr. BATU, Lonere from academic year 2017-18. The institute then applied for the same in the prescribed format. The university committee visited the institute in Feb 2017 and recommended the affiliation for the first year.

#### To apply to start the process of NBA accreditation and NAAC

As per the recommendations made by the council, the process of NBA accreditation and NAAC is in progress till date.

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 institute is on its way to structure the institute for autonomous status. However, the application will be made to the university in upcoming years when the institute believes to hold all the necessary requirements to be an autonomous institute.

#### 6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

There is an open-door policy. Students, staff and parents can approach the Principal and Vice Principal for problems which require immediate attention and they are immediately attended to.

Complaint boxes are available in library, administrative office and each department to receive complaints. There is a duly formed grievance redressal cell for students, teaching and non-teaching staff members.

• Student and Parents Grievances: A stated Grievance redressal mechanism is mentioned in the College Calendar which is a three-tier system

Tutor Level to be resolved by Local guardian

Department Level to be resolved by the HOD

College Level to be resolved by Vice Principal and Principal

• Staff Grievances: All grievances of the staff members are to be

submitted to the Grievance Committee to be resolved by the committee, HODs, Vice Principal and Principal.

- Women Redressal Cell is formed to address the grievances of the Girl Students to be resolved by the committee, Vice Principal and Principal.
- An online grievance e-box is in place at complaints@rcpit.ac.in

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?

Yes. The institute and the other minority colleges has approached the honorable High Court when they felt that the procedure for admitting nonminority students against vacant seats of minority was not proper. As per the rule, the vacant seats of minority were available for the general category students in fourth CAP rounds. At that time, all the eligible candidates were exhausted as there were less applications and large number of seats available.

Now these seats are available for general category in second round if minority students are not available. It resulted full enrollments in second rounds with good merit.

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?

Yes. The students online feedback is obtained to evaluate teaching methodology and teacher's evaluation once in a semester. Feedback are also obtained on soft and technical sill developmental program to study the interest of the students.

The institute also conducts an annual student satisfaction survey for assessing the institutional performance and the outcomes in the form of skill enhancement ability of students. The students also provide self-analysis form which provides inputs on facilities they like and give suggestion for improvising in areas for improvisation. These are analyzed, discussed and implemented on a priority basis with the consultation of top management.

Analysis of exit feedback obtained from the 498 passing out students is presented in the following table.

Feedback Analysis from	existing students
------------------------	-------------------

[A] Teaching Learning	Poor	Fair	Average	Good	Excellent
(in terms of learning support and academic)					
Credit System					
Utilization of Teaching Aids					
Conference and Workshop Conducted					

Library Facility (Books and journals available)					
Internet and Wi-fi facility					
Guest Lectures conducted					
Industrial/Education/Field tour arranged					
Use of latest technology					
Innovative practices					
Faculty Support					
Syllabus and Course Contents					
Examination System					
Studious Environment					
Paper presentation/Project presentation Encouragement					
[B] Infrastructure	Poor	Fair	Average	Good	Excellent
(in terms of comfort, aesthetic and use of latest technology)					
Building					
Class Room Comfort with Audio-Visual facility					
Laboratory Equipment					
Sports					
Cultural					
Hostel					
Canteen					
Library					
Library Computer Lab / Center					
Library Computer Lab / Center Sanitary					

[C] College Promotional Activity	Poor	Fair	Average	Good	Excellent
Website					
Social Media like					

facebook/twitter/Youtube/WhatsApp	
Print Media Advertisement/News	
Hoarding and Banners	
Brochure / booklets / Leaflets	
Education Fairs / Event Sponsorships	

[D] Student's Support System	Poor	Fair	Average	Good	Excellent
Local Guardian & Counselling system					
Soft Skill Training Courses					
Technical Training Courses					
Placement Assistance					
Higher Education Guidance					
Safety and Security					
Health care and Gym					
College Canteen and Mess/Food					
Hostel facility					
Hostel Canteen and Mess/Food					
Hostel Discipline and Environment					
Indoor and Outdoor game facility					
Cultural Activity					
Administrative/Office Support (in terms of time consumed for processing of your request)					
Department Support (in terms of time consumed for processing of your request)					
Library (in terms of Books / Journals available and time consumed for processing of your request)					

Scholarship/Freeship & Financial Aids support					
Student Reward and Award (appreciation)					
Anti-Ragging Environment (Ragging-Free)					
Bus Transportation					
[E] Others	Poor	Fair	Average	Good	Excellent
Brand Image & Management Reputation					
Campus overall Life and Culture					
[F] What you achieved (gain)?	Poor	Fair	Average	Good	Excellent
(Rate your development in last 3 / 4 yrs, studying in Technical/Professional Education)					
General Knowledge					
Technical Skills (Special Course/program)					
Soft Skills (English Proficiency, Communication, Aptitude, Body Language,					
behavioral style)					
Group/Team Development					
Social & Humanity					
Leadership					
Self-Confidence Level					
Emotional Stability					
Pressure/Stress Handling ability					
Creativity / Idea Generation					
Ability to achieve Goals/Objectives					

Ratings and reviews on Social Networking sites



Outcome and response of the institution to feedback and reviews

After conducting an annual student satisfaction survey for assessing the institutional performance and self-analysis of students and staff, inputs are provided to the management. These are analyzed, discussed and implemented on a priority basis in governing body and LMC meetings. The feedback is communicated to the teacher to take corrective steps in his/her teaching methodology. The institute takes the corrective steps on providing facilities.

# **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?

The institute provides various platforms to enhance the professional skills of teaching and non-teaching staff and to be on par with the recent trends. The institute conducts various training, pedagogy, coaching, workshops, etc. The institute encourages the faculty members and non-teaching staff in the following way:

- The Principal, HODs, Teaching and Non-teaching staff are educated and trained to accomplish the common shared goals. The institution frequently arranges for training programs in-house and deputes to other organization for acquiring balanced skills (technical skills, teaching skills, soft skills etc.) from all dimensions. The institute ensures that all employees possess the knowledge and skills to perform satisfactorily in their jobs or to advance in the institute.
- The head of the institute visits various foreign university and engineering colleges to adopt best practices and techniques once in a two year.
- Academic Performance Indicator (API) System is mandatory for all teaching. This motivates all faculty members to be involved in personal grooming by way of teaching-learning, subject results, plenary lectures in conferences, workshops and there by networking with other experts in the field from both academia and industry. API is the base for the increments, promotions of teaching faculty
- Teaching staff is motivated to apply for research grands under different grants which are funded by various organization like; AICTE, UGC. The institute has a separate departmental team to search, apply, disbursement and utilization of grant.
- The institute promotes faculty exchange program by sending teaching faculty to teach subjects where they are specialized in to other colleges situated nearby.
- Incentives are given for research consultancy and funded research projects ensure that the faculty members are in constant quest for industry oriented research.
- The institute promotes participation of the faculty members in the Faculty Development Program organized by the institutions like IITs

through Centre of Distance Engineering Education Program (CDEEP), Quality Enhancement in Engineering Education (QEEE)

- The institute encourages faculty to become members of professional bodies to take part in their program.
- The faculty is encouraged to publish one research paper in a year.
- The faculty is encouraged to acquired Ph.D. within a stipulated timeframe.
- Financial assistance is also given to teachers for presenting papers in seminars and workshops.
- Teaching faculty are promoted to set university papers for the subjects they are expertise in. Also motivated to evaluate performance of the students in oral and theory examinations.
- The institute improves the competence of faculty in their own subjects by preparing the study material on their own. This is used by the students as a course material.
- The institute has established recognized and affiliated research centers that stimulates hard core research activities, supervising and producing Doctorates (Ph.D. students). At present 16 faculties of the institute are enrolled for this research center.
- The non-teaching staff is trained periodically to upgrade the soft skills and they are supported to attend workshops to equip themselves with latest developments in their respective domain.
- Computer proficiency programs and programs of using technology effectively are arranged for non-teaching staff.
- Non-teaching staff are trained by the industrial personnel before they make use of software or processes.

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?

S. No.	Area for Improvisation	Strategies adopted	Areas of Training, Retrainin g and motivatio n	Resulting empower ment	
1	Language & Fluency	Frequent use. (Language laboratory)	Communic ation	Improved ability in communicatio n	

Table 6.11 Faculty empowerment strategies

2	Deficiency in comprehension	Increased reading (Library resources)	Knowledge	Enhanced competence in imparting knowledge
3	Poor Presentation	Providing know How (Workshops & seminars)	Skill	Effecti ve present ation
4	Effective Judgment	Providing Guidelines (Attesting policies, rules & regulations)	Evaluation	Fair assessment
5	Strained interpersonal relation	Group activities (Involvement in committees / groups)	Team work	Collaboration and synergy
6	Lack of sensitivity to student difficulties	Increased interactions (Involvement in students' activities)	Counseling	Better student- teacher relation.
7	Inadequate use of technology	Support facility (Provide effective teaching-aids)	Technology adoption	Use of teaching aids & electronic media for effective teaching
8	Negative thinking	Re-orientation (Motivation, support and interaction)	Attitude	Positive thinker
9	Stagnation	Provoking analytical thinking (Support for research activities)	Advanceme nt of research	More publications & contributions

					Adoption	of
10	Challenges in effective	Competition excellence	for	Teaching Innovation	creative thinking improvem	and ent
	teaching				in teac methods.	ching

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.

The details of the performance appraisal system to evaluate and encourage the staff members in their improvement are as follows:

#### Performance Appraisal System

At the end of each semester, a filled-in obtained online feedback form will be collected from the students about the faculty engaging the class, which evaluates about teaching methodology, creativity and level of understanding.

विद्यार्थीराय प्रणाली R.C.PATEL INSTITUTE OF TECHNOLOGY, SHIRPUR

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				NO	. 01	student n	as 0	wen	the reeut	ack						
SrNo.	Qno.	A Nos.	A Multiplied BY	A Sub. Total	B Nos	B Multiplied Bv	B Sub Total	C Nos.	C Multiplied Bv.	C Sub Total	D Nos.	D Multiplied Bv	D Sub Total	Out Of	Total	%
1	1	59	6	354	5	3	15	2	1	2				396	371	93.6
2	2	56	6	336	5	3	15	4	1	4				390	355	91.0
3	3	58	6	348	6	3	18	2	1	2				396	368	92.9
4	4	50	6	300	10	3	30	6	1	6				396	336	84.8
5	5	59	6	354	5	3	15	2	1	2				396	371	93.6
6	6	52	6	312	9	3	27	5	1	5				396	344	86.8
(	/	49	6	294	12	3	36	5	1	5		ļ		396	335	84.6
8	8	57	6	342	1	3	21	2	1	2				396	365	92.1
9	9	52 56	6	336	5	3	30 16	2 4	1	2	<u> </u>		<u> </u>	300	355	00.3
10	11	56	6	336	6	3	15	ч+ Л	1	ч Л	-		-	396	358	91.0
12	12	46	6	276	14	3	42	- <del>-</del>	1	6				396	324	81.8
	13	54	6	324	12	3	36	0	0	0				396	360	90.9
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13 14 15	14 TOTAL	36	0	0	5	3	15	12	2	00	15	2	20	5466	4693	04.0

Figure 6.7 Teacher feedback from student

The self-appraisal form (Academic Performance Indicator- API) will be filled in by the staff by providing the details of teaching, results obtained in internal examination and varsity examinations, books and papers published, conferences, seminars, workshops, training programs, research, consultancy and academic administration carried out during the academic year.

The parameters of the Academic Performance Indicator- API with the marks assigned are listed below;

### **Table 6.12 API Evaluation**

1	Teaching-Learning and Evaluation related activities		180
	Performance in engaging		
	lectures/practical/tutorials/administrative load/research	50	
	supervision/project guidance		
	Performance in attendance of students	20	
	Performance in theory subject results	20	
	Academic duties	10	
	Preparation of study material & resources	20	
	Innovating teaching-learning	20	
	Feedback given by students	15	
	Examination related duties	25	
2	Co-curricular, extension & professional development		70
	Involvement in Students' Co-curricular and extension	30	
	Community involvement	5	
	Involvement in institute's committees	20	
	Professional development	15	
3	Research publications and Academic contribution		125
	Papers published in journals/conference proceedings	30	
	Books published / Article, chapters published in books	25	
	Research Projects & consultancies	20	
	Research qualification	10	
	Research guidance	10	
	Patents	15	
	Workshop participation	15	
	Total		375

# Table 6.13 API Marks and Grades

API Marks out of 375	Grade and Review remarks				
≥300	0	Outstanding			
275-299	A+	Excellent			

250-274	А	Very Good
225-249	B+	Positively Good
200-224	В	Good
180-199	C+	Satisfactory
160-179	С	Improvement Required
<160	Not Acceptable	Not Acceptable

The Head of the Department and The Principal gives the feedback on the performance appraisal form filled by the concerned faculty about the overall performance of the faculty based on the information provided by the staff members in their self-appraisal form and through regular presentations where the faculty contributes the information and ideas in the improvement.

#### **Corrective Measures**

The information and the remarks provided by the HODs and the Principal on the performance appraisal helps the faculty to gain insights for improvement. The following inputs are provided to the faculty in the light of the review of the performance appraisal report.

- Enhance competency through strengthening knowledge in the subject.
- Introduce variety of teaching methods suited to the requirements of the subject.
- Increase interaction with the students and promote participation in the learning.
- Develop accessibility to the students outside the class.
- Prepare adequately prior to the classes.
- Ensure syllabus complete in time.
- Maintain regularity in conducting classes.
- Adopt better presentation skills.
- Concentrate on research projects
- Present papers in conferences and workshops
- Contribute to the specific events organized by the institution.
- Participate in faculty development programs.
- Write books, monographs etc.
- Review research papers/ books.
- Involve in course material development.
- Plan and schedule classes.
- Learn proper academic record keeping.

- Encourage assignments/tutorials.
- Maintain regularity and punctuality.
- Show sincerity, integrity, and maturity.
- Acquire higher qualifications.
- Involve in admission and counselling processes.
- Deliver expert lecture at as invited talks.
- Apply for memberships of professional bodies.
- Get linked with industry.
- Get engaged in community services

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?

#### Review process and major decisions taken by the management on the performance appraisal reports of teaching faculty

Performance appraisal of the teachers has been conducted annually by the management by taking into consideration of vision, mission and objectives of the institute and departments. The progress and achievements of the teachers are being appraised by the management to decide over the annual increments of the teachers. Management conducts personal interview and group discussions are held with the teachers to share appraisal reports and discuss about their career advancement.

Some of the major decisions taken by the management on the review of performance appraisal are;

- Sanction of annual increments to staff.
- Nominating faculty for training on specialized topics wherever some gap in performance is noticed.
- Assignment of senior faculty to mentor the junior faculty and guide them in both academic and administrative functions.
- Motivating staff to acquire higher qualifications like Ph.D.
- Stimulating members to rise to the expectations of the students and stakeholders. To encourage the staff to familiarize with modern technical support systems.

6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

#### Table 6.14 Various Schemes and Activities

Welfare schemes and activities	% of staff availed the benefit
Medical Insurance up to 2 lacs	100 %
Accidental Insurance up to 10 lacs	100%
Maternity Leave for women employees	100%

Accommodation in working women hostel	10%
Health club membership	20%
Professional memberships for research	50%
3-months paid maternity leave to female staff	100%
Provision of advance salary at the time of Diwali	100%
Financial assistance to conference and workshops	100%
Assistance to the admission of staff's children in the society managed schools	50%
Uniforms to all staff	100%
Mobile & diesel allowances for senior staff	50%
Laptops for Heads	100%
A.C. Transportation facility	30%
Facilities like PF	100%
Earned leave, on duty leave, medical leave & study leave	100%
Use of infrastructure for research activity for 24X7	100%
Annual Employee get-together	100%
Staff welfare fund managed by the staff	100%
Assistance to housing loans	30%
Immediate availability of personal loans by the co- operative bank managed by the management	70%
Online leave application system	100%

# 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

#### **Attracting Eminent Faculty**

Best strategies and efforts are in place to retain and recruit competent and talented faculty. Applications are invited through known circles, advertisements and website. Received applications are thoroughly scrutinized based on their qualifications, experience, research publications etc and short-listed candidates are called for an interview. The candidates are selected based on their performance in the written test, interview and demonstration of lecture.

#### **Retaining Eminent Faculty**

- The Institute provides basic laboratory and library facilities for research activities.
- The college encourages faculty members by giving necessary guidance of different schemes of funding agencies to apply for Minor/ Major research Projects.
- Financial support is given attending workshops, seminars, conferences at National, International levels.
- Financial assistance is given to the faculty for publications.
- Faculty members are actively involved in Local, State, National & International professional associations.
- Salary is offered to the faculty as per the 6<sup>th</sup> Pay and AICTE norms based on their experiences and qualifications
- Involvement in decision making and planning with participative management style.
- Providing comfort working environment with A.C. cabins
- Faculty members are given opportunities to earn extra income through participation in Consultancy work and delivering visiting lecture in other colleges.
- Infrastructural support for fitness & healthcare etc
- Providing autonomy and freedom in work

# **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?

The following systems take care of effective and efficient use of available financial resources.

All the financial activities are planned by inviting requirements from all departmental heads and in-charge of sections, in the form of annual budget incorporating therein recurring and non-recurring expenditure. The expected income budget is prepared by the registrar as per the projections made by the career counseling teams and its program.

The finance and accounts officer with registrar considers these budgetary requirements and after careful examinations makes recommendations in consultation with the principal for its approval by the Governing Body and LMC.

Expenditure and purchases are made in accordance with the provision made in the budget for that head of expenditure. However, provision is also made for the contingency expenses in the budget.

The institute effective and efficient use of available financial resources through following bodies/committees

- Governing Body
- Finance Committee
- Purchase Committee

- Building and Maintenance Committee
- Dead Stock Verification Committee
- Accounting and Audit Committee

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.

Till now there are no objections from the external auditor is received by the institute.

Last audit was made for financial year 2016-17 completed in Aug 30, 2017.



Figure 6.8 Financial Audit done (Day to Day, Internal & External )

### **Internal Audit**

Day-to-day financial transactions are looked by the institute's Finance and Accounts Officer with the support of accountant and the clerical staff. The institute also has a centralized accounting and auditing mechanisms which conducted by the internal auditor (CA) appointed by the trust at every 6 months. Internal auditing ensures that the financial transactions made are transparent and are in accordance with the rules and regulations of the government.

### **External Audit**

External audit is done annually at the end of financial year by an external auditor who is registered CA under the council of Chartered Accountants.

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 is private and managed by the society/trust on permanently nongrant basis. The major sources of institute's receipts/funding are given below;

- Tuition Fee receivable from the students the state government as a reimbursement
- Development fee receivable from students
- Grants from AICTE/UGC etc
- Funds receivable from the Society/Trust in case of contingency / emergency
- Fixed Deposits

Audited income and expenditure statement of academic and administrative activities of the previous four years are attached herewith. However, consolidated figures of the same are given in following table

Table 6.15 Income and Expenditure Statements
--

(Figures in Lacs)

	2013-14		2014-15		2015-16		2016-17	
	Aca-	Admin	Aca-	Admi	Aca-	Admini	Aca-	Admini-
	demic	istrativ	demic	ni-	demic	-	demic	strative
		e		strativ		strative		
				e				
Income	226	5.85	216.39		231.39		238.78	
Expenditu	130.07	106.51	145.45	91.83	162.05	123.11	207.94	81.21
re								
Total	236.59		237.29		285.17		289.16	
Expenditu								
re								

## Table 6.16 Reserved Funds

(Figures in Lacs)

	,			
	2013-14	2014-15	2015-16	2016-17
Fixed Deposits & others	59 lacs	65 lacs	81 lacs	98 lacs

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Year	Number of Research Proposals granted	Total amount in lacs	Agency
2013-14	2	8.25	AICTE, UGC/RGSTC
2014-15	18	21.46	AICTE, UGC/RGSTC, UGC/VCRMS
2015-16	14	7.29	UGC/VCRMS
2016-17	8	6.12	UGC/VCRMS

Table 6.17 Various research grants received

# 6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC)/ Quality Improvement Cell (QIC)

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?

# Yes.

SN	Name of the	Designation	Position
	Member		
1	Prof Dr J B Patil	Principal	Chairperson
2	Dr K B Patil	Director, SES	Management
-	Di II Di uni		representative
3	Shri Atul R.	Industrialist	Industrialist
-	Bhandari		
4	Shri Y N Bhandari	Chairman, Shirpur People	Local Society
		Co-op Bank	representative
5	Dr P J Deore	r P J Deore Vice Principal and Head,	
		E&TC Dept	
6	Mr. P. T. Mahajan	Administrative Officer	Member
7	S P Shukla	Head, Applied Science	Member
,	S I Shuhu	Department	
8	N N Patil	Head, Computer	Member

#### **IQAC** members

		Department		
9	9 N P Salunke	Head, Mechanical	IQAC	
	N I Salulike	Department	Coordinator	
10	D S Lal	Head, Civil Department	Member	
11	V S Patil	Head, Electrical Department	Member	
12	D R Patil	Head, IT Department	Member	
12	UM Datil	Associate Professor, Comp	Manahan	
15		Dept	Wieniber	
14	D D D Dholo	Assistant Professor, E&TC	Momhor	
14	r K bliole	Dept	Member	
15	T M Pattewar	Assistant Professor, IT Dept	Member	
16 DL Care da	P.L. Sarada	Assistant Professor, Mech	Member	
10	r L Salode	Dept	Wender	
17	V K Kirongo	Assistant Professor,	Mombor	
17	I K Khange	Electrical Dept	Member	
19	C I Chitta	Assistant Professor, Civil	Mombor	
10	C J Cliffic	Dept	Member	
10	Dr M S Sonawana	Assistant Professor, Applied	Member	
17		Science Dept		
20	Sunanda Khargaria	Alumni	Member	
21	Charushila Marathe	Student	Member	
22	S L Marathe	Parent	Member	

### Institute policy with regard to quality assurance

Quality enhancement is a continuous process, the IQAC is an integral part of an institute's system and work towards realizing the goals of quality enhancement and sustenance. The key objective of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of institute and the stakeholders and to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

### Strategic functions of IQAC

• Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution
- Development and maintenance of institutional database through MIS for maintaining /enhancing the institutional quality
- Documentation of the various programs/activities leading to quality improvement
- Ensuring the adequacy, maintenance and proper allocation of support structure and services
- Preparation of the Annual Quality Assurance Report (AQAR)
- The relevance and quality of academic and research programs
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
- Development of Quality Culture in the institution
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Equitable access to and affordability of academic programs for various sections of society
- Society awareness programs to attract diversity from various sections of the society.
- Optimization and integration of modern methods of teaching and learning
- Dissemination of information on various quality parameters of higher education
- The credibility of evaluation procedures
- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes
- Sharing of research findings and networking with other institutes in India and abroad.
- To conduct conferences, workshops, seminars at university, state, national and international levels for staff as well as for students

# Contribution made in institutionalizing the quality assurance processes

- Inclusivity of Diversity
- Implementing innovative and best practices
- Improving academic performance and results

- Strengthening Alumni, Industrial and Society engagements and relations
- Skill enhancement for employability and competency
- Overall development of staff and students
- Lubricating research activities
- Motivating co-curricular and extra-curricular activities

b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?

	Suggestions put by IQAC	by the management	by the Institute
	To establish Quality Enhancement in Engineering Education program	Approved	Implemented
	To establish distance learning program for GATE	Approved	Implemented
SU	To promote & establish massive open access courses through MOOCS	Approved	Implemented
ggestio	To set-up broadcasting center for virtual learning	Approved	Implemented
ıral Su	To set-up virtual laboratories in collaboration with IITs	In process	In process
frastructi	To establish start-up & incubation centers in the campus	In process	In process
nd In	To do external academic audit by educationalist	Approved	Implemented
Academic a	To promote open source technology for teaching- learning like Linux, Latex, Scilab, Moodle, A-View	Approved	Implemented
	To set-up Japanese Language Training	Approved	Implemented
	To upgradation of language lab software	Approved	Implemented
	To set-up German Language Training	Approved	In process
	To set-up industry and IITs laboratory	Approved	Implemented

	To introduce AICTE's In pr scholarships like 'Pragati' and 'Saksham'	cocess	In process
	To apply for VCRMS, AICTE, App UGC and RGST&C grants	roved	Implemented
	To apply for NACC App	roved	In process
	Merit based divisions based on App slow and advanced learners	roved	Implemented
	To include project based App learning	roved	Implemented
	To apply for NBA App	roved	In process
	To assign separate responsible App person for departmental training and placement activities	roved	Implemented
suo	Establishment of a rain water A harvesting system	pproved	Implemented
gesti	To offer merit based scholarships A	pproved	Implemented
e Sugg	To offer special fee concession to A attract girls	pproved	Implemented
inistrativ	To implement Academic A Performance Indication (API) system based on self-appraisal and	pproved	Implemented
Adm	To assign full time counselor for A student welfare	pproved	Implemented
nts	To implement one of weekly day as a 'No Vehicle Day' A	pproved	In process
ıgagemei	To aware tribal students through technology awareness through A hands on experience	pproved	Implemented
nunity Er	To apply for the nominations of 'Best Principal Award', 'Best A College Award'	pproved	Implemented
ers and Comm	To take participation in 'Transform Maharashtra' -a state ministry undertaking and A 'Hackathon'- a HRD ministry undertaking	.pproved	Implemented
takehold	To establish strong relationships with stakeholder through social A networking	pproved	Implemented
S	To establish WhatApp group of A	pproved	Implemented

foreign and Indian based Alumni	
for suggestions	
To interact distance alumni	
through Video conferencing for Approved	Implemented
students' guidance	-

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them. Yes.

1. Ms. Sunanda Khargharia (alumni), is an auditor for alumni interaction programs, teaching -learning methods. She has contributed by providing inputs on quality process and sustenance.

2. Shri. Atul Bhandari, an external member of IQAC exchanges innovative ideas with the Principal and management to enhance holistic development of the students. He also creates awareness regarding entrepreneurship among the students so that they can build their career in industries. He also has helped in skill enhancement programs for the students to make them employable. He has helped in searching training partners for the institutes. He also suggest in purchasing latest technology based equipment and machines.

d. How do students and alumni contribute to the effective functioning of the IQAC?



Students participation in contributing effective functioning of the IQAC

Feedback for teaching faculty's performance and on teachinglearning process Suggestion box kept library and departments Suggestions on training program Participation in co-curricular and extra-curricular activities Supporting academic processes Maintaining studious environment

#### Alumni participation in contributing effective functioning of the IQAC Alumni helps IQAC by involvement in students' interaction program, career guidance for foreign university selection, giving feedback on teaching, learning and facilities through meets and by involving in mentoring BE (final year) projects

# e. How does the IQAC communicate and engage staff from different constituents of the institution?

The institution has been actively pursuing quality assurance in all academic and administrative sections. Various Committees are made to ensure the quality assurance. The role, responsibility and mechanism of quality assurance at every level by all the cell and committees are deliberated.

The IQAC explains its plan of action and implementation of it to the various with co-operation of all functional committees, operating committees, head of departments and the principal. The Principal, the heads and all coordinators communicate the same to the staff members and the conveners of different committees. Verbal communications, notices and staff meetings, deliberations etc. are the means adopted by us. Beside this, the communication is made through College Website, official e-mails, Committee coordinators, WhatsApp and SMS.

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



Figure 6.9 Integrated framework of quality assurance

The institution has an integrated framework for Quality Assurance of both academic and administrative activities. The linked elements are framed with the implementation plan, periodic reviews, stakeholder surveying.

The basic elements of operating integrated framework for quality assurance are planning benchmarking, policy development, improving human resource, technology upgradations, identifying stakeholders needs and receiving inputs by data, reports and survey, monitoring & reviewing by internal & external audits, implementing innovative and best practices and ensuring creditability of outcomes with stakeholders' satisfaction.

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.

Trained by	Торіс	Impact
Indi-US collaboration for Engineering Education	Management of Engineering Colleges for Quality Education at CR Rao AIMSCS, UoH Campus, Hyderabad	Quality based services and education
Dr. Ajit Thete, First Foundation, Aurangabad	Benchmarking NBA Criteria, at R. C. Patel Institute of Technology, Shirpur	Awareness to and approaching NBA
Engineering Staff College of India, Hyderabad	Achieving Excellence in Engineering Education	Quality enhanced education
Indi-US collaboration for Engineering Education	Engineering projects in community services at MLR Institute of Technology, Hyderabad	Community engagement for its benefit
NMIMS, Mumbai arranged by NMIMS, Mumbai in collaboration with INDO US COLLABORATION FOR ENGINEERING EDUCATION (IUCEE) India	LEADERSHIP CONCLAVE for Change Leaders in Engineering Education	Organization change for better quality
SVKM's NMIMS, Mukesh Patel School of Technology Management and Engineering, Shirpur	Orientation Workshop on Outcome based Accreditation Process	Awareness to and approaching NAAC and NBA

### Table 6.18 Institute provide training to staff

University of Dallas, University of Texas at Arlington, Southern Methodist University, Ohio State University, Syracuse University, and Harvard Business School.	International Study Tour: USA	Quality based services and education & benchmarking
Wipro Technologies, Pune	Academic Leadership Workshop	Organization & governing quality program
Wipro Technologies, Pune	Mission10X workshop, at at R. C. Patel Institute of Technology, Shirpur	Faculty development for achieving innovative & best practices
IIT, Bombay	Orientation workshop for associate faculty	Achieving innovative & best practices
NYSS Institute of Management & Research, Nagpur	Leadership Beyond Boundaries	Organization & governing quality program
R. C. Patel Institute of Technology, Shirpur	Human Resource Development Intervention – FEEL Teacher	Motivation for satisfaction of stakeholders & self-development

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.

# **Table 6.19 Review of Experts**

Expert review	Suggestions	Outcomes
Prin. Dr Ulhas Shivurkar, Principal,	Auditorium shall be constructed	Accepted. It is in process
Aurangabad		
Dr. Sunil Bhirud,	To apply for AICTE	Accepted. AICTE grants
---------------------	---	--
Professor, VIJTI,	research schemes for	like MODROBS & for
Mumbai	teaching faculty	FDP is received.
Dr. Pradeep Waychal	Teachers be encouraged to pursue and guide research.	Accepted. Faculty encouraged UG & PG students to do publications under their guidance.

## 6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The Internal quality assurance mechanism involves all the members of the teaching and non-teaching staff who are coordinated by the IQAC members to maintain high quality standards in all the processes and operations of the institutions.

• The suggestions made by the external reviewers for academic and administrative audit, such as Local Inspection Committee (LIC) appointed by the university, Directorate of Technical Education committee for verification and AICTE committee for maintaining quality standards are taken into consideration for planning, implementing, reviewing and continuously improving to meet the requirements of the relevant quality assurance and regulatory authorities.

• The institute's stakeholders work with zeal to ensure compliance (if any) in the stipulated time for meeting regulatory, quality measures and legal requirements.

Areas	Grou p	Processes	Measures	Status of Completion
Regulator	Financia 1 Audit	External & Internal audits	Audit to be completed in stipulated time	Completed
у	Universi ty	Local Inspection Committee	Faculty, infrastructure, amenities, land	Satisfies the requirement

#### Table 6.20 Internal quality assurance mechanism

	Universi ty	Selection Committee	Faculty qualifications	Satisfies the requirement
	State Govt., DTE	Inspection Committee	Faculty, infrastructure, amenities, land	Satisfies the requirement
	AICTE	Inspection Committee	Faculty, infrastructure, amenities, land	Satisfies the requirement
Accredita tion	NAAC	Self-study report,	Quality standards, Governance etc	
Controlli ng	Financia 1 Committ	Dead stock verification, Fee checking	To ensure optimum utilization	Completed
Controlli ng & Directing	State Govt.	Scholarships and reimbursement	Distribution of Scholarships and reimbursement	Completed
Accredita tion	Industry	Inspection Committee	Teaching-learning, Faculty, infrastructure, amenities	Satisfies the requirement
Employm ents	Industry	Selection of students for jobs	Teaching-learning, Faculty, infrastructure, Skills	Satisfies the requirement
Develop ment	Academ ic (IITs) & Industry	Quality & Faculty Development	Faculty involvement, interactions, assignments	Satisfies the requirement

## 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?

'Yes' Structure of Teaching Learning



#### Figure 6.10 Structure of Teaching Learning

#### Methodology of Teaching Learning its outcome

#### Teacher's diary

Each faculty maintains teacher's dairy provided by the institute. It consists of academic calendar, time table, faculty academic activities, course objectives and outcome, teaching plan, attendance of students, lecture/topic details,

remedial for less attendance, practical plan, practical assessment, questionnaire for credit exam, record of credit test, assessment of test, result analysis, syllabus contents. It also contents records of self-development like; consultancy, workshop/seminar attended, extra-curricular and co-curricular activities, research work, local guardian records. The status of maintaining records in it is verified by the HODs and Vice-principal monthly.

*Outcome:* It is used to give feedback to students as well as parents. It is also used to communicate data and information of students to the concerned local guardian. It also ensures that lectures & practical are conducted in time.

#### HOD's Vice-principal's and Principal's review by attending lectures & labs

Each HOD supervises performance of lecture once in a semester by observing teacher's presentation skills, knowledge sharing, use of technology and skill of making lecture interactive. Vice-principal and Principal also adopts same procedure however they conduct this review by surprise visits.

*Outcome:* It is used to give feedback to staffs. It also ensures that lectures & practical are conducted with quality concern.

#### Internal marks based on the performance of students in teaching-learning

Attendance, class performance, performance in practical and internal sessional credit tests of each units are considered for assigning internal marks of term work. The system is transparent and monitored by the verification of other departments.

*Outcome:* It avoids unbiased practices. Assessment is done on the academic performance of the students.

### *Reviewing performance of teachers through meetings, online students' feedback and self-appraisal*

Teaching performance of faculty is measured by the online feedback system given by each student for each subject teacher based on punctuality, subject knowledge, teaching aids, involvement of students etc. The feedback review is communicated to the concerned teacher through personal meetings.

*Outcome:* Assessment commits to improve performance of the teacher thereby teaching-learning with quality assurance.

#### Local guardian involvement

Local guardian plays an important role of retaining students, keeping educational interest of students, keeping track on the progress report of the students and making feedback to their parents.

*Outcome:* Improves performance of students and facilitate quality teaching-learning process.

6.5.7. How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders? Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The communication regarding the quality assurance policies, mechanisms and outcomes is carried out through the members of the teaching, non-teaching staff and students.

- The QA policies, mechanisms and outcomes are communicated to all the stakeholders through various forums like meetings with them, programs, award functions, e-mails, SMS, social networking sites and through the news publications.
- The website of the institute has enhanced the communication worldwide by presenting the outcomes of the quality assurance policies.

#### Any other relevant information regarding Governance Leadership and Management which the college would like to include.

Nil

# CriterionVII Innovations And Best Practices



#### **CRITERIA VII: INNOVATION AND BEST PRACTISES**

#### 7.1 Environment Consciousness:

The institute is very conscious about its role to make students aware about their responsibility to serve the environment. Institute practices various activities like energy conservation, use of renewable sources of energy, water harvesting, swachh bharat abhiyan and tree plantation which results in the green and clean campus.

#### 7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes, Thecollege has conducted green audit of the campus by teacher and student coordinators. Primary importance is given for development of eco - friendly atmosphere in the campus by the management. The college has adopted various measures to maintain a green campus and helps in developing an eco-concern and environment consciousness. College has appointed gardener agency who maintain the greenery by timely grooming, cutting & watering them. Also they plant new trees in college and hostel premises.

#### 7.1.2 What are the initiatives taken by the college to make the campus ecofriendly? Following steps are taken to make the campus eco -friendly

#### **1.** Energy conservation:

- The college has gradually moved on from normal light bulbs (least required wattage) to tube lights, slim lights, CFLs, LEDs and the college also replaced most of the CRT monitor to LCD monitors & LCD monitors to LED monitors thus conserving energy is done.
- Solar water heating system is installed in Girls and Boys hostels. This has reduced the Electrical Energy Consumption.
- The UPS Batteries are maintained in good condition which reduces frequent charging of batteries and hence controls power utilization.
- Periodical equipment checking and monitoring is carried out to avoid excess power consumption.
- Design of College building is well architected so that the natural light is used in college premises.
- Lights and fans are turned off when rooms are unoccupied.



Fig.7.1 Computer lab with LED monitors facility

#### 2. Use of Renewable Energy:

In Boys and Girls Hostel, we have installed solar water heating system for the 24 hour hot water supply which uses natural energy resource, consequently which results into electric power saving. This practice helps in the reduction of  $CO_2$  emission coming from the conventional methods. Institute is planning to install solar panels on roof of main building.



Fig.7.2 Solar Water heating system

#### 3. Water Harvesting:

- Rain water harvesting has been in place from the establishment of the institute and from the experimental stage now the campus has increased systematically the harvesting capacity.
- Rain water harvesting system is built in main block of campus to ensure continuous recharging of ground level water. All water outlets in building are connected to the main channel and that channel is connected to the rechargeable tank. The water samples are collected and analyzed.



Fig.7.3 Water Recharge Tank

4. Check dam construction: Not applicable.

#### 5. Efforts for Carbon neutrality:

- The college has planted adequate number of trees.
- The college campus is maintained green enough to ensure thecarbon neutrality in this area.
- College observes no vehicle day on every Thursday.

#### 6. Plantation:

• A good number of plants are planted in the college campus and nearby area by arranging tree plantation programs.

- Bamboo trees, Almond trees, various flowers & tree plantation have been done in the campus.
- Green lawns are maintained well with water sprinklers.





Fig. 7.4 Greenery at college and Hostelpremises

#### 7. Hazardous waste management:

- Gas connection pipe line is designed by architect.
- Inverter batteries are replaced with the new batteries & old batteries are handover to the seller.
- Generator and oil section is covered with protective shield.
- Waste oil is dumped at the dumping yard.
- Chemistry laboratory waste generation is controlled by proper selection of practicals prescribed by University curriculum.
- Cement waste material in Civil engineering lab is used for footing in new construction.
- Iron waste from the mechanical workshop is send to the scrap centre.





Fig. 7.5 Gas connection pipe line in lab and Transformer protective shield

#### 8. E-waste management:

- E-waste is collected and stored carefully before it is handed over to the Shirpur Education Society.
- Old computer machines are donated to the Ashram schools of Shirpur Education Society. Since 2015 institution has a tie-up with HP in which old machines are sent back to the HP Company and new machines are received.
- Other old electrical, electronic devices are exchanged/sold to dealers/vendors. E-project waste is collected & reused for new projects.

#### 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.

Some of the innovations introduced by the institute that have created a positive impact on the functioning of the college are given in following paragraphs:

#### • Project Based Learning (PBL)

From second year onwards, every student has to undertake a semester level project other than university curriculum. At the end of every semester project exhibition is arranged where student visit and discuss their projects. Dr. Pradeep Waychal is academic adviser for implementation of PBL program.

#### Implementation of PBL-

- 1) Project Based Learning is student centered approach for learning.
- 2) Project based learning should be task oriented.
- 3) Project problem statement can be submitted by the students or can be proposed by faculty members.
- 4) The problem is open ended and the focus is on the application and assimilation of previously acquired knowledge.
- 5) The students need to produce a solution of problem given to them in the form of project.
- 6) The students required to produce an outcome in the form of a report.
- 7) Faculty / guide are considered as an input directing the learning process.
- 8) PBL committee will involve class teacher and subject teachers. Class teacher will act as the coordinator and subject teachers will be the member of the committee.
- 9) PBL coordinator forms student group (group size = 3, random selection), and call open ended problems.
- 10) PBL coordinator assigns groups to PBL members (Subject Teachers of that class).
- 11) If problem submitted by the students are not up to the mark, PBL coordinator and member will draft the problems.
- 12) PBL coordinator and team members will act as facilitator to the student groups.
- 13) It is expected that students themselves discuss and propose solution on the problem undertaken. Facilitator verifies the solution proposed by students, discuss all aspects of implementation and finalize system design from the group.
- 14) Class coordinator shall arrange the progress seminar (At least two) to monitor the progress of work. Seminar shall be delivered by the student in class or in laboratories in front of students.
- 15) At the end of term, spiral bound report shall be submitted to the department in prescribed format.

Institute provides the facilities to the students to design, develop, analyze and manufacturing of their project at our institute level and also provides the material or spare required for the project. The books, journals, e-

journals, e-resources, technical supports, lab facilities etc. are directly or indirectly help to the students to complete their projects. Students and faculty members undertake inter-disciplinary research work targeted at national level competitions like Converges, etc.

From previous academic year special emphasis is given to theproject based learning (PBL) module and internship programs in whichstudents are required to develop project, based on the knowledge andskills that he/she has gained during semester. Thus, many innovative projects have been accepted by the well-known industries like KPIT Cummins, TCS etc. As an outcome of PBL our students have recently secured Gold Ranking and a cash prize of 5,00,000/- by KPIT Sparkle competition. Innovative ideas generated through PBL have been converted into many successful start-ups.

In each department, Project Based Learning is implemented by assigning Projects to students for gain more practical knowledge.



Fig.7.6 KPIT Sparkle competition- Gold winner

#### • Promotion of ICT based education in campus

In RCPIT, Information and Communication Technology acts as a supplement to the teacher for undergraduate students. RCPIT's ICT based education ensures students and faculty to keep updated with latest technology and research trends through various tied-ups / associations like; National Program on Technological Enhance Learning (NPTEL- MHRD, New Delhi), Ouality Enhancement in Engineering Education (OEEE- IIT Madras), Center for Distance Engineering Education Program (CDEEP- IIT Bombay and IIT Kharagpur). On an average, 20-25 co-curricular courses are conducted per year using these platforms to update faculty and students' knowledge on latest trends in industrial technology. For the students who are interested in PG studies, RCPIT has e-learning platform of various entrance examinations like; GRE, TOEFL and GATE. Students and faculty are encouraged for certification courses through Massive Open Access Courses (MOOCS). About 100 plus certifications per year have been completed by students and faculty. In this regard 10 of our faculty were awarded as best performers in ICT based 2 months workshop by IIT Bombay and are invited to be resource persons for upcoming workshops. Beside this, RCPIT has developed its own virtual learning platform in collaboration with Amrita University for conducting multiple sessions. Institute's effort in ICT based education has been rewarded

by many forums. For e.g. IIT Madras, has granted RCPIT a 'Partner' category for its QEEE program (one among three institutes in Maharashtra) consecutively for three semesters. RCPIT is one among the pioneer institutes who has tie-up with IIT Bombay from its' CDEEP program right from its inception. RCPIT has also tie-up with IIT Kharagpur in terms of virtual classrooms and laboratories.

#### • Corporate to Campus program

On every Saturday, institute arranged alumni interaction and Industrial expert sessions to collect firsthand information about the demands and expectations of the corporate sectors regarding the required skill set of students.Special Skype sessions are conducted for the interaction with the alumni based in USA, UK, Canada etc, under RCPIT's 'Corporate-to-Campus'.

The guest lectures by eminent and distinguished personalities are arranged by the training and placement department and every department takes efforts to enhance soft skills such as spoken English, resume writing, personality development etc. Japanese language course is also conduct for student skill development. It is reflected in more number of students getting placed during campus/ off campus selection.



**Fig.7.7 Expert lectures and Alumni Interactions** 

#### • Topper monitoring

The performance of top ten students in previous university examination is monitored by subject expert with class teacher, class coordinator. After two sessional examinations Principal and HOD conduct meeting along with the monitoring coordinator. Meeting of the top students and faculty members is conducted after every sessional examination. The performance in ISE is observed carefully and measured that the graph in ISE is ascending. Students are guided and motivated if there are some up and downs in the ISE performance. This topper monitoring turns fruitful in the university results with more rankers and gold medalists.

#### • Remedial lectures for ISE failures

After the conduction of first ISE, the failures in difficult subjects are identified and remedial lectures are conducted for them. These remedial lectures are scheduled apart from the regular time table. Teachers of respective subject conduct extra classes for this activity. These students are guided in all

possible manners like motivation, clearingdoubts, solving previous year question papers, writing techniques to cover answer sheet within the time, also skills to draw apt diagrams which is very helpful to clear their backlog subjects. Due to this activity our all clear ratio in result is improved.

#### • Coaching for backlog students

Coaching for backlog studentsis arranged apart from the regular academic time table for the students who are failed in different subjects. Teachers of respective subject conduct extra classes for this activity. These students are guided in all possible manners like motivation, teaching the basic concepts, clearing doubts, solving previous year question papers, which is very helpful to clear their backlog subjects. Due to this activity our all clear ratio in result is improved.

#### • Scholarships, Fee Concessions for students

The newly admitted candidates in college, who secure ranks in CET examination and for diploma student, who scored above 75 % in examination, are awarded with R. C. Patel Memorial Scholarship every year. These students continue to receive the scholarship throughout the course, if they maintain good performances. Institute also supports financially by offering concession in admission fee for economically backward students.

#### Career counselling & Admission Process awareness

Every year the college arranges Career counselling programs at more than 100 junior colleges & coaching classes in North Maharashtra region. Counselling is not merely focused on R.C.P.I.T. rather it focuses on overall Admission Process awareness. Counselling is done impartially to choose the career options. Through these programs unnecessary fear regarding or inferiority complex regarding engineering education is eradicated. Also by explaining each & everything regarding option form filling, CAP rounds & how students can get the college of his / her choice. Whenever there is change in the process college is very conscious regarding it so to make it understandable to the students. College arranges different programs for the same in coordination with the DTE & Sakal Media group for e.g. Admission Gateway. Students are informed with all the updates like important dates, eligibility, documents, by the DTE through bulk SMS, College Facebook page & college website. College has its centers at various places in Dhule, Shirpur, Nandurbar, Shahada, Amalner, Parola, Chopda & Jalgaon to help the students free of charge, as to involve more number of students in the technical education.

#### 7.3 Best Practices

7.3.1 Elaborate on any two best practices as per the annexed format which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

Two best practices followed by the institution are given below.

#### **Practice I**

1. Title of Practice I: ICT based initiatives in teaching learning

#### 2. The Goal:

The specific goals are:

- To inculcate in the faculty the technological competence to strengthen teaching learning.
- To promote ICT culture in the college.
- To supplement the traditional chalk and talk method by novel teaching approach.
- To make teaching and learning interdisciplinary by tapping resources available on internet.
- To make optimum use of the ICT facility in classroom practices

#### 3. The Context:

- ICT makes teaching easier, student friendly, contently and interesting. It makes the classroom more and more responsive because it gives both audio and visual effect.
- Student understanding is enhanced because they comprehend whatever is taught.
- ICT based programs like MOOCS, NPTEL, etc. help to improve the teaching skills as well as it helps students for competitive exam preparation.

#### 4. The Practice:

Institution has developed all classrooms are smart class rooms, well equipped with necessary infrastructure (LCD projectors, Audio/video aids with internet etc.). It is made mandatory for each teacher to deliver lectures as possible by preparing PPTs in an academic year. High speed internet facility is provided to all the departments in the college. Computers and Printers are also provided to many of them. IQAC convened meetings with the teachers and encouraged them to make optimum use of ICT facilities for making teaching learning more and more interesting.

The RCPIT's ICT based education ensures students and faculty to keep updated with latest technology and research trends through various tied-ups / associations like; National Program on Technological Enhance Learning (NPTEL- MHRD, New Delhi), Quality Enhancement in Engineering Education (QEEE- IIT Madras), Center for Distance Engineering Education Program (CDEEP- IIT Bombay and IIT Kharagpur).

On an average, 20-25 co-curricular courses are conducted per year using these platforms to update faculty and students' knowledge on latest

trends in industrial technology. NPTEL video lectures are available at the college libraries which are used by both faculty and the students. For the students who are interested in PG studies, RCPIT has e-learning platform of various entrance examinations like; GRE, TOEFL and GATE. Students and faculty are encouraged for certification courses through Massive Open Access Courses (MOOCS). About 100 plus certifications per year have been completed by students and faculty.

RCPIT is one among the pioneer institutes who has tie-up with IIT Bombay from its' CDEEP program right from its inception. RCPIT has also tie-up with IIT Kharagpur in terms of virtual classrooms and laboratories. It provides a suitable environment to improve and assist the learning and/or experimentation process contributing to an increase in the effectiveness of scientific research and widening the use of scarce or costly equipment.

To bring effective class room management and to be aware of different teaching methodologies, the college encourages the faculty to attend Wipro sponsored MISSION10X programs and pedagogy programs

#### 5. Evidence of success:

In this regard 10 of our faculty were awarded as best performers in ICT based 2 months workshop by IIT, Bombay and are invited to be resource persons for upcoming workshops. Beside this, RCPIT has developed its own virtual learning platform in collaboration with Amrita University for conducting multiple sessions. Institute's effort in ICT based education has been rewarded by many forums. For e.g. IIT Madras, has granted RCPIT a 'Partner' category for its QEEE program (one among three institutes in Maharashtra) consecutively for three semesters.

Communicative competence of the students improved drastically because on viewing the PPTs and video clips, they naturally feel to react on the issues.

#### 6. Problems encountered & Resources required

ICT infrastructure is expensive and therefore requires massive investment.

7. Notes (Optional) Any other information that may be relevant and important to the reader for adopting/ implementing the Best Practice in their institution (about 150 words). : - NIL

#### **Practice II**

- 1. Title of Practice II: Promoting engineering education in tribal region.
- **2.** The Goal: To bring the tribal students into the main stream of engineering education.
- **3.** The Context: R. C. Patel Institute of Technology, Shirpur is situated in tribal region which has 48% tribal population as against the national average of 8%. That results in poor literacy of 64%. The students from tribal area are expected to be strong in academics and have good industrial exposure. Institute encourages them to adopt latest developments in engineering education.

- **4.** The Practice: To attract these students towards technical education and to create awareness among the tribal student, R. C. Patel Institute of Technology, Shirpur has been arranging engineering counseling programs since 2006. In this counseling programs information related admission process, various scholarship schemes are made available for this category by central and state government. Institute motivates them to develop the skill, knowledge and attitude that are needed to make an effective start as member of the industrial profession. Institute also supports financially by offering concession in admission fee for economically backward students.
- **5. Evidence of success:** As a result of that, in previous four year enrollment of tribal students and their passing percentage are steadily increasing.

Airbus, the Global Leader in Aeronautics, Space and the Global Engineering Dean Council (GEDC), the international organization for leaders of schools and colleges of engineering has shortlisted The team of R. C. Patel Institute of Technology, Shirpur along with 10 teams from engineering stream around the world for fifth GEDC Airbus Award for Diversity in Engineering Education. This is the recognition of institute on the global platform for increasing enrollment of girl students and tribal students and also for making them successful and employable through Engineering Education.

6. Problems encountered & Resources required: Due to illiteracy and reluctant nature towards the technical education, it is quite difficult to convince these tribal students and parent to opt engineering education.

To overcome this problem institute effectively organizes one to one interaction program in which senior faculties guide tribal students as well as their parents in relevance to their career opportunity.

7. Notes (Optional) Any other information that may be relevant and important to the reader for adopting/ implementing the Best Practice in their institution (about 150 words). : - NIL

## Evaluative Report Department-wise



#### **Evaluative Report of Civil Engineering Department**

- 1. Name of the department: Civil Engineering
- 2. Year of Establishment:

Year	Intake	Remarks
2010	60	Under graduate course in Civil Engineering with intake 60

3. Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D, Integrated Masters; Integrated Ph.D, etc) – UG

Program of Study	Description
UG in Civil Engineering	60

4. Names of Interdisciplinary courses and the departments/units involved

Courses offered	Name of Department
Engineering Mathematics	
Engineering Physics	
Engineering Chemistry	First Year
Environmental Studies	
Soft Skills	
Engineering Drawing & Elements of Mechanical Engineering	Mechanical Engineering
Energy Resources and Technology	
Computer Programming	Computer Engineering
Enterprise Resource Planning and SAP	
Elements of Electrical & Electronics Engineering	E&TC Engineering

5. Annual/semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments:

Courses offered	Name of Department
Elements of Civil Engineering & Engineering Mechanics	First Year
Finite Element Methods	All branches
Geographical Information systems	All branches

7. Courses in collaboration with the other universities, industries, foreign institutions, etc

Sr.	Name of Course	University/Industries	Number of Courses
No.	Name of Course		Completed
1.	QEEE	IIT, Madras	08
2.	MOOCs	Independent Learning	07
3.	Add on Courses	CADD Center, Pune	02
4.	Soft Skill (Yearly)	IU, SCOUT, CPLC, SEED	01

- 8. Details of courses/programmes discontinued (if any) with reasons: Nil
- 9. Number of teaching posts:

	Sanctioned	Filled
Professors	1	0
Associate Professors	3	0
Asst. Professors	9	15

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 Experience	No. of Ph.D. Students Guided for the last4years
1.	GV Tapkire	M. Tech.	Assistant Professor	Building Construction and Technology	6Y 8M	Nil
2.	D S Lal	Ph. D.	Assistant	Building Science and	15 Y 7 M	Nil
		(Appear), M.E.	Professor	Technology		
3.	H R	M.E.	Assistant	Building Science and	13 Y 7M	Nil
	Kumawat		Professor	Technology		
4.	Y N	M. Tech.	Assistant	Structural Engineering	9Y 8M	Nil
	Sonawane		Professor			
5.	P S Patil	M. E.	Assistant	Environmental	6Y 8M	Nil
			Professor	Engineering		
6.	R. N. Jain	M. E.	Assistant	Environmental	12Y 8M	Nil
			Professor	Engineering		
7.	C.J. Chitte	M. Tech.	Assistant Professor	Structural Dynamics and Earthquake Engineering	10Y 8M	Nil
8.	M.N. Patil	M. Tech.	Assistant	Structural Engineering	7Y 9M	Nil
			Professor			
9.	R.D. Patil	M.E.	Assistant	Building Science and	7Y 8M	Nil
			Professor	Technology		
10.	A.S. Pawar	M.E.	Assistant	Infra Structure	5Y 8M	Nil
			Professor	Engineering and		
11.	L. S.	Ph. D.	Assistant	Environmental	8Y 8M	Nil
	Mahajan	(Appear), M.E	Professor	Engineering		
12.	V. J. Patel	M. E.	Assistant	Transportation	5Y 6M	Nil
			Professor	Engineering		
13.	J.M.Joshi	M. Tech.	Assistant	Structural Engineering	2Y 4M	Nil
			Professor			
14.	R.S.	M.E.	Assistant	Civil Engineering	11Y 3M	Nil
	Parolkar		Professor			
15.	P. B.	U.G.	Assistant	Civil Engineering	13Y 1M	Nil
	Dugad		Professor			

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student-Teacher Ratio (programme wise): 1:15

Academic	Number of	Number of	Student-Teacher
Year	Students	Teachers	Ratio (STR)
2016-17	180	12	15

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sanctioned: 00

Filled: 04

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

	Sr. No.	Ph.D	PG	UG	
	1.	0	14	01	
	Total=	0	14	01	
** - 02 faculty Ph.D. registered					

02 facally f h.D. fegistered

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sr No	Name of Funding Agency	Year	Amount Received (Rs.)
1	Vice Chancellor Research Motivation Scheme	2016-17	3,11,000/-
2.	Vice Chancellor Research Motivation Scheme	2015-16	70,000/-

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:

Number of papers published in peer reviewed journals (national /International) -

Number of Publications in					
Year	National	International	National	International	Total
	Journal	Journal	Conference	Conference	
Till date	2	45	44	15	106
2016-17	0	13	13	3	29
2015-16	0	15	1	8	24
2014-15	0	12	9	0	21
2013-14	0	5	19	2	26

Sr. No.	Name of Teacher	h - index from Google Scholar	Total No. of Citations	No. of books published with ISBN/ISSN
1	D S Lal	1	5	1
2	H R Kumavat	4	32	2
3	Y N Sonawane	2	14	1
4	G V Tapkire	2	10	1
5	P S Patil	2	14	1
6	R N Jain	1	7	1
7	C J Chitte	0	0	1
8	R D Patil	0	0	1
9	M N Patil	1	9	1
10	LS Mahajan	1	1	1
11	A S Pawar	1	4	1
12	V J Patel	1	7	3
13	J M Joshi	0	0	0

20. Areas of consultancy and income generated:

Sr. No.	Area of Consultancy	Year	Income (Rs.)
1	Testing Work / Third Party Audit	2016-17	Rs. 65850/-
2.	Testing Work / Third Party Audit	2015-16	Rs. 42350/-
3.	Testing Work / Third Party Audit	2014-15	Rs. 21125/-
4.	Testing Work	2013-14	Rs. 10300/-
5.	Practical Work for other colleges	2013-14	Rs. 33200/-

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

Committee	National	International	Editorial Boards
Reviewer	01	03	
Convener	03		
Organizing Chairman	02		
Coordinator	03		

22. Student projects:

a) Percentage of students who have done in-house projects including interdepartmental/ 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 Awards/Recognitions received by faculty: 06 Awards/Recognitions received by students: 00
- 24. List of eminent academicians and scientists/visitors to the department

Academic	Eminent	Scientists	Industry
Year	academicians		Personal
2016-17	01	00	05
2015-16	00	00	06
2014-15	02	00	03
2013-14	02	00	01

Following table shows list of academicians and industry personal visited to department.

Eminent academicians	Industry Personal
Prof. Shitalkumar Rawandale	Mr. Shailesh Gadakh,
Prof. N B Khivsara	Mr. Harshad Bhamare,
Prof. R A Ogale	Mr. Vinay Barpande,
Prof. Dr.Sunil Y. Kute	Mr. Abhijeet Shrivastav,
	Mr. Pravin Bhamare
	Mr. Satish Mandora
	Mr. Madhavrao T. Patil
	Mr. Sunil Padol,
	Mrs. SmitaBhamare,
	Mr. Akshay Shah,
	Mr. J.P.Bhadane
	Mr. Udit Barukha
	Mr. Ashok
	Mr. M.T.Patil
	Mr. J.P.Bhadane

25. Seminars/Conferences/Workshops organized & the source of funding a) National, b) International

Tuno	No. of Sominor	No. of	No. of	Source of
Туре	No. of Seminar	Conferences	Workshops	funding
National			2	IIT Bombay /
Inational			5	IIT Kharagpur
National		8		Self Financed
International				
Institutional				Self Financed

Name of the	Vame of the		Enı	olled	
Course/programme (refer question no. 4)	Applications received	Selected	*M	*F	Pass percentage
2016-17			45	12	FE
2015-16	Admission per rules an	48	13	SE	
2014-15	of Director Educ	40	20	TE	
2013-14			42	20	BE

#### 26. Student profile programme / course wise:

#### \*M=Male \*F=Female

#### 27. Diversity of Students

Academic year	% of students from the same state	% of students from other States	% of students from abroad
2016-17	99	1	Nil
2015-16	97	3	Nil
2014-15	97	3	Nil
2013-14	93	7	Nil

Following table shows category wise diversity of students in the department.

Academic Year	OBC	SC	ST	VJ-NT	SBC
2016-17	144	10	17	31	8
2015-16	129	7	22	30	5
2014-15	141	15	16	29	9
2013-14	108	12	13	20	4

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? In Higher Education:

Academic Year	GATE	GRE/TOEFL
2016-17	00	00
2015-16	00	00
2014-15	02	00
2013-14	00	01

#### 29. Student progression

Student progression	Against % enrolled			
Academic Year	2016-17	2015-16	2014-15	2013-14
UG to PG	3.13	0.00	11.11	100
PG to M.Phil.				
PG to Ph.D.				
Ph.D. to Post-Doctoral				
Employed				
* Campus selection	60.98	60.00	62.50	6.25
* Other than campus recruitment	24.39	34.29	20.00	50.00
Entrepreneurship/Self- employment	5.48	5.56	0.00	15.00

30. Details of Infrastructural facilities a) Library

LibraryNo. of TitleNo. of<br/>VolumeProject Reports<br/>(Maintain for Last<br/>Year's)Central Library2242119Last three years<br/>project reports of<br/>all departmentsDepartmentalNuNu29

NIL

b) Internet facilities for Staff & Students Institute has internet facility of 155 Mbps

Library

c) Class rooms with ICT facility = Total 3 classrooms are available with ICT facility

NIL

28

Sr. No.	Name of the Laboratory	Area (Sqm)
1	Concrete Technology lab	80
2	Fluid Mechanics Lab	83
3	Testing of materials Lab + Surveying Store	105
4	Soil Mechanics Lab	80
5	Environmental Engineering -II Lab	80
6	Environmental Engineering -I + Chemistry Lab	120
7	Geology Lab + Basic Civil Lab	80
8	Model + BDD	80
9	Computer Lab	80
10	Additional Workshop-Civil	200
11	Engineering Mechanics Lab	80

#### d) Laboratories

31. Number of students receiving financial assistance from college, university, government or other agencies-

Academic		College				
Year	OBC	SC	ST	VJ-NT	SBC	Scholarship
2016-17	144	10	17	31	8	9
2015-16	129	7	22	30	5	9
2014-15	141	15	16	29	9	9
2013-14	108	12	13	20	4	9

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Year	Expert	Workshop	Add-on	Soft Skill	Alumni
	Talk/Lectures	_	courses	Courses	Interaction
2016-17	6	06	02	01	00
2015-16	6	02	02	01	01
2014-15	3	00	00	01	00
2013-14	1	00	00	01	00

33. Teaching methods adopted to improve student learning

List the teaching methods adopted by the faculty for different programmes.

- 1. Project based learning activity: By giving small minor projects to students to enhance their practical knowledge.
- 2. Toppers monitoring activity: Discussion is made with topper students to solve their queries to optimize their university result and rank.
- 3. Remedial Coaching: It is conducted for improvement of slow learner students who are not performing in internal sessional examinations.

- 4. Class room teaching: Lectures & Tutorials: The basic teaching method adopted by the teachers is class room teaching in which the teacher delivers lectures. The delivery is supported by electronic audio-video aids.
- 5. Laboratory work: It is also an integral part of the curriculum.
- 6. Assignment: The curriculum also includes assignments for self-study encouragement of students.
- 7. Site visits: They are arranged for real world exposure.
- 8. Expert lectures: develops ability of student for expectations of the industrialists from the fresh engineers
- 9. Seminars: New Ideas are discussed through presentation by student to enhance communication skill within students.
- 10. Students are also acquainted with open courseware; encourage for participation in various MOOCs courses, QEEE courses

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The institute recognizes its social responsibility. The holistic development of the students is ensured by involving them in extension activities also. The department has undertaken some extension activates as follows:

- a. Food distribution to poor people.
- b. Donation of clothes to poor peoples.
- c. Students are involved in various blood donation schemes and continuously encouraged to participate for the same.
- 35. SWOC analysis of the department and Future plans

Strengths:

- 1. Employability development program to increase placements
- 2. Qualified and experienced faculty members and modern Hi-tech class rooms, seminar halls, auditorium, laboratories with latest equipments and computation facilities, etc.
- 3. Excellent university results of students in university examination
- 4. Content beyond syllabus: QEEE, MOOCs, soft skill programs, Add on courses, project /ICT based learning to groom the student to enhance employability.

Weakness:

- 1. Lack of consultancy activity
- 2. Inability to attract larger research projects for the want of trained / committed students.
- 3. Industry Interaction needs to be strengthened further

**Opportunities:** 

- 1. Improved campus placement
- 2. Increased revenue generation through consultancy
- 3. Networking with National R & D labs., IITs

Challenges:

- 1. Challenge to tackle of rural student.
- 2. Adoption of Innovative Teaching Technique
- 3. To improve placements
- 4. To get higher merit students

Future Plans:

- 1. The department is focusing on qualification improvement of faculty members' e.g admission to Doctoral course.
- 2. Arranging more staff development programmes for faculties.
- 3. To establish department as a center of excellence in civil engineering education.
- 4. To be in the best departments in terms of quality education and placement among the region.

#### **Evaluative Report of the Computer Engineering Department**

- 1. Name of the department: Computer Engineering
- 2. Year of Establishment: 2001

Year	Intake	Remarks
2001	60	Under graduate course in Computer Engineering
		with intake 60
2008	120	Increase in intake by 60
2010	18 (PG)	Starting of PG course with intake 18.
2011	08	Starting of Ph.D course in Computer Engineering
		(Research Centre)
2012	24 (PG)	Increase in intake of PG course to 24

3. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) – UG, PhD

Program of Study	Description
UG in Computer Engineering	120
PG in Computer Engineering	24*
Ph.D. in Computer Engineering	8

\* -- Applied for Closure form academic year 2017-18

4. Names of Interdisciplinary courses and the departments/units involved

Courses offered	Name of Department
Engineering Mathematics I & II	•
Engineering Physics	
Engineering Chemistry	First Year
Engineering Mathematics III	
Soft Skills	
Elements of Civil Engineering & Engineering Mechanics	
Environmental Studies	Civil Engineering
Engineering Drawing & Elements of Mechanical	Mechanical
Engineering	Engineering
Elements of Electrical & Electronics Engineering	Electronics and
Analog and Digital Electronics	Telecommunication
Image Processing	Engineering

- 5. Annual/semester/choice based credit system (Programme wise): Semester
- 6. Participation of the department in the courses offered by other departments:

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Courses offered	Name of Department
Computer Programming	E&TC
Enterprise Resource Planning and SAP	
Computer Programming/ Matlab	Electrical Engineering

7. Courses in collaboration with the universities, industries, foreign institutions, etc.: MOOCs, QEEE

Participation of National & Foreign University courses.

Sr. No.	University offering Courses	No. of Courses offered by University
1	IIT Bombay, Mumbai	2
2	MOOCs (Independent Learning)	5
3	QEEE, IIT Madras, Chennai	9

- 8. Details of courses/programmes discontinued (if any) with reasons: PG course (ME Computer Engineering) due to decreasing admissions.
- 9. Number of teaching posts -

Post	Sanctioned	Filled
Professors	02	01
Associate Professors	05	03
Assistant Professors	18	28

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil. etc.,)

Sr. No.	Name	Qualificat ion	Designation	Specialization	No. of Years Experi ence	No of Ph.D Students guided for last 4 Years
1	Prof. Dr. Patil Jayavantrao Bhaurao	Ph.D	Professor	Web Catching and Web Mining	30 Yrs	NIL
2	Mr. Patil Nitin Namdeo	M.Tech	Head & Associate Professor	Information Hiding and Security	13.8 Yrs	NIL
3	Mrs. Patil Ujwala Manoj	M.Tech	Associate Professor	Data Mining and Web Mining	15 Yrs	NIL

Sr. No.	Name	Qualificat ion	Designation	Specialization	No. of Years Experi ence	No of Ph.D Students guided for last 4 Years
4	Mr. Wagh Rajnikant Bhagwan	M.Tech	Associate Professor	Data Mining and Web Mining	12 Yrs	NIL
5	Mr. Sonawane Sandip Ravindra	M.Tech	Assistant Professor	Network Security	11 Yrs	NIL
6	Ms. Saraf Puja Dipak	M.Tech	Assistant Professor	Image Processing	8.6 Yrs	NIL
7	Mr. Pardeshi Sachin Narendra	M.E.	Assistant Professor	Web Mining	8.4 Yrs	NIL
8	Ms. Sanjekar Priti Shivaji	M.E.	Assistant Professor	Image Processing	8 Yrs	NIL
9	Mr. Mali Makarand Lotan	M.E.	Assistant Professor	Information Security	7.9 Yrs	NIL
10	Mr. Suryavanshi Hitendra Eknath	M.Tech	Assistant Professor	Image Processing	7.9 Yrs	NIL
11	Mr. Pawar Chandrashek har Suresh	M.E.	Assistant Professor	Cloud Computing	7.2 Yrs	NIL
12	Mr. Patil Pankaj Rambhau	M.E.	Assistant Professor	Network Simulation	7.2 Yrs	NIL
13	Mr. Mahajan Mahesh Madhukar	M.Tech	Assistant Professor	Image Processing	7.2 Yrs	NIL
14	Mr. Jaiswal Raj Jayantilal	M.E.	Assistant Professor	Image Processing and Data Mining	6.7 Yrs	NIL
15	Mr. Mahale Prasad Prabhakar	M.Tech	Assistant Professor	Image Processing	6.7 Yrs	NIL
16	Mr. Saiyyad Mohmmadali Muzffarali	M.E.	Assistant Professor	Image Processing	5.8 Yrs	NIL
17	Mr. Agham Vinit Kishor	M.E.	Assistant Professor	Image Processing	6.2 Yrs	NIL

Sr. No.	Name	Qualificat ion	Designation	Specialization	No. of Years	No of Ph.D
					Experi ence	Students guided for last 4 Years
18	Mr. Pinjari Shakil Abdul	M.E.	Assistant Professor	Data Hiding and Security	5.7 Yrs	NIL
19	Ms. Soni Ranu Ashok	M.Tech	Assistant Professor	Computer Networking	5.1 Yrs	NIL
20	Ms.Sisode Megha Ravindra	M.E.	Assistant Professor	Web Personalization	6 Yrs	NIL
21	Mr.Dhole Vinayak Suresh	M.E.	Assistant Professor	Image watermarking	6 Yrs	NIL
22	Ms.Mali Sapana Prakash	M.E.	Assistant Professor	Image Processing	4.6 Yrs	NIL
23	Mr.Kasar Pankaj Eknath	M.Tech	Assistant Professor	Soft Computing, Software Engineering	3.11 Yrs	NIL
24	Mr.Paliwal Gaurav Vijay	M.Tech	Assistant Professor	Software Architecture and Modelling	3.11 Yrs	NIL
25	Ms. Bhandari Rishita Rajgopal	M.B.A.	Assistant Professor	Marketing Management	7.8 Yrs	NIL
26	Ms. Hire Gayatri Ashok	M.E.	Assistant Professor	Computer Networking and Dataware Mining	1.4 Yrs	NIL
27	Mr. Ahirrao Kaustubh Bhikan	M.E.	Assistant Professor	Image Processing and Multimedia	1.4 Yrs	NIL
28	Prof. Dr. Choubey Nitin Surajkishor	M.Tech	Assistant Professor	Theory of Computations	18.4 Yrs	NIL
29	Mr. Bhandari Atul Rajgopal	M.B.A.	Assistant Professor	Marketing Management	11.2 Yrs	NIL
30	Ms. Khagaria Sunanda Jatindranath	B.E.	Assistant Professor	Software Engineering	10.4 Yrs	NIL
31	Mr. Shirsath Prashant Girdhar	B.E.	Assistant Professor	Java Programmer	10.9 Yrs	NIL
32	Mr. Shazeb Abdulwajid Saudagar	B.E.	Assistant Professor	Web Development	10.4 Yrs	NIL

- 11. List of senior visiting faculty Nil
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty Nil
- 13. Student-Teacher Ratio (Programme-wise) (SE to BE) -

Program	STR
UG	15
PG	12

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned	Filled
00	08

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Ph.D.	PG	UG	Total
01	28	03	32

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Sr. No.	Name of Funding Agency	Sanctioned Year	Total Amount
1	RGSTC (Rajiv Gandhi Science & Technology Commission)	2014-15	Rs. 3.79 Lakhs
2	Vice Chancellor Research Motivation Scheme(VCRMS)	2014-15	Rs.2.57 Lakhs
3	Vice Chancellor Research Motivation Scheme(VCRMS)	2015-16	Rs.1.04 Lakhs
4	Vice Chancellor Research Motivation Scheme(VCRMS)	2016-17	Rs. 80,000

- 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

Research Center recognized by NMU Jalgaon which consists of computational facilities required for research scholars.

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#### 19. Publications:

Number of papers published in peer reviewed journals (national /International) -

	Number of Publication in				
Duration	National Journal	International Journal	National Conference	International Conference	Total
2013-2014	0	12	33	38	83
2014-2015	0	25	11	29	65
2015-2016	0	29	1	23	53
2016-2017	0	20	0	14	34

Sr. No.	Name of the Staff	h-index	Total No. of Citations till date	No. of books published with ISBN no.
1	Prof. Dr. Jayavantrao B. Patil	6	111	1, 978-3-639- 71656-6
2	Prof. Nitin N. Patil	6	100	1,978-3-659- 36018-3
3	Prof. Ujwala M. Patil	4	76	0
4	Prof. Rajnikant B. Wagh	6	142	0
5	Prof. Sandip R. Sonawane	1	22	1, 978-3-659- 92289-3
6	Prof. Ms. Puja D. Saraf	2	9	1, 978-3-659- 91332-7
7	Prof. Sachin N. Pardeshi	2	39	0
8	Prof. Ms. Priti S. Sanjekar	2	15	2, 978- 3659646560, 978- 3659902642
9	Prof. Makarand L. Mali	1	5	0
10	Prof. Hitendra E. Suravavanshi	1	15	1, 978-3-659- 36018-3
11	Prof. Chandrashekhar S. Pawar	1	3	1, 978-3-330- 05878-1
12	Prof. Pankaj R. Patil	3	113	0
13	Prof. Mahesh M. Mahajan	1	6	1, 978-3-659- 95548-8
14	Prof. Raj J. Jaiswal	1	3	0
15	Prof. Mohammad Ali M. Saiyyad	2	16	1, 978-3-330- 02378-9

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Sr. No.	Name of the Staff	h-index	Total No. of Citations till date	No. of books published with ISBN no.
16	Prof.Vinit K. Agham	1	2	0
17	Prof. Shakil A. Pinjari	1	3	0
18	Prof. Ms. Megha R. Sisode	1	1	1, 978-3-659- 86604-3
19	Prof.Vinayak S. Dhole	2	8	1, 3659876690
20	Prof.Gaurav V. Paliwal	1	3	0
21	Prof. Ms. Sapana P. Mali	1	1	0
22	Prof.Ranu A Soni	1	5	0
23	Prof.Nitin S. Choubey	7	118	2, 978- 8176253888, 978- 3-639-51712-5

20. Areas of consultancy and income generated -

Sr. No.	Area of Consultancy	Year	Income
1	Online Examination,	2016-17	191050
	NMU CAP		125175
2	Online Examination	2015-16	223010
3	Online Examination	2014-15	122000
4	Online Examination	2013-14	203000

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

a) National committees

b) International Committees

Committee Details				
Roles	National Committee	International Committee	Editorial Board	
Reviewer	0	7	0	
Convener	4	0	0	
Co-coordinator	7	0	0	
Organization Chair	4	0	0	

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/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:

Student Awards	Staff Awards
47	4

24. List of eminent academicians and scientists/visitors to the department

Academician	Scientists	Industry Persons	
16	1	40	

25. Seminars/Conferences/Workshops organized & the source of funding a) National b) International

	No. of	No. of	No. of	
Туре	Seminar	Conference	Workshop	Source of Funding
				IIT Bombay/ IIT
National	-	-	7	Kharagpur
International	-	-	-	-
Institutional	26	8	4	Self Financed

26. Student profile programme/coursewise:

Name of the	Applications Selected		Enrolled		Pass	
(refer question no. 4)	receiveu		*M	*F	(Student Pass in)	
2016-17			62	57	FE	
2015-16	Admission pro	56	54	SE		
2014-15	the rules and	46	38	TE		
2013-14		49	52	BE		

\*M=Male \*F=Female

27. Diversity of Students

Year	Name of the Course	% of Students from the same state	% of Students from the other state	% of Students from abroad	
2016-17	FE Computer	97.47	2.53	0	
2015-16	FE Computer	93.69	6.31	0	
2014-15	FE Computer	95.23	4.77	0	
2013-14	FE Computer	97.08	2.92	0	

Year		S.C.	S.T.	O.B.C.	S.B.C	N.T.	OPEN	TFWS	Total
2016-17	UG	22	6	274	12	40	147	22	523
	PG	0	0	0	0	0	12	0	12
2015 16	UG	23	5	275	10	31	132	0	476
2015-16	PG	0	0	0	0	0	0	0	21
2014 15	UG	25	3	304	11	24	148	0	515
2014-15	PG	1	0	3	0	0	28	0	32
2012 14	UG	22	9	284	8	28	186	0	537
2013-14	PG	0	0	0	0	0	0	0	0

28. How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civil services, Defense services, etc.in Higher Education

Exam Qualification Year	GATE	<b>GRE/TOEFL</b>
2015-16	1	0
2014-15	1	1
2013-14	3	6

#### 29. Student progression

Student Progression		Against % Enrolled (2016-17) 138	Against % Enrolled (2015-16) 139	Against % Enrolled (2014-15) 136	Against % Enrolled (2013-14) 138
UG	to PG	0	0	5.89	8.69
PG to	PG to M. Phil.		0	0	0
PG to	PG to Ph.D.		0	0 0	
Ph.D.to Po	Ph.D.to Post-Doctoral		0	0	0
Campus selection		72.63	45.71	18.95	23.16
Employed	Other than campus recruitment	3.16	9.52	15.79	26.32
Entrepreneurship/Self- employment		0	0	3	1

30. Details of Infrastructural facilities

a) Library

	No. of	No. of	e-journals	e-journal	All project
	Volumes	Titles		resources	reports till date
Central	30838	4684	60	2	179
Library					
Departmental	229	229	-	-	179
Library					

#### **Evaluative Report of Computer**
b) Internet facilities for Staff & Students

All laboratories are provided internet access. All the staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

Available Bandwidth: 155 Mbps Leased Line & 20 Mbps Broadband

c) Class rooms with ICT facility - Total 4 classrooms available with all audio video aids

d)	Laboratories -	- Total	12 labo	ratories	available	with	all r	required	equi	pments.
~ /										

New Lab				Area
Name	Lab / Major Equipments	UPS	Printer	SQM
CE-L1	Dell Optiplex 390 (Qty 25)+HP1020 Printer (Qty1)+10KVA Emerson UPS	1	1	117
CE-L2	Dell Optiplex 390 (Qty 25)+HP1020 Printer (Qty1)+10KVA Emerson UPS	1	1	66
CE-L3	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	1	87
CE-L4	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	1	87
CE-L5	HP Pro One 400 (Qty 25)+EPSON LX300+ (Qty1)+6KVA Emerson UPS	1	1	120
CE-L6	HP Pro One 400 (Qty 20)+EPSON LX300+ (Qty1)+6KVA Emerson UPS	1	1	57
CE-L7	DELL Optiplex 3010 (Qty 20)+EPSON LX 310+6KVA UPS	1	1	95
CE-L8	Digital IC Tester, Power Supply, Function Generator, CRO+Dell Optiplex 390 (Qty 10)	1	1	176
CE-L9	Dell Optiplex 390 (Qty 10) + LPC2148 ARM7+ARM9	1	1	66
CE-L10	XPO-85 Microprocessor kit with smps & k/b, Microcontroller kit, AD-DA Kit, Stepper motor, 8085 simu	0	0	66
CE-L11	HP Pro One 400 (Qty 25)+EPSON LX300+ (Qty1)+6KVA Emerson UPS	1	1	87
CE-L12	HP Pro One 400 (Qty 25)+EPSON LX300+ (Qty1)+6KVA Emerson UPS	1	1	71

31. Number of students receiving financial assistance from college, university, Government or other agencies

Туре	SC	ST	OBC	EBC	VJNT	SBC	Total
Government	6	0	52	22	9	2	91
R.C.Patel Memorial Scholarship				-			25
Management Level				-			02
Fee Concession							

32. Details on student enrichment programmes (special lectures/workshops/seminar)with external experts

Sr. No.	Year	Alumni Interaction	Expert talk	Workshop
1	2013-14	0	0	0
2	2014-15	17	0	0
3	2015-16	13	4	4
4	2016-17	11	5	3

- 33. Teaching methods adopted to improve student learning:
  - a. Videos of resource persons from various fields are downloaded and broadcasted to the students using virtual classroom facility.
  - b. Students are instructed and guided to perform laboratory experiments individually to enhance their practical skills.
  - c. Students are also acquainted and encouraged to attend open courseware availed online by various reputed Institutes.
  - d. Project based learning activity: Students are encouraged and guided to develop minor projects in each semester to implement and practice the project based learning activity.
  - e. Topper monitoring activity: Discussion is made with class-wise top ten students to solve their queries for consistency in the university results and ranks.
  - f. Remedial teaching: To improve the performance of slow learners with poor performance in internal sessional examination, remedial coaching is conducted.
  - g. Think pair share activity: It is a different learning activity which includes interactive sessions.
  - h. Tutorials: Tutorials are conducted additional to regular theory sessions for diagrammatic, mathematical subjects.
  - i. Students are encouraged to learn using various online resources like QEEE, MOOCs, etc.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sr. No.	Activity	Academic Year	Place
1	Tree Plantation by Department of Computer Engineering	2016-17	Z.P. Primary School Campus, Untawad Tal- Shirpur
2	Swachh Bharat Abhiyan by Department of Computer Engineering on auspicious day of Gandhi Jayanti	2016-17	Area Near College Campus

Sr. No.	Activity	Academic Year	Place
3	Blood Donation Camp	2016-17	R. C. Patel Institute of Technology Shirpur
4	Distribution of stationary . Breakfast to school students	2016-17	N. Z. Marathe School, Waghadi
5	Under " Rahat-2017" students have collected 500+ woolen clothes, and those clothes were distributed in padas/ small villages to needy peoples on 26/01/2017	2016-17	Padas/ small villages
6	Donated grossary to Savitribai Fule School for deaf and dumb students, Holnanthe	2016-17	Savitribai Fule School for deaf and dumb students , Holnanthe
7	Tree plantation by Department of Computer Engineering	2015-16	Untawad Tal- Shirpur
8	Blood Donation Camp	2015-16	R. C. Patel Institute of Technology Shirpur
9	Cleanliness Drive by Department of Computer Engineering	2015-16	Civil Hospital, Shirpur
10	Donated Uniforms to students	2015-16	Savitribai Fule School for deaf and dumb students , Holnanthe
11	Student taught basic Computer Fundamental	2014-15	R. C. Patel Secondary School, Holnanthe
12	Blood Donation Camp	2014-15	R. C. Patel Institute of Technology Shirpur
13	Student spent one day with deaf and dumb students and also donated ration for 2 months	2014-15	Savitribai Fule School for deaf and dumb students , Holnanthe
14	One day workshop on Computer Fundamental	2014-15	R. C. Patel Primary School, Warwade
15	Student taught basic Computer Fundamental	2014-15	AasharamShala, Nimzari
16	Blood Donation Camp	2013-14	R. C. Patel Institute of Technology Shirpur
17	Student taught basic Computer Fundamental	2013-14	R. C. Patel School Secondary, Ahilyapur
18	One day workshop on Computer Fundamental	2013-14	AasharamShala, Waghadi
19	One day workshop on Computer Fundamental	2013-14	AasharamShala, Asali

Sr. No.	Activity	Academic Year	Place
20	Provided one day meal	2013-14	Savitribai Fule School for deaf and dumb students , Holnanthe
21	Student taught basic Computer Fundamental	2013-14	R. C. Patel Secondary School, Holnanthe

# 35. SWOC analysis of the department and Future plans

Strength -

1) Dedicated, qualified faculty with good retention

2) Conducive environment for teaching learning

3) Well-equipped laboratories

- 4) Local guardian scheme for students' counselling and progress monitoring.
- 5) Employability development program to increase the placement.

Weaknesses -

1) Located in rural area.

2) Less industrial exposure.

Opportunities –

1) Industry-Institute Interaction

2) MOU with Professional Bodies

3) Attract more research funds from agencies like AICTE, UGC etc.

Challenges –

1) Improve student qualities

- 2) Produce employable students to satisfy requirements of Industries
- 3) Solve technical problems of the society

Future Plans -

1) Strengthen Industry-Institute Interaction Cell

2) Implement good research culture in the department

3) Increase alumni involvement in academic and placement activities

# **Evaluative Report of the Electronics & Telecommunication Department**

1. Name of the department: Electronics & Telecommunication

Year	Intake	Remarks				
2001	(0)	I had an and a start in Electronic 0				
2001	60	Under graduate course in Electronics &				
		Telecommunication Engineering with intake 60				
2002	120	Increase in intake by 60				
2010	180 (UG)	Increase in intake by 60.				
	18 (PG)	Starting of PG course with intake 18.				
2011		Starting of PhD course in E&TC (Research Centre)				
2012	24 (PG)	Increase in PG course intake to 24				
2015	120	Decrease in intake to 120				

2. Year of Establishment: 2001

3. Names of Programmes/Courses offered (UG, PG, M.Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.) – UG, PhD

Program of Study	Description
UG in E & TC Engineering	120
PG in E & TC Engineering	24
Ph.D. in E & TC Engineering	8

4. Names of Interdisciplinary courses and the departments/units involved

Courses offered	Name of Department
Engineering Mathematics	
Engineering Physics	
Engineering Chemistry	
Elements of Civil Engineering & Engineering	First Year Engineering
Mechanics	
Environmental Studies	
Soft Skills	
Engineering Drawing & Elements of	Mechanical Engineering
Mechanical Engineering	
Computer Programming	Computer Engineering
Energy Resources and Technology	Mechanical Engineering
Enterprise Resource Planning and SAP	Computer Engineering

5. Annual/semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments:

Courses offered	Name of Department		
Automotive Electronics	Mechanical Engineering		
Image Processing	Computer Engineering		
Analog & Digital Electronics	Computer Engineering		
Elements of Electronics and Electrical	First Year Engineering		
Engineering			

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Participation of National & Foreign University courses (MOOCs), CDEEP, QEEE courses, courses conducted by Industries:

SN	Name of University / institute / foreign	No of courses completed
	institutions / Industry	by students
1	Add on Course	10
2	Softskill	04
3	QEEE	09
4	Independent Learning (MOOCs)	11

8. Details of courses/programmes discontinued (if any) with reasons: PG course (ME E&TC) due to decreasing admissions.

9. Number of teaching posts

	Sanctioned	Filled
Professors	3	1
Associate Professors	7	8
Asst. Professors	24	31

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualifica tion	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Deore Pramod Jagan	Ph.D, M.Tech	Professor	Electronics & Telecomm	17	
Bhole Pravin Ravindra	ME	Assistant professor	Electronics & Telecomm	15.6	
Patil Jitendra Prakash	ME	Assistant professor	Digital Electronics	11	
Barawkar Manisha Balkrushna	ME	Assistant professor	Electronics	12.7	

Patil Vinod Ramesh	ME	Assistant professor	Digital Electronics	12	
Lokhande Narendra Lalchand	M.Tech	Assistant professor	Electronics	10.6	
Badgujar Ravindra Daga	ME, PhD (pursuing)	Assistant professor	Digital Electronics	12	
Jaware Tushar Hrishikesh	PhD, ME	Assistant professor	Digital Electronics	12	
Patil Smital Dhanraj	ME	Assistant professor	Electronics & Telecomm	11.3	
Sonawane Kiran Hilal	ME	Assistant professor	Electronics	12	
Dembrani Mahesh Bhimsham	PhD, ME	Assistant professor	Digital Electronics	11.6	
Patil Prashant Gorakh	ME, PhD (pursuing)	Assistant professor	Digital Comm	13.8	
Patil Bhushan Vamanrao	ME	Assistant professor	Digital Comm	9.8	
Goad Prashant Maganlal	M.Tech	Assistant professor	Microwave & Millimeter Engineering	9.5	
Jayaswal Anupkumar Bhatulal	M.Tech	Assistant professor	Electronics & Comm	6	
Khadke Abhijit Hanumantrao	MS	Assistant professor	Software System	14	
Patil Jayashree Sachin	ME	Assistant professor	Electronics & Telecomm	8.4	
Kunvar Kalpesh Nimbaji	ME	Assistant professor	Electronics & Telecomm	2.2	
Raghuwanshi Vediya	M.Tech	Assistant professor	VLSI & Embedded System	1	
Patil Vishal Pramod	ME	Assistant professor	Digital Electronics	4.6	
More Sagar Arun	ME, PhD (pursuing)	Assistant professor	Digital Electronics	15.6	
Patil Shailaja Arjun	ME, PhD (pursuing)	Assistant professor	Electronics	16	
Jadhav Jagadish Baburao	M.Tech, PhD (pursuing)	Assistant professor	Electronics & Telecomm	13.7	
Patel Manoj Lilachand	ME	Assistant professor	Digital Electronics	5.8	
Shah Minal Vasant	ME	Assistant professor	Digital Electronics	8.2	

Maheshwari Sneha Shrinivas	ME	Assistant professor	Electronics & Telecomm	7.2	
Bhandari Neha Omprakash	M.Tech	Assistant professor	Electronics & Telecomm	2.2	
Patil Litesh Arun	ME	Assistant professor	Electronics & Telecomm	1.2	
Sisode Smita Ashok	ME	Assistant professor	Digital Electronics	8	
Suryavanshi Hitesh Vinod	M.Tech	Assistant professor	Electronics Engineering	2	
Jain Milkesh Pramod	BE, MBA	Assistant professor	Electronics Engineering	5	
Nahatkar Sneha Chandrakant	M Tech	Assistant professor	Electronics & Telecomm	5	
Shaikh Tanveer Ahmad	ME	Assistant professor	Electronics & Telecomm	2	
Barania Shailendra Basantilal	ME	Assistant professor	Electronics Engineering	18	
Bhat Ravindra Ashok	M Tech	Assistant professor	Electronics Comm	18	
Patil Atul Ramesh	ME	Assistant professor	Electronics	19.8	
Patil Shashikant Shantilal	M Tech	Assistant professor	Electronics & Telecomm	18.7	
Kurumbanshi Suresh Shioprasad	M Tech	Assistant professor	Comm Engg	16.7	
Koshti Rahul Chandra	ME	Assistant professor	Electronics	10.8	
Javeed Akhtar Rehan Ahmad	ME	Assistant professor	Electronics Comm	10.9	

11. List of senior visiting faculty - Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty - Nil

13. Student-Teacher Ratio (programme wise)

UG	: 15: 1
PG	: 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled,

Sanctioned: 00 Filled: 05

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

PhD	PG	UG	Total
03	37	00	40

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

SN	Name of funding agency	Year	Amount
1	Vice Chancellor Research Motivation Scheme	2016-17	0.5 Lakhs
2	Vice Chancellor Research Motivation Scheme	2015-16	3.42 Lakhs
3	Vice Chancellor Research Motivation Scheme	2014-15	1.75 Lakhs
4	UGC – Minor Research Project	2014-15	3.4 Lakhs
5	Rajiv Gandhi Science and Technology	2013-14	3.5 Lakhs
	Commission		
		Total	12.57 Lakhs

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

SN	Name of funding agency	Year	Amount
1	HRD ministry / IIT Khargapur	2016-17	0.81 Lakhs
2	HRD ministry / IIT Khargapur	2014-15	1.44 Lakhs
3	AICTE	2014-15	6.5 Lakhs
4	HRD ministry / IIT Khargapur	2013-14	3.43 Lakhs
5	AICTE	2013-14	1.0 Lakhs
		Total	13.18 Lakhs

18. Research Centre/ facility recognized by the University: **Yes** Research Center recognized by NMU Jalgaon which have computational facilities required for research scholars.

19. Publications:

Number of papers published in peer reviewed journals (national /International)

	Number of Publications in				
Year	National	International	National	International	Total
	Journal	Journal	Conference	Conference	
2016-17	0	7	0	10	17
2015-16	0	33	3	18	54
2014-15	0	34	9	14	57
2013-14	0	21	26	22	69

\* Monographs - Nil

\* Chapter in Books - Nil

\* Books Edited - Nil

\* SNIP - Nil

\* SJR - Nil

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.)

SN	Name of Teacher	h - index	Total No. of Citations	No of books published with ISBN
1	Dr P J Deore	6	59	3
2	P R Bhole	0	0	2
3	S A More	3	28	0
4	Ms S A Patil	4	28	1
5	J B Jadhav	1	2	2
6	V R Patil	0	0	1
7	N L Lokhande	0	0	1
8	R D Badgujar	1	27	1
9	Dr T H Jaware	1	27	1
10	Ms S D Patil	1	8	0
11	K H Sonawane	0	0	1
12	Dr M B Dembrani	0	0	2
13	J P Patil	0	0	2
14	P G Patil	1	27	2
15	B V Patil	1	1	2
16	P M Goad	1	1	1
17	A B Jayaswal	0	0	1
18	Ms S C Nahatkar	1	4	0
19	V P Patil	1	10	2

Books with ISBN / ISSN numbers with details of publishers & Citation Index, h -index

20. Areas of consultancy and income generated - Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards....

Role	National*	International*	Editorial*
Reviewer		5	
Convener	2		
Organizing Chairman	1		
Judge	1		
Member	1		
Technical Advisor			1

\* Count of no of faculty members worked in committees.

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental / programme – 100%

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies – Nil

07

- 23. Awards/Recognitions received by faculty:
- Awards/Recognitions received by students: 65

24. List of eminent academicians and scientists/visitors to the department

Academician		Scientists/Industry/Corporate		
18		28		
List of Academician				
Name of Academician		Name of Institute		
Dr Jayanta Mukharjee	IIT	Bombay		
Dr S Raghavan	Prof	essor, NIT Trichy		
Dr Sachin Umbarkar	SRF VJT	(APPD, BARC, DAE-BRNS project), I Mumbai		
Dr Pratap N Shinde	Sinh	gad Academy of Engineering, Pune		
Dr D S Bormane	Prin of E	cipal, JSPM's Rajarshi Shahu College ngineering, Pune.		
Dr Girish Mundada	Prof	essor, PICT, Pune		
Dr D E Upasani	Prof Tecl Can	essor, Sinhgad Institute of nnology & Science, Narhe Technical npus, Pune		
Ahire Dnyaneshwar B.	Prof Eng	essor, Matoshri College of ineering and Research, Nasik		
Galande S G	Prof Eng	essor, Dept of E&TC, Pravara Rural ineering College, Loni		
Dr R J Bhiwani	Prof	essor, COE Pusad, Yawatnal		
Dr Abhilasha Mishra	JNE	C COE, Aurangabad		
Dr G M Malwatkar	Asso Pun	o. Prof, Zeal Institute of Technology, e		
Dr S D Shirbahadurkar	Prin Eng	cipal, Dr. D. Y. Patil College of ineering, Ambi, Tal:Maval, Dist:Pune		
Dr A M Agarkar	Dep Mah	artment of E&TC, Shri. Sant Gajanan araj College of Engineering, Shegaon		
Dr M G Wani	Dep COI	artment of E&TC, Dr. D. Y. Patil ET Lohgaon, Pune		
Dr V M Wadhai	Prin Eng	cipal, Sinhgad Academy of ineering, Kondhawa (Bk), Pune		
Dr Ulhas Shiurkar	Prin	cipal, Deogiri COE, Aurangabad		
Dr G K Kharate	Prin	cipal, Matoshri COE, Nasik		
	Academician18of AcademicianName of AcademicianDr Jayanta MukharjeeDr S RaghavanDr S RaghavanDr Sachin UmbarkarDr Pratap N ShindeDr D S BormaneDr Girish MundadaDr D E UpasaniAhire Dnyaneshwar B.Galande S GDr R J BhiwaniDr Abhilasha MishraDr G M MalwatkarDr S D ShirbahadurkarDr A M AgarkarDr M G WaniDr V M WadhaiDr Ulhas ShiurkarDr G K Kharate	Academician18of AcademicianName of AcademicianDr Jayanta MukharjeeIIT IDr S RaghavanProfDr Sachin UmbarkarDr S BormaneDr D S BormaneDr Girish MundadaProfDr D E UpasaniGalande S GDr R J BhiwaniDr G M MalwatkarDr G M MalwatkarDr S D ShirbahadurkarDr G M MalwatkarDr S D ShirbahadurkarDr G M MalwatkarDr S D ShirbahadurkarDr S D ShirbahadurkarDr S D ShirbahadurkarDr M G WaniDr W WadhaiPrin G K KharatePrin G K KharatePrin C K Kharate		

SN	Eminent Scientist/Industrialist	Organization
1	B Satyanarayana	Scientific Officer (G), Dept of High Energy Physics, Tata Institute of Fundamental Research,
2	Bipin Khairnar	Reliance Jio, Mumbai
3	Mrs Renuka Andankar	Senior Designer, SM Technologies
4	Haresh Kodnani	Targetrix, Mumbai
5	Nilesh Dighe	Sofcon India Pvt Ltd.
6	Shriniwas Vouti	Convergence Lab, Hyderabad
7	Pankaj Thakur	TCS, Pune
8	Nilesh Salgaonkar	TAACT, Nasik
9	Neeraj Ade	Profound Edutech Pvt Ltd, Pune.
10	Prashant Srivastava	Senaca University, Canada.
11	Sanjay Chaudhary	Electronic Study Centre, Nashik
12	Abhay Chaudhary	CADD Center, Pune
13	Chandrashekhar Gampwar	Win Globe Academy, Aurangabad
14	Nishit Bhatia	Project Engg, Valdel Engineers & Construction Ltd, Gandhinagar
15	Nitin R Mahajan	General Manager, BSNL Dhule
16	K S Patil	VP, NEC, Nasik
17	Pravin Jain	Data Serve Info Tech
18	Patel Nilesh D	Capgemini, Mumbai
19	Harshada Saner	KPIT, Pune
20	Sachin Chaudhari	Suryatech Solar System, Pune
21	Hemant Pawar	Tata Communication, Pune
22	Abhishek Sonawane	Capgemini, Mumbai
23	Pratik Chaudhari	Tata Communication, Pune
24	Anjali kakkad	Fox Studio, USA
25	Vimal Patel	Trendz Beauty Group (TBZ) Los Angeles, USA
26	Anirudha Kulkarni	Falcon
27	Sunanda Khargharia	Sr. Engineer, Cognizant, Pune
28	Nimesh Zalwadia	CEO, Aerotrol Pvt Ltd, Mumbai

List of Scientists/visitors

25. Seminars/Conferences/Workshops organized & the source of funding a) National b) International

Event	No of event organized	Source of funding	
Seminar	01	AICTE	
Semma	34	Self finance	
Conference (National)	08	Self finance	
	05	MHRD	
Workshop	01	AICTE	
	01	Self finance	

#### 26. Student profile programme / course wise:

Name of the Course/	Applications Selected		Enrolled		Pass
programme	received		*M	*F	percentage*
(refer question no. 4)				-	*(students
					are in)
2016-17	Admission p	rocess is as per	50	35	FE
2015-16	rules and r	egulations of	25	13	SE
2014-15	Directorat	te Technical	45	39	TE
2013-14	Edu	cation	113	30	BE

#### 27. Diversity of Students

Year	%of students from the same state	%of students from other States	%of students from abroad
2016-17	100	Nil	Nil
2015-16	97.36	2.63	Nil
2014-15	100	Nil	Nil
2013-14	100	Nil	Nil

#### As per category

Year	SC	ST	OBC	SBC	NT	Open
2016-17	18	15	194	15	25	73
2015-16	8	20	218	31	11	83
2014-15	9	20	362	12	35	112
2013-14	19	8	410	40	18	201

28. How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civil services, Defense services, etc.? in Higher Education

GATE	GRE
06	10

Student progression	Against % enrolled (2016-17)	Against % enrolled (2015-16)	Against % enrolled (2014-15)	Against % enrolled (2013-14)
UG to PG	8.33 %	9.30 %	20 %	19.23 %
PG to M.Phil.				
PG to Ph.D.				
Ph.D. to Post-Doctoral				
Employed •Campus selection •Other than campus	71.82 % 0.91 %	47.62 % 9.52 %	30.48 % 12.38 %	6.36 % 7.27 %
Entrepreneurship/Self- employment	-	-	1.30 %	3.19%

# 29. Student progression

30. Details of Infrastructural facilities a) Library

	Titles	Volume	Project Reports
Central Library	1095	8728	Last 3 years
Dept Library	361	395	690

b) Internet facilities for Staff & Students: Institute has internet facility of 155 Mbps

c) Class rooms with ICT facility: All classrooms available with audio video aids

d) Laboratories – Total 10 laboratories available with all required equipments.

SN	Name of Laboratory	Area (Sqm)
1	ETC Lab - 1 (EL1)	75
2	ETC Lab - 2 (EL2)	75
3	ETC Lab - 3 (EL3)	117
4	ETC Lab - 4 (EL4)	110
5	ETC Lab - 5 (EL5)	117
6	ETC Lab - 6 (EL6)	72.1
7	ETC Lab - 7 (EL7)	83.7
8	ETC Lab - 8 (EL8)	83.7
9	ETC Lab - 9 (EL9)	120
10	ETC Lab - 10 (EL10)	90.42

31.	Number	of	students	receiving	financial	assistance	from	college,
uni	versity, Go	ovei	mment or o	other agenci	ies			

		G	College			
Year	SC	ST	OBC	SBC	NT	Scholarship
2016-17	18	15	194	15	25	9
2015-16	8	20	218	31	11	9
2014-15	9	20	362	12	35	9
2013-14	19	8	410	40	18	9

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

Year	Alumni	Expert Talk	QEEE	Add On	Soft skill
	Interaction				
2016-17	16	10	5	3	1
2015-16	04	10	4	5	1
2014-15	02	06		1	1

33. Teaching methods adopted to improve student learning

a. Project based learning activity: By giving small projects to students to enhance their practical knowledge.

b. Topper monitoring activity: Discussion is made with topper students and solves their queries to optimize the university results and ranks.

c. Remedial teaching: is conducted for improvement of slow learner students, which are not performing well in internal /university examinations,

d. Think-pair-share activity: It is interactive session conducted in the class for several subjects.

e. Tutorial: It is adopted for diagrammatic, mathematical subjects, so that student gets enough practice and personal attention.

f. Videos of eminent personalities from various fields are downloaded and shown to the students.

g. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.

h. Special skill enhancement for practical skills by allowing students to do experiments individually.

i. Students are also acquainted with open courseware; encourage for participation in various MOOCs courses, QEEE courses.

j. Use of eYantra (IIT Mumbai) lab to learn basic / advance robotics.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

For the holistic development of the students, they need to be involved in extension activities also. Students generally involve in such activities

through Project, Sports activities, Cultural activities. Students from department formed various clubes such as e-yantra club (for robotics activities), English club, Computer Networking club through which students involve in extension activities.

Projects are integral part of the syllabus. Department implemented project based learning. Some students undertake projects which are of direct societal relevance. The department organizes activities like tree plantation, blood donation camp, cleanliness drive, Swatch Bharat Abhiyan, computer literacy program in rural areas, Books/Stationary/Grocery donation to orphan, deaf and dumb students/schools.

35. SWOC analysis of the department and Future plans

Strength –

1) Well maintained state of art infrastructure, modern laboratories and ICT enabled class rooms with high speed internet connection.

2) Excellent university results with record of consistent ranks in university.

3) Healthy student teacher ratio.

4) Highly qualified, committed and experience faculty with excellent faculty retention.

5) Employability development program to increase placement.

Weaknesses -

1) Lack of consultancy.

2) MoU with industry and leading academic institutions.

3) Industry interaction needs to be strengthened further.

4) Input quality of students is poor.

Opportunities -

1) Industry institute interaction.

2) MoU with professional bodies

3) Consultancy

Challenges -

1) College location is in rural area

2) Attracting better quality students.

3) Enhance industry-institute interaction

4) Enhance consultancy work.

# EVALUATIVE REPORT OF THE DEPARTMENTS OF APPLIED SCIENCE

- 1. Name of the department:- **Applied Sciences**
- 2. Year of Establishment: 2001
- 3. Names of Programmes/ Courses offered (**UG**, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):-

Program of study	Description		
Electronics and	120		
Telecommunication			
Engineering			
Computer Engineering	120		
Information Technology	60		
Electrical Engineering	60		
Civil Engineering	60		
Mechanical Engineering	120+60=180		
Shift –I + Shift –II			
Total	600		

4. Names of Interdisciplinary courses and the departments/units involved-

SN	Names of Interdisciplinary courses	Departments Involved
1	Elements of Civil Engineering and Engineering Mechanics	Civil Engineering
2	Computer Programing	Computer Engineering & Information Technology
3	Elements of Civil Engineering and Engineering Mechanics Lab	Civil Engineering
4	Computer Programing lab	Computer Engineering &
		Information Technology
5	Workshop Practice- 1& II	Mechanical Engineering
6	Elements of Electrical and Electronics Engineering	Electronics and Telecommunication Engineering & Electrical Engineering
8	Elements of Electrical and Electronics Engineering Lab	Electronics and Telecommunication Engineering & Electrical Engineering
7	Engineering Drawing Elements of Mechanical Engineering	Mechanical Engineering
9	Engineering Drawing Elements of Mechanical Engineering Lab	Mechanical Engineering

5. Annual/semester/choice based credit system (programme wise):- Semester

SN	Names of Interdisciplinary	Departments Involved
	courses	
1		Computer Engineering,
		Information Technology,
		Civil Engineering,
	Engineering Mathematics -III	Electronics and
		Telecommunication Engineering,
		Electrical Engineering,
		Mechanical Engineering
2		Computer Engineering,
		Information Technology,
		Civil Engineering,
	Soft Skill III	Electronics and
		Telecommunication Engineering,
		Electrical Engineering,
		Mechanical Engineering

6. Participation of the department in the courses offered by other departments-

- 7. Courses in collaboration with other universities, industries, foreign, institutions, etc.-NIL
- 8. Details of courses/programmes discontinued (if any) with reasons-NIL
- 9. Number of teaching posts:-

	Sanctioned	Filled
Professors	02	01
Associate Professors	05	04
Asst. Professors	18	20

10. Faculty profile with name, qualification, designation, specialization, (D.Sc../ D.Litt./ Ph.D./M.Phil..etc.,)

SN	Name	Qualification	Designation	Specialization	No. of Years' Experience	No. of Ph.D. Students guided for the last 4 years
1	Mr.Shukla Suhas Pandit	M.Sc. (Ph.D. Pursuing)	Associate Professor	Physics	16 Years	NIL
2	Mr. Suryavanshi Vijay Kashinath	M.Sc. (Ph.D. Pursuing)	Assistant Professor	Chemistry	15 Years	NIL

3	Dr. Desale Satish Vasantrao	Ph.D. (Maths)	Professor	Mathematics	13Years	NIL
4	Dr. Bhadane Premkiran Gopal	Ph.D. (Maths)	Associate Professor	Mathematics	12Years	NIL
5	Mr. Baviskar Vijay Shivaji	M.Sc. (P.hD. Pursuing)	Assistant Professor	Physics	8 Years	NIL
6	Dr. Bhandari Amruta Atul	Ph.D. (Maths)	Associate Professor	Mathematics	8Years	NIL
7	Mr.Patil Yogesh Panditrao	M.A. (English)	Assistant Professor	Soft Skill	7Years	NIL
8	Dr. Chandrashek har Shaalik Sutar	Ph.D. (Maths)	Assistant Professor	Mathematics	7 Years	NIL
9	Dr. Sonawane Milindkumar Suresh	Ph.D. (Physics)	Associate Professor	Physics	7 Years	NIL
10	Mr.Isai Kalpesh Anil	M.Sc. (Ph.D. Pursuing)	Assistant Professor	Chemistry	7 Years	NIL
11	Mr. Suryavanshi Kiran Eknath	M.Sc. (Ph.D. Pursuing)	Assistant Professor	Chemistry	7 Years	NIL
12	Mr.Jagtap Harshal Subhashrao	M.Sc. (Ph.D. Pursuing)	Assistant Professor	Mathematics	6 Years	NIL
13	Mr. Shaikh Jamir Salim	M.Tech.	Assistant Professor	Mathematics	5 Years	NIL
14	Mr. Narkhede Narayan Manohar	M.Sc.	Assistant Professor	Physics	5 Years	NIL
15	Mr. Patil Pramod Nagraj	M.Sc. (Ph.D. Pursuing)	Assistant Professor	Chemistry	5 Years	NIL
16	Mr. Thakare Kishor Ramakant	M.A.	Assistant Professor	English	4 Years	NIL

17	Mr. Rathod Nimbaji Sonsing	M.Ped.	Assistant Professor	Physical Director	3 Years	NIL
18	Mr. Vispute Yogesh Ratnakar	M.A.	Assistant Professor	English	3 Years	NIL
19	Miss. Patil Pratibha Hiralal	M.A.	Assistant Professor	English	1 Years	NIL
20	Miss. Sonawane Madhuri Rajendra	M.Sc.	Assistant Professor	Physics	1 Years	NIL
21	Mr. Sonawane Dhiraj Bahurav	M.Sc	Assistant Professor	Chemistry	1 Years	NIL
22	Mr. Patil Nilesh Sudhakar	M.Sc	Assistant Professor	Chemistry	1 Years	NIL
23	Miss. Mahajan Vandana Rajaram	M.Sc.	Assistant Professor	Physics	1 Years	NIL
24	Mrs. Shirsath Vaishali Bansilal	M.Sc.	Assistant Professor	Physics	1 Years	NIL
25	Mr. Chaudhari Jitendra Bansilal	M.Sc.	Assistant Professor	Physics	1 Years	NIL

- 11. List of senior visiting faculty:-**NIL**
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by Temporary Faculty:-**NIL**
- 13. Student-Teacher Ratio (programme wise):- 1:15

Year	Number of Students (As Per Intake)	Numberof Staff Members	Student Teacher Ratio
2016-17	600	40	1:15

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

SN	Academic Support Staff (Technical)	Sanctioned	Filled
1	No. of Academic support staff (Technical)	00	00
2	No. of Administrative Staff	01	01

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./MPhil/PG.:-25

SN	Qualification of Staff	No.of Faculty
1	Ph.D.	05
2	PG	20
3	UG	-

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:- 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:-

Year	Number of publication in				
	National Journal	International Journal	National Conference	International Conference	
2013-14	0	21	0	0	21
2014-15	1	9	0	2	12
2015-16	0	7	0	1	8
2016-17	0	3	4	1	8

Citation Index, h-index:-

Sn	Name of Teacher	h- index	Total no. of citations	No. of book published with ISSN
1	Mr. Suryavanshi Vijay Kashinath	-	-	1) Engineering Chemistry-II ISBN-978-93-81188
2	Dr. Desale Satish Vasantrao	1	3	-
3	Dr. Sonawane Milindkumar Suresh	1	1	-
4	Dr. Bhadane Premkiran Gopal	3	10	<ol> <li>Enggineering Mathematics–I</li> <li>ISBN978-81-909164-16-3</li> <li>Enggineering Mathematics–II</li> <li>ISBN978-9381188-21-7</li> </ol>
5	Mr. Patil Pramod Nagraj	-	-	Engineering Chemistry-I ISBN-978-81-909164-17-0

- 20. Areas of consultancy and income generated:-NIL
- Faculty as members in a) National committees , b) International Committeesc) 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:-**NIL**
- 23. Awards/Recognitions received by faculty and students:

Students	Faculty
-	06

- 24. List of eminent academicians and scientists/visitors to the department:-NIL
- 25. Seminars/Conferences/Workshops organized & the source of funding a) National

Sr.no.	No. of workshop	No. of seminar	Source	of
			funding	
National	Engineering Physics 8 <sup>th</sup>		IIT Bombay	
	Dec $2015 - 18^{th}$ Dec			
	2015			
Institute		Numerical methods	Self	
		for engineers 2 <sup>nd</sup>		
		May 2015		

b) International: - NIL

Name of the Course/programme (refer question no. 4)*	Academic Year	Applications received	Selected	Enro	olled	Pass percentage (With ATKT)
				Μ	F	
FE	2013-14	Admission proce	ess is as ner	369	132	62.81
FE	2014-15	rules and regu	alations of	337	116	69.23
FE	2015-16	Director of T	echnical	336	111	75.99
FE	2016-17	Educati	on	395	147	65.39

#### 26. Student profile programme /course wise:

\*M=Male \*F=Female

27. Diversity of Students

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2013-14	UG	99.41%	0.59%	0%
2014-15	UG	98.45%	1.54%	0%
2015-16	UG	99.1%	0.89%	0%
2016-17	UG	100%	0%	0%

Category wise Students:

Year	OBC	SBC	SC	VJ-NT	ST	EBC
2013-14	347	13	30	47	31	85
2014-15	246	14	35	46	19	48
2015-16	226	12	16	44	12	44
2016-17	252	13	29	55	30	74

- 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? in Higher Education:- **NIL**
- 29. Student progression:-

Student progression	Against % enrolled
UG to PG	NA
PG to M.Phil.	NA

PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed •Campus selection •Other than campus recruitment	NA
Entrepreneurship/Self-employment	NA

# 30. Details of Infrastructural facilities

#### a. Library:

	Title	Volume
Central library	460	1530

b. **Internet facilities for Staff & Students:** Institute has internet facility of 155 Mbp.

#### c. Class rooms with ICT facility

The 8 Class rooms with ICT facility: All classrooms are provided with internet facility. All class rooms are spacious and well equipped with necessary infrastructure (LCD projectors, Audio/video aids with internet etc.) making it conductive to teaching and learning.

#### d. Laboratories

Adequate numbers of laboratories are available in the department as per AICTE norms.

Equipment is maintained in working condition so that satisfactory and reliable results are obtained.

31. Number of students receiving financial assistance from college, university, government or other agencies

Government agencies							R C Patel	
Year	Total	OBC	SBC	SC	VJ-NT	ST	EBC	Memorial Scholarship
2013-14	553	347	13	30	47	31	85	26
2014-15	416	246	14	35	46	19	48	8
2015-16	362	226	12	16	44	12	44	8
2016-17	484	252	13	29	55	30	74	31

Sr. No	Name of Teacher	Designation	Торіс
1	Prof. Sharda Shitole	Vice-Principal, Z.B.Patil ACS College, Dhule	Personality Development
2	Prof. V H Pradhan	SVNIT, Surat	Expert Lecturer on Numerical Method For Engineers

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

#### 33. Teaching methods adopted to improve student learning:-

- 1. Project based learning activity: By giving small minor projects to student to enhance their practical knowledge.
- 2. Toppers monitoring activity: Discussion is made with topper students and solve their queries to optimize the university results and ranks.
- 3. Remedial teaching: It is conducted for improvement of slow learner students which are not performing well in internal sessional examination.
- 4. Think-pair-share activity: It is interactive session conducted for several subjects in the class.
- 5. High speed internet.
- 6. Tutorial methods: It is adopted for diagrammatic, mathematical subjects.
- 7. Videos of eminent personalities from various fields are downloaded and shown to the students.
- 8. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.
- 9. Special skill enhancement for practical skills by allowing students to do experiments individually.
- 10. Students are also acquainted with open courseware which is available on the Institutional website.
- 11. Students are also acquainted with open courseware which is available on the Institutional website.
- 12. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.
- 13. Special skill enhancement for practical skills by allowing students to do experiments individually.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:-NIL

35. SWOC Analysis of the department and Future plans

#### Strengths:

- 1) Local Guardian system for close correspondence with students and parents.
- 2) Continuous assessment system to map and enhance students' academic progress.
- 3) Capable team of staff for pre and post counseling for the technical education.
- 4) Equipped with resources to make use of ICT in teaching and learning.

#### Weakness:

- 1) Located in rural area.
- 2) Less industrial exposure and placement.
- 3) Faculty is bound to the first year department only.
- 4) Lack of opportunity to teach and guide higher classes.

#### **Opportunities:**

- 1) Industry Institute Interaction.
- 2) To receive young minds at the threshold of technical education.
- 3) Inspiration to the students by giving inputs of basic sciences.

#### **Challenge:**

- 1) Challenge to eradicate inferiority complex among students as they belong to rural area.
- 2) Challenge to deal with in difference among parents regarding technical education and their ward's career.
- 3) Challenge to empower faculty in research and knowledge upgrading activities due to time constraint.

#### **Future Plans:**

- 1) To have experimental as well as motivational learning for students.
- 2) To have frequent awareness activities for parents.
- 3) To have more faculty for Ph. D.
- 4) To organize more workshops and seminars for teachers and students at the departmental level.

# EVALUATIVE REPORT OF THE INFORMATION TECHNOLOGY DEPARTMENT

1. Name of the department: Information Technology

2. Year of Establishment: 2001

Year	Intake	Remarks
2001	60	Under graduate course in Information Technology with intake 60

3. Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated

Masters; Integrated Ph.D., etc.)

Program of Study	Description
UG in Information Technology	60

4. Names of Interdisciplinary courses and the departments/units involved:

Courses Offered	Name of Department	
Engineering Mathematics		
Engineering Physics	Einst Voor	
Engineering Chemistry	riist Year	
Soft Skills		
Engineering Drawing & Elements of Mechanical Engineering	Mechanical Engineering	
Elements of Civil Engineering & Engineering Mechanics	Civil Engineering	
Environmental Studies		
Elements of Electronics and Electrical Engineering	E & TC	
Image Processing	E&TC	

5. Annual/semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments

Courses offered	Name of Department
1 Enterprise Resource Planning & SAP	E&TC
2 Software Engineering & Project	Mechanical Engineering
Management	Civil Engineering
	Electrical Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr. No.	University/Training Agencies offering Courses	No. of Courses offered by University
1	IIT Bombay, Mumbai	03

2	MOOCs Independent Training	05
3	IIT Madras	06
4	SEED InfoTech, Pune	7
5	CPLC, Pune	04

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts

	Sanctioned	Filled
Professors	01	Nil
Associate Professors	03	01
Assistant Professors	09	13

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil.etc.,)

Name of Faculty	Qualificatio n	Designation	Specializatio n	No. of Years of Experienc e	No. of Ph.D. Students Guided for the Last 4 years
Patil Dharmaraj Rajaram	ME	Assistant Professor	Web Security Mining	13.7 Yrs	Nil
Patil Vandana Mohan	MTech	Associate Professor	Semantic Web Mining	12.8 Yrs	Nil
Pardeshi Shailendra Madansing	MTech	Assistant Professor	Image Processing	11 Yrs	Nil
Pattewar Tareek Manohararo	ME	Assistant Professor	Embedded System	12.3 Yrs	Nil
Patil Sheetal Nana	MTech	Assistant Professor	Image Processing	12.5 Yrs	Nil
Punjabi Vipul Devendra	MTech	Assistant Professor	Image Processing	8.7 Yrs	Nil
Ishi Manoj Sakharam	MTech	Assistant Professor	Image Processing	7.2 Yrs	Nil

Randhi Hemant Narayan	MTech	Assistant Professor	Image Processing	6.8 Yrs	Nil
Patil Punam Ravan	MTech	Assistant Professor	Image Processing	6 Yrs	Nil
Salve Bhagyashri Girdhar	ME	Assistant Professor	Image Processing	1.1 Yrs	Nil
Patel Swati Jitendrakumar	ME	Assistant Professor	Web Mining	1.1 Yrs	Nil
Rathod Sunil Bajrang	ME	Assistant Professor	Web Mining	1.1 Yrs	Nil
Tambat Rahul Mannalal	BE	Visiting Faculty	Query Optimization	10.8 Yrs	Nil
Maid Yogesh Sudhakar	BE	Visiting Faculty	Internet Security	10.8 Yrs	Nil

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student-Teacher Ratio (programme wise) (SE to BE)

Total Sanctioned Intake=180 Student-Teacher Ratio: 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned: 00

Filled: 02

15.	Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PC						
	PhD	PG	BE	Total			
	Nil	12	02	14			

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

5 (1 for Rajiv Gandhi Science and Technology Commission & 4 for Vice Chancellor Research Motivation Scheme)

Sr. No.	Name of the Funding agency	Sanctioned Year	Amount (in Rupees)
1	VCRMS Scheme North Maharashtra University Jalgaon	2016-17	48,000
2	2 VCRMS Scheme North Maharashtra University Jalgaon		1,41,000
3	RGSTC Govt. Maharashtra through NMU Jalgaon	2014-15	1,00,000

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

\* Number of papers published in peer reviewed journals (national/ international) by faculty

	Number of Publications in				
Year	National	International	National	International	Total
	Journal	Journal	Conference	Conference	
2016-17	Nil	08	Nil	01	09
2015-16	Nil	11	Nil	06	17
2014-15	Nil	12	06	18	36
2013-14	Nil	07	12	19	38

Citation Index, h -index

SN	Name of Teacher	No. of Publications listed on Google Scholar since 2011	h - index	Total No. of Citations	Books published with ISBN/ISSN No.
1	Patil Dharmaraj Rajaram	55	06	88	Nil
2	Patil Vandana Mohan	04	Nil	Nil	Nil
3	Pardeshi Shailendra Madansing	09	02	24	01
4	Pattewar Tareek Manohararo	43	04	50	01
5	Patil Sheetal Nana	05	Nil	Nil	01
6	Punjabi Vipul Devendra	07	02	07	01
7	Ishi Manoj Sakharam	05	02	07	Nil
8	Randhi Hemant Narayan	03	02	06	Nil
9	Patil Punam Ravan	06	1	01	01

20. Areas of consultancy and income generated

Sr. No.	Area of Consultancies	Year	Income
1	TCS Exams(iON Digital Exam)	2015-16	92520
2		2014-15	47000
3		2013-14	63000

21. Faculty as members in

Committee Details									
Roles	National Committee	International Committee	Editorial Board						
Reviewer	Nil	02	04						
Convener	04	Nil	Nil						

Organizing Chairman	01	Nil	Nil	
Coordinator	04	Nil	Nil	

22. Student projects

- Percentage of students who have done in-house projects including interdepartmental/programme: 100%
- 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



24. List of eminent academicians and scientists/visitors to the department

Academician	Scientists	Industry Persons
05	02	42

25. Seminars/Conferences/Workshops organized & the source of funding

Туре	No. of Seminar	No. of Conference	No. of Workshop	Source of Funding
Institutional	Nil	04	01	Self Financed by RCPIT, Shirpur
National	07	Nil	07	IIT Bombay/ IIT Kharagpur
International	Nil	Nil	Nil	Nil

26. Student profile programme/course wise:

	Name of the Course/	Amplications	Enro	olled	Doss		
	programme (refer question no. 4)	received	Selected	*M	*F	Percentage	
	2016-17			26	32	FE	
	2015-16	Admission proce	14	15	SE		
	2014-15	and rights of Technical	Directorate of Education	12	10	TE	
ſ	2013-14			26	18	BE	

\*M=Male \*F=Female

27. Diversity of Students

A. Region Wise

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2016-17	100	Nil	Nil
2015-16	100	Nil	Nil

2013-14 90.91 9.09 Nil	2014-15	95.46	4.54	Nil
2013-14 90.91 9.09 141	2013-14	90.91	9.09	Nil

B. Category Wise

X/	OF	BC		ST		S		N	Г	SB	С	OPE	EN	То	tal	Total
Year	М	F	М	F		М	F	М	F	М	F	М	F	М	F	Students
First	10	14	2	2		4	1	3	2	1	5	7	8	27	32	59
Second	12	6	0	0		1	4	1	2	1	1	7	8	22	21	43
Third	4	8	1	0		1	0	1	0	0	0	2	3	9	11	20
Final	9	5	0	1		0	1	2	1	0	0	4	5	15	13	28
					I	Aca	dem	ic Y	ear:	201	5-16	5				
Veen	OB	С	S	Т		SC		N	Γ	SB	С	OPI	EN	То	otal	Total
i ear	М	F	М	F	]	М	F	М	F	М	F	М	F	М	F	Students
First	8	6	0	0		0	2	3	2	0	0	6	5	17	15	32
Second	2	6	2	1		0	0	1	1	0	0	3	5	8	13	21
Third	6	4	0	1		0	1	0	0	0	0	6	7	12	13	25
Final	12	2	0	0		0	2	0	0	0	0	7	2	19	6	25
Academic Year: 2014-15																
Veen	O	BC		ST		S	С	N	Т	SE	C	OPI	EN	То	tal	Total
rear	М	F	M	[ F	7	М	F	М	F	М	F	М	F	М	F	Students
First	9	6	1	2	2	0	0	2	0	0	0	0	2	12	10	22
Second	6	10	1	1		1	1	2	0	0	0	8	4	18	16	34
Third	18	8	0	(	)	1	2	4	2	0	0	8	4	31	16	47
Final	14	10	0	1		1	0	4	3	0	0	6	4	25	18	43
					ŀ	Aca	dem	ic Y	ear:	201	3-14	1				
Voor	0	BC		ST		S	С	N	T	S	BC	OF	PEN	Т	otal	Total
Tear	М	F	7 ]	MI	7	М	F	М	F	М	F	М	F	М	F	s
First	6	1	1 2	2 2	2	2	0	1	2	0	0	10	9	21	24	45
Second	28	6	5 (	) (	)	0	3	3	3	0	0	6	6	37	18	55
Third	10	7	7 (	) 1	[	0	1	4	2	0	0	7	7	21	18	39

# Academic Year: 2016-17

	Final	15	13	0	0	4	1	1	0	1	0	25	3	46	17	63	
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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

## (Average of Session 2016-17 to 2013-14)

Student progression	Against % enrolled (2016-17)	Against % enrolled (2015-16)	Against % enrolled (2014-15)	Against % enrolled (2013-14)
UG to PG	01	01	04	03
PG to M.Phil.	Nil	Nil	Nil	Nil
PG to Ph.D.	Nil	Nil	Nil	Nil
Ph.D. to Post-Doctoral	Nil	Nil	Nil	Nil
Employed • Campus selection • Other than campus recruitment	40%	32%	16.67%	24.44%
Entrepreneurship/Self- employment	Nil	Nil	2.33%	4.76%

30. Details of Infrastructural facilities

a) Library

Library	No. of Volumes	No. of Titles	e- journals	e-journal resources	Project Reports (Maintain for Last Years)
Central Library	30995	4752	60	02	Last three years project reports of all departments
Departmental Library	28	26	06	02	46

b) Internet facilities for Staff & Students

All laboratories are provided internet access. All the staff members are having internet nodes at their desktops. The whole campus is Wi-Fi connected.

Available Bandwidth: 155 Mbps

c) Class rooms with ICT facility - Total 3 classrooms available with all audio video aids

d) Laboratories - Total 8 laboratories available with all required equipments.

Name of the Laboratory	Lab / Major Equipments	UPS	Printer	Area (in sq.m.)
IT1(Project) Lab	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	2	70
IT2	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	2	70

IT3	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	2	85
IT4	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	Pro One 400 (Qty 25)+HP 020 Printer (Qty1)+6KVA Emerson UPS		75
IT5	HP Pro One 400 (Qty 25)+HP 1020 Printer (Qty1)+6KVA Emerson UPS	1	2	70
IT6 (Embedded System Lab)	n Lab) Desktops Printer UPS Embedded Kit ALPS Kit		NA	85
IT7 (Digital Laboratory)	Power Supply, ICs	NA	NA	85
IT8 (Microprocessor Laboratory)	89V51RD2 Kit LCD RTC- EEPROM ADC Stepper Motor Mega LCD Seven Segment Display 16F877 based PIC board	NA	NA	70

31.	Number	of	students	receiving	financial	assistance	from	college,
univer	sity, Gove	rnm	ent or othe	er agencies				

Academic Year	SC	ST	OBC	EBC	VJNT	SBC	RCP Mem orial	Bhaisaheb Concession	Total
2016-17	12	06	68	44	12	08	05	01	156
2015-16	05	04	44	41	07	Nil	01	01	103
2014-15	06	06	81	36	17	Nil	Nil	Nil	146
2013-14	11	05	96	73	16	01	Nil	Nil	202

lectures/workshops/seminar) with external experts	32.	Details	on	student	enrichment	programmes	(special
	lecture	es/worksho	ps/sem	inar) with ex	sternal experts		_

Sr No.	Year	Alumni Interaction	Expert talk	Workshop
1	2016-17	06	05	01
2	2015-16	05	05	05
3	2014-15	09	09	01
4	2013-14	Nil	Nil	Nil

- 33. Teaching methods adopted to improve student learning
  - Videos of eminent personalities from various fields are downloaded and Shown to the students.
  - College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.

- Special skill enhancement for practical skills by allowing students to do experiments individually.
- Students are also acquainted with open courseware which is available on the various website.
- Project based learning activity: By giving small minor projects to students to enhance their practical knowledge.
- Topper monitoring activity: Discussion is made with topper students and solved their queries to optimize the university results and ranks.
- Remedial teaching: It is conducted to improvement of slow Lerner students which are not performing well in internal sessional examination.
- Think pair share activity: It is interactive session conducted for several subjects in the class.
- ➢ High speed internet.

Tutorial methods: It is adopted for diagrammatic, mathematical subjects.
 Participation in Institutional Social Responsibility (ISR) and Extension

activities

 Sr.
 Activity
 Academic
 Place

Sr. No.	Activity	Academic Year	Place
1	Cashless INDIA	2016-17	Grampanchayat, Vikhran , Shirpur
2	Blood Donation Camp	2016-17	R. C. Patel Institute of Technology shirpur
6	Donated grocery to Savitribai Fule School for deaf and dumb students, Holnanthe	2016-17	Savitribai Fule School for deaf and dumb students, Holnanthe
7	Tree plantation by Department of Computer Engineering	2015-16	Untawad Tal- Shirpur
8	Cleanliness Drive by Department of Computer Engineering	2015-16	Civil Hospital, Shirpur
9	Donated Uniforms to students	2015-16	Savitribai Fule School for deaf and dumb students, Holnanthe
10	Student taught basic Computer Fundamental	2014-15	R. C. Patel Secondary School, Holnanthe
11	Student spent one day with deaf and dumb students and also donated ration for 2 months	2014-15	Savitribai Fule School for deaf and dumb students , Holnanthe
12	One day workshop on Computer Fundamental	2014-15	R. C. Patel Primary School, Warwade

14	Student taught basic Computer Fundamental	2013-14	R. C. Patel School Secondary , Ahilyapur
15	One day workshop on Computer Fundamental	2013-14	AasharamShala, Waghadi
16	One day workshop on Computer Fundamental	2013-14	AasharamShala, Asali
17	Provided one day meal	2013-14	Savitribai Fule School for deaf and dumb students, Holnanthe
18 Student taught basic Computer Fundamental		2013-14	R. C. Patel Secondary School, Holnanthe

35. SWOC analysis of the department and Future plans

Strengths:

- > Experienced faculties
- Employability development program to increase placement
- Most of faculty presented & published research papers at several national/international conferences & journals
- Faculty willing to take any responsibilities

Weakness

- > No PG and PhD programs
- Need to increase collaborative research/projects among faculties
- > Need to involve more under graduates students in research
- Little students participation in internships

Opportunities

- > To find research grants from industry and government agencies
- Develop interdisciplinary research/projects
- Make department more research oriented
- > Offer more online courses

Challenges

- Balance teaching quality with research
- Participation of students in faculty research
- Curriculum not exactly meet industry requirement
- Ready students more programming oriented

Future Plans: To organize subject related conferences and workshops as the subjects are dynamic and have practical relevance.
#### EVALUATIVE REPORT OF THE MECHANICAL ENGINEERING DEPARTMENT

#### 1. Name of the department: Mechanical Engineering

#### 2. Year of Establishment: 2004

Year	Intake	Remarks				
2004.05 60		Under graduate course in Mechanical				
2004-03	00	Engineering with intake 60				
2010-11	120	Increase in intake by 60				
2011-12	180	Increase in intake by 60 with Second Shift				
2011-12	18 (PG)	Starting of PG course with intake 18.*				
*DC C	· 01	1: 0015.16				

\*PG Course in Closed in 2015-16

#### 3. Names of Programs / Courses offered

Program of Study	Description
UG in Mechanical Engineering	180

#### 4. Names of Interdisciplinary courses and the departments/units involved

Courses offered	Name of Department	
Engineering Mathematics		
Engineering Physics		
Engineering Chemistry		
Elements of Civil Engineering & Engineering	First Year	
Mechanics		
Environmental Studies		
Soft Skills		
Computer Programming	Computer Engineering	
Enterprise Resource Planning and SAP	Computer Engineering	

#### 5. Annual/ semester/choice based credit system: Semester.

6. Participation of the department in the courses offered by other departments

Courses offered	Name of Department
Automotive Electronics	E&TC
Operation Research Techniques	Mechanical Engineering

Energy Resources and Technology				Mechanical Engineering
Engineering Drawing and Elements of Mechanical Engineering				Common with First Year

# 7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sr. No.	Course offered	University/Training	No. of Courses offered
		Agencies offering Courses	by University
1	MOOCs	Independent Training	21
2	QEEE	IIT Madras	09
3	ADDON	SEED InfoTech, Pune	07
4	Softskills	CPLC, Pune	04
5	ADDON	CADD Center, Pune	03

#### 8. Details of courses/programs discontinued (if any) with reasons: Nil

#### 9. Number of teaching posts

	Sanctioned	Filled
Professors	4	0
Associate Professors	8	2
Asst. Professors	26	38

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

SN	Name of Staff	Qualification	Designation	Specialization	Experi ence in Years	No. of PhD Students Guided
1	Salunke Nilesh Pitambarrao	B.E, M.E.	Asso. Prof.	Jet Propolusion and gas turbine	14	Nil
2	Patil Manoj Rajan	B.E, M.Tech.	Asso. Prof.	Thermal and fluid Engineering	19.1	Nil
3	Wagh Hemant Krishnarao	B.E, M.E.	Asst. Prof.	Computer integrated manufacturing	12.8	Nil
4	Saner Kapil Ashokrao	B.E, M.E.	Asst. Prof.	Machine Design	8	Nil
5	Yeole Sunil Vasudeo	B.E, M.E.	Asst. Prof.	Mechanical Engineering	11.8	Nil

6	Kumbhar Anil Hiralal	B.E, M.Tech.	Asst. Prof.	Heat Power and Thermal Engineering	8	Nil
7	Sarode Pravin Laxmanrao	B.E, M.E.	Asst. Prof.	Mechanical Design Engineering	14	Nil
8	Patil Pandit Subhash	B.E, M.E.	Asst. Prof.	Machine Design	9	Nil
9	Juned Ahmad Rafik Ahmad	B.E, M.E.	Asst. Prof.	General Mechanical	7	Nil
10	Badgujar Sachin Prabhakar	B.E, M.E.	Asst. Prof.	General Mechanical	6.8	Nil
11	Baviskar Pankaj Valmik	B.E, M.E.	Asst. Prof.	General Mechanical	5.11	Nil
12	Jamadar Pradip Darbarsing	B.E, M.E.	Asst. Prof.	General Mechanical	7.11	Nil
13	Patil Vijayendra Maharu	B.E, M.Tech.	Asst. Prof.	Heat Power and Thermal Engineering	8.2	Nil
14	Khatik Juber Ahamad Mo.Salim	B.E, M.E.	Asst. Prof.	General Mechanical	7.8	Nil
15	Patil Bhushan Youraj	B.E, M.Tech.	Asst. Prof.	Thermal System Design	5.8	Nil
16	Jadhav Vijay Bhimsing	B.E, M.E.	Asst. Prof.	General Mechanical	5.2	Nil
17	Patil Pradip Kailas	B.E, M.E.	Asst. Prof.	General Mechanical	7.11	Nil
18	Pathak Yogesh Raghunath	B.E, M.Tech.	Asst. Prof.	Turbomachines	4.8	Nil
19	Sandhanshi v Rahul Dilip	B.E, M.Tech.	Asst. Prof.	CAD/CAM	4.8	Nil
20	Deore Kailas Dhanraj	B.E, M.Tech.	Asst. Prof.	IPED	5.3	Nil
21	Patil Rajendra Arvindbhai	B.E, M.Tech.	Asst. Prof.	CAD/CAM	3.7	Nil
22	Patil Nilesh Arun	B.E, M.E.	Asst. Prof.	Thermal Engineering	4.7	Nil
23	Shinde Nilesh Mohan	B.E, M.E.	Asst. Prof.	Heat Power	3.7	Nil

24	Shinde Nitin Girdhar	B.E, M.E.	Asst. Prof.	Thermal Engineering	11	Nil
25	Ozarkar Rohan Rajendra	B.E, M.Tech.	Asst. Prof.	CAD/CAM	2.7	Nil
26	ChaudhariI Kiran Dinkar	BE	Asst. Prof.	Mechanical Engineering	8	Nil
27	Shaikh Sameer Ismail	B.E, MTech.	Asst. Prof.	Thermal Engineering	2	Nil
28	Sonawane Harish Balravi	B.E, MTech.	Asst. Prof.	Thermal Engineering	2	Nil
29	Pathak Pushkar Sharad	B.E, M.B.A.	Asst. Prof.	MBA	6	Nil
30	Parikh Ankit Shailesh	B.E, M.B.A.	Asst. Prof.	MBA	8	Nil
31	Kishor Pandurang Dshmukh	B.E, MTech.	Asst. Prof.	Heat Power	10	Nil
32	Chaudhari Rakesh Sharad	BE, ME	Asst. Prof.	CAD/CAM	20	Nil
33	Gupta Krishna Kumar	B.E., ME	Asst. Prof.	General Mechanical	21	Nil
34	Fegade Vishal Shaligram	B.E., ME	Asst. Prof.	General Mechanical	15	Nil
35	Chaurey Sudhir Bhagirath	AMIE (Mech), ME	Asst. Prof.	Turbomachines	15	Nil
36	Chittam Kavishwar Prabhakar	BE M.B.A.	Asst. Prof.	Mechanical Engineering	11	Nil
37	Salunke Rupesh Pitambar	BE, M.B.A.	Asst. Prof.	Mechanical Engineering	12	Nil
38	Shendge Dadasaheb Jagannath	BE, M.Tech,	Asst. Prof.	Aerospace Engineering	11	Nil
39	Badgujar dipak madhukar	BE, ME	Asst. Prof.	Mechanical Design Engineering	11	Nil
40	Sathe Manish Satish	BE, ME	Asst. Prof.	Heat Power	3.5	Nil

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty: Nil

13. Student - Teacher Ratio (program wise)

Year	Number of Student	Number of teachers	S T R
2016-17	540	38	1:14.21

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned: 00

filled: 05

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

	Ph.D	PG	UG	Total
No. of Faculty	00	39	01	40

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S N	Name of Funding Agency	No of Faculty	Sanction Year	Amount
1	RGSTE	2	2014-15	475000/-
1	VCRMS	2		1,40,000/-
2	UGC	3	2015 16	685000/-
2	VCRMS	1	2013-10	70,000/-
3	VCRMS	1	2016-17	1,15,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

CN	Name of Funding	No of	Sanction	Amount
SIN	Agency	Faculty	Year	Amount
1	AICTE (MODROB)	1	2011-12	9,50,000/-
2	RGSTC	2	2014-15	4,75,000/-
			TOTAL	14,25,000/-

18. Research Centre /facility recognized by the University: Nil

#### 19. Publications:

	Number of Publications in					
Year	National	International	National	International		
	Journal Journal		Conference	Conference		
2013-14	0	8	9	2		
2014-15	0	9	3	0		
2015-16	1	12	2	0		
2016-17	0	4	0	0		

#### **\*a)** Publication per faculty

Sr. No.	Name of the faculty	No. of Citations	h-Index Average	No of Books Published / Chapters In Book/ with ISBN
1	Prof. Salunke N.P.	11	2	0
2	Prof. Patil M. R.	2	1	1
3	Prof. Sarode P. L.	2	1	1
4	Prof. Patil P. S.	2	1	0
5	Prof. Juned A Rafik A	9	1	0
6	Prof. Patil Vijyendra	9	2	1
7	Prof. Pathak Y.R.	21	3	0
8	Prof. Kailas D Deore	6	1	0
9	Prof. Shinde Nilesh M	6	1	0
10	Prof. V B. Jadhav	0	0	2
11	Prof. P.V.Baviskar	0	0	2
12	Prof.H.K.Wagh	0	0	1
13	Prof. A.H.Kumbhar	0	0	1
14	Prof. S.P.Badgujar	0	0	1
15	Prof. K.A.Saner	0	0	1
16	Prof. P.D.Jamadar	0	0	1
17	Prof. P.K.Patil	0	0	1
18	Prof. N.A.Patil	0	0	1

#### 20. Areas of consultancy and income generated

Voor	Teaching	Software	Total	
I eal	Expertise	Training	TOTAL	
2015-16	86,200	5,32,000	6,18,200	
2014-15	40,000		40,000	
2013-14	38,880		38,880	

#### 21. Faculty as members in

	National	International	Editorial Boards
Reviver	0	0	1
Convener	1	0	0
Organizing Chairman	1	0	0
Coordinator	2	0	0
Member	0	15	0

#### 22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme: 100 %

#### 23. Awards / Recognitions received by faculty and students

Year	Participants	Event	Ward or Rank	Location	
2014 15		SAE Doio	Virtual round	Pithampur,	
2014-13		SAE Daja	v intuai rounu	Indore	
2015 16		M Rojo	68 <sup>th</sup> National	Pithampur,	
2013-10		IVI-Daja	Rank	Indore	
2015 16		TechFest	3rd position	IIT Romboy	
2013-10		Robo war	Sid position	III Bollibay	
2015 16		Robowar	3rd position	VIT DUNE	
2013-10		Melange	Sid position	VII PUNE	
2016 17	Student	E Baia	9 <sup>th</sup> National	Pithampur,	
2010-17	Student	E -Daja	rank	Indore	
2016-17		M Paia	68th National	Pithampur,	
2010-17		M-Daja	Rank	Indore	
2016-17		Maga ATV	8 <sup>th</sup> National	Abemadnagar	
2010-17		Mega AT V	Rank	Anemadinagai	
2016-17		Saksham	Rs. 25000	IIT Bombay	
2010-17		Saksham	Award	III Dombay	
2016-17		Transform	Rs. 3, 04,000	Gov. of	
2010-17		Maharashtra	Award	Maharashtra	
2016-17		FDP by IIT	Rs. 5000/- for 3	IIT Bombay	
2010-17	Faculty	Bombay	Faculties	III Dombay	
2015-16	Tacuny	Avishkar	Recognition	NMU Jalgaon	
2016-17		Avishkar	Recognition	NMU Jalgaon	

IIT Bombay organized a four Week AICTE approved MOOC based FDP on "Use of ICT in Education for Online and Blended Learning" under the Teach 10000 Teachers (T10KT) project. Out of 2200 participants who qualified for certification, 10 participants from the Institute were among the 383 Top Performers. They had an opportunity to participate in 24th International Conference on Computers in Education, ICCE 2016 organized by Asia Pacific Society for Computers in Education and IEEE Conference on Technology for Education. Faculty regularly participates in AVISHKAR competition at district, University and State level every year.

24.	List	of	eminent	academicians	and	scientists	/	visitors	to	the
dep	artm	ent								

Academicians	Scientists	Industrial/Others
Dr. Purnanand V. Bhale,	Dr. Ravindra Bankar,	Mr Shikshashtakam Das
Sadanand Namjoshi,		Mr. Sagar Patil,
B.Satyanarayana,		Mr. Pravin Bhamare,
Dr. S. A. Channiwala,		Mr. Akshay Shah,
Dr A.G.Chandak,		Chavan Charudatta,
Dr. R.K.Shriwastava		Mr.Nilesh Salgaonkar,
Dr.Hole J A		Mr.Abhay Chaudhary,
Dr A B Borada		Mr Dineshkumar Bhanudas
DI.A. D. Dolade		Patil,
		Mr.Sharma Dinesh K.,
		Mr. Rajesh Mandlik,
		Mr. Sarang Patil,
		Mr. Barkul Pavan A

#### 25. Seminars/ Conferences/Workshops organized & the source of funding

Туре	No of Seminar	No of Conferences	No of Workshop	
National	20	4	7	
International	Nil	Nil	Nil	
Source of Funding	Nil	Self-Finance	IIT Bombay,	

Nama of	Academi	Applicatio		Enro	lled	Pass
the Course	c Year	ns received	Selected	Male	Female	Percentag e
	2016-17	Admission	process	162	2	FE
UG	2015-16	is as per rules and		156	7	SE
Mechanical Engineering	2014-15	regulatio	ons of	171	13	TE
	2013-14	Technical I	or of Education	172	13	BE

#### 26. Student profile programme/course wise:

#### 27. Diversity of Students

Nome of the	Acadomia	Students	Students	Students
Course	Year	from the	from other	from
Course		same state	States	abroad
	2016-17	163	1	0
UG Mashariaal	2015-16	157	6	0
(Mechanical Engineering)	2014-15	171	7	0
Engineering)	2013-14	185	0	0

Academic Year	SC	OBC	ST	VJ-NT	SBC
2016-17	19	494	14	76	17
2015-16	23	438	11	66	13
2014-15	24	473	06	61	16
2013-14	19	401	07	44	12

<sup>28.</sup> How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

	2013-14	2014-15	2015-16	2016-17
GATE	6	1	2	0
CAT	NIL	NIL	NIL	NIL
GRE/TOEFL/IELTS	9	4	4	1

#### 29. Student progression

	Against %	Against %	Against %	Against %
Student progression	enrolled	enrolled (2015-	enrolled	enrolled
	(2016-17)	16)	(2014-15)	(2013-14)
UG to PG	0.9	2.4	7.5	11.1
PG to M.Phil.	NA	NA	NA	NA
PG to Ph.D.	NA	NA	NA	NA
Ph.D. to Post-Doctoral	NA	NA	NA	NA
Employed Campus selection	37.42	49.17	3.33	7.37
Employed Other than campus recruitment	17.03	20.83	16.67	29.47
Entrepreneurship/Self- employment	0%	0%	1.87	3.93

#### 30. Details of Infrastructural facilities

a) Library

	Title	Volume	Project Report
Central Library	1043	6775	251
Departmental library	119	231	251

Other Available Resources, Departmental Newsletters, B.E. Project Reports/CDs, E-Books/CDs, Question Papers, NPTEL video lectures

#### b) Internet facilities for Staff & Students

Name of Internet Provider: Available Bandwidth: 155 Mbps.

c) Class rooms with ICT facility & Laboratories: 7 ICT Based Class Rooms.

d) Laboratories: Total 10 Laboratories are available with all required equipment's

Lab No.	Designation	Name of Lab	Area in Sq. Meter
1	MEL1	Material Science & Metallurgy	120

2	MEL2	Refrigeration & Air Conditioning	94
3	MEL3	Heat Transfer	120
4	MEL4	Fluid Mechanics	80
5	MEL5	Turbomachninary	80
6	MEL6	Metrology & Quality Control	66
7	MEL7	ICE/AT	66
8	MEL8	CAD/CAM	121.6
9	MEL3	Theory of Machines	120
10	MEL2	Tribology	94

31. Number of students receiving financial assistance from college, university, government or other agencies

Academic Year	SC	OBC	ST	VJ-NT	SBC	RCP Momorial
						Wiemonai
2016-17	19	494	14	76	17	
2015-16	23	438	11	66	13	25
2014-15	24	473	06	61	16	23
2013-14	19	401	07	44	12	

32. Details on student enrichment programs (special lectures / workshops /seminar) with external experts

Year	Alumni Interaction	Expert Talk	Workshop
2013-14	2	1	Nil
2014-15	5	4	Nil
2015-16	7	2	1
2016-17	5	1	Nil

#### 33. Teaching methods adopted to improve student learning:

- 1. Project base Learning activity: By giving small projects to students to enhance their practical knowledge.
- 2. Topper Monitoring Activity: Discussion is made with topper students and solve their queries to optimize the university result and ranks.
- 3. Remedial Teaching: It is conducted for improvement of slow learner students which are not performing well in internal sessional examination.
- 4. High speed Internet facilities
- 5. Tutorial method: It is adopted for Numerical subjects.
- 6. Videos of eminent personalities from various fields are downloaded and shown to the students.
- 7. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons
- 8. Special skill enhancement for practical skills by allowing students to do experiments individually

# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The institute focuses on creating a sustainable environment in campus.

Activity	2016-17	2015-16	2014-15
Blood donation camps	2	2	2
Tree plantation	1	1	1
Gandhi Vichar Parishad Exam	1	1	1
Sarva Shiksha Abhiyan	1	1	1
Swachh Bharat Abhiyan	1	1	1
Seminar on Personality Development	1	1	1
Other Social Activities	1	1	1

**Tree Plantation**: Students every year carry out tree plantation in the campus as well as in the city area of Shirpur and over the year they have seen the campus and city going greener. Due to these activities students has become more aware about environment and social responsibilities.

**Sarva Shiksha Abhiyan**: Students given computer education and teach different skills to Village based school students under Sarva Shiksha Abhiyan. Because of that student realize the importance of good communication and knowledge of subject. Also they learn to interact at the level of the person in front of them. They also get knowledge to interact among different personals from various backgrounds. When our students visited Help for Physical Disability Person Help to dip & dumb students (For Food) they also learn to interact with people from all walks of life.

**Social Awareness:** When students do visits to different villages and in rural areas help them to empathize with the difficulties faced by people who may not be as fortunate as them. This makes them emotionally more sound and helps them put in their best

**Seminar on Personality Development:** Students along with staff members attended seminar on Personality Development ISKCON Youth forum. During this program students were able to understand how personality of human being is related with the inner consciousness of human being.

Students from our institute "Saksham Group" conducted Social Awareness about Hygiene among the pregnant women and children of the rural area. For this social work they received third price in IIT Bombay Students also participated in poster presentation program on woman's day.

#### 35. SWOC analysis of the department and Future plans

#### STRENGTHS

- 1. Employability development program to increase placement.
- 2. Motivated and Dedicated faculty having passion for teaching and selfdevelopment to improve quality of education.

- 3. Department have well equipped laboratories.
- 4. Consistently good examination results with 4Gold Medal's in last five years

#### WEAKNESSES

- 1. First generation learners.
- 2. Minimum no IPR activities
- 3. Consultancy, funded projects need to be enhanced

#### **OPPORTUNITIES**

- 1. Consultancy work
- 2. Can arrange training facilities.
- 3. Research grants from different funding agencies.

#### CHALLENGES

- 1. Maintaining the top position in University
- 2. Increase in campus placement
- <sup>3.</sup> Lack of attraction for technical education in rural area.

#### **FUTURE PLANS**

- 1. Focus on getting research grants from government bodies.
- 2. Increasing R&D and quality publications, Patents.

#### 3. Evaluative Report of the Electrical Engineering Department

1. Name of the department: Electrical Engineering

2. Year of Establishment : 2012

Year	Intake	Remarks
2012	60	Under graduate course in Electrical Engineering with intake 60

3. Names of Programmes /Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) – UG

Program of Study	Description
UG in Electrical Engineering	60

4. Names of Interdisciplinary courses and the departments / units involved

Courses offered	Name of Department	
Engineering Mathematics		
Engineering Physics		
Engineering Chemistry	First Year Engineering	
Environmental Studies		
Soft Skills		
Power Plant Engineering	Mechanical Engineering	
Elements of Civil Engineering &	Civil Engineering	
Engineering Mechanics		
Computer Programming	Computer Engineering	
Energy Resources and Technology	Mechanical Engineering	

5. Annual/semester/choice based credit system (programme wise): Semester

6. Participation of the department in the courses offered by other departments:

Courses offered				Name of Department	
Basic of Electrical Drives Control				Mechanical Engineering	
Elements	of	Electrical	&	Electronics	First Year Engineering
Engineering					

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Participation of National & Foreign University courses (MOOCs), CDEEP, QEEE courses, courses conducted by Industries:

S.N	Name of University / institute / foreign	No of courses completed
	institutions / Industry	by students
1	Add on Course	02
2	Soft Skill	03
3	QEEE	03
4	Independent Learning (MOOCs)	29
5	Expert Talk /Guest Lecture	09
6	Alumni Interaction	01

8. Details of courses/ programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts: 14 Posts

	Sanctioned	Filled
Professor	1	0
Associate Professor	3	1
Assistant Professor	9	13

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M.Phil. etc.,)

Name	Qualificatio	Designatio	Specialization	No. of	No. of Ph.D.
	n	n		Years	Students
				of	Guided for the
				Experie	Last 4 years
				nce	
Patil Vijay Shrinath	M.E	Associate	Digital	14	00
	Ph.D	Professor	Electronics		
	(Pursuing)				
Patil Bhushan	M.E	Assistant	Electrical	12	00
Prataprao		Professor	Power System		
Mahira Amit	M.Tech	Assistant	Digital	08	00
		Professor	Communicatio		
кајепога			n		

Seragi	M.E	Assistant	Digital	07	00
Sattyendrasing		Professor	Electronics		
Akashsing					
Patel Vinitkumar	M.E.	Assistant	Communicatio	08	00
Vasantbhai		Professor	n Engineering		
Nadaam Akhtar	M.E	Assistant	Electronics &	10	00
Divoz Ahmod		Professor	Telecommunic		
Kiyaz Annad			ation		
Kirange Vogesh	M.E	Assistant	Electrical	08	00
Kalidas		Professor	Machines and		
Kanuas			Drives		
	M. Tech	Assistant	Electronics	06	00
Bhoite Pankaj Anna		Professor	Communicatio		
			n		
Patil Rupesh	M. Tech	Assistant	Electrical	07	00
Shantaram		Professor	Power System		
Kankariya Rahul	M B A	Assistant	E&TC	06	00
Mistrilal		Professor			
			T ( 1	01	00
Pardeshi Sachin	M. Tech	Assistant	Integrated	01	00
Mukundsing		Professor	Power System		
Savais Sachin	M. Tech	Assistant	Power System	04	00
Vashawant		Professor			
Baruah Manash	BE	Assistant	E&TC	09	00
Joynath		Professor			
Patil Kamelsh	BE	Assistant	E&TC	10	00
Bhaskarrao		Professor			

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student-Teacher Ratio (programme wise) (SE to BE): UG-12.85:1

14. Number of academic support staff (technical) and administrative staff, sanctioned and filled

Sanctioned: 00

```
Filled: 02
```

15. Qualifications of teaching faculty with DSc / D.Litt / Ph.D / M.Phil / PG.

PhD	PG	UG	Total
00	12	02	14

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received- VCRMS

S.N	Name of the Funding agency	Year	Amount
1	Vice Chancellor Research Motivation Scheme	2014-15	0.7 Lakhs

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

S.N	Name of funding agency	Year	Amount
1	HRD Ministry / IIT Khargapur	2017-18	0.32 Lakhs

18. Research Centre / facility recognized by the University: Nil

19. Publications:

Number of papers published in peer reviewed journals (National / International):

Year	National	International	National	International	Total
	Journal	Journal	Conference	Conference	
2016-17	01	05	01	02	
2015-16				02	
2014-15					
2013-14					

\* Monographs - Nil

\* Chapter in Books - Nil

\* Books Edited - Nil

\* SNIP - Nil

\* SJR - Nil

\* Impact factor: Nil

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.)

Citation Index, h-index and books published

			Total	No of books published with
S.N	Name Teacher	h Index	No of	ISBN / ISSN
			Citation	
1	Patil Vijay Shrinath	01	01	00
2	Patel Vinitkumar	02	04	01 (ISBN:978-3-330-06254-2)
	Vasantbhai			
3	Mahire Amit Rajendra	01	02	01 (ISBN :978-3-659-87699-8)
4	Bhoite Pankaj Anna	01	03	01 (ISBN: 978-3-659-88866-3)
5	KirangeYogesh Kalidas	01	01	00
6	Nadeem Akhtar Riyaz	00	00	01 (ISBN:978-3-330-00805-2)
Ű	Ahmad	00	00	
7	Seragi Satyendrasing	01	01	01 (ISBN ·978-3-659-87699-8)
,	Akashsing		01	
8	Patil Rupesh Shantaram	00	00	01 (ISBN: 978-93-81188-44-6)

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees b) International Committees

c) Editorial Boards

Polo	National	International	Editorial Doorda*	
KOle	Committees*	Committees*	Eulional Boards	
Reviewer	00	01		
Convener	01			
Coordinator	01			
Organizing Chairman	01			

\* Count of no of faculty members worked in committees.

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:

S.N	No of Student	No of Faculty
1	05	Nil

24. List of eminent academicians and scientists / visitors to the department

CN	Academic	A	C - i - u t i - t -	Industrial	Alumni
5.IN	Year	Year Academicians Scientists		Person	Interaction
1	2016-17			04	01
2	2015-16			05	
3	2014-15				
4	2013-14				

List of Visitors:

S.N	Name of Expert	Topic of Information	Date
1	Ashok A More	Industrial Automation	3/1/2017
2	Swapnil Wankhede	Power Transmission (MAHATRANSCO)	5/1/2017
3	Pradeep Anvekar	Electrical Safety	12/1/2017
4	Aniket Badgujar	Industrial tools Application and Maintainence	25/01/2017
5	Anurag Morankar	Enterpreneurship & Panel Design	12/04/2017
6	Abhay B Chaudhary	Need of Plastic Industry	28/03/2016
7	Ashok A More	Automation	12/04/2016
8	Swapnil Wankhede	Power Transmission Process	13/4/2016
9	Nisharg Mistry	Scope of PLC/SCADA training course.	12/3/2016
10	Gaurav Vikhe	Variable Frequency Drives	21/4/2016

25. Seminars / Conferences /Workshops organized & the source of fundinga) National b) International

Event	No of event organized	Source of funding
Conference (National)	08	Self finance
Workshop	01	MHRD / IIT Khargapur

26. Student profile programme /course wise:

	Admission Proc				
Name of the Course	rules of I	DTE	Enro	lled	
Programme	Application	Selected			Pass
(Refer Question No.4)	Received		*M	*F	percenta
					ge
2016-17	Admission proces	ss is as per	47	8	FE
2015-16	rules and reg	gulations of	34	8	SE
2014-15	Directorate Techni	cal Education	45	12	TE
2013-14			48	9	BE

- \*M=Male \*F=Female
- 27. Diversity of Students

Name of the course			
	% of students	% of students from	% of students from
	from the	other States	abroad
	same state		
2016-17	100 %	Nil	Nil
2015-16	96.49 %	3.51 %	Nil
2014-15	100 %	Nil	Nil
2013-14	100 %	Nil	Nil

As per Category

Year	SC	ST	OBC	SBC	NT	Open
2016-17	14	03	131	10	26	31
2015-16	14	04	111	11	18	39
2014-15	09	03	86	10	13	24
2013-14	02	01	44	06	07	15

28. How many students have cleared national and state competitive examination such as NET, SLET, GATE, Civil services, Defense services, etc.? in Higher Education

Year	GATE	CAT	IBPS	GRE	TOEFL	UPSC	MPSC
2016-17	01	Nil	Nil	Nil	Nil	Nil	Nil

#### 29. Student progression

Student progression	Against %	Against %	Against %	Against %
	enrolled	enrolled	enrolled	enrolled
	(2016-17)-	(2015-16)	(2014-15)	(2013-14
UG to PG	Nil	Nil	Nil	Nil
PG to M.Phil.	Nil	Nil	Nil	Nil
PG to Ph.D.	Nil	Nil	Nil	Nil
Ph.D. to Post-Doctoral	Nil	Nil	Nil	Nil
Employed				
<ul> <li>Campus selection</li> </ul>	70.91 %	52 %	Nil	Nil
•Other than campus	3.64 %	10 %		
Entrepreneurship/Self	Nil	Nil	Nil	Nil
-employment				

#### 30. Details of Infrastructural facilities

a) Library

	No .of Titles	No. of Volumes	No. of Project Reports
Central Library	210	1751	Nil
Departmental Library	Nil	Nil	26

b) Internet facilities for Staff & Students: Institute has internet facility of 155 Mbps

c) Total number of classrooms: 03, 03 projectors and 03 A.C are available in the class rooms which are fixed. 01 Seminar hall.

d) Laboratories - Total 09 laboratories	s available with all rec	juired equipments.
---	--------------------------	--------------------

Lab No	Name of Laboratory	Area in sq.mt
EL-L1	Electrical Machines Lab	82.61
EL-L2	High Voltage Lab	80.43
EL-L3	Microprocessor and Power Electronics Lab	80.25

EL-L4	Electrical Engineering Material and ADE Lab	80.25
EEL-05	Control System & Project Lab	80.25
EL-L6	Computer Lab	80.25
EL-L7	Electrical Measurement & Network Analysis Lab	80.25
EL-L8	Industrial Drives & Control Lab	80.25
EL-L9	Power system & Switch Gear Protection Lab	80.25

31. Number of students receiving financial assistance from college, university, Government or other agencies

		Gove		College		
Year	SC	ST	OBC	SBC	NT	Scholarship
2016-17	14	03	131	10	26	09
2015-16	14	04	111	11	18	09
2014-15	09	03	86	10	13	06
2013-14	02	01	44	06	07	03

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Year	Alumni	Expert Talk/	QEEE	Add On	Soft skill
	Interaction	Guest Lecture			
2016-17	01	04	03	01	01
2015-16	00	05	00	01	01
2014-15	00	00	00	00	01

S.N	Name of Expert/Industrial Person	Topic of Information	Date
1	Ashok A More	Industrial Automation	3/1/2017
2	Swapnil Wankhede	Power Transmission (MAHATRANSCO)	5/1/2017
3	Pradeep Anvekar	Electrical Safety	12/1/2017
4	Aniket Badgujar	Industrial tools Application and Maintainence	25/01/2017

5	Anurag Morankar	Enterpreneurship & Panel Design	12/04/2017
6	Abhay B Chaudhary	Need of Plastic Industry	28/03/2016
7	Ashok A More	Automation	12/04/2016
8	Swapnil Wankhede	Power Transmission Process	13/4/2016
9	Nisharg Mistry	Scope of PLC/SCADA training course.	12/3/2016
10	Gaurav Vikhe	Variable Frequency Drives	21/4/2016

#### 33. Teaching methods adopted to improve student learning

- 1. Project based learning activity: By giving small minor projects to student to enhance their practical knowledge.
- 2. Toppers Monitoring activity: Discussion is made with topper students and solve their queries to optimize the university results and ranks.
- 3. Remedial teaching: It is conducted for improvement of slow learner students which are not performing well in internal sessional examination.
- 4. Think-pair-share activity: It is interactive session conducted for several subjects in the class.
- 5. High speed internet.
- 6. Tutorial methods: It is adopted for diagrammatic, mathematical subjects.
- 7. Videos of eminent personalities from various fields are downloaded and shown to the students.
- 8. College is having Virtual classroom facility to listen lectures delivered by the various recourse persons.
- 9. Special skill enhancement for practical skills by allowing students to do experiments individually.
- 10. Students are also acquainted with open courseware which is available on the Institutional website.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities
  - 1. Donation for welfare fund.
  - 2. Blood donation camps
  - 3. Tree plantation activity.
  - 4. Cleanliness drives etc.

#### 35. SWOC analysis of the department and Future plans

#### Strength

1) Employability development program to increase placements

- 2) Dedicated well qualified faculty with good retention.
- 3) Conducive environment for teaching learning.
- 4) Well-equipped laboratories.

#### Weaknesses

- 1) Located in rural area.
- 2) Less industrial exposure and placement.

#### **Opportunities**

- 1) Engineering and business consulting firms
- 2) MOU with Professional Bodies
- 3) Consultancy

#### Challenges

- 1. To make the students to stand out in the competitive world.
- 2. Improve communication skill among the students

#### Future plans of the department

- 1. To impart their practical knowledge to solve the problem of rural area
- 2. To be recognized as a center of excellence in Electrical Engineering.

#### 8. DECLARATION BY HEAD OF THE INSTITUTION



I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the institution with seal:

Place: Date:

### 9. CERTIFICATE OF COMPLIANCE

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<section-header><section-header><text><list-item><list-item><text><text><text></text></text></text></list-item></list-item></text></section-header></section-header>		7	outward No 72/RCP
<ul> <li>This is to certify that R C Patel Institute of Technology Shirpur fulfils all norms</li> <li>Stipulated by the North Maharashtra University, Jalgaon</li> <li>Regulatory Council/Body – All India Council for Technical Education</li> <li>The affiliation and recognition is valid till date.</li> <li>In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.</li> <li>It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.</li> <li>In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.</li> </ul>		of Compliance	Certifi
<ol> <li>Stipulated by the North Maharashtra University, Jalgaon</li> <li>Regulatory Council/Body – All India Council for Technical Education</li> <li>The affiliation and recognition is valid till date.</li> <li>In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.</li> <li>It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.</li> <li>In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.</li> </ol>		ute of Technology Shirpur fulfils all norms	This is to certify that R C Patel
<ol> <li>Regulatory Council/Body – All India Council for Technical Education</li> <li>The affiliation and recognition is valid till date.</li> <li>In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.</li> <li>It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.</li> <li>In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.</li> </ol>	•	University, Jalgaon	1. Stipulated by the North Mahar
<ol> <li>The affiliation and recognition is valid till date.</li> <li>In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.</li> <li>It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.</li> <li>In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.</li> </ol>		Council for Technical Education	2. Regulatory Council/Body – All
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to compliance of conditions by the institution will be sent. It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be. In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.		conditional, then a detailed enclosure with regard	In case the affiliation / recognit
It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be. In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.		stitution will be sent.	to compliance of conditions by
once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be. In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.		, if granted, shall stand cancelled automatically,	It is noted that NAAC's accred
In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.		sity affiliation or Recognition by the Regulatory	once the institution loses its Council, as the case may be.
accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.		by the institution is found to be false then the	In case the undertaking subn
	•	e to be withdrawn. It is also agreeable that the splayed on the college website.	accreditation given by NAAC i undertaking given to NAAC wil
th			
		- St	
Date: 30/03/2017 Principal/Head of the Institution		Principal/Head of the Institution	Date: 30/03/2017
Place: Shir pur Name and Signature with Office seal)		Name and Signature with Office seal)	Place: Shirpur
PRINCIPAL		PRINCIPAL	
R.C.Patel Institute of Technology,		R.C.Patel Insitilute of Technology,	
United of the second se		Grinpar (Bridic)	
SEAL 5		DEFICE I WIL	
		OFFICE ) E	

# **10. Annexures**

Ph. 23236351, 23232701, 23237721 23234116, 23235733, 23232317 23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges) UGC Website: <u>www.ugc.ac.in</u> F. No. 8-158/2010 (CPP-I/C)

The Registrar, North Maharashtra University, Umavinagar, Post Box 80, Jalgaon – 425 001, **Maharashtra.** 

ज्ञान-विज्ञान विमुक्तये SPEED POST विश्वविद्यालयं अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली-110 002 UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG

**NEW DELHI-110 002** 

March, 2011

## 1 4 MAR 2011

Sub: - Recognition of College under Section 2 (f) of the UGC Act, 1956.

Sir,

I am directed to refer to the letter No. 1218/2011 dated 15.02.2011 received from the Principal, The Shirpur Education Society's R. C. Patel Institute of Technology, Shirpur – 425 405, Tal: Shirpur, Dist: Dhule, (Maharashtra) on the above subject and to say that it is noted that the following college is **temporarily** affiliated to **North Maharashtra University**. I am further to say that the name of the following college has been included in the list of colleges prepared under Section 2 (f) of the UGC Act, 1956 under the head '**Non Government** Colleges teaching upto **Bachelor's** Degree':-

Name of the College	Year of Establishment	Remarks
The Shirpur Education Society's R. C. Patel Institute of Technology, Shirpur – 425 405, Tal: Shirpur, Dist: Dhule, (Maharashtra).	2001	The College does not fulfill the requirement of permanent affiliation. Therefore, the College is <b>not</b> eligible to receive Central assistance under Section 12 (B) of the UGC Act, 1956.

The Indemnity Bond and the other supporting documents submitted in respect of the above College have been accepted by the University Grants Commission.

Yours faithfully,

(Shashi Bala Arora) Under Secretary

#### Copy to:-

- 1. The Principal, The Shirpur Education Society's R. C. Patel Institute of Technology, Shirpur 425 405, Tal: Shirpur, Dist: Dhule, (Maharashtra).
- 2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi 110 001.
- 3. The Principal Secretary, Tech. & Higher Education Deptt., Government of Maharashtra, Mantralaya, Annexe Building, Mumbai 400 032, (Maharashtra).
- 4. The Deputy Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona 411 007, (Maharashtra).
- 5. Publication Officer (UGC-Website), New Delhi.
- 6. Section Officer (FD-III Section), UGC, New Delhi
- 7. All Sections, UGC, New Delhi.
- 8. Guard file.

good to make the reserve bage Hrpur Dist-Ohute IM 5 1 180m No. 314fampatives on 21-3-1 Carl Carl Constant Constant

Spilet (Sunita Gulati) Section Officer

Ph. 23236351, 23232701, 23237721 23234116, 23235733, 23232317 23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges) UGC Website: <u>www.ugc.ac.in</u> F. No. 8-158/2010 (CPP-I/C)

The Registrar, North Maharashtra University P.B. No. 80, Umavinagar Jalgaon – 425 001 **Maharashtra** 



विश्वविद्यालय अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली-110 002 UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI-110 002

December, 2012

## 1 5 JAN 2013

Sub: - Declaring a College fit to receive Central Assistance under Section 12 (B) of the UGC Act, 1956.

Sir,

I am directed to refer to the letter No. 411/2012 dated 10.10.2012 received from the Principal, The Shirpur Education Society's R.C. Patel Institute of Technology, Shirpur – 425 405, Tal – Shirpur, Dist. Dhule, Maharashtra on the above subject and to say that it is noted that the following college is **un-aided/self financed** and **permanently** affiliated to **North Maharashtra University**. <u>The college is already included under Section 2 (f) of the UGC Act, 1956 vide this office letter of even No. dated 14.03.2011.</u> I am further to say that the name of the following college has been included in the list of colleges prepared under Section 12 (B) of the UGC Act, 1956 under the head '**Non-Government, self financed** Colleges teaching upto **Bachelor's** Degree':-

Name of the College	Year of Establishment	Remarks
The Shirpur Education Society's R.C. Patel Institute of Technology, Shirpur – 425 405, Tal – Shirpur, Dist. Dhule, Maharashtra.	2001	As the College is charging fee as per State/University norms and a certificate in this regard has been received in UGC. The College would also be eligible to get grant for all UGC schemes related to teachers and students only as per the decision of the Commission dated 8 <sup>th</sup> July 2011.

The documents submitted in respect of the above College have been accepted by the University Grants Commission.

a O Datel Institute of Technolog	У
R.C.Pater Institute Dhuse (M.S.)	1
Shapur Last States 821113	
Inward No.	
Received Date	
Received Sign	

Yours faithfully,

(Raksha Pahwa) Under Secretary

Copy to:-

1. The Principal, The Shirpur Education Society's R.C. Patel Institute of Technology, Shirpur – 425 405, Tal – Shirpur, Dist. Dhule, Maharashtra.

- 2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi 110 001.
- 3. The Principal Secretary, Tech. & Higher Education Department, Government of Maharashtra, Mantralaya, Annexe Building, Mumbai 400 032 (Maharashtra).
- 4. The Deputy Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona 411 007, (Maharashtra).
- 5. Publication Officer (Website-UGC), New Delhi.
- 6. Section Officer (F.D.-III Section) U.G.C., New Delhi.
- 7. Guard file.

(Sunita Gulati) Section Officer

To -

# अपित महस्तर का एक जन्म संस्थान) (१ ५१० जन्म вору оf THE GOVERNMENT OF INDIA)

F.No.: 740-89-043(NDEG)/ET/2001 Date : 28.06.2001

The Secretary Higher & Technical Education & Employment Department. Govt. of Maharashtra Mantralaya, Mumbai - 400 032.

**Guard** File

Sub: AICTE approval to THE SHIRPUR EDUCATION SOCIETY SUBHASH COLONY, SHIRPUR (DHULE) MAHARASHTRA - 425 405 for establishment of R.C. PATEL INSTITUTE OF TECHNOLOGY KARWAND NAKA, SHIR PUR SHAHSDA ROAD, SHIRPUR- 425 405 MAHARASHTRA

I am directed to state that based on the consultations with the concerned State Govt., the concerned affiliating body and on recommendations of the Regional Committee, the Expert Committee constituted by the Council and as per the provisions of AICTE Act and Regulations, the All India Council for Technical Education (AICTE), is pleased to accord approval to THE SHIRPUR EDUCATION SOCIETY SUBHASH COLONY, SHIRPUR (DHULE) MAHARASHTRA - 425 405 for establishment of R.C. PATEL INSTITUTE OF TECHNOLOGY KARWAND NAKA, SHIR PUR SHAHSDA ROAD, SHIRPUR- 425 405 MAHARASHTRA for the academic year2001-02, for course(s) and intake as given below with specific condition that admission shall be made through the Central Counseling by the Government of Maharashtra only. This approval is valid only for the academic years 2001-2002 and cannot be extended for the next year 2002-2003. In the event the establishment of the institutions having not been operationalised, this approval is not valid unless AICTE specifically revalidates.

COURSE(S)	INTAKE	LEVEL	DURATION (YEARS)	PERIOD OF APPROVAL
THE REAL PROVIDE OF A	60	Degree	4	2001-02
INFORMATION TECHNOLOGY	60.	Degree	4	2001-02
ELECTRONICS & TELECOMM. ENGINEERING	60.	Degree	4	2001-02

This approval has been accorded subject to fulfillment of general conditions and as per the Norms and Standards of the AICTE, and also specific conditions (if any, given).

The attention of the management is drawn to the fact that the approval given now is only for one academic session before the end of which an expert committee shall visit to assess if the norms and standards as stipulated by AICTE are fulfilled, and only then will the continuation or otherwise shall be intimated.

The admission will be made in accordance with Regulations notified by the AICTE vide GSR 476(E) dated 20.05.1994 based on the Hon'ble Supreme Court Judgement dated 04.02.1993 with regard to WP(C) No. 607 of 1992 in the case of Unni Krishanan JP and other etc. V/s. State Government of Andhra Pradesh and others etc. and later judgements. No Management/Institute/Trust or Society shall announce admissions directly under etc. and later judgements. No Management/Institute contrary to any provisions laid down by the Council and any circumstances. Any action by the institute contrary to any provisions laid down by the Council and Concerned State Government shall make it liable for actions.

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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

F.No. Western/1-2809659212/2016/EOA

Date: 30-Apr-2016

To,

The Secretary, Tech. & Higher Education Deptt. Govt. of Maharashta, Mantralaya, Annexe Building, Mumbai-400032

#### Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

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

Regional Office	Western	Application Id	1-2809659212
Name of the Institute	R. C. PATEL INSTITUTE OF TECHNOLOGY	Permanent Id	1-14601229
Name of the Society/Trust	THE SHIRPUR EDUCATION SOCIETY, SHIRPUR	Institute Address	NEAR NIMZARI NAKA,SHAHADA ROAD, SHIRPUR, SHIRPUR, DHULE, Maharashtra, 425405
Institute Type	Unaided - Private	Society/Trust Address	SUBHASH COLONY,SHIRPUR,DHULE,Maharashtra,425405

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Program	-2809659	Level	Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaborarion/Twining Program Approval status
ENGINEERIN G AND TECHNOLO GY	1st Shift	POS T GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	24	24	NA	NA	NA



#### 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

ENGINEERIN G AND TECHNOLO GY	1st Shift	POS T GRA DUA TE	ELECTRONICS & TELE- COMMUNICATI ON ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	24	24	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	CIVIL ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	60	60	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	COMPUTER ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	120	120	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	ELECTRICAL ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	60	60	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	ELECTRONICS & TELE- COMMUNICATI ON ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	120	120	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	INFORMATION TECHNOLOGY	FULL TIME	North Maharashtra University, Jalgaon	60	60	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	1st Shift	UND ER GRA DUA TE	MECHANICAL ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	120	120	NA	NA	NA
ENGINEERIN G AND TECHNOLO GY	2nd Shift	UND ER GRA DUA TE	MECHANICAL ENGINEERING	FULL TIME	North Maharashtra University, Jalgaon	60	60	NA	NA	NA

The above mentioned approval is subject to the condition that R. C. PATEL INSTITUTE OF TECHNOLOGY 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.

Course(s) Applied for Closure by the Institute for the AY 2016-17:

Application Id: 1	-2809659	9212	Name of the Course	Full/Part Time	Affiliating Body	Course Closure Status
Program	Shift	Level				



#### 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

ENGINEE RING AND TECHNOL OGY	1st Shift	POST GRADUAT E	MECHANICAL ENGINEERING : (Last Approved Intake 18)	FULL TIME	North Maharashtra University, Jalgaon	Approved
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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.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/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.

#### Note: Validity of the course details may be verified at www.aicte-india.org

Prof. Alok Prakash Mittal Member Secretary, AICTE

Copy to:

- 1. The Regional Officer,
  - All India Council for Technical Education Industrial Assurance Building 2nd Floor, Nariman Road Mumbai - 400 020, Maharashtra
- 2. The Director Of Technical Education, Maharashtra
- 3. The Registrar, North Maharashtra University, Jalgaon
- 4. The Principal / Director, R. C. PATEL INSTITUTE OF TECHNOLOGY NEAR NIMZARI NAKA,SHAHADA ROAD, SHIRPUR, SHIRPUR,DHULE, Maharashtra,425405
- The Secretary / Chairman, THE SHIRPUR EDUCATION SOCIETY, SHIRPUR SUBHASH COLONY, SHIRPUR, DHULE, Maharashtra, 425405
- 6. Guard File(AICTE)

" अंतरी पेटवू ज्ञानज्योत "



## उत्तर महाराष्ट्र विद्यापीठ, जळगांव

जा.क.:- उमबि/५-ए./धु.७३/२८९२/२००५

दिनांक:- १४/८/२००१

प्रति. मा. अध्यक्ष. शिरपुर एज्युकेशन सोसायटी, शिरपूर.

विषय: - शैक्षणिक वर्ष २००१ - २००२ पासून शिरपूर येथे आर. सी.पटेल इन्स्टिटयूट

ऑफ टेक्नॉलॉजी सुरू करण्यास विद्यापीठाची संलयता मिळणेवावत.

संदर्भ:- १) अखिल भारतीय तंत्र शिक्षण परिषद, नवी दिली यांचे पत्र क. ७४०-८९-

083 (NDEG)/ET/2001, दि. २८/६/२००१

२) शासन निर्णय क. पीइंसी/२००१/(३५३/०१), तांशि-१, दि.३० जून २००१

महोदय,

आपल्या संस्थेस शिषपूर येथे आर. सी.पटेल इन्स्टिटयूट ऑफ टेक्नॉलॉजी सुरू करण्यास अखिल भारतीय तंत्र शिक्षण परिषद, नवी दिल्ली व महाराष्ट्र शासनाने अनुक्रमे संवर्भ क. १ व २ अन्वये दिलेल्या मान्यतंच्या अनुर्षगाने विद्यापीठाची संलग्नसा देण्यासंदर्भांत तपासणी करून अहवाल सादर करण्यासाठी विद्यापीठाद्वारा नियुक्त केलेल्या स्थानिक नौकशी समितीच्या अहवालास मा. कुलगुरुंनी, विद्या परिषदेच्या वतीने दिलेल्या मान्यतेस अनुसरून, प्राप्त आदेशावरून आपणास कळविण्यात येते की, आपल्या संस्थेस सोबत जोडलेल्या स्थानिक चौकशी समितीच्या अहवालात नमूद केलेल्या अटींची /तुटींची तसेच संदर्भिय पत्रामध्ये नमूद केलेल्या अटींची पूर्तता करण्याच्या अटींवर शेक्षणिक वर्ष २००१ -२००२ पासून खालील अभियांत्रिकी पदवी अभ्यासक्रमासह आर. सी.पटेल इन्स्टिटयूट ऑफ टेक्नॉलॉजी सुरू करण्यास नहाराष्ट्र विद्यापीठ अधिनियम १९९४ च्या कलम ८३ (४) नुसार संलग्नीकरण देण्यात येत आहे. सदर मान्यता एक वर्षाकरिता राहील व सदर मान्यतेचे वेलोवेली नूतनीकरण करणे आवश्यक राहील याची कृपया नोंद घ्यावी ही विनंती.

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(कृपया पुढील पानावर पहावे)

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he Shirpur Education Society Shirpu Inward No 110/2001-02 2318/2eu

तसेच वेळोवेळी निर्गमित होणारे शासन नियम, महाराष्ट्र विद्यापीठ अधिनियम १९९४ मधील तरतुर्वीचे व उत्तर महाराष्ट्र विद्यापीठाच्या नियमांचे पालन करणे बंधनकारक राहिल.

- 2 -

तनार महातालु विकास दि, जलमा होळक

सोबत: - स्थानिक चौकशी समितीच्या अहवालाची प्रत.

जप कुलसचिव(संलग्रता)

SPITE WITH

(डॉ. सं.नि. देसाई)

आपला विश्वास.

## प्रत माहिती तथा आवश्यक त्या कार्यवाहीसाठी सादर :-

- भा. अवर सचिव, महाराष्ट्र शासन, उच्च व तंत्रशिक्षण विभाग, मंत्रालय विस्तार, भवन, मुंबई-३२.
- २) मा. संचालक, तंत्र शिक्षण, तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य, ३ महापालिका मार्ग पत्र पेटी क्र. १९६७, मुंबई-१.
- ३) मा. सहसंचालक, तेत्र शिक्षण, महाराष्ट्र राज्य, विभागीय कार्यालय, नवीन शासकीय तंत्रनिकेतन परिसर, पोष्ट बॉक्स नं. २९९, सामनगाव रोड, नाशिक रोड, नाशिक.

तः ४) विद्यापीठातील सर्व मा.विभाग प्रमुख.

cck3doc-41

वितायीत्वयी स्वा स्वायतात्वा का साथां करने स्वा प्राप्त क्यायावादी वेगापीसाइस वेसूत कलेल्या नेवरां वितिशीस्वा अन्द्र आस रा दलपल्ली दि । परि तन्त वदी दि रिन्स मान्यले वन् सन्द, पांठ आने अच्छान स्वावंतवता कर के साम्हा करेवा पर्यंत को मांचा म्यां के रायं । परि नेव के साथ के सिन, पांठ आने अदीयी ( त्वीयों लर्क्स ग्वीपींव प्राप्ता के स्वाय प्राप्ता के रायं । परि नेव के साथ यां वित् **नेव** अदीयी ( त्वीयों लर्क्स ग्वीपींव प्राप्ता के स्वाय प्राप्ता के स्वाय के साथ के स्वार्य के स्वाय अदीयी ( त्वीयों लर्क्स ग्वीपींव प्राप्ता के स्वाय के स्वाय प्राप्ता के स्वाय के साथ के स्वाय अदीयी ( त्वीयों लर्क्स ग्वीपींव प्राप्ता के स्वाय के साथ के साथ स्वार्य के स्वाय के स्वायित वर्ष 2 के व्य प्राप्ता के स्वाय ग्वीपींव प्राप्ता के स्वाय के स्वाय के साथ स्वाय के स्वाय के स्वाय के स्वाय स्वाय है कि स्वाय स्वाय स्वाय के साथ के साथ स्वाय के स्वाय के साथ स्वाय के स्वाय के स्वाय स्वाय स्वाय है कि स्वाय स्वाय के साथ के साथ के साथ स्वाय के स्वाय के स्वाय के स्वाय स्वाय के स्वाय स्वाय का स्वाय होत्र सिंव स्वाय स्वाय के स्वाय साथ के स्वाय के स्वाय स्वाय के साथ स्वाय के स्वाय स्वाय स्वाय का के स्वाय स्वाय के स्वाय साथ के साथ के साथ साथ के साथ साथ ने स्वाय के स्वाय साथ के स्वाय की सिन्ही

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# Ref. No.: NMU/5A/DHU.73/2892/2001

# Date: 14/08/2001

To, The President, The Shirpur Education Society, Shirpur.

Sub:Regarding an affiliation with the university to commence R.C. Patel Institute of<br/>Technology at Shirpur from academic year 2001-2002

**Ref:** 1) The letter no. 740-89-043(NDEG/ET2001) from All India Council of Technical Education, New Delhi, Dated28/06/2001.

# 2) GR no. PEC/2001/(353/01), Tech. Edu.-01, Dated 30/06/2001.

Sir/Madam,

With respect of above mentioned Ref. Letters 1&2 that is respectively approval from AICTE, New Delhi and Government of Maharashtra for the commencement of your R. C. Patel Institute of Technology at Shirpur, for offering the affiliation with the University, approval by the hon. Vice Chancellor to the report of the appointed Local Inquiry Committee for the inquiry, with respect of received orders as per the approval by the Academic Council, you are hereby informed that from the academic year 2001-2002 the affiliation is offered to the R. C. Patel Institute of Technology with following mentioned degree courses under the Maharashtra University Act 1994, Article 83(4) with respect of mentioned deficiencies/conditions in attached report of Local Inquiry Committee and on condition to fulfill the same mentioned in the reference letter.

Kindly note that the said approval will be valid for year only and time to time continuation of the respective affiliation will be mandatory.

Sr. No.	Course	Intake Capacity
1	Information Technology	60
2	Computer Engineering	60
3	Electronics & Telecommunication Engineering	60
		(PTO)

It will be mandatory to follow the Government rule issued timely, provisions in the Maharashtra University Act 1994 and rules and regulations of North Maharashtra University, Jalgaon.




## Yours faithfully,

(Dr. S.N Desai)

The Dy. Registrar.

Enclosures: A copy of Local Inquiry Committee report.

Copy for acknowledgement & further proceedings

- 1) Hon Upper Secretary, Government of Maharashtra Higher and Technical Education, Ministry Expansion Building, Mumbai-32
- 2) Hon. Director, Technical Education, Directorate of Technical Education, Government of Maharashtra -3, Mahapalika Marg, P.O. Box no. 1967, Mumbai-1
- 3) Hon. Joint Director, Technical Education, Regional Office, New Polytechnic building, P.B.

No. 219, Samangaon Road, Nashik Road, Nashik.

4) All the respected Heads of Departments in the University.



4



![](_page_433_Picture_0.jpeg)

(NAAC Re-Accredited)

|| अंतरी पेटवू ज्ञााज्योत ||

उत्तर महाराष्ट्र विद्यापीठ, जळगांव- ४२५००१

NORTH MAHARASHTRA UNIVERSITY, JALGAON- 425001

P.B.NO. 80, UMAVI NAGAR, JALGAON - 425 001 (M.S.)

उमवि/५/टे.क.८/ ४५९ /२०१२

प्रति,

मा. प्राचार्य, दि. शिरपुर एज्यु. सोसा.चे,

आर.सी. पटेल इन्स्टि. ऑफ टेक्नॉ.,

शिरपूर, जि. धुळे

विषयः- शैक्षणिक वर्ष २०१२-१३ पासून अभियांत्रिकी पदवी अभ्यासक्रमाच्या कायम संलग्नीकरणाबाबत..

- संदर्भ:- १) आपले पत्र क्र. ४३/२०११, दि.०३ मे, २०११
  - २) विद्यापीठ पत्र क्र.उमवि/५/कायम संलगीकरण-स्था.चौ.स.टे.क्र.८/१३०३/२०११,दि.०५/०९/११
  - ३) विद्यापीठ पत्र क्र. उमवि/५/ ३६९/२०१२, दि.११/०४/२०१२
  - ४) आपले पत्र क्र.१४८/२०१२, दि.०३ मे, २०१२
  - ५) विद्यापीठ पत्र क्र. उमवि/५/टे.क्र.८/४०१/२०१२, दि.०४/०५/२०१२

महोदय,

उपरोक्त संदर्भिय पत्र क्र. १ अन्वये शै. वर्ष २०१०-११ पासून कायम संलगीकरणाबाबत प्राप्त झालेत्या प्रस्तावाच्या अनुषंगाने आपल्या महाविद्यालयाची तपासणी करून अहवाल सादर करणेसाठी विद्यापीठ पत्र क्र. २ अन्वये स्थानिक चौकशी समिती नियुक्त करण्यात आली होती. सदर समितीचा अहवाल प्राप्त झाल्यानंतर दि. २८ फेब्रु., २०१२ रोजी झालेल्या मा. विद्या परिषदेच्या सभेत सदरचा अहवाल विचारार्थ ठेवण्यात आला असता ठराव क्र. वि.प.बी.- ५७/२०१२ च्या निर्णयानुसार आपल्या महाविद्यालयास संदर्भिय पत्र क्र. ३ अन्वये अटीपूर्तता अहवाल सादर करण्यास कळविण्यात आलेले होते. त्यानुसार आपण संदर्भिय पत्र क्र. ४ नुसार पूर्तता अहवाल सादर केला असून सदर अहवालाची पडताळणी करणेसाठी संदर्भिय पत्र क्र. ५ अन्वये पडताळणी समिती गठीत करण्यात आली होती. सदर समितीने, महाविद्यालयाने सादर केलेल्या अटीपूर्ततेच्या अहवालाची पडताळणी करून विद्यापीठास सादर केलेल्या शिफारशीचा पडताळणी अहवालावर प्राप्त झालेल्या आदेशानुसार आपणांस कळविण्यात येते की, आपल्या महाविद्यालयाच्या खालील अभियांत्रिकी पदवी अभ्यासक्रमांस कायम संलग्नीकरण मान्य करण्यात आलेले असून महाराप्ट्र विद्यापीठे अधिनियम, १९९४ चे कलम ८८ नुसार शैक्षणिक वर्ष २०१२ - १३ पासून खालील अभ्यासक्रमाच्या कायम संलग्नीकरणास मान्यता देण्यात येत आहे.

Sr.No.	Branch/ Subject	Intake
1.	Computer Engineering (UG)	६०
2.	Electronics & Telecommunication Engineering (UG)	१२०
3.	Information Technology (UG)	६०
4.	Mechnical Engineering (UG)	६०

तसेच उपरोक्त अभ्यासक्रमासाठी दरवर्षी वार्षिक संलगता शुल्क भरणे आवश्यक आहे. याची कृपया नोंद घ्यावी ही विनंती.

म. कळावे,

आपला सेहांकित,

दि. ०७/०६/२०१२

अग्नि (प्रा.डॉ. डी.जी. हुंडीवाले) संचालक, बी.सी.यु.डी.

सोबत:- पडताळणी समितीचा अहवालाची झेरॉक्स प्रत.

प्रत माहिती तथा आवश्यक त्या कार्यवाहीसाठी सादर:-

1) मा. अवर सचिव, उच्च व तंत्र शिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई-32.

2) मा.संचालक,तंत्र शिक्षण, तंत्रशिक्षण संचालनालय, महाराष्ट्र राज्य,3 महापालीका मार्ग,पत्रपेटी क्र.1967, मुंबई-1.

3) मा.सहसंचालक,तंत्र शिक्षण,तंत्र शिक्षण संचालनालय,सामनगांव रोड,पो.बॉ.नं.219,ाविा शासकिय तंत्रनिकेतन आवार, नाशिक

४) मा. परीक्षा नियंत्रक, उ.म.वि., जळगाव.

5) मा.पध्दती विश्लेषक,संगणक विभाग,उमवि,जळगांव.

PHONE: (0257) 2257223, 2257255 Web Site : <u>www.nmu.ac.in</u> D:\CCK Letter & Other\Engg. Letter.doc

Fax No. : (0257) 2258403/406 E-mail: so-affilliation@nmu.ac.in

#### PERMANENT AFFILIATION

NMU/5/T.N.8/459/2012 To,

The Principal, The Shirpur Education Society's R. C. Patel Institute of Technology, Shirpur, Dist. Dhule.

Sub. – Regarding permanent Affiliation for Technical Degree Courses from Academic Year 2012-13.

1) Your letter No. 43/2011, Dated – May 03 2011

2) University Letter No. NMU/5/Permanent Affiliation

3) University Letter No. NMU/5/369/2012 Dated – April 11, 2012

4) Your Letter No. 148/2012 Dated – May 03, 2012

5) University Letter No. NMU/5/ TE.No.8/401/2012 Dated – May 04, 2012

Sir/Madam,

Ref. -

With reference to above letter No. 1, we have received a proposal regarding a permanent affiliation from academic year 2010-2011. In accordance to that the Local Inquiry Committee was formed to complete inspection of your respective college as per reference letter no. 2. After receiving the report of concerned committee, it was put for consideration and discussion in front of the Academic Council meeting on Feb. 28, 2012. You were informed to submit compliance report as per the resolution no. VPV – 57/2012 as per reference letter no. 3. So, in accordance with reference letter no. 4, you had submitted a compliance report. For the verification of above report, as per reference letter no. 5, the Verification Committee was formed. In accordance with orders received on the basis of recommendations by the report of verification committee, you are hereby informed that the following degree courses run by your college are approved for the permanent affiliation, from academic year 2012-2013, as per University Act 1994, Article No. 88, the permanent affiliation of following degree courses has been approved.

Sr. No.	BRANCH / SUBJECT	INTAKE	
1	Computer Engineering (UG)	60	
2	Electronics & Telecommunication Engineering (UG)	120	
3	Information Technology (UG)	60	
4	Mechanical Engineering (UG)	60	

Please kindly note that it is necessary to pay annual affiliation fee for above mentioned degree courses.

Yours faithfully,

Date: 07/06/2012

Dr. D. G. Hundiwale Director, BCUD, NMU, Jalgaon.

Enclosures: Chart including continuation of affiliation / natural growth for the academic year 2016-17. Copy for acknowledgement & further proceedings

1) Hon. Upper Secretary, Government of Maharashtra Higher & Technical education, Ministry

- -
- Hon. Director, Technical Education, Directorate of Technical Education, Government of Maharashtra
   Mahapalika Marg, post box no. 1967 mumbai-1
- 3) Hon. Joint Director, Technical Education, Regional Office, New Polytechnic Building, P.B.No. 219, Samangaon Road, Nashik Road, Nashik
- 4) Hon. Controller of Examination, NMU, Jalgaon

expansion building, Mumbai-32

5) Hon. System Analyst, Computer Section, NMU, Jalgaon.

R.C.Patel Institute Of Technology Shirpur Cist Dhule

![](_page_434_Picture_23.jpeg)

![](_page_435_Picture_2.jpeg)

जा.क्र.उमवि/५/नुतनी/नै.वि.२०१६-१७/ डी.ओ. 8 / 142 /२०१६

दिनांक : 20-05-2016

प्रति,

मा. प्राचार्य/मा.संचालक दि. शिरपूर एज्युकेशन सोसायटीचे आर.सी.पटेल इंस्टिटयूट ऑफ़ टेक्नॉलॉजी शिरपुर जिल्हा धुळे ता. शिरपुर जि. धुळे

विषय :- शैक्षणिक वर्ष २०१६-१७ करिता संलग्नीकरणाचे नुतनीकरण / नैसर्गिक विस्ताराच्या मान्यतेबाबत

संदर्भ :- १) आपल्या महाविद्यालयाने / परिसंस्थेने शैक्षणिक वर्ष २०१६-१७ करिता संलग्नीकरणाचे नुतनीकरणासाठी / नैसर्गिक विस्तारासाठी [Continuation of Affiliation / Natural Growth] माहे, ऑक्टोबर २०१५ मध्ये सादर केलेला प्रस्ताव

२) विद्यापीठाद्वारे दि. 29-01-2016 रोजी नियुक्त करण्यांत आलेली स्थानिक चौकशी समिती

३) मा. विद्या परिषदेचा ठराव क्रमांक वि.प.ए-१५/२०१६ दिनांक १३.०४.२०१६

महोदय /महोदया,

शैक्षणिक वर्ष २०१६-१७ करिता संलग्नीकरणाच्या नुतनीकरणास / नैसर्गिक विस्तारास मान्यता मिळणेकरिता आपण विद्यापीठास संदर्भिय पत्र क्रमांक ०१ नुसार सादर केलेल्या प्रस्तावाच्या अनुषंगाने आपल्या महाविद्यालयासंदर्भात/मान्यताप्राप्त परिसंस्थेसंदर्भात तपासणी करून अहवाल सादर करण्यासाठी विद्यापीठाद्वारे संदर्भिय पत्र क्रमांक ०२ अन्वये स्थानिक चौकशी समितीची नियुक्त करण्यांत आली होती.

सदर स्थानिक चौकशी समितीने आपल्या महाविद्यालयास/मान्यताप्राप्त परिसंस्थेस भेट देवून विद्यापीठास सादर केलेला अहवालाची, प्राप्त आदेशान्वये, विशेष समितीमार्फत छाननी करण्यांत येऊन छाननी समितीचा अहवाल आणि सदर समितीने केलेल्या शिफारशी दिनांक १३.०४.२०१६ संपन्न झालेल्या मा.विद्या परिषदेच्या सभेत विचारार्थ ठेवण्यात आला असता मा.विद्या परिषदेने ठराव क्र. वि.प.ए-१५/२०१६ दिनांक १३.०४.२०१६ अन्वये घेतलेल्या निर्णयाच्या अनुषंगाने, सोबतच्या तक्त्यात नमूद केलेल्या विषय/ अभ्यासक्रमाच्या संलग्नीकरणाच्या नुतनीकरणास/ नैसर्गिक विस्तारास [ Continuation of Affiliation / Natural Growth ] त्यासमोर दर्शविलेल्या कालावधीकरिता, महाराष्ट्र विद्यापीठे अधिनियम, १९९४ चे कलम ८३(४) नुसार मान्यता देण्यांत येत आहे.

आपल्या महाविद्यालयास/मान्यताप्राप्त परिसंस्थेस देण्यांत येत असलेली मान्यता ही फक्त एका शैक्षणिक वर्षाकरिता म्हणजेच, शैक्षणिक वर्ष २०१६-१७ करिता देण्यांत येत असून सदर मान्यतेचे वेळोवेळी नुतनीकरण करणे आपणांस बंधनकारक राहील.

तरी उपरोक्तबाबत योग्य ती कार्यवाही करण्यांत यावी, हि विनंती.

म.कळावे,

आपला विश्वासू,

(ग. ना. पवार ) उपकुलसचिव, बीसीयुडी, उमवि, जळगांव सोबत :- शैक्षणिक वर्ष २०१६-१७ करिता नुतनीकरण / नैसर्गिक विस्ताराचा तक्ता.

प्रत माहितीस्तव तथा पुढील कार्यवाहीस्तव :-

१) मा. अवर सचिव, महाराष्ट्र शासन, उच्च व तंत्र शिक्षण विभाग, मंत्रालय विस्तार भवन, मुंबई-३२

२) मा. शिक्षण संचालक,तंत्र शिक्षण, तंत्र शिक्षण संचालनालय, महाराष्ट्र राज्य, ३, महापालिका मार्ग, पत्रपेटी क्रमांक १९६७, मुंबई - १

३) मा. सहसंचालक, तंत्र शिक्षण, विभागीय कार्यालय, नविन शासकीय तंत्र निकेतन परिसर, पो.बॉ.क्र.२१९, सामनगांव रोड, नाशिक रोड, नाशिक

४) मा. परीक्षा नियंत्रक, उ.म.वि., जळगांव.

५) मा. पद्धती विश्लेषक, संगणक विभाग, उ.म.वि., जळगांव

६) मा. उप/सहा. कुलसचिव, संबंधीत विद्याशाखा, परीक्षा विभाग, उ.म.वि., जळगांव

७) मा. सहा. कुलसचिव, प्रवेश पात्रता व अभ्यासमंडळ विभाग, उमवि, जळगांव

८) मा. समन्वयक, ई सुविधा केंद्र, उमवि, जळगांव

## जा.क्र. उमवि/५/नुतनी/नै.वि.२०१६-१७/ डी.ओ. 8/ 142/२०१६, दिनांक : 20-05-2016 चे सहपत्र

शैक्षणिक वर्ष २०१६-१७ करिता नुतनीकरण / नैसर्गिक विस्ताराच्या मान्यतेबाबतचा तक्ता

Name of	Details of	Details of	Details of	Approval of University to	Remarks of
College /	Additional Division	Courses/Subjects for	Courses/Subjects	Continuation of Affiliation	University
Recognized	for Nutanikaran for	Nutanikaran for A.Y	for Natural	/ Natural Growth for A.Y	regarding
Institute	A.Y 2016-17	2016-17	Growthfor A.Y	2016-17	admission
	[As per Proposal]	[As per Proposal]	2016-17		for A.Y.
			[As per Proposal]		2016-17
01	02	03	04	05	06
[E240081] -	B.E. (CIVIL) - First	B.E. (CIVIL) - First		Continuation of	The
THE SHIRPUR	Year - 1[ 60 ]	Year - All Compulsory		Affiliation/Natural Growth,	College be
EDUCATION	B.E. (CIVIL) -	Subjects - 60		as mentioned in column	considered
SOCIETYS R.	Second Year - 1[	B.E. (CIVIL) -		no. 02,03 & 04 of the	for
C. PATEL	60 ]	Second Year - All		chart has been granted	Centralized
INSTITUTE OF	B.E. (CIVIL) - Third	Compulsory Subjects		for Academic Year 2016-	Admission
TECHNOLOGY	Year - 1[ 60 ]	- 60		17.	process.
SHIRPUR	B.E. (CIVIL) -	B.E. (CIVIL) - Third			
Tal. Shirpur	Fourth Year - 1[ 60	Year - All Compulsory			
Dist. Dhule	]	Subjects - 60			
	B.E. (COMPUTER)	B.E. (CIVIL) - Fourth			
	- First Year - 1[ 60 ]	Year - All Compulsory			
	B.E. (COMPUTER)	Subjects - 60			
	- Second Year - 1[	B.E. (COMPUTER) -			
	60 ]	First Year - All			
	B.E. (COMPUTER)	Compulsory Subjects			
	- Third Year - 1[ 60	- 60			
	]	B.E. (COMPUTER) -			
	B.E. (COMPUTER)	Second Year - All			
	- Fourth Year - 1[	Compulsory Subjects			
	60 ]	- 60			
	B.E.	B.E. (COMPUTER) -			
	(ELECTRICAL) -	Third Year - All			
	First Year - 1[ 60 ]	Compulsory Subjects			
	B.E.	- 60			
	(ELECTRICAL) -	B.E. (COMPUTER) -			
	Second Year - 1[	Fourth Year - All			101

http://affiliation.oaasisnmu.org/renewal\_report/letter\_ac\_renewal1.php?cid=E240081

2/4

60]	Compulsory Subjects	
B.E.	- 60	
(ELECTRICAL) -	B.E. (ELECTRICAL)	
Third Year - 1[ 60 ]	- First Year - All	
B.E.	Compulsory Subjects	
(ELECTRICAL) -	- 60	
Fourth Year - 1[ 60	B.E. (ELECTRICAL)	
1	- Second Year - All	
B.E.	Compulsory Subjects	
(ELECTRONICS &	- 60	
TELICOMM) -	BE (FLECTRICAL)	
Third Year - 1[ 60 ]	- Third Year - All	
B E	Compulsory Subjects	
	60	
TELICOWIM.) -	D.E. (ELECTRICAL)	
Fourth Year - 1[ 60	- Fourth Year - All	
Ц 	Compulsory Subjects	
B.E.	- 60	
(MECHANICAL) -	B.E.	
First Year - 2[ 120 ]	(ELECTRONICS &	
B.E.	TELICOMM.) - Third	
(MECHANICAL) -	Year - All Compulsory	
Second Year - 2[	Subjects - 60	
120 ]	B.E.	
B.E.	(ELECTRONICS &	
(MECHANICAL) -	TELICOMM.) -	
Third Year - 2[ 120	Fourth Year - All	
1	Compulsory Subjects	
B F	- 60	
(IVIECHAINICAL) -	D.E. (IVIECHAINICAL)	
	- First Year - All	
120 ]	Compulsory Subjects	
M.E.	- 120	
(COMPUTER) -	B.E. (MECHANICAL)	
First Year - 1[ 24 ]	- Second Year - All	
M.E.	Compulsory Subjects	
(COMPUTER) -	- 120	
Second Year - 1[	B.E. (MECHANICAL)	
24 ]	- Third Year - All	
M.E.	Compulsory Subjects	
(ELECTRONICS &	- 120	
TELICOMM.) -	B.E. (MECHANICAL)	
First Year - 1[ 24 ]	- Fourth Year - All	
MF	Compulsory Subjects	
Record Vaca 4	First Vaar All	
Second Year - 1[	riist year - All	
24 ]	Compulsory Subjects	
M.E.	- 24	
(MECHANICAL) -	M.E. (COMPUTER) -	
Second Year - 1[	Second Year - All	
18 ]	Compulsory Subjects	
	- 24	
	M.E.	
	(ELECTRONICS &	
	TELICOMM.) - First	
	Year - All Compulsory	

27/05/2016	North Maharashtra University, Jalgaon :: OAASIS (Affiliation Online)	
	Subjects - 24 M.E. (ELECTRONICS & TELICOMM.) - Second Year - All Compulsory Subjects - 24 M.E. (MECHANICAL) - Second Year - All Compulsory Subjects - 18	

(ग. ना. पवार ) उपकुलसचिव, बीसीयुडी, उमवि, जळगांव

#### O NO. NMU/5/ continuation/N. V. 2016-17/D. O. 8/142/2016

Date: 20/05/2016 -

10,		
The Principa	al /Director	
The Shirpur	Education Society's,	
R. C. Patel I	nstitute of Technology,	
Shirpur, Dist	Dhule	
Subject:	Regarding approval of continuation of affiliation/natural growt	h for the academic year
	2016-2017	

Reference: 1) Proposal of your college / Institute in the month of October 2015 for the continuation of Affiliation / natural growth for the academic year 2016-17
2) Local Inspection Committee appointed by the University dated 29/01/2016
3) Hon. Academic Council's Resolution no. VPA-15 dated 13/04/2016

#### Sir/ Madam,

With reference to your letter as per reference No. 1 regarding continuation of affiliation / natural growth for the academic year 2016-17, the Local Inquiry Committee was appointed to inspect and submit a report as per the reference letter No. 2.

The concerned Local Inquiry Committee visited your college and the report was submitted to the University. In accordance with the received orders, it was verified by the Special Committee. It's report and recommendations were put in the meeting of the Academic Council, held on 13/04/2016 then as per the decisions taken by Hon. Academic Council with reference to resolution VPA-15/2016 dated 13/04/2016, Continuation of affiliation/natural growth of Subject/Syllabus in the below mentioned table has been approved under the Maharashtra University Act, 1994, Article 83(4).

The approval, offered to the college/Institute will be valid for one academic year only, i.e. for the academic year 2016-17 and time to time continuation of concerned affiliation will be mandatory.

So, kindly do the needful.

Yours faithfully,

(G. N. Pawar) Dy. Registrar, BCUD, NMU, Jalgaon.

R.C.Patel Institute Of Technology Shirper Dist. Dhule DFFIC

Enclosures: Chart including continuation of affiliation / natural growth for the academic year 2016-17.

Copy for acknowledgement & further proceedings

- 1) Hon. Upper Secretary, Government of Maharashtra Higher & Technical education, Ministry expansion building, Mumbai-32
- 2) Hon. Director, Technical Education, Directorate of Technical Education, Government of Maharashtra 3, Mahapalika Marg, post box no. 1967 mumbai-1
- Hon. Joint Director, Technical Education, Regional Office, New Polytechnic Building, P.B.No. 219, Samangaon Road, Nashik Road, Nashik

- 4) Hon. Controller of Examination, NMU, Jalgaon
- 5) Hon. System Analyst , Computer Section, NMU, Jalgaon
- 6) Hon. Dy. Registrar, Concern Course, Exam Section, NMU, Jalgaon
- 7) Hon. Dy. Registrar, Eligibility & BCUD Section, NMU, Jalgaon
- 8) Hon. Controller, E-Suvidha Section, NMU, Jalgaon

Name of De College / Recognized Nu Institute	etails of Additional Division for utanikaran for A.Y 2016-17 As per Proposal]	Details of Courses/Subjects for Nutanikaran for A.Y 2016- 17 [As per Proposal]	Details of Courses/Su bjects for Natural Growthfor A.Y 2016-	Approval of University to Continuation of Affiliation / Natural Growth for	Remark s of Universit y regardin
01	02	03	04	05	06
[E240081]       -       B.E         THE SHIRPUR       Yea         EDUCATION       B.E         SOCIETYS       R. Sec         C.       PATEL 60 ]         INSTITUTE OF       B.E         TECHNOLOGY       Yea         SHIRPUR       B.E         Tal.       Shirpur         Dist.       Dhule         J       B.E.         - Fir         B.E.         - Thi         J         B.E.         - For         60 ]         B.E.         - For         60 ]         B.E.         - For         60 ]         B.E.         (ELE         First         B.E.         (ELE	E. (CIVIL) - First ar - 1[ 60 ] E. (CIVIL) - cond Year - 1[ ] E. (CIVIL) - Third ar - 1[ 60 ] E. (CIVIL) - Third ar - 1[ 60 ] E. (COMPUTER) E. (COMPUTER) C. (COMPUTER) E. (COMPUTER) Durth Year - 1[ 60 ] E. (COMPUTER) - ECTRICAL) - E	B.E. (CIVIL) - First Year - All Compulsory Subjects - 60 B.E. (CIVIL) - Second Year - All Compulsory Subjects - 60 B.E. (CIVIL) - Third Year - All Compulsory Subjects - 60 B.E. (CIVIL) - Fourth Year - All Compulsory Subjects - 60 B.E. (COMPUTER) - First Year - All Compulsory Subjects 60 B.E. (COMPUTER) - Second Year - All Compulsory Subjects 60 B.E. (COMPUTER) - Third Year - All Compulsory Subjects 60 B.E. (COMPUTER) - Third Year - All Compulsory Subjects 60 B.E. (COMPUTER) -	04	Continuation of Affiliation/Natural as mentioned in no. 02,03 & 04 of chart has been for Academic Year 17.	06 The College consider for Centraliz Admissi Proces s.

PRINCIPAL R.C.Patel Institute Of Technology Shirper Dist. Dhule

![](_page_440_Picture_7.jpeg)

177		
Second Year - 1[60 ] B.E. (ELECTRICAL) - Third Year - 1[ 60 ] B.E. (ELECTRICAL) - Fourth Year - 1[ 60 ] B.E. (ELECTRONICS & TELICOMM.) - Third Year - 1[ 60 ] B.E. (ELECTRICAL) - Fourth Year - 2[ 120 ] 60 ] B.E. (ELECTRICAL) - Third Year - 1[ 60 ] B.E. (ELECTRICAL) - Third Year - 1[ 60 ] B.E. (ELECTRICAL) - Fourth Year - 1[ 60 ] B.E. (ELECTRONICS & TELICOMM.) - Third Year - 1[ 60 ] B.E. (ELECTRONICS & TELICOMM.) - Third Year - 1[ 60 ] B.E. (ELECTRONICS & TELICOMM.) - Third Year - 1[ 60 ] B.E. (ELECTRONICS & TELICOMM.) - Fourth Year - 1[ 60 ] B.E. (MECHANICAL) - First Year - 2[ 120 ] B.E. (MECHANICAL) - First Year - 2[ 120 ] B.E. (MECHANICAL) - First Year - 2[ 120 ] B.E.	Fourth Year - All Compulsory Subjects- 60 B.E. (ELECTRICAL) - First Year - All Compulsory Subjects- 60 B.E. (ELECTRICAL) - Second Year - All Compulsory Subjects- 60 B.E. (ELECTRICAL) - Third Year - All Compulsory Subjects- 60 B.E. (ELECTRICAL) - Fourth Year - All Compulsory Subjects- 60 B.E. (ELECTRONICS & TELICOMM.) - Third Year - All Compulsory Subjects - 60 B.E. (ELECTRONICS & TELICOMM.) - Fourth Year - All Compulsory Subjects - 60 B.E. (MECHANICAL) - First Year - All Compulsory Subjects - 120 B.E. (MECHANICAL) - First Year - All Compulsory Subjects - 120 B.E. (MECHANICAL) - Third Year - All Compulsory Subjects - 120 B.E. (MECHANICAL) - Fourth Year - All Compulsory Subjects - 120 B.E. (MECHANICAL) - Fourth Year - All Compulsory Subjects - 120 B.E. (MECHANICAL) - Fourth Year - All Compulsory Subjects	
	- 24	

![](_page_441_Picture_1.jpeg)

PRINCIPAL R.C.Patal Institute Of Technology, Shirpur Dist. Dhule

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B.E.	M.E. (COMPUTER) -
(MECHANICAL) -	Second Year - All
Fourth Year - 2[120]	Compulsory Subjects
M.E.	- 24
(COMPUTER) -	M.E.
First Year - 1[ 24 ]	(ELECTRONICS &
M.E.	TELICOMM.) - First
(COMPUTER) -	Year - All Compulsory
Second Year - 1[24]	Subjects - 24
M.E.	M.E.
(ELECTRONICS &	(ELECTRONICS &
TELICOMM.) -	TELICOMM.) -
First Year - 1[ 24 ]	Second Year - All
M.E.	Compulsory Subjects
(ELECTRONICS &	- 24
TELICOMM.) -	M.E.
Second Year - 1[24]	(MECHANICAL) -
M.E.	Second Year - All
(MECHANICAL) -	Compulsory Subjects
Second Year - 1[18]	- 18

PRINCIPAL R.C.Patel Institute Of Technology, Shirper Dist, Dhule

![](_page_442_Picture_3.jpeg)

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'A'Grade NAAC Re-accreditated उत्तर महाराष्ट्र विद्यापीठ, जळगाव- ४२५ ००१ NORTH MAHARASHTRA UNIVERSITY, JALGAON Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA

।। अंतरी पेटव ज्ञाज्योत ।।

(3 <sup>10</sup> C	Cycle)	
Fax :	(91)-0257-2258406	Telephone :(O) : 0257-2257224, 0257-2258409
Website :	www.nmu.ac.in	Email : bcudresearch@rediffmail.com

## NMU/11/Lab.Rcog./Engg./ 1165 /2015

Date : 23.05.2015

To,

The Principal, R. C. Patel Institute of Technology, Shirpur.Dist.Dhule-425405.

> Sub.: Recognition for Post Graduate Research Lab. Ref : Your letter dated 20.02.2015

#### Dear Sir/Madam,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prof. S. R. Kolhe, Jalgaon for recognition of Post Graduate Research Lab.recognition of your college vide this office letter No. जा.क्र.उमवि/११/प्रयोगज्ञाळा मान्यता/अभियांत्रिकी/४५७/२०१५, दि.०४.०३.२०१५, The committee has visited to your college on 31.03.2015. After verification of existing facilities, the committee unanimously recommended to grant recognition for Post Graduate Research Lab.recognition of your college. (A copy of the committee's report is enclosed herewith for ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Lab.recognition as per resolution No. fq. q. q. 32(2034, fd.35.08.304).

In view of the above recommendations of the committee and resolution passed in the Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Lab.recognition of your college in the following subjects:

Sr.	Subject	Research students allowed	Period of recogntion
1	2	3	4
1	Computer Engineering	08 students	2014-15 to 2016- 2017

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Thanking you,

DDrive Ph.D. KPW/Lab.Rec.doc

R. C. P. I. T.

Inward No. (SSJ.

Received Delto

Received

Shirpur Dist. Dhuleney! S/d.

Yours sincerely,

(Prof. D.G. Hundiwale) Director.

Board of Colleges and University Development.

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।। अंतरी पेटवू ज्ञाज्योत ।।

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उत्तर महाराष्ट्र विद्यापीठ, जळगाव- ४२५ ००१

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Umavinagar, Post Box 80, Jalgaon - 425 001, INDIA

'A'Grade NAAC Re-accreditated (3<sup>rd</sup> Cycle)

NMU/11/Lab.Rcog./Engg./ 1166 /2015

Date: 23.05.2015

To,

### The Principal,

R. C. Patel Institute of Technology, Shirpur.Dist.Dhule-425405.

Sub.: Recognition for Post Graduate Research Lab. Ref : Your letter dated 20.02.2015

Dear Sir/Madam,

With reference to the above subject and letter under reference, I would like to inform you that the University has communicated you an expert committee constituted under the Chairmanship of Prof. D. K. Gautam, Jalgaon for recognition of Post Graduate Research Lab.recognition of your college vide this office letter No. जा.क्र.उमवि/११/प्रयोगशाळा मान्यता/अभियांत्रिकी/४५६/२०१५, दि.०४.०३.२०१५, The committee has visited to your college on 25.03.2015. After verification of existing facilities, the committee unanimously recommended to grant recognition for Post Graduate Research Lab.recognition of your college. (A copy of the committee's report is enclosed herewith for ready reference and compliance of the conditions/suggestions). This report was placed before the Academic Council of the University. The Academic Council has approved the report submitted by the committee appointed for the recognition to your Post Graduate Research Lab.recognition as per resolution No. चि. प. ए. 3c/303',  $\overline{d}.35,083'3$ .

In view of the above recommendations of the committee and resolution passed in the Academic Council, I am directed to inform you that the University has granted recognition to the Post-Graduate Research Lab.recognition of your college in the following subjects:

Sr.	Subject	Research students allowed	Period of recogniion
No.	2	3	4
1	Electronics & Telecommunication Engineering	08 students	2014-15 to 2016- 2017

Please note that the above recognition is granted only for the years mentioned in the column No. 4 of the above statement. If you want renewal to this recognition or recognition to another subject except above, you will have to again submit the new proposal along with necessary fees as per rules.

Thanking you,

DhuleEnel.sa/a.

R. C.

Yours sincerely,

(Prof. D.G. Hundiwale) Director,

Board of Colleges and University Development.

up Drive Ph.D. KPW Lab. Rec. doc

## Annexure -IV

## List of Major and Minor Research Projects

2014-2015

Nature of Project	Status	Title of the Project	Name of Faculty (Principal Investigat or)	Name of the Funding agency	Grant Sanctio ned	Grant Receiv ed
Minor	On going	Design and Experimental Analysis of a CDA compressor cascade for Gas turbine.	N P Salunke	UGC/RGSTC	475000	475000
Major	On going	To design and develop wireless system for sewage / drainage congestion system	Prof. N G Haswani	UGC/RGSTC	350000	213000
Major	On going	Development of Robust Watermarking Techniques for Devanagari Text	Prof.Nitin N Patil	Assistance for S& T Projects under RGSTC	379000	319000
Minor	On going	New Web Personalization Techniques to Improve Browsing Experience	Prof. R.B.Wagh	Vice Chancellor Research Motivation Scheme(VCR MS)	70000	35000
Minor	On going	Self Configuring Intrusion Detection System	Prof.S.R.S onawane	Vice Chancellor Research Motivation Scheme(VCR MS)	47000	26000
Minor	On going	Personal Authentication based on multimodal biometrics	Prof.P.S.S anjekar	Vice Chancellor Research Motivation Scheme(VCR MS)	70000	60000

Minor	On going	Modified SPIHT Algorithm for Hardware Implementation	Prof. P.D.Saraf	Vice Chancellor Research Motivation Scheme(VCR MS)	70000	55000
Minor	On going	Algorithm for Minimizing No. of Hops & Wavelengths in WDM Network	Prof K H Sonwane	Vice Chancellor Research Motivation Scheme(VCR MS)	60000	50000
Minor	On going	Local Binary Pattern based Face Recognition System for Automotive Security	Prof S A Patil	Vice Chancellor Research Motivation Scheme(VCR MS)	70000	60000
Minor	On going	Loss propagation model in Heterogeneous Media	Prof P M Goad	Vice Chancellor Research Motivation Scheme(VCR MS)	45000	30000
Minor	On going	Banana Plantation Disease detection using Image Processing	Prof P R Bhole	UGC/MRP	140000	0
Minor	On going	Local Binary Pattern based Face Recognition System for Automotive Security	Prof S A Patil	UGC/MRP	90000	0
Minor	On going	Identification of speaker	Prof N L Lokhande	UGC/MRP	110000	0

Minor	On going	Experimental analysis of rectangular fin array and development of Neural network mode for prediction of H.T. Coefficient.	Prof. N P Salunke	Vice Chancellor Research Motivation Scheme(VCR MS)	70000	55000
Minor	On going	Experimental analysis of Cha Evaporative P L Re cooling wall for Sarode Mo different cross section profile.		Vice Chancellor Research Motivation Scheme(VCR MS)	70000	55000
Minor	On going	Fabrication and Calibration of Five hole Pressure Probe	P L Sarode	UGC- Minor Research Projects	200000	0
Minor	On going	To Analysis the varying fin shapes for microprocessor cooling.	K A Saner	UGC- Minor Research Projects	270000	0
Minor	On going	Solar water heater with Absorber plate having Concavities & concentrating collector	S V Yeole	UGC- Minor Research Projects	215000	0
Major	On going	Malicious Website Detection	Mr. D. R. Patil	RGSTC Govt. Maharashtra through NMU Jalgaon	100000	68567

Minor	On going	Vice Chancellor Research Motivation Scheme on Discrimination of interturn fault from Magnetizing in rush current in Transformer	Prof. B P Patil	UGC/NMU/V CRMS	70000	47000
-------	-------------	--	--------------------	-------------------	-------	-------

## 2015-2016

Nature of Projec t	Statu s	Title of the Project	Name of Faculty (Principal Investigato r)	Name of the Funding agency	Grant Sanctio ned	Grant Receiv ed
Minor	On going	An Intelligent System for Exploration of Web User Behavior	Prof. U.M.Patil	Vice Chancellor Research Motivation Scheme(VC RMS)	62000	55000
Minor	On going	User Behavior Information from The Free Log	Prof. S.N.Pardes hi	Vice Chancellor Research Motivation Scheme(VC RMS)	18000	10000
Minor	On going	Implementation of Modified Technique for Web Document Protection Using Unicode	Prof. R .J. Jaiswal	Vice Chancellor Research Motivation Scheme(VC RMS)	24000	22000
Minor	On going	MRI Findings of Japanese Encephalitis	Prof J P Patil	UGC/VCRM S	58000	43000

Minor	On going	Development of Novel, Economic Embedded System using Cypress PSoC board	Prof. A H Khadke	UGC/VCRM S	70000	65000
Minor	On going	Handwritten Devnagri Character Recognition	Prof. M B Barawkar	UGC/VCRM S	43000	33000
Minor	On going	Remote Monitoring of Crop Field Using Wireless Sensor Network for Shirpur Town		UGC/VCRM S	60000	55000
Minor	On going	Offline Fingerprint Recognition System	Prof. S D Patil	UGC/VCRM S	41000	34000
Minor	On going	IMAGE DENOISING USING ADAPTIVE FILTER	Prof. A B Jayaswal	UGC/VCRM S	70000	48000
Minor	On going	Effect of Thickness and helix distance/ height of helical spring locked washers in the evaluation of loosening performance of bolted joints.	Prof. H. K. Wagh	Vice Chancellor Research Motivation Scheme(VC RMS)	70000	70000

Minor	On going	Residential Monitoring of Telemedicine System Based on Embedded Computer	Mr. T. M. Pattewar	Vice Chancellor Research Motivation Scheme(VC RMS)	50000	42000
Minor	On going	An algorithm for Hearing Aid	Ms. S. N. Patil	VCRMS Scheme North Maharashtra University Jalgaon	69000	67000
Minor	On going	An Alternative Approach to Remove Impulse Noise from Digital Images to Reduce Execution Time	Mr. V. D. Punajbi	VCRMS Scheme North Maharashtra University Jalgaon	24000	22000
Minor	On going	Condition assesment of concrete with Non- Destructive testing	Prof. H. R. kumavat	Vice Chancellor Research Motivation Scheme(VC RMS)	70000	70000

## Annexure V Master Plan

![](_page_451_Figure_1.jpeg)

![](_page_452_Figure_0.jpeg)

![](_page_453_Figure_0.jpeg)

## **ANNEXURE VI**

# List of teachers who have attended Refresher course and orientation Programme in last four years.

No. of faculty		Acaden	nic year	
attended workshop	2015-16	2014-15	2013-14	2012-13
Department	National	National	National	National
Applied Science	7	18	12	24
Civil engineering	23	6	44	16
Computer Engineering	3	105	11	76
Electrical Engineering	2	20	21	NA
Electronics & Telecom. Engineering	2	50	98	49
Information Technology	1	9	27	27
Mechanical Engineering	11	3	28	62
Total	49	211	241	254

Academic Year: 2012-13

SN	Name of Teacher	Name of Workshop	Dates
1	D S Lal	Computational Fluid Dynamics	12-22 June 2012
2	D S Lal	Syllabus Framing for Second Year Civil Engineering	June 2012
3	D S Lal	AAKASH Tablet	10-11 Nov 2012
4	H R Kumavat	Computational Fluid Dynamics	12-22 June 2012
5	H R Kumavat	AAKASH Tablet	10-11 Nov 2012
6	Y N Sonawane	Computational Fluid Dynamics	12-22 June 2012
7	Y N Sonawane	AAKASH Tablet	10-11 Nov 2012
8	G V Tapkire	Computational Fluid Dynamics	12-22 June 2012
9	G V Tapkire	AAKASH Tablet	10-11 Nov 2012
10	G V Tapkire	Research Methodology	24 Jun to 04 july 2012
11	P S Patil	Computational Fluid Dynamics	12-22 June 2012
12	P S Patil	AAKASH Tablet	10-11 Nov 2012
14	P S Patil	Research Methodology	24 Jun to 04 july 2012

15	C J Chitte	Computational Fluid Dynamics	12-22 June 2012
16	C J Chitte	AAKASH Tablet	10-11 Nov 2012
17	Sandip Sonawane	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
18	Ranu Soni	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
19	Mohmmad ali Saivvad	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
20	Shakil Pinjari	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
21	Vinayak Dhole	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
22	Priti Sanjekar	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
23	Pankaj Patil	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
24	Priya Kundal	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
25	Vinit Agham	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
26	Makarand Mali	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
27	Mahesh Mahajan	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
28	Nitin Patil	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
29	Raj Jaiswal	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
30	Bharati Patil	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
31	Chetan Patil	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
32	Puja Saraf	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
33	Prasad Mahale	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
34	Chandrashekhar Pawar	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
35	Hitendra Suryayanshi	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
36	Megha Sisode	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
37	Sachin Pardeshi	ISTE Workshop on Introduction to Research Methodology	25 June - 4 July 2012
38	Sandip Sonawane	TWO Week ISTE Workshop on Database Management System	21 May -31 May 2013
39	Nitin Patil	TWO Week ISTE Workshop on Database Management System	21 May -31 May 2013
40	Makarand Mali	TWO Week ISTE Workshop on Database Management System	21 May -31 May 2013

41	Ranu Soni	TWO Week ISTE Workshop on Database	21 May -31 May 2013
40	Hitendra	TWO Week ISTE Workshop on Database	2013 21 May -31 May
42	Suryavanshi	Management System	2013
43	Prasad Mahale	TWO Week ISTE Workshop on Database	21 May -31 May
	Trasad Manate	Management System	2013
44	Pankaj Patil	TWO Week ISTE Workshop on Database	21 May -31 May
		Management System	2013
45	Ujwala Patil	Anagement System	21 May -51 May 2013
		TWO Week ISTE Workshop on Database	2015 21 May -31 May
46	Mahesh Mahajan	Management System	2013
1.5		TWO Week ISTE Workshop on Database	21 May -31 May
47	Rajnikant Wagh	Management System	2013
10	Drain Count	TWO Week ISTE Workshop on Database	21 May -31 May
48	Puja Sarai	Management System	2013
49	Sachin Pardeshi	TWO Week ISTE Workshop on Database	21 May -31 May
- <del>-</del> - 7	Saenin i araesin	Management System	2013
50	Chetan Patil	TWO Week ISTE Workshop on Database	21 May -31 May
		Management System	2013
51	Bharati Patil	TWO Week ISTE Workshop on Database	21 May -31 May
		TWO Week ISTE Workshop on Detabase	2013
52	Megha Sisode	Anagement System	21 May -51 May 2013
		TWO Week ISTE Workshop on Database	2015 21 May -31 May
53	Sapana Mali	Management System	2013
<i></i>	Chandrashekhar	TWO Week ISTE Workshop on Database	21 May -31 May
54	Pawar	Management System	2013
55	Shakil Pinjari	TWO Week ISTE Workshop on Database	21 May -31 May
55	Shakii i iijaii	Management System	2013
56	Mohmmad ali	TWO Week ISTE Workshop on Database	21 May -31 May
	Saiyyad	Management System	2013
57	Jagruti Mahajan	TWO Week ISTE Workshop on Database	21 May -31 May
		TWO Week ISTE Workshop on Detabase	2013
58	Vinayak Dhole	Anagement System	21 May -51 May 2013
		TWO Week ISTE Workshop on Database	2015 21 May -31 May
59	Vinit Agham	Management System	2013
<i>c</i> 0		TWO Week ISTE Workshop on Database	21 May -31 May
60	Priti Sanjekar	Management System	2013
61	Prof Nitin N Patil	ISTE Workshop On Askash For Education	10-11 November
01		ISTE Workshop On Aakash For Education	2012
62	Prof. R B Wagh	Attending Short Term Training Programme on Machine Learning	17-21 June 2013
63	Prof. R B Wagh	ISTE Workshop On Aakash For Education	10-11 November 2012
64	Prof. U.M.Patil	ISTE Workshop On Aakash For Education	10-11 November
	Prof S R		2012 10-11 November
65	Sonawane	ISTE Workshop On Aakash For Education	2012
	Prof. Priti S		10-11 November
66	Sanjekar	ISTE Workshop On Aakash For Education	2012

67	Prof. Priti S Sanjekar	ISTE Workshop On Introduction To Research Methodologies	25 June To 4 July 2012
68	Prof. P.D. Saraf	ISTE Workshop On Aakash For Education	10-11 November 2012
69	Prof. Hitendra Suravanshi	ISTE Workshop On Aakash For Education	10-11 November 2012
70	Prof S N Pardeshi	ISTE Workshop On Aakash For Education	10-11 November 2012
71	Prof. M. M. Mahajan	ISTE Workshop On Aakash For Education	10-11 November 2012
72	Prof. M.L.Mali	ISTE Workshop On Aakash For Education	10-11 November 2012
73	Prof. P.R. Patil	ISTE Workshop On Aakash For Education	10-11 November 2012
74	Prof. Bharti Patil	ISTE Workshop On Aakash For Education	10-11 November 2012
75	Prof. Chetan B. Patil	ISTE Workshop On Aakash For Education	10-11 November 2012
76	Prof. Chetan B. Patil	ISTE Workshop On Aakash For Education	10-11 November 2012
77	Prof. Raj Jaiswal	ISTE Workshop On Aakash For Education	10-11 November 2012
78	Prof. Prasad Mahale	ISTE Workshop On Aakash For Education	10-11 November 2012
79	Prof. V K Agham	ISTE Workshop On Aakash For Education	10-11 November 2012
80	Prof. Megha Ravindra Sisode	ISTE Workshop On Aakash For Education	10-11 November 2012
81	Prof. Ranu Soni	ISTE Workshop On Aakash For Education	10-11 November 2012
82	Prof. Shakil Pinjari	ISTE Workshop On Aakash For Education	10-11 November 2012
83	Prof. Shakil Pinjari	ISTE Workshop On Database Management System	21-31 May 2013
84	Prof. Vinayak Suresh Dhole	ISTE Workshop On Aakash For Education	10-11 November 2012
85	Prof. Vinayak Suresh Dhole	Workshop On Cloud Computing	8-9 March 2013
86	Prof. Mohmmad Ali Saiyyad	ISTE Workshop On Aakash For Education	10-11 November 2012
87	Prof. Mohmmad Ali Saiyyad	Workshop On Cloud Computing	8-9 March 2013
88	Prof. Mohmmad Ali Saiyyad	Mission 10X	24-28 June 2013
89	Prof. Mohmmad Ali Saiyyad	Workshop On Cloud Computing	8-9 March 2013
90	Prof. Miss J R Mahajan	ISTE Workshop On Aakash For Education	10-11 November 2012
91	Prof. Miss J R Mahajan	ISTE Workshop On Database Management System	21-31 May 2013
92	Prof. Miss J R Mahajan	Workshop On Cloud Computing	8-9 March 2013
93	V. S. Baviskar	Engineering Thermodynamics	2012

94	V. S. Baviskar	Aakash for Education	2012
95	V. S. Baviskar	Introduction to Research Methodologies	2012
96	N. M. Narkhede	Engineering Thermodynamics (STTP)	2012
97	N. M. Narkhede	Aakash for Education (STTP)	2012
98	V. K. Suryawanshi	Akash Education ( RCPIT, Shipur)	2012
99	V. K. Suryawanshi	Engineering Thermodynamics (RCPIT, Shipur)	2012
100	M. S. Sonawane	Engineering Thermodynamics" organized by IIT, at R.C.P.I.T., Shirpur.	2012
101	M. S. Sonawane	"Akash for Education" organized by IIT, at R.C.P.I.T.	2012
102	M. S. Sonawane	"Introduction to Research Methodology" organized by IIT, at R.C.P.I.T., Shirpur.	2012
103	M. S. Sonawane	"Effective teaching and learning methods" organized by Wipro technology, at R.C.P.I.T., Shirpur.	2012
104	K. A. Isai	ISTE Workshop on "Engineering Thermodynamics" Organized by Indian Institute of Technology, Bombay at R C Patel Institute of Technology, Shirpur, Dist.Dhule (Maharashtra)	2012
105	K. A. Isai	ISTE Workshop on "Aakash for Education" Organized by Indian Institute of Technology, Bombay at R C Patel Institute of Technology, Shirpur, Dist.Dhule (Maharashtra)	2012
106	K. A. Isai	ISTE Workshop on "Introduction to Research Methodologies" Organized by Indian Institute of Technology, Bombay at R C Patel Institute of Technology, Shirpur, Dist.Dhule (Maharashtra)	2012
107	S. V. Desale	Framing the Syllabi of Applied Sciences, J.T.Mahajan College of Engineering, Faizpur.	2012
108	S. V. Desale	Syllabus Framing of Engineering Mathematics-III, S.S.G.B. College of Engineering and Technology, Bhusawal.	2012
109	S. V. Desale	Two Day ISTE workshop on Aakash for Education conducted by Indian Institute of Technology, Bombay.	2012
110	P. G. Bhadane	Framing the Syllabi of Applied Sciences, J.T.Mahajan College of Engineering, Faizpur.	2012
111	P. G. Bhadane	Syllabus Framing of Engineering Mathematics-III, S.S.G.B. College of Engineering and Technology, Bhusawal.	2012
112	P. G. Bhadane	Two Day ISTE workshop on Aakash for Education conducted by Indian Institute of Technology, Bombay.	2012
113	P. G. Bhadane	STTP on Recent Advances in Mathematics and its Applications to Science and Engineering (RAMASE-2013), Department	2013

		of Mathematics, Visvesvaraya National	
		Institute of Technology, Nagpur.	
114	P. G. Bhadane	Workshop on LaTeX	2013
		Attended ISTE workshop on "Aakash for	
115	H S Jagtan	Education" conducted by IIT Bombay under	2012
115	II. 5. Jagtap	the National Mission on Education through	2012
		ICT (MHRD)	
116	I S Shaikh	Two-day ISTE workshop on Aakash for	2012
110	J. S. Shaikh	Education(IIT, Bombay)	2012
117	D R Patil	ISTE Workshop On Introduction To	25 June To 4 July
117	D. R. I atli	Research Methodologies	2012
118	V M Patil	ISTE Workshop On Introduction To	25 June To 4 July
110	v. 1v1. 1 atii	Research Methodologies	2012
110	S M Dardashi	ISTE Workshop On Introduction To	25 June To 4 July
119	5. WI. Falueshi	Research Methodologies	2012
120	T M Pottower	ISTE Workshop On Introduction To	25 June To 4 July
120	1. WI. Fallewal	Research Methodologies	2012
121	S N Datil	ISTE Workshop On Introduction To	25 June To 4 July
121	S. N. Falli	Research Methodologies	2012
122	V D Dunishi	ISTE Workshop On Introduction To	25 June To 4 July
122	v. D. Fulljabi	Research Methodologies	2012
122	M.C. Labi	ISTE Workshop On Introduction To	25 June To 4 July
125	IVI. 5. ISIII	Research Methodologies	2012
124	U.N. Dendhin	ISTE Workshop On Introduction To	25 June To 4 July
124	H. N. Kanonir	Research Methodologies	2012
105		ISTE Workshop On Introduction To	25 June To 4 July
125	P. K. Patil	Research Methodologies	2012
126	D. D. Datil	ISTE Workshop On Askash For Education	10-11 November
120	D. K. Paul	ISTE WORKShop On Aakash For Education	2012
107	V M Datil	ISTE Wardshan On Aslash Ear Education	10-11 November
127	v. Ivi. Paul	ISTE WORKShop On Aakash For Education	2012
100	C M Dandashi	ISTE Washeber On Ashash Ear Education	10-11 November
128	S. M. Pardesni	ISTE Workshop On Aakash For Education	2012
120	T M Dettermen	ISTE Wardshan On Aslash Ear Education	10-11 November
129	1. M. Pattewar	ISTE Workshop On Aakash For Education	2012
120	C N D (1	ICTE W. 1.1. O. A.1. I. E. E.1.	10-11 November
130	S. N. Patil	ISTE Worksnop On Aakash For Education	2012
121	V D D	ICTE West store On Astronomer Education	10-11 November
131	v. D. Punjabi	ISTE Worksnop On Aakash For Education	2012
120	M C Lab	ISTE Washen On Ashash Eas Education	10-11 November
152	MI. 5. ISM	ISTE Workshop On Aakash For Education	2012
122	ILN D	ICTE W. 1.1. O. A.1. I. F. E.1.	10-11 November
155	H. N. Kandhir	ISTE worksnop On Aakash For Education	2012
124		ICTE W. 1.1. O. A.1. I. E. E.1.	10-11 November
134	P. R. Patil	ISTE Worksnop On Aakash For Education	2012
125		ISTE Workshop On Database Management	01 21 M. 0012
135	D. K. Patil	System	21-31 May 2013
120	V.M. Dat'l	ISTE Workshop On Database Management	21 21 May 2012
130	v. M. Patil	System	21-51 May 2015
127	C M Decition	ISTE Workshop On Database Management	21 21 May 2012
13/	5. M. Pardeshi	System	21-31 May 2013
120	TMD	ISTE Workshop On Database Management	01 01 M. 0010
138	1. M. Pattewar	System	21-31 May 2013

139	S. N. Patil	ISTE Workshop On Database Management System	21-31 May 2013
140	V. D. Punjabi	ISTE Workshop On Database Management System	21-31 May 2013
141	M. S. Ishi	ISTE Workshop On Database Management System	21-31 May 2013
142	H. N. Randhir	ISTE Workshop On Database Management System	21-31 May 2013
143	P. R. Patil	ISTE Workshop On Database Management System	21-31 May 2013
144	A H Kumbhar	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
145	A H Kumbhar	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
146	A R Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
147	A R Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
148	B Y Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
149	B Y Patil	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
150	B Y Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
151	H K Wagh	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
152	H K Wagh	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
153	H K Wagh	Writing effective conference papers	18-19 February 2012
154	H K Wagh	Computational Fluid Dynamics	12-22 June 2012
155	H K Wagh	Research Trends in Engineering and Matlab as Scientific Tool For Research	8-10 Feb 2013
156	H K Wagh	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012

157	J S Khatik	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
158	J S Khatik	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
159	Juned A R A	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
160	Juned A R A	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
161	Juned A R A	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
162	K A Saner	Writing effective conference papers	18-19 February 2012
163	K A Saner	Computational Fluid Dynamics	12-22 June 2012
164	K A Saner	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
165	K A Saner	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
166	K D Chaudhary	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
167	K D Chaudhary	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
168	K D Chaudhary	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
169	M R Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
170	M R Patil	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
171	M R Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012

172	M R Patil	Use of concentrating solar and air conditioning applications in institution and religious sectors	
173	N P Salunke	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
174	N P Salunke	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
175	P D Jamadar	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
176	P D Jamadar	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
177	P K Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
178	P K Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
179	P L Sarode	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
180	P L Sarode	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
181	P L Sarode	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
182	P L Sarode	Computational Fluid Dynamics	12-22 June 2012
183	P L Sarode	Computational Fluid Dynamics	12-22 June 2012
184	P S Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
185	P S Patil	ISTE WORKSHOP "Introduction to Research Methodologies" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	24 Jun to 04 july 2012
186	P S Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
187	P V Baviskar	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION"	10-11 Nov 2012

		CONDUCTED BY IIT BOMBAY AT	
		RCPIT SHIRPUR	
		ISTE WORKSHOP "Introduction to	24 Jun to 04 july
188	P V Baviskar	Research Methodologies" CONDUCTED	2012
		BY IIT BOMBAY AT RCPIT SHIRPUR	2012
		TWO WEEK ISTE WORKSHOP	
180	D V Bowickor	"ENGINEERING THERMODYNAMICS"	11 21 Dec 2012
109	r v Daviškai	CONDUCTED BY IIT BOMBAY AT	11-21 Dec 2012
		RCPIT SHIRPUR	
		TWO DAYS ISTE WORKSHOP	
100	D D Condhonshire	"AAKASH FOR EDUCATION"	10.11 Nov. 2012
190	K D Sandhanshiv	CONDUCTED BY IIT BOMBAY AT	10-11 NOV 2012
		RCPIT SHIRPUR	
		TWO WEEK ISTE WORKSHOP	
101	D D Can dhan shia	"ENGINEERING THERMODYNAMICS"	11 21 Dec 2012
191	R D Sandhanshiv	CONDUCTED BY IIT BOMBAY AT	11-21 Dec 2012
		RCPIT SHIRPUR	
		TWO DAYS ISTE WORKSHOP	
102	DMC	"AAKASH FOR EDUCATION"	10 11 N. 2012
192	R M Chavan	CONDUCTED BY IIT BOMBAY AT	10-11 Nov 2012
		RCPIT SHIRPUR	
		TWO WEEK ISTE WORKSHOP	
102	DMC	"ENGINEERING THERMODYNAMICS"	11.01.0.0010
193	R M Chavan	CONDUCTED BY IIT BOMBAY AT	11-21 Dec 2012
		RCPIT SHIRPUR	
		TWO DAYS ISTE WORKSHOP	
10.4		"AAKASH FOR EDUCATION"	10 11 11 0010
194	S P Badgujar	CONDUCTED BY IIT BOMBAY AT	10-11 Nov 2012
		RCPIT SHIRPUR	
		ISTE WORKSHOP "Introduction to	04 I + 04 1
195	S P Badgujar	Research Methodologies" CONDUCTED	24 Jun to 04 july
	0.5	BY IIT BOMBAY AT RCPIT SHIRPUR	2012
		TWO WEEK ISTE WORKSHOP	
100		"ENGINEERING THERMODYNAMICS"	11.01.0.0010
196	S P Badgujar	CONDUCTED BY IIT BOMBAY AT	11-21 Dec 2012
		RCPIT SHIRPUR	
		TWO DAYS ISTE WORKSHOP	
105	G	"AAKASH FOR EDUCATION"	10 11 11 0010
197	S V Yeole	CONDUCTED BY IIT BOMBAY AT	10-11 Nov 2012
		RCPIT SHIRPUR	
		TWO WEEK ISTE WORKSHOP	
100	~ * * * *	"ENGINEERING THERMODYNAMICS"	
198	S V Yeole	CONDUCTED BY IIT BOMBAY AT	11-21 Dec 2012
		RCPIT SHIRPUR	
		TWO DAYS ISTE WORKSHOP	
		"AAKASH FOR EDUCATION"	
199	V B Jadhav	CONDUCTED BY IIT BOMBAY AT	10-11 Nov 2012
		RCPIT SHIRPUR	
		ISTE WORKSHOP "Introduction to	
200	V B Jadhav	Research Methodologies" CONDUCTED	24 Jun to 04 july
200	, D buunu ,	BY IIT BOMBAY AT RCPIT SHIRPUR	2012
-		TWO WEEK ISTE WORKSHOP	
201	V B Jadhav	"ENGINEERING THERMODYNAMICS"	11-21 Dec 2012
L			

		CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	
202	V M Patil	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
203	V M Patil	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012
204	Y R Pathak	TWO DAYS ISTE WORKSHOP "AAKASH FOR EDUCATION" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	10-11 Nov 2012
205	Y R Pathak	TWO WEEK ISTE WORKSHOP "ENGINEERING THERMODYNAMICS" CONDUCTED BY IIT BOMBAY AT RCPIT SHIRPUR	11-21 Dec 2012

#### Academic Year: 2013-14

SN	Name of Teacher	Name of Workshop	Dates
1	Prof D S Lal	Two Week ISTE Workshop on "Fluid	20 May to 30 May
1	1101. D.S. Lai	Mechanics"	2014.
		Two Week ISTE Workshop on	26th Nov 13 to 6th
2	Prof. D.S. Lal	"Engineering Mechanics" (From	Dec 2013)
		26thNov.13 to 6thDec.2013).	Dec.2013)
3	Prof D.S. Lal	Vision Maharashtra 2047 (Water, Power,	
5	1101. D.D. Lui	Business & Transport)	
4	Prof Kumayat H R	Two Week ISTE Workshop on "Fluid	20 May to 30 May
•	Tion Runa (at Thirt.	Mechanics"	2014.
		Two Week ISTE Workshop on	26th Nov.13 to 6th
5	Prof. Kumavat H.R.	"Engineering Mechanics" (From	Dec.2013)
		26thNov.13 to 6thDec.2013).	
-		Three days workshop on Engineering	From 9th
6	Prof. Kumavat H.R.	Faculty Workshop (Mission 10x)	Dec.2013 to 11th $D_{22}(2012)$
		STTD on Line of Total Station Douton D	Dec.2013)
7	Prof. Kumavat H.R.	200 Series	
		200 Series	
8	Prof. Kumavat H.R.	Vision Manarasinia 2047 (water, Fower, Business & Transport)	
	Drof V N	Two Week ISTE Workshop on "Eluid	20 May to 30 May
9	Sonawane	Mechanics"	20 Way to 50 Way 2014
	Sonawane	Two Week ISTE Workshop on	2014.
10	Prof. Y. N.	"Engineering Mechanics" (From	26th Nov.13 to 6th
10	Sonawane	26thNov 13 to 6thDec 2013)	Dec.2013)
	Prof. Y. N.	National Workshop on "Statistics for	
11	Sonawane	Experimental Researchers"	
	Prof. Y. N.	Vision Maharashtra 2047 (Water, Power,	
12	Sonawane	Business & Transport)	
12	Def C V Test	Two Week ISTE Workshop on "Fluid	20 May to 30 May
13	Prof. G. V. Tapkire	Mechanics"	2014.

		Two Week ISTE Workshop on	
14	Prof C V Tapkira	"Engineering Mechanics" (From	26th Nov.13 to 6th
14	F101. U. V. Tapkile	26thNov 13 to 6thDoc 2013)	Dec.2013)
		Zounnov.15 to oundec.2015).	
15	Prof. G. V. Tapkire	Vision Manarashira 2047 (water, Power,	
		Business & Transport)	20.14 / 20.14
16	Prof. P.S.Patil	I wo Week ISTE Workshop on "Fluid	20 May to 30 May
		Mechanics"	2014.
		Two Week ISTE Workshop on	26th Nov.13 to 6th
17	Prof. P.S.Patil	"Engineering Mechanics" (From	Dec.2013)
		26thNov.13 to 6thDec.2013).	
18	Prof P S Patil	Vision Maharashtra 2047 (Water, Power,	
10	1101.1.0.1 401	Business & Transport)	
19		Two Week ISTE Workshop on "Fluid	20 May to 30 May
17		Mechanics"	2014.
		Two Week ISTE Workshop on	26th Nov 13 to 6th
20	Prof. R. N. Jain	"Engineering Mechanics" (From	2001  Nov.15 to 001
		26thNov.13 to 6thDec.2013).	Dec.2013)
		"Mission 10X"- Engineering Faculty	From 9th
21	Prof. R. N. Jain	Empowerment Workshop (From	Dec.2013 to 11th
		9thDec.2013 to 11thDec.2013).	Dec.2013)
22	Durf D. N. L.'s	Vision Maharashtra 2047 (Water, Power,	
22	Prof. R. N. Jain	Business & Transport)	
		Two Week ISTE Workshop on "Fluid	20 May to 30 May
23	Prof. Chetan J. Chitte	Mechanics"	2014.
		Two Week ISTE Workshop on	
24	Prof. Chetan J. Chitte	"Engineering Mechanics" (From	26th Nov.13 to 6th
		26thNov.13 to 6thDec.2013).	Dec.2013)
			From 9th
25	Prof. Chetan J. Chitte	Mission 10X, Engineering Faculty	Dec. 2013 to 11th
		Workshop	Dec.2013)
		Vision Maharashtra 2047 (Water, Power,	
26	Prof. Chetan J. Chitte	Business & Transport)	
		National Workshop on "Statistics for	
27	Prof. Chetan J. Chitte	Experimental Researchers"	
		One Day Workshop on "Syllabus Framing	
28	Prof. Chetan J. Chitte	TE Civil CGPA"	
		Two Week ISTE Workshop on "Fluid	20 May to 30 May
29	Drof M N Datil	I WO WEEK ISTE WORKShop on Thura	20 May 10 50 May
	PIOL M. N. Paul	Mechanics"	2014
1	PIOL M. N. Paul	Mechanics" Two Week ISTE Workshop on	2014.
30	Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From	2014. 26th Nov.13 to 6th
30	Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov 13 to 6thDec 2013)	2014. 26th Nov.13 to 6th Dec.2013)
30	Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013).	2014. 26th Nov.13 to 6th Dec.2013)
30	Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013).	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th
30 31	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31 32	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Eurorimental Researchers	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31 32	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Mehamel (# 2047 (Weight P	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31 32 33	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Decimal Parameter)	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31 32 33	Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil Prof. M. N. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Business & Transport) The Web Letter Web Letter (The Letter Web Letter Web Letter (The Letter	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013)
30 31 32 33 34	Prof. M. N. Patil Prof. Rajendra D.	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Business & Transport) Two Week ISTE Workshop on "Fluid	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013) 20 May to 30 May
30 31 32 33 34	Prof. M. N. Patil Prof. Rajendra D. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Business & Transport) Two Week ISTE Workshop on "Fluid Mechanics"	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013) 20 May to 30 May 2014.
30 31 32 33 34	Prof. M. N. Patil Prof. Rajendra D. Patil Prof. Rajendra D.	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Business & Transport) Two Week ISTE Workshop on "Fluid Mechanics" Two Week ISTE Workshop on	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013) 20 May to 30 May 2014. 26th Nov.13 to 6th
30 31 32 33 34 35	Prof. M. N. Patil Prof. Rajendra D. Patil Prof. Rajendra D. Patil	Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013). Mission 10X National Workshop On Statistics For Experimental Researchers Vision Maharashtra 2047 (Water, Power, Business & Transport) Two Week ISTE Workshop on "Fluid Mechanics" Two Week ISTE Workshop on "Engineering Mechanics" (From	2014. 26th Nov.13 to 6th Dec.2013) From 9th Dec.2013 to 11th Dec.2013) 20 May to 30 May 2014. 26th Nov.13 to 6th Dec.2013)

36	Prof. Rajendra D. Patil	MISSION 10X	From 9th Dec.2013 to 11th Dec.2013)
37	Prof. Rajendra D. Patil	Vision Maharashtra 2047 (Water, Power, Business & Transport)	
38	Prof. A. S. Pawar	Two Week ISTE Workshop on "Fluid Mechanics"	20 May to 30 May 2014.
39	Prof. A. S. Pawar	Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013).	26th Nov.13 to 6th Dec.2013)
40	Prof. A. S. Pawar	Vision Maharashtra 2047 (Water, Power, Business & Transport)	
41	Vikram J. Patel	Two Week ISTE Workshop on "Engineering Mechanics" (From 26thNov.13 to 6thDec.2013).	26th Nov.13 to 6th Dec.2013)
42	Vikram J. Patel	North Maharashtra University Workshop – [Syllabus Framing of T.E. Civil Engineering]	22nd Feb, 2014
43	Prof. L. S. Mahajan	National Workshop on "Statistics for Experimental Researchers"	
44	Vikram J. Patel	Two Week ISTE Workshop on "Fluid Mechanics"	20 May to 30 May 2014.
1	Prof. Hitendra Suravanshi	Attending Workshop on Data Mining and Pattern Management	13-15 Jan 2014
2	Prof. Prasad Mahale	Attending Workshop on Data Mining and Pattern Management	13-15 Jan 2014
3	Prof. Shakil Pinjari	Attending Workshop on Advances in Computing	13-15 Feb 2014
4	Prof. Shakil Pinjari	Attending Workshop on Engineering Faculty	09-11 Dec 2013
5	Prof. Shakil Pinjari	Attending Workshop on Recent Trends in Image Processing and Computer Vision	16-17 Dec 2013
6	Prof. Mohmmad Ali Saiyyad	Attending Workshop on Mission10X- ULTP Practitioner Training Program	24-28 June 2013
7	Prof. Mohmmad Ali Saiyyad	Attending Workshop on Engineering Faculty	09-11 Dec 2013
8	Prof. Mohmmad Ali Saiyyad	Attending Workshop on Advances in Computing	13-15 Feb 2014
9	Prof. Mohmmad Ali Saiyyad	Attending Workshop on Recent Trends in Image Processing and Computer Vision	16-17 Dec 2013
10	Prof. Miss J R Mahajan	Attending Workshop on Engineering Faculty	09-11 Dec 2013
11	Prof. Miss J R Mahajan	Attending Workshop on Advances in Computing	13-15 Feb 2014
1	Prof.V.S.Patil	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June 2013
2	Prof.B.P.Patil	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June 2013
3	Prof.A.R.Mahire	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June 2013
4	Prof.S.A.Seragi	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June 2013

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5	Prof.V.V.Patel	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June
		The sector of th	2013
6	Prof.N.R.Ansari	I wo week ISTE workshop on 'Analog	4th June-14th June
-		Electronics' conducted by IIT Kharagpur	2013
		AICTE sponsored National Seminar on	24 25th August
7	Prof.V.V.Patel	"Scilab and its Application to Global	24-25thAugust
		Optimization and Differential equation"	2013
		AICTE sponsored National Seminar on	
8	Prof P A Bhoite	"Scilab and its Application to Global	24-25thAugust
0	FIOLF.A.BHOILE	Ontimination and Differential emotion?	2013
		Optimization and Differential equation	
		AICTE sponsored National Seminar on	24-25thAugust
9	Prof.N.R.Ansari	"Scilab and its Application to Global	2013
		Optimization and Differential equation"	2013
		AICTE sponsored National Seminar on	24.251
10	Prof. Y. K. Kirange	"Scilab and its Application to Global	24-25thAugust
10		Optimization and Differential equation"	2013
		AICTE sponsored National Seminar on	
11	Drof C A Caraci	"Sailah and its Application to Clabal	24-25thAugust
11	FIOLS.A.Seragi	Schao and its Application to Global	2013
		Optimization and Differential equation"	
12	Prof.N.R Ansari	Mission 10X (Engineering Faculty	9-11thDecember
12		workshop)	2013
12	Drof V S Datil	Two week ISTE workshop on 'Signals and	2-12thJanuary
15	FIOL V.S.Fatli	Systems' conducted by IIT Kharagpur	2014
		Two week ISTE workshop on 'Signals and	2-12thJanuary
14	Prof.A.R.Mahire	Systems' conducted by IIT Kharagpur	2014
		Two week ISTE workshop on 'Signals and	2-12th January
15	Prof.S.A.Seragi	Systems' conducted by IIT Kharagpur	2 12th January 2014
		Two week ISTE workshop on 'Signals and	2-12th January
16	Prof.V.V.Patel	Systems' conducted by IIT Kharagpur	2014
		Two week ISTE workshop on 'Signals and	2-12th January
17	Prof.N.R.Ansari	Systems' conducted by IIT Kharagnur	2014
		Two week ISTE workshop on 'Signals and	2-12th January
18	Prof.P.A.Bhoite	Systems' conducted by IIT V heregrup	2014
		The systems conducted by ITT Kharagpur	2014
19	Prof.B.P.Patil	Two week ISTE workshop on Signals and	2-12thJanuary
		Systems' conducted by III Kharagpur	2014
20	Prof Y K Kirange	Two week ISTE workshop on 'Signals and	2-12thJanuary
20	1 Ion I I I I I I I I I I I I I I I I I I	Systems' conducted by IIT Kharagpur	2014
21	Prof Y K Kirange	1 Day training on Industrial Automation	1-Sep-14
21	1101. 1. K. Khange	Workshop	1-50p-14
1	Drof Dr D I Dooro	Two week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
2	Drof D D Disala	Two week ISTE workshop on 'Analog	4th June-14th June
2	rioi.r.k.bhole	Electronics' conducted by IIT Kharagpur	2013
-	D (G ) D	Two week ISTE workshop on 'Analog	4th June-14th June
3	Prof.S.A.Patil	Electronics' conducted by IIT Kharaonur	2013
		Two week ISTE workshop on 'Analog	4th June-14th June
4	Prof.J.B.Jadhav	Electronics' conducted by IIT Kharagour	2013
		Two week ISTE workshop on 'Analog	Ath Juna 14th Juna
5	Prof.M.B.Barawkar	Floatronics' conducted by UT Where	
		The section is conducted by III Knaragpur	2015
6	Prof.V.R.Patil	I wo week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
7	Prof V S Patil	Two week ISTE workshop on 'Analog	4th June-14th June
ŕ		Electronics' conducted by IIT Kharagpur	2013
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8	Prof.N.G.Haswani	Two week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by III Knaragpur	2013
9	Prof.R.D.Badgujar	Two week ISTE workshop on 'Analog Electronics' conducted by IIT Kharagpur	4th June-14th June
		The sector of th	2013
10	Prof.T.H.Jaware	Electronics' conducted by IIT Kharagpur	4th June-14th June 2013
		Two week ISTE workshop on 'Analog	Ath June-1Ath June
11	Prof.B.P.Patil	Electronics' conducted by IIT Kharagpur	2013
10		Two week ISTE workshop on 'Analog	4th June-14th June
12	Prof.S.D.Patil	Electronics' conducted by IIT Kharagpur	2013
12	Prof M P Dombroni	Two week ISTE workshop on 'Analog	4th June-14th June
15	FIOLWI.B.Demorali	Electronics' conducted by IIT Kharagpur	2013
14	Prof K H Sonawane	Two week ISTE workshop on 'Analog	4th June-14th June
	T TOT.IX.III.Dona wane	Electronics' conducted by IIT Kharagpur	2013
15	Prof.N.L.Lokhande	Two week ISTE workshop on Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
16	Prof.J.P.Patil	I wo week ISTE workshop on 'Analog	4th June-14th June
10		Electronics' conducted by IIT Kharagpur	2013
17	Prof.B.V Patil	Two week ISTE workshop on 'Analog	4th June-14th June
17	Tion.D. Vir util	Electronics' conducted by IIT Kharagpur	2013
18	Prof P M Good	Two week ISTE workshop on 'Analog	4th June-14th June
10	r ioi.r .ivi.ooau	Electronics' conducted by IIT Kharagpur	2013
10	Drof I S Datil	Two week ISTE workshop on 'Analog	4th June-14th June
19	PIOLJ.S.Path	Electronics' conducted by IIT Kharagpur	2013
20	Drof M V Shah	Two week ISTE workshop on 'Analog	4th June-14th June
20	PTOLIVI. V.Shan	Electronics' conducted by IIT Kharagpur	2013
21	Prof.A.H.Khadke	Two week ISTE workshop on 'Analog	4th June-14th June
	1101111111111	Electronics' conducted by IIT Kharagpur	2013
22	Prof A R Mahire	Two week ISTE workshop on 'Analog	4th June-14th June
	1 Total Literorumie	Electronics' conducted by IIT Kharagpur	2013
23	Prof A B Jaiswal	Two week ISTE workshop on 'Analog	4th June-14th June
23	1 IOI.A.D.Jaiswai	Electronics' conducted by IIT Kharagpur	2013
24	Drof S A Samari	Two week ISTE workshop on 'Analog	4th June-14th June
24	FIOLS.A.Selagi	Electronics' conducted by IIT Kharagpur	2013
25	Drof V V Datal	Two week ISTE workshop on 'Analog	4th June-14th June
23	Prof. v. v. Pater	Electronics' conducted by IIT Kharagpur	2013
26	Prof M L Patel	Two week ISTE workshop on 'Analog	4th June-14th June
20	1 101.141.12.1 att	Electronics' conducted by IIT Kharagpur	2013
27	Prof.N.R.Ansari	Two week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
28	Prof.S.C.Nahatkar	Two week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
29	Prof.K.N.Kuawar	I wo week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
30	Prof.V.P.Patil	Two week ISTE workshop on 'Analog	4th June-14th June
		Electronics' conducted by IIT Kharagpur	2013
_		AICTE sponsored National Seminar on	24-25thAugust
31	Prof.Dr.P.J.Deore	"Scilab and its Application to Global	2013
		Optimization and Differential equation"	2013
		AICTE sponsored National Seminar on	$24_{-}25$ th August
32	Prof.Smital.D.Patil	"Scilab and its Application to Global	24-25urAugust
		Optimization and Differential equation"	2015

33	Prof.P R Bhole	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
34	Prof.J.B.Jadhav	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
36	Prof.M.V.Shah	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
37	Prof.S.C.Nahatkar	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
38	Prof.K.H.Sonawane	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
39	Prof.V.P.Patil	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
40	Prof.V.V.Patel	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
41	Prof.B.V.Patil	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
42	Prof.R.D.Badgujar	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
43	Prof.T.H.Jaware	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
44	Prof.P.A.Bhoite	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
45	Prof.A.B.Jayswal	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
46	Prof.N.R.Ansari	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
47	Prof. N.L.Lokhande	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
48	Prof.S.A.Seragi	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
49	Prof.S.A.More	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013
50	Prof. K.N.Kuwar	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2013

51	Prof.J.S.Patil	AICTE sponsored National Seminar on "Scilab and its Application to Global Optimization and Differential equation"	24-25thAugust 2014
54	Prof.K.H.Sonawane	Worlddidac India workshops(Powered by IDA)For session Assistive technology for learning and accessment in an inclusive classroom	11-13 September
55	Prof. J.B.Jadhav	One week ISTE workshop for co- ordinators on 'Signals and Systems' conducted by IIT Kharagpur	30thSeptember - 4thOctober 2013
56	Prof.T.H.Jaware	One week short term training program on " Image processing and machine learning(STTP-IPML)	3-7thDecember 2013
57	Prof.R.D.Badgujar	One week short term training program on " Image processing and machine learning(STTP-IPML)	3-7thDecember 2013
58	Prof.N.R.Ansari	Mission 10X (Engineering Faculty workshop)	9-11thDecember 2013
59	Prof.V.P.Patil	Mission 10X (Engineering Faculty workshop)	9-11thDecember 2013
60	Prof.S.C.Nahatkar	Mission 10X (Engineering Faculty workshop)	9-11thDecember 2013
61	Prof.R.D.Badgujar	AICTE sponsored workshop on "Recent trends in Image processing and computer vision" NMU Jalgaon	16-17thDecember 2013
62	Prof. Shailaja A.Patil	AICTE sponsored workshop on "Recent trends in Image processing and computer vision" at NMU Jalgaon	16-17thDecember 2013
63	Prof.Dr.P.J.Deore	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur(Remote centre co-ordinator)	2-12thJanuary 2014
65	Prof. S.A. More	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
67	Prof.P.R.Bhole	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
68	Prof. S. A. Patil	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
69	Prof.J.B.Jadhav	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
71	Prof.M.B.Barawkar	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
72	Prof.V.R.Patil	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
73	Prof.V.S.Patil	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
74	Prof.N.G.Haswani	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
75	Prof.R.D.Badgujar	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
76	Prof.T.H.Jaware	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014
77	Prof.Smital.D.Patil	Two week ISTE workshop on 'Signals and Systems' conducted by IIT Kharagpur	2-12thJanuary 2014

-		Two week ISTE workshop on 'Signals and	2-12thJanuary
78	Prof.M.B.Dembrani	Systems' conducted by IIT Kharagpur	2014
70	Dref V U Concerne	Two week ISTE workshop on 'Signals and	2-12thJanuary
79	Prol.K.H.Sonawane	Systems' conducted by IIT Kharagpur	2014
80	Prof N L Lokhande	Two week ISTE workshop on 'Signals and	2-12thJanuary
80	I IOI.IN.L.LOKIIAIIUC	Systems' conducted by IIT Kharagpur	2014
81	Prof I P Patil	Two week ISTE workshop on 'Signals and	2-12thJanuary
01	1101.3.1.1 util	Systems' conducted by IIT Kharagpur	2014
82	Prof. P.G. Patil	Two week ISTE workshop on 'Signals and	2-12thJanuary
		Systems' conducted by IIT Kharagpur	2014
83	Prof.B.V.Patil	Two week ISTE workshop on Signals and	2-12thJanuary
		Systems conducted by III Knaragpur	2014
84	Prof.P.M.Goad	Two week ISTE workshop on Signals and Systems' conducted by UT Kharagnur	2-12thJanuary
		Two week ISTE workshop on 'Signals and	2014 2 12th January
85	Prof.J.S.Patil	Systems' conducted by IIT Kharagnur	2-12uijanuary 2014
		Two week ISTE workshop on 'Signals and	2-12thIanuary
86	Prof.M.V.Shah	Systems' conducted by IIT Kharagpur	2014
07		Two week ISTE workshop on 'Signals and	2-12thJanuary
87	Prot.A.H.Khadke	Systems' conducted by IIT Kharagpur	2014
00		Two week ISTE workshop on 'Signals and	2-12thJanuary
88	Prof.A.R.Manire	Systems' conducted by IIT Kharagpur	2014
80	Prof A B Jaiswal	Two week ISTE workshop on 'Signals and	2-12thJanuary
69	F101.A.D.Jaiswai	Systems' conducted by IIT Kharagpur	2014
90	Prof S A Seragi	Two week ISTE workshop on 'Signals and	2-12thJanuary
	Tion.b.n.benagi	Systems' conducted by IIT Kharagpur	2014
91	Prof.V.V.Patel	Two week ISTE workshop on 'Signals and	2-12thJanuary
		Systems' conducted by IIT Kharagpur	2014
92	Prof.M.L.Patel	Two week ISTE workshop on Signals and	2-12thJanuary
		Systems' conducted by III Knaragpur	2014
93	Prof.N.R.Ansari	I wo week ISTE workshop on Signals and Systems' conducted by IIT Kharagpur	2-12th January $2014$
		Two week ISTE workshop on 'Signals and	2014 2.12th January
94	Prof.S.C.Nahatkar	Systems' conducted by IIT Kharagnur	2-12013anuary 2014
		Two week ISTE workshop on 'Signals and	2-12thIanuary
95	Prof.K.N.Kuawar	Systems' conducted by IIT Kharagpur	2014
0.5	D. GUDD. II	Two week ISTE workshop on 'Signals and	2-12thJanuary
96	Prot.V.P.Patil	Systems' conducted by IIT Kharagpur	2014
07	Duct Doules: Dist.	Two week ISTE workshop on 'Signals and	2-12thJanuary
9/	Prof. Pankaj Bhofte	Systems' conducted by IIT Kharagpur	2014
		Winterschool on speech and audio	
98	Prof P G Patil	processing(WiSSAP-2014) at	17-20 January
70	1 101.1 .O.1 atli	International Institute of information	2014
		Technology, Hyderabad	
0.0		Three days UGC, New Delhi sponsored	10-15 February
99	Prof.N.R.Ansari	National Workshop in advances in	2014
		computing(NWAC-2014)	
100	Duct Doules: Dist.	I hree days UGC, New Delhi sponsored	10-15 February
100	FIOI. Pankaj Bhoite	rational workshop in advances in computing (NWAC 2014)	2014
		Three days UGC New Delhi sponsored	
101	Prof S A More	National Workshop in advances in	10-15 February
101	1 101. 0.7 1.101010	computing(NWAC-2014)	2014
L			

102	Prof.V.S.patil	Three days UGC, New Delhi sponsored National Workshop in advances in computing(NWAC-2014)	10-15 February 2014
103	Prof.M.B.Barawkar	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
104	Prof. Smital D.PAtil	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
105	Prof. V.S.PAtil	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
106	Prof.J.P.patil	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
107	Prof.M.B.Dembrani	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
108	Prof.P.G.PAtil	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
109	Prof.K.H.Sonawane	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur,under the faculty of Engineering and technology,NMU Jalgaon.	17 th February 2014
110	Prof.J.S.PAtil	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
111	Prof.A.B Jayswal	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
112	Prof.S.A.More	Third year syllabus framing workshop for third year E&TC held at RCPIT Shirpur, under the faculty of Engineering and technology, NMU Jalgaon.	17 th February 2014
113	Prof.V.P.Patil	Training of Industrial Automation(TAACT)	01-Mar-14
114	Prof.S.C.Nahatkar	Training of Industrial Automation(TAACT)	01-Mar-14
1	V. S. Baviskar	Signals & Systems	02-12 Jan 2014
2	V. S. Baviskar	Material:Synthesis to Diverse Applications(MSDA-2013)	9-13 December 2013
3	M. S. Sonawane	Materials: Synthesis to diverse application" organized by Dept. of Physics at VNIT, Nagpur.	12-9-2013

4	N. M. Narkhede	Signals & Systems (STTP)	02-12 Jan 2014
5	N. M. Narkhede	Material:Synthesis to Diverse	9-13 December
5		Applications(MSDA-2013) (Workshop)	2013
6	K R Thakare	Mission 10X	9th to 11th
0	K. K. Thakare		December,2013
		TEQIP-II Sponsored STTP on	
_		"Application of Bioprocess and	10 00 1 5 0014
1	K. A. Isai	Nanotechnology in Chemical Engineering"	18-22th Dec. 2014
		Organized by SGGSIE&1, Nanded	
		(Manarashtra)	
		Numerical Techniques for Engineers and	
		Scientists (AANTES) Department od	
8	S. V. Desale	Applied Mathematics and Humanities	March 3-7, 2014
		Sardar Vallabhbhai Institute of	
		Technology, Surat.	
		STTP on Advanced Analytical and	
		Numerical Techniques for Engineers and	
0	D C Dla land	Scientists (AANTES), Department od	March 2 7 2014
9	P. G. Bhadane	Applied Mathematics and Humanities,	March 3-7, 2014
		Sardar Vallabhbhai Institute of	
		Technology, Surat.	
10	H S Jagtan	Attended the workshop on, "Research	Sep 20-25 2013
10	11. 5. Jagap	Methodology"	Sep. 20-23, 2013
11	J. S. Shaikh	Two week ISTE workshop on Fluid	20th to 30th MAY
••		Mechanics (IIT,Kharagpur)	, 2014
12	J. S. Shaikh	Two week ISTE workshop on Signals and	2nd to 12th
		Systems (IIT,Kharagpur)	January ,2014
1	D. R. Patil	ISTE Workshop On Computer	16thJune to
		Programming ISTE Workshop On Computer	21thJune, 2014
2	V. M. Patil	Programming	21th June 2014
		ISTE Workshop On Computer	16th June to
3	S. M. Pardeshi	Programming	21th June $2014$
		ISTE Workshop On Computer	16th June to
4	T. M. Pattewar	Programming	21thJune 2014
_		ISTE Workshop On Computer	16thJune to
5	S. N. Patil	Programming	21thJune, 2014
~	V.D.D: 1'	ISTE Workshop On Computer	16thJune to
6	v. D. Punjabi	Programming	21thJune, 2014
7	M S Jahi	ISTE Workshop On Computer	16thJune to
/	IVI. <b>5</b> . ISIII	Programming	21thJune, 2014
8	H N Randhir	ISTE Workshop On Computer	16thJune to
0		Programming	21thJune, 2014
9	P R Patil	ISTE Workshop On Computer	16thJune to
<i>`</i>	1 . IX. I uui	Programming	21thJune, 2014
10	D. R. Patil	ISTE Workshop On Computer Network	30thJune to
			05thJuly, 2014.
11	V. M. Patil	ISTE Workshop On Computer Network	30thJune to
			05thJuly, 2014.
12	S. M. Pardeshi	ISTE Workshop On Computer Network	30thJune to
12		r	05thJuly, 2014.

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13	T. M. Pattewar	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
14	S. N. Patil	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
15	V. D. Punjabi	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
16	M. S. Ishi	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
17	H. N. Randhir	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
18	P. R. Patil	ISTE Workshop On Computer Network	30thJune to 05thJuly, 2014.
19	D. R. Patil	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
20	V. M. Patil	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
21	S. M. Pardeshi	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
22	T. M. Pattewar	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
23	S. N. Patil	ISTE Workshop On Cyber Security	10thJuly to 20thJuly 2014
24	V. D. Punjabi	ISTE Workshop On Cyber Security	10thJuly to 20thJuly 2014
25	M. S. Ishi	ISTE Workshop On Cyber Security	10thJuly to 20thJuly 2014
26	H. N. Randhir	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
27	P. R. Patil	ISTE Workshop On Cyber Security	10thJuly to 20thJuly, 2014.
1	N.P.Salunke	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
2	M. R. Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
4	K. D. Chaudhary	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
5	K. A. Saner	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
6	P. L. Sarode	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
7	S. V. Yeole	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
8	P S Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
9	A H Kumbhar	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
10	V M Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
11	S P Badgujar	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
12	Juned A. R.A.	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014

B. Y. Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
J. S. Khatik	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
V. B. Jadhav	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
V. B. Jadhav	National workshop under QIPPU On RECENT TRENDS IN RENEWABLE ENERGY	DEC 23-24, 2013
P. V. Baviskar	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
P. D. Jamadar	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
P. K. Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
Y. R. Pathak	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
R. D. Sandanshiv	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
K D Deore	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
N M shinde	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
N M shinde	National workshop under QIPPU On RECENT TRENDS IN RENEWABLE ENERGY	DEC 23-24, 2013
R A Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
R A Patil	National workshop under QIPPU On RECENT TRENDS IN RENEWABLE ENERGY	DEC 23-24, 2013
N A Patil	ISTE 2 Week workshop on Fluid Mechanics	May 20-30, 2014
N A Patil	National workshop under QIPPU On RECENT TRENDS IN RENEWABLE ENERGY	DEC 23-24, 2013
	<ul> <li>B. Y. Patil</li> <li>J. S. Khatik</li> <li>V. B. Jadhav</li> <li>V. B. Jadhav</li> <li>P. V. Baviskar</li> <li>P. D. Jamadar</li> <li>P. K. Patil</li> <li>Y. R. Pathak</li> <li>R. D. Sandanshiv</li> <li>K D Deore</li> <li>N M shinde</li> <li>N M shinde</li> <li>R A Patil</li> <li>R A Patil</li> <li>N A Patil</li> <li>N A Patil</li> </ul>	B. Y. PatilISTE 2 Week workshop on Fluid MechanicsJ. S. KhatikISTE 2 Week workshop on Fluid MechanicsV. B. JadhavISTE 2 Week workshop on Fluid MechanicsV. B. JadhavISTE 2 Week workshop on Fluid MechanicsV. B. JadhavRECENT TRENDS IN RENEWABLE ENERGYP. V. BaviskarISTE 2 Week workshop on Fluid MechanicsP. D. JamadarISTE 2 Week workshop on Fluid MechanicsP. A. PatilISTE 2 Week workshop on Fluid MechanicsY. R. PathakISTE 2 Week workshop on Fluid MechanicsR. D. SandanshivISTE 2 Week workshop on Fluid MechanicsK D DeoreISTE 2 Week workshop on Fluid MechanicsN M shindeISTE 2 Week workshop on Fluid MechanicsN M shindeISTE 2 Week workshop on Fluid MechanicsN A PatilISTE 2 Week workshop on Fluid MechanicsN A PatilRECENT TRENDS IN RENEWABLE ENERGYN A PatilRECENT TRENDS IN RENEWABLE ENERGYN A PatilRECENT TRENDS IN RENEWABLE ENERGYN A PatilRECENT TRENDS IN RENEWABLE ENERGY

## Academic Year: 2014-15

SN	Name of Teacher	Name of Workshop	Dates
1	Prof S A Patil	ISTE workshop on Computer	28May-
1		Networking(Online activity)	29June2014
2	Prof S A Datil	ISTE workshop on Computer Networking	30 June-5
2	FIOL S.A.F atti	ISTE workshop on Computer Networking	July2014
3	Prof N L Lokhando	ISTE workshop on Computer	28May-
5	FIOLIN.L.LOKIIAIIde	Networking(Online activity)	29June2014
4	Prof N L Lakhanda	ISTE workshop on Computer Networking	30 June-5
4	FIOLIN.L.LOKIIAIIde	151E workshop on Computer Networking	July2014
5	Duct V C Datil	ISTE workshop on Computer	28May-
5	PIOL V.S.Patli	Networking(Online activity)	29June2014
6	Drof V S Datil	ISTE workshop on Computer Networking	30 June-5
0	r101. v.S.ratli	151 E workshop on Computer Networking	July2014

1			2014
7	Prof.P.R.Bhole	ISTE workshop on Computer Networking(Online activity)	28May- 29June2014
8	Prof.P.R.Bhole	ISTE workshop on Computer Networking	30 June-5 July2014
9	Prof. A.H.Khadke	ISTE workshop on Computer Networking(Online activity)	28May- 29June2014
10	Prof. A.H.Khadke	ISTE workshop on Computer Networking	30 June-5 July2014
11	Prof. N.G.Haswani	STTP on Wireless sensor networks: Secure Data Aggregation and Related Issues	14-18 July 2014
12	Prof. Vishal P Patil	Control Systems one week co-ordinators workshop	15-19 September 2014
13	Dr.P.J.Deore	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
14	Prof. Pravin Bhole	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
15	Prof. Sagar More	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
16	Prof. Shailaja Patil	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
17	Prof. Manisha Barawkar	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
18	Prof. V.S.Patil	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
19	Prof. V.R.Patil	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
20	Prof.N.G.Haswani	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
21	Prof. NARENDRA	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
22	Prof. Ravindra Badquiar	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
23	Prof. BHUSHAN	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December
24	Prof. Smital Patil	Two week ISTE workshop on Control	2-12 December
25	Prof. KIRAN	Two week ISTE workshop on Control	2-12 December
26	Prof. MAHESH	Two week ISTE workshop on Control	2014 2-12 December
27	Prof. Jitendra Patil	Two week ISTE workshop on Control	2014 2-12 December
28	Prof. PRASHANT	Systems organized by IIT Kharagpur           Two week ISTE workshop on Control	2014 2-12 December
29	PATIL Prof. BHUSHAN	Systems organized by IIT Kharagpur Two week ISTE workshop on Control	2014 2-12 December
29	PATIL Prof. PRASHANT	Systems organized by IIT Kharagpur Two week ISTE workshop on Control	2014 2-12 December
30	GOAD	Systems organized by IIT Kharagpur	2014
31	Prof. AMIT MAHIRE	Systems organized by IIT Kharagpur	2-12 December 2014
32	Prof. ABHIJIT KHADKE	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014

33	Prof. SATTYENDRASING SERAGI	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
34	Prof. VINITKUMAR PATEL	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
35	Prof.A.B.Jayaswal	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
36	Prof. MANOJ PATEL	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
37	Prof. NADEEM AKHTAR RIYAZ AHMAD ANSARI	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
38	Prof. Sneha Nahatkar	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
39	Prof. KALPESH KUNVAR	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
40	Prof. Pankaj Bhoite	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
41	Prof.V.P.Patil	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
42	Prof.V.P.Patil	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
43	Jagadish Jadhav	Two week ISTE workshop on Control Systems organized by IIT Kharagpur	2-12 December 2014
44	Prof.K.H.Sonawane	A workshop organized on"Industrial approach in Electronics" at RCPIT Shirpur	23-26 January2015
45	Prof.Smital D.Patil	A workshop organized on"Industrial approach in Electronics" at RCPIT Shirpur	23-26 January2015
46	Prof.M.B.Barawkar	A workshop organized on"Industrial approach in Electronics" at RCPIT Shirpur	23-26 January2015
47	Prof.V.S.Patil	One day workshop on syllabus setting for final year Electronics/E&TC for NMU Jalgaon.	14thFebruary 2015
48	Prof.P.R.Bhole	One day workshop on syllabus setting for final year Electronics/E&TC for NMU Jalgaon.	14thFebruary 2015
49	Prof.S.A.More	One day workshop on syllabus setting for final year Electronics/E&TC for NMU Jalgaon.	14thFebruary 2015
50	Prof.B.P.Patil	One day workshop on syllabus setting for final year Electrical and Instrumental engineering for NMU Jalgaon.	14thFebruary 2015
51	Prof.S.A.PAtil	One week ISTE approved FDP on "Application of GPU programming in Engineering Fields-2015" (AGPE-2015) in Association with IIT Guwahati	20-24thFeb.2015
52	Dr.P.J.Deore	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications" organized by	4-17 May 2015

		department of E&TC held at RCPIT	
		Shirpur	
53	Prof.J.B.Jadhav	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications"organized by department of E&TC held at RCPIT Shirpur	4-17 May 2015
54	Prof. M.B.Dembrani	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications" organized by department of E&TC held at RCPIT Shirpur	4-17 May 2015
55	Prof.M.L.Patel	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications"organized by department of E&TC held at RCPIT Shirpur	4-17 May 2015
56	Prof.S.A.Seragi	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications"organized by department of E&TC held at RCPIT Shirpur	4-17 May 2015
57	Prof. K.H.Sonawane	AICTE sponsored Faculty Develpoment programme on "RF and microwave communication:Fundamentals, design and applications" organized by department of E&TC held at RCPIT Shirpur	4-17 May 2015

## Academic Year: 2015-16

SN	Name of Teacher	Name of Workshop	Dates
1	Prof.V.V.Patel	Four Week AICTE approved FDP Use of ICT in Education for Online and Blended Learning	2 May to 10 July 2016
2	Prof.N.R.Ansari	Four Week AICTE approved FDP Use of ICT in Education for Online and Blended Learning	2 May to 10 July 2016
3	Prof. R. S. Patil	Innovation towards Learner Centric Pedagogy-II	21-25 Nov 2016
1	Prof.M.L.Patel	Short Term Training Program on Embedded Linux and Android Application Development (Organized by department of E&TC and Comp)	1-5thDec.2015
2	Prof.J.B.Jadhav	ARMREB-DRDO sponsored Stort Term Training Programme on,"Microwave passive Circuits and	4-9 January 2016

		Antennas:Design,Simulation and Measurements"	
1	P. L. Sarode	Third International Conference on Transformation in Engineering Education	8 Jan to 12 jan 2016
2	P S Patil	ISTE 1 Week STTP on Mechatronics & Automation	Dec 14-19, 2015
3	P S Patil	PhD Course Work	june 08-13,2015
4	Juned A. R.A.	Advanced Optimization Techniques for Innovative Research in Engineering & Technology	April 25-29, 2016
5	J. S. Khatik	Advanced Optimization Techniques for Innovative Research in Engineering & Technology	April 25-29, 2016
6	P. D. Jamadar	ISTE 1 Week STTP on Mechatronics & Automation	Dec 14-19, 2015
7	P. K. Patil	ISTE 1 Week STTP on Mechatronics & Automation	Dec 14-19, 2015
8	K D Deore	2 Week Iste workshop on Environmental studies	Jun 2-12, 2015
9	N M Shinde	VIRTUAL BAJA 2015	JULY 10-11,2015
10	N M Shinde	BAJA SAEINDIA 2016	FEB 18-21,2016
11	N M Shinde	Innovation towards learner centric pedagogy	MAY 2-4,2016
1	Prof. D. S. Lal	Environmental stuides	2 June to 12 June 2015.
2	Prof. D. S. Lal	Introduction to Structural Engineering	4th January to 9th January 2016
3	Prof. H. R. Kumavat	Environmental stuides	2 June to 12 June 2015.
4	Prof. H. R. Kumavat	Introduction to Structural Engineering	4th January to 9th January 2016
5	Prof. Y. N. Sonawane	Environmental stuides	2 June to 12 June 2015.
6	Prof. Y. N. Sonawane	Introduction to Structural Engineering	4th January to 9th January 2016
7	Prof. G. V. Tapkire	Environmental stuides	2 June to 12 June 2015.
8	Prof. G. V. Tapkire	Introduction to Structural Engineering	4th January to 9th January 2016
9	Prof. P. S. Patil	Environmental stuides	2 June to 12 June 2015.
10	Prof. P. S. Patil	Introduction to Structural Engineering	4th January to 9th January 2016
11	Prof. R. N. Jain	Environmental stuides	2 June to 12 June 2015.
12	Prof. C. J. Chitte	Environmental stuides	2 June to 12 June 2015.
13	Prof. C. J. Chitte	Introduction to Structural Engineering	4th January to 9th January 2016

14	Prof. M. N. Patil	Environmental stuides	2 June to 12 June 2015.
15	Prof. M. N. Patil	Introduction to Structural Engineering	4th January to 9th January 2016
16	Prof. R. D. Patil	Environmental stuides	2 June to 12 June 2015.
17	Prof. R. D. Patil	Introduction to Structural Engineering	4th January to 9th January 2016
18	Prof. A. S. Pawar	Environmental stuides	2 June to 12 June 2015.
19	Prof. A. S. Pawar	Introduction to Structural Engineering	4th January to 9th January 2016
20	Prof. L .S. Mahajan	Environmental stuides	2 June to 12 June 2015.
21	Prof. L .S. Mahajan	Introduction to Structural Engineering	4th January to 9th January 2016
22	Prof. V. J. Patel	Environmental stuides	2 June to 12 June 2015.
23	Prof. V. J. Patel	Introduction to Structural Engineering	4th January to 9th January 2016
1	T. M. Pattewar	SAS Training & Visual Analytics	Dec 14 to Dec 24, 2015
1	Prof. U.M.Patil	Soft Computing-ANN & Fuzzy Applications in Engineering	30 Nov - 05 Dec 2015
2	Chandrashekhar Pawar	Attending Workshop on SAS training of Base SAS	
3	Chandrashekhar Pawar	Attending Workshop on SAS training of Visual Analytics Fast Track	
1	V. S. Baviskar	Co-ordinator workshop on Engineering Physics	07-11 Sep 2015
2	V. S. Baviskar	Research Methodology	08-13 Jun 2015
3	M. S. Sonawane	Engineering Physics,organized by IIT, at R.C.P.I.T.	8-12-2015
4	M. S. Sonawane	Environmetal Science, organized by IIT, at R.C.P.I.T.	6-2-2015
5	N. M. Narkhede	Enviromental Studies (STTP)	02-12 June 2015
6	V. K. Suryawanshi	Research Methodology	08-13 Jun 2015
7	A. A. Bhandari	One week STTP on Mathematical Modeling with Simulation by Scientific tools,SVNIT,Surat	22-26th June,2015
8	A. A. Bhandari	Mathematical Modelling and Simulation for Researchers Engineers and Scientists	11-15th July 2016



